Pictures

6665

MME Form 9
Rev. Nov. 65

UNITED STATES
DEPARTMENT OF THE INTERIOR
Geological Survey

OFFICIAL DOCKET FILE Contract No. 2270 Docket No. 6665

Application
- [x] Denied
- [ ] Withdrawn

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

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

Folder No. 1:

Left Side

- [ ] Royalty Audits
- [ ] Certification of Discovery
- [x] Closing Letter
- [x] Cost Audits January 1971
- [ ] Termination Notice or Agreement
- [ ] Recision Notice
- [ ] Assignment of Contract
- [x] Contract Amendments
- [x] Contract with all exhibits and annexes 9-6-68
- [ ] Owner's Consent to Lien and Subordination Agreement
- [x] Application and Attachments

Right Side

- [ ] Project Summary (final)
- [ ] Work Completed Analysis (final)
- All other material filed in chronological order including the following reports if checked:
- [ ] Field Team Semiannual Report for Certified Project
- [x] Final Field Team Report (Tab)
- [x] Operator's Final Report (Tab) 8/18/70
- [ ] Interim Field Team Reports
- [x] Operator's monthly reports and all attachments
- [x] On-site Exam. Report (Tab) 1-24-68
- [ ] Settlement Sheets Supplemental 6/5/68
- [ ] Drill Logs

Additional Folders:

Left Side

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

Right Side

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

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

Folders No. _____: Settlement Sheets

Folders No. _____: Drill Logs

Folders No. _____: Royalty Material

72195-65

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
1/26/71	Emerick	120
		120
		220

JAN 27 1971

M & M Buchanan Gold Mining
& Milling Corp.
896 Douglas Avenue
Oakland, California 94603

Re: OME-6665 (Gold)
M & M Buchanan Gold Mining & Milling Corp.
Buchanan Mine
Tuolumne County, California
Contract 2270

Gentlemen:

Reference is made to the completed exploration project with the Government.

We sincerely regret that the work performed did not result in a certification of possible production under the provisions of the contract. In the absence of such certification the Government retains no claim or lien against the property described in the contract or any future production therefrom. We, therefore, are closing our books and records on the contract. Your attention is called to the provisions of the contract which require the Operator to keep and preserve certain records for the periods indicated.

We appreciate your interest and participation in the OME exploration program.

Sincerely yours,

Harold Kirkemo
glk

Harold Kirkemo
Chief, Office of
Minerals Exploration

cc: Director's Reading File
Mineral Resources File
OME Docket
OME Reading File
OME Region II
Branch of Budget & Finance
Mr. Emerick
130

WLEmerick/bsl 1/26/71

I-C-DC-OME-14-71

1

Docket copy

UNITED STATES
DEPARTMENT OF THE INTERIOR

Office of Survey and Review

Audit Operations

OFFICIAL
COPY
O. M. E.
RECEIVED
JAN 15 1971

INITIALS	CODE
	130
	120M
HK	130
WE	120E

Report of Review-Contract 2270
Docket No. OME 6665
M&M Buchanan Gold Mining & Milling
Corporation (Operator)
Tuolumne County, California

Washington, D. C.
January 1971

RECEIVED
U.S. GEOLOGICAL SURVEY
JAN 15 8 32 AM 1971
OFFICE OF THE DIRECTOR

United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240
OFFICE OF SURVEY AND REVIEW
Audit Operations, Region I
801 19th Street, N.W., Room 813
Washington, D.C. 20240

January 13, 1971

Memorandum

To: Director, Geological Survey

From: Regional Director, Region I
Audit Operations, Office of Survey and Review

Subject: Review of Contract 2270
Docket No. OME-6665
M&M Buchanan Gold Mining & Milling Corporation (Operator)
Tuolumne County, California

As requested by the Chief, Office of Minerals Exploration, we made a cost review of Contract 2270. The results of our review are shown in the attached report.

C. D. Bar

Attachment

A final review has been made of the contract files of the Office of Minerals Exploration (OME) pertaining to the mineral exploration Contract 2270 with M&M Buchanan Gold Mining and Milling Corporation (Operator), and the related disbursement records were examined in the Branch of Budget and Finance, Administrative Division, Geological Survey. The review was made during January 1971 at Washington, D. C.

The contract was awarded September 6, 1968 for $12,200, the total estimated cost of the project, with OME participation on a 75 percent basis or not in excess of $9,150.

The Operator was to explore by crosscutting and drifting on the 700 level for gold-bearing ore shoots occurring in quartz veins which have intruded the east-west trending Buchanan fault zone.

Repayment of disbursed Federal funds plus simple interest at 7¼ percent was to be made on the basis of established royalties on all the minerals and metals produced from the land during the exploration operations, and for a period of eleven (11) years from the date of the contract should a certification of possible production be issued by OME, or until the total net amount contributed by the Government is fully repaid with interest at 7¼ percent, whichever occurs first.

Work on the contract was to begin on or before September 15, 1968, and was to be completed within six months from the date of the contract or by March 6, 1969. Two amendments were written that extended the contract due to adverse weather conditions. Amendment 1 extended it to November 6, 1969, and Amendment 2 to October 6, 1970.

Work under the contract was completed July 31, 1970, and it did not result in a discovery of minable ore. The Operator plans to do long-hole drilling from the OME drift and this may result in the discovery of a minable ore shoot. OME issuance of a certification of possible production has been delayed until results of the additional work are known.

The units of work authorized and approved under Contract 2270 are summarized on Exhibit I. We believe that the claimed and accepted costs of $12,030, and the OME participation on a 75 percent basis of $9,023 were proper under the terms of the contract.

C. D. Bauer
Regional Director

EXHIBIT I

Summary of Contract Terms, Accepted Costs, and Unexpended Balances

	Authorized Amounts	Accepted Costs	Unexpended Balances
Fixed Unit Costs 1/			
Drifting and Crosscutting incl. Timbering 200 ft. at $60.00/foot	$12,000.00	$12,000.00	
Assaying for gold and silver - 40 samples at $5.00/sample	200.00	30.00	$170.00
Total Cost of Project	$12,200.00	$12,030.00	$170.00
Government Participation at 75%	$9,150.00	$ 9,023.00 2/	$127.00

1/ The Government retains no equity in any of the equipment or materials used.

2/ Reimbursement claimed and paid.

Government's copy

EXPLORATION CONTRACT
M & M BUCHANAN GOLD MINING AND MILLING CORP.
OME-6665

AMENDMENT NO. 2

It is agreed this 13th day of February, 1970, between the United States of America, acting through the Department of the Interior, U. S. Geological Survey, hereinafter called the "Government," and M & M Buchanan Gold Mining and Milling Corp., hereinafter called the "Operator," that Exploration Contract 2270 (OME-6665), dated September 6, 1968, as amended, is further amended, effective the date of the contract as follows:

1. The time fixed by Article 1(a) of the contract, as amended by Amendment No. 1, for completion of the work is extended from fourteen (14) to twenty-five (25) months from the date of the contract, or until October 6, 1970.

2. The maximum period for royalty payments and for the lien to secure payments thereof provided for in Article 6 of the contract is extended from ten (10) to eleven (11) years from the date of the contract.

3. The time fixed by Article 1 of the contract to begin the work is extended from September 15, 1968 to April 1, 1970.

4. It is the essence of this amendment that the work shall be undertaken and completed before the termination of the period fixed for completion; and if not completed in the manner required by the contract, the following provisions shall thereupon become effective:

(a) The contract and all obligations of the parties thereunder, except as hereinafter otherwise provided, shall be and are hereby terminated as follows:

(i) Effective the date of the contract if work on the contract has not been started on or before April 1, 1970.

(ii) Effective October 6, 1970, if the work has been started but not completed on or before that date.

(b) The Government will contribute only to allowable costs incurred prior to the relevant effective date set forth in 4(a) above.

(c) The Operator shall promptly perform all winding-up and settlement actions provided for in the contract, including the rendering of the final report and final account.

(d) The Operator, as principal if the Operator is the producer, or as surety if the Operator is not the producer (for example, if the Operator either transfers or fails to retain its interest in the land), shall pay to the Government the royalty provided for in the contract in the same manner and amount, for the same period, and subject to the same provisions as provided for in the contract as amended herein as if a certification of possible production had been made, such certification being hereby waived by the Operator. In addition, all rights of the Government provided for in the contract with respect to a certification of possible production, percentage royalty and liens to secure payment thereof, reports (including preservation of Operator's records), accounts, audits, and the right to recover any overpayments are hereby preserved.

(e) The Operator hereby releases and agrees to save the Government harmless from all claims or demands under or arising out of the contract, except as provided for in this Amendment No. 2.

This amendment shall not be construed to increase the estimated total cost of the contract, the aggregate amount which the Government may be required to contribute, the amount of any item designated as a maximum, nor the fixed unit cost of any item of work.

Executed in quadruplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By Harold Kirkemo
Chief, Office of Minerals Exploration
U. S. Geological Survey

M & M BUCHANAN GOLD MINING AND MILLING CORP.

By [illegible]

Title Pres & General Manager

Martin Long
Appd. Sol. Off.
Kirkemo
Kilsgaard

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
1/15/70		120
		120
		220
		120M

January 15, 1970

MEMORANDUM

To: The File

From: Edward C. Peterson
Office of Minerals Exploration

Subject: OME-6665 (Gold)
M & M Buchanan Gold Mining and Milling Corp.
Buchanan Mine
Tuolumne County, California
Contract 2270

Justification for Amendment No. 2

In a letter dated January 8, 1970, the Operator requested an additional extension of time of ten months to complete exploration work under the subject contract. Although the Operator has worked almost continuously, weather conditions permitting, since the contract was executed in September 1968, it has taken him considerably longer than anticipated to complete the necessary rehabilitation before starting the OME drifting on the 700-level authorized in the contract. Due to early adverse winter weather conditions at the mine, it now appears that contract work will be further delayed until about March 1970.

Since the exploration targets remain untested, it would be in the best interest of both the Government and Operator to maintain the contract in force and thereby retain the opportunity for a significant ore discovery.

I concur with the Field Officer's recommendation to approve the request.

Edward C. Peterson

Edward C. Peterson

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

ECPeterson/bsl 1/15/70

Government's c

EXPLORATION CONTRACT
M & M BUCHANAN GOLD MINING AND MILLING CORP.
OME-6665

AMENDMENT NO. 1

It is agreed this 15th day of May, 1969, between the United States of America, acting through the Department of the Interior, U. S. Geological Survey, hereinafter called the "Government," and M & M Buchanan Gold Mining and Milling Corp., hereinafter called the "Operator," that Exploration Contract 2270 (OME-6665), dated September 6, 1968, is amended effective the date of the contract as follows:

> The time fixed by Article 1(a) of the contract for completion of the work is extended from six (6) months to fourteen (14) months from the date of the contract, or to November 6, 1969.

This amendment shall not be construed to increase the estimated total cost of the contract, the aggregate amount which the Government may be required to contribute, the amount of any item designated as a maximum, nor the fixed unit cost of any item of work.

Executed in quadruplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By Harold Kirkemo
Chief, Office of Minerals Exploration
U. S. Geological Survey

M & M BUCHANAN GOLD MINING & MILLING CORP.

By [illegible]

Title General Manager
President

Long
App'd. Sol. Off.
Pearson
Kirkemo
Kilsgaard
Hepp

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
5/5/69	Kirkemo	120
		120
		220
		120M

May 5, 1969

Memorandum

To: The File

From: Edward C. Peterson
Office of Minerals Exploration

Subject: OME-6665 (Gold)
M & M Buchanan Gold Mining and Milling Corp.
Buchanan Mine
Tuolumne County, California
Contract 2270

Justification for Amendment No. 1

The Operator has requested a eight-month extension of time to complete exploration work under the subject contract. The contract dated September 6, 1968, stated that the work be completed within six months or by March 6, 1969. Although preliminary work was started immediately, the early onset of the most severe winter on record forced the closing down of all work at the property until late in March. The property is now accessible again and the Operator has resumed work but the pumping out of the flooded workings, and rehabilitation of the shaft will require at least another month to complete before exploration work can be started.

Since the delay was unavoidable and the exploration targets remain untested, it would be in the best interest of both the Government and Operator to grant the request. Therefore, I concur with the Field Officer's recommendation to extend the contract time an additional eight months, or until November 6, 1969.

Edward C. Peterson

Edward C. Peterson

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

ECPeterson/bsl 5/5/69

Government's copy

MME Form 51
July 1965

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
U. S. Geological Survey

EXPLORATION CONTRACT
(Short Form)

Docket	Commodity	Contract No.	County	State
OME-6665	Gold	2470	Tuolumne	California

It is agreed SEP 6 1968 (Date), between the United States of America, acting through the Department of the Interior, U. S. Geological Survey, hereinafter called the "Government," and

M & M Buchanan Gold Mining and Milling CORP.

whose mailing address is 796 Douglas Avenue, Oakland, California 94603, hereinafter called the "Operator," as follows:

ARTICLE I. Authority and scope.--(a) This contract, entered into under the authority of Public Law 701, 85th Cong., 2d sess. (72 Stat. 700; 30 U.S.C. § 641 - 646), consists of this form, the attached Annex I (land description), Exhibit A (work and costs), and the maps and documents listed. The work is a search for new or unexplored deposits of the commodity designated above. The Operator shall begin the work on or before SEP 15 1968 (Date), and, subject to the provisions of Article 7 and Exhibit A, shall complete the work within 6 months from the date of the contract.

(b) The description of the work and the fixed cost for each unit of work to be performed (per foot of drilling, per foot of drifting, per hour of operations, etc.) are hereby agreed upon as specified in Exhibit A. The estimated total cost of the work is $12,200.00. The Government will contribute 75 percent of the total fixed unit costs of the work performed, not in excess of $9,150.00 in accordance with the provisions of Articles 4 and 5.

(c) Interest computation.--Simple interest at the rate of 7¾ percent shall accrue from the dates Federal funds are made available until the period specified for payment of royalty expires, or until the amount of Federal funds contributed is fully repaid with interest.

(d) The Operator shall not transfer or assign this contract or any right or obligation thereunder without the written consent of the Government.

ARTICLE 2. Operator's rights in land.--(a) The Operator represents and undertakes that Annex I correctly describes the land which is the subject of this contract and the nature of the Operator's right of property and possession therein (whether as owner, lessee, or otherwise), and that such right, title, or interest is subject only to the following claims, liens, or encumbrances:

SEE ANNEX I

(b) The Subordination Agreement of the holder of any claim, lien, or encumbrance listed above and (if the Operator does not hold the legal title) the Lien Agreement of any holder of the legal title of the land (lessor, seller, optionor, etc.) are attached as follows:

SEE ANNEX I

(c) The Operator shall preserve and maintain his right, title, or interest in the land and his right to the possession thereof for the purposes of this contract, and shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of this contract. The Operator shall neither transfer, convey, nor surrender the land nor any right, title, or interest therein, nor permit nor suffer any claim, lien, or encumbrance thereon, without expressly referring to and providing in the instrument of conveyance, lien, or encumbrance for the preservation of the Government's right to a royalty on production and liens for the payment thereof. Two true copies of such instrument shall be furnished to the Government. If the Government's rights to royalty as provided in Article 6 have been terminated, the provisions of this paragraph (c) shall become inapplicable.

ARTICLE 3. Performance of the work.--(a) Operator's responsibility.--The work shall be performed diligently, efficiently, in a workmanlike manner in accordance with good mining standards, and in compliance with State laws governing health, safety, and liability insurance covering employment. The Operator shall provide suitable and adequate equipment, facilities, materials, supplies, and labor to complete the work as specified in Article 1(a).

(b) Government may inspect.--The Operator shall consult with and inform the Government on all phases of the work as it progresses. The Government may enter at all reasonable times to inspect the work under the contract and production operations during the period that royalty is payable to the Government. The Operator shall provide the Government with all reasonable means of access for such inspections.

ARTICLE 4. Contribution by the Government.--The Government will make its contribution on the basis of the monthly vouchers referred to in Article 5(b), but all payments by the Government are provisional only, subject to audit. Until the account between the Operator and the Government is finally audited and settled and the Operator's final report has been received, the Government may withhold such sums as are necessary to protect its interests. To the extent that amounts in excess of fixed unit costs or in excess of the estimated total cost may be necessary for the performance of the work, the Operator shall incur and pay such amounts for his own account without contribution by the Government. The Government will not contribute to the cost of any work performed prior to the date of this contract. The Government may make payments for the account of the Operator directly to independent contractors and suppliers rather than to the Operator.

ARTICLE 5. Reports, accounts, audits.--(a) Operator's records.--The Operator shall keep suitable records and accounts of the units of work performed and of any production in which the Government may have an interest; and shall preserve those with respect to work performed for at least three years after final payment by the Government, and those with respect to production for at least three years after any obligation to pay royalties to the Government has terminated. The Government may inspect and audit said records and accounts at any time, either by itself or by a certified public accountant. The Comptroller General of the United States or his representative, until the expiration of said three-year periods, shall have access to and the right to examine all pertinent books, documents, papers, and records of the Operator.

(b) Monthly reports.--The Operator shall provide the Government with four copies of monthly reports in three sections as follows:

(1) Operator's Monthly Voucher claiming costs for work performed;

(2) Operator's Progress Report showing the number of units of the various types of work performed; and

(3) a narrative report of the work performed during the reporting period, including adequate engineering-geological maps or sketches, drill hole logs and locations, and assay reports on samples taken concurrently with advance in mineralized ground.

(Forms for reporting under (1) and (2) above will be provided by the Government.)

(c) Final report.--Upon completion of the work or termination of the Government's obligation to contribute to costs, the Operator shall furnish the Government with three copies of a final report (in addition to the final monthly report). This final report shall include a geological and engineering evaluation of the results of the work performed under the contract with an estimate of the ore reserves resulting from such work, complete assay data, adequate geological and engineering maps or sketches, and a summary of the work performed and the unit costs thereof.

(d) Report of sales.--The Operator shall provide the Government with suitable accounting and documentary evidence covering all production to which the Government's royalty relates, such as two copies of smelter or concentrator settlement sheets and certified accounts of production and sale or other disposition of production.

(e) Compliance with requirements.--If the Government determines that any of the Operator's reports, records, or accounts are insufficient or incomplete, or if the Operator fails to make them, the Government may procure the preparation or completion of same with suitable attachments as an expense of the work to which the Operator shall contribute. The Government may withhold approval and payment of any vouchers relating to insufficient or incomplete reports, records, or accounts.

ARTICLE 6. Repayment by Operator.--(a) Certification.--If the Government considers that mineral or metal production from the land covered by the contract may be possible as a result of the exploration work, it shall so certify in writing to the Operator at any time not later than six months after a sufficient final report and final accounting (see Article 5) have been furnished.

(b) Royalty on production.--The Operator, whether or not the producer (for example, if the Operator either transfers or does not retain his interest in the land), shall pay to the Government a royalty on all minerals and metals mined or produced from the land as follows:

(1) irrespective of any certification of possible production--from the date of the contract until the lapse of the time within which the Government may issue such certification or until the total net amount contributed by the Government is fully repaid with interest, whichever occurs first; or

(2) if the Government issues a certification of possible production--for a period of ten years from the date of the contract or until the total net amount contributed by the Government is fully repaid with interest, whichever occurs first.

(c) Payment of royalty.--(1) The Government's royalty shall be five percent of the gross proceeds (including any bonuses, premiums, allowances, or other benefits) from the production sold, in the form sold (ore, concentrate, metal, or equivalent), at the point of delivery (the f.o.b. point); except, that charges of the buyer arising in the regular course of business and shown as deductions on the buyer's settlement sheets (such as treatment processes performed by the buyer, sampling and assaying to determine the value of the production sold, and freight payable by the buyer to a carrier (not the Operator or producer)), shall be allowed as deductions in arriving at the "gross proceeds" as that term is used herein. No costs of the Operator or producer are deductible in arriving at the "gross proceeds" as that term is here used.

The term "treatment processes" means those processes (such as milling, concentrating, smelting, refining, or equivalent, but excluding fabricating or manufacturing) applied to the crude ore or other production after it is extracted from the ground to put it into a commercially marketable form.

(2) The Government's royalty shall be computed and paid currently upon each lot sold, held, or used in integrated operations, as the case may be.

(d) Unsold production.--If any production (ore, concentrate, metal, or equivalent), after the lapse of six months from the date the ore was extracted from the ground, remains neither sold nor used in integrated manufacturing or fabricating operations (for instance if it is stockpiled), the Government, at its option, as long as it so remains, may require the computation and payment of its royalty on the value of such production in the form (ore, concentrate, metal, or equivalent) it is in when the Government elects to require computation and payment. If any production is used in integrated manufacturing or fabricating operations before the Government makes its election, the Government's royalty on such production shall be computed on the value thereof in the form in which and at the time it is so used. "Value" as here used means what is or would be gross income from mining operations for percentage depletion purposes in Federal income tax determination, or the market value, whichever is greater.

(e) Lien for payment.--To secure the payment of royalty (see Article 6(b)), the Operator hereby grants to the Government a lien upon his interest in the land and upon any production of minerals and metals therefrom until the royalty claim is extinguished by lapse of time or is fully paid.

(f) Notice to purchasers.--The Operator or producer shall give notice of the Government's claim for royalty to any purchaser of the production, and shall authorize and direct such purchaser to pay the royalty directly to the Government and to furnish the Government with copies of the settlement sheets. If the records of any production and sales or other disposition of production, whether the production is by the Operator or by others, are not made available to the Government, the amount of the royalty may be estimated by the Government, and this estimate shall be final and binding upon the Operator or producer.

(g) No obligation to produce.--Nothing in this contract shall be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any production operations.

(h) Government not obligated to buy.--Nothing in this contract shall be construed as imposing any obligation on the Government to purchase any minerals and metals mined or produced from the land.

ARTICLE 7. Termination of the Government's Obligations.--(a) If the Government determines that operations at any time have failed to achieve anticipated results and further work is not justified, the Government may give the Operator written notice thereof, and thereupon:

(1) the Government shall be free of all obligation to pay on account of units of work not then performed; and

(2) the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to final accounting and reporting.

(b) If the Government determines that the Operator is in default under the terms of the contract, the Government may give the Operator written notice of such default with a specification of reasonable time within which the default must be cured; and if the Operator fails to cure such default as required, thereupon:

(1) the Government shall be relieved of all obligation to pay on account of units of work not performed when the notice was given, and

(2) the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to final accounting and reporting.

The Government may also avail itself of any other remedy the law may provide for breach of contract, including the right to rescind the contract and to demand repayment of all moneys contributed by the Government under the contract.

(c) The giving of any notice by the Government under the provisions of this Article 7 shall not affect the Government's rights as provided for in the contract with respect to royalty and liens to secure the payment thereof, and such rights shall be fully preserved.

(d) The determinations of the Government are subject to appeal under Article 11.

ARTICLE 8. Notices to be given by the Government may be delivered to the Operator or may be sent by certified mail addressed to the Operator at his mailing address stated in this contract. If mailed, notices are deemed to have been delivered five days after the date of mailing.

ARTICLE 9. Officials not to benefit.--No member of or delegate to Congress or resident commissioner shall be admitted to any share or part of this contract or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

ARTICLE 10. Nondiscrimination in Employment.--The provisions respecting nondiscrimination in employment which are required by section 301 of Executive Order 10925, dated March 6, 1961, as amended and supplemented, are attached hereto as Exhibit B and are hereby incorporated in and made a part of this contract.

ARTICLE 11. Disputes.--Any dispute arising under this contract which is not disposed of by agreement shall be decided by the Director, U. S. Geological Survey, who shall reduce his decision to writing and mail or otherwise furnish a copy thereof to the Operator. The decision of the Director, U. S. Geological Survey, shall be final and conclusive unless, within 30 days from the date of receipt of such copy, the Operator mails or otherwise furnishes to the Director, U. S. Geological Survey, a written appeal addressed to the Secretary of the Interior. The decision of the Secretary or his duly authorized representative for the determination of such appeals shall be final and conclusive unless determined by a court of competent jurisdiction to have been fraudulent, or capricious or arbitrary, or so grossly erroneous as necessarily to imply bad faith, or not supported by substantial evidence.

The term "Director, U. S. Geological Survey," as used herein includes his duly authorized representative.

ARTICLE 12. Work Hours Act of 1962 - Overtime Compensation.--This contract, to the extent that it is of a character specified in the Work Hours Act of 1962 (Public Law 87-581, 76 Stat. 357-360) and is not covered by the Walsh-Healey Public Contracts Act (41 U.S.C. 35-45), is subject to the following provisions and to all other provisions and exceptions of said Work Hours Act of 1962.

(a) Overtime requirements.--No Operator or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any laborer or mechanic to be employed on such work in excess of eight hours in any calendar day or in excess of forty hours in any workweek unless such laborer or mechanic receives compensation at a rate of not less than one and one-half times his basic rate of pay for all hours worked in excess of eight hours in any such calendar day or in excess of forty hours in any such workweek, as the case may be.

(b) Violations; liability for unpaid wages; liquidated damages.--In the event of any violation of the clause set forth in subparagraph (a) of this paragraph, the Operator and any subcontractor responsible therefor shall be liable to any affected employee for his unpaid wages. In addition, such Operator and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed, with respect to each individual laborer or mechanic employed in violation of the clause set forth in subparagraph (a) of this paragraph, in the sum of $10 for each calendar day on which such employee was required or permitted to work in excess of eight hours or in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in subparagraph (a) of this paragraph.

(c) Withholding for unpaid wages and liquidated damages.--The U. S. Geological Survey may withhold or cause to be withheld, from any moneys payable on account of work performed by the Operator or subcontractor, such sums as may administratively be determined to be necessary to satisfy any liabilities of such Operator or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (b) of this paragraph.

ARTICLE 13. Copeland (Anti-Kickback) Act--Nonrebate of wages.--The regulations of the Secretary of Labor applicable to contractors and subcontractors (29 CFR, Part 3), made pursuant to the Copeland Act, as amended (40 U. S. C. 276c) and to aid in the enforcement of the Anti-Kickback Act (18 U. S. C. 874) are made a part of this contract by reference. The Operator will comply with these regulations and any amendments or modifications thereof and will be responsible for the submission of affidavits required of independent contractors thereunder. The foregoing shall apply except as the Secretary of Labor may specifically provide for reasonable limitations, variations, tolerances, and exemptions.

ARTICLE 14. Changes and added provisions.--

Executed in quintuplicate the day and year first above written.

M & M BUCHANAN GOLD MINING AND MILLING CORP.
(Operator)

By Fred A. Mason
Pres. & General Manager

THE UNITED STATES OF AMERICA

By Arthur A. Baker
Acting Director, U. S. Geological Survey
Arthur A. Baker

I, Harry Mason (Name), certify that I am the secretary of the corporation named as Operator herein; that Fred A. Mason (Name), who signed this contract on behalf of the Operator, was then Pres. & General Manager (Title) of said corporation; that said contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

M & M Buchanan Gold Mining & Milling Corp.

CORPORATE SEAL

INCORPORATED NOV 1, 1937 CALIFORNIA

EXPLORATION CONTRACT
M & M BUCHANAN GOLD MINING & MILLING CORP.
OME-6665

ANNEX I

The land including all rights pertaining thereto, referred to in Article 2 of the contract, consists of two (2) patented lode mining claims, one (1) patented millsite, and six (6) unpatented lode mining claims in secs. 22, 23, 26, and 27, T. 1N., R. 16 E., MDB&M, Tuolumne mining district, Tuolumne County, California. The claims are shown on Figure 1, entitled, "Property map of Buchanan Mine, Tuolumne County, California," attached and made part hereof.

The patented claims and millsite are owned by the Operator and are recorded in the Tuolumne County Recorder's office at Sonora, California, as follows:

Name	Survey No.
Buchanan Quartz Mining Claim	43A
Buchanan Extension Quartz Mineral Claim	50
Buchanan Mill site	43B

The unpatented claims are owned by the Operator and are recorded in the Tuolumne County Recorder's office at Sonora, California, as follows:

Name	Book	Page
Buchanan North Quartz Mine	18	415
Buchanan Northeast Quartz Mine	18	416
Buchanan Northeast Quartz Mine Mill and Tunnel Site	18	415
Buchanan South Quartz Mine	18	416
Buchanan West Quartz Mine	18	414
Buchanan Southwest Mine	18	424

EXPLORATION CONTRACT
M & M BUCHANAN GOLD MINING & MILLING CORP.
OME-6665

EXHIBIT A

The purpose of this project is to explore by crosscutting and drifting on the 700 level for gold-bearing ore shoots occurring in quartz veins which have intruded the east-west trending Buchanan fault zone.

General Provisions

All drifts and crosscuts shall be not less than 5 by 7 feet in cross section, and shall be timbered as necessary. Mine rail shall be not less than 14-pound size, air line not less than 2-inch diameter, water line not less than 1-inch diameter, and ventilation line not less than 8-inch diameter.

All significantly mineralized areas traversed by the drifts or crosscuts, shall be sampled normal to the trends of the veins at intervals not exceeding 5 feet.

All samples shall be split as necessary, and one split assayed for gold and silver. The remainder of each sample shall be stored in a suitable container for Government inspection and possible use. With prior Government approval, the Operator may dispose of the stored samples.

True copies of assay certificates shall be submitted with the Operator's monthly report which shall also include a map or sketch showing the work completed during the reporting period, the location of all samples taken, and the general geological formations and structures traversed by the workings.

The Operator shall provide such supervision, labor, technical services, and equipment as may be required to complete the work in a satisfactory manner.

The location, direction, and extent of each work item shall be subject to Government approval.

Description of the Work

The work shall consist of extending the present drift on the 700 level for approximately 100 feet in a westerly direction. On the best showings of ore in the drift, crosscuts shall be driven across the fault zone to determine its width and to obtain samples for assay. Total crosscutting and drifting shall not exceed 200 feet.

The approximate location of the proposed work is shown in green on Figure 2, entitled, "Map of No. 3 Inclined Shaft, Buchanan Mine, Tuolumne County, California, showing approximate location of proposed exploration," attached and made part hereof.

Estimated Costs of the Work 1/

Fixed Unit Costs

Drifting and crosscutting, including timbering, 200 feet @ $60.00/foot	$12,000.00
Assaying for gold and silver, 40 samples @ $5.00/sample	200.00
Total Estimated Cost of the Project	$12,200.00
Government Participation @ 75%	$ 9,150.00

1/ The Government retains no equity in any of the equipment or materials used.

EXHIBIT B

NONDISCRIMINATION IN EMPLOYMENT

(Section 202, Executive Order 11246, September 24, 1965)

"During the performance of this contract, the contractor agrees as follows:

'(1) The contractor will not discriminate against any employee or applicant for employment because of race, creed, color, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, creed, color, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.

'(2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, or national origin.

'(3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

'(4) The contractor will comply with all provisions of Executive Order No. 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

'(5) The contractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

'(6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be cancelled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

'(7) The contractor will include the provisions of Paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the contracting agency may direct as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, That in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.'"

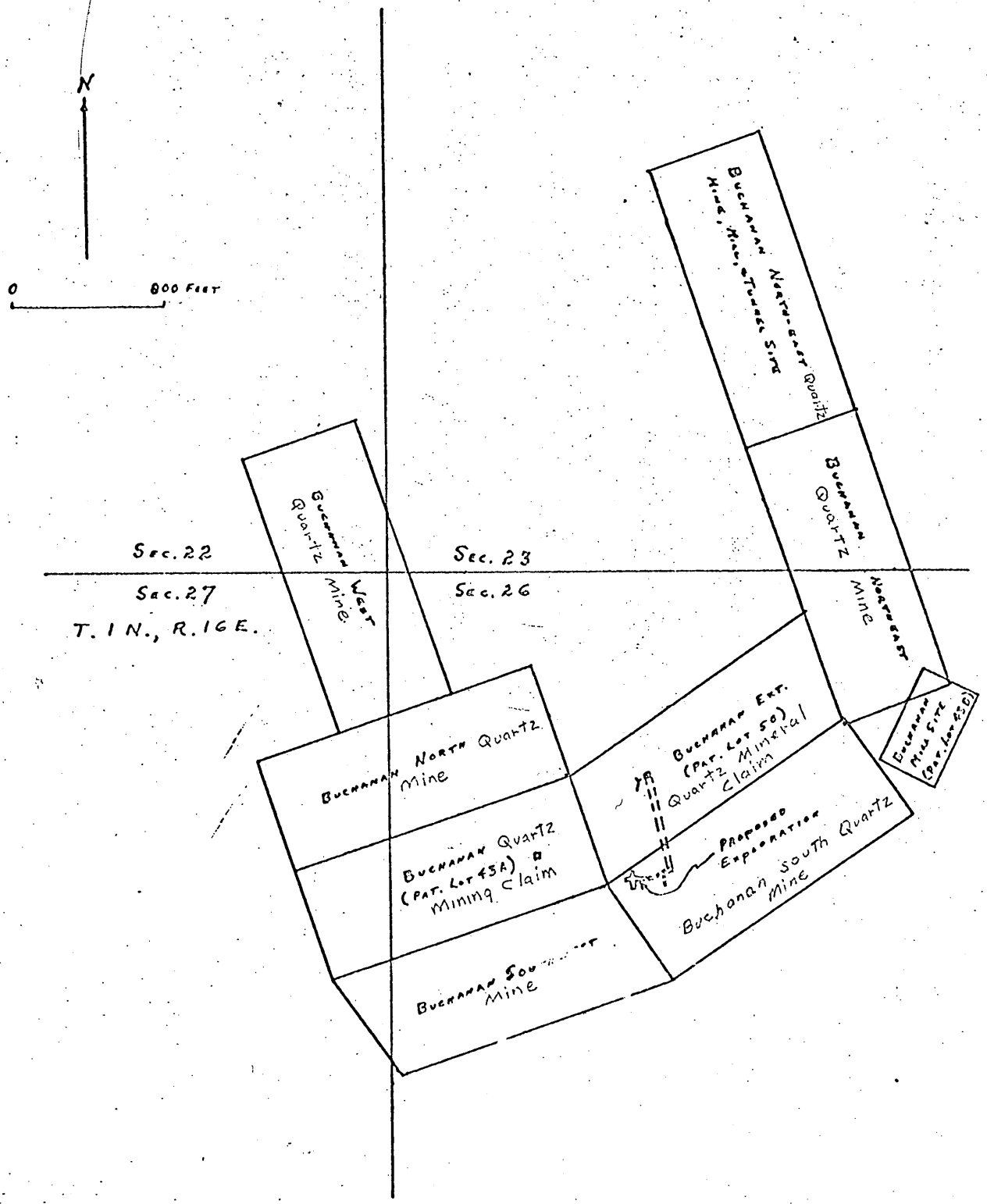


Figure 1.--Property map of Buchanan Mine, Tuolumne County, California.

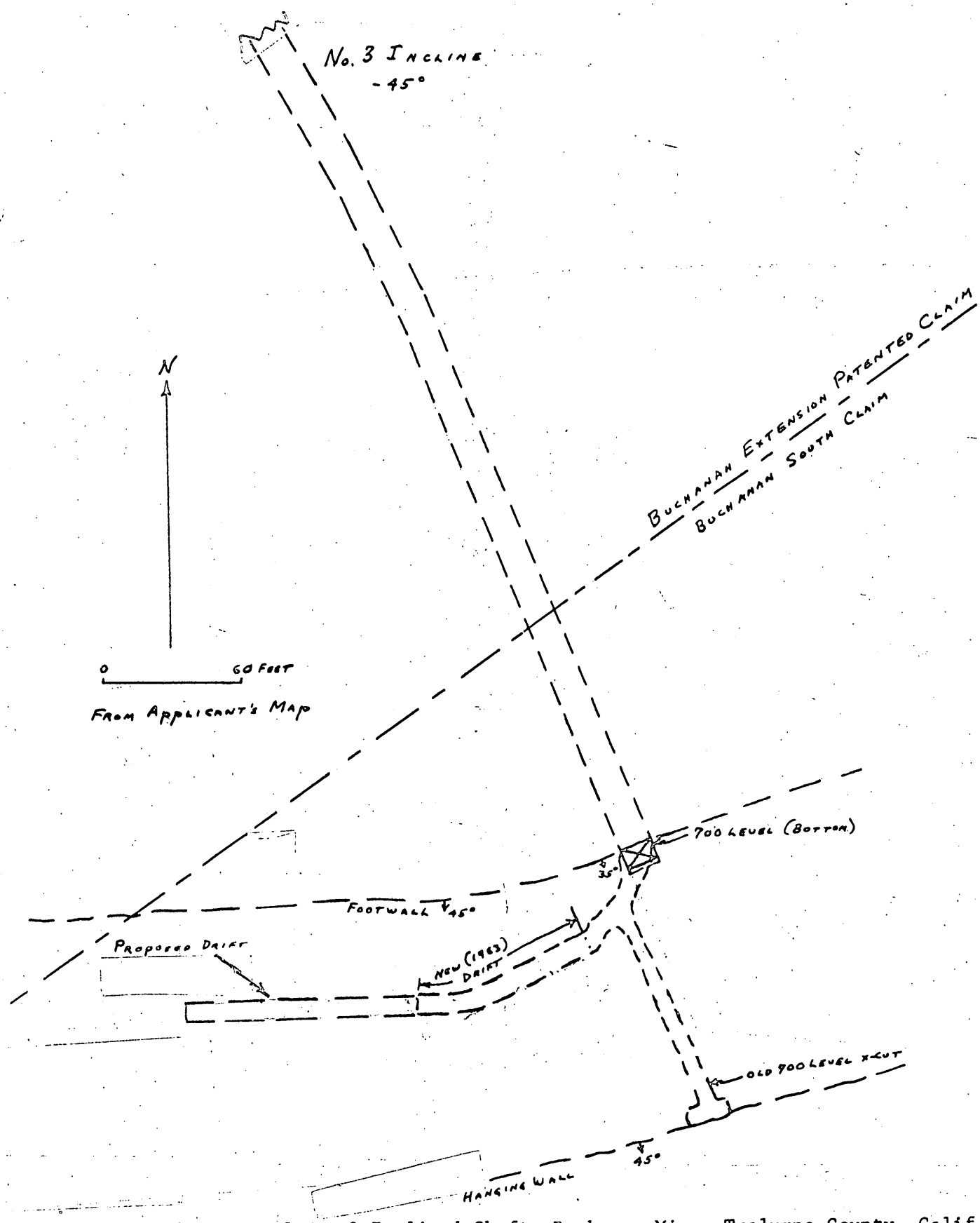


Figure 2.--Map of No. 3 Inclined Shaft, Buchanan Mine, Tuolumne County, Calif. showing approximate location of proposed exploration.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Memorandum

October 20, 1967

OFFICIAL COPY
O. M. E.
RECEIVED
OCT 23 1967

INITIALS	CODE

To: Chief, Office of Minerals Exploration
Washington, D. C.

From: Field Officer
Region II

Subject: New Application (Gold)
M & M Buchanan Gold Mining & Milling Corp.
Buchanan Mine
Tuolumne County, California

Enclosed is an Application for Financial Assistance in an exploration project for gold at the Buchanan Mine, Tuolumne County, California, submitted to the Field Office on October 19, 1967.

The applicants submitted a previous application (Docket OME-6211) that was denied on March 6, 1962. Since that time they have done additional work and it now appears that they may have a worthwhile exploration project. Proposed work consists of sinking an inclined shaft an additional 110 feet and driving 200 feet of drifts on the 800 level. Estimated costs are high but these could probably be adjusted downward by more accurate calculations of the amount of labor, supplies, and material needed.

H. K. Stager

Enclosure

Development to mine in Tuolumne
in new shaft 200' level.
Region II forwarded
Application for approval
of costs. Is to be
granted? HKS

MME Form 40
Jan. 65

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

OFFICIAL COPY O. K. RECEIVED OCT 23 1967 TITLE & CODE

APPLICATION FOR FINANCIAL ASSISTANCE IN MINERALS EXPLORATION

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

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

M & M BUCHANAN GOLD MINING & MILLING CORP.
FRED J. MASON
796 DOUGLAS AVENUE
OAKLAND, CALIF. 94603

APPLICANT DO NOT USE THIS BLOCK

DOCKET NUMBER: 6665

DATE RECEIVED: OCTOBER 23, 1967

REGION: II

DIVISION CODE:

BUSINESS ORGANIZATION *(Check one)*

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

STATE IN WHICH FIRM IS ORGANIZED: CALIFORNIA

LIST CORPORATE OFFICERS OR PARTNERS HERE, IF APPLICABLE

NAME	ADDRESS	TITLE
FRED J. MASON	796 DOUGLAS AVENUE OAKLAND, CALIF. 94603	PRESIDENT
HARRY N. MASON	796 DOUGLAS AVENUE OAKLAND, CALIF. 94603	TREASURER

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

ESTIMATED COST OF PROJECT: $ $55,000.00

PROPERTY NAME: M&M BUCHANAN GOLD MINING AND MILLING CORP.

LOCATION — COUNTY: TUOLUMNE; STATE: CALIF.

GENERAL INSTRUCTIONS

Before filling out this application, please read the *OME Regulations for Obtaining Federal Assistance in Financing Explorations for Mineral Reserves* (30 CFR Chap. III). To assure prompt action, your application must provide all applicable material and information specified on the back of this application form. Avoid unnecessary correspondence and delays by submitting complete and accurate information. *Please submit two copies of this application and all accompanying papers* except as otherwise noted. Place your name and address on each sheet. Each item of information, maps, and reports required as a part of this application is described on the back of this form. Identify each attached statement by the item number to which it applies. If an item does not apply to your application, show the item number on your statement and after it write "not applicable." Maps or sketches should be used to supplement narrative descriptions of the property location and boundaries in item 2, existing mine workings and geology in item 3, and the proposed exploration work in item 5. When this information is not too complex, all of it may be shown on one map or sketch. All documents and other attachments submitted as a part of this application, except those in item 3(g) which you mark to be returned, become the property of the Government and will not be returned to the applicant. Send true copies, *not originals*, of leases, contracts, and other documents which are an essential part of your business records. *File this application with the Office of Minerals Exploration, Department of the Interior,* ~~Washington 25, D.C. or with the nearest OME Field Office.~~ Washington, D. C., 20242, or with the nearest OME Field Office.

