MME Form 9
Rev. Nov. 65

UNITED STATES
DEPARTMENT OF THE INTERIOR
Geological Survey

OFFICIAL DOCKET FILE

Contract No. 2286 Docket No. 6772

Application
- [ ] Denied
- [ ] Withdrawn

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

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

Folder No. 1:

Left Side

- [ ] Royalty Audits
- [ ] Certification of Discovery
- [x] Closing Letter
- [x] Cost Audits December 1970
- [x] Termination ~~Notice or~~ Agreement eff.7/25/70
- [ ] Recision Notice
- [ ] Assignment of Contract
- [ ] Contract Amendments
- [x] Contract with all exhibits and annexes 6/25/69
- [x] Owner's Consent to Lien and Subordination Agreement
- [x] Application and Attachments

Right Side

- [ ] Project Summary (final)
- [ ] Work Completed Analysis (final)
- All other material filed in chronological order including the following reports if checked:
- [ ] Field Team Semiannual Report for Certified Project
- [x] Final Field Team Report (Tab)
- [x] Operator's Final Report (Tab) 2/n/71
- [ ] Interim Field Team Reports
- [ ] Operator's monthly reports and all attachments
- [x] On-site Exam. Report (Tab) 5/29/69
- [ ] Settlement Sheets
- [ ] Drill Logs

Additional Folders:

Left Side

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

Right Side

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

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

Folders No._____: Settlement Sheets

Folders No._____: Drill Logs

Folders No._____: Royalty Material

72195-65

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
3/16/71	Emerick	120
		120
		130
		220

MAR 17 1971

Horse Heaven Mine
602 Tower Building
Seattle, Washington 98101

Re: OME-6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon
Contract 2286

Gentlemen:

Reference is made to your terminated exploration contract 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 subject to the contract or any future production therefrom. We, therefore, are closing our books and records on this contract. Your attention, however, 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
gsr

Harold Kirkemo
Chief, Office of
Minerals Exploration

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

BSLong/1 3/17/71

I-C-DC-OME-21-71

Docket copy

UNITED STATES
DEPARTMENT OF THE INTERIOR

Office of Survey and Review

Audit Operations

Report of Review-Contract 2286
Docket No. OME 6772 (Mercury)
Horse Heaven Mine (Operator)
Jefferson County, Oregon

Washington, D.C.
December 1970

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HK	1	20
WE		~~20~~

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

JAN 11 1971

Memorandum

To: Director, Geological Survey

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

Subject: Review of Contract 2286
Docket No. OME 6772 (Mercury)
Horse Heaven Mine (Operator)
Jefferson County, Oregon

As requested by the Chief, Office of Minerals Exploration, we made a cost review of Contract 2286. 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 Mineral Exploration (OME) pertaining to the mineral exploration Contract 2286 with Horse Heaven Mine (Operator) and an examination of the related disbursement records in the Branch of Budget and Finance, Administrative Division, Geological Survey. The review was made during December 1970 at Washington, D.C.

The contract was awarded July 25, 1969, for $24,000, the total estimated cost of the project, with OME participation on a 75 percent basis or not in excess of $18,000.

The Operator was to explore by trenching, shaft sinking, drifting, and long-hole drilling for mercury-bearing ore bodies occurring in brecciated rocks and clays of the Clarno formation of Eocene age which underlie the post-Clarno soils. The work was to be completed in two stages with the approval of Stage II based upon the results of Stage I. Stage I consisted of bulldozing five trenches and then backfilling after all the trenches had been mapped and sampled for mercury. Stage II was to continue the work by sinking an inclined shaft to further test the extent of mineralization.

Repayment of disbursed Federal funds plus simple interest at 8½ 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, in the event a certification of possible production is issued by OME, for a period of 10 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.

Work on the contract was to begin on or before November 1, 1969, and was to be completed within 12 months from the date of the contract or by July 25, 1970.

Assays from samples taken from the trenches failed to show any mineralization of economic value, therefore, the work proposed under Stage II of the contract was not undertaken. The contract was terminated effective July 25, 1970, and the Government is to contribute only as to the allowable costs incurred prior to October 31, 1969.

The units of work authorized and approved under Contract 2286 are summarized on Exhibit I. We believe that the claimed and accepted costs incurred from July 25 to October 31, 1969, of $2,580 and the OME participation on a 75 percent basis of $1,935 were proper under the terms of the contract.

C. D. Barr
Regional Director

EXHIBIT I

Summary of Contract Terms, Accepted Costs, and Unexpended Balance

	Authorized Amounts	Accepted Costs	Unexpended Balance
Fixed Unit Costs 1/			
Stage I			
Bulldozing & backfilling trenches 100 hrs @ $15.00/hour	$ 1,500	$1,365	$ 135
Drilling & blasting bedrock in trenches as required, incl. labor, equipment rental and supplies 24 hrs @ $7.50/hour	180	135	45
1 Supervisor-engineer 1 month @ $800.00/month	800	800	-
1 Outside consultant, incl. per diem and travel 2 days @ $100.00/day	200	200	-
Office expense 1 month @ $50.00/month	50	50	-
Assaying 20 samples for mercury @ $6.00/sample	120	30	90
Total Cost - Stage I	2,850	2,580	270
Stage II			
Total Cost - Stage II 2/	21,150	-	21,150
Total Cost of Project	24,000	2,580	21,420
Government Participation at 75%	18,000	1,935 3/	16,065

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

2/ Stage II costs are not itemized because the contract was terminated.

3/ Reimbursement claimed $1,935, paid $1,735; $200 withheld pending receipt of Operator's final report.

Governmen[illegible] copy

EXPLORATION CONTRACT
HORSE HEAVEN MINE
OME-6772

Termination Agreement

It is agreed this 23rd day of October, 1970, between the United States of America, acting through the Department of the Interior, U. S. Geological Survey, hereinafter called the "Government," and Horse Heaven Mine, hereinafter called the "Operator," parties to that certain Exploration Contract No. 2286 (OME-6772), dated July 25, 1969, hereinafter called the "Contract" that:

1. Effective July 25, 1970, the Contract and all obligations of the parties thereunder, except as otherwise herein expressly provided, shall be and are hereby terminated.

2. The Government shall contribute only to the allowable costs incurred prior to October 31, 1969.

3. The Operator shall promptly perform all winding-up and settlement actions provided for in the Contract, including furnishing to the Government three copies of a final report (in addition to the final monthly report) which 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 related costs thereof.

4. 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.

5. 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 otherwise provided in this termination agreement.

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

THE UNITED STATES OF AMERICA

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

HORSE HEAVEN MINE

By Martin Jaus

Title Partner

Martin
Michael
Emerick
Sisbarro

Extra copy

EXPLORATION CONTRACT
HORSE HEAVEN MINE
OME-6772

Termination Agreement

It is agreed this 1st day of October, 1970, between the United States of America, acting through the Department of the Interior, U. S. Geological Survey, hereinafter called the "Government," and Horse Heaven Mine, hereinafter called the "Operator," parties to that certain Exploration Contract No. 2236 (OME-6772), dated July 25, 1969, hereinafter called the "Contract" that:

1. Effective October 31, 1969, the Contract and all obligations of the parties thereunder, except as otherwise herein expressly provided, shall be and are hereby terminated.

2. The Government shall contribute only to the allowable costs incurred prior to October 31, 1969.

3. The Operator shall promptly perform all winding-up and settlement actions provided for in the Contract, including furnishing to the Government three copies of a final report (in addition to the final monthly report) which 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 related costs thereof.

Vol

4. 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.

5. 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 otherwise provided in this termination agreement.

IN WITNESS WHEREOF, these parties have executed this agreement

as of the day and year first above written.

THE UNITED STATES OF AMERICA

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

HORSE HEAVEN MINE

By_____

Title_____

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
9/18/70	Emerick	120
9/18/70	Kirkham	120
		220

September 18, 1970

Memorandum

To: The File

From: William L. Emerick
Office of Minerals Exploration

Subject: OME-6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon
Contract 2286

Justification for Termination Agreement

The purpose of the project was to explore by trenching, shaft sinking, drifting, and long-hole drilling for mercury-bearing ore bodies occurring in brecciated rocks and clays in an Eocene formation. The work was divided into two stages. Stage I consisted of bulldozing and backfilling 5 trenches and Stage II approval depended upon the results of Stage I. Total estimated cost of the work was $24,000.

Bulldozer trenching and backfilling was completed in October 1969 under Stage I of the contract. Assays from samples taken in the trenches failed to show any mineralization of economic value, therefore, the OME work of Stage II under the contract would not be warranted. The Field Officer, Region I, advised the Operator during an interim inspection on September 8, 1969, that work under Stage II of the contract would probably not be approved if the trenching failed to find extensions of the cinnabar found in the discovery or west pit.

Inasmuch as the conditions for Stage II work under the contract were not obtained under the Stage I work, termination of the contract appears justified.

William L. Emerick

William L. Emerick

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

WLEmerick/bsl 9/18/70

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-6772	Mercury	2286	Jefferson	Oregon

It is agreed JUL 25 1969 (Date), between the United States of America, acting through the Department of the Interior, U. S. Geological Survey, hereinafter called the "Government," and

Horse Heaven Mine, a partnership

whose mailing address is 602 Tower Building, Seattle, Washington 98101, 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 NOV 1 1969 (Date), and, subject to the provisions of Article 7 and Exhibit A, shall complete the work within 12 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 $24,000.00. The Government will contribute ~~50~~ 75 percent of the total fixed unit costs of the work performed, not in excess of $18,000.00 in accordance with the provisions of Articles 4 and 5.

(c) Interest computation.--Simple interest at the rate of 8½ 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.

EXPLORATION CONTRACT
HORSE HEAVEN MINE
OME-6772

ANNEX I

The land including all rights pertaining thereto, referred to in Article 2 of the contract consists of the E1/2NW1/4 and NE1/4, sec. 12, T. 10 S., R. 18 E., WB&M, Jefferson County, Oregon. The tract of land is shown outlined in green on Figure 1 entitled, "Property map, Horse Heaven Mine, Jefferson County, Oregon," attached and made part hereof.

The Operator is in possession of the land by virtue of an Assignment of Lease dated February 3, 1969, from Humbolt Metals Company, lessees under a Lease, as amended, executed January 23, 1967, by the owner, Cordero Mining Company.

Lien and Subordination Agreements executed August 6, 1968, by the property owner, Cordero Mining Company, is attached and made a part hereof.

MME Form 52
Jan. 1959

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

FOR GOVERNMENT USE ONLY
Operator
Docket No. OME –
Contract No. 14-23-090 – 2286
Contract Date JUL 25 1969

LIEN AND SUBORDINATION AGREEMENTS 1/

To the United States of America:

That certain land in the County of JEFFERSON, State of OREGON,

described as follows: 2/ The East ½ of NW ¼ of Section 12 and the NE ¼ of Section 12, situated in Township 10 South, Range 18 E. W. M.,

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

HORSE HEAVEN MINE 3/

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

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

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

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

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

None

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

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

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

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

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

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

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

Dated this 6th day of August, 1968.