CERTIFICATION

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

OCT. 2, 1967
DATED

FRED J. MASON
BY *(Signature)*

PRESIDENT
TITLE

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

INFORMATION REQUIRED WITH THIS APPLICATION

1. Financial Eligibility:

(a) Submit evidence of efforts made within 90 days preceding the filing of this application to obtain credit from your bank of account and at least one other banking institution or other private source of credit. Such evidence shall include true copies of correspondence which show: (1) date of loan request, (2) amount and terms requested, (3) proposed use of loan funds, and (4) the replies from credit sources. If the loan was offered under terms which you consider unreasonable, state why you consider them so.

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

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

2. Applicant's Rights in Land:

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

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

(c) For all land or mineral rights encumbered or not owned, submit five copies of Lien and Subordination Agreements on MME Form 52. If the agreements cannot be obtained, state reasons and provide copies of letters of refusal.

3. Physical Description:

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

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

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

(d) Describe known ore reserves, giving quantities and grades and sampling methods used. Support your statement with copies of assay certificates and assay maps if available.

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

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

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

4. Accessibility of Property:

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

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

5. Exploration Work:

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

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

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

6. Experience:

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

7. Estimate of Costs:

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

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

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

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

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

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

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

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

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

FRED MASON
796 DOUGLAS AVENUE
OAKLAND, CALIF. 94603

1. FINANCIAL ELIGIBILITY

(A) TWO BANKS CONTACTED WILL NOT LOAN MONEY FOR EXPLORATION OF A GOLD MINE.

(B) NOT APPLICABLE.

(C) MONEY TOBE SUPPLIED BY BUCHANAN GOLD MINING AND MILLING CO.. OFFICE AT 976 DOUGLAS AVENUE OAKLAND, CALIF. 94603.

2. APPLICANTIS RIGHTS IN LAND

(A) BUCHANAN MINE WAS TAKEN OVER IN 1939 FROM OWNER ON A 10 PERSENT ROYALTY BASIS. IN 1958 MINE WAS BOUGHT FROM OWNER AT ASET PRICE.

(B) PATENTED CLAIMS AND UN PATENED CLAIMS.

PATENTED CLAIMS: A QUARTZ MINE AND MILL SITE BEING ENTRY # 192 DES. AS LOTS 43A 7B EMB A POR. OFSEC. 26 AND KNOWN AS BUCHANAN MINE. SECTION 27, BLOCK 1N, RANGE EAST 26.

A QUARTZ MINE BEING E.EXT.OF THE BUCHANAN MINE AND KNOWN AS THE LOOKOUT QUARTZ MINE IN SECTION 26, BLOCK 1N RANGE EAST 16. SITUATED IN TUOLUMNE MINING DISTRICT, COUNTY OF TUOLUMNE, STATE OF CALIFORNIA.

UNPATENTED CLAIMS
BUCHANAN SOUTH, BUCHANAN NORTH -EAST QUARTZ MINE AND TUNNEL SITE . BUCHANAN WEST, BUCHANAN SOUTH-WEST, BUCHANAN NORTH-EAST, BUCHANAN NORTH QUARTZ CLAIM.

(C) NOT APPLICABLE.

3. PHYSICAL DESCRIPTION

(A) SEE ATTACHMENTS.

(B) ENGINEERING, MONEY , LABOR, AND MATERIAL FOR EXPLORATION WILLBE FURNISHED BY STONEHURST IRON AND MACHINE CO. 796 DOUGLAS AVENUE OAKLAND, CALIFORNIA.

(C) NO ACTUAL RECORDS EXCEPT FOR MAP. SUPPOSEDLY 2-½ MILLION DOLLARS WORTH OF GOLD PRIOR TO 1893. SEE ATTACHED DOCUMENT.

(D) WE KNOW THE BUCHANAN MINE WAS MINED BETWEEN 500 AND 600 FT.LEVEL FROM SHAFT NO.2.

(E) SEE ATTACHED MAPS AND SUMMARY.

(F) A NEW 45 DEGREE 700 FT.SHAFT WAS SUNK IN SLATE AND MOSTLY TIMBERED AND LAGGED TO TAKE OUT THE ORE BETWEEN 700 AND 600 FT.LEVEL. ALSO TO MAKE TWO OPENINGS FOR AIR CONDITIONS, BUT WAS NEVER CONNECTED.

(G) NO PAPERS NEED BE RETURNED.

(4) ACCESSIBILITY OF PROPERTY

(A) WILL MEET REPRESENTATIVE AT STONEHURST IRON AND MACHINE CO. 796 DOUGLAS AVENUE, OAKLAND, CALIF. AND TAKE HIM TO PROPERTY; WHICH IS LOCATED 12 MILES IN THE MOUNTAINS FROM TUOLUMNE CITY, CALIFORNIA. THERE IS A GOOD ROAD INTO THE MINING PROPERTY FROM TUOLUMNE CITY.

(B) TUOLUMNE CITY, CALIFORNIA.

(5) EXPLORATION WORK

(A) PROPOSE TO SINK FROM 700 FT. LEVEL TO 800 FT. LEVEL PLUS 10 FT SUMP. DRIVE DRIFT ON 800 FT. LEVEL, WEST 100 FT., EAST 100 FT., 5 FT X 7 FT. I.D. OF TIMBERS. BOTH SHAFT AND DRIFTS WILL BE TIMBERED AND LAGGED.

(B) NO ROADES NEED BE BUILT.

(C) WEATHER PERMITTING; OTHERWORDS ANY TIME. PROGRESS OF FOOTAGE SINKING SHAFT AND DRIFTING WILL DEPEND ON FORMATION OF ROCK AND SEEPAGE OF WATER.

(6) EXPERIENCE

(A) 25 YEARS MINING EXPERIENCE. FRED MASOM ; HARRY MASON ; WILLIAM MASON.

(7) ESTIMATE OF COSTS

(A) NO INDEPENDENT CONTRACTS, AS WE KNOW OF NOW.

(B) SINK 100 FT. OF SHAFT, FROM 700 FT. LEVEL TO 800 FT. LEVEL, PLUS 10 FT. SUMP. DRIVE 100 FT. DRIFT WEST, AND 100 FEET EAST, BUILD STATION AT 800 FT. LEVEL. ESTIMATED COST $55,000.00.

(C) ALL ON JOB SITE.

(D) MACHINERY LIST ATTACHED.

(E) NO REPAIRS.

(F) NO NEW BUILDINGS NEEDED.

(G) NO REPAIRS. PREVIOUS PAPERWORK HAS BEEN DONE BY STONEHURST IRON AND MACHINE CO.-IN ALL PROBABILITY THIS WOULD CONTINUE THE SAME.

SWEETWOOD 8-5455

Stonehurst Iron & Machine Co
796 DOUGLAS AVENUE
OAKLAND 3, CALIFORNIA

September 11, 1967

Bank of America
4800 MacDonald Avenue
Richmond, California

Attn: J. A. Buckley, Mgr.

Dear Mr. Buckley:

This is a request for a five year loan of $55,000.00 for exploration purposes at the M & M Buchanan Gold Mine and Milling Company in Tolumne County, California.

Respectfully,

Fred J. Mason

Fred J. Mason
President

FJM:ms

Bank of America
NATIONAL TRUST AND SAVINGS ASSOCIATION

CABLE ADDRESS
"BANKAMERICA"

September 18, 1967

M & M Buchanan Gold Mining and Milling Company
796 Douglas Avenue
Oakland 3, California

Gentlemen:

We are unable to comply with your request for an extension of credit in the amount of $55,000.00 for a period of five years for exploration of the M & M Buchanan Gold Mining and Milling Company in Tolumne County, California.

Bank policy will not permit us to enter into this speculative type of loan with a new corporation having a limited net worth.

Sincerely yours,

J. A. Buckley
Manager

JB:mb

DUPLICATE

SWEETWOOD 8-5455

Stonehurst Iron & Machine Co

796 DOUGLAS AVENUE
OAKLAND 3, CALIFORNIA

September 11, 1967

The Mechanics Bank of
Richmond California
9th & MacDonald Avenue
Richmond, California

Attn: Mr. S. D. Loiseau
Asst. Cashier/Mgr.

Dear Mr. Loiseau:

This is a request for a five-year loan of $55,000.00 for exploration purposes at the M & M Buchanan Gold Mine and Milling Company in Tolumne County, California.

Respectfully,

Fred J. Mason

Fred J. Mason
President.

FJM:ms

RAYMOND C. GERICKE
ATTORNEY AT LAW
SUITE 03-08
436 14TH STREET
OAKLAND 12, CALIFORNIA
GLENCOURT 1-0823

February 5, 1962

Mr. Fred J. Mason
19541 Alana Road
Castro Valley, California

Re: M & M Buchanan Gold Mining and Milling Company

Dear Mr. Mason:

Enclosed is escrow receipt covering the shares of stock issued in your name by the above named corporation. These shares are being held by me, as escrow holder, as provided in the permit of the corporation commissioner, dated December 19, 1961.

Yours very truly,

Raymond C. Gericke

RCG:lp
Enclosure

UNITED CALIFORNIA BANK

Oakland Main Office — Escrow No. ES 10746

Oakland 12, California — Oct[illegible] 2, 1961

To: William G. Meagher

Inclosed:

(1) Deed of Burton B. Brace dated September 25, [illegible] and conveying title to William [illegible]

(2) Bill of Sale dated September [illegible] 1958 between Fred J. Mason and William G. Meagher.

(3) Bill of Sale dated September 25, 1958 [illegible]en J. Andrew Cook and William G. Meagher.

(4) Certificate No. 116 for 50,998 shares of Buchanan Gold Mining and Milling Company dated July 19, 1910.

(5) Certificate No. 111 for 15,000 shares of Buchanan Gold Mining and Milling Company, dated December 27, 1907.

(6) Certificate No. 112 for 15,000 shares of Buchanan Gold Mining and Milling Company dated December 27, 1907.

(7) Certificate No. 113 for 15,000 shares of Buchanan Gold Mining and Milling Company dated December 27, 1907.

This now closes the escrow. If we can be of any further assistance to you in the future, please do not hesitate to call on us.

Sincerely yours,

R. S. Alis
Assistant Secretary

Receipt of the above inclosures is hereby acknowledegd

RSA:mmk
Enclosures

.....

.....

TRU 249 CAL. 4-60

California
[illegible] 1961.

AGREEMENT

Between Wm. G. Meagher and Fred and Harry Mason regarding the Buchanan Mine:-

First. Fred and Harry Mason agree to pay the balance due under the escrow held by the United California Bank on the purchase of the Buchanan Mine.

Second. This payment will enable the Mason's and Meaghers sole owners of the Buchanan Mine. It is then understood that the stock will be reissued equally between Meagher and the Masons.

Third. It is understood that the Buchanan Mine will then issue it's notes for the amount paid by the Masons into this escrow and also a note will be executed by the Corporation to Bill Meagher for the difference between what the Masons paid into this escrow and $15,000.00

Fourth. The Masons will diligently pursue the obtaining of a loan from the Government to complete the necessary work involved in the expansion of the tunnel and other necessary repair work. It is understood that the Masons alone, will put up the necessary funds (either in material or labor) to complete this work. In other words, Bill Meagher is not to put any more money in this venture.

Fifth. It is hereby understood that any monies and/or labor hereafter furnished by the Masons will be billed to the Corporation and will become a receivable to them. It is understood that they are to be repaid for these advances and labor out of the proceeds from the Mine before any dividends are paid to the stockholders.

Sixth. An agreement is to be drawn on which all parties agree not to dispose of their stock before allowing the other parties the right to purchase the shares offered for sale at the same price that could be obtained from others.

This agreement has been read and approved by the following:

ESCROW HOLDER

Pursuant to the Permit of the Commissioner of Corporations of the State of California, dated December 19, 1961, the following certificates representing shares of the $1.00 par value common stock of M & M Buchanan Gold Mining and Milling Company, have been issued and are on deposit with the undersigned escrow holder:

Certificate No. 2 for 7,500 shares, issued January 12, 1962, in the name of Fred J. Mason

Dated: February 5, 1962

Raymond C. Gericke
Escrow Holder

This receipt is not transferable. None of the shares of stock referred to in it may be sold, transferred, or pledged without first applying for and obtaining an Order of the Commissioner of Corporations of the State of California authorizing such sale, transfer or pledge.

TUOLUMNE COUNTY TITLE COMPANY

184 SOUTH WASHINGTON STREET
SONORA, CALIFORNIA

JE 2-2292

December 26, 1961

Mr. Fred Mason
1723 Peralta St.
Oakland 7, California

Order No. *7412-1121*

We enclose the following items marked with an "X":

( )

( ) Title Insurance Policy

( ) Closing letter and Escrow Statement

( ) Statement for charges, for which we shall be pleased to receive your check

( ) Check for

(x) Deed from *Meagher Sr., to M & M Buchanan Gold Minigg and Milling Co.*

( ) Deed of Trust from

( ) Promissory Note from

( ) Fire Insurance Policy

( ) Any other papers to which you are entitled, not enclosed herewith, shall be forwarded to you later.

We are happy to have had the priivilege of serving you in this instance, and earnestly suggest that you consult with us in the event you have questions or problems relating to the above matter. Our aim is to serve you well --- please call on us any time we may be of help to you.

TUOLUMNE COUNTY TITLE COMPANY

By *David Holstrom*
David Holstrom, Vice-President

ALAN CRANSTON, CHAIRMAN
STATE CONTROLLER
HALE CHAMPION, VICE-CHAIRMAN
DIRECTOR OF FINANCE
JOHN W. LYNCH
CHAIRMAN BOARD OF EQUALIZATION

JOHN J. CAMPBELL
EXECUTIVE OFFICER
1025 P STREET
SACRAMENTO 14

State of California
Franchise Tax Board

M & M BUCHANAN GOLD MINING AND
MILLING COMPANY,
% R. C. GERICKE,
438 - 14TH ST.,
OAKLAND, CALIF.

11-1-61
D-422674

DATE OF INCORPORATION OR QUALIFICATION

Gentlemen:

This letter is a request for important information from the corporation referred to above which recently became subject to the Bank and Corporation Tax Law. If not properly addressed, please forward this letter and enclosure to the correct address of the corporation so that someone concerned with the future operations can furnish the required information.

ACCOUNTING PERIOD AND MAILING ADDRESS

Please inform this office promptly of the accounting period adopted and the correct mailing address to be used. This information can be inserted in the space provided below and this letter returned for attention.

A return must be filed for each accounting period, even though inactive, and the tax disclosed by the return must be satisfied. The accounting period to be adopted must meet three basic requirements.

1. The end of the first period should not be more than 12 months from the date of incorporation or qualification.
2. The period must end on the last day of any month.
3. The period adopted must be identical with the year to be used in filing United States corporation income tax returns.

This letter is mailed to the address of record. We should be notified immediately of the proper mailing address if the address of record is not correct.

GUIDE FOR NEW CORPORATIONS

The enclosed Guide for New Corporations should be reviewed now for information regarding the accounting period and also retained for review at the time the first return is required to be filed.

If the required information is furnished regarding the correct mailing address and the accounting period adopted, we will be in a position to furnish you with return forms prior to the time the first return is due.

Yours very truly,

FRANCHISE TAX BOARD
JOHN J. CAMPBELL, *Executive Officer*

By Leo J. Butcholder
Supervisor

Income year adopted: .....

Correct mailing address (Please print):

.....

.....
Signature Title

52753 11-61 5M SPO

Grant Deed

#74-2-1121

For value received William G. Meagher, Sr., also known as
William G. Meagher, and Jane A. Meagher, his wife

GRANT.....to M & M Buchanan Gold Mining and Milling Company,
a California corporaion

all the real property situate in the
County of Tuolumne , State of California, described as follows:

SEE SCHEDULE A ATTACHED

WITNESS our hand

William G. Meagher Sr.

Jane A. Meagher

SUMMARY OF OPERATIONS OF BUCHANAN MINE

(Researched by former operator of mine from 1935 to 1939, and written up in the following manner.)

Remaining Ore

The ore now remaining in the Buchanan Mine may be grouped for summarizing and descriptive purposes, as follows:

1. A virgin body of ore between the 600 and 800 levels of a vertical depth of 171 feet and an incline depth of approximately 300 feet. Considered a very good grade of milling ore at the old price of gold.

2. Number two ore shute, distant 30 feet in the hanging wall. Dimensions unknown. Good grade of ore.

3. Number three or hanging wall ore shute, within the fissure, east of main shute. Known to be extensive but eastern limits undetermined. Mill-run tests, taken from the 200, 500, and 600 levels showed $19.00 mill recovery at the old price of gold. Important.

4. That which was formerly waste but is now commercial ore, due to increased price of gold. A substantial amount.

5. A large support pillar between the 200 and 300 levels. Above average value at the old price of gold.

6. All ore below the 800 or lowest level of present development, of which engineer Day states, - "The indications are favorable for a continuation of ore to a much greater depth, and I see no reason why the grade should change for the worse." Can be easily made available by continuing No. 3 incline shaft to greater depth at the same angle.

It is the writer's opinion that if Barron and Davis had continued to operate the mine, they would have more than doubled its bullion production. In other words, I believe that there are gold values still available in the Buchanan Mine which far exceed the $2,500,000 estimated to have been taken from it by Barron and Davis. I base this belief on the intimate knowledge of the property which I have gained through a careful search for facts since 1931 and in operating under the bond and lease which I now hold. (1) I am convinced that it is only because of the peculiar circumstances connected with the Mine's history (referred to above) that the mine was permanently shut down in 1893 by Barron and Davis; that if it had not been for the Barron-Davis family feud which continued thereafter until 1932, after I first became interested in the property, the rich ore deposits, still in place, would have long been extracted, and would not be available for current operations.

Condition of the Property in 1935:

The property was taken over for operation and development by the writer on June 15, 1935, - 42 years after the shutdown in 1893.

---

(1) If all the data had come from one or two sources, it could conceivably be subject to question; but when, as in this case, it has come from so many entirely disconnected and disinterested sources and where each source substantiates the other, the writer can come to but one conclusion -- that the data on the whole is substantially correct. Then, when further verified by 4-1/2 years of work in the mine to a certain depth and found accurate, I cannot escape the conclusion the data on the remaining depths is reasonable accurate.

Fred Mason
796 Douglas Ave.
Oakland, Calif.

d J. Mason
796 Douglas Avenue
Oakland 3, California

Between 1881 and July 1886, they operated a ten-stamp Mill (1) erected in 1881, crushing probably between 20,000 and 25,000 tons during the period.

In July 1886 Barron and Davis completed installation of a 20-850 lb. stamp mill with a capacity ranging from 30 to 60 tons per day. (2) At various times they used screens differing in mesh, - ranging from 30 to 50 mesh, with 34 and 40 mesh predominating. The writer has talked many times with the two men who operated this mill most of the 1886 to 1892 period and believes that 40 tons per day makes ample allowance for lost time, - or approximately 86,400 tons for the 6-year period. Commencing with the first work done in 1881, it may be fairly said that at least 100,000 tons of ore approximates the amount of ore mined during the entire 10-1/2 years from 1881 to 1892.

In 1892 Barron and Davis shut down mining operations to embark on a new development program, which contemplated the sinking of a new shaft. By this time they had only partially developed a large body of ore, though sufficiently to establish its general trend and give them some idea of its magnitude.

They opened up a large tonnage of ore, - several times larger than they could possibly have mined and milled during the same period. (3) It extended a horizontal distance of approximately 900 feet and a vertical depth of 776 feet. (4)

After establishing the trend of the chute, they were confronted with the necessity of sinking a new shaft to conform with that trend. Moreover, they had worked themselves into a bad mining situation for the extensive development required below the 500 foot level. An inspection of the mine, coupled with a study of the map of the underground workings, makes this patent to anyone with any knowledge of the fundamentals of mining. Not only were they faced with the prospect of rehandling of ore below the 500 foot level, but they also had a single opening to the surface through a long tunnel or drift, completely lacking in any equipment for ventilation. Consequently, the powder smoke caused them considerable difficulty, - it being a known fact that they nearly lost 3 men on one occasion due to this cause. The writer has been told by a Mr. Stanley, who was superintendent during this period, of several narrow escapes from death in this area, due to powder gas. Indeed, on one occasion the attempted rescue came too late.

(1) "Report of the Director of the Mint upon the Production of Precious Metals in the U. S. for the calendar year 1883" page 228.

(2) Mining and Scientific Press Mar. 31, 1888, page 198. State Mineralogist Reports: VI, Part II, page 60; VIII, page 666; X, page 752; and XI, page 494.

(3) "Mining and Scientific Press", March. 31, 1888, page 198. State Mineralogists Reports, VIII, Page 666; X, page 752; and XI, page 494. Report of Engineer J. B. Low, dated July 1, 1889. Letter from E. W. Stanley, Superintendent at the time. Letter from J. W. Ball, dated June 20, 1932, a former Buchanan miner, and many others.

(4) From Surveyed underground map. Low's Report dated July 1, 1889.

Fred J. Mason
796 Douglas Avenue
Oakland 3, California

Stanley's statement on this score is born out by an old check book in the writer's possession, which contains an item of the funeral expenses involved. Apparently the failure of Barron and Davis to raise an air shaft at the time resulted from their intention to sink the new working shaft which would automatically eliminate the powder gas trouble, and at the same time materially reduce their mining costs.

In 1889 they engaged engineer J. B. Low to make a thorough study of their property in this connection. (1)

In 1892 work on the new shaft commenced. This was started at a 200-foot lower elevation near the mill, outside the fissure and in solid slate but parallel to the ore chute. At the same time they started a new tunnel from the same elevation to connect the 200-foot level of the mine; and they prepared to increase their milling capacity to 100 tons per day, and started the construction of a hydro-electric plant on the main Tuolumne River. After working more than a year, they had the new shaft more than half completed, the tunnel 280 feet short of completion, and the ground prepared for the mill extension. They also completed the power house flume, and almost completed construction of the power house building. However, they never completed this development program. (2) At this stage, in 1893, work was "temporarily" suspended pending settlement of the purely personal differences and animosities which then existed between Barron and Davis. These had developed through the years to a point where both these strong old pioneer characters refused each other any further cooperation in the mine's operations or developments. (3)

It is possible that they might have "gotten together" again, but both men were very old and set in their ways and antagonism for each other continued until Barron died in 1893 or 1894. In the meantime and for several years thereafter, the mine was idle. However, in 1898 Davis decided to put the mine in shape for further operation and to complete the shaft in accordance with the original plan. This he did at his own expense, receiving no cooperation from the Barron heirs, who had inherited old Barron's antipathy. In connection with this development work, Davis engaged an engineer, a Mr. William Moorehead, to complete the shaft to the 800-foot level and connect it by cross-cut into the ore chute at a point east of the winze. (4)

---

(1) Apparently, their plans for this expansion program were very carefully worked out over a period of years. Old check books in the writer's possession contain two items for the services of "Experts" other than Low's during this period of planning. The writer has been unable to locate copies of their reports. Their plans are also mentioned in: "Mining and Scientific Press" March 31, 1888; State Mineralogists Reports VIII, page 666 and X, page 752.

(2) The writer has checked this carefully. The tunnel, designed to avoid hoisting the ore remaining above the 200 level, is now uncompleted as shown on the map. The cellar of the shaft has been cross timbered and covered, then further covered by a land slide. Guided entirely by the map as to location and elevation, the writer ran an open cut into the slide and arrived at the cellar of the shaft directly on the wood-iron hand rails. I believe this shaft can be reopened at small cost. The powerhouse, now gone, and the road leading to it, are shown on the U. S. Geological Survey Map. (See bottom of nextpage for (3) and (4).

This was done but when the work was completed, the shaft collar was closed in 1899 without drifting from the 800-foot level to the winze. Apparently, Davis was only interested at this time in the completion of the shaft to the 800-foot level and did not care for immediate production. This is indicated by the fact that he made no attempt to unwater the rest of the mine workings, (water having flowed in, during the 6 years the mine was idle) but he postponed all such operations for the following year.

In 1899 Davis became too sick and feeble to take any further active interest in the mine; and continued to be a very sick man for several years until he finally died in 1906.

Thereafter, the Davis heirs and the Barron heirs continued to stand in each others' light - both factions refusing to do anything toward the opening of the mine or cooperating in any attempt at selling it. In the meantime, unpaid taxes were accumulating so that by 1932 the tax delinquencies amounted to over $25,000. In that year the mine was put up for supervisors' tax sale at the instigation of the writer.(5)

At this point, - almost too late, - the Barron and Davis heirs was brought together by a mutual friend, and the properties were bid in at the sale for the heirs' account. Thereafter the writer, who owned adjoining claims, put his claims into the "pot" and was granted a bond and lease on the patented and unpatented claims. This instrument is very liberal in its terms and is now in good standing and in full effect. Under it, the writer started work on the mine in June, 1935.

---

(3) Details from the heirs themselves and their representatives.

(4) The writer has a letter in his possession, addressed to another person, by a Mr. Kelly, foreman under Moorehead, regarding the shaft. He states the formation through which this shaft runs, is solid unfractured slate after the first 45 to 50 feet of depth and that the mine can be put on a paying basis through this shaft at a comparatively small cost.

(5) Before the writer tried to get a lease on the mine he was told by several others who had tried it, of the antagonistic nonsocoperative condition existing between the heirs and that he was wasting his time and money. Yet he felt it could be done if the right way was found. He discussed tax sale with several familiar with the facts and was told the heirs would outbid any outsider. Assuming that this was true, the writer arranged the tax sale in 1932, his purpose being to precipitate some activity by the Barron and Davis heirs.

Fred J. Mason
796 Douglas Avenue
Oakland 7, California

Surface Indications of the Extent of the Barron-Davis Operations:

The magnitude of these early operations is indicated by the fact that, during the Barron-Davis period, a complete village developed at the mine which was wholly dependent on it for support. The mine employees varied, during this period, from 40 to 175 men at different times and seasons; and the village included a number of family dwellings, a large boarding house, bunk houses, a general store, an office building, and a public school. A stage ran from Sonora to the mine twice a week in winter and three times per week in summer carrying mail and passengers. (1) In this connection it is interesting to note that Barron and Davis surveyed and built 16 miles of new road to Tuolumne, where previously only a pack trail existed. (2) After completion of this road, additional steam boilers and a new 20-stamp mill were installed, which started milling on July 1, 1886. All of the original buildings are gone now, except the store and office buildings.

Production Prior to 1935:

Authentic records of the total production of ore are not available. However, in gathering information on the mine over a period of several years, the writer has required a considerable amount of cumulative data. Some of this data he can substantiate with printed statements and records from authentic sources; the rest of it, while less dependable, nevertheless has the ring of truth, - particularly as it is born out by examination of the mine itself. For the period prior to 1881, the only report available is contained in "Mineral Resources West of the Rocky Mountains" (1875), showing an average mill recovery at this time of $20.00 per ton, based on $20.67 gold. This would indicate to the writer an average ore value in excess of ounce ore, for the reason that, with amalgamation, flotation, and table concentration of ore from the same general area, much fine heavily oxidized free gold escaped. (3). Judging from the size of the stopes left by the earlier operators, during the period prior to 1881, approximately 10,000 tons of ore were mined. These stopes were easily identified, since Barron and Davis did not mine into the area worked by the earlier operators. When the writer first examined the mine in 1935, the old operations could be followed quite accurately, and it was apparent that the earlier operators had taken the heart out of that part of the chute. The first well assays taken in 1935 ranged from $10.00 to $151.00, based on thirty-five dollar gold. At $20.00 per ton, this would indicate a net recovery somewhere in the vicinity of $200,000 for that period.

---

(1) "Mining and Scientific Press" - March 21, 1885.

(2) State Mineralogist's Reports - VIII, Page 666, par. 2 and X, page 752, Par. 2.

(3) This was close to the surface in the oxidized zone. Most of the values were in well distributed heavily oxidized flour gold. While considerable caught on the plates, much passed. Flotation caught enough to bring the concentrates up to $700. per ton at times, in spite of the fact that the tailings ran as high as $6.00 per ton. This was later overcome to a large extent by gravel filled cone steel traps designed and built by the writer. Traps or flotation were not used at the Buchanan prior to 1935.

Fred J. Mason
796 Douglas Ave., Oakland 11, Cal.

... [illegible] with the [illegible] were lost in the [illegible] fire of 19[illegible], with the result [illegible] report [illegible] [illegible] it [illegible].

[illegible] is believed [illegible] that the recovery during this period [illegible] approximately $[illegible],000, [illegible] it is possible that this figure may be [illegible] correct. [illegible] the [illegible]-ft. level, [illegible] the [illegible]-ft. level, [illegible] the average recovery [illegible] level [illegible] [illegible]. (1)

In [illegible] time to [illegible] allowance for the [illegible] fill [illegible] left [illegible], the result [illegible] approximately [illegible] feet [illegible] length, with an average width of [illegible] feet to [illegible] feet high. This would indicate about 75,000 to [illegible],000 tons. From information [illegible] from many sources, the writer believes the average recovery from this [illegible]-foot level was about [illegible] per ton, including several large "bunches" of high grade. These figures would indicate a recovery of around [illegible] from the [illegible] ft. level alone. However, the values in that level were substantially higher than in any other part of the [illegible] workings, although Mr. [illegible]'s report (2) states:

"I should not [illegible] the ore [illegible] in sight [illegible] per ton, [illegible] the [illegible] [illegible]. I [illegible] informed, however, that rich [illegible] frequently encountered within the [illegible] that tend to raise the grade higher than that are now to be seen [illegible] indicate."

---

(1) [illegible] Engineer's Report by J. [illegible], dated July 1, 19[illegible]. Letter from former Superintendent [illegible], dated June [illegible], 19[illegible]. Letters from J. [illegible] dated June [illegible], 19[illegible], and [illegible], dated June [illegible], 19[illegible]. [illegible] by other sources.

(2) I have [illegible] a number of former [illegible] miners, [illegible] including [illegible] statement of [illegible] Wilson. [illegible] very accurately with the facts [illegible] determined. Wilson's statement [illegible] the following: "I think the [illegible] was pretty high grade ore, [illegible] support pillar of high grade ore which [illegible] left. There wasn't much low grade ore there." ([illegible] level. [illegible] Wilson started work [illegible] in 19[illegible] and [illegible] in 19[illegible].)

Fred J. [illegible]
7[illegible] Fourth Avenue
[illegible], California

Mr. Low's reference to the "lower levels" refers to the 600 and 700-ft. levels. Furthermore, former Superintendent Stanley (who came to the Buchanan after the 300-ft. level was practically worked out) states:

> "We shipped gold regularly every month. Sometimes we shipped it twice a month, sometimes twice a week. I do not know what the average would be. Sometimes I would get into an awfully rich piece and ship very often. I remember several shipments of over $20,000 each within a short period. Sometimes I would pound out a whole shipment in a very few days. There was over a million taken out of that mine during the time I was there."

In view of the fact that Mr. Stanley's report refers to the lower levels, - below 300 feet, - his statement is particularly significant. For when the "million" which he refers to is added to the million dollars which was probably taken from the 300-ft. level, we begin to approximate the values believed by the Davis heirs to have been taken from the mine. The areas principally worked by Stanley were the 400, 500, and 600 ft. levels and a triangle west of the winze above the 700-ft. level.

The 400-feet level was the poorest level extensively worked; the 500-ft. level was very good; and the portion of the 600 ft. level which was mined was even better. The only mining done between the 700 and 600-foot levels was a triangle under the winze, which was all very good, - some of it highgrade. No mining has been done below the 700 ft. level, although this was all good ore so far as tested, - recoveries ranging from $5.00 per ton ($20.67 gold) to powder box gold." (1)

The best information available, as to the total number of tons of ore mined by Barron and Davis is obtained from a checkup of the size of the mills used, and the length of time they operated. As indicated above, during the period 1882 until 1886, mill operations averaged approximately 10 to 20 tons per day, while during the period 1886 to 1892 mill operations averaged approximately 40 tons per day, - making ample allowance for lost time, shutdowns, etc.

---

(1) The above is an approximation of the average values of the various levels in comparison with each other, acquired from a mass of data, some it hearsay. However, approximate average values mined from certain levels are fairly well known, and I believe that the above gives a fairly accurate general picture of relative values at the various levels.

Fred J. Mason
796 Douglas Avenue
Oakland 3, California

It must be remembered that Barron and Davis had opened up a large tonnage of ore and had only mined the best. It must also be remembered that they were mining in a location where "bunches" or local enrichments was encountered with pleasing regularity, - "frequently", according to Low's report. These varied in size from small bunches to bunches consisting of many tons. (1) Based on the writer's own experiences in operating the Buchanan Mine, he can say that some of the ore which he had milled would "sweeten up" a large amount of ore of much less value. Some of these higherade ore bodies appeared to be the filling of a space caused by a slip, ~~which~~ while some showed no apparent boundaries or reason. (2) Their values consisted principally of a very fine free gold, mingled with gold which was somewhat coarser. The first Barron-Davis underground development consisted of sinking No. 1 incline shaft on the vein near the south of the adit tunnel. As each 100 feet in depth was reached a station was cut, and drifts started both east and west on the vein. The shaft was continued in this manner until, in 1886, the 500 ft. level was completed with a 12-foot sump below that level. (3)

While doing this work Barron and Davis found that the easterly dip of the North-South Veins was 35°- 40° and that the "rack" of the Buchanan chute followed in the same direction. The new No. 1 incline shaft was started before this fact was known, and at too steep an angle. Therefore, as depth was reached, longer drifts were required in extracting the ore. For that reason, instead of continuing the shaft to greater depth, a winze was sunk from the 500 foot level east drift, 300 feet from the shaft. The writer has already alluded to the expensive rehandling costs experienced by Barron and Davis, and the foregoing is one of the main reasons for this fact.

By 1888, the winze was down 200 feet. In 1890, it was extended 59 feet, and in 1892 a further distance of 50 feet, - to a total depth of 300 feet, or to the 800-ft. level. (4)

---

(1) The effect of these larger bunches is shown quite clearly in the quotation on Page 7 from Superintendent Stanley's letter.

(2) Those encountered by the writer seemed to be located in the general vicinity of a small seam coming in through the hanging wall, from a southeasterly direction.

(3) Report of the Director of the Mint upon the Production of Precious Metals in the U. S. for the calendar year 1883, Page 228. VIth Report, State Mineralogist, Part II, 1886, page 60.

(4) State Mineralogist Reports, VIIIth - 1888, page 666, par. 1; xth-1890, Page 752, par. 1; XI - 1892, Page 494.

Fred J. Mason
796 Douglas Avenue
Oakland 3, California

The Second and Third Ore Chutes

In the course of their operations, Herron and Davis found that, in addition to the large fissure known as the Buckhorn Vein, there are several other veins of varying sizes which come into the hanging wall from an easterly and southeasterly direction. The values near these points of contact tend to rise, - sometimes quite sharply and to a considerable extent.

In 1890, a second ore chute was uncovered in the hanging wall, parallel to the main chute and 70 feet distant. (1) This chute has not been sufficiently developed to determine its size. The writer believes it to be extensive and, where tested, its values were somewhat higher than adjacent values in the main chute. It is the belief of the writer, gained from statements made to him by a number of men who worked there, that this second chute was not worked because of the possibility of disturbing the hanging wall, since it was in a crushed condition. The only ore taken from it was that which ran out at two different connecting breaks, one between the 300 and 400 foot levels and the other on the 600-ft. level. This is based on the assumption that the breaks mentioned, were from the same chute.

A few months before Herron and Davis shut down mining in 1892, a third chute was uncovered by accident on the 500-ft. level. (2) Of this chute, the State Mineralogist's Report (1892) at least

> "Accidently the work caved-in, the north side body next to the hanging wall that had received but little attention was uncovered, and a crushing of several hundred tons proved it to be of far greater value than the foot wall ore body, - both as to free gold also in the yield of the sulphurets, carrying $15.00 in free gold and $[illegible] in sulphurets. Work is being directed toward its development. The sinking of the lower shaft (winze) at present is developing some very fine ore. The vein matter is ribbon quartz with a manganese like gloss of layers of black slate are found between the quartz ribbons.."

---

(1) 14th Report, State Mineralogist - 1890, page 752, 2nd par. Letter of [illegible] dated June [illegible], 1934. In a letter dated June 20, 1934, from J. [illegible] Bell, (a miner whose statements check very accurately with my own findings, as far as they have gone), will state: "Whenever you come to the west end of the chute of ore it always wore or less caved where they did not stoth it up. They had several caves outside the main chute which produced good gold, in fact, some of the richest ore taken out of the mine. That would indicate that the gold in the vicinity was not confined to the main chute, - there must be other chutes there some place."

(2) "Mining and Scientific Press", June 1, 1892, page 348. An article referring to this chute. The above date is about 3 months before they stopped mining to sink the new shaft in the fall of 1892. All the former employees from the writer has met talked at length about both of these extra chutes. The writer also has an outline hand-sketch found among the effects of William Koerchens by his son.

Fred J. Nason
79[illegible] Lowell Avenue
Oakland 1, California

This hanging wall chute lies within the fissure but further east than the main chute. It may be necessary to extend six drifts further east to determine its limits. It was tested four points where the foot wall on the east edge of the main chute appears to overlap the west edge of the new chute. These tests indicated that this chute may become of great importance to the mine, when it is further developed. Apparently, it lies in a very favorable position, - between two contact veins coming in from the hanging wall.

Effect of $35.00 Gold Price

In all deposits of gold ore of the type found in the Buchanan Mine, the number of tons of ore of a value in a case of $12.70 per ton, is far less than the total number of tons of a lower value.

In practice, only that ore of a value sufficient to return operating costs plus a fair profit, is classified as ore. All rock of a lower value is classified as waste.

Barton and Davis' operating costs, per ton or ore milled, according to figures taken from the State Mineralogists' Reports, were approximately $6.00 per ton. According to a nine months average figure taken from old check books, their operating costs were $6.05 per ton. Their mill efficiency, I believe, was under ~~[illegible]~~ rather than over 80 per cent. Therefore, it required $7.50 ore, assay value to recover the $6.00 operating cost. It is a very safe assumption that all waste or ore of a value less than operating costs was not mined, and therefore still remains in the mine.

The increase in the price of gold from $20.67 per ounce to $35.00 has the effect of increasing the value of what was formerly $3.00 waste to $5.00 ore, and what was formerly $7.50 ore to $12.69 ore. Therefore, all former waste of $3.00 gold value is now commercial ore of $5.00 value per ton. Also, all former Buchanan marginal ore of $7.50 value is now $12.70 ore, or an ore of sufficient value to return an operating profit of over 150 per cent. The worth of all ore of a higher value is increased in proportion.

In the Buchanan Mine, I would estimate the amount of former waste ranging in value from $3.00 to $7.50, which is now worth $5.00 to $12.70, to be materially greater, in tonnage, than the number of tons of a higher value.

Therefore, as approximately 100,000 tons have been mined from the Buchanan, I would estimate the amount of what was formerly waste, that has now been converted into commercial ore by the increase in price of gold, to be materially in excess of 100,000 tons.

Fred J. Mason
796 Douglas Avenue
Oakland 3, California

SUMMARY OF BUCHANAN MINE OPERATION FROM 1939

TO PRESENT TIME (1961).

The Buchanan Mine was taken over in 1939 with the plan to be in full operation in two years. Incline Shaft #1 was retimbered to the 200 ft. level, and then pumped to the 500 ft. level. Most of the timbers in the shaft and stations from the 200 to the 500 ft. level were reshored or replaced. To do this work we had to build one building to house a 200 HP Diesel Electric Power Plant and panel board, one air compressor, and one triple-drum hoist. We fabricated and erected one 40-ft. steel hoisting frame with ore hopper. The shaft was fitted with 500 ft. of rail, 400 ft. 8" blower pipe, 500 feet. power cable and electric lights and telephones; also pumps, one 60 HP stationed at the 500 ft. level, and one 30 HP at 350 feet. Water was pumped through 400 ft. of 3-1/2" pipe and discharged at the 100-ft. level. #1 Incline Shaft is still open to the200 ft. water level, but before closing down we built a bulkhead at the 200-ft. station. Timbers below the 200 ft. level should be in very good condition.

When we mucked out the 500-ft. drift which was full of silt to sink Shaft #2 we found that someone took the trouble to remove all station and shaft sets and replace with drift sets and lagging, up to the bulkhead at the end of the 500 ft. drift. The lagging was so tight that we could not find Incline Shaft #2. When the 500-ft. drift was measured from Shaft #1 to Shaft #2 and lagging removed it was the same as shown on the map. There was also a large 4-inch thick plank door in the drift. We feel that all work to close off drift and Shaft #2 was to hold the water back and relieve water pressure. We were also told that there is a bulkhead at the bottom of the 700-ft Shaft #2. We did not pump this shaft out because our operations were stopped with the advent of gas rationing in WW II.

While all this preparation to repair Shaft #1 was undertaken, we also built a complete 50-ton per day grinding mill, and installed one 300 HP Diesel Electric Power Plant. All this equipment is under steel buildings. The grinding mill is fully equipped and electrically driven. The mining operation was closed down in 1942 because of WW II. We feel this mine could have been in operation in another six months, as we were actually grinding rock from the 200 ft. level at this time. The operation has been maintained until now, and the grinding mill can be put into operation in a very short time. This mine is 12 miles from a small town, Tuolumne City.

In 1949 we returned to finish Shaft #3 which was started in 1942, which is located in a ravine 200 feet below Shaft #1. When resuming work and to finish cleaning out shaft we found we had to replace collar and timbers down to the bulkhead that were placed there in 1942 that was water level. We also had to build one new steel hoist house because the old house was over collar of shaft. As sinking progressed we found Shaft #3 was filled completely solid with much, rock and collar timbers to the 700 ft. level, and also the 165 ft. drift was filled with silt. When sinking shaft was completed in 1959 it was then surveyed and checked with the map, figures, and old survey points that were located in shaft and drift.

SUMMARY OF BUCHANAN MINE OPERATION FROM 1939

TO PRESENT TIME (1961).

The Buchanan Mine was taken over in 1939 with the plan to be in full operation in two years. Incline Shaft #1 was retimbered to the 200 ft. level, and then pumped to the 500 ft. level. Most of the timbers in the shaft and stations from the 200 to the 500 ft. level were reshored or replaced. To do this work we had to build one building to house a 200 HP Diesel Electric Power Plant and panel board, one air compressor, and one triple-drum hoist. We fabricated and erected one 40-ft. steel hoisting frame with ore hopper. The shaft was fitted with 500 ft. of rail, 400 ft. 8" blower pipe, 500 feet. power cable and electric lights and telephones; also pumps, one 60 HP stationed at the 500 ft. level, and one 30 HP at 350 feet. Water was pumped through 400 ft. of 3-1\2" pipe and discharged at the 100-ft. level. #1 Incline Shaft is still open to the200 ft. water level, but before closing down we built a bulkhead at the 200-ft. station. Timbers below the 200 ft. level should be in very good condition.

When we mucked out the 500-ft. drift which was full of silt to sink Shaft #2 we found that someone took the trouble to remove all station and shaft sets and replace with drift sets and lagging, up to the bulkhead at the end of the 500 ft. drift. The lagging was so tight that we could not find Incline Shaft #2. When the 500-ft. drift was measured from Shaft #1 to Shaft #2 and lagging removed it was the same as shown on the map. There was also a large 4-inch thick plank door in the drift. We feel that all work to close off drift and Shaft #2 was to hold the water back and relieve water pressure. We were also told that there is a bulkhead at the bottom of the 700-ft Shaft #2. We did not pump this shaft out because our operations were stopped with the advent of gas rationing in WW II.

While all this preparation to repair Shaft #1 was undertaken, we also built a complete 50-ton per day grinding mill, and installed one 300 HP Diesel Electric Power Plant. All this equipment is under steel buildings. The grinding mill is fully equipped and electrically driven. The mining operation was closed down in 1942 because of WW II. We feel this mine could have been in operation in another six months, as we were actually grinding rock from the 200 ft. level at this time. The operation has been maintained until now, and the grinding mill can be put into operation in a very short time. This mine is 12 miles from a small town, Tuolumne City.

In 1949 we returned to finish Shaft #3 which was started in 1942, which is located in a raise 200 feet below Shaft #1. When resuming work and to finish cleaning out shaft we found we had to replace collar and timbers down to the bulkhead that were placed there in 1942 that was water level. We also had to build one new steel hoist house because the old house was over collar of shaft. As sinking progressed we found Shaft #3 was filled completely solid with much, rock and collar timbers to the 700 ft. level, and also the 165 ft. drift was filled with silt. When sinking shaft was completed in 1959 it was then surveyed and checked with the map, figures, and old survey points that were located in shaft and drift.

MINERAL REPORT

To: Mr. Fred Mason
796 Douglas Ave.,
Oakland, California

Re: Escrow No. 7412
Buchanan Mine

The following report of the condition of title to the hereinafter described property which you have requested is furnished for your information and without liability.

TITLE VESTED IN: BURTON B. BRACE

DESCRIPTION:

PARCEL 1:
Lots 43A, Buchanan Quartz Mining Claim, and 43B, Buchanan Mill Site, being a portion of the NW 1/4 of Section 26, a portion of the NE 1/4 of Section 26, and a portion of the NE 1/4 of Section 27, T.1N, R. 16E, M.D.B&M, described as follows:

Beginning, for the description of that portion of the premises hereby conveyed designated as Lot 43A, at center of Wly boundary of the claim a post in stone mound marked B.M., from which a black oak 6" in diameter marked B.Y.B.M. bears North 2°30' E. at the distance of 30 links, and a Pine 30" in diameter marked B.Y.B.M. bears S. 20°30' W. at the distance of 64 links; thence from said post N. 19°W. 4 chains and 55 links to NW corner of the claim, a post in stone mound marked B.M., from which a Pine 28" in diameter marked B.Y.B.M. bears S. 43°E at the distance of 33 links; thence from said post, N. 71°E. 7 chains and 49 links to a point on E. boundary of Section 27, from which the 1/4 Section corner on boundary between Sections 26 and 27 in T. 1N, R. 16 E., M.D.B.&M., bears S. 53' W. at the distance of 19 chains and 33 links 22 chains and 74 links to the NE corner of the claim a post in mound of stones marked B.M.; thence S. 19°E 15 links to Ravine, 4 chains and 55 links to center of Wly boundary of the claim, a black oak tree 36" in diameter marked B.M. on W. side, and situate on Wly boundary of the Warwick claim from which mainshaft bears S. 71°W. at the distance of 9 chains and 35 links 5 chains and 90 links to center of Road to Quartz Mill 9 chains and 10 links to the SE corner of the claim a Post marked B.M.; thence S. 71°W. 18 chains and 54 links to a

point on W. boundary of said Section 26, from which the said Section corner hereinbefore described bears S. 53'W. at the distance of 9 chains and 64 links 22 chains and 74 links to the SW corner of the claim a Post in Stone Mound marked B.M. from which the said 1/4 Section corner bears S. 24°49' E. at the distance of 9 chains and 14 links; thence from said post N. 19°W. 4 chains and 55 links to the place of beginning, containing 20.69 acres of land, more or less, and embracing 1500 linear feet of the Buchanan Quartz Mine to wit: 617 linear feet Sly and 883 linear feet Wly from Main Shaft on said Mine.

Beginning, for the description of that portion of the premises hereby conveyed designated as Lot 43B, at the Wly corner of the Mill Site, an oak tree 6" in diameter, marked B.M.S., from which the SE corner of said Lot 43A hereinbefore described bears S. 66°10' W. at the distance of 23 chains and 77 links, and the S. end of Stable bears N. 79°E. at the distance of 75 links; thence from said Oak Tree, S. 63° E. 1 chain and 40 links to Ravine, 4 chains and 88 links to Sly corner of the Mill Site, a Post marked B.M.S.; thence N. 27° E. 8 chains and 20 links to Ely corner of the Mill Site, a Post marked B.M.S.; thence N. 63°W. 1 chain and 90 links to Ravine, 4 chains and 88 links to the Nly corner of the Mill Site, thence S. 27°W. 8 Chains and 20 links to the place of beginning, containing 4 acres of land, more or less, which, together with the area embraced by said Lot No. 43A aggregates 24.69 acres of land, more or less.

Except from Lot 43A that portion of Wedge Quartz Mineral Claim, described in Mineral Survey No. 495, included therein.

PARCEL 2:

Lot 50, Buchanan Extension Quartz Mineral Claim, and known as the Lookout Quartz Mine, being a portion of the NW 1/4 of Section 26, T 1N, R. 16 E., M.D. B&M, as described in Notice of Location recorded January 3, 1882, in Volume 3, Page 61 of Quartz Claims, as follows:

The undersigned claim 1500 feet on the quartz-vein or lode for mining purposes, said claim is located in Tuolumne Mining District, Tuolumne County, State of California,

about eight miles North or Northeast from Summersville in said County, being the North Easterly extension of the Buchanan Mine, and more fully described as follows: Commencing at a notice posted on a black oak tree at the Buchanan line marked B.M., and running along the vein or lead 1500 feet with 300 feet on each side to a similar notice posted on a pine tree at the end of the claim and known as the North East Extension of the Buchanan Mine.

PARCEL 3:

(a) Notice of Quartz Location by Geo. F. Blair.
Dated May 24, 1932, Recorded May 31, 1932, in Volume 18, Page 414 of Quartz Claims.
Claim is: Buchanan West Quartz Mine.

The center line of this claim runs at approximate-right angle to the center line of the Buchanan North Quartz Mine in a NWly direction and beginning at a point at about the center of the NW line of Buchanan North Quartz Mine for identification purposes, to a point 750 feet therefrom to this claim center location point and extending on in a NWly direction 750 feet.

This notice is posted on a large pine tree, approximately 400 feet from the NW line of the Buchanan North Quartz Mine and few feet from the center line of this claim. Notice is also posted at point of discovery.

This claim is in portions of the NW 1/4 of Sec. 26 and the SW 1/4 of Section 23, T. 1N, R. 16 E., Tuolumne County, Calif.

(b) NOTICE OF QUARTZ LOCATION by J. Andrew Cook
Dated May 24, 1932, Recorded May 31, 1932, in Volume 18, Page 415 of Quartz Claims.
Claim is: Buchanan North Quartz Mine.

Approxiamtely 300 feet North of the second large dump of the Buchanan Quartz Mine and the center line of this claim is approximately parallel to the NW property line of the Buchanan Quartz Mine property.

This notice is posted on a Black Oak tree approximately North of the second dump of the Buchanan Quartz Mine and about 300 feet therefrom.

This claim is in portions of the NW 1/4 of Section 26 and SW 1/4 of Section 23, T. 1N, R. 16E, Tuolumne County California.

(c) NOTICE OF QUARTZ LOCATION by J. Andrew Cook
Dated May 24, 1932, Recorded May 31, 1932, in Volume 18, Page 415 of Quartz Claims.
Claim is: Buchanan North-east Quartz Mine Mill and Tunnel Site.

This mineral, mill and tunnel site claim is located in such manner as to join the NW boundary line of the Buchanan N.E. Quartz Mine, and extends Northwesterly therefrom to a line 200 feet Northwest from and paralleling Hunter Creek and the Southwest boundary line of this claim is a straight extension in a Northwesterly direction of the Southwest boundary line of the Buchanan North-East Quartz Mine and the Northeast boundary line of this claim is a straight extension in a Northwesterly direction of the North-east boundary line of the Buchanan North-East Quartz Mine.

This claim is located in the SW 1/4 of Section 23, T. 1 N., R. 16 E., and is necessary for the economical mining and milling from the Buchanan North-East Quartz Mine, in Tuolumne County, California.

(d) NOTICE OF QUARTZ LOCATION by J. Andrew Cook.
Dated May 24, 1932, Recorded May 31, 1932, in Volume 18, Page 416 of Quartz Claims.
Claim is: Buchanan South Quartz Mine.

The center line of this claim runs parallel with the Southeast boundary line (of Lot 50) of the Buchanan Mine (and known as the Lookout Quartz Mine) and 300 feet distant Southeast therefrom and the Northeast end of this claim extends about 250 feet Northeast of the Southeast corner of the said Lot 50 of the Buchanan Mine and the Southwest end of the centerline of this claim is at a point which is 300 feet South-east from the said Southeast boundary line of said Lot 50 of the Buchanan Mine and said point is about 250 feet Northeast of an intersection of a straight extension of the centerline of this claim and a straight extension of the dividing boundary line between Lots 50 and 43A, of the Buchanan Mine.

This claim is in the NW 1/4 and the NE 1/4 of Section 26, T 1N, R. 16 E., Tuolumne County, Calif.

(e) NOTICE OF QUARTZ LOCATION by J. Andrew Cook
Dated May 24, 1932, Recorded May 31, 1932, in Volume 18, Page 416 of Quartz Claims.
Claim is: Buchanan Northeast Quartz Mine.

The center-line of this claim runs in a Northwesterly and Southeasterly direction 300 feet Northeasterly from and parallel with the Northeast end boundary line of Lot 50 of the Buchanan Mine (said Lot 50 of the Buchanan Mine is known as the Eastern Extension of the Buchanan Mine, also as the Lookout Quartz Mine). The Southeast end of the center-line of this claim is at a point about 100 feet Southeast of a straight extension of the Southeast boundary line of said Lot 50 of the Buchanan Mine and is about 50 feet from the Northeast boundary line of the Buchanan South Quartz Mine, at a point about 100 feet Southeast of the Northeast corner of the said Buchanan South Quartz Mine. The Northwest end of the center-line of this claim is at a point almost North of the Northeast corner of the said Lot 50 of the Buchanan Mine.

This claim is in portions of the NW 1/4 and NE 1/4 of Section 26 and in portions of the SW 1/4 and SE 1/4 of Section 23, both T. 1N, R. 16E., Tuolumne County, California.

(f) NOTICE OF QUARTZ LOCATION by J. Andrew Cook.
Dated June 23, 1932, Recorded June 24, 1932, in Volume 18, Page 424 of Quartz Claims.
Claim is: Buchanan Southwest Mine.

The center line of this claim lies about 300 feet nearly South of and parallel with the South property line of the Buchanan Mine Lots 43A and 50, and the West end of the center-line is located on the East line of the "Elk" and the Wedge patented line, and the East end of the center line joins the West end of the center line of the Buchanan South Mine Claim.

This claim is located partly in Section 26, T. 1N, R. 16 E., M.D.B.&M.

SUBJECT TO:

1. County taxes for the fiscal year 1961-62. First installment $160.71, second installment $160.71.

2. Personal Property Taxes for the fiscal year 1961-62 $18.66 affecting Parcel 3.

3. The interest of Buchanan Gold Mining Company, a co-partnership, consisting of J. Andrew Cook and Charles S. Wheeler, Jr.,

in the property herein described, by reason of an Option Agreement dated June 10, 1935, between Charles S. Wheeler, Jr. and J. Andrew Cook, referred to in Certificate of Ltd. Partnership of Buchanan Gold Mining Company, recorded September 23, 1936, in Volume 2, Page 58 of Official Records of Tuolumne County.

4. Any claim by the Buchanan Gold Mining and Milling Company, a California corporation, former record owner, whose interest was conveyed to the State of California for default in payment of taxes, or persons claiming under the Buchanan Gold Mining and Milling Company, a California corporation, that one or more steps of the proceedings leading up to and including the deed by the County Tax Collector to Charles S. Wheeler, Jr., dated May 24, 1932, recorded May 24, 1932, in Volume 99, Page 342 of Deeds, Tuolumne County Records, were invalid and did not divest said Company or its successors of the title to their interest.

5. The interest of J. Andrew Cook in the property herein described by reason of an unrecorded Lease referred to in Notice of Non-responsibility executed by Charles S. Wheeler, Jr., owner, recorded January 5, 1939, in Volume 1, Page 479, of Official Records of Tuolumne County.

6. The interest of Fred Mason in the property herein described by reason of an unrecorded Option to Purchase and Agreement to Mine, etc., only, by said Mason and not as an agent of said Wheeler, and at Mason's expense, executed by Charles S. Wheeler, Jr., Owner, recorded March 22, 1941, in Volume 18, Page 314, of Official Records of Tuolumne County.

7. No guarantee is made as to the sufficiency of the description of property in Parcel No. 2, as herein described.

8. Matters which may affect the title unless eliminated by statements of identity from the present owner and any new owner.

9. Usual printed conditions and stipulations as contained in policy of title insurance.

Note: There are no judgments or other liens against William G. Meagher.

Note: This report is not to be used as a basis for a policy of title insurance with reference to Parcels 2 and 3 herein, as these parcels are not patented lands.

Dated at Sonora, California, November 16, 1961, at 8:00 o'clock A.M.

TUOLUMNE COUNTY TITLE COMPANY

David Halstrom
Vice President

SWEETWOOD 8-5455

Stonehurst Iron & Machine Co

796 DOUGLAS AVENUE
OAKLAND 3, CALIFORNIA

October 16, 1967

U. S. Geological Survey
345 Middlefield Road
Menlo Park, California 94025

Attn: Mr. Harold K. Stager

Dear Mr. Stager:

Below is our cost breakdown for sinking 110' of shaft, timbered & lagged. 5' x 9' I.D. of timbers, two compartments, 45° incline from the 700' station to the 810' level. Cost per foot: $268.00. Total cost of 110' of shaft $29,400.00.

Material: 8" x 10" foot and hanging wall timbers, 3 required 8" x 10" posts, 6" x 6" spreaders, 3" x 10" hanging wall laggen, 3" x 10" sidewall laggen.

Job Description	Man Hours
Hoisting	8.0
Maintenance	8.0
Timberman, Shaft & Drift	8.0
Mucker	8,0
Truckdriver, Chuck Tender	8.0
	48.00

Manhours for two and one half feet of shaft at average pay of $6.25 per hr.:	$300.00
This amount includes: Hospitalization, Welfare, Pension, Vacation.	
Plus Timbers:	70.00
Overhead:	300.00
Total amount for sinking 2½' of Shaft	$670.00

Overhead takes care of supplying everything except labor, wages & timbers. Overhead Breakdown: Furnish insurance, ins. rate per $100.00 wages: $16.67, powder, caps, gasoline, diesel fuel, oil, drill bits, and steel. Pipes, plastic or steel, rails misc., steel etc., blower pipe, rubber or plastic. Timberhangers, all electric equipment and rolling equipment, air equipment.

All men are paid the same wage rate, all men work underground.

Very truly yours,

SWEETWOOD 8-5455

Stonehurst Iron & Machine Co
796 DOUGLAS AVENUE
OAKLAND 3, CALIFORNIA

October 16, 1967

U. S. Geological Survey
345 Middlefield Road
Menlo Park, California 94025

Attn: Mr. Harold K. Stager

Dear Mr. Stager:

Below is our cost breakdown for the two hundred foot of tunnel, per your request:

Man hours and material for drifting two hundred feet on eight hundred foot level to drift one hundred foot East and one hundred foot West.

This tunnel will be timbered and lagged 5 x 7 ft. I.D. of timbers, 8 x 8 posts and caps, 6 x 6 spreaders, 3 x 10 hanging wall lagging, 2 x 10 side wall lagging.

Job Description	Man Hours
Hoisting	8.0
Maintenance	8.0
Timberman Shaft & Drift	8.0
Driller, Powderman	8.0
Mucker	8.0
Truck Driver Chuck Tender	8.0
Total Man Hours for 5' of Tunnel	48.0

Average rate of pay $6.25 per hour. $6.25 x 48 = $300.00, this amount includes Hospitalization, Welfare, Pension & Vacation.

Plus Timber	$ 50.00
Overhead	$300.00
This amount is for drifting f' of tunnel:	$650.00

Overhead takes care of supplying everything except labor, wages & timber. Overhead Breakdown: Furnish insurance, insurance rate per $100.00 wages $16.67, powder, caps, gasoline, diesel fuel, oil, drill bits, and steel. Pipes, plastic or steel, rails misc., steel etc., blower pipe rubber or plastic. Timber hangers, all electric equipment and rolling equipment, air equipment.

All men are paid the same wage rate, all men work underground.

Total cost of shaft and tunnel $55,000.00. Estimated price of 1' of tunnel is $128.00. Total price of 200' of tunnel is $25,600.00.

Very truly yours,

Fred J. Mason

M & M BUCHANAN GOLD MINING AND MILLING CORP.

TUOLUMNE COUNTY, TUOLUMNE CITY, CALIF.

LISTED BELOW IS THE EQUIPMENT IN GOOD WORKING CONDITION.
ON THE MINE SITE—

1 250 KVA FAIRBANKS MORSE, 3 CYL. DIESEL ELECTRIC POWER PLANT MOUNTED IN CONCRETE

1 100 KVA GENERAL MOTORS DIESEL ELECTRIC POWER PLANT MOUNTED IN CONCRETE

1 12 KVA DIESEL ELECTRIC HOUSE LIGHTING PLANT

1 165 CUBIC FT. ELECTRIC AIR COMPRESSOR

1 165 CUBIC FT. GASOLINE AIR COMPRESSOR

1 TRACTOR SHOVEL LOADER

1 TRACTOR SHOVEL LOADER, D 6, WITH LOGGING WINCH AND FORKS

1 FORD DUMP TRUCK

1 MINE SHOVEL LOADER

6 AIR SUMP PUMPS WITH HOSES

1 HIGH PRESSURE DEWATERING PUMP, 50 HP

2 HIGH PRESSURE D EWARTING PUMPS, 15 HP

1 HYDRALIC DRIFTING JUMBO

5 DRIFTERS, NEW WITH ALL ATTACHMENTS

2 STOPERS, WITH 1 IN. CHUCKS

3 CHAIN SAWS, AIR AND ELETRIC

2 WELDING MACHINES

2000 JACK BITS (NEW)

1 MAN AND ORE HOIST, ELECTRICALLY CONTROLLED, WITH NEW CABLES AND GASOLINE ENGINE STANDBY

1 COMBINATION ELETRIC AND GASOLINE PUMP HOIST

1 DIAMOND DRILL WITH ALL ACCESSORIES

EQUIPMENT AT 796 DOUGLAS AVENUE, OAKLAND, CALIFORNIA

2 150 KVA, LORIMER 4 CYL. DIESEL ELETRIC POWER PLANTS

1 100 KVA, GENERAL MOTORS DIESEL ELETRIC POWER PLANT, PORTABLE

1 185 CUBIC FT. ELETRIC AIR COMPRESSOR

1 FORD TRUCK, 1965, 4 WHEEL DRIVE, 3/4 TON

1 SAW MILL

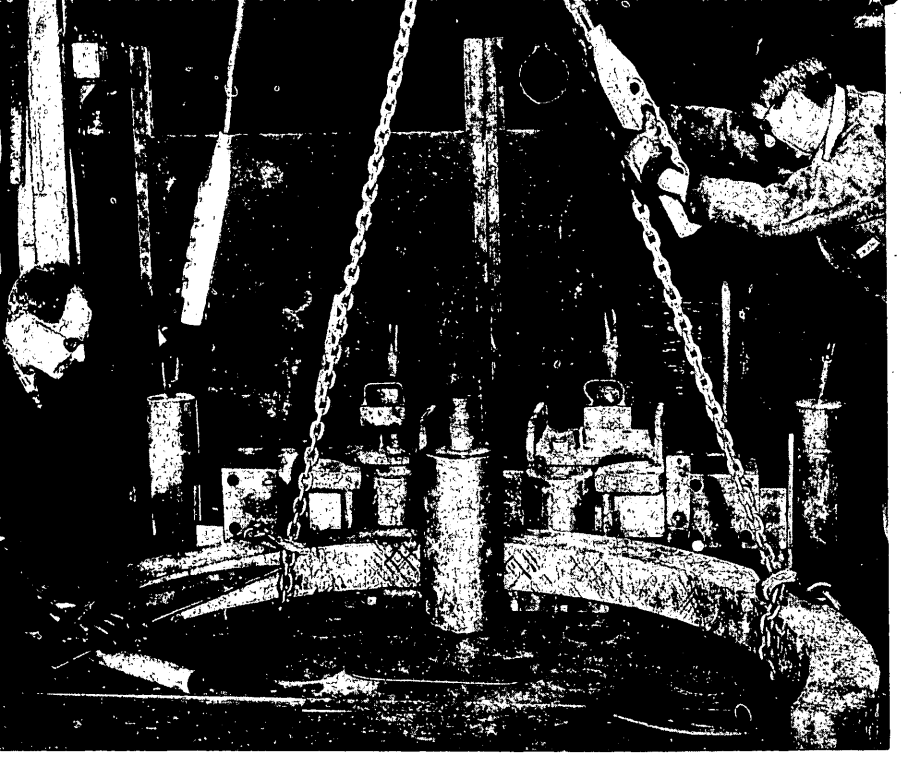
ON HAND ARE ALL THE SMALL TOOLS THAT WILL BE NEEDED TO SINK SHAFT AND DRIVE DRIFT.

LARGE QUANTITY OF STANDING TIMBER ON THE PROPERTY.

IN ADDITION TO THE ABOVE EQUIPMENT AND TOOLS THERE IS A COMPLETE MACHINE SHOP AND STEEL FABRICATING PLANT AVAILABLE IN OAKLAND; NAMLY STONEHURST IRON AND MACHINE CO., 796 DOUGLAS AVENUE, OWNED BY THE MASON BROTHERS. THIS IS A VERY MODERN PLANT WITH MODERN EQUIPMENT, AND ANY WORK OF BUILDING OF EQUIPMENT FOR THE MINE CAN BE DONE AT THIS PLANT.

Fred J. Mason

FRED J. MASON
796 DOUGLAS AVENUE
OAKLAND, CALIF. 94603

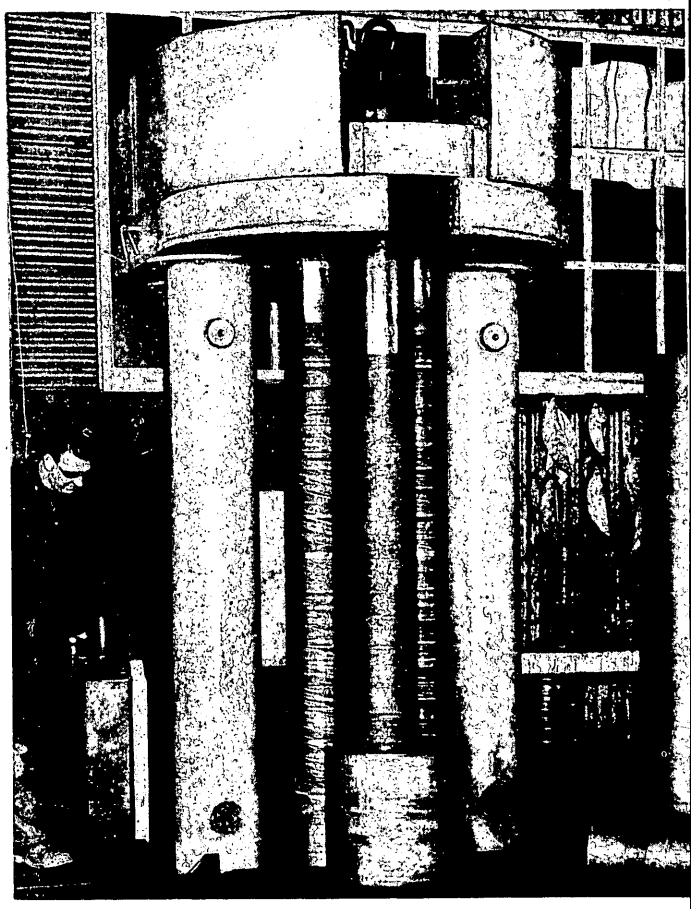


Pin Press or Floor Press

Ring or shape forming or straightening of all types, cold or hot. Forming capacity 400 tons. Will form 5″ by 5″ square or round bar from 4″ inside diameter to any size ring, cold or hot. Have formed 8″ by 8″ square bar to a 5 ft. inside diameter hot.

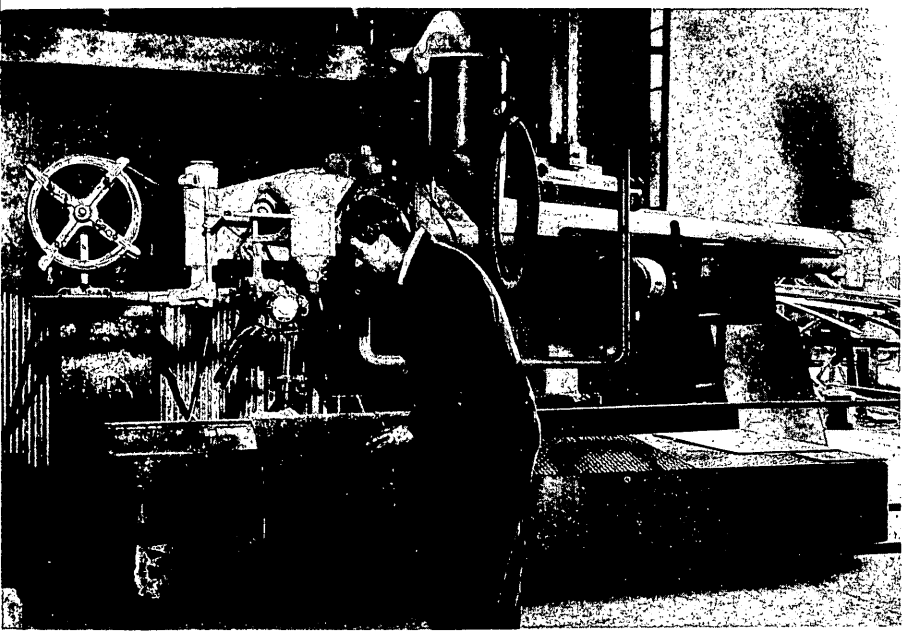
Forming of channels, easy or hardway, beams, tees, angles, pipe, squares, rounds or rails, into shapes or rings. Straightening of Logging Machinery, Fork Lift, forks, Crane Booms, tractor swing frames, Buckets, Beams, bars, etc.

We specialize in forming or rolling of thick stainless steel or steel flat bars on the edge or "hardway" into small or large diameter rings or shapes.



Vertical Plate Roll

Capacity 5/8″ x 7 ft. cold or from 5/8″ to 3″ thick, up to 36″ long, if heated. Rolling of plates, channels, beams, tees, flats, squares, rounds, angles, pipe, etc. "Special" rolling of small thick wall pipe, by inserting plug and rolling on outside walls. Thickness of plates 1/4″ to 3/4″. Diameters of pipes 5 1/2″ to 9″. Length of plates 1″ to 6 ft. long. Special rolls for straightening split beam tees.



Automatic Submerged Arc Welder

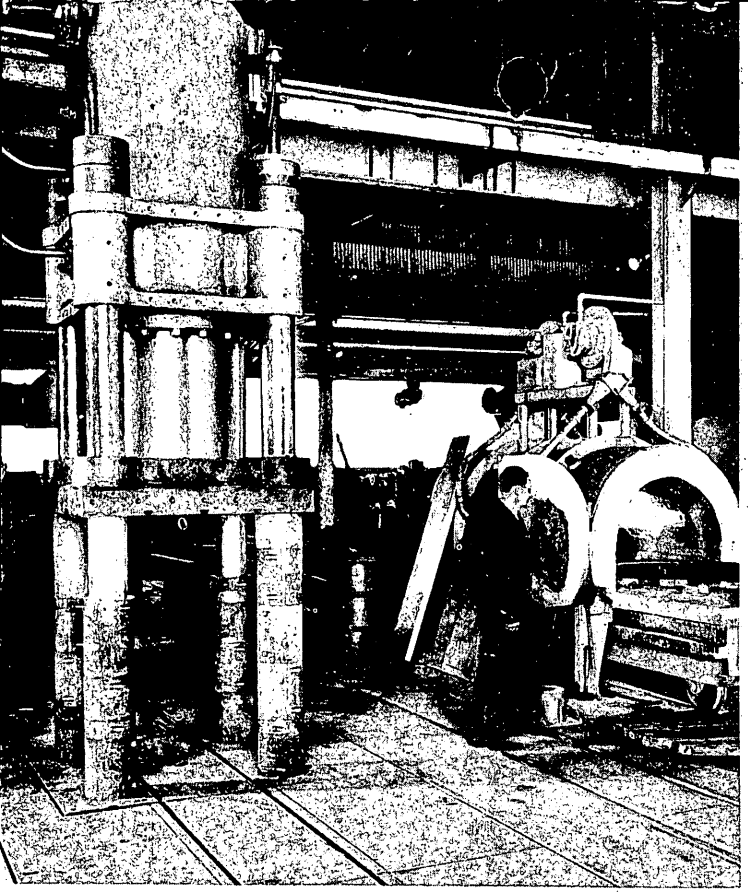
Strip burning of beams, etc. Large welding positioners, tank rolls, welding of tanks, beams, pipes, flats and rebuilding of worn rolls. 60 ft. carriage travel.

It is indeed a fact . . . in metal processing, the least expensive job is the one that is DONE RIGHT THE FIRST TIME. We offer you a *complete service* . . . and guarantee that, when we do a job for you, it will be done to your complete satisfaction!

Call on us for the RESULTS YOU WANT.

STONEHURST IRON & MACHINE CO.

796 Douglas Ave. . Oakland 3, Calif. · Telephone 638-5455



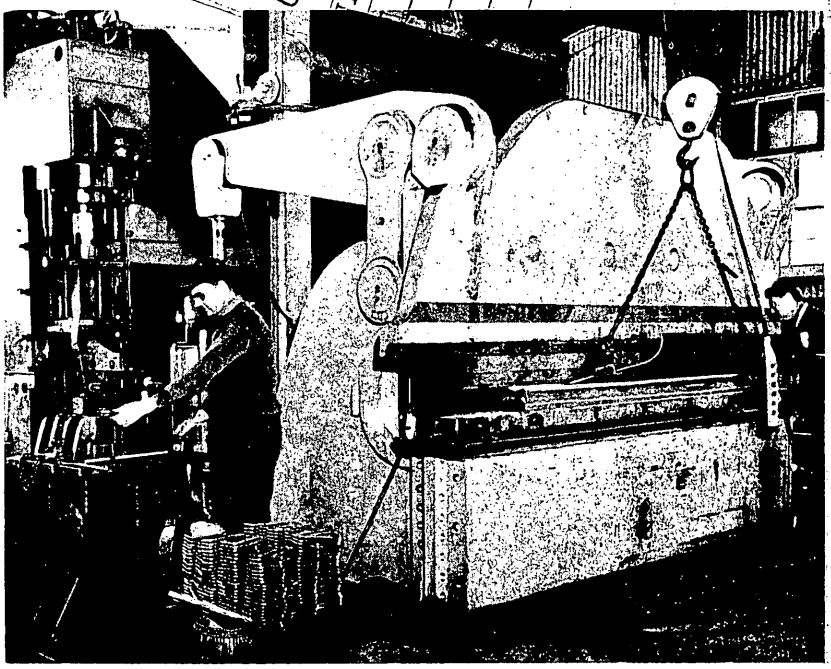
All tools in photographs were fabricated by Mason Brothers, in our own plant, The Stonehurst Iron and Machine Company, 796 Douglas Ave., Oakland 3, California. Telephone: 638–5455

We have other facilities available to handle a wide range of jobs, including a complete Tool and Die plant, also complete tank and structural fabricating facilities.

OUR SPECIALITY IS STRAIGHTENING.

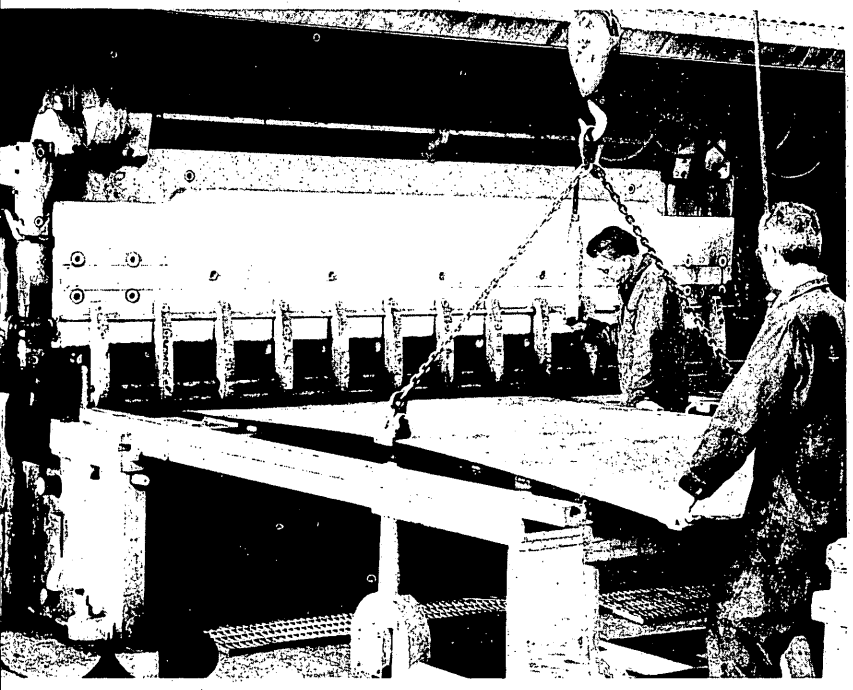
All tools are underbridge cranes.

COPY
O. K.
RECEIVED
OCT 23
INITIALS



1200 Ton Hydraulic Forming, Bending and Blanking Press

30″ Stroke. 6 ft. opening between Ram and Base. 30″ openings between guide rods, 50″ top platen, 60″ Bottom Platen. Dies designed and fabricated in our plant to do any job for Punching, Coining, Hobbing, Bending, Blanking, Dishing, Straightening or forming of steel plate to make rings or tubes up to 6″ thick and 30″ long or longer if plate can go between guide rods. Hot or cold.



Combination Hydraulic Ring Wrapper and Horn Press

Forming or wrapping of odd shapes. Will form rectangles, oblongs, rings, squares. Forming of Anchor bolts up to 3″ diameter hot. Horn Press 12″ stroke, 100 tons forming of structural, Miscellaneous iron and hardware, hot or cold.

400-Ton Hydraulic Press Brake

Will form 12 ft. ½″ plate or 6 ft. ¾″ plate.

Plate Shear

½″ x 12 ft. of steel or ¼″ Stainless steel plate. We rip plate, also angle shearing up to 4″ x 4″.

STONEHURST IRON & MACHINE CO.

796 Douglas Ave. . Oakland 3, Calif. · Telephone 638-5455

Pictures + Map

UNITED STATES
DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY
Office of Minerals Exploration
345 Middlefield Road
Menlo Park, California 94025

February 1, 1971

Memorandum

To: Chief, Office of Minerals Exploration
Washington, D. C.

From: Field Officer
Region II

Subject: OME-6665 (Gold)
M & M Buchanan Gold Mining & Milling Corp.
Buchanan Mine
Tuolumne County, California
Contract 2270

FEB 3 1971

INITIALS	CODE
sda	30
Gol	20
HK	~~20~~
WZ	~~200~~
	220

Final Field Report

Enclosed is a summary-type Final Field Report for the subject exploration project.

H. K. Stager

Enclosure

FINAL FIELD REPORT - OME EXPLORATION PROJECT

By H. K. Stager, Field Officer, Region II

February 1, 1971

1. OME-6665 (Gold)
M & M Buchanan Gold Mining & Milling Corp.
Buchanan Mine
Tuolumne County, California
Contract 2270

Operator: M & M Buchanan Gold Mining & Milling Corp.
896 Douglas Avenue
Oakland, California 94603

Property: Consists of two patented lode mining claims (Buchanan Quartz Mining Claim and Buchanan Extension Quartz Mining Claim), one patented mill site (Buchanan Mill Site), and six unpatented lode mining claims (Buchanan North, Buchanan Northeast, Buchanan Northeast Quartz Mine Mill and Tunnel Site, Buchanan South, Buchanan West, and Buchanan Southwest) in secs. 22, 23, 26, and 27, T. 1 N., R. 16 E., MDBM, Tuolumne Mining District, Tuolumne County, California. A map showing the area of these nine claims was attached to the contract.

Ownership: The Operator is the owner of the claims.

2. Purpose of Project: The purpose of the project was to explore by crosscutting and drifting on the 700 level for gold-bearing ore shoots occurring in quartz veins within the east-west trending Buchanan fault zone.

3. Contract: Dated September 6, 1968, for a term of 6 months.
Original contract amount - $12,200.00
Government participation - 75 percent, $9,150.00

Amendments - No. 1 - May 15, 1969, to extend the time for completion of the work to 14 months.

No. 2 - February 13, 1970, to extend the time for completion of the work to 25 months; to extend the maximum period for royalty payments to 11 years; and to provide for automatic termination and waiving of certification if the work was not completed within the time allowed.

4. Project Work: Started March 26, 1970. Completed July 31, 1970.

Cost Items	Authorized Units	Authorized Rate	Authorized Amount	Completed Units	Completed Amount
Drifting and cross-cutting, including timbering	200 ft.	$60/ft.	$12,000.00	200 ft.	$12,000.00
Assaying for gold and silver	40 spls.	$5/spl.	200.00	6	30.00
Total amounts			$12,200.00		$12,030.00
Government participation at 75 percent			$ 9,150.00		$ 9,022.50
Paid to the Operator					$ 9,022.50

The Government retained no equity in any of the equipment or materials used.

Effectiveness of the Work - The target area was adequately explored.

Efficiency of Operation - Because of the inexperience of the Operator, and his inability to obtain adequate experienced labor, the work progressed in a slow and inefficient manner, although the rehabilitation and exploration work was done in a safe and thorough manner.

5. Reports:

Operator's Final Report - An acceptable Final Report was received on August 19, 1970.

Cost Review - A Report of Review was issued by the Office of Survey and Review in January 1971.

Final Audit - A final audit was not requested inasmuch as no additional vouchers were submitted or paid after the Report of Review. The final voucher was paid on September 4, 1970.

Royalty Review - There was no production sold and no royalty was due the Government. A Royalty Review was not requested.

6. Project Results:

Discoveries - The project work did not result in the discovery of gold-bearing ore. Six samples of mineralized quartz exposed by the OME drift assayed from 0.025 to 0.06 ounce of gold per ton. Assays of samples taken during interim inspections were within the same low range. No ore reserves were estimated as a result of the work. Production is not economically feasible. The Operator plans to continue exploration and development at its own expense, but unless this work indicates new favorable targets, additional Government participation is not warranted.

Certification - The work completed under the OME contract, and subsequent exploratory drilling by the Operator, failed to discover significant mineralization on the 700 level of the Buchanan Mine. Certification of possible production was not recommended. A letter to the Operator, dated January 27, 1971, stated that the Government had closed its books and records on the contract and retained no claims or lien against the property.

Production - There was no ore produced, sold, or stockpiled during the period of the contract.

Royalties - There was no ore or concentrate sold during the period of the contract and no royalties paid or due the Government.

7. Geologic Summary - The ore bodies that have been mined at the Buchanan Mine consist of gold-bearing shoots in quartz veins and veinlets that occur within a fault zone that strikes about east-west and dips 35°-45° south. The ore shoots range from a few feet to several hundred feet in length, from a few inches to 45 feet in thickness, and have been mined or partly explored down dip for about 700 feet on a rake of S. 75° E. Total production from 1881 to the present is estimated at about 100,000 tons of ore, that averaged about one ounce of gold per ton, and valued at about $2,500,000.

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
1/26/71	Emerick	120
1/26/71	Kirkemo	120
		220

January 26, 1971

Memorandum

To: The File

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

Subject: OME-6665 (Gold)
M & M Buchanan Gold Mining & Milling Corp.
Buchanan Mine
Tuolumne County, California
Contract 2270

The Field Officer in a memorandum dated November 5, 1970 reviewed the exploration work completed under the contract and also additional exploration work done by the Operator at its own expense. No reserves were found by the exploration work, therefore no certification of discovery was recommended.

A final closing letter to the Operator has been prepared under this date.

William L. Emerick

William L. Emerick

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

WLEmerick/bsl 1/26/71

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
1/25/71	Emerick	120
		120
1/26	CAC	220
		120M

JAN 26 1971

Memorandum

To: Chief, Branch of Budget and Finance

From: Chief, Office of Minerals Exploration

Subject: OME-6665 (Gold)
M & M Buchanan Gold Mining & Milling Corp.
Buchanan Mine
Tuolumne County, California
Contract 2270

Enclosed is a copy of the Field Officer's letter of January 22, 1971, forwarding a copy of the Report of Review issued in January 1971 to the subject Operator. Also enclosed is a copy of the report for your files.