_____ (Street)
_____ (City & State)
_____ (Seal)

_____ (Street)
_____ (City & State)
_____ (Seal)

_____ (Street)
_____ (City & State)
_____ (Seal)

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_____ (Seal)

_____ (Street)
_____ (City & State)
_____ (Seal)

_____ (Street)
_____ (City & State)
_____ (Seal)

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

x J. Eldon Gilbert
(Corporate Seal)

EXPLORATION CONTRACT
HORSE HEAVEN MINE
OME-6772

EXHIBIT A

The purpose of this project is to explore by trenching, shaft sinking, drifting, and long-hole drilling for mercury-bearing ore bodies occurring in brecciated rocks and clays of the Clarno formation of Eocene age which underlie the post-Clarno soils.

General Provisions

A bulldozer no smaller than an International TD-14A or equivalent unit of any other make shall be used for trenching and backfilling.

The inclined shaft shall be not less than 4 by 6 feet in the clear of timber and shall be timbered as necessary. Shaft timber shall be of not less than 6- by 6-inch or equivalent round timber. Suitable ladders and rail shall be installed for the full length of the shaft.

All drifts shall be not less than 5 by 7 feet in cross section and shall be timbered as necessary using standard 8- by 8-inch drift sets or equivalent round timber.

Mine rails shall be not less than 12-pound size, air lines not less than 2-inch diameter, water lines not less than 1/2-inch in diameter, and vent lines not less than 8-inch diameter.

All significantly mineralized areas exposed by the trenching and by underground exploratory workings shall be sampled. A representative bulk sample shall be collected from each round broken in mineralized rock. Channel samples shall be cut normal to the trends of the deposit at intervals of not more than 5 feet. Significantly mineralized cuttings from the long-holes shall be sampled, and no individual sample shall represent more than 5 linear feet of hole.

All samples, from whatever source, shall be split as necessary and one split assayed for mercury. The Operator

shall store one split of each sample in a suitable container properly identified as to source and location for Government inspection and possible use. With prior Government approval, the Operator may dispose of the stored samples.

True copies of assay certificates and maps or sketches showing the work completed, the location, width, and assay value of samples, and the geological formations and structures traversed by the workings shall be furnished monthly to the Government.

No work under this contract shall be performed within 100 feet of the outer boundary of the project area.

The Operator shall provide such supervision, labor, and technical services 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.

The work shall be divided into two stages. The Operator shall complete all of Stage I and as much of Stage II as is authorized in advance by the Government and confirmed in writing. Approval of Stage II shall depend upon the results obtained in Stage I.

Description of the Work

Stage I

The work shall consist of bulldozing and backfilling 5 trenches. Each trench shall be approximately 100 feet long and deep enough to cut through at least the upper part of the clays of the post-Clarno soil for sampling purposes, but not exceeding a depth of five feet into the clays. Bedrock above the clays shall be broken by drilling and blasting when necessary.

All trenches shall be mapped and sampled, and with Government approval, backfilled to the level of the original surface.

The approximate locations of the trenches are shown on Figure 2 entitled, "Proposed Stage I exploration, Horse Heaven Mine, Jefferson County, Oregon," attached and made part hereof.

Stage II

From a prepared site determined after careful study of Stage I results, an inclined shaft shall be sunk approximately 110 feet on the dip of the mineralized zone.

At a point above the bottom of the shaft a station shall be established from which drifts shall be driven along the mineralized structure for not more than an aggregate of 175 feet.

To further test the extent of mineralization, percussion long-holes shall be drilled into the walls of the exploratory drifts from sites selected by the Operator. The long-holes shall be spaced at intervals of not less than 10 feet and the aggregate footage of all holes drilled shall not exceed 900 feet.

Estimated Cost of the Work

Stage I

Fixed Unit Costs 1/

Bulldozing and backfilling trenches, 100 hours @ $15.00/hour	$1,500.00
Drilling and blasting bedrock in trenches, as required, including labor, equipment rental, and supplies, 24 hours @ $7.50/hour	180.00
1-Supervisor -engineer 1 month @ $800.00/month	800.00
1-Outside consultant, including per diem and travel 2 days @ $100.00/day	200.00
Office expenses, 1 month @ $50.00/month	50.00

Assaying, 20 samples for mercury @ $6.00/sample	$ 120.00	
Total Estimated Costs, Stage I		$2,850.00

Stage II

Fixed Unit Costs [1/]

Construct headframe, including labor, materials, and supplies	$1,000.00 [2/]
Construct 8' x 12' frame tool shed	250.00 [2/]
Install water and electric power lines to shaft site	500.00 [2/]
Shaft sinking, 110 feet @ $72.00/foot	7,920.00
Timbering shaft, 100 feet @ $25.00/foot	2,500.00
Establish shaft station, including timbering as necessary	175.00 [2/]
Drifting, 175 feet @ $35.00/foot	6,125.00
Timbering drifts, 75 feet @ $12.00/foot	900.00
Long-hole drilling, 900 feet @ $1.00/foot	900.00
Assaying, 30 samples for mercury @ $6.00/sample	180.00

1-Outside consultant, 4 days @ $100.00/day, including per diem and travel	$ 400.00	
Office expenses, 6 months @ $50.00/month	300.00	
Total Estimated Costs, Stage II		$21,150.00

SUMMARY

Total Estimated Costs of Stage I	$ 2,850.00
Total Estimated Costs of Stage II	$21,150.00
Total Estimated Costs of Project	$24,000.00
Government Participation @ 75%	$18,000.00

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

2/ The completed job is the unit of work.

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.'"