Harold Kirkemo

Harold Kirkemo

Enclosures

cc: Director's Reading File
Mineral Resources File
OME Docket
OME Reading File
OME Region II
Mr. Emerick
130

BSLong/1 1/25/71

Office of Minerals Exploration
345 Middlefield Road
Menlo Park, California 94025

January 22, 1971

OFFICIAL
COPY
O. M. E.
RECEIVED
JAN 25 1971
INITIALS | CODE
Ca / 30
Cal / 20
/ 20

M & M Buchanan Gold Mining
& Milling Corp.
796 Douglas Avenue
Oakland, California 94603

Re: OME-6665 (Gold)
M & M Buchanan Gold Mining & Milling Corp.
Buchanan Mine
Tuolumne County, California
Contract 2270

Gentlemen:

Enclosed is a copy for your files of a Report of Review dated January 1971 by the Office of Survey and Review in Washington, D.C., on your OME contract referenced above.

The facts and figures as stated in the report agree with those in the records of the Field Office, and I concur in the report.

Sincerely yours,

H. K. Stager
Field Officer
OME, Region II

Enclosure

cc: ✓OME, Wash., D.C. (2)
Dir. RF
ACG RF
MP RF
Docket

RMSmith:mkh

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
1/18/71	Emerick	120
		120
1/19		220
		120M

Memorandum

JAN 19 1971

To: Field Officer, Region II

From: Chief, Office of Minerals Exploration

Subject: OME-6665 (Gold)
M & M Buchanan Gold Mining and Milling Corp.
Buchanan Mine
Tuolumne County, California
Contract 2270

Enclosed are the Field Office's and Operator's copies of a Report of Review issued in January 1971 on the subject contract.

If you concur in the facts as stated in this report, one copy should be sent to the Operator with any comments you may care to make, and the other copy retained for your files. As evidence of your concurrence, two copies of your letter transmitting the Operator's copy of the report should be furnished this office. If for any reason you do not concur, both copies of the report should be returned to this office with appropriate comments.

Harold Kirkemo
Harold Kirkemo

Enclosures

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

WELong/1 1/18/71

UNITED STATES
DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY
Office of Minerals Exploration
345 Middlefield Road
Menlo Park, California 94025

November 5, 1970

OFFICIAL
COPY
O. M. E.
RECEIVED
NOV 9 1970
INITIALS | CODE
gla / 30
Gall / 20
HK / 20
WE / 20

Memorandum

To: Chief, Office of Minerals Exploration
Washington, D. C.

From: Field Officer
Region II

Subject: OME-6665 (Gold)
M & M Buchanan Gold Mining and Milling Corp.
Buchanan Mine
Tuolumne County, California
Contract 2270

Work under the subject contract, completed during August 1970, did not result in the discovery of minable ore. Long-hole drilling from the OME drift, at the Operator's expense, completed during September and October also failed to discover a minable ore shoot. Certification is not justified and is not recommended.

H. K. Stager

UNITED STATES
DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY
Office of Minerals Exploration
345 Middlefield Road
Menlo Park, California 94025

August 20, 1970

Memorandum

To: Chief, Office of Minerals Exploration
Washington, D. C.

90 B&P 8/25

From: Field Officer
Region II

Subject: OME-6665 (Gold)
M & M Buchanan Gold Mining and Milling Corp.
Buchanan Mine
Tuolumne County, California
Contract 2270

OFFICIAL COPY
O. M. E.
RECEIVED
AUG 24 1970

INITIALS	CODE
gla	30
Gal	120
HK	120
WE	120

Enclosed is the final voucher and monthly report, for July-August 1970, and the Operator's Final Report for the subject contract. I recommend that the Operator's Final Report be accepted and that a final cost review or audit be requested.

Although the completed contract work did not result in a discovery of minable ore, it is possible that the long-hole drilling from the OME drift, that is to be started immediately, will discover a minable ore shoot. I will delay my recommendations as to certification until the results of the drilling are known, probably during September.

H. K. Stager

Enclosures

FORM 9-1648
MARCH 1968

OFFICIAL COPY
O. M. E.
RECEIVED
SEP 8 1970
INITIAL CODE

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
OFFICE OF MINERALS EXPLORATION

OK-WPE
8/25/70

OPERATOR'S MONTHLY VOUCHER

For Month of July + AUGUST 1970

Docket No. OME- 6665
Contract 14-08-0001 2270
Contract Amount $ 12,200.00
Gov't. Participation % 75 $ 9,150.00

Operator's Name M & M BUCHANAN GOLD MINING & MILLING CORP.
Address 796 Douglas Avenue, Oakland, Ca. 94603

FOR OPERATOR'S USE					FOR GOVERNMENT USE ONLY			
COST ITEMS (FROM EXHIBIT A)	THIS MONTH		TO DATE		THIS MONTH		TO DATE	
	UNITS	COSTS	UNITS	COSTS	UNITS	COSTS	UNITS	COSTS
Drifting	165	$ 9,900.00	200	$ 12,000.00	165	$ 9,900.00	200	$ 12,000.00
Assaying	6	30.00	6	30.00	6	30.00	6	30.00
TOTALS	~~165~~	$ 9,930.00	~~206~~	$ 12,030.00		$ 9,930.00		$ 12,030.00

I certify that the above bill is correct and just and that payment therefor has not been received.

Date July 31, 1970 *Payee M & M BUCHANAN GOLD MINING & MILLING CORP.

Per Harry Mason Title Treasurer

SEP 4 1970

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

Approved as noted, subject to field examination and audit.

Signature H. B. Rager OME Field Officer Date 8-19-70

(63) 14X0804

Approved for: $ 7,447.50
(SUBJECT TO AUDIT)

12112

M & M BUCHANAN GOLD MINING & MILLING CORP.
796 DOUGLAS AVENUE
OAKLAND, CALIFORNIA 94603

July 31, 1970

United States Department
of the Interior
Geological Survey
Office of Minerals Exploration
Menlo Park, California

Gentlemen:

Subject: Operator's Monthly Report Docket No. OME-6665
Contract No. 14-08-0001 - Contract No. 2270

The following is the Operator's Narrative Report of Work at the Buchanan Mine covering the month of July 1970:

A) Personnel consists of: 2 miners
2 mechanics
1 foreman

B) Work completed: 165' of 7' x 9' tunnel. Method used: blasting and mucking. Rock removed to the surface by skip bucket. (20' of the above is a cross-cut as shown on attached sketch).

C) Six (6) Assay Reports attached.

D) Attached is a sketch showing the completed new drift as covered by our contract.

E) The geological formation tranversed by the workings appears to be chiastolite, slate, quartz and ~~tellerides.~~

Very truly yours,

M & M BUCHANAN GOLD MING & MILLING
CORPORATION

F.J. Mason, President

FJM/jo
Atts.

Fred J. Mason

METALLURGICAL LABORATORIES, INC. CHEMISTS • ASSAYERS • SPECTROGRAPHERS

42 HOWARD STREET • SAN FRANCISCO, CALIFORNIA 94103 • AREA CODE 415 863-8575

REPORT OF ASSAY

Submitted by Stonehurst Iron & Machine Company
796 Douglas
Oakland, California 94603

Date June 8, 1970

Sample of Minerals

P. O. No.

Lab. No. 6800

MARK	GOLD, PER TON OF 2,000 LBS.		SILVER, PER TON OF 2,000 LBS.		%	%	%
	TROY OUNCES	VALUE	TROY OUNCES	VALUE			
1	0.06						
2	0.055						
3	0.03						
4	0.05						

METALLURGICAL LABORATORIES, INC.

By [signature]

METALLURGICAL LABORATORIES, INC. CHEMISTS • ASSAYERS • SPECTROGRAPHEI

1142 HOWARD STREET • SAN FRANCISCO, CALIFORNIA 94103 • AREA CODE 415 863-857

REPORT OF ASSAY

Submitted by Stonehurst Iron & Machine Co.
796 Douglas Ave.
Oakland, California 94603

Date August 7, 1970

Sample of Minerals

P. O. No. a

Lab. No. 7144

MARK	GOLD, PER TON OF 2,000 LBS.		SILVER, PER TON OF 2,000 LBS.		%	%	%
	TROY OUNCES	VALUE	TROY OUNCES	VALUE			
#1 (Larger)	0.027						
#2 (Smaller)	0.025						

METALLURGICAL LABORATORIES, INC.

By John D. Atwood

M & M BUCHANAN GOLD MINING & MILLING CORP.
796 DOUGLAS AVENUE
OAKLAND, CALIFORNIA

August 18, 1970

United States Department of
the Interior
Geological Survey
Office of Minerals Exploration
Menlo Park, California

Attention: H. K. Stagger - Geologist

Subject: Operator's Final Report

Gentlemen:

We are pleased to submit the following Operator's Final Report:

1. OME No. 6665
   Contract No. 14-08-0001-2270
   Name of Operator: M & M Buchanan Gold Mining & Milling Corp.
   Name and Location of Property: Buchanan Mine, Tuolumne, Calif.

2. Summary of Project:

   a) Starting Date: June 22, 1970, Completion Date: July 31, 1970.

   b) Final inspection by H. K. Stagger, August 12, 1970.

   c) Work completed - 200 ft. of drifting and cross cutting. (7' x 9' tunnel timbered)..... $12,000 x .75 = $9,000.00.
   6 ASSAYS @ $5/EACH 30 $12,030 22.50 $9,022.50

3. Geologic:

   a) Attached sketch shows the completed drift.

   b) Assay reports show no value of the ore of the diggings.

   c) The geological formation transversed by the workings appeared to be a slate wall with a quartz vein, approximately 6' x 8' running the entire length of the new drift, and consisting of low grade gold bearing ore highly mineralized with sulphides.

4. The new drift has located us under the old workings approximately 20 ft. from the No. 2 shaft. This puts us in an optimum position to probe the mountain and to connect shaft No. 1 and No. 2.

Operator's Final Report

Operating conditions were favorable, both surface and underground. Efficiency rated 100%, resulting in drifting 200 ft. 7' x 9' timbered tunnel on the 700 ft. level, and removing ore by skip to the surface in 36 working days with a crew of five (5).

The results of the project are as follows:

a) completed our contract with the Office of Mineral Exploration,

b) no value of the ore taken out,

c) the new drift is advantageous for continuing explorations of the Buchanan Mine.

Future plans are as follows:

a) surveying the new drift,

b) probing the new drift every 10 ft. to a depth of 50 ft., top and bottom. Technique used will be Jack Steel drilling, starting 100 ft. in from the station of the new drift,

c) connecting new drift with shafts No. 1 and No. 2, and draining water from these shafts.

Trusting that the above report is favorable and that we may continue to participate in the Minerals Exploration Program.

Very truly yours,

M & M BUCHANAN GOLD MINING & MILLING CORPORATION

F. J. Mason
President

FJM/Jo
Atts.

Fred J. Mason

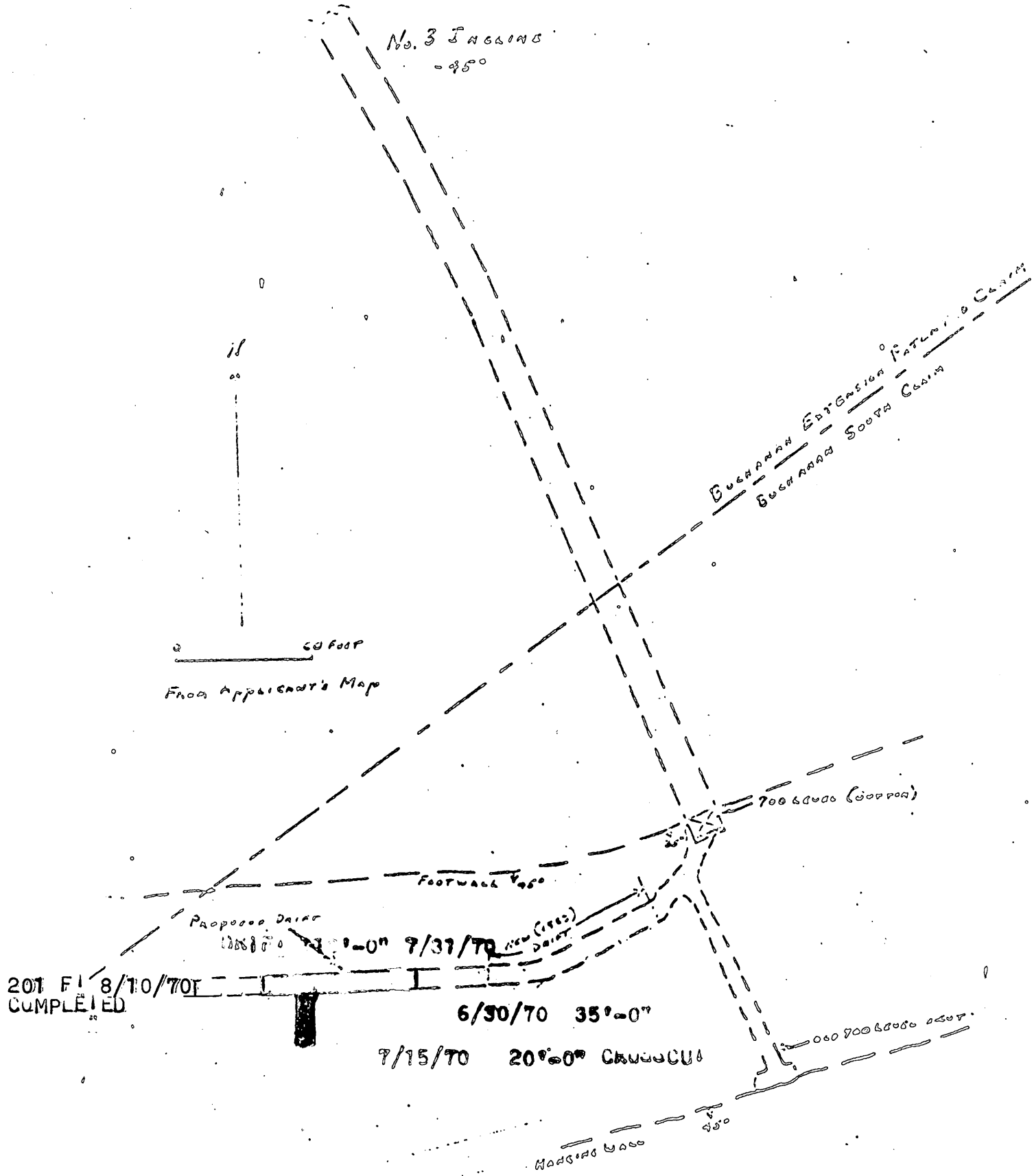


Figure 2.--Map of No. 3 Inclined Shaft, Buchanan Mine, Tuolumne County, California showing approximate location of proposed exploration.

UNITED STATES
DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY
Office of Minerals Exploration
345 Middlefield Road
Menlo Park, California 94025

August 17, 1970

OFFICIAL
COPY
O. M. E.
RECEIVED
AUG 19 1970

Memorandum

To: Chief, Office of Minerals Exploration
Washington, D. C.

From: Field Officer
Region II

Subject: OME-6665 (Gold)
M & M Buchanan Gold Mining and Milling Corp.
Buchanan Mine
Tuolumne County, California
Contract 2270

Interim Inspection

An interim inspection of the subject property was made by the Field Officer on August 12, 1970, accompanied by Mr. Harry M. Mason, Treasurer and mine manager for the Operator.

Since the last inspection on June 23, 1970 (report dated June 30, 1970), about 190 feet of drift had been driven on the 700 level, for a total of 202 feet, thereby completing the drifting allowed under the OME contract. The work has progressed in a rapid and efficient manner since the last inspection and the drift is well timbered and ventilated. The Operator has taken some samples and has panned the material from each round, but only traces of gold have been found. The samples taken during the last inspection assayed only 0.02 to 0.03 ounce of gold per ton and a trace of silver. A sample from the end of the drift shows some scattered chalcopyrite and will be assayed.

The Operator has purchased a set of extension drill steel and plans to drill fans of long-holes from the drift to thoroughly test the mineralized zone and also to locate the bottom of the old mine workings above the 700 level. This drilling (at the Operator's expense) will start about August 18. Samples will be taken of all the drill cuttings for panning and/or assaying.

H. K. Stager

GEOLOGICAL SURVEY
OFFICE OF MINERALS EXPLORATION

OFFICIAL COPY
O. M. E.
RECEIVED
JUL 16 1970
INITIALS

OK-WPC
7/6/70

OPERATOR'S MONTHLY VOUCHER

For Month of April- May-June 1970

Docket No. 6665
Contract To Date 2270
Contract Amount $ 12,200.00
Govt. Participation 75% $9,150.00

Operator's Name M & M BUCHANAN GOLD MINING AND MILLING CORP.
Address 796 Douglas Avenue, Oakland, California 94603

FOR OPERATOR'S USE					FOR GOVERNMENT USE ONLY			
COST ITEMS (FROM EXHIBIT A)	THIS MONTH		TO DATE		THIS MONTH		TO DATE	
	UNITS	COSTS	UNITS	COSTS	UNITS	COSTS	UNITS	COSTS
Drifting	35 FT	$ 2100.00	35 FT	$ 2100.00	35 FT.	$ 2,100.00	35 FT.	$ 2,100.00
Assaying	—	—	—	—	0	0	0	0
TOTALS		$ 2100.00		$ 2100.00		$ 2,100.00 -		$ 2,100.00 -

I certify that the above bill is correct and just and that payment therefor has not been received.

Date June 30, 1970 *Payee M & M BUCHANAN GOLD MINING & MILLING CORP.

Per Harry M Mar (Title) TREASURER

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

A willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction is a criminal offense. (U. S. Code, Title 18, Sec. 1001.)

(INSTRUCTIONS ON REVERSE)

Approved as noted, subject to field examination and audit.

Signature [illegible] OME Field Officer Date 6-30-70

(63)14X0804

Approved for: $ 1,575.00
(SUBJECT TO AUDIT)

Signature MO

Date JUL 16 1970 Vou. No. 10308

(SEE OTHER SIDE)

SS1538

RECEIVED
U.S. GEOLOGICAL SURVEY
7 JUL 70 08 11

M & M BUCHANAN GOLD MINING AND MILLING CORP.
796 DOUGLAS AVENUE
OAKLAND, CALIFORNIA 94603

June 30, 1970

United States Department
of the Interior
Geological Survey
Office of Minerals Exploration
Menlo Park, California

Gentlemen:

Subject: Operator's Report Docket No. OME-6665
Contract 14-08-0001

The following is the Operator's narrative report of work at the Buchanan Mine covering the month of June 1970.

A) Personnel consists of: 2 miners
2 mechanics
1 foreman

B) Work completed - 35' of 7'x 9' tunnel. Method used: blasting and mucking. Rock removed to the surface by skip bucket.

C) Samples are marked by location and ready for assay.

D) Attached is a sketch showing the completed part of the new drift.

E) The geological formation transversed by the working appears to be:

1st layer - chiastolite
2nd layer - quartz
3rd layer - tellerides, respectively.

Very truly yours,

M & M BUCHANAN GOLD MINING
AND MILLING CORPORATION

F. J. Mason
President

LAB/jo
Att.

UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY JANE 30, 1970 (Gold)

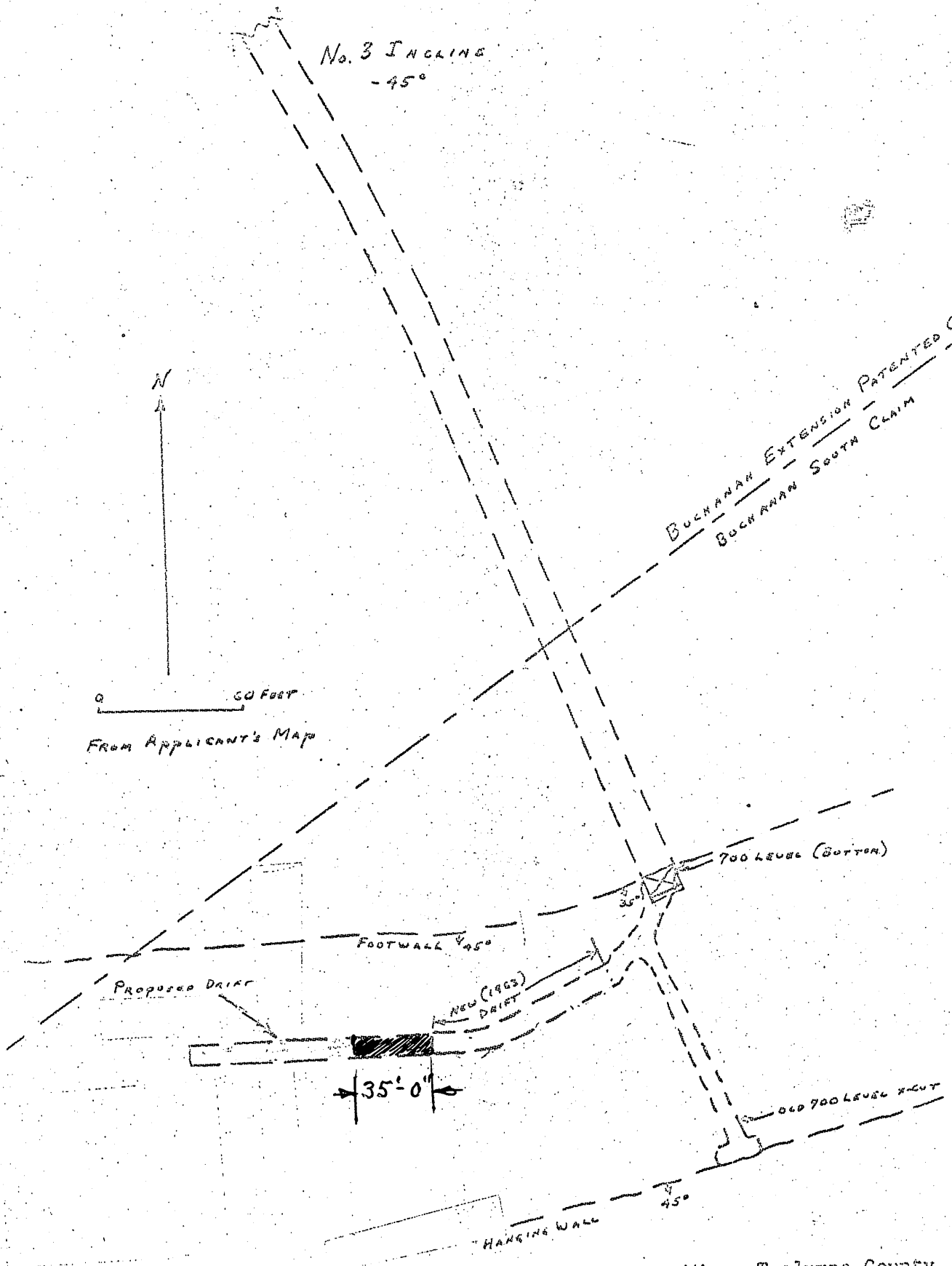


Figure 2.--Map of No. 3 Inclined Shaft, Buchanan Mine, Tuolumne County, Calif. showing approximate location of proposed exploration.

UNITED STATES
DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY
Office of Minerals Exploration
345 Middlefield Road
Menlo Park, California 94025

June 30, 1970

Memorandum

To: Chief, Office of Minerals Exploration
Washington, D. C.

From: Field Officer
Region II

Subject: OME-6665 (Gold)
M & M Buchanan Gold Mining and Milling Corp.
Buchanan Mine
Tuolumne County, California
Contract 2270

ORIGINAL
COPY
O. M. E.
RECEIVED
JUL 2 1970
INITIALS CODE
HK

Interim Inspection

An interim inspection of the subject property was made by the Field Officer on June 23, 1970, accompanied by Mr. Harry M. Mason, Treasurer and mine manager for the Operator.

Work was in progress on the 700 level and about 12 feet of drift had been driven since the last inspection on April 23, 1970. In addition, the entire 700 level workings had been rehabilitated, timber repaired, new rail installed, new air, water, and ventilation lines, and a dam built in a crosscut to provide sump storage of water diverted from the shaft. The workings were free of excess water and in good condition.

Mineralized quartz vein material, about three feet in thickness and dipping about 45° south, was exposed in the face of the drift. A sample was taken of this material and the results of the assay will be reported in the next interim inspection report. A selected sample was also taken of stockpiled material on the surface.

On June 30 the Operator submitted a voucher and report for work completed during April-May-June and reported a total of 35 feet of drift driven to date under the contract.

H. K. Stager

UNITED STATES
DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY
Office of Minerals Exploration
345 Middlefield Road
Menlo Park, California 94025

April 28, 1970

Memorandum

To: Chief, Office of Minerals Exploration
Washington, D. C.

From: Field Officer
Region II

Subject: OME-6665 (Gold)
M & M Buchanan Gold Mining and Milling Corp.
Buchanan Mine
Tuolumne County, California
Contract 2270

OFFICIAL COPY
O. M. E.
RECEIVED
APR 30 1970
INITIALS | CODE
ala 130
Bol 120
HK 120
gf 120 P

Interim Inspection

An interim inspection of the subject project was made by the Field Officer on April 23, 1970, accompanied by Mr. Harry M. Mason, Treasurer and mine manager for the Operator.

The Operator reported on March 27, 1970, that the inclined shaft and 700-level workings of the Buchanan Mine had been pumped out and were accessible as of March 26, 1970, and that work was in progress on the 700-level. It was apparent during the inspection that much rehabilitation work has been completed since the last interim inspection on September 17, 1969 (report dated September 26, 1969). New rail, air lines, pump column, and pumps have been installed in the shaft. A dam was under construction, in an unused crosscut on the 700-level, to provide sump storage of water diverted from the shaft in order to prevent flooding of the working area during periods of pump shutdowns. Several new sets of timber, and some lagging, will be necessary before drifting can be safely undertaken.

Although sampling of the face is now possible, it will probably be mid-May before drifting is started. The Operator's report and voucher for April would only include a small amount of assaying and therefore may be delayed and combined with the May voucher. Three men are now employed consisting of a hoistman and two miners. Two additional men are to start work about May 1 to expedite the driving of the drift.

H. K. Stager

United States Department of the Interior

GEOLOGICAL SURVEY
Office of Minerals Exploration
345 Middlefield Road
Menlo Park, California 94025

February 25, 1970

OFFICIAL
COPY
C. M. E.
RECEIVED
FEB 26 1970
INITIALS CODE
HK 120

Memorandum

To: Chief, Office of Minerals Exploration
Washington, D. C.

From: Field Officer
Region II

Subject: OME-6665 (Gold)
M & M Buchanan Gold Mining and Milling Corp.
Buchanan Mine
Tuolumne County, California
Contract 2270

Enclosed are the Government's copy and Budget and Finance's copy of Amendment No. 2 to the subject contract properly executed by the Operator.

The remaining copies have been distributed in the usual manner.

H. K. Stager

Enclosures

Office of Minerals Exploration
345 Middlefield Road
Menlo Park, California 94025

February 17, 1970

M & M Buchanan Gold Mining
& Milling Corp.
796 Douglas Avenue
Oakland, California 94603

OFFICE COPY
O. M. E.
RECEIVED
FEB 19 1970
INITIALS CODE

Re: OME-6665 (Gold)
M & M Buchanan Gold Mining & Milling Corp.
Buchanan Mine
Tuolumne County, California
Contract 2270

Gentlemen:

Enclosed are the original and three copies of proposed Amendment No. 2 (two pages), to the subject contract, signed for the Government.

If the proposed amendment is satisfactory to you, all four copies should be signed by an authorized representative of M & M Buchanan Gold Mining & Milling Corp. and the Government's copy, Budget and Finance's copy, and Field Office's copy returned to this office. The Operator's copy should be retained for your files.

If any part of the proposed amendment does not have your approval, the original and all copies are to be returned to this office together with the proposed changes for consideration.

Sincerely yours,

H. K. Stager
Field Officer
OME, Region II

Enclosures

cc: OME, Wash., D.C.
Dir. RF
ACG RF
MP RF
Docket

RMSmith:mkh

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
2/13/70	(on leave)	120
"	Kirkemo	120
2/13/70	Kilgard	
1/13	Cal	220
		120M

AIRMAIL

FEB 13 1970

Memorandum

To: Field Officer, Region II

From: Chief, Office of Minerals Exploration

Subject: OME-6665 (Gold)
M & M Buchanan Gold Mining & Milling Corp.
Buchanan Mine
Tuolumne County, California
Contract 2270

Enclosed are the original and three copies of proposed Amendment No. 2 (two pages), to the subject contract, signed for the Government. An extra copy of the amendment is also enclosed for field use.

If the proposed amendment is satisfactory to you and the Operator, all four copies should be signed by an authorized representative of the Operator and distributed in the usual manner.

If any part of the proposed amendment does not have your approval or that of the Operator, the original and all copies are to be returned to this office together with the proposed changes for consideration.

Harold Kirkemo (gla)
Harold Kirkemo

Enclosures

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

ECPeterson/bsl 2/13/70

FORM 6 REFERENCE SLIP
REV. 2-59 OFFICE OF MINERALS EXPLORATION

TO:	DATE	INITIALS
1. Assoc. Sol. MR, Room 6554 (Through Rm. 6042)		
2. Mr. Peterson, Rm. 4457, Interior		
3. SOLICITOR 34549.3123		
4. JAN 19/0		
5.		
FROM: Chief, OME		

INTERIOR DEPT.

FOR: Check items for action desired

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

REMARKS:

OME-6665 M & M Buchanan Gold Mining
& Milling Corp.

(Proposed Amendment No. 2)

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

G 120

120 Kitsemo

DRAFT 1/15/70
ECPeterson/bsl

To legal 1/19

120M

EXPLORATION CONTRACT
M & M BUCHANAN GOLD MINING AND MILLING CORP.
OME-6665

AMENDMENT NO. 2

It is agreed this _____ day of _____, 1970, between the United States of America, acting through the Department of the Interior, U. S. Geological Survey, hereinafter called the "Government," and M & M Buchanan Gold Mining and Milling Corp., hereinafter called the "Operator," that Exploration Contract 2270 (OME-6665), dated September 6, 1968, as amended, is further amended, effective the date of the contract as follows:

1. The time fixed by Article 1(a) of the contract, as amended by Amendment No. 1, for completion of the work is extended from fourteen (14) to twenty-five (25) months from the date of the contract, or until October 6, 1970.

2. The maximum period for royalty payments and for the lien to secure payments thereof provided for in the contract is extended from ten (10) to eleven (11) years from the date of the contract.

3. The time fixed by Article 1 of the contract to begin the work is extended from September 15, 1968 to April 1, 1970.

4. It is the essence of this amendment that the work shall be undertaken and completed before the termination of the period fixed for completion; and if not completed in the manner required by the contract, the following provisions shall thereupon become effective:

(a) The contract and all obligations of the parties thereunder, except as hereinafter otherwise provided, shall be and are hereby terminated as follows:

(i) Effective the date of the contract if work on the contract has not been started on or before April 1, 1970.

(ii) Effective October 6, 1970, if the work has been started but not completed on or before that date.

(b) The Government will contribute only to allowable costs incurred prior to October 6, 1970.

(c) The Operator shall promptly perform all winding-up and settlement actions provided for in the contract, including the rendering of the final report and final account.

(d) The Operator, as principal if the Operator is the producer, or as surety if the Operator is not the producer (for example, if the Operator either transfers or fails to retain its interest in the land), shall pay to the Government the royalty provided for in the contract in the same manner and amount, for the same period, and subject to the same provisions as provided for in the contract as amended herein as if a certification of possible production had been made, such certification being hereby waived by the Operator. In addition,

all rights of the Government provided for in the contract with respect to a certification of possible production, percentage royalty and liens to secure payment thereof, reports (including preservation of Operator's records), accounts, audits, and the right to recover any overpayments are hereby preserved.

(e) The Operator hereby releases and agrees to save the Government harmless from all claims or demands under or arising out of the contract, except as provided for in this Amendment No. 2.

This amendment shall not be construed to increase the estimated total cost of the contract, the aggregate amount which the Government may be required to contribute, the amount of any item designated as a maximum, nor the fixed unit cost of any item of work.

Executed in quadruplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By_____
Chief, Office of Minerals Exploration
U. S. Geological Survey

M & M BUCHANAN GOLD MINING & MILLING CORP.

By_____

Title_____

United States Department of the Interior

GEOLOGICAL SURVEY
Office of Minerals Exploration
345 Middlefield Road
Menlo Park, California 94025

January 12, 1970

OFFICIAL
COPY
O. M. E.
RECEIVED
JAN 14 1970
INITIALS
zla 1/30
bel 1/20 M
HK 1/20
gp 1/20 P

Memorandum

To: Chief, Office of Minerals Exploration
Washington, D. C.

From: Field Officer
Region II

Subject: OME-6665 (Gold)
M & M Buchanan Gold Mining and Milling Corp.
Buchanan Mine
Tuolumne County, California
Contract 2270

Enclosed is a letter from the subject Operator, dated January 8, 1970, requesting an additional extension of time for completion of the work to August 31, 1970. Time for completion of the work, as amended by Amendment No. 1 dated May 15, 1969, expired on November 6, 1969. Although the Operator has worked almost continuously, weather conditions permitting, since the contract was executed in September 1968 and has accomplished a great amount of necessary rehabilitation work, it has not been possible to start the OME drifting on the 700-level as authorized in the contract. With the present unfavorable weather conditions at the mine, it now appears that work on the OME drift will be further delayed until about March 1970.

I recommend that an amendment be approved extending the allowable time from 14 months to 24 months from the date of the contract, or to September 6, 1970.

H. K. Stager

H. K. Stager

Enclosures

M & M BUCHANAN GOLD MINING & MILLING CORP.
796 Douglas Avenue
Oakland, California 94603

January 8, 1970

Department of The Interior
United States Geological Survey
Office of Minerals Exploration
345 Middlefield Road
Menlo Park, California 94025

Subject: Exploration Contract #3370 - Docket #OME 6665
Amendment #1

Attention: Harold K. Stager, Field Officer of Minerals Exploration

Gentlemen:

With reference to the above subject contract, we wish to apply for an extension of an additional six months, starting March 1, 1970, through August 31, 1970. The reason for the extension is to complete work on the 700' level, including drifting and cross cutting approximately 200'.

We were not able to finish the contract under Amendment #1, because completion of all surface work exceeded our estimate of six months. Now that all surface work is completed, we can start dewatering the main shaft and commence drifting on the 700' level on March 1, 1970.

The following is a report on work and equipment which has been completed to date:

I. New Hoist Building - 40' x 40' all steel construction - Cement Foundation and Floor - With overhead traveling service crane.

A). New ore skip-hoist with ore car (electric and gasoline powered for safety).

B). New double-drum hoist - for man-lift and pumping machinery (electric and gasoline powered for safety).

C). 2- 150KVA Diesel Electric Power Plants, complete with panel boards mounted on cement foundation.

D). 1 - 165 cubic ft. Air Compressor

D). New Fuel Oil Storage Tank - 3000 gal. capacity

II. New All Steel Welded Head Frame equipped with new electric crane over mine collar for safety of handling machinery to skip cars.

III. One (1) New Special Acid Resistant Coated Submergable Pump - (This type pump allows us to shut down our power for one shift while dewatering the main shaft as it is not affected by the water rise during the power shutdown. We would also like to add that the delivery schedule on the pump was delayed because of the special coating required to handle the water characteristics at the mine).

IV. Inventory of material on site:

A) 1000 ft. 2" new galv. pipe for air lines
B) 1000 ft. $3\frac{1}{2}$" new water discharge pipe
C) 2000 ft. new ship car rails
D) Complete saw mill machinery for cutting mine timbers.

In view of the above, we are hoping that we will receive a favorable reply granting our request for an extension in order that we may complete the contract and participate in the Minerals Exploration Program.

Thanking you for your courtesy in this matter, we remain

Very truly yours,

M & M BUCHANAN GOLD MINING
& MILLING CORPORATION

Fred Mason

Fred Mason
President

LAB/j

RECEIVED
JAN 9 1970
OFFICE OF MINERALS EXPLORATION
U.S. GEOLOGICAL SURVEY
MENLO PARK, CALIF.

United States Department of the Interior

GEOLOGICAL SURVEY
Office of Minerals Exploration
345 Middlefield Road
Menlo Park, California 94025

OFFICIAL COPY
O. M. E.
RECEIVED
SEP 29 1969

INITIALS	CODE
[illegible]	130
[illegible]	120
HK	120
[illegible]	120

September 26, 1969

Memorandum

To: Chief, Office of Minerals Exploration
Washington, D.C.

From: Field Officer
Region II

Subject: OME-6665 (Gold)
M & M Buchanan Gold Mining and Milling Corp.
Buchanan Mine
Tuolumne County, California
Contract 2270

Interim Inspection

An interim inspection of the subject project was made by the Field Officer on September 17, 1969, accompanied by Mr. Harry M. Mason, Treasurer for the Operator.

The subject contract, dated September 6, 1968, was signed about September 15, 1968, and rehabilitation of the surface facilities was started immediately. All work at the property was suspended for about 6 months because of severe winter weather and necessitated an 8-month extension of time for completion of the work, until November 6, 1969.

Although the shaft and 700-level workings were open and accessible at the time of the application examination on June 5, 1968 by the time the contract was ready for execution the workings were again completely flooded to the collar of the shaft. The Operator decided to completely rebuild the surface facilities, including a new hoist house, new headframe, two complete hoists with standby engines, new steel waste and ore bins, double tracks in the shaft, new pumping facilities, and completion of the mill building. This work was nearly complete at the time of the inspection and work in the shaft was being started as the water level is lowered. Some new steel sets are being

installed in place of old timber sets, new air and water lines are being placed in the shaft as well as new rail. When the water level is pumped down to the 700-level some rehabilitation will be necessary on that level in order to gain access to the face where the OME drifting will start. It is planned that the new drift can be started about mid-October and that the 200 feet of workings can be driven within about one month's time. It may be necessary to again extend the time for completion of the work but the Operator has been informed that I will not recommend another extension until drifting is actually started and it can be determined how much time will be required. If additional delays, or winter weather too severe to permit operations at the mine, again force a shut-down until the spring of 1970 it may be advisable to terminate the contract rather than continue to extend the completion date indefinitely.

H. K. Stager

UNITED STATES
DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY
Office of Minerals Exploration
345 Middlefield Road
Menlo Park, California 94025

May 29, 1969

OFFICIAL COPY
O. M. E.
RECEIVED
JUN 2 1969

INITIALS	CODE
[illegible]	130
[illegible]	120
HK	120
[illegible]	120

Memorandum

To: Chief, Office of Minerals Exploration
Washington, D. C.

From: Field Officer
Region II

Subject: OME-6665 (Gold)
M & M Buchanan Gold Mining and Milling Corp.
Buchanan Mine
Tuolumne County, California
Contract 2270

Enclosed are the Government's copy and Budget and Finance's copy of Amendment No. 1 to the subject contract properly executed by the Operator. The remaining copies have been distributed in the usual manner.

H. K. Stager

Enclosures

See left side

Office of Minerals Exploration
345 Middlefield Road
Menlo Park, California 94025

May 26, 1969

OFFICIAL COPY
O. M. E.
RECEIVED
MAY 28 1969
INITIALS | CODE
HK | 70

M & M Buchanan Gold Mining
& Milling Corp.
796 Douglas Avenue
Oakland, California 94603

Re: OME-6665 (Gold)
M & M Buchanan Gold Mining and Milling Corp.
Buchanan Mine
Tuolumne County, California
Contract 2270

Gentlemen:

Enclosed are the original and three copies of proposed Amendment No. 1 (one page), to the subject contract, signed for the Government.

If the proposed amendment is satisfactory to you, all four copies should be signed by an authorized representative of M & M Buchanan Gold Mining & Milling Corp. and the Government's copy, Budget and Finance's copy, and Field Office's copy returned to this office. The Operator's copy should be retained for your files.

If any part of the proposed amendment does not have your approval, the original and all copies are to be returned to this office together with the proposed changes for consideration.

Sincerely yours,

H. K. Stager
Field Officer
OME, Region II

Enclosures

cc: OME, Wash., D.C.
Dir. RF
ACG RF
MP RF
Docket

HKStager:mkh

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
5/12/69	[illegible]	120
5/12/69	Kirkemo	120
5/14	Kilsgaard	
5/14	[illegible]	
5/15	CAC	220
		120M

MAY 15 1969

AIRMAIL

Memorandum

To: Field Officer, Region II

From: Chief, Office of Minerals Exploration

Subject: OME-6665 (Gold)
M & M Buchanan Gold Mining & Milling Corp.
Buchanan Mine
Tuolumne County, California
Contract 2270

Enclosed are the original and three copies of proposed Amendment No. 1 (one page), to the subject contract, signed for the Government. An extra copy of the amendment is also enclosed for field use.

If the proposed amendment is satisfactory to you and the Operator, all four copies should be signed by an authorized representative of the Operator and distributed in the usual manner.

If any part of the proposed amendment does not have your approval or that of the Operator, the original and all copies are to be returned to this office together with the proposed changes for consideration.

Harold Kirkemo (gfr)

Harold Kirkemo

Enclosures

cc: Director's Reading File
Economic Geology File
OME Docket
OME Reading File
Mr. Peterson
190

BSLong/1 5/12/69

MME FORM 6 REFERENCE SLIP

REV. 2-59 OFFICE OF MINERALS EXPLORATION

TO:	DATE	INITIALS
1. Assoc. Sol.--MR, Room 6[illegible] (Through Room 6042)		
2. Mr. Peterson, Room 4457		
3.		
4.		
5.		
FROM: Chief, OME, Room ~~XX~~ 4459		

FOR: Check items for action desired

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

REMARKS:

SOLICITOR
15785.3123
MAY - 6 1969

INTERIOR DEPT.

INT.-DUP. SEC., WASH., D.C. M50943

EP ~~120~~

HK ~~120~~

120M

DRAFT 5/5/69
ECPETERSON/bsl

To Legal
5/5/69

EXPLORATION CONTRACT
M & M BUCHANAN GOLD MINING AND MILLING CORP.
OME-6665

AMENDMENT NO. 1

It is agreed this _____ day of_____, 1969, between the United States of America, acting through the Department of the Interior, U. S. Geological Survey, hereinafter called the "Government," and M & M Buchanan Gold Mining and Milling Corp., hereinafter called the "Operator," that Exploration Contract 2270 (OME-6665), dated September 6, 1968, is amended effective the date of the contract.

1. The time fixed by Article 1(a) of the contract for completion of the work is extended from six (6) months to fourteen (14) months from the date of the contract, or to November 6, 1969.

This amendment shall not be construed to increase the estimated total cost of the contract, the aggregate amount which the Government may be required to contribute, the amount of any item designated as a maximum, nor the fixed unit cost of any item of work.

Executed in quadruplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By_____
Chief, Office of Minerals Exploration
U. S. Geological Survey

M & M BUCHANAN GOLD MINING & MILLING CORP.

By_____

Title_____

UNITED STATES
DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY
Office of Minerals Exploration
345 Middlefield Road
Menlo Park, California 94025

April 25, 1969

OFFICIAL COPY
O. M. E.
RECEIVED
APR 28 1969

INITIALS	CODE
	130
bal	170
HK	170
	120

Memorandum

To: Chief, Office of Minerals Exploration
Washington, D. C.

From: Field Officer
Region II

Subject: OME-6665 (Gold)
M & M Buchanan Gold Mining and Milling Corp.
Buchanan Mine
Tuolumne County, California
Contract 2270

The subject contract, dated September 6, 1968, provided that the work be completed within six months or by March 6, 1969. Although preliminary work was started immediately, the early onset of the most severe winter on record forced the closing down of all work at the property until late in March. The property is now accessible again and the Operator has resumed work but the rebuilding of the hoist house, pumping out of the completely flooded workings, and rehabilitation of the shaft and project level will require at least another month to complete before work on the OME drift can be started.

The President and Treasurer of the Corporation visited the Field Office today and requested that they be granted an eight months extension of time, or until November 6, 1969, in which to complete the work under the contract. I recommend that an amendment to the contract be prepared authorizing the extension of time.

H. K. Stager

UNITED STATES
DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY
Office of Minerals Exploration
345 Middlefield Road
Menlo Park, California 94025

September 16, 1968

OFFICIAL COPY
O. K. P.
SEP 18 1968
INITIALS | CODE
120
120
110
120

Memorandum

To: Chief, Office of Minerals Exploration
Washington, D. C.

From: Field Officer
Region II

Subject: OME-6665 (Gold)
M & M Buchanan Gold Mining and Milling Corp.
Buchanan Mine
Tuolumne County, California
Contract No. 2270

Enclosed are the Government's copy and Budget and Finance's copy of the contract properly executed by the Operator. The remaining copies have been distributed in the usual manner.

H. K. Stager

Enclosures

MME FORM 6 REFERENCE SLIP

REV. 2-5 OFFICE OF MINERALS EXPLORATION

TO:	DATE	INITIALS
1. ~~Asaco, Sol. MR, Room 6554 (Through Room 6042)~~		
2. Mr. Peterson, Room 4459	8-22-68	
3.		
4.		
5.		
FROM: Chief, OME		

9-68 SOLICITOR

INTERIOR DEPT.

FOR: Check items for action desired

____ Action ____ Reply for signature of ____

____ Approval ____ Investigate ____ Surname

____ Comment ____ Recommendations ____ Signature

____ Conference ____ Rewrite ____ File

____ Instructions ____ Your information

REMARKS:

RECEIVED
AUG 2 1968
Division of Mineral Resources
General Legal Services

FROM SOLICITOR

AUG 26 1968

FOR SIGNATURE

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

MME FORM 6 REFERENCE SLIP

REV. 2- , OFFICE OF MINERALS EXPLORATION

TO:	DATE	INITIALS
1. Assoc. Sol.--MR, Room 6554 (Through Room 6042)		
2. Mr. Peterson, Room 4459		
3.		
4.		
5.		

RECEIVED
JUL 3 1 1968
Division of Mineral Resources
and General Legal Services

FROM: Chief, OME

FOR: Check items for action desired

____ Action ____ Reply for signature of ____

____ Approval ____ Investigate ____ Surname

____ Comment ____ Recommendations ____ Signature

____ Conference ____ Rewrite ____ File

____ Instructions ____ Your information

REMARKS:

Please return maps.

SOLICITOR
G-68-2222.3192
JUL 30 1968

INTERIOR DEPT.

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

OME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
8/30/68	Peterson	120
	(on leave)	120
8/30	Johnson	110
9/3	Peterson	
9/3	Shelden	
9/3	Cryp	
		110
9/6	cae	220
		120M

AIRMAIL

SEP 6 1968

Memorandum

To: Field Officer, Region II

From: Chief, Office of Minerals Exploration

Subject: OME-6665 (Gold)
M & M Buchanan Gold Mining & Milling Corp.
Buchanan Mine
Tuolumne County, California

Enclosed are the original and three copies of a proposed contract for the subject property. The contract consists of MME Form 51 (5 pages), Annex I (1 page), Exhibit A (2 pages), Exhibit B (1 page), and two maps (Figures 1 and 2). All copies of the contract have been signed for the Government. You should insert the date for commencement of the work. Also enclosed is an extra copy of the contract for field use.

If the proposed contract is satisfactory to you and the Applicant, all four copies should be signed by an authorized representative of the Applicant. Thereafter, please distribute the copies in the usual manner.

Please advise the Applicant that the 7-1/4 percent interest accrues from the dates on which individual payments are made by the Government and like the principal is repayable from royalty on production.

If any part of the proposed contract does not have your approval or that of the Applicant, the original and all copies should be returned to this office together with the proposed changes for consideration.

FRANK E. JOHNSON

Frank E. Johnson

Enclosures

cc: Director's Reading File
Economic Geology File
OME Docket
OME Reading File
130
ECPetersson

ECPeterson/bsl 8/30/68

/68
/bsl

To Legal 7/30/68 Ret'd

To Legal 8/21/68

L@) 120 EP
120 HR
~~110~~ JKL
120M

MME Form 51
July 1965

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
U. S. Geological Survey

EXPLORATION CONTRACT
(Short Form)

Docket	Commodity	Contract No.	County	State
-6665 OME	Gold		Tuolumne	California

It is agreed _____ (Date), between the United States of America, acting through the Department of the Interior, U. S. Geological Survey, hereinafter called the "Government," and

M & M Buchanan Gold Mining and Milling Co.

_____,

whose mailing address is 796 Douglas Avenue, Oakland, California 94603, hereinafter called the "Operator," as follows:

ARTICLE I. Authority and scope.--(a) This contract, entered into under the authority of Public Law 701, 85th Cong., 2d sess. (72 Stat. 700; 30 U.S.C. § 641 - 646), consists of this form, the attached Annex I (land description), Exhibit A (work and costs), and the maps and documents listed. The work is a search for new or unexplored deposits of the commodity designated above. The Operator shall begin the work on or before _____ (Date), and, subject to the provisions of Article 7 and Exhibit A, shall complete the work within 6 months from the date of the contract.

(b) The description of the work and the fixed cost for each unit of work to be performed (per foot of drilling, per foot of drifting, per hour of operations, etc.) are hereby agreed upon as specified in Exhibit A. The estimated total cost of the work is $ 12,200.00. The Government will contribute 75 ~~50~~ percent of the total fixed unit costs of the work performed, not in excess of $ 9,150.00 in accordance with the provisions of Articles 4 and 5.

(c) Interest computation.--Simple interest at the rate of _____ percent shall accrue from the dates Federal funds are made available until the period specified for payment of royalty expires, or until the amount of Federal funds contributed is fully repaid with interest.

(d) The Operator shall not transfer or assign this contract or any right or obligation thereunder without the written consent of the Government.

ARTICLE 2. Operator's rights in land.--(a) The Operator represents and undertakes that Annex I correctly describes the land which is the subject of this contract and the nature of the Operator's right of property and possession therein (whether as owner, lessee, or otherwise), and that such right, title, or interest is subject only to the following claims, liens, or encumbrances:

SEE ANNEX I

(b) The Subordination Agreement of the holder of any claim, lien, or encumbrance listed above and (if the Operator does not hold the legal title) the Lien Agreement of any holder of the legal title of the land (lessor, seller, optionor, etc.) are attached as follows:

SEE ANNEX I

(c) The Operator shall preserve and maintain his right, title, or interest in the land and his right to the possession thereof for the purposes of this contract, and shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of this contract. The Operator shall neither transfer, convey, nor surrender the land nor any right, title, or interest therein, nor permit nor suffer any claim, lien, or encumbrance thereon, without expressly referring to and providing in the instrument of conveyance, lien, or encumbrance for the preservation of the Government's right to a royalty on production and liens for the payment thereof. Two true copies of such instrument shall be furnished to the Government. If the Government's rights to royalty as provided in Article 6 have been terminated, the provisions of this paragraph (c) shall become inapplicable.

ARTICLE 3. Performance of the work.--(a) Operator's responsibility.--The work shall be performed diligently, efficiently, in a workmanlike manner in accordance with good mining standards, and in compliance with State laws governing health, safety, and liability insurance covering employment. The Operator shall provide suitable and adequate equipment, facilities, materials, supplies, and labor to complete the work as specified in Article 1(a).

(b) Government may inspect.--The Operator shall consult with and inform the Government on all phases of the work as it progresses. The Government may enter at all reasonable times to inspect the work under the contract and production operations during the period that royalty is payable to the Government. The Operator shall provide the Government with all reasonable means of access for such inspections.

ARTICLE 4. Contribution by the Government.--The Government will make its contribution on the basis of the monthly vouchers referred to in Article 5(b), but all payments by the Government are provisional only, subject to audit. Until the account between the Operator and the Government is finally audited and settled and the Operator's final report has been received, the Government may withhold such sums as are necessary to protect its interests. To the extent that amounts in excess of fixed unit costs or in excess of the estimated total cost may be necessary for the performance of the work, the Operator shall incur and pay such amounts for his own account without contribution by the Government. The Government will not contribute to the cost of any work performed prior to the date of this contract. The Government may make payments for the account of the Operator directly to independent contractors and suppliers rather than to the Operator.

ARTICLE 5. Reports, accounts, audits.--(a) Operator's records.--The Operator shall keep suitable records and accounts of the units of work performed and of any production in which the Government may have an interest; and shall preserve those with respect to work performed for at least three years after final payment by the Government, and those with respect to production for at least three years after any obligation to pay royalties to the Government has terminated. The Government may inspect and audit said records and accounts at any time, either by itself or by a certified public accountant. The Comptroller General of the United States or his representative, until the expiration of said three-year periods, shall have access to and the right to examine all pertinent books, documents, papers, and records of the Operator.

(b) Monthly reports.--The Operator shall provide the Government with four copies of monthly reports in three sections as follows:

(1) Operator's Monthly Voucher claiming costs for work performed;

(2) Operator's Progress Report showing the number of units of the various types of work performed; and

(3) a narrative report of the work performed during the reporting period, including adequate engineering-geological maps or sketches, drill hole logs and locations, and assay reports on samples taken concurrently with advance in mineralized ground.

(Forms for reporting under (1) and (2) above will be provided by the Government.)

(c) Final report.--Upon completion of the work or termination of the Government's obligation to contribute to costs, the Operator shall furnish the Government with three copies of a final report (in addition to the final monthly report). This final report shall include a geological and engineering evaluation of the results of the work performed under the contract with an estimate of the ore reserves resulting from such work, complete assay data, adequate geological and engineering maps or sketches, and a summary of the work performed and the unit costs thereof.

(d) Report of sales.--The Operator shall provide the Government with suitable accounting and documentary evidence covering all production to which the Government's royalty relates, such as two copies of smelter or concentrator settlement sheets and certified accounts of production and sale or other disposition of production.

(e) Compliance with requirements.--If the Government determines that any of the Operator's reports, records, or accounts are insufficient or incomplete, or if the Operator fails to make them, the Government may procure the preparation or completion of same with suitable attachments as an expense of the work to which the Operator shall contribute. The Government may withhold approval and payment of any vouchers relating to insufficient or incomplete reports, records, or accounts.

ARTICLE 6. Repayment by Operator.--(a) Certification.--If the Government considers that mineral or metal production from the land covered by the contract may be possible as a result of the exploration work, it shall so certify in writing to the Operator at any time not later than six months after a sufficient final report and final accounting (see Article 5) have been furnished.

(b) Royalty on production.--The Operator, whether or not the producer (for example, if the Operator either transfers or does not retain his interest in the land), shall pay to the Government a royalty on all minerals and metals mined or produced from the land as follows:

(1) irrespective of any certification of possible production--from the date of the contract until the lapse of the time within which the Government may issue such certification or until the total net amount contributed by the Government is fully repaid with interest, whichever occurs first; or

(2) if the Government issues a certification of possible production--for a period of ten years from the date of the contract or until the total net amount contributed by the Government is fully repaid with interest, whichever occurs first.

(c) Payment of royalty.--(1) The Government's royalty shall be five percent of the gross proceeds (including any bonuses, premiums, allowances, or other benefits) from the production sold, in the form sold (ore, concentrate, metal, or equivalent), at the point of delivery (the f.o.b. point); except, that charges of the buyer arising in the regular course of business and shown as deductions on the buyer's settlement sheets (such as treatment processes performed by the buyer, sampling and assaying to determine the value of the production sold, and freight payable by the buyer to a carrier (not the Operator or producer)), shall be allowed as deductions in arriving at the "gross proceeds" as that term is used herein. No costs of the Operator or producer are deductible in arriving at the "gross proceeds" as that term is here used.

The term "treatment processes" means those processes (such as milling, concentrating, smelting, refining, or equivalent, but excluding fabricating or manufacturing) applied to the crude ore or other production after it is extracted from the ground to put it into a commercially marketable form.

(2) The Government's royalty shall be computed and paid currently upon each lot sold, held, or used in integrated operations, as the case may be.

(d) Unsold production.--If any production (ore, concentrate, metal, or equivalent), after the lapse of six months from the date the ore was extracted from the ground, remains neither sold nor used in integrated manufacturing or fabricating operations (for instance if it is stockpiled), the Government, at its option, as long as it so remains, may require the computation and payment of its royalty on the value of such production in the form (ore, concentrate, metal, or equivalent) it is in when the Government elects to require computation and payment. If any production is used in integrated manufacturing or fabricating operations before the Government makes its election, the Government's royalty on such production shall be computed on the value thereof in the form in which and at the time it is so used. "Value" as here used means what is or would be gross income from mining operations for percentage depletion purposes in Federal income tax determination, or the market value, whichever is greater.

(e) Lien for payment.--To secure the payment of royalty (see Article 6(b)), the Operator hereby grants to the Government a lien upon his interest in the land and upon any production of minerals and metals therefrom until the royalty claim is extinguished by lapse of time or is fully paid.

(f) Notice to purchasers.--The Operator or producer shall give notice of the Government's claim for royalty to any purchaser of the production, and shall authorize and direct such purchaser to pay the royalty directly to the Government and to furnish the Government with copies of the settlement sheets. If the records of any production and sales or other disposition of production, whether the production is by the Operator or by others, are not made available to the Government, the amount of the royalty may be estimated by the Government, and this estimate shall be final and binding upon the Operator or producer.

(g) No obligation to produce.--Nothing in this contract shall be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any production operations.

(h) Government not obligated to buy.--Nothing in this contract shall be construed as imposing any obligation on the Government to purchase any minerals and metals mined or produced from the land.

ARTICLE 7. Termination of the Government's Obligations.--(a) If the Government determines that operations at any time have failed to achieve anticipated results and further work is not justified, the Government may give the Operator written notice thereof, and thereupon:

(1) the Government shall be free of all obligation to pay on account of units of work not then performed; and

(2) the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to final accounting and reporting.

(b) If the Government determines that the Operator is in default under the terms of the contract, the Government may give the Operator written notice of such default with a specification of reasonable time within which the default must be cured; and if the Operator fails to cure such default as required, thereupon:

(1) the Government shall be relieved of all obligation to pay on account of units of work not performed when the notice was given, and

(2) the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to final accounting and reporting.

The Government may also avail itself of any other remedy the law may provide for breach of contract, including the right to rescind the contract and to demand repayment of all moneys contributed by the Government under the contract.

(c) The giving of any notice by the Government under the provisions of this Article 7 shall not affect the Government's rights as provided for in the contract with respect to royalty and liens to secure the payment thereof, and such rights shall be fully preserved.

(d) The determinations of the Government are subject to appeal under Article 11.

ARTICLE 8. Notices to be given by the Government may be delivered to the Operator or may be sent by certified mail addressed to the Operator at his mailing address stated in this contract. If mailed, notices are deemed to have been delivered five days after the date of mailing.

ARTICLE 9. Officials not to benefit.--No member of or delegate to Congress or resident commissioner shall be admitted to any share or part of this contract or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

ARTICLE 10. Nondiscrimination in Employment.--The provisions respecting nondiscrimination in employment which are required by section 301 of Executive Order 10925, dated March 6, 1961, as amended and supplemented, are attached hereto as Exhibit B and are hereby incorporated in and made a part of this contract.

ARTICLE 11. Disputes.--Any dispute arising under this contract which is not disposed of by agreement shall be decided by the Director, U. S. Geological Survey, who shall reduce his decision to writing and mail or otherwise furnish a copy thereof to the Operator. The decision of the Director, U. S. Geological Survey, shall be final and conclusive unless, within 30 days from the date of receipt of such copy, the Operator mails or otherwise furnishes to the Director, U. S. Geological Survey, a written appeal addressed to the Secretary of the Interior. The decision of the Secretary or his duly authorized representative for the determination of such appeals shall be final and conclusive unless determined by a court of competent jurisdiction to have been fraudulent, or capricious or arbitrary, or so grossly erroneous as necessarily to imply bad faith, or not supported by substantial evidence.

The term "Director, U. S. Geological Survey," as used herein includes his duly authorized representative.

ARTICLE 12. Work Hours Act of 1962 - Overtime Compensation.--This contract, to the extent that it is of a character specified in the Work Hours Act of 1962 (Public Law 87-581, 76 Stat. 357-360) and is not covered by the Walsh-Healey Public Contracts Act (41 U.S.C. 35-45), is subject to the following provisions and to all other provisions and exceptions of said Work Hours Act of 1962.

(a) Overtime requirements.--No Operator or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any laborer or mechanic to be employed on such work in excess of eight hours in any calendar day or in excess of forty hours in any workweek unless such laborer or mechanic receives compensation at a rate of not less than one and one-half times his basic rate of pay for all hours worked in excess of eight hours in any such calendar day or in excess of forty hours in any such workweek, as the case may be.

(b) Violations; liability for unpaid wages; liquidated damages.--In the event of any violation of the clause set forth in subparagraph (a) of this paragraph, the Operator and any subcontractor responsible therefor shall be liable to any affected employee for his unpaid wages. In addition, such Operator and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed, with respect to each individual laborer or mechanic employed in violation of the clause set forth in subparagraph (a) of this paragraph, in the sum of $10 for each calendar day on which such employee was required or permitted to work in excess of eight hours or in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in subparagraph (a) of this paragraph.

(c) Withholding for unpaid wages and liquidated damages.--The U. S. Geological Survey may withhold or cause to be withheld, from any moneys payable on account of work performed by the Operator or subcontractor, such sums as may administratively be determined to be necessary to satisfy any liabilities of such Operator or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (b) of this paragraph.

ARTICLE 13. Copeland (Anti-Kickback) Act--Nonrebate of wages.--The regulations of the Secretary of Labor applicable to contractors and subcontractors (29 CFR, Part 3), made pursuant to the Copeland Act, as amended (40 U. S. C. 276c) and to aid in the enforcement of the Anti-Kickback Act (18 U. S. C. 874) are made a part of this contract by reference. The Operator will comply with these regulations and any amendments or modifications thereof and will be responsible for the submission of affidavits required of independent contractors thereunder. The foregoing shall apply except as the Secretary of Labor may specifically provide for reasonable limitations, variations, tolerances, and exemptions.

ARTICLE 14. Changes and added provisions.--

_____

_____

_____

_____

Executed in quintuplicate the day and year first above written.

M & M BUCHANAN GOLD MINING AND MILLING CO.
(Operator)

By _____

Title _____

THE UNITED STATES OF AMERICA

By James A. Baker

Acting **Director, U. S. Geological Survey**

I, _____ (Name), certify that I am the _____ secretary of the corporation named as Operator herein; that _____ (Name), who signed this contract on behalf of the Operator, was then _____ (Title) of said corporation; that said contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

_____

[CORPORATE SEAL]

EXPLORATION CONTRACT
M & M BUCHANAN GOLD MINING & MILLING CORP.
OME-6665

ANNEX I

The land including all rights pertaining thereto, referred to in Article 2 of the contract, consists of two (2) patented lode mining claims, one (1) patented millsite, and six (6) unpatented lode mining claims in secs. 22, 23, 26, and 27, T. 1N., R. 16 E., MDB&M, Tuolumne mining district, Tuolumne County, California. The claims are shown on Figure 1, entitled, "Property map of Buchanan Mine, Tuolumne County, California," attached and made part hereof.

The patented claims and millsite owned by the Operator are recorded in the Tuolumne County Recorder's office at Sonora, California, as follows:

Name	Survey No.
Buchanan Quartz Mining Claim	43A
Buchanan Extension Quartz Mineral Claim	50
Buchanan Mill site	43B

The unpatented claims owned by the Operator are recorded in the Tuolumne County Recorder's office at Sonora, California, as follows:

Name	Book	Page
Buchanan North Quartz Mine	18	415
Buchanan Northeast Quartz Mine	18	416
Buchanan Northeast Quartz Mine Mill and Tunnel Site	18	415
Buchanan South Quartz Mine	18	416
Buchanan West Quartz Mine	18	414
Buchanan Southwest Mine	18	424

EXPLORATION CONTRACT
M & M BUCHANAN GOLD MINING & MILLING CORP.
OME-6665

EXHIBIT A

The purpose of this project is to explore by crosscutting and drifting on the 700 level for gold-bearing ore sheets occurring in quartz veins which have intruded the east-west trending Buchanan fault zone.

General Provisions

All drifts and crosscuts shall be not less than 5 by 7 feet in cross section, and shall be timbered as necessary. Mine rail shall be not less than 14-pound size, air line not less than 2-inch diameter, water line not less than 1-inch diameter, and ventilation line not less than 8-inch diameter.

All significantly mineralized areas traversed by the drifts or crosscuts, shall be sampled normal to the trends of the veins at intervals of not exceeding 5 feet.

All samples shall be split as necessary, and one split assayed for gold and silver. The remainder of each sample shall be stored in a suitable container for Government inspection and possible use. With prior Government approval, the Operator may dispose of the stored samples.

True copies of assay certificates shall be submitted with the Operator's monthly report which shall also include a map or sketch showing the work completed during the reporting period, the location of all samples taken, and the general geological formations and structures traversed by the workings.

The Operator shall provide such supervision, labor, technical services, and equipment as may be required to complete the work in a satisfactory manner.

The location, direction, and extent of each work item shall be subject to Government approval.

Description of the Work

The work shall consist of extending the present drift on the 700 level for approximately 100 feet in a westerly direction. On the best showing of ore in the drift, crosscuts shall be driven across the fault zone to determine its width and to obtain samples for assay. Total crosscutting and drifting shall not exceed 200 feet.

The approximate location of the proposed work is shown in green on Figure 2, entitled, "Map of No. 3 Inclined Shaft, Buchanan Mine, Tuolumne County, California, shewing approximate location of proposed exploration," attached and made part hereof.

Estimated Costs of the Work 1/

Fixed Unit Costs

Drifting and crosscutting, including timbering,	
200 feet @ $60.00/foot	$12,000.00
Assaying for gold and silver,	
40 samples @ $5.00/sample	200.00
Total Estimated Cost of the Project	$12,200.00
Government Participation @ 75%	$ 9,150.00

1/ The Government retains no equity in any of the equipment or materials used.

Cable Address—BANKAMERICA

Bank of America
NATIONAL TRUST AND SAVINGS ASSOCIATION

MIRA VISTA BRANCH • 4800 MacDONALD AVENUE • RICHMOND, CALIFORNIA 94805

August 14, 1968

OFFICIAL COPY
O. M. E.
RECEIVED
AUG 20 1968
INITIALS | CODE
30
20
110
120

M and M Buchanan Gold Mining and Milling Company
796 Douglas Avenue
Oakland, California 94603

Attn: Fred Mason

Gentlemen:

I have reviewed your application for a $55,000.00, five (5) year amortized loan for exploration purposes; dewatering and repair of new shaft No. 3; continued sinking of the shaft from the 700 foot level to the 800 foot level; and the continued drifting of 200 feet more on the 700 foot level.

First of all, this type of a loan is strictly speculative, and secondly, the equipment listed on your application would not serve as adequate collateral. I am sorry to inform you that your application cannot be accepted due to the extreme deviation from our normal bank policy.

Thanks for thinking of us, and perhaps we can be more receptive at another time.

Sincerely,

James A. Buckley
Manager

JAB:bjw

Phone: 235-7500, Ext. 304

August 14, 1968

M and M Buchanan Gold Mining and Milling Company
796 Douglas Avenue
Oakland, California 94603

Attn: Fred Mason

Gentlemen:

I have reviewed your application for a $55,000.00, five (5) year amortized loan for exploration purposes; dewatering and repair of new shaft No. 3; continued sinking of the shaft from the 700 foot level to the 800 foot level; and the continued drifting of 200 feet more on the 700 foot level.

First of all, this type of a loan is strictly speculative, and secondly, the equipment listed on your application would not serve as adequate collateral. I am sorry to inform you that your application cannot be accepted due to the extreme deviation from our normal bank policy.

Thanks for thinking of us, and perhaps we can be more receptive at another time.

Sincerely,

James A. Buckley

James A. Buckley
Manager

JAB:bjw

Phone: 235-7500, Ext. 304

Oakland, Calif. 8-12-68

Bank of America
4800 MacDonald Avenue
Richmond, Calif.

Attn: J. A. Buckley, Mgr.

Dear Mr. Buckley:

We propose to borrow $55,000.00 from your bank for exploration purposes, to dewater and repair new shaft No. 3. Then continue sinking from 700 foot level to 800 foot level. Also, continue drifting 200 feet more on 700 foot level.

In return for the loan we will submit our mining equipment that is listed and attached with summary of the mine history.

We will repay this loan over a 5-year period at a reasonable rate of interest, with repayment based on percentage of the mine's return after it is operating and in production.

Please advise us of the availabilty of funds as soon as possible.

Very truly yours,

Fred Mason

Fred Mason

Oakland, Calif. 8-12-68

Bank of America
4800 MacDonald Avenue
Richmond, Calif.

Attn: J. A. Buckley, Mgr.

Dear Mr. Buckley:

We propose to borrow $55,000.00 from your bank for exploration purposes, to dewater and repair new shaft No. 3. Then continue sinking from 700 foot level to 800 foot level. Also, continue drifting 200 feet more on 700 foot level.

In return for the loan we will submit our mining equipment that is listed and attached with summary of the mine history.

We will repay this loan over a 5-year period at a reasonable rate of interest, with repayment based on percentage of the mine's return after it is operating and in production.

Please advise us of the availability of funds as soon as possible.

Very truly yours,

Fred Mason

Fred Mason

M & M BUCHANAN GOLD MINING AND MILLING CORP.

TUOLUMNE COUNTY, TUOLUMNE CITY, CALIF.

LISTED BELOW IS THE EQUIPMENT IN GOOD WORKING CONDITION.
ON THE MINE SITE

1 250 KVA FAIRBANKS MORSE, 3 CYL. DIESEL ELECTRIC POWER PLANT MOUNTED IN CONCRETE

1 100 KVA GENERAL MOTORS DIESEL ELECTRIC POWER PLANT MOUNTED IN CONCRETE

1 12 KVA DIESEL ELECTRIC HOUSE LIGHTING PLANT

1 165 CUBIC FT. ELECTRIC AIR COMPRESSOR

1 165 CUBIC FT. GASOLINE AIR COMPRESSOR

1 TRACTOR SHOVEL LOADER

1 TRACTOR SHOVEL LOADER, B G, WITH LOGGING WINCH AND FORKS

1 FORD DUMP TRUCK

1 MINE SHOVEL LOADER

6 AIR SUMP PUMPS WITH HOSES

1 HIGH PRESSURE DEWATERING PUMP, 50 HP

2 HIGH PRESSURE D EWARTING PUMPS, 15 HP

1 HYDRALIC DRIFTING JUMBO

5 DRIFTERS, NEW WITH ALL ATTACHMENTS

2 STOPERS, WITH 7 IN. CHUCKS

3 CHAIN SAWS, AIR AND ELETRIC

2 WELDING MACHINES

2000 JACK BITS (NEW)

1 MAN AND ORE HOIST, ELECTRICALLY CONTROLLED, WITH NEW CABLES AND GASOLINE ENGINE STANDBY

1 COMBINATION ELETRIC AND GASOLINE PUMP HOIST

1 DIAMOND DRILL WITH ALL ACCESSORIES

1 COMPLETE 50 TON PER DAY ORE GRINDING MILL
ALL UNDER STEEL BUILDINGS

M & M BUCHANAN GOLD MINING AND MILLING CORP.

TUOLUMNE COUNTY, TUOLUMNE CITY, CALIF.

LISTED BELOW IS THE EQUIPMENT IN GOOD WORKING CONDITION.
ON THE MINE SITE

1 250 KVA FAIRBANKS MORSE, 3 cycl. DIESEL ELECTRIC POWER PLANT MOUNTED IN CONCRETE

1 100 KVA GENERAL MOTORS DIESEL ELECTRIC POWER PLANT MOUNTED IN CONCRETE

1 12 KVA DIESEL ELECTRIC HOUSE LIGHTING PLANT

1 155 CUBIC FT. ELECTRIC AIR COMPRESSOR

1 155 CUBIC FT. GASOLINE AIR COMPRESSOR

1 TRACTOR SHOVEL LOADER

1 TRACTOR SHOVEL LOADER, 3 C.Y. WITH LOGGING WINCH AND FORKS

1 FORD DUMP TRUCK

1 MINE SHOVEL LOADER

6 AIR SUMP PUMPS WITH HOSES

1 HIGH PRESSURE DEWATERING PUMP, 50 HP

2 HIGH PRESSURE D EWARTING PUMPS, 15 HP

1 HYDRALIC DRIFTING JUMBO

5 DRIFTERS, NEW WITH ALL ATTACHMENTS

2 STOPERS, WITH 1 in. CHUCKS

3 CHAIN SAWS, AIR AND ELETRIC

2 WELDING MACHINES

2000 JACK BITS (NEW)

1 MAN AND ORE HOIST, ELECTRICALLY CONTROLLED, WITH NEW CABLES AND GASOLINE ENGINE STANDBY

1 COMBINATION ELETRIC AND GASOLINE PUMP HOIST

1 DIAMOND DRILL WITH ALL ACCESSORIES

1 COMPLETE 50 TON PER DAY ORE GRINDING MILL
ALL UNDER STEEL BUILDINGS

EQUIPMENT AT 796 DOUGLAS AVENUE, OAKLAND, CALIFORNIA

2 150 KVA, LORIMER 4 CYL. DIESEL ELETRIC POWER PLANTS

1 100 KVA, GENERAL MOTORS DIESEL ELETRIC POWER PLANT, PORTABLE

1 185 CUBIC FT. ELETRIC AIR COMPRESSOR

1 SAW MILL

ON HAND ARE ALL THE SMALL TOOLS THAT WILL BE NEEDED TO SINK SHAFT AND DRIVE DRIFT.

LARGE QUANTITY OF STANDING TIMBER ON THE PROPERTY.

EQUIPMENT AT 755 DOUGLAS AVENUE, OAKLAND, CALIFORNIA

2 150 KVA, LORIMER 4 CYL. DIESEL ELECTRIC POWER PLANTS

1 100 KVA, GENERAL MOTORS DIESEL ELECTRIC POWER PLANT, PORTABLE

1 185 CUBIC FT. ELECTRIC AIR COMPRESSOR

1 SAW MILL

ON HAND ARE ALL THE SMALL TOOLS THAT WILL BE NEEDED TO SINK SHAFT AND DRIVE DRIFT.

LARGE QUANTITY OF STANDING TIMBER ON THE PROPERTY.

SUMMARY OF BUCHANAN MINE OPERATION FROM 1939

TO PRESENT TIME (1968).

The Buchanan Mine was taken over in 1939 with the plan to be in full operation in two years. Incline Shaft #1 was retimbered to the 200 ft. level, and then pumped to the 500 ft. level. Most of the timbers in the shaft and stations from the 200 to the 500 ft. level were reshored or replaced. To do this work we had to build one building to house a 200 HP Diesel Electric Power Plant and panel board, one air compressor, and one triple-drum hoist. We fabricated and erected one 40-ft. steel hoisting frame with ore hopper. The shaft was fitted with 500 ft. of rail, 400 ft. 8" blower pipe, 500 feet. power cable and electric lights and telephones; also pumps, one 60 HP stationed at the 500 ft. level, and one 30 HP at 350 feet. Water was pumped through 400 ft. of 3-1/2" pipe and discharged at the 100-ft. level. #1 Incline Shaft is still open to the200 ft. water level, but before closing down we built a bulkhead at the 200-ft. station. Timbers below the 200 ft. level should be in very good condition.

When we mucked out the 500-ft. drift which was full of silt to sink Shaft #2 we found that someone took the trouble to remove all station and shaft sets and replace with drift sets and lagging, up to the bulkhead at the end of the 500 ft. drift. The lagging was so tight that we could not find Incline Shaft #2. When the 500-ft. drift was measured from Shaft #1 to Shaft #2 and lagging removed it was the same as shown on the map. There was also a large 4-inch thick plank door in the drift. We feel that all work to close off drift and Shaft #2 was to hold the water back and relieve water pressure. We were also told that there is a bulkhead at the bottom of the 700-ft Shaft #2. We did not pump this shaft out because our operations were stopped with the advent of gas rationing in WW II.

While all this preparation to repair Shaft #1 was undertaken, we also built a complete 50-ton per day grinding mill, and installed one 300 HP Diesel Electric Power Plant. All this equipment is under steel buildings. The grinding mill is fully equipped and electrically driven. The mining operation was closed down in 1942 because of WW II. We feel this mine could have been in operation in another six months, as we were actually grinding rock from the 200 ft. level at this time. The operation has been maintained until now, and the grinding mill can be put into operation in a very short time. This mine is 12 miles from a small town, Tuolumne City.

In 1949 we returned to finish Shaft #3 which was started in 1942, which is located in a ravine 200 feet below Shaft #1. When resuming work and to finish cleaning out shaft we found we had to replace collar and timbers down to the bulkhead that were placed there in 1942 that was water level. We also had to build one new steel hoist house because the old house was over collar of shaft. As sinking progressed we found Shaft #3 was filled completely solid with muck, rock and collar timbers to the 700 ft. level, and also the 165 ft. drift was filled with silt. When sinking shaft was completed in 1959 it was then surveyed and checked with the map, figures, and old survey points that were located in shaft and drift. In 1960 we returned to diamond drill from 800 ft. drift of the ~~new shaft~~ (#3) TO EXPLORE THE SIZE AND TREND OF THE VEIN . . . The diamond drilling operation was discontinued after several weeks because of broken formation of ledge, ore, and soft streaks of gouge. WHAT SHOWED A LARGE VEIN OF COMMERICAL VALUE GOLD BEARING ORE

SUMMARY OF OPERATIONS OF BUCHANAN MINE

(Researched by former operator of mine from 1935 to 1939, and written up in the following manner.)

Remaining Ore

The ore now remaining in the Buchanan Mine may be grouped for summarizing and descriptive purposes, as follows:

1. A virgin body of ore between the 600 and 800 levels of a vertical depth of 171 feet and an incline depth of approximately 300 feet. Considered a very good grade of milling ore at the old price of gold.

2. Number two ore chute, distant 30 feet in the hanging wall. Dimensions unknown. Good grade of ore.

3. Number three or hanging wall ore chute, within the fissure, east of main chute. Known to be extensive but eastern limits undetermined. Mill-run tests, taken from the 200, 500 and 600 levels showed $19.00 mill recovery at the old price of gold. Important.

4. That which was formerly waste but is now commercial ore, due to increased price of gold. A substantial amount.

5. A large support pillar between the 200 and 300 levels. Above average value at the old price of gold.

6. All ore below the 800 or lowest level of present development, of which engineer Low states, - "The indications are favorable for a continuation of ore to a much greater depth, and I see no reason why the grade should change for the worse." Can be easily made available by continuing No. 3 incline shaft to greater depth at the same angle.

It is the writer's opinion that if Barron and Davis had continued to operate the mine, they would have more than doubled its bullion production. In other words, I believe that there are gold values still available in the Buchanan Mine which far exceed the $2,500,000 estimated to have been taken from it by Barron and Davis. I base this belief on the intimate knowledge of the property which I have gained through a careful search for facts since 1931 and in operating under the bond and lease which I now hold. (1) I am convinced that it is only because of the peculiar circumstances connected with the Mine's history (referred to above) that the mine was permanently shut down in 1893 by Barron and Davis; that if it had not been for the Barron-Davis family feud which continued thereafter until 1932, after I first became interested in the property, the rich ore deposits, still in place, would have long since been extracted, and would not be available for current operations.

Condition of the Property in 1935:

The property was taken over for operation and development by the writer on June 15, 1935, - 42 years after the shutdown in 1893.

---

(1) If all the data had come from one or two sources, it could conceivably be subject to question; but when, as in this case, it has come from so many entirely disconnected and disinterested sources and where each source substantiates the other, the writer can come to but one conclusion—that the data on the whole is substantially correct. Then, when further verified by 2-1/2 years of work in the mine to a certain depth and found accurate, I cannot escape the conclusion the data on the remaining depths is reasonably accurate.

Between 1881 and July 1886, they operated a ten-stamp Mill (1) erected in 1881, crushing probably between 20,000 and 25,000 tons during the period.

In July 1886 Barron and Davis completed installation of a 20-850 lb. stamp mill with a capacity ranging from 30 to 60 tons per day. (2) At various times they used screens differing in mesh, - raning from 30 to 50 mesh, with 34 and 40 mesh predominating. The writer has talked many times with the two men who operated this mill most of the 1886 to 1892 period and believes that 40 tons per day makes ample allowance for lost time, - or approximately 86,400 tons for the 6-year period. Commencing with the first work done in 1881, it may be fairly said that at least 100,000 tons of ore approximates the amount of ore mined during the entire 10-1/2 years from 1881 to 1892.

In 1892 Barron and Davis shut down mining operations to embark on a new development program, which contemplated the sinking of a new shaft. By this time they had only partially developed a large body of ore, though sufficiently to establish its general trend and give them some idea of its magnitude.

They opened up a large tonnage of ore, - several times larger than they could possibly have mined and milled during the same period. (3) It extended a horizontal distance of approximately 900 feet and a vertical depth of 776 feet. (4)

After establishing the trend of the chute, they were confronted with the necessity of sinking a new shaft to conform with that trend. Moreover, they had worked themselves into a bad mining situation for the extensive development required below the 500 foot level. An inspection of the mine, coupled with a study of the map of the underground workings, makes this patent to anyone with any knowledge of the fundamentals of mining. Not only were they faced with the prospect of rehandling of ore below the 500 foot level, but they also had a single opening to the surface through a long tunnel or drift, completely lacking in any equipment for ventilation. Consequently, the powder smoke caused them considerable difficulty, - it being a known fact that they nearly lost 3 men on one occasion due to this cause. The writer has been told by a Mr. Stanley, who was superintendent during this period, of several narrow escapes from death in this area, due to powder gas. Indeed, on one occasion the attempted rescue came too late.

(1) "Report of the Director of the Mint upon the Production of Precious Metals in the U. S. for the calendar year 1883" page 228.

(2) Mining and Scientific Press Mar. 31, 1888, page 198. State Mineralogist Reports: VI, Part II, page 60; VIII, page 666; X, page 752; and Xi, page 494.

(3) "Mining and Scientific Press", March. 31, 1888, page 198. State Mineralogists Reports, VIII, Page 666; X, page 752; and XI, page 494. Report of Engineer J. B. Low dated July 1, 1889. Letter from H. W. Stanley, Superintendent at the time. Letter from J. W. Ball, dated June 20, 1832, a former Buchanan miner, and many others.

(4) From Surveyed underground map. Low's Report dated July 1, 1889.

This was done but when the work was completed, the shaft cellar was closed in 1899 without drifing from the 800-foot level to the winze. Apparently, Davis was only interested at this time in the completion of the shaft to the 800-foot level and did not care for immediate production. This is indicated by the fact that he made no attempt to unwater the rest of the mine workings, (water having flowed in, during the 6 years the mine was idle) but he postponed all such operations for the following year.

In 1899 Davis became too sick and feeble to take any further active interest in the mine; and continued to be a very sick man for several years until he finally died in 1906.

Thereafter, the Davis heirs and the Barren heirs continued to stand in each others' light - both factions refusing to do anything toward the opening of the mine or cooperating in any attempt at selling it. In the meantime, unpaid taxes was accumulating so that, by 1932, the tax delinquencies amounted to over $25,000.00. In that year the mine was put up for supervisors' tax sale at the instigation of the writer.(5)

At this point, - almost too late, - the Barren and Davis heirs were brought together by a mutual friend, and the properties were bid in at the sale for the heirs' account. Thereafter the writer, who owned adjoining claims, put his claims into the "pot" and was granted a bond and lease on the patented and unpatented claims. This instrument is very liberal in its terms and is now in good standing and in full effect. Under it, the writer started work on the mine in June, 1935.

---

(3) Details from the heirs themselves and their representatives.

(4) The writer has a letter in his possession, addressed to another person, by a Mr. Kelly, foreman under Moorehead, regarding this shaft. He states the formation through which this shaft runs, is solid unfractured slate after the first 45 to 50 feet of depth and that the mine can be put on a paying basis through this shaft at a comparatively small cost.

(5) Before the writer tried to get a lease on the mine he was told by several others who had tried it, of the antagonistic non-cooperative condition existing between the heirs and that he was wasting his time and money. Yet he felt it could be done if the right way were found. He discussed tax sale with several familiar with the facts and was told the heirs would outbid any outsider. Assuming that this was true, the writer arranged the tax sale in 1932, his purpose being to precipitate some activity by the Barren and Davis heirs.