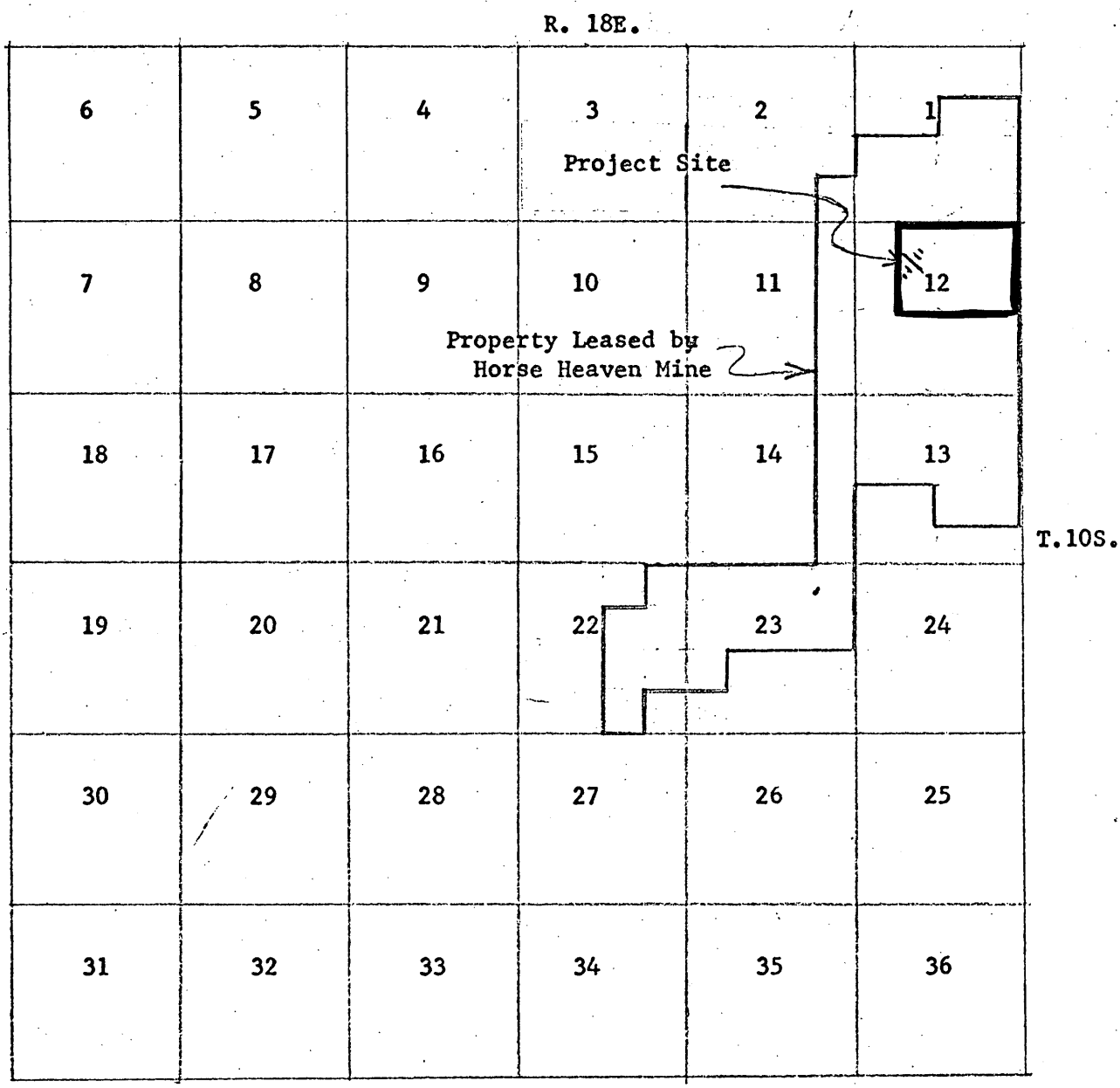


Figure 1. Property map, Horse Heaven Mine, Jefferson County, Oregon

E½NW¼

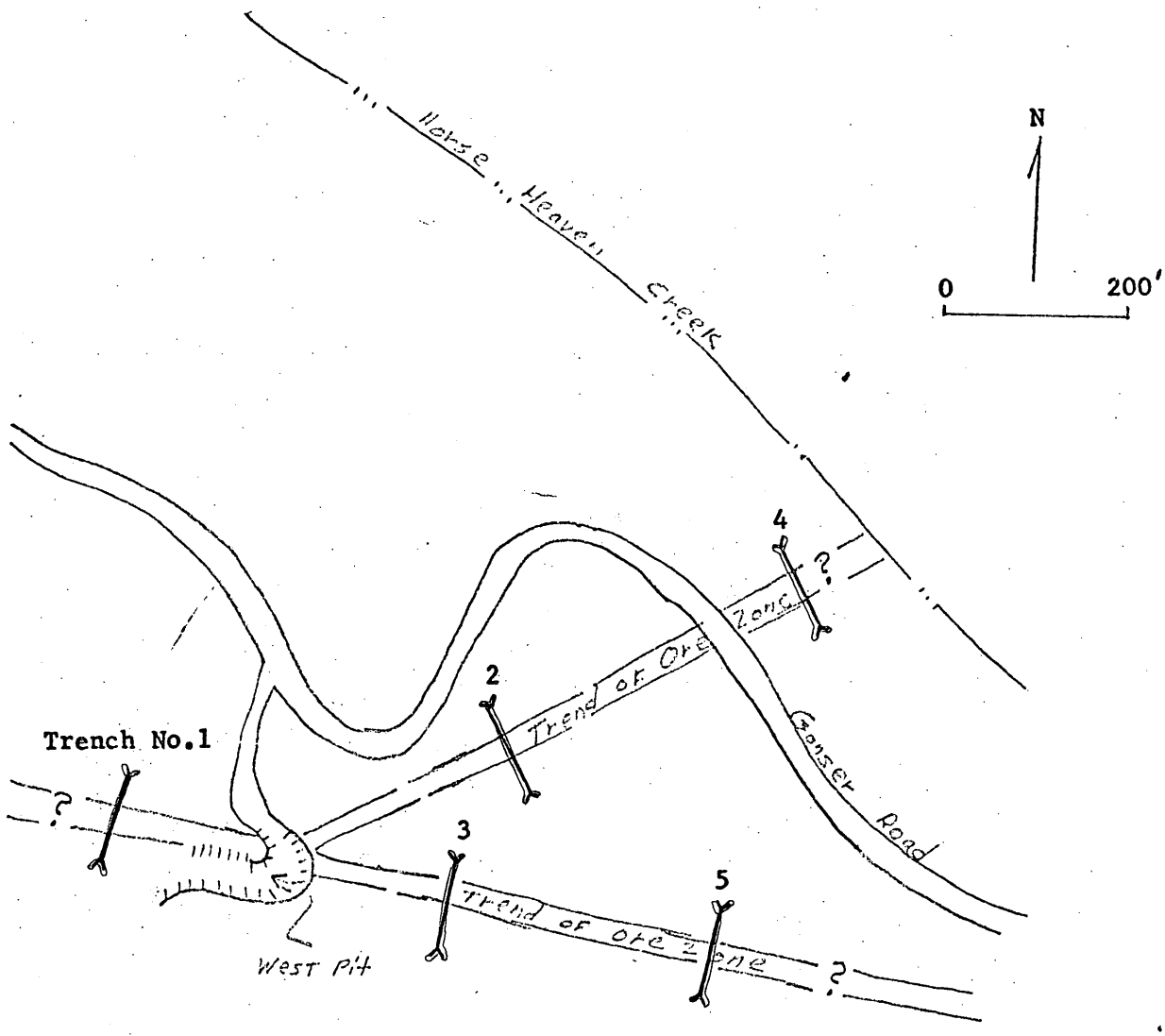


Figure 2. Proposed Stage I exploration, Horse Heaven Mine, Jefferson County, Oregon

REFERENCE SLIP

2-59 OFFICE OF MINERALS EXPLORATION

TO:	DATE	INITIALS
1. Chief, OME	7/7/69	
2. Re: OME-6772 (Mercury) Horse Heaven Mine		
3. Horse Heaven West Property Jefferson County, Oregon		
4.		
5. Willard P. Puffett WPP		
FROM: Field Officer, Region 1		

FOR: Check items for action desired

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

REMARKS:

Enclosed are the letter of transmittal and "true" copy of notice to Cordero Mining Company from Albert M. Franco stating that Humboldt Metals Company elects to proceed with dev. and production from Horse Heaven property. This in effect extends their lease for the life of the mine.

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

FRANCO, ASIA, BENSUSSEN & COE
ATTORNEYS AT LAW
806 TOWER BUILDING
SEATTLE, WASHINGTON 98101
MA 3-8082 · MA 3-8088

ALBERT M. FRANCO
BENJAMIN S. ASIA
EDWARD M. BENSUSSEN
HAROLD S. COE

July 2, 1969

OFFICIAL
COPY
O. M. E.
RECEIVED
JUL 11 1969

INITIALS	CODE
	130
	120
	120

[illegible]
[illegible]
[illegible]
[illegible]
The Interior
[illegible]
[illegible]
[illegible]

[illegible] Secretary
[illegible] Mine
[illegible] Silver Lost Property
[illegible] County, Oregon

Dear Mr. [illegible]:

Enclosed herewith are three "true copies" of "Election to proceed with development and production" from the lessee to the lessor, Cordero Mining Co., dated June 25, 1967. There is considerable additional correspondence relating to the time for commencement of payment of minimum $[illegible] per month royalty, which I will [illegible] if you wish [illegible], the [illegible] the lease [illegible] and in [illegible].

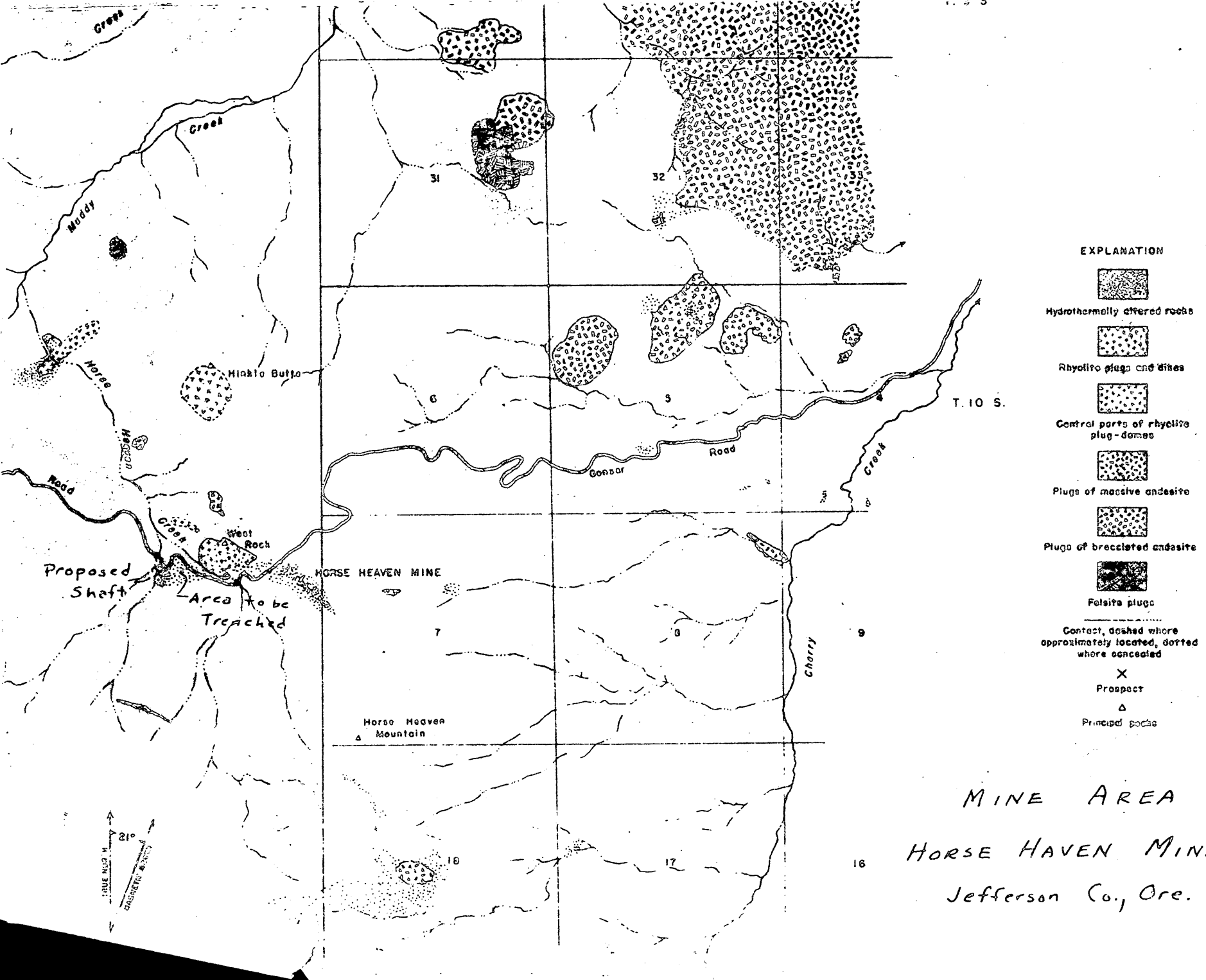
Sincerely,

[illegible] M. [illegible]

AMF:[illegible]
Encls.

046488

RECEIVED
U.S. GEOLOGICAL SURVEY
JUL 10 8 38 AM '69
BUDGET & FINANCE



MINE AREA

HORSE HAVEN MINE

Jefferson Co., Ore.

ARTICLE 14. Changes and added provisions.--

Executed in quintuplicate the day and year first above written.

HORSE HEAVEN MINE
(Operator)

By Milton B. Rowman

Title Partner

THE UNITED STATES OF AMERICA

By Arthur A. Baker

Acting Director, U.S. Geological Survey

Long
App'd. Sol. Off.
E. Peterson
Spokane
D. Peterson

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]

LOCATION MAP
HORSE HAVEN MINE
Jefferson Co., Ore.

Figure C

RECEIVED
JUL 7 1969
O.M.E.
WASH

June 23, 1967

Cordero Mining Company
151 University Avenue
Palo Alto, California

RE: Horseheaven Mine - Jefferson County, Oregon

Gentlemen:

Reference is hereby made to leasehold of January 23, 1967, between Cordero Mining Company, as Lessor, and Humboldt Metals Company, as Lessee, covering the attached legally described real property in Jefferson County, State of Oregon:

You are hereby notified that pursuant to paragraphs 2, 4, and 5 of the said lease and any other applicable and appropriate paragraphs thereof, that Humboldt Metals Company, the Lessee, does hereby elect to proceed with development and production of minerals from the property, which is the subject matter of the lease.

You will be notified of the date of commencement of production for the purpose of payment of royalties.

If you have any questions or comments, you may feel free to communicate with me.

Very truly yours,

ALBERT M. FRANCO

AMF:bb
Attachment
bcc: Messrs. Reuss, Pine and Whiting

July 2, 1969
Certified true copy —
Albert M. Franco,
Attorney at Law
602 Tower Bldg.
Seattle, Wash.

MME FORM 6 REFERENCE SLIP
REV -59 OFFICE OF MINERALS EXPLORATI

TO: Chief, OME

	DATE	INITIALS
1.	7/2/69	
2.		
3.		
4.		
5. Willard P. Puffett WPP		

Re: OME-6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon

OFFICIAL COPY
O. M. E.
RECEIVED
JUL 7 1969

INITIALS	CODE
	130
Gel	120 M
HK	120
	130 P

FROM: Fld. Officer, OME, Region I

FOR: Check items for action desired

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

REMARKS:
Attached are 3 bids which were the subject of my conversation with Ed Peterson this a.m.

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

STATEMENT

IN ACCOUNT WITH

LOUIS KOWOLOWSKI

GENERAL CONTRACTOR

PHONE 2185 BOX 26

MADRAS, OREGON April 30 1969

Hope-Haven Mine
Ashwood, Oregon

Re- O.M.E. 6772 (Mercury)

Date		Amount	Total
	Proposed Rental on Joy 105 Compressor with Hose, Hammer Drill Steel & Bits. $200.00/Month.		
	All lost, or worn Bits & Steel Will be Charged for extra.		
	Madras Redi-Mix By Louis Kowolowski		

RECEIVED
MAY 1 1969
U.S.G.S.
SPOKANE, WASH.

RECEIVED
MAY 1
U.S.G.S.
SPOKANE, WASH.

RECEIVED
MAY 1 1969 WOP
U.S.G.S.
SPOKANE, WASH.

Ashwood, Oreg.
April 25, 1969

Mr Ray Whiting
Horse Heaven Mine
Ashwood, Oreg,

Dear Sir:

In regard to OME 6772 I am submitting a bid of $15.00 PER HR for trenching at Horse Heaven Mine.

This work will be done with a T.D.14A tractor equipped with hydraulic dozer blade with ripper attachment.

Yours truly
Charles J Keegan
Ashwood, Ore

JES

P.S. This bid includes operator, all fuels & Lubricates, grease guns etc. And Keegan is responsible for break-downs.

Ray Whiting.

Jack Robinson & Sons, Inc.
EXCAVATION CONTRACTOR
EXCAVATION OF ALL KINDS
RT. 2, BOX ~~XXX~~ 35 PHONE 382-4681
BEND, OREGON 97701

RECEIVED
MAY 1 1969
U.S.G.S.
SPOKANE, WASH.
WPP

April 28, 1969

Mr. Ray Whiting
Horse Heaven Mine
Ashwood, Oregon 97711

Dear Mr. Whiting,

RE: O, M. E. Loan # 6772

We propose to do 100 hours of tractor work for Three Thousand Nine Hundred dollars ($3,900.00). The above price includes move in and out.

The tractor we would use would be a Euclid C-6, power shift with hydraulic rear mounted ripper and hydraulic dozer.

Thank you for the opportunity of submitting this bid.

Yours very truly,
Jack Robinson & Sons, Inc.

Eldon Robinson

Eldon Robinson

ER/ba

FORM 6 REFERENCE SLIP

/. 2-59 OFFICE OF MINERALS EXPLORATION

TO:		DATE	INITIALS
1.	Chief, OME	6/12/69	
2.	Re: OME-6772 (Mercury) Horse Heaven Mine		
3.	Horse HeavenWest Property Jefferson County, Oregon		
4.			
5.	Willard P. Puffett WPP		
FROM:	Fld. Officer, Reg. I		

FOR: Check items for action desired

____ Action ____ Reply for signature of _____

____ Approval ____ Investigate ____ Officials Copy

____ Comment ____ Recommendations ____ Signature

____ Conference ____ Rewrite ____ O. File E.

____ Instructions X Your information

RECEIVED

JUN 16 1969

REMARKS:

INITIALS	CODE
	130
Gol	120 M
AK	120
	120 P

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

Horse Heaven Mine
602 Tower Bldg.
Seattle, Wash. 98101

June 9, 1969

Office of Minerals Exploration
U.S. Court House, RM. 656
West 920 Riverside Ave.
Spokane, Wash. 99201

Re: OME-6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon.

Mr. Willard Puffett
Field Officer, O.M.E.

Dear Mr. Puffett;

This letter is persuant to our long distance phone conversation of two weeks back. The topic of the discussion was based on procedure of exploration, when and if a OME loan is granted, to the principals of the Horse Heaven Mine.

We the partners agreed to stand on our proposal, of limited trenching along strike length, with sinking in the immediate area of surface exposer, as proposed in loan application, Horse Heaven West Property.

We feel your proposal of extensive trenching, with then surface drilling, certainly has merit, however the cost would be quite costly. The program would have to be quite extensive and costly, to insure exposing enough ore, to then go ahead and sink. We feel that we would rather take our chance on the sinking program.

Our thinking is based on several observations. Number 1, a statement by C.N. Schuette, Quicksilver in Oregon, in his examination of the Horse Heaven property in 1938, page 91, "The outcrop is not prominent, though ore came to the surface in a very limited area, now marked by glory holes." The original outcrop consisted of approximately one ton of ore, and no more. It was mined out by Harry Hog and myself in 1933. Though the Horse Heaven Mine has certainly been a large producer, it certainly does not give that impression by surface trace of cinnabar or outcrops.

No 2: When you now look at the composite map of the entire Horsen Heaven workings, one gets the impression that following the small leads, led to all the mineable ore bodies. This was confirmed to me by Mr. Lewis the longtime resident engineer on my visit to the property in 1955. Mr. Clarence Mac Claine was on the property three weeks past, he was underground superintendent for Cordero, both at Horse Heaven, and the Nevada operation, and he is a firm believer of staying with leads, which direct you to the ore bodies.

No 3. The outcrop at Horse Heaven West has to date with rather a limited area of workings produced 17 bottles of quick. The last mining in the open pit workings, produced (6) bottles of quick. I have no reason to believe, it will produce (6) bottles, or hopefully more as has been the production from surface to present level.

No 4: I feel the proposed site of the shaft is within range of exposing a good chance of connection between present outcrop, with a surface showing (300') to the East.

Mr Puffett, you brought up the subject of our limited mineable extention to the West. Our lease states we are protected by getting additional land, to cover and protect extended ore bodies. We would be glad to include the U.S. Government with that right.

I might add we certainly hope, that we will qualify for a OME loan. The same principals had a DMEA loan and preformed a contract well within the time limit, and well under the total amount of loan contract.

Enclosed in letter is a tape log: 1 Reels while retorting. The log represents last ore from pit.

Yours sincerely,

Ray P Mitchell

RECEIVED
JUN 12 1969
O. M. E.
SPOKANE, WASH.

Retort Log

8:00 A.M.
6:00 P.M
12:00 A.M
4:00 A.M. - 40#

Sept 3 / 68 Tues → 40#

5# curryover

Sept 4 / 68 - Wed

8:00 A.M.
12:00 P.M.
4:00 P.M. - 23#

→ 23#

8:00 P.M.
12:00 A.M.
4:00 A.M. - 25#

Sept. 5 / 68 Thurs → 9

8:00 AM
12:00 P.M
4:00 P.M - 38#

~~25#~~

→ 4 Tons Fri

~~16# curryover~~

~~54#~~

77# / 1st bottle

16# curryover

32

8:00 P.M.
12:00 A.M
4:00 A.M. - 25#

Sept 6 / 68 Fri ~~Sat.~~ →

48#
25
73#
4

8:00 A.M.
12:00 P.M.
4:00 P.M. - 29#

77# 2nd bottle

8:00 P.M.
12:00 A.M.
4:00 A.M - 25#

Sept 7 / 68 - ~~Sat.~~

25# curryover
25#

Retort Log

8:00 A.M. 12:00 P.M. 4:00 P.M.	22# 4 days 1 charge	50# 26 76# #3 Bottle
8:00 P.M. 12:00 A.M. 4:00 A.M.	Sept 8/68-Sun. 25#	25#
8:00 A.M. 12:00 P.M. 4:00 P.M.	25# 5 days 1 charge	25#
8:00 P.M. 12:00 A.M. 4:00 A.M.	Sept 9/68-Mon 28#	24 76# #4 Bottle
8:00 A.M. 12:00 P.M. 4:00 P.M.	26# 6 days - 1 charge 12 Tons 650#	26#
8:00 P.M. 12:00 A.M. 4:00 A.M.	Sept. 10/68-Tues. 32#	32#
8:00 A.M. 12:00 P.M. 4:00 P.M.	38# 7 days - 1 charge 14 Tons - 650#	58 18 76# #5 ~~#~~
8:00 P.M. 12:00 A.M. 4:00 A.M.	Sept 11/68 Wed 16#	20# carry over 16#
8:00 A.M. 12:00 P.M. 4:00 P.M.	7 8 days - 1 charge	7

Retort Log

8:00 P.M.	Sept 12/68 –	43#
12:00 A.M.		23#
~~4:00 A.M.~~		

66#, #6

Ray Whitney

one charge is approx 650# raw ore.

(6) charges in (24 hrs)

IN REPLY REFER TO

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
U.S. Court House, Rm. 656
West 920 Riverside Avenue
Spokane, Washington 99201
February 10, 1969

OFFICIAL COPY
O. M. E.
RECEIVED
FEB 12 1969
INITIALS | CODE

Memorandum

To: Chief, Office of Minerals Exploration

From: Willard P. Puffett, Geologist

Subject: Transmittal of Application for Assistance (Mercury)
Horse Heaven Mine
Horse Heaven West
Jefferson County, Oregon

Enclosed is the application from Horse Heaven Mine, a partnership, for OME assistance in exploring further the small cinnabar showing that is about a half of mile west of the formerly productive Horse Heaven mine, Jefferson County, Oregon. No estimate of mercury content of the new showing is given, but surface work has resulted in the production of 17 flasks of mercury. The new showing is referred in the application as Horse Heaven West.

Missing in the application are the letters from the applicant to his banks requesting a loan and the location of the property boundaries relative to the proposed new work. Section 12, where the new work is planned, is actually in an unsurveyed township in Jefferson County, Oregon, and it will probably be necessary to make a field examination to determine where the proposed work is in regard to the property boundaries.

Willard P Puffett
Willard P. Puffett

Enclosures

HORSE HEAVEN MINE

602 Tower Building
Seattle, Washington 98101

February 7, 1969

U.S. Department of the Interior,
Geological Survey,
Office of Minerals Exploration
Spokane, Washington.

Re: Horse Heaven Mine

Gentlemen:

Herewith, in duplicate, find O.M.E. Loan application for Horse Heaven Mine, Jefferson County, Oregon, (Mercury), with accompanying data and documents.

Your early attention to this application will be much appreciated.

Very truly yours,

HORSE HEAVEN MINE

By Ray R Whiting Jr.
Ray R. Whiting, Jr.

RRW UN

RECEIVED
FEB 10 1969
O.M.E.
SPOKANE, WASH.

OFFICIAL COPY
MME Form 40
Jan. 65
O. M. E.
RECEIVED
FEB 12 1969
INITIALS | CODE

RECEIVED
FEB 10 1969
OTALCO
SPOKANE, WASH.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

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.)*

HORSE HEAVEN MINE
602 Tower Building
Seattle, Washington 98101

APPLICANT DO NOT USE THIS BLOCK

DOCKET NUMBER: 6772

DATE RECEIVED: 2/12/69

REGION: I

DIVISION CODE:

BUSINESS ORGANIZATION *(Check one)*

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

STATE IN WHICH FIRM IS ORGANIZED

LIST CORPORATE OFFICERS OR PARTNERS HERE, IF APPLICABLE

NAME	ADDRESS	TITLE
Charles S. Fine	340 Stimson Medical Center Seattle, Wash. 98101	Partner
Albert M . Franco	602 Tower Building, Seattle, Wash. 98101	Partner
Milton P. Roumm and Ruth Roumm	9838 N.E. 21st, Bellevue, Wash. 98004	Partners
Ray R. Whiting, Jr.	Box 3, Ashwood, Oregon	Partner

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

ESTIMATED COST OF PROJECT: $ 38,055.20

PROPERTY NAME	LOCATION COUNTY	STATE
Horse Heaven Mine	Jefferson County	Oregon

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 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.