Surface Indications of the Extent of the Barron-Davis Operations:

The magnitude of these early operations is indicated by the fact that, during the Barron-Davis period, a complete village developed at the mine which was wholly dependent on it for support. The mine employees varied, during this period, from 40 to 175 men at different times and season; and the village included a number of family dwellings, a large boarding house, bunk houses, a general store, an office building, and a public school. A stage ran from Sonora to the mine twice a week in winter and three times per week in summer, carrying mail and passengers. (1) In this connection it is interesting to note that Barron and Davis surveyed and built 16 miles of new road to Tuolumne, where previously only a pack trail existed. (2) After completion of this road, additional steam boilers and a new 20-stamp mill were installed, which started milling on July 1, 1886. All of the original buildings are gone now, except the store and office buildings.

Production Prior to 1935:

Authentic records of the total production of ore are not available. However, in gathering information on the mine over a period of several years, the writer has acquired a considerable amount of cumulative data. Some of this data he can substantiate with printed statement and records from authentic sources; the rest of it, while less dependable, nevertheless has the ring of truth, - particularly as it is borne out be examination of the mine itself. For the period prior to 1881, the only report available is contained in "Mineral Resources West of the Rock Mountain" (1875), showing an average mill recovery at that time of $20.00 per ton, based on $20.67 gold. This would indicate to the writer an average ore value in excess of ounce ore, for the reason that, with amalgamation, flotation, and table concentration of ore from the same general area, much fine heavily oxadized free gold escaped. (3). Judging from the size of the stopes left by the earlier operators, during the period prior to 1881, approximately 10,000 tons of ore were mined. These stopes were easily identified, since Barron and Davis did not mine into the area worked by the earlier operators. When the writer first examined the mine in 1935, the old operations could be followed quite accurately, and it was apparent that the earlier operators had taken the heart out of that part of the chute. The first wall assays taken in 1935 ranged from $19.00 to $151.00, based on Thirty-five Dollar gold. At $20.00 per ton, this would indicate a net recover somewhere in the vicinity of $200,000 for that period.

---

(1) "Mining and Scientific Press" - Mar. 31, 1888

(2) State Mineralogists Reports - VIII, page 666, par. 2 and X, page 752, par. 2

(3) This area is close to the surface in the oxidized zone. Most of the values were in well distributed heavily oxidized flour gold. While considerable caught on the plates, much passed. Flotation caught enough to bring the concentrates up to $700. per ton at times, in spite of the fact that the tailings ran as high as $6.00 per ton. This was later overcome to a large extent by gravel filled cone steel traps designed and built by the writer. Traps or flotation were not used at the Buchanan prior ot 1935.

Records of the Barron-Davis period were lostin the San Francisco fire of 1906, - with the exception of an underground map and a copy of Low's report then located outside the city. A photostatic copy of this map is attached.

The Davis heirs say that they have always understood that the recovery during this period was approximately $2,500,000, and it is possible that this figure may be close to correct. Barron and Davis sunk their shaft to the 500-foot level, doing their first mining on the 300-foot level, because the average recovery in that level was by far the highest in the mine. The workings at that level were 341 feet long, including the 2 cross branches, and the area was mined to a width of 45 feet in places. (1)

In attempting to estimate its cubic content, after making allowances for the shaft wall and ceiling and a 30-foot pillar left by Barron and Davis, the result shows on the incline, approximately 200 feet net length, with an average width of 25 feet by 90 feet high. This would indicate about 35,000 to 40000 tons. From information gathered from many sources, the writer believes the average recovery from this 300-foot level was about $30.00 per ton, including several large "bunches" of highgrade. These figures would indicate a recovery of around $1,000,000 from the 300-foot level alone. However, the values in that level were substantially higher than in any other part of the Barron-Davis workings, although Mr. Low's report (2) states:

> "I should not estimate the ore now in sight at more than $17.00 per ton, except the virgin body lately struck in the lower levels. I am informed and believe, that rich pockets are frequently encountered within the ore chutes that tend to raise the grade higher than that ore now to be seen would indicate."

---

(1) Mining Engineer's Report by J. B. Low, dated July 1, 1889. Letter from former Superintendent H. W. Stanley, dated June 25, 1932. Letters from J. W. Ball dated June 20, 1932, and W. H. Wilson, dated June 14, 1932. Surveyed underground map and many other sources.

(2) I have signed statements by a number of former Buchanan miners, a foreman and Superintendent including a statement of W. H. Wilson. Some check very accurately with the facts so determined. Wilson's statement contains the following: "I think the 300 was pretty high grade ore and was cleaned out pretty good except a large support pillar of high grade ore which was left. There wasn't much low grade ore there." (300' level) Mr. Wilson started work at the Buchanan in 1889 and remained until work stopped in 1893.

Mr. Low's reference to the "lower Levels" refers to the 600 and 700-foot levels. Furthermore, former Superintendent Stanely (who came to the Buchanan after the 300-foot level was practically worked out) states:

> "We shipped gold regularly every month. Sometimes we shipped it twice a month, sometimes twice a week. I do not know what the average would be. Sometimes I would get into an awfully rich piece and ship very often. I remember several shipments of over $20,000 each within a short period. Sometimes I would pound out a whole shipment in a very few days. There was over a million taken out of that mine during the time I was there."

In view of the fact that Mr. Stanley's report refers to the lower levels, - below 300 feet, - his statement is particularly significant. For when the "million" which he refers to is added to the million dollars which was probably taken from the 300-foot level, we begin to approximate the values believed by the Davis heirs to have been taken from the mine. The areas principally worked by Stanley were the 400, 500, and 600-foot levels and a triangle west of the winze above the 700-foot level.

The 400-foot level was the poorest level extensively worked; the 500-foot level was very good; and the portion of the 600-foot level which was mined was even better. The only mining done between the 700 and 600-foot levels was a triangle under the winze, which was all very good, - some of it high-grade. No mining has been done below the 700-foot level, although this was all good ore so far as tested, - recoveries ranging from $5.00 per ton (20.67) gold) to powder box gold". (1)

The best information available, as to the total number of tons of ore mined by Barron and Davis is obtained from a checkup of the size of the mills used, and the length of time they operated. As indicated above, during the period 1882 until 1886, mill operations averaged approximately 10 to 20 tons per day, while during the period 1886 to 1892 mill operations averaged approximately 40 tons per day, - making ample allowance for lost time, shutdowns, etc.

---

(1) The above is an approximation of the average values of the various levels in comparison with each other, acquired from a mass of data, some of it hearsay. However, approximate average values mined from certain levels are fairly well known, and I believe that the above gives a fairly accurate general picture of relative values at the various levels.

It must be remembered that Barron and Davis had opened up a large tonnage of ore and had only mined the best. It must also be remembered that they were mining in a location where "bunches" or local enrichments were encountered with pleasing regularity, - "frequently", according to Low' report. These varied in size from small bunches to bunches consisting of many tons. (1) Based on the writer's own experience in operating the Buchanan Mine, he can say that some of the ore which he has milled would "sweeten up" a large amount of ore of much less value. Some of these highgrade ore bodies appeared to be the filling of a space caused by a slip, while some showed no apparent boundaries or reason. (2) Their values consisted principally of a very fine free gold, mingled with gold which was somewhat coarser. The first Barron-Davis underground development consisted of sinking No. 1 incline shaft on the vein near the south of the adit tunnel. As each 100 feet in depth was reached, a station was cut, and drifts started both east and west on the vein. The shaft was continued in this manner until, in 1886, the 500 foot level was completed with a 12-foot sump below that level. (3)

While doing this work Barron and Davis found that the easterly dip of the North-South Veins was 35° - 40° and that the "rake" of the Buchanan chute followed in the same direction. The new No. 1 incline shaft was started before this fact was known, and at two steep an angle. Therefore, as depth was reached, longer drifts were required in extracting the ore. For that reason, instead of continuing the shaft to greater depth, a winze was sunk from the 500-foot level east drift, 300 feet from the shaft. The writer has already alluded to the expensive rehandling costs experienced by Barron and Davis, and the foregoing is one of the main reasons for this fact.

By 1888, the winze was down 200 feet. In 1890, it was extended 50 feet, and in 1892 a further distance of 50 feet, - to a total depth of 300 feet, or to the 800-foot level. (4)

---

(1) The effect of these larger bunches is shown quite clearly in the quotation on Page 7 from Superintendent Stanley's letter.

(2) Those encountered by the writer seemed to be located in the general vicinity of a small seam coming in through the hanging wall, from a south-easterly direction.

(3) Report of the Director of the Mint upon the Production of Precious Metals in the U. S. for the calendar year 1883, Page 228. VIth Report, State Mineralogist, Part II, 1886, page 60.

(4) State Mineralogist Reports, VIIIth - 1888, page 666, par. 1; Xth-1890, Page 752, par. 1; XI - 1892, Page 494.

The Second and Third Ore Chutes

In the course of their operations, Barron and Davis found that, in addition to the large fissure known as the Buchanan Vein, there are several other veins of varying sizes which come into the hanging wall from an easterly and south-easterly direction. The values near these points of contact tend to rise, sometimes quite sharply and to a considerable extent.

In 1890, a second ore chute was uncovered in the hanging wall, parallel to the main chute and 30 feet distant. (1) This chute has not been sufficiently developed to determine its size. The writer believes it to be extensive and, where tapped, its values were somewhat higher than adjacent values in the main chute. It is the belief of the writer, gained from statements made to him by a number of men who worked there, that this second chute was not worked because of the possibility of disturbing the hanging wall, since it was in a crushed condition. The only ore taken from it was that which ran out at two different connecting breaks, one between the 300 and 400-foot levels and the other on the 600-foot level. This is based on the assumption that the breaks mentioned, were from the same chute.

A few months before Barron and Davis shut down mining in 1892, a third chute was uncovered by accident on the 500-foot level. (2) Of this chute, the State Mineralogist's Report (1892) states:

> "Accidently through a cave-in, the quartz body next to the hanging wall that had received but little attention was uncovered, and a crushing of several hundred tons proved it to be of far greater value than the foot wall ore body, - both as to free gold also in the yield of the sulphurets, carrying $15.00 in free gold and $200.00 in sulphurets. Work is being directed toward its development. The sinking of the lower shaft (winze) at present is developing some very fine ore. The vein matter is ribbon quartz with a gouge almost like plumbago; layers of black slate are found between the quartz ribbons."

---

(1) Xth, Report, State Mineralogist - 1890, page 752, 2nd par. Letter of W. H. Wilson dated June 14, 1932. In a letter dated June 20, 1932, from J. W. Ball, (a miner whose statements check very accurately with my own findings, as far as they have gone), Ball states: "whenever you come to the west end of that chute of ore it always more or less caved where they did not catch it up. They had several caves outside the main chute which produced good gold, in fact, some of the richest ore taken out of the mine. That would indicate that the gold in the vicinity was not confined to the main chute, - there must be other chutes there some place."

(2) "Mining and Scientific Press", June 12, 1892, page 424. An article referring to this chute. The above date is about 3 months before they stopped mining to sink the new shaft in the fall of 1892. All the former employees whom the writer has met talked at length about both of these extra chutes. The writer also has an outline hand-sketch found among the effects of William Moorehead by his soon.

This hanging wall chute lies within the fissure but further east than the main chute. It may be necessary to extend six drifts further east to determine its limits. It was tested at four points where the foot wall on the east edge of the main chute appears to overlap the west edge of the new chute. These tests indicated that this chute may become of great importance to the mine, when it is further developed. Apparently, it lies in a very favorable position, - between two contact veins coming in from the hanging wall.

Effect of $35.00 Gold Price

In all deposits of gold ore of the type found in the Buchanan mine, the number of tons of ore of a value in excess of $12.70 per ton, is far less than the total number of tons of a lower value.

In practice, only that ore of a value sufficient to return operating costs plus a fair profit, is classified as ore. All rock of a lower value is classified as waste.

Barron and Davis' operating costs, per ton or ore milled, according to figues taken from the State Mineralogists' Reports, were approximately $6.00 per ton. According to a nine months average figure taken from old check books, their operating costs were $6.05 per ton. Their mill efficiency, I believe, was under rather than over 80 per cent. Therefore, it required $7.50 ore, assay value, to recover the $6.00 operating cost. It is a very safe assumption that all waste or ore of a value less than operating costs was not mined, and therefore still remains in the mine.

The increase in the price of gold from $20.67 per ounce to $35.00 has the effect of increasing the value of what was formerly $3.00 waste to $5.00 ore, and what was formerly $7.50 ore to $12.69 ore. Therefore, all former waste of $3.00 gold value is now commercial ore of $5.00 value per ton. Also, all former Buchanan marginal ore of $7.50 value is now $12.70 ore, or an ore of sufficient value to return an operating profit of over 150 per cent. The worth of all ore of a higher value is increased in proportion.

In the Buchanan Mine, I would estimate the amount of former waste ranging in value from $3.00 to $7.50, which is now worth $5.00 to $12.70, to be materially greater, in tonnage, than the number of tons of a higher value.

Therefore, as approximately 100,000 tons have been mined from the Buchanan, I would estimate the amount of what was formerly waste, that has now been converted into commercial ore by the increase in price of gold, to be materially in excess of 100,000 tons.

CROCKER-CITIZENS NATIONAL BANK
CHARTERED 1870
OAKLAND MAIN OFFICE
1450 BROADWAY · OAKLAND, CALIFORNIA 94612

ROY A. LEBARON
VICE PRESIDENT AND MANAGER

August 12, 1968

M & M Buchanan Gold Mining and Milling Company
796 Douglas Avenue
Oakland, California 94603

Gentlemen:

We are in receipt of your application dated August 12, 1968, for exploration loan in the amount of $55,000, to be amortized over a five year period.

We regret to inform you the Loan Committee of this bank has this date found it necessary to decline your application in view of the speculative nature of the venture, together with the fact that the equipment suggested as collateral does not currently meet standards of this office for such ventures.

We deeply appreciate, however, your favoring us with this application.

Yours very truly,

Roy A. LeBaron
Vice President
and Manager

RAL:ls

Crocker-Citizens National Bank
Oakland Main Office
1450 Broadway, Oakland 12, Calif.

August 12, 1968

M & M Buchanan Gold Mining and Milling Company
796 Douglas Avenue
Oakland, California 94603

Gentlemen:

We are in receipt of your application dated August 12, 1968, for exploration loan in the amount of $55,000, to be amortized over a five year period.

We regret to inform you the Loan Committee of this bank has this date found it necessary to decline your application in view of the speculative nature of the venture, together with the fact that the equipment suggested as collateral does not currently meet standards of this office for such ventures.

We deeply appreciate, however, your favoring us with this application.

Yours very truly,

Roy A. LeBaron
Vice President
and Manager

RAL:ls

COPY

Oakland, Calif. 8-12-68

Crocker-Citizens Bank
Broadway, Main Branch
Oakland, Calif.

Attn: Mr. La Baron

Gentlemen:

We propose to borrow $55,000.00 from your bank for exploration purposes, to dewater and repair new shaft No. 3. Then continue sinking from 700 foot level to 800 foot level. Also, continue drifting 200 feet more on 700 foot level.

In return for the loan, we will submit our mining equipment that is listed and attached with summary of the mine history.

We will repay this loan over a 5-year period at a reasonable rate of interest, with repayment based on percentage of the mine's return after it is operating and in production.

Please advise us of the availability of funds as soon as possible.

Very truly yours,

Fred Mason

Fred Mason

Oakland, Calif. 8-12-68

Crocker-Citizens Bank
Broadway, Main Branch
Oakland, Calif.

Attn: Mr. La Baron

Gentlemen:

We propose to borrow $55,000.00 from your bank for exploration purposes, to dewater and repair new shaft No. 3. Then continue sinking from 700 foot level to 800 foot level. Also, continue drifting 200 feet more on 700 foot level.

In return for the loan, we will submit our mining equipment that is listed and attached with summary of the mine history.

We will repay this loan over a 5-year period at a reasonable rate of interest, with repayment based on percentage of the mine's return after it is operating and in production.

Please advise us of the availability of funds as soon as possible.

Very truly yours,

Fred Mason

Fred Mason

M & M BUCHANAN GOLD MINING AND MILLING CORP.

TUOLUMNE COUNTY, TUOLUMNE CITY, CALIF.

LISTED BELOW IS THE EQUIPMENT IN GOOD WORKING CONDITION.
ON THE MINE SITE

1 250 KVA FAIRBANKS MORSE, 3 CYL. DIESEL ELECTRIC POWER PLANT MOUNTED IN CONCRETE

1 100 KVA GENERAL MOTORS DIESEL ELECTRIC POWER PLANT MOUNTED IN CONCRETE

1 12 KVA DIESEL ELECTRIC HOUSE LIGHTING PLANT

1 165 CUBIC FT. ELECTRIC AIR COMPRESSOR

1 165 CUBIC FT. GASOLINE AIR COMPRESSOR

1 TRACTOR SHOVEL LOADER

1 TRACTOR SHOVEL LOADER, D 6, WITH LOGGING WINCH AND FORKS

1 FORD DUMP TRUCK

1 MINE SHOVEL LOADER

6 AIR SUMP PUMPS WITH HOSES

1 HIGH PRESSURE DEWATERING PUMP, 50 HP

2 HIGH PRESSURE D EWARTING PUMPS, 15 HP

1 HYDRALIC DRIFTING JUMBO

5 DRIFTERS, NEW WITH ALL ATTACHMENTS

2 STOPERS, WITH 1 IN. CHUCKS

3 CHAIN SAWS, AIR AND ELETRIC

2 WELDING MACHINES

2000 JACK BITS (NEW)

1 MAN AND ORE HOIST, ELECTRICALLY CONTROLLED, WITH NEW CABLES AND GASOLINE ENGINE STANDBY

1 COMBINATION ELETRIC AND GASOLINE PUMP HOIST

1 DIAMOND DRILL WITH ALL ACCESSORIES

1 COMPLETE 50 TON PER DAY ORE GRINDING MILL
ALL UNDER STEEL BUILDINGS

EQUIPMENT AT 796 DOUGLAS AVENUE, OAKLAND, CALIFORNIA

2 150 KVA, LORIMER 4 CYL. DIESEL ELETRIC POWER PLANTS

1 100 KVA, GENERAL MOTORS DIESEL ELETRIC POWER PLANT, PORTABLE

1 185 CUBIC FT. ELETRIC AIR COMPRESSOR

1 SAW MILL

ON HAND ARE ALL THE SMALL TOOLS THAT WILL BE NEEDED TO SINK SHAFT AND DRIVE DRIFT.

LARGE QUANTITY OF STANDING TIMBER ON THE PROPERTY.

SUMMARY OF BUCHANAN MINE OPERATION FROM 1939

TO PRESENT TIME (1968).

The Buchanan Mine was taken over in 1939 with the plan to be in full operation in two years. Incline Shaft #1 was retimbered to the 200 ft. level, and then pumped to the 500 ft. level. Most of the timbers in the shaft and stations from the 200 to the 500 ft. level were reshored or replaced. To do this work we had to build one building to house a 200 HP Diesel Electric Power Plant and panel board, one air compressor, and one three-drum hoist. We fabricated and erected one 40-ft. steel hoisting tower with ore hopper. The shaft was fitted with 500 ft. of rail, 400 ft. of blower pipe, 500 feet. power cable and electric lights and telephones; two pumps, one 60 HP stationed at the 500 ft. level, and one 30 HP at 350 feet. Water was pumped through 400 ft. of 3-1/2" pipe and discharged at the 100-ft. level. #1 Incline Shaft is still open to the200 ft. water level, but before closing down we built a bulkhead at the 200-ft. station. Timbers below the 200 ft. level should be in very good condition.

When we mucked out the 500-ft. drift which was full of silt to sink Shaft #2 we found that someone took the trouble to remove all station and shaft sets and replace with drift sets and lagging, up to the bulkhead at the end of the 500 ft. drift. The lagging was so tight that we could not find Incline Shaft #2. When the 500-ft. drift was measured from Shaft #1 to Shaft #2 and lagging removed it was the same as shown on the map. There was also a large 4-inch thick plank door in the drift. We feel that all were to close off drift and Shaft #2 was to hold the water back and remove water pressure. We were also told that there is a bulkhead at the bottom of the 700-ft Shaft #2. We did not pump this shaft out because our operations were stopped with the advent of gas rationing in WW II.

While all this preparation to repair Shaft #1 was undertaken, we also built a complete 50-ton per day grinding mill, and installed one 300 HP Diesel Electric Power Plant. All this equipment is under steel buildings. The grinding mill is fully equipped and electrically driven. The mining operation was closed down in 1942 because of WW II. We feel this mine could have been in operation in another six months, as we were actually grinding rock from the 200 ft. level at this time. The operation has been maintained until now, and the grinding mill can be put into operation in a very short time. This mine is 12 miles from a small town, Tuolumne City.

In 1949 we returned to finish Shaft #3 which was started in 1942, which is located in a ravine 200 feet below Shaft #1. When resuming work and to finish cleaning out shaft we found we had to replace collar and timbers down to the bulkhead that were placed there in 1942 that was water level. We also had to build one new steel hoist house because the old house was over collar of shaft. As sinking progressed we found Shaft #3 was filled completely solid with muck, rock and collar timbers to the 700 ft. level, and also the 165 ft. drift was filled with silt. When sinking shaft was completed in 1959 it was then surveyed and checked with the map, figures, and old survey points that were located in shaft and drift. In 1960 we returned to diamond drill from 700 ft. drift of the ~~new shaft~~ (#3) TO EXPLORE THE SIZE AND TREND OF THE VAIN. The diamond drilling operation was discontinued after several weeks because of broken formation of shale, ore, and soft streaks of gouge. WHAT SHOWED A LARGE VAIN OF COMMERCIAL VALUE GOLD BEARING ORE

SUMMARY OF OPERATIONS OF BUCHANAN MINE

(Researched by former operator of mine from 1935 to 1939, and written up in the following manner.)

Remaining Ore

The ore now remaining in the Buchanan Mine may be grouped for summarizing and descriptive purposes, as follows:

1. A virgin body of ore between the 600 and 800 levels of a vertical depth of 171 feet and an incline depth of approximately 300 feet. Considered a very good grade of milling ore at the old price of gold.

2. Number two ore chute, distant 30 feet in the hanging wall. Dimensions unknown. Good grade of ore.

3. Number three or hanging wall ore chute, within the fissure, east of main chute. Known to be extensive but eastern limits undetermined. Mill-run tests, taken from the 200, 500 and 600 levels showed $19.00 mill recovery at the old price of gold. Important.

4. That which was formerly waste but is now commercial ore, due to increased price of gold. A substantial amount.

5. A large support pillar between the 200 and 300 levels. Above average value at the old price of gold.

6. All ore below the 800 or lowest level of present development, of which engineer Low states, - "The indications are favorable for a continuation of ore to a much greater depth, and I see no reason why the grade should change for the worse." Can be easily made available by continuing No. 3 incline shaft to greater depth at the same angle.

It is the writer's opinion that if Barron and Davis had continued to operate the mine, they would have more than doubled its bullion production. In other words, I believe that there are gold values still available in the Buchanan Mine which far exceed the $2,500,000 estimated to have been taken from it by Barron and Davis. I base this belief on the intimate knowledge of the property which I have gained through a careful search for facts since 1931 and in operating under the bond and lease which I now hold. (1) I am convinced that it is only because of the peculiar circumstances connected with the Mine's history (referred to above) that the mine was permanently shut down in 1893 by Barron and Davis; that if it had not been for the Barron-Davis family fund which continued thereafter until 1932, after I first became interested in the property, the rich ore deposits, still in place, would have long since been extracted, and would not be available for current operations.

Condition of the Property in 1935:

The property was taken over for operation and development by the writer on June 15, 1935, - 42 years after the shutdown in 1893.

---

(1) If all the data had come from one or two sources, it could conceivably be subject to question; but when, as in this case, it has come from so many entirely disconnected and disinterested sources and where each source substantiates the other, the writer can come to but one conclusion--that the data on the whole is substantially correct. Then, when further verified by 2-1/2 years of work in the mine to a certain depth and found accurate, I cannot escape the conclusion the data on the remaining depths is reasonably accurate.

Between 1881 and July 1886, they operated a ten-stamp Mill (1) erected in 1881, crushing probably between 20,000 and 25,000 tons during the period.

In July 1886 Barron and Davis completed installation of a 20-850 lb. stamp mill with a capacity ranging from 30 to 60 tons per day. (2) At various times they used screens differing in mesh, - raning from 30 to 50 mesh, with 34 and 40 mesh predominating. The writer has talked many times with the two men who operated this mill most of the 1886 to 1892 period and believes that 40 tons per day makes ample allowance for lost time, - or approximately 86,400 tons for the 6-year period. Commencing with the first work done in 1881, it may be fairly said that at least 100,000 tons of ore approximates the amount of ore mined during the entire 10-1/2 years from 1881 to 1892.

In 1892 Barron and Davis shut down mining operations to embark on a new development program, which contemplated the sinking of a new shaft. By this time they had only partially developed a large body of ore, though sufficiently to establish its general trend and give them some idea of its magnitude.

They opened up a large tonnage of ore, - several times larger than they could possibly have mined and milled during the same period. (3) It extended a horizontal distance of approximately 900 feet and a vertical depth of 776 feet. (4)

After establishing the trend of the chute, they were confronted with the necessity of sinking a new shaft to conform with that trend. Moreover, they had worked themselves into a bad mining situation for the extensive development required below the 500 foot level. An inspection of the mine, coupled with a study of the map of the underground workings, makes this patent to anyone with any knowledge of the fundamentals of mining. Not only were they faced with the prospect of rehandling of ore below the 500 foot level, but they also had a single opening to the surface through a long tunnel or drift, completely lacking in any equipment for ventilation. Consequently, the powder smoke caused them considerable difficulty, - it being a known fact that they nearly lost 3 men on one occasion due to this cause. The writer has been told by a Mr. Stanley, who was superintendent during this period, of several narrow escapes from death in this area, due to powder gas. Indeed, on one occasion the attempted rescue came too late.

(1) "Report of the Director of the Mint upon the Production of Precious Metals in the U. S. for the calendar year 1883" page 228.

(2) Mining and Scientific Press Mar. 31, 1888, page 198. State Mineralogist Reports: VI, Part II, page 60; VIII, page 666; X, page 752; and XI, page 494.

(3) "Mining and Scientific Press", March. 31, 1888, page 198. State Mineraologists Reports, VIII, Page 666; X, page 752; and XI, page 494. Report of Engineer J. B. Low dated July 1, 1889. Letter from N. W. Stanley, Superintendent at the time. Letter from J. W. Ball, dated June 20, 1832, a former Buchanan miner, and many others.

(4) From Surveyed underground map. Low's Report dated July 1, 1889.

This was done but when the work was completed, the shaft collar was closed in 1899 without drifing from the 800-foot level to the winze. Apparently, Davis was only interested at this time in the completion of the shaft to the 800-foot level and did not care for immediate production. This is indicated by the fact that he made no attempt to unwater the rest of the mine workings, (water having flowed in, during the 6 years the mine was idle) but he postponed all such operations for the following year.

In 1899 Davis became too sick and feeble to take any further active interest in the mine; and continued to be a very sick man for several years until he finally died in 1906.

Thereafter, the Davis heirs and the Barron heirs continued to stand in each others' light - both factions refusing to do anything toward the opening of the mine or cooperating in any attempt at selling it. In the meantime, unpaid taxes wee accumulating so that, by 1932, the tax delinquencies amounted to over $25,000.00. In that year the mine was put up for supervisors' tax sale at the instigation of the writer.(5)

At this point, - almost too late, - the Barron and Davis heirs were brought together by a mutual friend, and the properties were bid in at the sale for the heirs' account. Thereafter the writer, who owned adjoining claims, put his claims into the "pot" and was granted a bond and lease on the patented and unpatented claims. This instrument is very liberal in its terms and is now in good standing and in full effect. Under it, the writer started work on the mine in June, 1935.

---

(3) Details from the heirs themselves and their representatives.

(4) The writer has a letter in his possession, addressed to another person, by a Mr. Kelly, foreman under Moorehead, regarding this shaft. He states the formation through which this shaft runs, is solid unfractured slate after the first 45 to 50 feet of depth and that the mine can be put on a paying basis through this shaft at a comparatively small cost.

(5) Before the writer tried to get a lease on the mine he was told by several others who had tried it, of the antagonistic non-cooperative condition existing between the heirs and that he was wasting his time and money. Yet he felt it could be done if the right way were found. He discussed tax sale with several familiar with the facts and was told the heirs would outbid any outsider. Assuming that this was true, the writer arranged the tax sale in 1932, his purpose being to precipitate some activity by the Barron and Davis heirs.

Surface Indications of the Extent of the Barron-Davis Operations:

The magnitude of these early operations is indicated by the fact that, during the Barron-Davis period, a complete village developed at the mine which was wholly dependent on it for support. The mine employees varied, during this period, from 40 to 175 men at different times and season; and the village included a number of family dwellings, a large boarding house, bunk houses, a general store, an office building, and a public school. A stage ran from Sonora to the mine twice a week in winter and three times per week in summer, carrying mail and passengers. (1) In this connection it is interesting to note that Barron and Davis surveyed and built 16 miles of new road to Tuolumne, where previously only a pack trail existed. (2) After completion of this road, additional steam boilers and a new 20-stamp mill were installed, which started milling on July 1, 1886. All of the original buildings are gone now, except the store and office buildings.

Production Prior to 1935:
Authentic records of the total production of ore are not available. However, in gathering information on the mine over a period of several years, the writer has acquired a considerable amount of cumulative data. Some of this data he can substantiate with printed statement and records from authentic sources; the rest of it, while less dependable, nevertheless has the ring of truth, - particularly as it is borne out be examination of the mine itself. For the period prior to 1881, the only report available is contained in "Mineral Resources West of the Rock Mountain" (1875), showing an average mill recovery at that time of $20.00 per ton, based on $20.67 gold. This would indicate to the writer an average ore value in excess of ounce ore, for the reason that, with amalgamation, flotation, and table concentration of ore from the same general area, much fine heavily oxadized free gold escaped. (3). Judging from the size of the stopes left by the earlier operators, during the period prior to 1881, approximately 10,000 tons of ore were mined. These stopes were easily identified, since Barron and Davis did not mine into the area worked by the earlier operators. When the writer first examined the mine in 1935, the old operations could be followed quite accurately, and it was apparent that the earlier operators had taken the heart out of that part of the chute. The first wall assays taken in 1935 ranged from $19.00 to $151.00, based on Thirty-five Dollar gold. At $20.00 per ton, this would indicate a net recover somewhere in the vicinity of $200,000 for that period.

---

(1)"Mining and Scientific Press" - Mar. 31, 1888

(2) State Mineralogists Reports - VIII, page 666, par. 2 and X, page 752, par. 2

(3) This area is close to the surface in the oxidized zone. Most of the values were in well distributed heavily oxidized flour gold. While considerable caught on the plates, much passed. Flotation caught enough to bring the concentrates up to $700. per ton at times, in spite of the fact that the tailings ran as high as $6.00 per ton. This was later overcome to a large extent by gravel filled cone steel traps designed and built by the writer. Traps or flotation were not used at the Buchanan prior ot 1935.

Records of the Barron-Davis period were lostin the San Francisco fire of 1906, - with the exception of an underground map and a copy of Low's report then located outside the city. A photostatic copy of this map is attached.

The Davis heirs say that they have always understood that the recovery during this period was approximately $2,500,000, and it is possible that this figure may be close to correct. Barron and Davis sunk their shaft to the 500-foot level, doing their first mining on the 300-foot level, because the average recovery in that level was by far the highest in the mine. The workings at that level were 341 feet long, including the 2 cross branches, and the area was mined to a width of 45 feet in places. (1)

In attempting to estimate its cubic content, after making allowances for the shaft wall and ceiling and a 30-foot pillar left by Barron and Davis, the result shows on the incline, approximately 200 feet net length, with an average width of 25 feet by 90 feet high. This would indicate about 35,000 to 40000 tons. From information gathered from many sources, the writer believes the average recovery from this 300-foot level was about $30.00 per ton, including several large "bunches" of highgrade. These figures would indicate a recovery of around $1,000,000 from the 300-foot level alone. However, the values in that level were substantially higher than in any other part of the Barron-Davis workings, although Mr. Low's report (2) states:

> "I should not estimate the ore now in sight at more than $17.00 per ton, except the virgin body lately struck in the lower levels. I am informed and believe, that rich pockets are frequently encountered within the ore chutes that tend to raise the grade higher than that ore now to be seen would indicate."

---

(1) Mining Engineer's Report by J. B. Low, dated July 1, 1889. Letter from former Superintendent H. W. Stanley, dated June 25, 1932. Letters from J. W. Ball dated June 20, 1932, and W. H. Wilson, dated June 14, 1932. Surveyed underground map and many other sources.

(2) I have signed statements by a number of former Buchanan miners, a foreman and Superintendent including a statement of W. H. Wilson. Some check very accurately with the facts so determined. Wilson's statement contains the following: "I think the 300 was pretty high grade ore and was cleaned out pretty good except a large support pillar of high grade ore which was left. There wasn't much low grade ore there." (300 level) Mr. Wilson started work at the Buchanan in 1889 and remained until work stopped in 1893.

Mr. Low's reference to the "lower Levels" refers to the 600 and 700-foot levels. Furthermore, former Superintendent Stanely (who came to the Buchanan after the 300-foot level was practically worked out) states:

> "We shipped gold regularly every month. Sometimes we shipped it twice a month, sometimes twice a week. I do not know what the average would be. Sometimes I would get into an awfully rich piece and ship very often. I remember several shipments of over $20,000 each within a short period. Sometimes I would pound out a whole shipment in a very few days. There was over a million taken out of that mine during the time I was there."

In view of the fact that Mr. Stanley's report refers to the lower levels, - below 300 feet, - his statement is particularly significant. For when the "million" which he refers to is added to the million dollars which was probably taken from the 300-foot level, we begin to approximate the values believed by the Davis heirs to have been taken from the mine. The areas principally worked by Stanley were the 400, 500, and 600-foot levels and a triangle west of the winze above the 700-foot level.

The 400-foot level was the poorest level extensively worked; the 500-foot level was very good; and the portion of the 600-foot level which was mined was even better. The only mining done between the 700 and 600-foot levels was a triangle under the winze, which was all very good, - some of it high-grade. No mining has been done below the 700-foot level, although this was all good ore so far as tested, - recoveries ranging from $5.00 per ton (20.67) gold) to powder box gold". (1)

The best information available, as to the total number of tons of ore mined by Barron and Davis is obtained from a checkup of the size of the mills used, and the length of time they operated. As indicated above, during the period 1882 until 1886, mill operations averaged approximately 10 to 20 tons per day, while during the period 1886 to 1892 mill operations averaged approximately 40 tons per day, - making ample allowance for lost time, shutdowns, etc.

---

(1) The above is an approximation of the average values of the various levels in comparison with each other, acquired from a mass of data, some of it hearsay. However, approximate average values mined from certain levels are fairly well known, and I believe that the above gives a fairly accurate general picture of relative values at the various levels.

It must be remembered that Barron and Davis had opened up a large tonnage of ore and had only mined the best. It must also be remembered that they were mining in a location where "bunches" or local enrichments were encountered with pleasing regularity, - "frequently", according to Low' report. These varied in size from small bunches to bunches consisting of many tons. (1) Based on the writer's own experience in operating the Buchanan Mine, he can say that some of the ore which he has milled would "sweeten up" a large amount of ore of much less value. Some of these highgrade ore bodies appeared to be the filling of a space caused by a slip, while some showed no apparent boundaries or reason. (2) Their values consisted principally of a very fine free gold, mingled with gold which was somewhat coarser. The first Barron-Davis underground development consisted of sinking No. 1 incline shaft on the vein near the south of the adit tunnel. As each 100 feet in depth was reached, a station was cut, and drifts started both east and west on the vein. The shaft was continued in this manner until, in 1886, the 500 foot level was completed with a 12-foot sump below that level. (3)

While doing this work Barron and Davis found that the easterly dip of the North-South Veins was 35° - 40° and that the "rake" of the Buchanan chute followed in the same direction. The new No. 1 incline shaft was started before this fact was known, and at two steep an angle. Therefore, as depth was reached, longer drifts were required in extracting the ore. For that reason, instead of continuing the shaft to greater depth, a winze was sunk from the 500-foot level east drift, 300 feet from the shaft. The writer has already alluded to the expensive rehandling costs experienced by Barron and Davis, and the foregoing is one of the main reasons for this fact.

By 1888, the winze was down 200 feet. In 1890, it was extended 50 feet, and in 1892 a further distance of 50 feet, - to a total depth of 300 feet, or to the 800-foot level. (4)

---

(1) The effect of these larger bunches is shown quite clearly in the quotation on Page 7 from Superintendent Stanley's letter.

(2) Those encountered by the writer seemed to be located in the general vicinity of a small seam coming in through the hanging wall, from a southeasterly direction.

(3) Report of the Director of the Mint upon the Production of Precious Metals in the U. S. for the calendar year 1883, Page 228. VIth Report, State Mineralogist, Part II, 1886, page 60.

(4) State Mineralogist Reports, VIIIth - 1888, page 666, par. 1; Xth-1890, Page 752, par. 1; XI - 1892, Page 494.

The Second and Third Ore Chutes

In the course of their operations, Barron and Davis found that, in addition to the large fissure known as the Buchanan Vein, there are several other veins of varying sizes which come into the hanging wall from an easterly and south-easterly direction. The values near these points of contact tend to rise, - sometimes quite sharply and to a considerable extent.

In 1890, a second ore chute was uncovered in the hanging wall, parallel to the main chute and 30 feet distant. (1) This chute has not been sufficiently developed to determine its size. The writer believes it to be extensive and, where tapped, its values were somewhat higher than adjacent values in the main chute. It is the belief of the writer, gained from statements made to him by a number of men who worked there, that this second chute was not worked because of the possibility of disturbing the hanging wall, since it was in a crushed condition. The only ore taken from it was that which ran out at two different connecting breaks, one between the 300 and 400-foot levels and the other on the 600-foot level. This is based on the assumption that the breaks mentioned, were from the same chute.

A few months before Barron and Davis shut down mining in 1892, a third chute was uncovered by accident on the 500-foot level. (2) Of this chute, the State Mineralogist's Report (1892) states:

> "Accidently through a cave-in, the quartz body next to the hanging wall that had received but little attention was uncovered, and a crushing of several hundred tons proved it to be of far greater value than the foot wall ore body, - both as to free gold also in the yield of the sulphurets, carrying $15.00 in free gold and $200.00 in sulphurets. Work is being directed toward its development. The sinking of the lower shaft (winze) at present is developing some very fine ore. The vein matter is ribbon quartz with a gouge almost like plumbago; layers of black slate are found between the quartz ribbons."

---

(1) Xth, Report, State Mineralogist - 1890, page 752, 2nd par. Letter of W. H. Wilson dated June 14, 1932. In a letter dated June 20, 1932, from J. W. Ball, (a miner whose statements check very accurately with my own findings, as far as they have gone), Ball states: "whenever you come to the west end of that chute of ore it always more or less caved where they did not catch it up. They had several caves outside the main chute which produced good gold, in fact, some of the richest ore taken out of the mine. That would indicate that the gold in the vicinity was not confined to the main chute, - there must be other chutes there some place."

(2) "Mining and Scientific Press", June 12, 1892, page 424. An article referring to this chute. The above date is about 3 months before they stopped mining to sink the new shaft in the fall of 1892. All the former employees whom the writer has met talked at length about both of these extra chutes. The writer also has an outline hand-sketch found among the effects of William Moorehead by his son.

This hanging wall chute lies within the fissure but further east than the main chute. It may be necessary to extend six drifts further east to determine its limits. It was tested at four points where the foot wall on the east edge of the main chute appears to overlap the west edge of the new chute. These tests indicated that this chute may become of great importance to the mine, when it is further developed. Apparently, it lies in a very favorable position, - between two contact veins coming in from the hanging wall.

Effect of $35.00 Gold Price

In all deposits of gold ore of the type found in the Buchanan mine, the number of tons of ore of a value in excess of $12.70 per ton, is far less than the total number of tons of a lower value.

In practice, only that ore of a value sufficient to return operating costs plus a fair profit, is classified as ore. All rock of a lower value is classified as waste.

Barron and Davis' operating costs, per ton or ore milled, according to figures taken from the State Mineralogists' Reports, were approximately $6.00 per ton. According to a nine months average figure taken from old check books, their operating costs were $6.05 per ton. Their mill efficiency, I believe, was under rather than over 80 per cent. Therefore, it required $7.50 ore, assay value, to recover the $6.00 operating cost. It is a very safe assumption that all waste or ore of a value less than operating costs was not mined, and therefore still remains in the mine.

The increase in the price of gold from $20.67 per ounce to $35.00 has the effect of increasing the value of what was formerly $3.00 waste to $5.00 ore, and what was formerly $7.50 ore to $12.69 ore. Therefore, all former waste of $3.00 gold value is now commercial ore of $5.00 value per ton. Also, all former Buchanan marginal ore of $7.50 value is now $12.70 ore, or an ore of sufficient value to return an operating profit of over 150 per cent. The worth of all ore of a higher value is increased in proportion.

In the Buchanan Mine, I would estimate the amount of former waste ranging in value from $3.00 to $7.50, which is now worth $5.00 to $12.70, to be materially greater, in tonnage, than the number of tons of a higher value.

Therefore, as approximately 100,000 tons have been mined from the Buchanan, I would estimate the amount of what was formerly waste, that has now been converted into commercial ore by the increase in price of gold, to be materially in excess of 100,000 tons.

UNITED STATES
DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY
Office of Minerals Exploration
345 Middlefield Road
Menlo Park, California 94025

July 12, 1968

Memorandum

To: Chief, Office of Minerals Exploration
Washington, D. C.

From: Field Officer
Region II

Subject: OME-6665 (Gold)
M & M Buchanan Gold Mining & Milling Corp.
Buchanan Mine
Tuolumne County, California

OFFICIAL COPY
O. M. E.
RECEIVED
JUL 15 1968
CODE
120
120
110
120

Supplemental Applic. Report

Supplemental Application Report

Please refer to Application Report dated January 24, 1968.