Feb. 7/69
DATED

Ray R Whiting Jr
BY (Signature)

Partner
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).]

1. Financial Eligiblity.

   (a) Attached are copies of requests to obtain credit, along with replies received during the last 90 days.

   (b) None

   (c) Money and equipment.

2. Applicants' Rights in Land.

   (a) Humboldt Metals has a lease and option on the land and mineral rights. A copy of which is attached.

   There are no liens, mortgages or other encumbrances on the land.

   (b) The legal description of the land upon which we wish to explore is as follows:

   The East 1/2 of the NW 1/4 of Section 12 and the NE 1/4 of Section 12, Township 10 South, Range 18, E. W. M., Jefferson County, Oregon.

   The land which should not be subject to government and liens is as follows:

   Lands other than those shown in 2 (b) on lease between Cordero Mining Company and Humboldt Metals Company.

   (c) Attached are five copies of Lien and Subordination Agreements on MME Form 52 covering the land included in the proposed exploration program.

3. Physical Description:

   (a) The Horse Heaven Mine and adjoining area have been described in detail in U.S.G.S. Bulletin 969-E, Quicksilver Deposits of the Horse Heaven Mining District, Oregon by A. C. Waters. A summary of the geology and history is also given in Quicksilver in Oregon by Howard C. Brooks, Bulletin 55, State of Oregon, Dept. of Geology and Mineral Industries pp. 117-121, 1963.

   A new open pit, which is about one-half mile west of the Horse Heaven Mine workings, is the site of a recent discovery where the principal amount of exploration work is proposed. A map (Figure A) is attached showing the geology encountered in the pit area along with the proposed exploration work.

3. (b) Ray Whiting, Jr., one of the partners, discovered the mineralization in both the present open pit area and the original discovery at the Horse Heaven Mine.

(c) Past production - Production from the Horse Heaven Mine through 1958 was 17,214 flasks. Mine was inactive from 1958 until 1967. During 1967 and 1968, 17 flasks have been produced from the new discovery which is about 1/2 mile west of the main Horse Heaven Mine workings.

(d) Ore Reserves - Known ore reserves are nil. All known reserves had been mined out when the Horse Heaven Mine was closed down in 1958 (Price $229.00 per flask). However, there are a number of areas in the Horse Heaven Mine which warrant exploration along with the new discovery (Horse Heaven West). The new discovery offers excellent possibilities for the development of high grade ore.

(e) Geologic Features - The Horse Heaven Mine has been described in detail by the Geological Survey in their Bulletin 969-E by A.C. Waters.

Horse Heaven West is a new discovery made in 1967 by Ray Whiting, Jr., who also was the original discoverer of the Horse Heaven Mine back in 1933. At the new discovery, cinnabar occurs as disseminations and veinlets in Clarno clays along, and near, a fault which trends about N 80 W and dips about 40 degrees south. Movement along the fault is unknown, but it is in the order of at least 10's of feet, as evidenced by the clays exposed beneath rhyolite in the west side of the open pit (See Figure A).

Along at least part of the fault an andesitic dike (in places up to several feet in thickness) has been intruded. Cinnabar has been found disseminated in the hard dike rock, although in the exploration work carried out to date no significant concentrations have been found, as might possibly be expected, along the dike.

The fault has very definitely been a controlling structural feature for the mineralization, as evidenced by the fact that practically all the mineralization is located in the footwall of the fault. Mineralization extends out as far as 30 feet in the footwall, mainly in veinlets that are essentially vertical and which are at an angle to the fault. Cinnabar mineralization appears to be more intense near the fault.

The clays in which the cinnabar occurs is part of the old weathered erosion surface on top of the Clarno formation of Eocene age. These clays were developed as a weathered erosion surface, and now mark the unconformity between the Clarno and post-Clarno volcanics. These same clays were a controlling factor in the mineralization in the main workings at the Horse Heaven Mine.

(f) Ore - The mineralized structure upon which exploration is proposed in the west pit has already produced 17 flasks of mercury. This production came from narrow stringers and disseminated cinnabar in clay. These clays represent the old erosion surface on top of the Clarno formation and are reported to vary between a few inches and 100 feet or more. (Waters, p. 118) in thickness. The clays in the Horse Heaven Mine were not particularly a good host for mineralization, most of the cinnabar there occurring in autobrecciated rhyolite. Consequently, there would appear to be a good possibility that better mineralization will be encountered in a more receptive host rock at depth, along the fault zone which has apparently been the controlling structure for the mineralization in the clays.

The proposed exploration is directed toward exploring the mineralized zone at a depth of 100 feet. In addition, it is proposed to trench an area to the west of the pit area where high grade float cinnabar has been found.

(g) Geologic Reports - (1) Waters, A.C., Quicksilver Deposits of the Horse Heaven Mining District, Oregon, U.S.G.S. Bulletin 969-E, 140 pp. 1951 is the best reference. (Out of print, copies are not enclosed).

(2) Geological map of the west pit area is enclosed - Figure A (not to be returned)

(3) Map showing location of proposed bulldozer is enclosed - Figure B. (not to be returned).

4. <u>Accessibility of Property:</u>

(a) Ray Whiting (mail address - P.O. Box 3, Ashwood, Oregon) is living at the property and will be available to show the OME representative about the property. The property may be reached from Madras, Oregon, via Ashwood over county roads a total distance of 43 miles. See Figure C.

The nearest supply and shipping point is Madras, Oregon, 43 miles by road west of the mine.

7. Estimate of Costs. Although a detailed estimate of costs are given, the applicant would like a unit cost contract, due to the excellent possibility that some minable cinnabar will be encountered during the exploration work.

(a) Independent contracts - None

(b) Personal Services -

Number	Type	Days Wage *
1	Supervisor	$50
2	Miners	30
1	Hoist and/or surface man	25
1 p.t.	Geologic Consultant	150
1. p.t.	Accountant	50

* - Including taxes, industrial insurance and etc.

Above services and personnel are available in the area.

(c) Operating Materials and Supplies -

Shaft Sinking -		Cost Per Ft.
Vent tube	110' @ 1.25/ft.	1.25
Rail	110' 20# @ 15¢/#	2.05
Water Line	110' 1/2" @ 25¢/ft	.25
Air Line	110' 2" @ 65¢/ft	2.00
Powder	5# per foot in clay @ 30¢/# 10# per foot in solid @ 30¢ /# Avg. cost per ft.	2.25
Caps	22 per 5' @ 30¢ each plus lead wire	1.35
Supplies - Misc.	(including hose, fittings, hardware & etc.)	1.00
Tools, Misc.	(hand tools and etc. less than $50 each)	1.50
Fuel and power		5.00
Timber	Wall Plates 5' x 6' in clear 5.34 x 24 = 128' @ $125/m = $16.00 ÷ 5	3.20
	Posts 8" x 8" x 5' 4 ea. ÷5.34 x 20= 107 @ 125/M ÷ 5	2.68
	Logging 3" x 12" x 6' 240 @ 125/M ÷ 5	6.00

		Cost Per Ft.
Drifting -		
Vent tube	200' @ 1.25/ft.	1.25
Rail	200' 20# @ 15¢/#	2.05
Water line	175' @ 25¢/ft.	.22
Air Line	175' @ 65¢/ft.	.57
Drill Steel and bits		2.00
Powder	5# per ft. in clay @ 30¢/# 10# per foot in solid @ 30¢/# Avg. cost per ft.	2.25
Caps	22 per 5' @ 30¢ ea plus lead wire	1.35
Supplies, Misc.	(including hose, fittings, hardware & etc.)	1.00
Tools, misc.	(hand tools and etc. less than $50 each)	1.50
Fuel and power		5.00
Timber	Sets 5' x 7' in clear (8" x 8")	
	Caps, posts and sill 28' 149' @ $125 ÷ 5 =	3.72
	Lagging 3" x 12" 21 pcs. x 7' = 441' @ 125 ÷ 5	11.02

(d) Operating Equipment -

Equip. to be Purchased	Cost	Salvage Value	Direct Cost
Skip for shaft	$250.	-	$250.
Hoist, gas driven with 175' ¢ cable (used)	500.	150.	350.
Jackhammer w/ leg	800.	400.	400.
Fan w/ electric motor	350.	150.	200.
2 mine car used	300.	100.	200.

Equip. to be Rented -

Air Compressor - $200 per month for 6 mos.	1,200.00
Bulldozer - TD 14 (with operator) $20 per hr, 150 hrs.	3,000.00

Furnished by the Operator

Truck, pick up - $100.00 per month	600.00
Trailer (for living quarters) $100 per month	600.00
Back hoe, tractor mounted (w/operator) $15 per hr. 100 hrs.	1,500.00

	Total Cost
(e) Initial rehabilitation and Repairs -	
Repair water line from spring to camp and install storage tank, clean out and rehabilitate spring	500.00
(f) New buildings, fixtures, installations -	
Head frame with waste and/or one pocket, sheave wheel, collar set and hoise foundation	1,000.00
Electric power instalation from REA line to shaft	300.00
Water supply - From main water line at corral to shaft site (2000' - 1/2" plastic pipe)	200.00
Tool Shed at shaft 8' x 12' galvanized iron and/or plywood	250.00
(g) Miscellaneous -	
Assays - Mercury 30 ea @ 6.00	180.00

Because of the nature of the mineralization and the excellent probability of encountering cinnabar that would be economic to recover during the exploration work, it is requested that the contract be written on a unit cost basis. Summarizing the detailed data we estimate our unit costs to be as follows:

Items	Unit Cost	Total Cost
Bulldozer trenching		
Bulldozer (with operator) $20.00 per hr.	$20.00 hr. (150 hrs.)	$3,750.
Supervisor - $40.00 per day	$25.00 per hr. (150 hrs.)	
Backhoe Trenching		
Backhoe (w/ operator) $15.00 per hr	$15.00 hr.	
Supervisor ($40.00 per day)	$20.00 per hr. (100 hrs.)	2,000.
Shaft Sinking		
Labor - (based on 2 feet per day advance)		
2 miners 30	$45.00	
1 surface man 25 $955.22		
1 supervisor 40		
Operating Materials and Supplies	$17.19	

Operating Equipment (Pro-rated between shaft sinking and drifting)

	Unit Cost	Total Cost
Purchased	$4.53	
Rented or furnished by operator	7.73	
New building fixtures and etc.	5.01	
Estimated cost in untimbered ground	79.57	
10% contingency	7.96	
Total estimated per ft. cost untimbered ground	87.53	$9,628.30
110 feet @ $87.53		
Timber cost in shaft (where necessary)		
Sets, per foot	11.88	
Labor placing, per ft.	9.02	
Estimated cost of shaft timber	20.90	
10% contingency	2.09	
Total estimated per ft. cost for timber		$2,528.90
110 ft. @ $22.99		
Drifting		
Labor (based on 4 feet advance per day)		
2 miners		
1 surface man		
1 supervisor	23.75	
Operating Materials and Supplies	11.84	
Operating Equipment - Purchased	4.53	
Rented or furnished by Operator	7.73	
New building fixtures & etc.	5.01	
Estimated cost in untimbered grounds	52.86	
10% contingency	5.29	
Total estimated per ft. cost in timbered ground	58.15	
200' @ 58.15		$11,630.00
Timber cost in draft (where necessary)		
Sets and lagging per foot 14.74	14.74	
Labor placing sets 4.75	4.75	
Estimated cost of drift timber	19.49	
10 % contingency	1.95	
Total estimated per ft. costs drift timber	$21.44	
200 feet @ $21.44		4,288.00

		Unit Cost	Total Cost
Rehabilitate Water Supply			$500.00
Accountant	5 days @ $50.00		250.00
Geologic Consultant	12 days @ $150.00 per day		1,800.00
Assays	30 @ $6.00 each		180.00
Long hole drilling	100 feet @ $1.50 per foot		1,500.00
	Total estimated cost of Project		$38,055.20

5. Exploration Work:

(a) (1) Bulldozer trenching - It is proposed to do 150 hours of bulldozer work to determine the extensions of the mineralized fault exposed in the open pit; also to locate the source of the cinnabar discovered by panning about 400 feet northeast of the pit area (See Map B).

(2) Sink a 110 foot inclined (± 40° shaft on the mineralized structure exposed in the open pit. Draft a total of 200 feet on the structure at the 100 foot level. Shaft to be 5' x 6' in the clear, drifts to be 5' x 7' in the clear. (See attached Map A).

(3) Long hole drill from the 100 foot level and/or the shaft to determine the width of the mineralized zone. Location of holes to be determined as geological structure indicates and upon agreement between applicant and O.M.E. Total of long hole drilling 1,000 feet.

(b) Access road is not necessary.

(c) Work could be commenced within 30 days after a contract was executed. It is estimated that it would take nine months to complete the work as follows:

Item	Weeks
30 days to start	4
Bulldozing	4
Headframe Construction	2
Shaft - 2-1/2 feet per day	9
Drifting - 5 feet per day	8
Contingency (weather, etc.)	12

6. Experience -

Work will be under the direction supervision of Ray Whiting, Jr. who has years of operating experience in exploration work. He directed the exploration work (including work similar to that presently proposed) under DMEA Contract (Docket 3594) on the Indian Creek Mercury Prospect, Yakima County, Wash.

A geologist will be retained by the applicant to prepare the necessary reports and advise on the work.

PLEASE ADDRESS
REPLY TO
THE MANAGER

CANADIAN IMPERIAL BANK OF COMMERCE

P.O. BOX 100
SEATTLE 11, WASHINGTON

CABLE ADDRESS:
"CANBANK"

January 29, 1969

Horseheaven Mine
c/o Mr. Albert M. Franco
602 Tower Building
Seattle, Washington 98101

Gentlemen:

This letter will serve to confirm our oral advices that we have declined your request for a $50,000 loan for exploration and development purposes.

Yours very truly,

D. W. C. Rodgerson,
Assistant Manager

500 OLIVE WAY

Central Branch....P. O. BOX 40, SEATTLE, WASHINGTON 98111

January 21, 1969

Humboldt Metals Company
602 Tower Building
Seattle, Washington 98101

Humboldt Metals Company
d/b/a Horseheaven Mines

Gentlemen:

After due deliberation, our loan committee is unable to grant your request for a $50,000 capital loan for exploration and development of the Horseheaven Mine in Jefferson County, Oregon.

Capital loans for this purpose do not comply with our general lending practices. We regret being unable to assist you in this situation.

Sincerely,

J. A. Daly

J. A. Daly
Assistant Vice President

JAD:jb

NB of C

ASSIGNMENT OF LEASE

FOR VALUABLE CONSIDERATION, Humboldt Metals Company, a co-partnership, does hereby assign unto Ray R. Whiting, Jr., Albert M. Franco, Milton P. Roumm, Charles S. Fine, and Ruth J. Roumm, as their interest may appear, doing business as Horseheaven Mine, that certain lease, as amended, wherein Cordero Mining Company, a corporation, is Lessor, and these assignors are Lessees, of the following described property and mineral rights thereto in Jefferson County, Oregon:

> The N.E. 1/4 of the N. E. 1/4, and the South 1/2 of the N.E. 1/4, and the North 1/2 of the S.E. 1/4, and the S.W. 1/4 of the S.E. 1/4 of Section 22; the North 1/2 and the N.W. 1/4 of the S.W. 1/4 of Section 23; the East 1/2 of the East 1/2 of Section 14; the North 1/2 and the North 1/2 of the S.E. 1/4 of Section 13; all of Section 12; the East 1/2 of the East 1/2 of Section 11; the S.E. 1/4 of the S. E. 1/4 of Section 2; the South 1/2 of the N.E. 1/4, and the North 1/2 of the S. E. 1/4, and the South 1/2 of Section 1; and Lots 1 and 2 of Section 1; all of the foregoing situated in Township 10 South, Range 18, E. W. M., Jefferson County, Oregon.
>
> TOGETHER with all mineral rights thereto and minerals of any kind whatsoever lying beneath the surface of the foregoing property.

DATED this 3d day of FEBRUARY, 1969.

HUMBOLDT METALS COMPANY

By [illegible]

Albert M. Franco — Partner

Ray R. Whiting Jr. — Partner

Milton P. Roumm — Partner

Ruth J. Roumm — Partner

Partner

LEASE AMENDMENT

THAT CERTAIN LEASE from CORDERO MINING COMPANY, a corporation, to HUMBOLDT METALS COMPANY, a co-partnership, consisting of Ray R. Whiting, Jr., Albert M. Franco, Milton P. Roumm, and Charles S. Fine, and Ruth J. Roumm, executed by the Lessor on January 23, 1967 and by the Lessee on March 10, 1967 and March 18, 1967, and recorded March 19, 1967 in Jefferson County, Oregon, Deed Book 41, Page 155, on March 9, 1967, and in Jefferson County, Oregon, Deed Book 41, Page 205, on March 23, 1967, be and it hereby is amended so that the portion of the legal description contained therein relating to the property demised in Section 23, shall read and be corrected to read as follows:

> "The north 1/2 and the northwest 1/4 of the southwest 1/4 of Section 23."

Other than this amendment, the terms and provisions of the said lease shall remain unchanged.

DATED this 29th day of August, 1967.

CORDERO MINING COMPANY

By _____ Vice-President

HUMBOLDT METALS COMPANY

By _____ Partner

L E A S E

THIS INDENTURE made this ____ day of December, 1968, between CORDERO MINING COMPANY, a corporation, hereinafter referred to as "Lessor", and HUMBOLDT METALS COMPANY, a co-partnership, consisting of Ray R. Whiting, Jr., Albert M. France, Milton R. Roumm, Charles S. Fine, and Ruth J. Roumm, hereinafter referred to as "Lessee",

W I T N E S S E T H :

That the Lessor for and in consideration of the covenants and agreements hereinafter expressed to be kept and performed by the Lessee has leased, let, and demised and by these presents does lease, let and demised and by these presents does lease, let and demise unto the Lessee, the following described premises situate, lying and being in Jefferson County, State of Oregon, to-wit:

> The N.E. 1/4 of the N.E. 1/4, and the South 1/2 of the N.E. 1/4, and the North 1/2 of the S.E. 1/4, and the S.W. 1/4 of the S.E. 1/4 of Section 22; the North 1/2 of the N.W. 1/4 and the S.W. 1/4 of Section 23; the East 1/2 of the East 1/2 of Section 14; the North 1/2 and the North 1/2 of the S.E. 1/4 of Section 13; all of Section 12; the East 1/2 of the East 1/2 of Section 11; the S.E. 1/4 of the S.E. 1/4 of Section 2; the South 1/2 of the N.E. 1/4, and the North 1/2 of the S.E. 1/4, and the South 1/2 of the South 1/2 of Section 1; and Lots 1 and 2 of Section 1; all of the foregoing situated in Township 10 South, Range 18, E.W.M., Jefferson County, Oregon.
>
> TOGETHER with all mineral rights thereto and minerals of any kind whatsoever lying beneath the surface of the foregoing property, all under the following terms and conditions:

1. It is expressed to be the intention of the parties that the Lessee intends to do certain prospecting on a portion of the demised premises to the extent that the Lessee determines it is necessary and advisable for its purposes. It is further

expressed to be the intent of the parties that if the Lessee determines it wishes to proceed further and to employ a geologist for a geological examination of any findings, and if Lessee determines to proceed beyoind geological reports, to undertake development and production.

2. Any election by Lessee to proceed with development and production shall be made in writing within two (2) years from the date of this indenture. Commercial production, in the event the foregoing election is made, shall commence within three years from the date of this indenture. In lieu of a minimum production requirement, after the commencement of production Lessee's rights to maintain its leasehold may be held by payment to Lessor of a minimum monthly royalty of $300.00, payment of which shall commence thirty (30) days after production starts.

3. Lessor shall receive from production of minerals from the above-described property a sum equal to 10% of any monies received from the sale of such minerals by Lessee. The amount of royalties shall be determined by the sales records of the Lessee and royalty payments are to be scheduled monthly beginning thirty (30) days after the first shipment has been made or after the first settlement with the buyers of the said minerals. Royalties based on 10% of monies received by Lessees from production shall continue until Lessor has received from such royalties the total sum of $100,000 at which time the royalties shall cease and Lessor shall execute to Lessee a warranty deed conveying to the Lessee up to 50 acres, not necessarily contiguous, as selected by Lessee. In any event, any selection of the aforementioned facts made by Lessee shall be as reasonably needed for mining purposes in mine development, and shall not be selected without such reasonable need. Royalties shall continue thereafter from mineral sales from undeeded land, except that Lessee may select thereafter any additional 50 acres, which are to be contiguous to one or more other parcels previously deeded to Lessee, except for said additional parcel or

parcels reasonably needed for mining purposes and mine development, and which additional parcel or parcels of 50 acres shall be deeded for $50,000 in royalties paid by Lessee for each parcel.

4. The duration of this lease shall be for two years, unle-s prior thereto by notice given as hereinset forth, the Lessee elects to discontinue or to proceed with development and production. In the event the Lessee determines to proceed with development and production, the duration of the lease shall be for the term of the life of the mine or mines developed upon the property unless sooner forfeited by the Lessor in the manner hereinbefore provided. As to land deeded by Lessor to Lessee, the leasehold shall be deemed ended by virtue of Lessee's fee title, and the lease and royalty payments shall continue only as to undeeded land in the manner above provided.