The applicant, following the suggestions contained in your letter of February 7, 1968 denying the application, rehabilitated the underground workings and surface facilities at the Buchanan Mine. This work included dewatering of the No. 3 shaft and 700 level workings, repairing timbers, track, air, water, and ventilation systems; general cleanup and repairs to shaft collar area, headframe and hoist house. When this work was completed, in late May, the applicant requested (by telephone) that I make a second examination of the mine and reconsider the proposal for Government assistance in an exploration project. A field examination was made on June 5, 1968, accompanied by Mr. Fred J. Mason, president of the corporation.

The purpose of the second field examination was to obtain geologic information and samples of the ore-bearing structure exposed on the 700 (bottom) level of the mine that was inaccessible because of the flooded condition of the workings at the time of the original field examination on November 7, 1967.

The No. 3 inclined shaft is in the well-indurated schist and argillite of the Calaveras Formation and is in the footwall of the fault zone that contains the gold-bearing ore shoots. The shaft intersects the footwall of the fault at the

700 level, or about 10 feet above the bottom of the shaft. A quartz vein, about 4 feet in thickness that strikes about N. 40° E. and dips 35° SE., is exposed at this point and the bottom of the shaft is almost entirely in quartz. A chip sample of this vein (Sample No. 4 on Fig. 4) assayed 0.07 ounce of gold and a trace of silver per ton. From the bottom of the shaft the old 700 level crosscut extends southeast about 120 feet through the Buchanan fault zone. Except for a few thin quartz veinlets the zone is not mineralized. A drift to the southwest, driven by the applicant in 1963, intersects mineralized material at a distance of about 40 feet from the shaft. About 80 feet of mineralized material is exposed in this drift and several samples taken by the applicant while the drift was being driven assayed about one ounce of gold per ton. A sample of broken rock near the face (Sample No. 1 on Fig. 4) assayed 0.03 ounce of gold and a trace of silver per ton.

Two quartz veins, each about 3 feet in thickness, are exposed near the drift face and chip samples of these veins (Samples Nos. 2 and 3) assayed 0.02 and 0.17 ounce of gold and a trace to 0.25 ounce of silver per ton. These quartz veins and the mineralized material between them probably represent the southeast end of the east-raking ore shoot mined in the old workings but little is known of the size and grade of this ore shoot below the 500 level. An old winze (No. 2 Incline) is reported to have partly explored this ore shoot but because of water and ventilation problems did not adequately test the shoot below about the 600 level, or about 120 feet above and 250 feet west of the presently exposed workings. The bottom of the No. 2 Incline is about 20 feet above the new 700 level from the No. 3 Incline.

Additional exploration and sampling of the ore shoot on the 700 level is warranted and is considered to be essential to justification of the previously proposed exploration at the 800 level.

It is recommended that a modified exploration program be approved consisting of 200 feet of drifting, crosscutting, and sampling on the 700 level (Fig. 4). If this exploration is successful then a second stage, or an amendment to the contract, could be justified to permit the original proposal of sinking to and drifting on the 800 level.

The applicant, at its own expense, has rehabilitated the No. 3 Incline and 700 level workings. Work could start immediately on the drifting, crosscutting, and sampling and could be completed in about 3 months' time. Although the ground is not heavy, in the area of the proposed work, almost complete timbering is required to prevent sloughing.

A contract consisting of the following items of work is recommended:

Fixed Unit Costs

Drifting and crosscutting, including timbering, 5' x 7', 200 feet at $60/ft.	$12,000.00
Sampling and assaying, 40 samples for gold and silver, at $5/sample	200.00
Total estimated cost of project	$12,200.00
Government participation at 75 percent	$ 9,150.00

Extra copies of revised Figures 2, 3, and 4 are enclosed for your use if a contract is granted.

H K Stager

H. K. Stager

Enclosures

UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

OME-6665

(Gold)

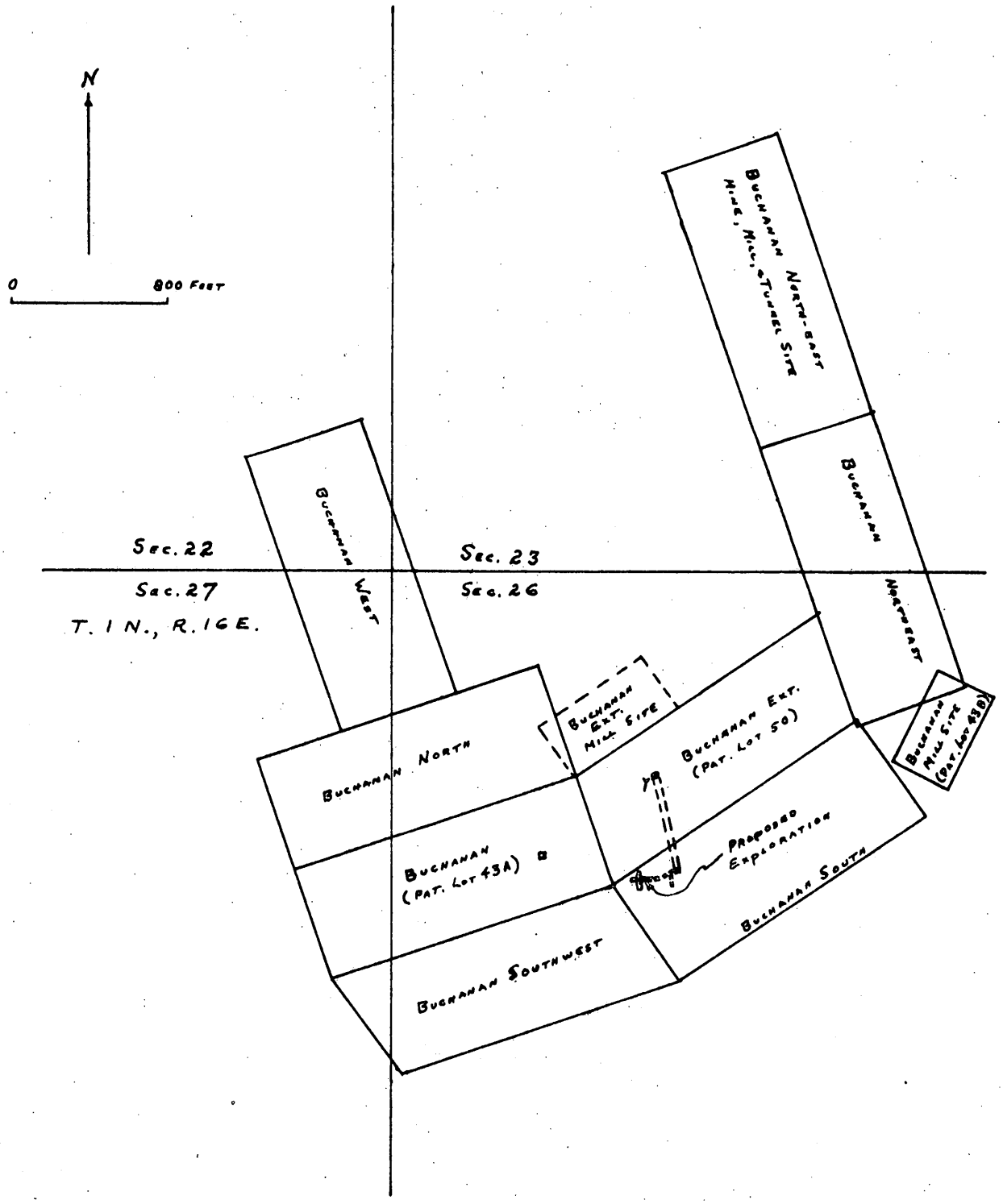


Figure 2.--Property map of Buchanan Mine, Tuolumne County, California.

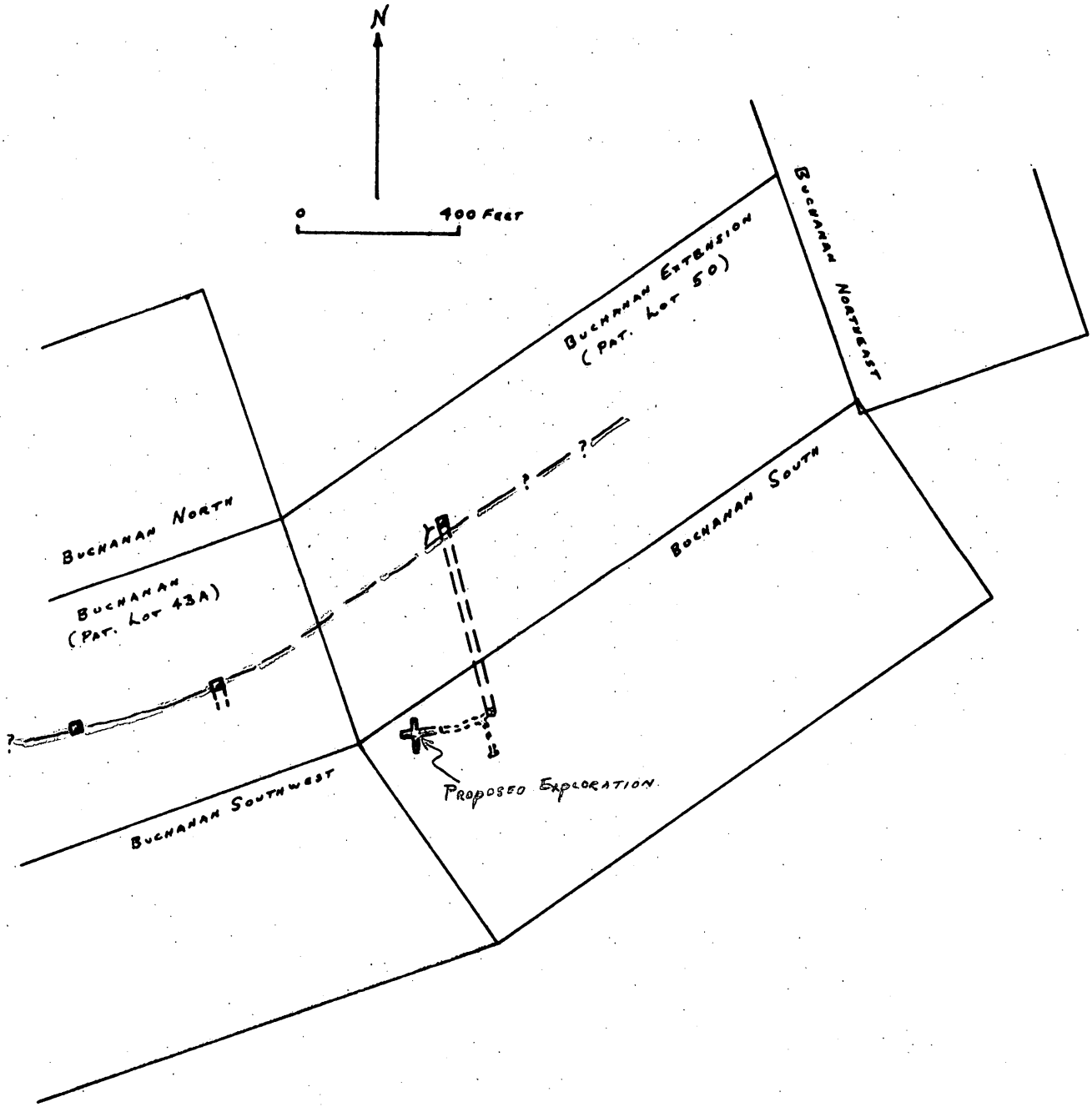


Figure 3.--Map showing location of proposed exploration, Buchanan Mine, Tuolumne County, California

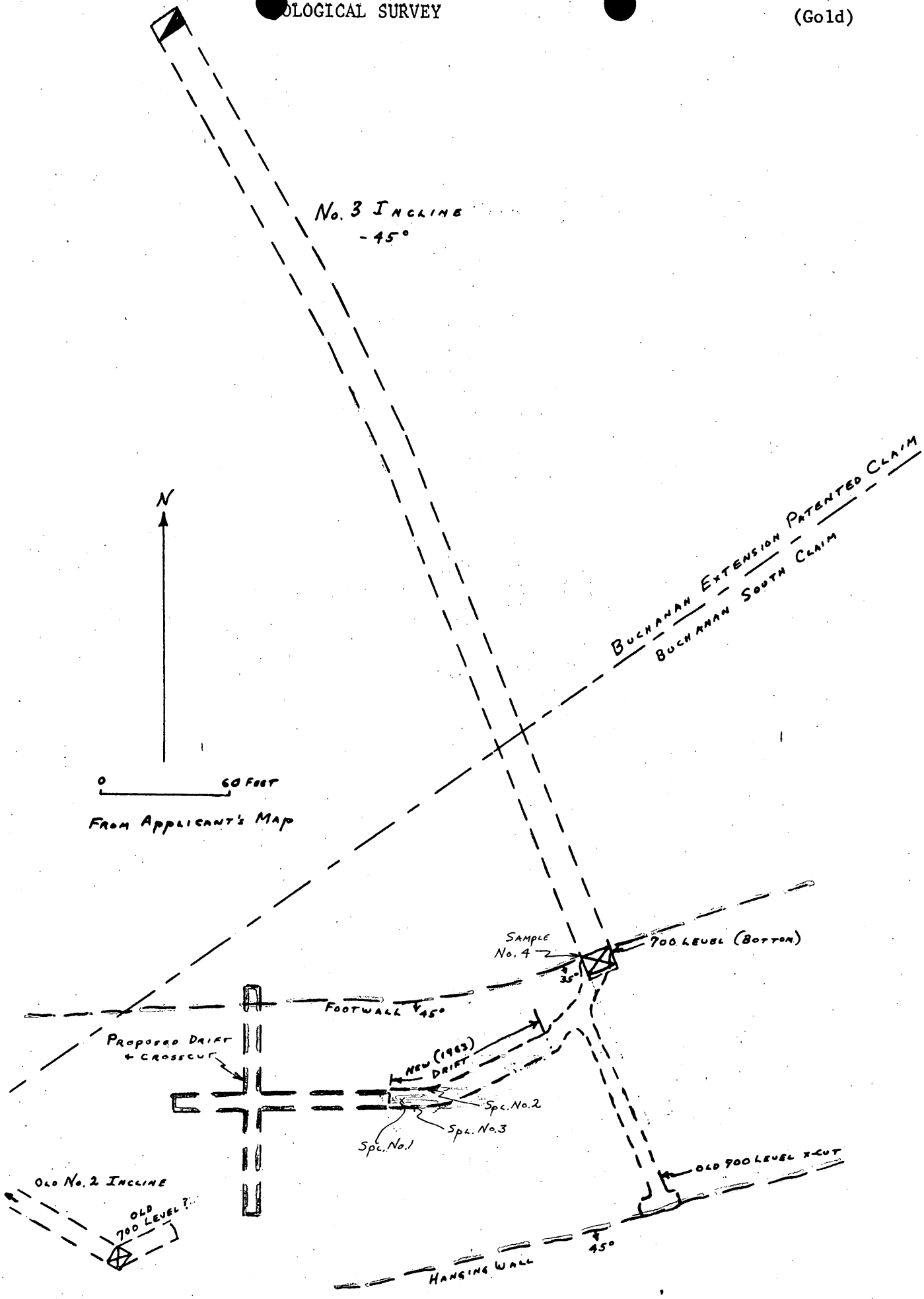


Figure 4.--Map of No. 3 Inclined Shaft, Buchanan Mine, Tuolumne County, Calif.

OME Surname copy

2/2/68

Peterson 120

Kikemo 120

Johnson 110 2/5

Kilgore 220 2/6

Kerr 2/6

AIRMAIL

M & M Buchanan Gold Mining &
Milling Corporation
796 Douglas Avenue
Oakland, California 94603

Re: OMK-6665 (Gold) 110
M & M Buchanan Gold Mining & Milling Corp.
Buchanan Mine 220
Tuolumne County, California

Gentlemen:

Careful study of your application for financial assistance in exploring the subject property and of other information available to us indicates that not enough geologic information is known of the target area to support the proposed exploration and justify Government participation therein. Accordingly, we must inform you that your application for assistance is denied.

We regret the necessity for this action which, however, is taken without prejudice to the property. Should you dewater the No. 3 shaft and rehabilitate the bottom (700) level sufficiently so that the workings could be examined, perhaps the necessary supporting evidence could be found. We would be pleased to consider a new application at the time such new data were submitted.

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

Sincerely yours,

FRANK E. JOHNSON

Frank E. Johnson
Chief, Office of
Minerals Exploration

cc: Director's Reading File
Division File
Economic Geology File
OME docket
OME Reading File
OME Region II
Mr. Peterson
130

ECPeterson/gla 2-2-68

OME Surname copy

2/2/68 Peterson 120

February 2, 1968 Kirkemo 120

110

Memorandum

220

To: The File

From: E. C. Peterson, Office of Minerals Exploration

Subject: OME-6665 (Gold)
M & M Buchanan Gold Mining & Milling Corp.
Buchanan Mine
Tuolumne County, California

Justification for Denial of Application

In his examination report the Field Officer recommends that the subject application for assistance be approved and an exploration contract prepared. However, after carefully reviewing the report and data submitted by the Applicant, Harold Kirkemo and the writer recommend that the application be denied for the following reasons:

1. Geological data required to justify the proposed work has not been furnished and, apparently, is not presently available. There is no evidence of a specific target--no geologic maps, samples, or assays are available to indicate the location, size, grade, and nature of known ore shoots and of potential targets. It should be noted that the underground workings were not accessible to the Field Officer for examination as they are presently flooded and partially caved.

2. The work as proposed is more in the nature of development and preparation for mining rather than exploration.

Because of the possibility that an eligible exploration target may exist at the Buchanan Mine, it is recommended that the application be denied without prejudice to the property. If additional work performed by the Applicant provides the necessary supporting data, the OME should consider a new or amended application at that time.

We have discussed our findings with the Field Officer and he concurs in our recommendation.

E. C. Peterson

E. C. Peterson

cc: Director's Reading File
Division File
Economic Geology File
OME docket
OME Reading File
Mr. Peterson

ECPeterson/gla 2-2-68

OME Surname copy

1/31/68 120

120

January 31, 1968 110

Memorandum 120M

To: The File

From: Assistant Chief, Office of Minerals Exploration

Subject: OME-6665 (Gold)
M & M Buchanan Gold Mining & Milling Corp.
Buchanan Mine
Tuolumne County, California

I recommend denial without prejudice of the application for the following reasons:

1. There is no evidence of a specific target--no geologic maps, samples or assays are available to indicate the location, size, grade, and nature of known ore shoots and of potential targets. If such information were available, it is likely that targets might be evident because of the extensive history of discoveries and development at the property. Unfortunately, there are no technical records available of the past history which could be used to support a future exploration program.

2. The work proposed is more in the nature of development and preparation for mining than it is for exploration.

Ideally, the Applicant should dewater the shaft and rehabilitate the bottom drift on his own account so that the property could be examined for determining whether an exploration program is warranted and the extent of such a program.

Harold Kirkemo

Harold Kirkemo

cc: Director's Reading File
Division File
Economic Geology File
OME docket
OME Reading File
Mr. Kirkemo

HKirkemo/gla 1-31-68

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

OFFICIAL COPY
O. M. E.
RECEIVED
JAN 26 1968

INITIALS	CODE
	130
	120
	110
	120

Memorandum January 24, 1968

To: Chief, Office of Minerals Exploration
Washington, D. C.

From: Field Officer
Region II

Subject: OME-6665 (Gold)
M & M Buchanan Gold Mining & Milling Corp.
Buchanan Mine
Tuolumne County, California

Enclosed is an Application Report on the subject property recommending that a contract be granted consisting of 110 feet of shaft sinking, 200 feet of drifting, rehabilitation, and assaying. Total cost is estimated at $40,000.00, of which the Government's share would be $30,000.00.

Also enclosed are five extra copies each of Figures 2, 3, and 4, for your use if a contract is granted.

H. K. Stager

Enclosures

Not a good project
Unwatering and [illegible]
[illegible] work [illegible] formerly
[illegible] [illegible] [illegible] Co.
[illegible] [illegible] [illegible]
[illegible] productive zone. No
real evidence but
[illegible] "[illegible]"
[illegible]

UNITED STATES

DEPARTMENT OF THE INTERIOR

STEWART L. UDALL, SECRETARY

OFFICE OF MINERALS EXPLORATION

REPORT OF EXAMINATION

REGION II

APPLICATION REPORT

Report of Exam.

OME-6665 (Gold)
M & M Buchanan Gold Mining & Milling Corp.
Buchanan Mine
Tuolumne County, California

By
H. K. Stager
Field Officer
OME, Region II

January 24, 1968

CONTENTS

	Page
INTRODUCTION	1
SUMMARY	2
RECOMMENDATIONS	2
LOCATION, ACCESSIBILITY, AND LOCAL FACILITIES	3
PROPERTY	3
History and Production	3
Ownership	4
Financial Eligibility	5
Development	5
GEOLOGY	5
Geologic Setting	5
Ore Deposits	6
Sampling	6
Ore Reserves	7
EXPLORATION	7
Applicant's Proposal	7
Examiner's Proposal	8
Proposed Exploration Costs	8
Cost Estimate	9

ILLUSTRATIONS

Figure 1. Index map of Tuolumne County, California.

Figure 2. Property map of Buchanan Mine.

Figure 3. Map showing location of proposed exploration.

Figure 4. Map of No. 3 Inclined Shaft.

INTRODUCTION

The M & M Buchanan Gold Mining & Milling Corp. of 796 Douglas Ave., Oakland, Calif. 94603, applied to the Office of Minerals Exploration for Government assistance in an exploration project, Docket OME-6665; to explore for gold at the Buchanan Mine, Tuolumne County, California. The applicant infers the presence of minable gold ore shoots in a quartz vein that intrudes quartz-mica schist on the property and wishes to explore for these ore shoots by rehabilitating an old shaft to a depth of 700 feet, deepening the shaft 110 feet, and driving 200 feet of exploratory drifts on the 800 level.

A field examination was requested by the Office of Minerals Exploration and was made by H. K. Stager, Field Officer, on November 7, 1967, accompanied by Mr. Fred J. Mason, president, and Mr. Harry N. Mason, treasurer, of the corporation. The applicant's maps, reports, and other data were examined and compared with exposures on the property. All of the mine workings were flooded and inaccessible, thus preventing examination and sampling of the mineralized material in place.

The applicant had submitted a previous application (Docket OME-6211), on September 18, 1961, that was denied on March 6, 1962. During the period 1962-63 additional underground work was done, and since that time the mill has been moved and rebuilt. The present application proposes work at a deeper horizon than that previously contemplated.

SUMMARY

The Buchanan Mine has yielded an estimated $2,500,000 in gold ore, and although it is not now possible to examine the old underground workings because of flooding, it appears reasonable to infer that minable gold-bearing ore shoots exist in the area of the vein to be explored by the proposed project. The applicant's estimates of costs required to accomplish the proposed work appear to be excessive and it is possible that the work can be done at a much lower cost. The proposed program consists of the pumping out and rehabilitation of the inclined shaft to a depth of 700 feet, sinking an additional 110 feet, and drifting about 200 feet on a new 800 level. The project will probably require about 6 months to complete. The project site is accessible and facilities for accomplishing the work are available.

RECOMMENDATIONS

It is recommended that the Government enter into a contract with M & M Buchanan Gold Mining & Milling Corp. to provide 75 percent of the costs of the proposed program to explore the Buchanan Mine. The program will require about 6 months to complete and the Government's share of the estimated total cost of $40,000.00 would be $30,000.00. To facilitate administration of the contract, the work should be based on fixed unit costs rather than actual costs.

LOCATION, ACCESSIBILITY, AND LOCAL FACILITIES

The Buchanan Mine is in sec. 26, T. 1 N., R. 16 N., MDBM, Tuolumne mining district, Tuolumne County, Calif. (Fig. 1), on the western slope of the Sierra Nevada, at an altitude of about 3,000 feet.

To reach the property, that is about 10 miles east of Sonora (the closest major town), drive east on California Highway 108 about 2 miles to Standard; then continue east on a county road about 5 miles to Tuolumne City; then northeast and east on a graded dirt road, via Riverside Station and Alder Spring, about 10 miles to the mine. The road from Tuolumne City is passable to ordinary passenger cars except in heavy rain or snow storms. The drive from Sonora usually requires about 1 hour.

Mail, telephone, trucking, and railroad services are available in Tuolumne City. Labor, mining equipment, materials, and supplies are available in Sonora. Ample water is available from springs on the property, and timber is available on the property and from nearby sawmills. Assay service, at a cost of $4-$5 per sample for gold and silver, is available in San Francisco (160 miles). Because of local strong labor union control, the wage scale for miners in the area is about $6-$7 per hour.

PROPERTY

History and Production

A summary of the history and estimated production for the Buchanan mine is contained in the application. The mine was discovered in the 1870's and the first mill (10 stamps) was built in 1881. A larger mill (20 stamps) was completed in 1886. During the period 1881 to 1892 about 100,000 tons of ore was mined and milled. Mining was stopped in 1892 but development

work continued until about 1899. No additional work was done until 1935. A new 50-ton-per-day mill was constructed about 1939. The mine was rehabilitated and placed in operating condition during the period 1935-1942, but the entire operation was closed down because of World War II. Work was again started in 1949. The No. 3 shaft was rehabilitated to the 700 level during the period 1949-1959 but no mining or milling was done.

Total production is estimated at about $2,500,000 in gold, but no accurate records of tonnage mined or gold produced are known.

The present owners purchased full interest in the property in 1961. After denial of the previous OME application in 1962, the operators, at their own expense, drove about 85 feet of new drift on the 700 level of the No. 3 shaft. The results of this work lead to the present application.

What made?

Ownership

The property consists of two patented claims and a mill site, plus six unpatented mining claims, all owned by the applicant. These claims are shown on Figure 2 and are described as follows:

Claim Name	Survey No.	Volume	Page
Buchanan Quartz Mining Claim	43A		
Buchanan Mill Site	43B		
Buchanan Extension Quartz Mineral Claim	50	3	61
Buchanan West Quartz Mine		18	414
Buchanan North Quartz Mine		18	415
Buchanan Northeast Quartz Mine Mill and Tunnel Site		18	415
Buchanan South Quartz Mine		18	416
Buchanan Northeast Quartz Mine		18	416
Buchanan Southwest Mine		18	424

These claims are recorded in the Tuolumne County records at Sonora, Calif. Work proposed is confined to the Buchanan Extension patented claim and the Buchanan South unpatented claim (Fig. 3).

Financial Eligibility

The applicant furnished copies of letters to two banks requesting loans for the proposed work and also copies of letters denying the loans. The applicant proposes to furnish its share of the exploration costs by furnishing labor, use of equipment, and the balance in cash.

Development

The Buchanan Mine is developed by 2 inclined shafts, 2 adits, an inclined winze, and about 3,000 feet of workings on 7 levels. None of the underground workings are accessible. The adit portals are caved and the shafts are flooded.

The surface plant consists of a 50-ton-per-day gravity-flotation-amalgamation mill, hoist house, warehouse, compressor house, garage, and several cabins. The mill has been moved to a newly constructed building and requires some additional work and rewiring before it can operate.

The applicant owns a fully equipped and operating iron fabricating and machine shop in Oakland, Calif. A large amount of mining and milling machinery and equipment is stored at the machine shop. All equipment necessary for the proposed work is on hand and in operating condition.

GEOLOGY

Geologic Setting

The Buchanan Mine is in a densely forested area of moderate relief with deep soil cover. Rock exposures in the mine area are extremely poor. Because of caving and flooding, the underground workings of the mine are inaccessible. Little is known of the geology of the claim area.

Sparse exposures along mine access roads, on mine dumps, and at several of the caved adit portals indicate the principal rocks are mica-schist and argillite of the Calaveras Formation of Carboniferous age. These rocks strike northwest and dip about 60°-70° SW. A fault that strikes east-west and dips 35°-45° S. cuts the rocks in the mine area and has been intruded by a quartz vein and veinlets. It is within these quartz veins that the gold-bearing ore shoots occur.

Ore Deposits

The gold deposit at the Buchanan Mine consists of gold-bearing ore shoots in quartz veins and veinlets that intrude a fault zone, about 50 feet in width, with a strike of about east-west and dip of 35°-45°S. These ore shoots are reported to range from a few feet to several hundred feet in length, from a few inches to 45 feet in thickness, and have been mined, or partly explored, down dip for about 700 feet on a rake of about S. 75° E. Total production is estimated at about 100,000 tons of ore that averaged about 1 ounce of gold per ton. Most of the gold is reported to occur free but some is contained in sulfides (probably arsenopyrite). Assays of vein material discovered in the 700 level drift driven by the applicant in 1963 (Fig. 4) indicate a gold content of about 1 ounce per ton. Gangue minerals are quartz, pyrite, galena, and abundant graphite.

Sampling

There were no samples taken during the field examination. All underground workings are inaccessible because of caving or flooding. There are no surface exposures of the vein accessible for sampling.

Ore Reserves

An estimate contained in the application states that about 100,000 tons of gold-bearing material, that assays about 0.3 ounce of gold per ton, remains in the unmined parts of the vein above the 500 level. Shoots of higher grade material are indicated by exploratory work between the 500 and 700 levels, but no mining and only limited development work has been done in this part of the mine. The applicant states that reserves in excess of 50,000 tons of ore, that averages about 1 ounce of gold per ton, are indicated above the 700 level west of the No. 3 Inclined Shaft. Reserves totaling about 30,000 tons of ore of the same grade are inferred below the 700 level and are the target of the proposed exploration.

EXPLORATION

Applicant's Proposal

The applicant proposes to rehabilitate the No. 3 Inclined Shaft to the bottom (700) level, sink an additional 110 feet of shaft and sump, and drive about 200 feet of drift and crosscut on the 800 level.

Diamond drilling from the surface, to test the downward extent and rake of the ore shoot, was considered but, because of the intensely fractured nature of the fault zone containing the shoot, it is not feasible and would not yield adequate information. An adit, from the canyon north of the mine, would require several thousands of feet of crosscut to reach the ore zone at the desired depth and would be very costly to drive.

Although the proposed work will only explore a small segment of the favorable target area it is as much as the applicant feels justified in undertaking at this time and, because of the high unit costs, is probably as much as the Government should participate in.

Examiner's Proposal

I agree with the applicant's proposal to sink the No. 3 Inclined Shaft an additional 110 feet and to drive 200 feet of crosscuts and drifts on the 800 level. This work will test the downward extent of the ore zone and yield valuable information as to the probable size and grade of the deposit below the 500 level. ? Exploration ?

Proposed Exploration Costs

The costs as estimated by the applicant are excessive and are due, in large part, to a planned work force that is larger than necessary to accomplish the work. A 4-man crew, consisting of 2 miners underground, a hoistman, and 1 additional surface man, should be sufficient to sink the shaft and drive the two short drifts. The cost of the proposed work should not exceed the costs we are experiencing in similar work at the Oriental Mine at Alleghany (OME-6454) except for the additional timbering required in the drifts.

The applicant estimates a cost of $15,000.00 for preliminary rehabilitation and preparation. Much of this cost is for cleanup and rearrangement of facilities not directly required for the exploration. I recommend that the Government's contribution to this work be limited to about 10 percent of the exploration costs, or $4,000.00.

The applicant may object to the reduced costs allowable for shaft sinking and drifting because of his high labor and overhead costs, but I feel reasonably certain that if the work were to be subcontracted to an outside mining contractor that it could be accomplished for very near my estimated costs.

Cost Estimate

Fixed Unit Costs

Rehabilitation to include: dewatering shaft; cleaning out; repairing or replacing timbers; repairing track, air, water, and ventilation tubing; clean up of shaft collar area; repairs to headframe and hoist house (job)	$ 4,000.00
Shaft sinking, including timbering, 5'x9', 110 feet at $200/ft	22,000.00
Excavating shaft station, including timbering, 900 cubic feet at $2/cu ft	1,800.00
Drifting and crosscutting, including timbering, 5'x7', 200 feet at $60/ft	12,000.00
Assaying, 40 samples for gold and silver, at $5/sample	200.00
Total estimated cost of project	$40,000.00
Government participation at 75 percent	$30,000.00

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

OME-6665
(Gold)

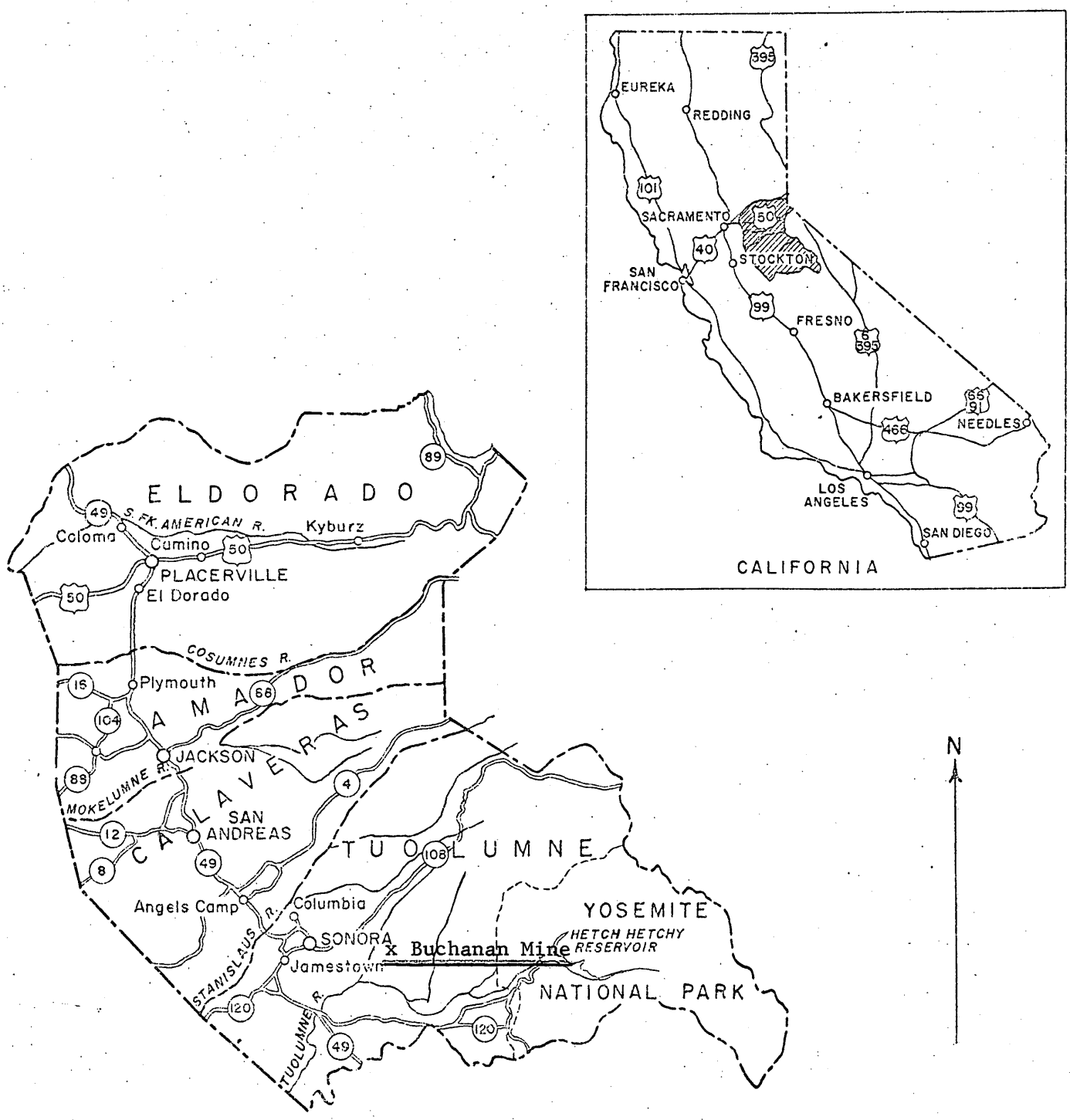


Figure 1. INDEX MAP OF ELDORADO, AMADOR, CALAVERAS, AND TUOLUMNE COUNTIES, CALIFORNIA

0 20 40 60 Miles

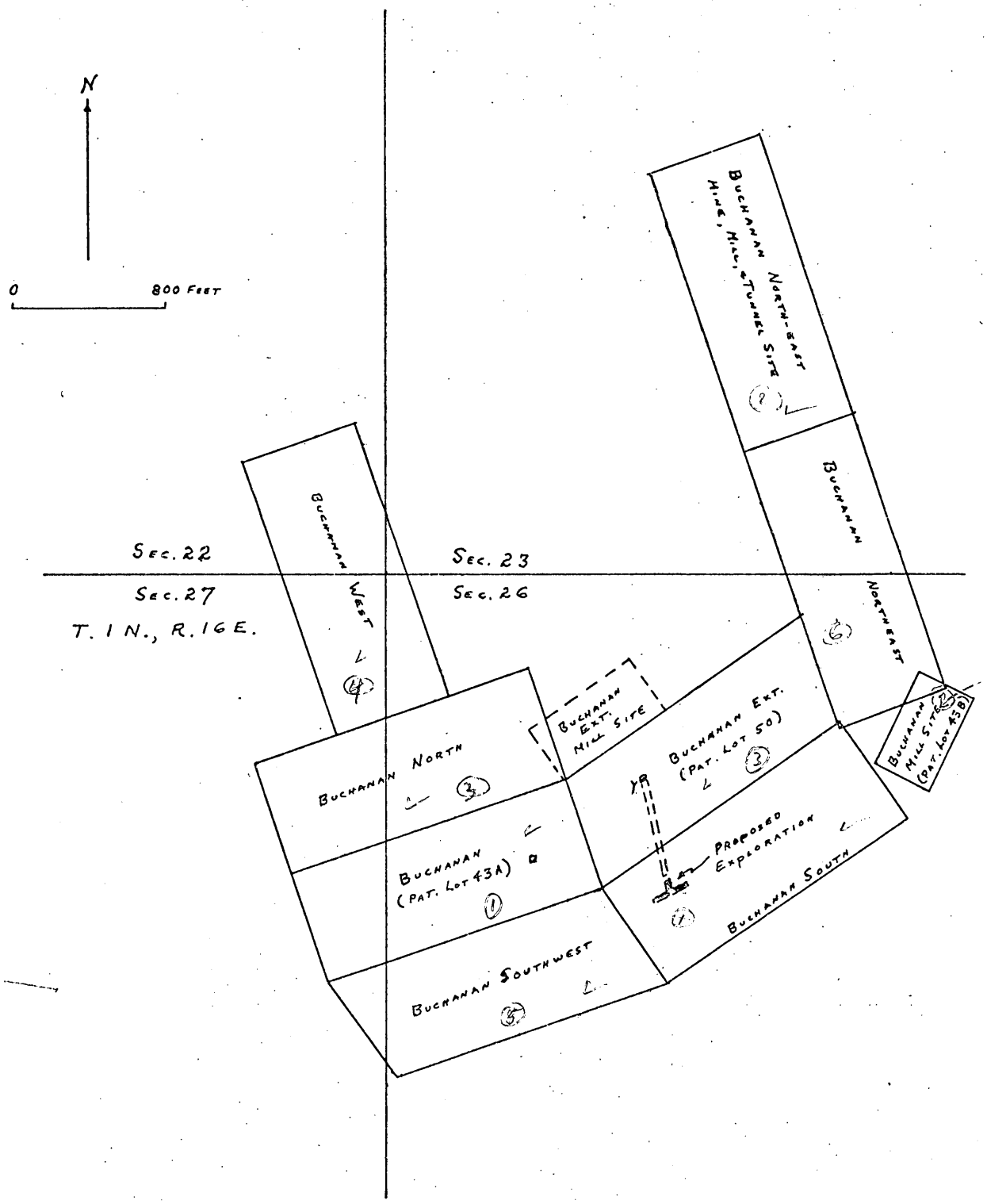


Figure 2.--Property map of Buchanan Mine, Tuolumne County, California.