5. Notice by Lessee to Lessor of election to proceed with development and production shall be given by depositing same in the regular mails of the United States addressed to Lessor at 151 University Avenue, Palo Alto, California.

6. Lessee agrees in consideration of the said demise that it will enter upon said mine or premises within a period of eight (8) months from the date of execution, in such area or areas upon the demised premises selected by Lessee, and will undertake panning and soil sampling. Lessee further agrees that in the event it elects as provided herein to develop and produce minerals from the foregoing property, it will work the said premises in the manner necessary to good and economical mining, so as to take out the greatest amount of ore possible, with due regard to the development and preservation of said premises as a workable mine.

7. If the Lessor deems that the Lessee has breached any covenant or condition contained herein, it shall give to the Lessee by registered mail notice of said default wherein said notice shall give the said Lessee sixty (60) days within which to correct said default or said lease shall be considered null and void at the expiration of said period. Forfeiture of the lease in the event of such default shall be the sole remedy for such breach, except as to failure or refusal of Lessee to account for royalties as herein provided.

8. Lessee shall assume all liabilities to itself or its

employees as relates to any work it does upon the demised premises. Lessor shall not be responsible for any debts contracted by Lessee or its successors or assigns, and the property shall be kept free of all indebtedness unless otherwise agreed and put in writing by the Lessor. It is understood that at the present time Lessor has executed a grazing lease to one Raymond Crowley of Ashwood, Oregon, and it is agreed by the parties that the rights given hereunder by Lessor to Lessee shall permit the Lessee to prospect, develop and mine on any of the above-described property, but without substantially interfering with said grazing rights. Nothing herein contained shall substantially interfere with said Crowley's use of water for his cattle, horses, or other livestock.

9. Lessor agrees to cooperate with Lessee in securing a United States Government loan for exploration and development of minerals upon the above demised property, without obligation by Lessor for repayment of any such loans secured by Lessee for such exploration and development.

10. This lease shall be construed in accordance with the lease of the State of Washington, and the venue of any action to enforce or interpret this lease shall be in King County, State of Washington.

COPPERO MINING COMPANY

By J. Eldon Gilbert

Its Vice Pres.

HUMBOLDT METALS COMPANY

By Albert M. Lowe

Milton R. Rowe

Ruth J. Rowe

E. Rhue M.D.

Ray R. Hutchings

STATE OF CALIFORNIA)
ss
COUNTY OF SANTA CLARA)

On this 23rd day of JANUARY, 1967, before me personally appeared J. Eldon Gilbert to me known to be the Vice President of COPPERO MINING COMPANY

SUE G. POLZONI
NOTARY PUBLIC - CALIFORNIA
PRINCIPAL OFFICE IN
SANTA CLARA COUNTY

My Commission Expires January 10, 1970

Sue G. Polzoni

the corporation that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said corporation.

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

NOTARY PUBLIC in and for the State of California, ~~XXXXXXXXXXX~~ _____.
SANTA CLARA COUNTY

STATE OF WASHINGTON)
COUNTY OF KING) ss

On this 12 day of May, 1969, before me personally appeared ALBERT T. FRANCO, CHARLES T. KINL, M.D., MILTON P. ROUEM and RUTH J. ROUEM, to me known to be the partners of HUMBOLDT METALS COMPANY, the company that executed the within and foregoing instrument and acknowledged said instrument to be the free and voluntary act and deed of said ~~corporation~~ PERSONS AND PARTNERSHIP, for the uses and purposes therein mentioned, and on oath stated that they were authorized to execute said instrument, for and on behalf of said HUMBOLDT METALS COMPANY.

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

NOTARY PUBLIC in and for the State of Washington, residing at Seattle.

STATE OF OREGON)
COUNTY OF JEFFERSON) ss

On this 18 day of March, 1969, before me personally appeared RAY R. WHITING, JR., to me known to be one of the partners of HUMBOLDT METALS COMPANY, the company that executed the within and foregoing instrument and acknowledged said instrument to be the free and voluntary act and deed of said ~~corporation~~ PERSON AND PARTNERSHIP, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument for and on behalf of said HUMBOLDT METALS COMPANY.

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

NOTARY PUBLIC in and for the State of Oregon, residing at MADRAS.

MY COMMISSION EXPIRES MAR. 16, 1970

4 684

STATE OF CALIFORNIA)
ss
COUNTY OF [illegible])

On this 24th day of August, 1967, before me personally appeared J. ELDON GILBERT, to me known to be the Vice-President of CORDERO MINING COMPANY, the corporation that executed the within and foregoing instrument, and acknowledged that said instrument is the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said corporation.

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

[illegible]
NOTARY PUBLIC in and for the State of California, residing at [illegible] Calif

STATE OF WASHINGTON)
ss
COUNTY OF KING)

On this 31st day of August, 1967, before me personally appeared ALBERT M. FRANCO, to me known to be one of the partners of HUMBOLDT METALS COMPANY, the partnership that executed the within and foregoing instrument, and acknowledged that said instrument is the free and voluntary act and deed of said partnership, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said corporation.

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

[illegible]
NOTARY PUBLIC in and for the State of Washington, residing at Bellevue.

STATE OF OREGON }
County of Jefferson } **ss.**

#091559
CORDERO MINING COMPANY
to
HUMBOLDT METALS COMPANY

I certify that the within instrument was received for record on the 8 **day of** September, **A. D. 19** 67 **at** 8:30 **o'clock** A **M., and recorded in book** 41 **on page** 663 **Record of** Deeds **of said County.**

Witness my hand and seal of County affixed.

NELLIE WATTS **County Clerk.** **By** June Woodcock **Deputy.**

STATE OF WASHINGTON)
ss
COUNTY OF KING)

On this 3rd day of Feb, 1969, before me, the undersigned, a Notary Public in and for the State of Washington, duly commissioned and sworn personally appeared Ray R. Whiting, Jr., Albert M. Franco, Milton P. Roumm, Charles S. Fine, and Ruth J. Roumm, to me known to be the individuals described in and who executed the foregoing instrument, and acknowledged to me that they signed and sealed the said instrument as their free and voluntary act and deed for the uses and purposes therein mentioned.

WITNESS my hand and official seal hereto affixed the day and year in this certificate above written.

Edward M Bauman
NOTARY PUBLIC in and for the State of Washington, residing at Seattle.

United States Department of the Interior

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

July 7, 1971

OFFICIAL COPY
O. M. E.
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MEMORANDUM

To: Chief, Office of Minerals Exploration

From: Field Officer, Region I

Subject: Summary Final Report
OME 6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon
Contract 2286

INTRODUCTION

This report summarizes an OME project to explore for extensions of cinnabar ore in a shallow open pit about 3,000 feet west of the formerly productive Horse Heaven Mine, some 17 miles east of Ashwood, Jefferson County, Oregon. The contract, dated July 25, 1969, for a total estimated cost of $24,000.00 of which the Government would contribute 75 percent or $18,000.00, was not amended. Work, started in August 1969 and finished in October 1969, consisted of 91 hours of bulldozing and 18 hours of drilling and blasting. The contract was terminated July 25, 1970. Total accepted cost of the work was $2,580.00 of which the Government contributed $1,935.00. No ore was found and the Government notified the Operator on March 17, 1971, that it retains no claim or lien against the property subject to the contract or to any future production therefrom.

OPERATOR

A partnership known as:

Horse Heaven Mine
602 Tower Building
Seattle, Washington 98101

FINAL
FIELD REPT

Partners include:

Charles S. Fine
340 Stimson Medical Center
Seattle, Washington 98101

Albert M. Franco
602 Tower Building
Seattle, Washington 98101

Milton P. and Ruth Roumm
3838 N.E. 21st
Bellevue, Washington 98004

Ray R. Whiting, Jr.
P. O. Box 3
Ashwood, Oregon 97711

PROPERTY

The property consists of the E-1/2NW-1/4 and NE-1/4, Sec. 12, T. 10 S., R. 18 E., Jefferson County, Oregon (Fig. 1 - Index, plan, geologic maps, and section, Horse Heaven West, Sec. 12, T. 10 S., R. 18 E., Jefferson County, Oregon). The unsurfaced Gonser Road leads from Ashwood to Mitchell, Oregon, and crosses the Horse Heaven mine property about 17 miles east of Ashwood. Altitude is between 3,000 and 3,200 feet. Topography is gently rolling with a few deep ravines marking the courses of intermittent streams. Scattered juniper dot the landscape.

The Operator possessed the land by virtue of an Assignment of Lease dated Feb. 3, 1969, from Humbolt Metals Company, lessees under a Lease, as amended, executed Jan. 23, 1967, by the owner, Cordero Mining Company.

GEOLOGY

Cinnabar deposits in the Horse Heaven mine area are in and near volcanic plugs that have intruded tuffaceous sediments of the Clarno Formation of Eocene age (Waters and others, 1951, p. 109, 127). Cinnabar is in the autobrecciated portions of plugs and dikes, zones of breccia along faults, and beneath impermeable cappings of clay or other rock. Ores at the Horse Heaven mine yielded more than 17,000 flasks of quicksilver between 1934 and 1958 (Brooks, H. C., 1963, Table 7).

Cinnabar was found about 3,000 feet west of the Horse Heaven mine in 1968. Ore from a prospect pit that followed the new

discovery to a depth of about 20 feet yielded seventeen flasks of quicksilver. The objective of the OME exploration project was extensions of the new discovery, referred hereafter as the Horse Heaven West property.

The cinnabar occurs along iron-stained fractures in clay and hydrothermally(?) altered rhyolite that apparently is intruded by and overlain by light gray rhyolite (Figure 1) that has been faulted(?) against white, barren clay. Some gray, glassy rhyolite is along the fault and, reportedly, some cinnabar is along the fault. The cinnabar-bearing fractures are widely separated, in places as much as 20 feet and the intervening ground apparently is barren. The fractures strike northeasterly and dip about 35° SE. A sample, 14 inches wide, along one fracture assayed 0.88 percent mercury.

The OME bulldozing failed to find extensions of the cinnabar-bearing fractures and, as a consequence, little more was learned about the cinnabar than was known prior to the contract. Waters and others (1951, p. 148) caution that cinnabar commonly occurs as float in landslide material far from the nearest outcrop of mineralized rock. Perhaps the Horse Heaven West occurrence is in landslide material.

PURPOSE OF PROJECT

The purpose of the project was to explore by trenching, shaft-sinking, drifting, and long-hole drilling for mercury-bearing ore bodies occurring in brecciated rocks and clays of the Clarno Formation of Eocene age which underlie post-Clarno soils.

CONTRACT

The contract, No. 2286, dated July 25, 1969, required that work start on or before Nov. 1, 1969, and be completed within 12 months from the contract date. The work was divided into two stages as follows:

Stage I: Bulldoze and backfill 5 trenches, each approximately 100 feet long and deep enough to cut through the upper part of the clays of the post-Clarno soils, but not to exceed 5 feet into the clays.