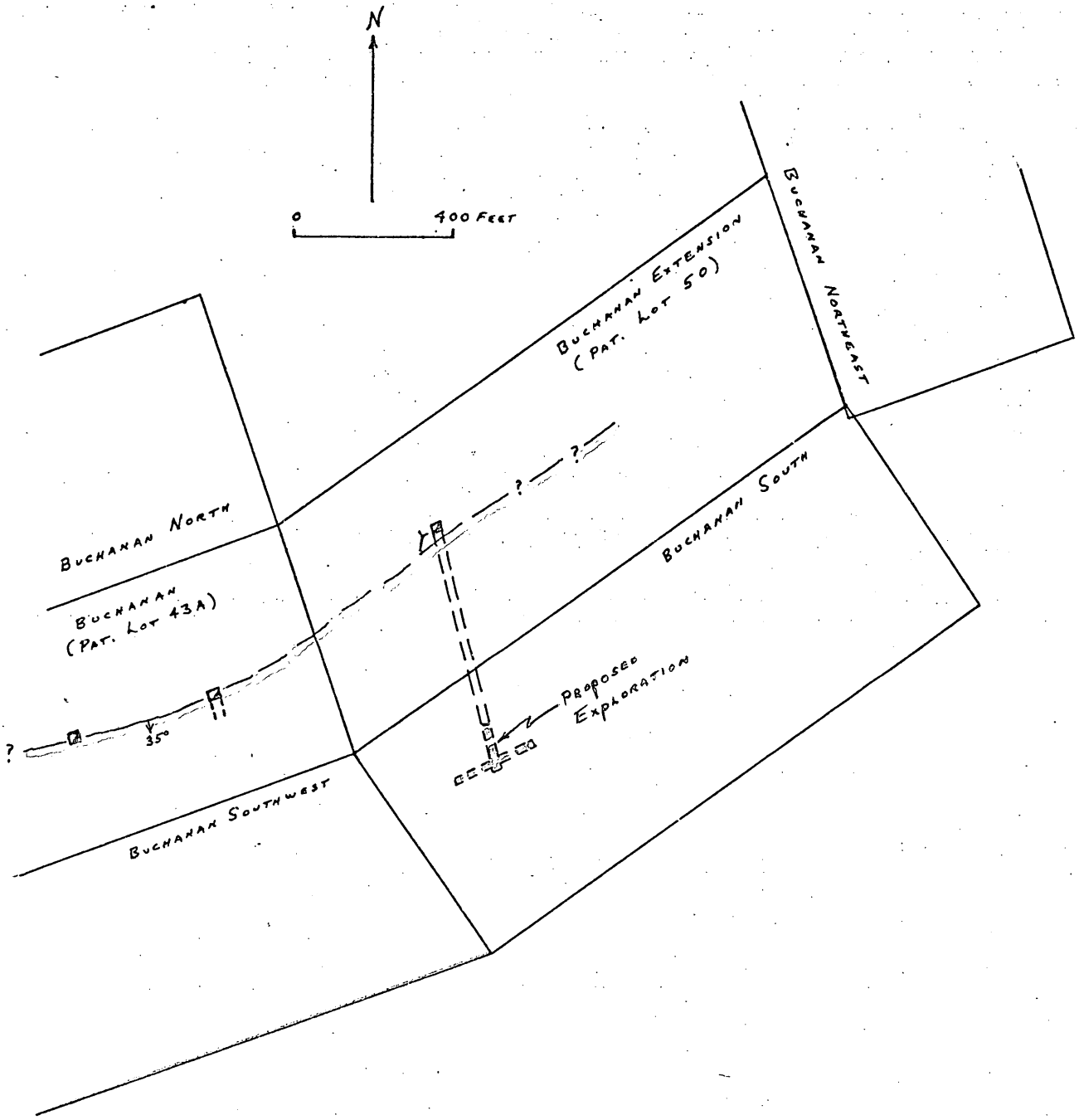


Figure 3.--Map showing location of proposed exploration, Buchanan Mine, Tuolumne County, California

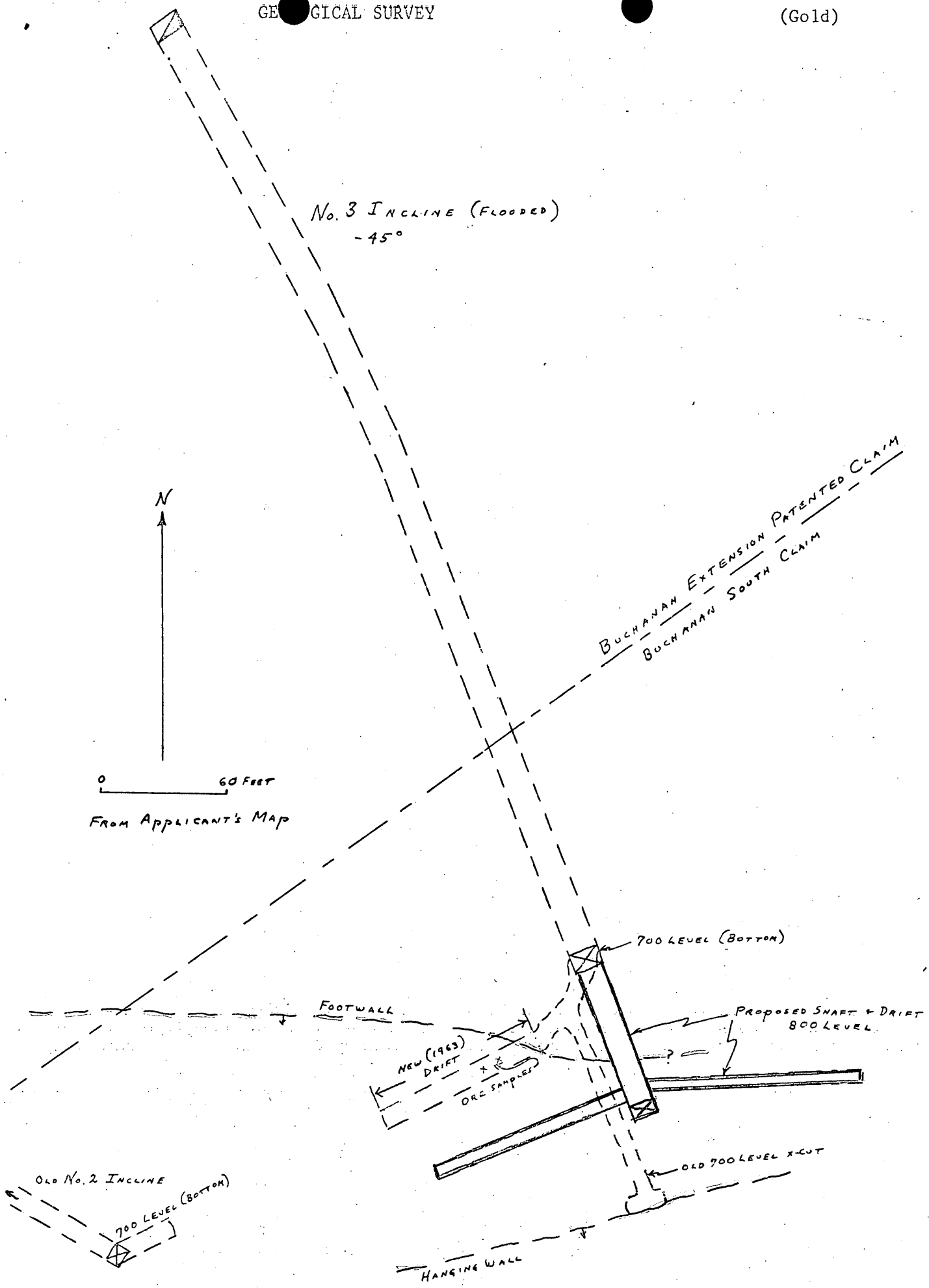


Figure 4.--Map of No. 3 Inclined Shaft, Buchanan Mine, Tuolumne County, Calif.

WILLIAM H. DONAHUE
(1871-1948)

FRANK S. RICHARDS
JAMES E. GALLAGHER
GEORGE E. THOMAS
JOSEPH A. WOODS, JR.
JAMES H. RIGGS
BRUCE D. GILLIES
ROBERT N. WOOD
WILFRID F. ROBERGE, JR.
HARRISON S. ROBINSON

LAW OFFICES OF
DONAHUE, RICHARDS & GALLAGHER
CENTRAL BUILDING
14TH AND BROADWAY
OAKLAND, CALIFORNIA 94612
TELEPHONE (415) 451-0544

January 10, 1968

Mr. Harold K. Stager
United States Geological Survey
Field Office of Mineral Exploration
345 Middlefield Road
Menlo Park, California 94025

Dear Mr. Stager:

Re: M & M Buchanan Gold Mining and Milling Company, a California Corporation

In accordance with my telephone conversation with you I am enclosing herewith a copy of the recorded deed from William C. Meagher, Sr., also known as William G. Meagher, and Jane A. Meagher, his wife, to M & M Buchanan Gold Mining and Milling Company for your perusal.

As I advised you over the telephone, since the two major shareholders for the corporation were in my office they did hold a meeting whereby they authorized me to deliver the enclosed deed to you, as well as to authorize the President and Secretary of the Corporation to do all things necessary to obtain funds from the government, and to sign any and all contracts that may be prepared by the government. In other words, the President and Secretary of the corporation are presently authorized to do all things necessary to complete the transaction that you and I discussed on the phone.

If I can be of any further help or assistance, please do not hesitate to contact me.

Thank you for your cooperation.

Very truly yours,

James E. Gallagher

JEG/ds

Enclosure

RECEIVED
JAN 12 1968
OFFICE OF MINERALS EXPLORATION
U.S. GEOLOGICAL SURVEY
MENLO PARK, CALIF.

VOL 136 PAGE 138

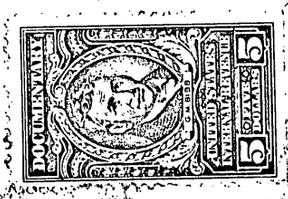
5376

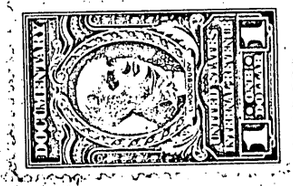
Grant Deed

#7412-1121

For value received William G. Meagher, Sr., also known as
William G. Meagher, and Jane A. Meagher, his wife

GRANT.....to M & M Buchanan Gold Mining and Milling Company,
a California corporaion





all the real property situate in the
County of Tuolumne , State of California, described as follows:

SEE SCHEDULE A ATTACHED

6-5376-1

WITNESS our hand

William G. Meagher Sr.
Jane A. Meagher

139

STATE OF CALIFORNIA,
COUNTY OF ALAMEDA } ss.

ON THIS 11th day of December A. D. One Thousand Nine Hundred and Sixty-One, before me, ~~Raymond Gomicke~~, Rosemary McCombs a Notary Public, in and for the County of Alameda, State of California, residing therein, duly commissioned and sworn, personally appeared

William G. Meagher, Sr., also known as
William G. Meagher, and Jane A. Meagher, his wife

known to me to be the persons described in and whose names are subscribed to the within instrument, and they acknowledged to me that they executed the same.

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

Rosemary McCombs
ROSEMARY MCCOMBSS
Commission Expires 1/14/63.
Notary Public

In and for said..... County of Alameda, State of California

5376-2

Grant Deed

William G. Meagher, Sr., also known as William G. Meagher, and Jane A, Meagher, his wife TO M & M Buchanan Gold Mining and Milling Company

DATED December 19 61

FOR RECORDER'S STAMP
RECORDED AT REQUEST OF
TUOLUMNE CO. TITLE CO.
at 15 min. past 2 P M
136 Official Records p 138
DEC 13 1961
Tuolumne County, California
Marie L. Oretto Recorder
Fee $ 6.00 Pd.
No. 5376

DO NOT WRITE IN THIS SPACE

RECORDED
INDEXED
COMPARED

When Recorded Return to

SCHEDULE " A "

PARCEL 1:

Lots 43A, Buchanan Quartz Mining Claim, and 43B, Buchanan Mill Site, being a portion of the NW 1/4 of Section 26, a portion of the NE 1/4 of Section 26, and a portion of the NE 1/4 of Section 27, T. 1 N, R. 16E, M.D. B&M, described as follows:

Beginning, for the description of that portion of the premises hereby conveyed designated as Lot 43A, at center of Wly boundry of the claim a post in stone mound marked B.M., from which a black oak 6" in diameter marked B.Y.B.M. bears North 2° 30' E. at the distance of 30 links, and a Pine 30" in diameter marked B.Y.B.M. bears S. 20° 30' W. at the distance of 64 links; thence from said post N. 19° W. 4 chains and 55 links to NW corner of the claim, a post in stone mound marked B.M., from which a Pine 28" in diameter marked B.Y.B.M. bears S. 43° E at the distance of 33 links; thence from said post, N. 71° E. 7 chains and 49 links to a point on E. Boundary of Section 27, from which the 1/4 Section corner on boundary between Sections 26 and 27 in T. IN, R. 16 E., M.D.B. & M., bears S. 53' W. at the distance of 19 chains and 33 links 22 chains and 74 links to the NE corner of the claim a post in mound of stones marked B.M.; thence S. 19° E 15 links to Ravine, 4 chains and 55 links to center of Wly boundary of the claim, a black oak tree 36" in diameter marked B.M. on W. Side, and situate on Wly boundary of the Warwick claim from which mainshaft bears S. 71° W. at the distance of 9 chains and 35 links 5 chains and 90 links to center of Road to Quartz Mill 9 chains and 10 links to the SE corner of the claim a Post marked B.M.; thence S. 71° W. 18 chains and 54 links to a point on W. boundary of said Section 26, from which the said Section corner hereinbefore described bears S. 53' W. at the distance of 9 chains and 64 links 22 chains and 74 links to the SW corner of the claim a Post in Stone Mound marked B.M. from which the said 1/4 Section corner bears S. 24° 49' E. at the distance of 9 chains and 14 links; thence from said post N. 19° W. 4 chains and 55 links to the place of beginning, containing 20.69 acres of land, more or less, and embracing 1500 linear feet of the Buchanan Quartz Mine to wit: 617 linear feet Ely and 883 linear feet Wly from Main Shaft on said Mine.

Beginning, for the description of that portion of the premises hereby conveyed designated as Lot 43B, at the Wly corner of the Mill Site, an oak tree 6" in diameter, marked B.M.S., from which the SE corner of said Lot 43A hereinbefore described bears S. 66° 10' W. at the distance of 23 chains and 77 links, and the S. end of Stable bears N. 79° E. at the distance of 75 links; thence from said Oak Tree, S. 63° E. 1 chain and 40 links to Ravine, 4 chains and 88 links to Sly corner

5376-3

of the Mill Site, a Post marked B.M.S.; thence N. 27° E. 8 chains and 20 links to Ely corner of the Mill Site, a Post marked B.M.S.; thence N. 63° W. 1 chain and 90 links to Ravine, 4 chains and 88 links to the Nly corner of the Mill Site; thence S. 27° W. 8 chains and 20 links to the place of beginning, containing 4 acres of land, more or less, which, together with the area embraced by said Lot No. 43A aggregates 24.69 acres of land, more or less.

Except from Lot 43A that portion of Wedge Quartz Mineral Claim, described in Mineral Survey No. 495, included therein.

PARCEL 2:

Lot 50, Buchanan Extension Quartz Mineral Claim, and known as the Lookout Quartz Mine, being a portion of the NW 1/4 of Section 26, T 1N, R. 16 E., M.D. B & M, as described in Notice of Location recorded January 3, 1882, in Volume 3, Page 61 of Quartz Claims, as follows:

The undersigned claim 1500 feet on the quartz-vein or lode for mining purposes, said claim is located in Tuolumne Mining District, Tuolumne County, State of California, about eight miles North or Northeast from Summersville in said County, being the North Easterly extension of the Buchanan Mine, and more fully described as follows: Commencing at a notice posted on a black oak tree at the Buchanan line marked B.M., and running along the vein or lead 1500 feet with 300 feet on each side to a similar notice posted on a pine tree at the end of the claim and known as the North East Extension of the Buchanan Mine.

PARCEL 3:

(a) Notice of Quartz Location by Geo. F. Blair.
Dated May 24, 1932, Recorded May 31, 1932, in Volume 18, Page 414 of Quartz Claims.
Claim is: Buchanan West Quartz Mine.
The center line of this claim runs at approximate-right angle to the center line of the Buchanan North Quartz Mine in a NWly direction and beginning at a point at about the center of the NW line of Buchanan North Quartz Mine for identification purposes, to a point 750 feet therefrom to this claim center location point and extending on in a NWly direction 750 feet.
This notice is posted on a large pine tree, approximately 400 feet from the NW line of the Buchanan North Quartz Mine and few feet from the center line of this claim. Notice is also posted at point of discovery.
This claim is in portions of the NW 1/4 of Sec. 26 and the SW 1/4 of Section 23, T. 1N, R. 16 E., Tuolumne County, Calif.

(b) NOTICE OF QUARTZ LOCATION by J. Andrew Cook
Dated May 24, 1932, Recorded May 31, 1932, in Volume 18, Page 415 of Quartz Claims.
Claim is: Buchanan North Quartz Mine.
Approximately 300 feet North of the second large dump of the Buchanan Quartz Mine and the center line of this claim is approximately parallel to the NW property line of the Buchanan Quartz Mine property.
This notice is posted on a Black Oak tree approximately North of the second dump of the Buchanan Quartz Mine and about 300 feet therefrom.
This claim is in portions of the NW 1/4 of Section 26 and SW 1/4 of Section 23, T. 1N, R. 16E, Twolumne Co., California.

(c) NOTICE OF QUARTZ LOCATION by J. Andrew Cook
Dated May 24, 1932, Recorded May 31, 1932, in Volume 18, Page 415 of Quartz Claims.
Claim is: Buchanan North-east Quartz Mine Mill and Tunnel Site.

This mineral, mill and tunnel site claim is located in such manner as to join the NW boundary line of the Buchanan N.E. Quartz Mine, and extends Northwesterly therefrom to a line 200 feet Northwest from and paralleling Hunter Creek and the Southwest boundary line of this claim is a straight extension in a Northwesterly direction of the Southwest bounda ry line of the Buchanan North-East Quartz Mine and the Northeast boundary line of this claim is a straight extension in a Northwesterly direction of the Northeast boundary line of the Buchanan North-East Quartz Mine,

This claim is located in the SW 1/4 of Section as, T. 1 N., R. 16 E., and is necessary for the economical mining and milling from the Buchanan North-East Quartz Mine, in Tuolumne County, California.

(d) NOTICE OF QUARTZ LOCATION by J. Andrew Cook.
Dated May 24, 1932, Recorded May 31, 1932, in Volume 18, Page 416 of Quartz Claims.
Claim is: Buchanan South Quartz Mine.
The center line of this claim runs parallel with the Southeast boundary line (of Lot 50) of the Buchanan Mine (and known as the Lookout Quartz Mine) and 300 feet distant Southeast therefrom and the Northeast end of this claim extends about 250 feet Northeast of the Southeast corner of the said Lot 50 of the Buchanan Mine and the Southwest end of the center-line of this claim is at a point which is 300 feet Southeast from the said Southeast boundary line of said Lot 50 of the Buchanan Mine and said point is about 250 feet Northeast of an intersection of a straight extension of the centerline of this claim and a straight extension of the dividing boundary line between Lots 50 and 43A, of the Buchanan Mine.

5376-5

This claim is in the NW 1/4 and the NE 1/4 of Section 26, T 1N, R. 16 E., Tuolumne County, California.

(e) NOTICE OF QUARTZ LOCATION by J. Andrew Cook Dated May 24, 1932, Recorded May 31, 1932, in Volume 18, Page 416 of Quartz Claims.
Claim is: Buchanan Northeast Quartz Mine.

The center-line of this claim runs in a Northwesterly and Southeasterly direction 300 feet Northeasterly from and parallel with the Northeast end boundary line of Lot 50 of the Buchanan Mine (said Lot 50 of the Buchanan Mine is known as the Eastern Extension of the Buchanan Mine, also as the Lookout Quartz Mine.) The Southeast end of the center-line of this claim is at a point about 100 feet Southeast of a straight extension of the Southeast boundary line of said Lot 50 of the Buchanan Mine and is about 50 feet from the Northeast boundary line of the Buchanan South Quartz Mine, at a point about 100 feet Southeast of the Northeast corner of the said Buchanan South Quartz Mine. The Northwest end of the center-line of this claim is at a point almost North of the Northeast corner of the said Lot 50 of the Buchanan Mine.

This claim is in portions of the NW 1/4 and NE 1/4 of Section 26 and in portions of the SW 1/4 and SE 1/4 of Section 23, both T. 1N, R. 16E., Tuolumne County, California.

5376-6

(f) NOTICE OF QUARTZ LOCATION by J. Andrew Cook. Dated June 23, 1932, Recorded June 24, 1932, in Volume 18, Page 424 of Quartz Claims.
Claim is: Buchanan Southwest Mine.

The center line of this claim lies about 300 feet nearly South of and parallel with the South property line of the Buchanan Mine Lots 43A and 50, and the West end of the center-line is located on the East line of the "Elk" and the Wedge patened line, and the East end of the center line joins the West end of the center line of the Buchanan South Mine Claim.

This claim is located partly in Section 26, T. 1N, R. 16 E., M.D.B. & M.

TUOLUMNE COUNTY TAXES 1967-1968

For the FISCAL year beginning July 1, 1967 and ending June 30, 1968

Make Checks Payable to
CHARLES J. PESCE
Tuolumne County Tax Collector
Sonora, California

IMPORTANT
READ INFORMATION AND INSTRUCTIONS ON REVERSE SIDE OF BILL

No. 9451

Tuolumne County Assesses at 25% of Full Cash Value. If Householder's Exemption was allowed on personal property, $400 should be added to the total amount of personal property as shown on this statement. If Taxes are unpaid it will be necessary to pay delinquent penalties, costs, redemption penalties and a redemption fee.

ASSESSED TO OWNER AS OF MARCH 6, 1967

M & M BUCHANAN GOLD MINING & MILLING CO
c/o FRED MASON
796 DOUGLAS ST.
OAKLAND, CALIF.

TAXPAYERS HAVE THE OPTION OF PAYING BOTH INSTALLMENTS WHEN FIRST INSTALLMENT IS DUE

PARCEL 62-29-1

FULL CASH VALUE		ASSESSED VALUE			Exemptions	TOTAL TAXABLE VALUE
Real Prop.	Personal Prop.	Land	Improvements	Personal Prop.		
200		50				50

THIS BILL MUST BE RETURNED WITH PAYMENT

TOTAL TAX	CODE AREA	Second Installment Delinquent Apr. 10, 1968, 5.00 P.M.		CODE AREA	First Installment Due Nov. 1, 1967 — Delinquent Dec. 11, 1967, 5:00 P.M.	
$ 4.48 *	74,004	$ 2.24		74,004	$ 2.24	If you have sold this Property please forward this Bill to New Owner or return to Tax Collector.
6% 1st		Del. 1st				
6% 2nd		6% Pen.				
COSTS		COSTS	WHEN PROPERLY ENDORSED THIS BILL BECOMES YOUR RECEIPT FOR PAYMENT OF TAXES ON PROPERTY DESCRIBED HEREON.		6% Pen.	
TOTAL		TOTAL			TOTAL	

Receipt for Second or Both Installments When Validated

PAID
NOV 27 1967
CHARLES J. PESCE
TAX COLLECTOR
PER

Receipt for First Installment When Validated

TUOLUMNE COUNTY TAXES 1967-1968

For the FISCAL year beginning July 1, 1967 and ending June 30, 1968

Make Checks Payable to
CHARLES J. PESCE
Tuolumne County Tax Collector
Sonora, California

IMPORTANT
READ INFORMATION AND INSTRUCTIONS ON REVERSE SIDE OF BILL

No. 9452

Tuolumne County Assesses at 25% of Full Cash Value. If Householder's Exemption was allowed on personal property, $400 should be added to the total amount of personal property as shown on this statement. If Taxes are unpaid it will be necessary to pay delinquent penalties, costs, redemption penalties and a redemption fee.

ASSESSED TO OWNER AS OF MARCH 6, 1967

M & M BUCHANAN GOLD MINING & MILLING CO
c/o FRED MASON
796 DOUGLAS ST.
OAKLAND, CALIF.

TAXPAYERS HAVE THE OPTION OF PAYING BOTH INSTALLMENTS WHEN FIRST INSTALLMENT IS DUE

PARCEL 62-29-2

FULL CASH VALUE		ASSESSED VALUE			Exemptions	TOTAL TAXABLE VALUE
Real Prop.	Personal Prop.	Land	Improvements	Personal Prop.		
17,720		1,000	3,430			4,430

THIS BILL MUST BE RETURNED WITH PAYMENT

TOTAL TAX	CODE AREA	Second Installment Delinquent Apr. 10, 1968, 5.00 P.M.		CODE AREA	First Installment Due Nov. 1, 1967 — Delinquent Dec. 11, 1967, 5:00 P.M.	
$ 397.38 *	74,004	$ 198.69		74,004	$ 198.69	If you have sold this Property please forward this Bill to New Owner or return to Tax Collector.
6% 1st		Del. 1st				
6% 2nd		6% Pen.	WHEN PROPERLY ENDORSED THIS BILL BECOMES YOUR RECEIPT FOR PAYMENT OF TAXES ON PROPERTY DESCRIBED HEREON.		6% Pen.	
COSTS		COSTS				
TOTAL		TOTAL			TOTAL	

Receipt for Second or Both Installments When Validated

PAID
NOV 3 1967
CHARLES J. PESCE
TAX COLLECTOR
PER

Receipt for First Installment When Validated

Mildred Bergess
209-532-7119

Josiassen
SILVER NITRATE
SOLUTION

STATEMENT OF RETURNS

JOSIASSEN SMELTING & REFINING CO.

JOHN S. JOSIASSEN — HARMON C. GARDNER
1311 66th STREET HUmboldt 3-9519
EMERYVILLE, CALIF.

Josiassen
SILVER NITRATE
CRYSTALS

TO
Harry Mason
796 Douglas Avenue
Oakland, California

DATE 4/4/63

YOUR ORDER NO.

REMARKS

Supplemental report on sulphur and sulfide

LOT NO.	DESCRIPTION	ASSAY NO.	WEIGHTS BEFORE MELT AVOIRDUPOIS POUNDS OZ.	WEIGHTS AFTER MELT TROY OZ.	ASSAY CERTIFICATE FINENESS GOLD	ASSAY CERTIFICATE FINENESS SILVER	ASSAY CERTIFICATE FINENESS OTHER	GOLD FINE OZ.	SILVER FINE OZ.	OTHER
1	Ore		Chemical analysis shows				3.4%	~~XXXXXX~~sulfide		
5	Ore -sulfides (very little)						1.5%	sulphur		

PRICES		
SILVER	$	PER OZ.
GOLD		PER OZ.
TIN		PER LB.
MERCURY		PER LB.
OTHER		

CHARGES		
REDUCING		$
SMELTING		
REFINING		
2 ASSAYING	4.00	8.00
OTHER		
TOTAL		$

VALUES $ $ $
TOTAL VALUES $
DEDUCTIONS $
NET AMOUNT OF RETURN $
PAID BY CREDIT MEMO NO.
PAID BY CHECK NO. AND/OR
LBS. SILVER NITRATE ON
INVOICE NO.

NOTE — THIS REPORT IS FOR THE INFORMATION OF CUSTOMER AND IS OF NO OTHER VALUE

Josiassen
SILVER NITRATE SOLUTION

STATEMENT OF RETURNS

JOSIASSEN SMELTING & REFINING CO.

JOHN S. JOSIASSEN — HARMON C. GARDNER
1311 66th STREET HUmboldt 3-9519
EMERYVILLE, CALIF.

Josiassen
SILVER NITRATE CRYSTALS

TO

Harry Mason
796 Douglas Avenue
Oakland, California

DATE 4/4/63

YOUR ORDER NO.

REMARKS

Assay for gold in ore and gold in sulfides

LOT NO.	DESCRIPTION	ASSAY NO.	WEIGHTS BEFORE MELT AVOIRDUPOIS POUNDS OZ.	WEIGHTS AFTER MELT TROY OZ.	ASSAY CERTIFICATE FINENESS GOLD	ASSAY CERTIFICATE FINENESS SILVER	ASSAY CERTIFICATE FINENESS OTHER	GOLD FINE OZ.	SILVER FINE OZ.	OTHER
1	Ore						2.2 % sulfides - 18.15 Tr. Oz. per ton of gold in sulfides)			
2	Round # 1				1.2 Tr Oz per ton					
3	Gouge-last round				.90 Tr Oz per ton					
4	Round #2 - last shot				.36 Tr Oz per ton					
5	Ore- very little sulfide				.95 Tr.Oz per ton in sulfide					

PRICES

SILVER	$	PER OZ.
GOLD		PER OZ.
TIN		PER LB.
MERCURY		PER LB.
OTHER		

CHARGES

REDUCING		$
SMELTING		
REFINING		
5 ASSAYING	$4.00 ea	20.00
OTHER		
TOTAL		$

VALUES $ $ $
TOTAL VALUES $
DEDUCTIONS $
NET AMOUNT OF RETURN $
PAID BY CREDIT MEMO NO.
PAID BY CHECK NO. AND/OR
LBS. SILVER NITRATE ON
INVOICE NO.

NOTE — THIS REPORT IS FOR THE INFORMATION OF CUSTOMER AND IS OF NO OTHER VALUE

®

3543

PROOF OF LABOR
UPON MINING CLAIM.

STATE OF CALIFORNIA)
County of Tuolumne) ss.

FRED MASON being duly sworn, says that the following described work and labor: Re-timbered 70 ft. of shaft, put in Electric Plant

and being not less than $ 2500.00 worth of labor or improvements, were performed and made upon Buchanan South, Buchanan North-East, Qtz. Mine and Tunnel Site, Buchanan West, Buchanan South-West, Buchanan North-East, Buchanan North Qtz. Claim situated in Tuolumne Mining District, County of Tuolumne, State of California during the year ending September 1st, (Noon) 19 62. Such expenditure was made by or at the expense of Buchanan Mining and Milling Co. - Fred Mason, owner

owner of said claim, for the purpose of holding said claim.

Fred Mason

SUBSCRIBED AND SWORN to before me this 21st day of Aug. 19 62

Marie A. Onto

County Recorder

MAIL TO:

19541 Alana Road
Castro Valley, Calif.

SOLELY FOR RECORDERS USE

RECORDED AT REQUEST OF
FRED MASON
at 30 min. past 3 P M
19 P. of L. Official Records p 2

AUG 21 1962
Tuolumne County, California
Marie A. Onto Recorder
Fee $ 2.75 Pd.
No. 3543

PROOF OF LABOR
UPON MINING CLAIM
2196

STATE OF CALIFORNIA)
County of Tuolumne) ss.

Fred Mason being duly sworn, says that the following described work and labor: General Maintenance on all Mines

and being not less than $ 1,500.00 worth of labor or improvements, were performed and made upon Buchanan South, Buchanan Northeast Quartz Mines and Tunnel Site, Buchanan West, Buchanan Southwest, Buchanan Northeast and Buchanan North Quartz Mines. situated in Tuolumne Mining District, County of Tuolumne, State of California during the year ending September 1st, (Noon) 19_____. Such expenditure was made by or at the expense of Fred Mason, Lessee For Chas. S. Wheeler, Jr.

owner_ of said claim_, for the purpose of holding said claim.

Fred Mason

SUBSCRIBED AND SWORN to before me this 29th day of June 1959.

Mary M. Smith

County Recorder

MAIL TO: 792 Douglas Ave
Oakland. Cal

SOLELY FOR RECORDERS USE

RECORDED AT REQUEST OF
Fred Mason
at 25 min. past 10 A. M
14 P. of L. Official Records p. 133
JUN 29 1959
Tuolumne County, California
Marie A. Onetto
Fee $2.75 Pd. Recorder
No. 2196

THE DANISH "PRECIOUS METAL" SMELTER • ESTABLISHED 1934

JOSIASSEN* SMELTING & REFINING COMPANY

1311 66TH STREET • OAKLAND 8, CALIFORNIA • 654-1030 (AREA CODE 415)

COPY

June 27, 1963

SPECTROGRAPH ANALYSIS

Ore Sample # 5599-1

Fe	Major Constituent
V	50 Parts per million
Cu	200 Parts per million
Ag	100 Parts per million
Na	1,000 Parts per million
Ti	2,000 Parts per million
Zr	100 Parts per million
Mo	2 Parts per million
Al	Major Constituent
Si	Major Constituent
Mg	Major Constituent
Ni	40 Parts per million
Cr	20 Parts per million
Pb	40 Parts per million
Mn	400 Parts per million
B	200 Parts per million
as	400 Parts per million

*(JOE-SIGH-A-SIN)

Lodi, California
June 25, 1932

Mr. J. Andrew Cook,
984 Haddon Road,
Oakland, California.

Dear Sir:

I went to mining in Colorado when I was 12 years old. I am 76 now. I followed mining all my life except for the last few years. I was superintendent of a large mine in Colorado before I came to California, when I became superintendent of the Green Mine above Sonora. Then the Buchanan. I was superintendent there for four years. I left just before they started to sink the new shaft, the No. 8 shaft. I ran the Kanaka and several others after that. But the Buchanan, it was very rich all along. I never saw a mine like it.

The ore shoot dips east nearly 45 degrees and south about the same amount and the deeper we went the better it got. They never had such a mine near the top as I had down there at the bottom of the second shaft. I had as high as 10 feet of rich rock in one vein. The deeper you go, you see, the further that dips east and the richer it got as it went. There never was a better mine in the state than the Buchanan. I got a good deal over a million dollars out of it. I do not think a million and a half would cover its output during the time I was running it.

Several others had the mine before Davis got it, but they never got into the main part like I did. They just worked out the surface. Even Sullivan and Hagen only worked down to the 500 level. That is a big vein and lots of it. The total production must have been very large - much larger than most people think. I remember I used to stand and watch them try to break the rock in pieces and there would be long strips of gold going all through it holding it together. It is pretty nice when you knock a rock out that weighs 500 pounds that is so rich in gold you could not bust it. I got it all along that way.

If you can raise enough money to get into that vein again with some reasonable way to get it out, there is a mine I believe will last. I believe it goes down. I believe it will be worked for many years irrespective of depth. I do not think there is any bottom to it. It got bigger and better as it went down. The smallest place in that mine is near the surface. It is what we call easy ground for a vein to live in because there was a pretty big opening to start with and the vein just naturally filled that opening up. That mine is a good deal larger than it looks. I think it will go clear down to where that fellow Nick is building the big fires. It is an awfully good mine.

It is free milling gold quarts with sulphides in it. There is galina there and where you find galina that means gold - especially so in the Buchanan. There is also tellurides in it and that is pure gold only it is coated deep blue. The coating burns off and leaves pure gold. When you see into tellurium it would be very rich. We had some sulphides as high as $400 per ton.

If you can get down below the old works and drift east and south you will hit that vein and you will hit it good because there isn't any place that isn't good. You will know it when you hit it because it is hard, then you will know you have something, especially if you find porphyr. But you have to look out for that stuff, it will cave down. It carried a gold content clear to the bottom. In one place the footwall was very hard, smooth and covered with plumbago. You could stand and look where they broke that quartz off and as they went in it was perhaps a hundred feet and you could see gold from there clear to where you were standing. The porphyr was speckled with gold. That is something I have never seen in mines before or since - gold in that yellow porphy. Below the 700 level there is plenty of money in there because that showed lots of gold there we hit it.

It was a good mine and it is a good mine yet if you get into it, but it would not pay to go into the old works. It should not have been worked the way it was. I told them when I first went there that they should go down below the hill and go in that way.

We shipped gold regularly every month, sometimes we shipped it twice a month. Sometimes twice a week. I do not know what the average would be. Sometimes I would get into an awfully rich place and ship very often. I remember several shipments of over $20,000 each within a short period. Sometimes I would pound out a whole shipment in a few days. There was over a million taken out of that mine during the time I was there. That is a good mine.

You have my permission to use all of any of this, as you see fit.

Very truly yours,

OFFICIAL FILE COPY

Date	Surname	Code
10/27/67	Peterson	120
10/27/67	Kirkham	120
		110
10/30	Cal	220
		120M

OCT 30 1967

Memorandum

To: Field Officer, Region II

From: Chief, Office of Minerals Exploration

Subject: OME-6665 (Gold)
M & M Buchanan Gold Mining & Milling Corp.
Buchanan Mine
Tuolumne County, California

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

We agree, the new proposal appears to be exploration in contrast to the work proposed in 1962 (Docket OME-6211), which was considered development and was denied. However, the Applicant has presented no real evidence to justify any work on the property. Perhaps the necessary data can be obtained during a field examination, if one is made.

Although additional work may have been performed on the property since 1962, there is no indication of this on the map submitted.

If a contract is recommended, the cost estimate should be revised in accordance with the average costs in the district. We note that the proposed work on the lower levels may encounter serious water problems which could raise the costs considerably.

It should also be determined who the Applicant is, Fred J. Mason as listed on the application form, or M & M Buchanan Gold Mining and Milling Corporation as shown elsewhere in the narration.

FRANK E. JOHNSON (gfa)

Frank E. Johnson

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

ECPeterson/bsl 10/27/67

23263

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
10/27/67	Peterson	120
10/27/67	Kimberness	120
		110
		220
		120M

AIRMAIL

M & M Buchanan Gold Mining &
Milling Corporation
796 Douglas Avenue
Oakland, California 94603

Re: OME-6665 (Gold)
M & M Buchanan Gold Mining & Milling Corp.
Buchanan Mine
Tuolumne County, California

Gentlemen:

Your application for exploration assistance has been reviewed in our Washington Office and referred to Mr. Harold K. Stager, Field Officer, Region II, Office of Minerals Exploration, U. S. Geological Survey, 345 Middlefield Road, Menlo Park, California 94025.

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

Sincerely yours,

FRANK E. JOHNSON (glu)

Frank E. Johnson
Chief, Office of
Minerals Exploration

cc: Director's Reading File
Division File
Economic Geology File
OME Docket
OME Reading File
Mr. Peterson
Region II

ECPeterson/bsl 10/27/67

23263

October 24, 1967

M & M Buchanan Gold Mining &
Milling Corporation
796 Douglas Avenue
Oakland, California 94603

Subject: OME-6665

Gentlemen:

Your application for exploration assistance, dated October 2, 1967, submitted to our office at Menlo Park, California, has been assigned Docket No. OME-6665.

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

Sincerely yours,

Frank E. Johnson
Chief, Office of
Minerals Exploration

Copy to Region II

Tailing Pond Now 1967

Pump Mill Building 1963

Now Replaced New Bilding

Tailing Pond 1963

Pumping Water From 700 FT Level Filling Pond 1964

Starting Tailing Pond 1962

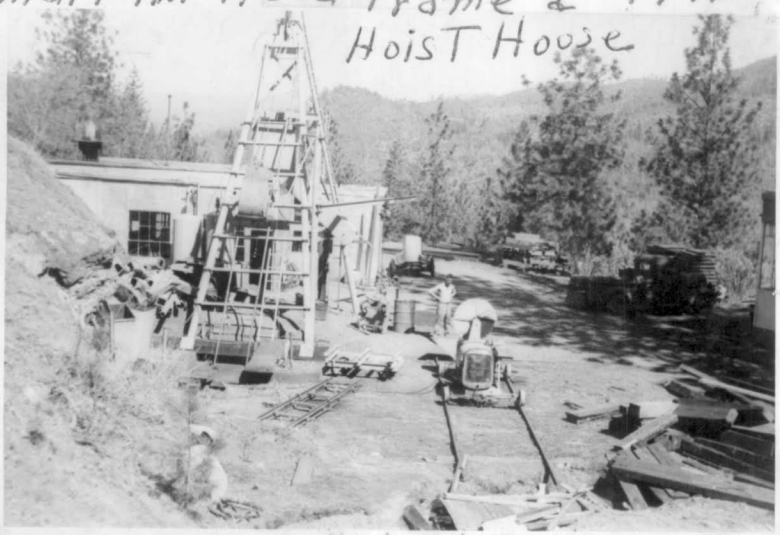
Tearing Down Old Mill Building 1963

Part of Stonehurst Iron 1967

HOUSE, SWIMMING POOL, SHOWER & LIGHT PLANT HOUSE 1967

SETTING POWER PANEL & COOLING TOWER 1963

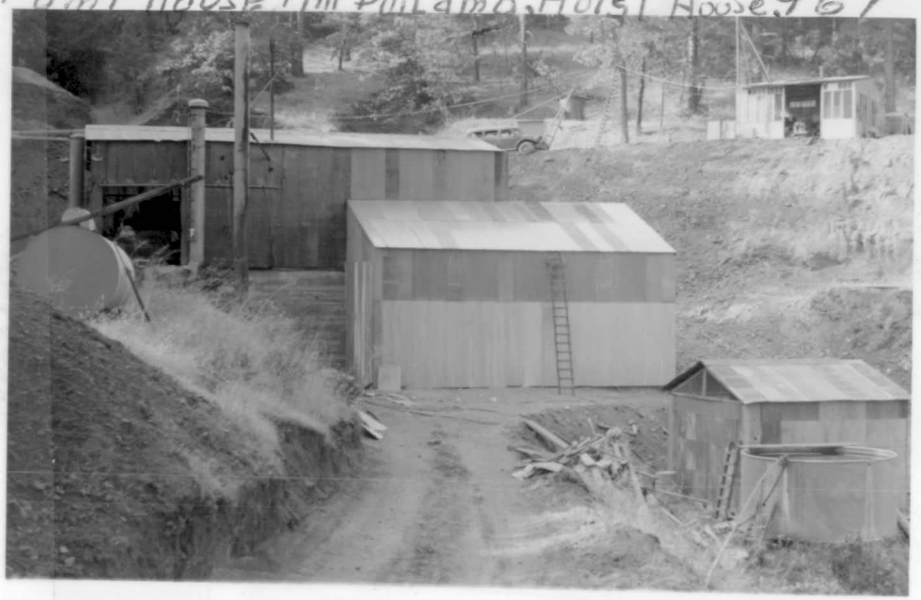
SHAFT NO1 HEAD FRAME & 1941
HOIST HOUSE

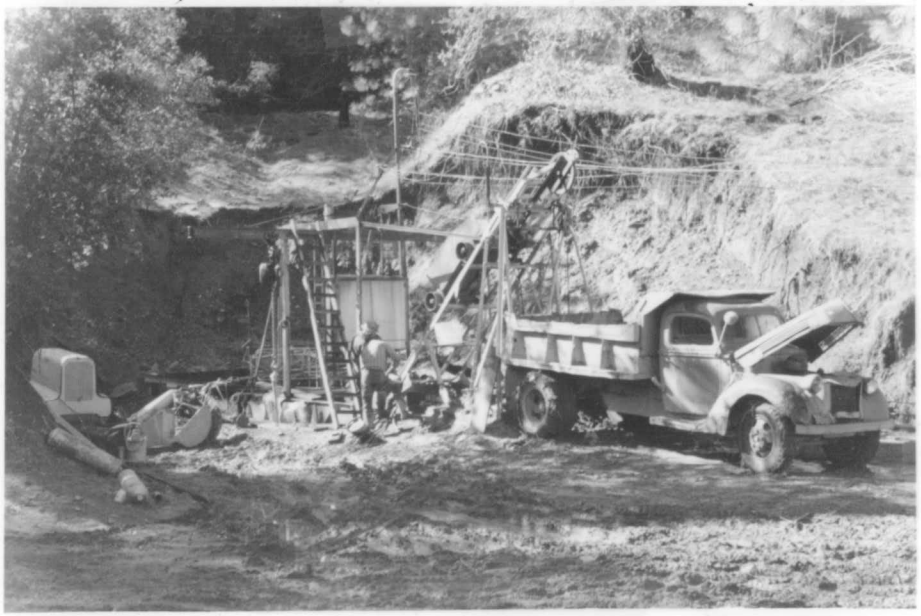


TO BE MOVED TO SHAFT NO. 3

Inside OF Mill Building 1965

Pump House Mill Building, Hoist House 1967





Shaft No3 Power Panal Car & Head Frame 1967

Head Frame To Be Replaced

HUNTINGTON & ASSOCIATES • STRUCTURAL ENGINEERS • BUILDERS

2205 MAC ARTHUR BOULEVARD, OAKLAND 2, CALIFORNIA - AN 1-1483

BUCHANAN MINE TRACING

DRAWN	DATE
E.M. HANCOCK	3/26/59
CHECKED	DATE
JOB NO.	SHEET OF