Stage II: Sink an inclined shaft approximately 110 feet on dip of mineralized zone, drive 175 feet of drift along mineralized structure from near bottom of shaft, and test drift walls by drilling percussion long-holes at intervals of not less than 10 feet, with an aggregate footage of not more than 900 feet.

Estimated Cost of the Work

Stage I

Fixed Unit Costs

Bulldozing and backfilling trenches 100 hours at $15/hour	$ 1,500.00	
Drilling and blasting bedrock in trenches, as required, including labor, equipment rental and supplies 24 hours at $7.50/hour	180.00	
1 Supervisor-engineer 1 month at $800/month	800.00	
1 Outside consultant, including per diem and travel 2 days at $100/day	200.00	
Office expenses 1 month at $50/month	50.00	
Assaying 10 samples for mercury at $6/sample	120.00	
Total estimated costs, Stage I		$2,850.00

Stage II

Fixed Unit Costs

Construct headframe, including labor, materials and supplies	1,000.00
Construct 8 x 12' frame tool shed	250.00
Install water and electric power lines to shaft site	500.00
Shaft sinking 110 feet at $72/ft	7,920.00
Timbering shaft 100 feet at $25/ft	2,500.00
Establish shaft station, including timbering as necessary	175.00

Drifting 175 feet at $35/ft	6,125.00	
Timbering drifts 75 feet at $12/ft	900.00	
Long-hole drilling 900 feet at $1/ft	900.00	
Assaying 30 samples for mercury at $6/sample	180.00	
1 Outside consultant 4 days at $100/day including per diem and travel	400.00	
Office expenses 6 months at $50/month	300.00	
Total estimated costs, Stage II		$21,150.00
Total estimated costs of project		24,000.00
Government participation at 75%		18,000.00

PROJECT WORK

Trenching started August 21, 1969. Some delays were caused by equipment trouble but the trenching was completed by Oct. 1, 1969, after which the trenches were backfilled. Trench locations are shown on figure 1. No cinnabar was found in the trenches and Stage II work was not justified. The contract was terminated July 25, 1970.

Approved costs of the completed work are as follows:

Stage I

Bulldozing and backfilling trenches 91 hours at $15/hr	$ 1,365.00
Drilling and blasting bedrock in trenches as required 18 hours at $7.50/hr	135.00
1 Supervisor-engineer 1 month at $800/month	800.00

1 Outside consultant, including per diem and travel		
2 days at $100/day	200.00	
Office expense		
1 month at $50/month	50.00	
Assaying		
5 samples at $6.00/sample	30.00	
Total accepted costs, Stage I		$2,580.00
Government participation @ 75%		1,935.00

The Government retains no equity in any equipment or supplies at the property.

REPORTS

The Operator submitted an acceptable final report on Feb. 11, 1971. The Government prepared a Report of Review in December 1970.

PROJECT RESULTS

The bulldozed trenches failed to find extensions of the cinnabar ore found in the pit of the Horse Heaven West property. Extensions of the fault structure were found in trenches 3 and 4 (Fig. 1). Trench 1 failed to expose more than a small bit of bedrock; apparently the overburden in the area is much deeper than originally anticipated. Trench 2 and the short north-south trench near its west end, exposed the contact between rhyolite and clays and tuff. Bulldozing in the tributary of the West Branch of Horse Heaven Creek cut through a fault(?) contact between clays in the Clarno but failed to find ore; the Operator reported panning some cinnabar in this area.

Apparently the chalky white rhyolite exposed northeast of the Horse Heaven West pit is an intrusive and not a flat-lying cap-rock.

The complete lack of cinnabar in the trenches suggest that the ore in the Horse Heaven West pit is very local. Perhaps the rock is part of an old landslide, far removed from its original location.

Seven vertical holes were drilled in the vicinity of the Horse Heaven West pit after OME work was done. Hole diameter was 5-1/2 inches; deepest hole was 250 feet. All holes encountered water at depths of about 60 feet. Swelling clay was a problem. Colors could be panned from the cuttings but no holes intersected ore-grade material.

CERTIFICATION

The Government notified the Operator in a letter dated March 17, 1971, that it retains no claim or lien against the property subject to the contract or to any future production therefrom.

PRODUCTION AND ROYALTIES

There has been no production from the property since the OME contract work.

SUMMARY

Bulldozing failed to find extensions of cinnabar that had been exposed in the Horse Heaven West pit. There was no justification for sinking a shaft as outlined under Stage II of the contract. Drilling after the OME work failed to find cinnabar ore.

Perhaps the ore showing in the Horse Heaven West pit is part of an old landslide. More detailed mapping and exploration will be necessary to prove this.

Unless new and more promising evidence is found, there is no justification for the Government to participate in further exploration for cinnabar ore near the Horse Heaven West pit.

REFERENCES CITED

Brooks, H. C., 1963, Quicksilver in Oregon: Oregon Dept. of Geology and Mineral Ind. Bull. 55, 223 p.

Waters, A. C., Brown, R.E., Compton, R.R., Staples, L.W., Walker, G.W., and Williams, Howel, 1951, Quicksilver deposits of the Horse Heaven mining district, Oregon: U.S. Geol. Survey Bull. 969-E, 149 p.

Willard P. Puffett

Willard P. Puffett

Enclosures: Fig. 1 - Index, plan, geologic maps, and section, Horse Heaven West, Sec. 12, T. 10 S., R. 18 E., Jefferson County, Oregon.

OFFICIAL FILE COPY

Date	Surname	Code
3/17/71	Emerick	120
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OME Form 7
(2/63)

7 1971

ing Company
sity Avenue
, California 94301

Re: OME-6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon
Contract 2286

Gentlemen:

Enclosed is a copy of a self-explanatory letter of today to the Operator under the subject contract.

This correspondence relates to the Lien and Subordination Agreements executed August 6, 1968, by J. Eldon Gilbert, Vice President of your company, under the Office of Minerals Exploration program.

Sincerely yours,

Harold Kirkemo
gr

Harold Kirkemo
Chief, Office of
Minerals Exploration

Enclosure

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

BSLang/1 3/17/71

Standard Form No. 1047
7 GAO 5000
1047-104

PUBLIC VOUCHER FOR REFUNDS

Vo. .....

U. S. Interior, Geological Survey
(Department or Establishment, Bureau or Office)

Location: Washington, D. C. 20242

Appropriation or Fund: 14X6875 (08)

PAID BY

To
Address
Horseheaven Mine
602 Tower Bldg.
Seattle, Washington 98101

Amount withheld
~~Deposit received~~ from the above-named ~~XXXXXXX~~ on October 27, 19 69

for ~~pending submission of final report in connection with contract~~ 2286

has been applied as herein stated and the balance indicated is returned herewith:

Amount of deposit Sch. # 02596 - Aug.-Sept.Vo.$ 200.00

Applied as explained in "Remarks" below .....

Balance authorized to be refunded $ 200.00

Remarks:
Acceptable final report has been submitted per memo from Chief, Office Minerals Exploration, 2/19/71.

(Sign original only) .....

Title .....

Refund by
Check No. .....
Cash, $ ..... on ..... (Signature of payee) ..... (Sign original only)
Other method, $ ....., ... (Describe)

* U.S. GOVERNMENT PRINTING OFFICE : 1960 O—572727

FRANCO, ASIA, BENSUSSEN & COE
ATTORNEYS AT LAW
602 TOWER BUILDING
SEATTLE, WASHINGTON 98101
MA. 3-5622 · MA. 3-5088
NEW PHONE MA 4-5622

ALBERT M. FRANCO
BENJAMIN S. ASIA
EDWARD M. BENSUSSEN
HAROLD B. COE

OFFICIAL
COPY
O. M. E.
RECEIVED
FEB 25 1971
INITIALS CODE
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~~HK 120~~
~~WS 120~~

February 22, 1971

Dictated but not read by
Mr. Franco prior to mailing

United States Department of Interior
Geological Survey
Washington, D.C. 20242

RE: OME 6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon
Contract 2286

Attention: Mr. Harold Kirkemo, Chief
Office of Minerals Exploration

Dear Mr. Kirkmeo:

Regarding the Operator's Final Report forwarded to you with my letter of February 11, 1971, note that there is an inconsistency between the costs listed on Page Two in the sum of $2715.00, and Summary of Contract Terms, Accepted Costs, and Unexpended Balance referred to in the Contract Review of December, 1970. Since Accepted Costs of only $2,580 were previously submitted and have been audited, and accepted, we could have no claim for any sums in excess, and therefore request that your office consider the figures in the Operator's Final Report modified to conform with the previously indicated costs, and we, of course, would have to waive any claim in excess of that which was previously reported and approved.

If there are any questions or comments, please advise.

Very truly yours,

Albert M. Franco

ALBERT M. FRANCO

AMF:bb
cc: Mr.Willard Puffett

OFFICIAL FILE COPY

FEB 19 1971

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Memorandum

To: Chief, Branch of Budget and Finance

From: Chief, Office of Minerals Exploration

2/19 220

Subject: OME-6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon
Contract 2286

120M

As the Operator under the subject contract has submitted an acceptable final report, the $200.00 withheld from the August-September 1969 voucher may now be paid to the Operator

Harold Kirkemo (rel)

Harold Kirkemo

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

WLEmerick/bsl 2/18/71

United States Department of the Interior

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

February 12, 1971

Memorandum

To : Chief, Office of Minerals Exploration

From : Field Officer, Region I

Subject: Operator's final report
OME-6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon
Contract 2286

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I have reviewed a copy of the Operator's final report on the subject exploration project. The Operator mailed you the original of the report on February 11, 1971.

The final report with accompanying map is a suitable summation of the completed work. I recommend that the Operator be paid the $200.00, which was withheld from his final voucher pending receipt of a final report.

Willard P. Puffett

Willard P. Puffett

ALBERT M. FRANCO
BENJAMIN S. ASIA
EDWARD M. BENSUSSEN
HAROLD B. COE

FRANCO, ASIA, BENSUSSEN & COE
ATTORNEYS AT LAW
602 TOWER BUILDING
SEATTLE, WASHINGTON 98101
MA. 3-5622 · MA. 3-5088

NEW PHONE MA 4-5622

O. M.
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Feb. 11, 1971

United States Department of Interior
Geological Survey
Washington, D.C.
20242

RE: OME-6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon
Contract 2286

Attention: Mr. Harold Kirkemo, Chief,
Office of Minerals Exploration

Dear Mr. Kirkemo:

Herewith is a final report which has been prepared by a mining engineer for submission to your office. Hoping same is satisfactory, I am

Very truly yours,

ALBERT M. FRANCO

AMF:jn
Encl.

HORSE HEAVEN MINE

OPERATOR'S FINAL REPORT

Jefferson County, Oregon

Docket OME 6772 (Mercury)

An exploration contract was entered into between the United States of America and Horse Heaven Mine (a partnership) on July 25, 1969. This contract called for, under Stage I, the bulldozing and backfilling of 5 trenches. Total estimated cost of this stage to be $2,850.00. Entering into Stage II was predicated upon the success of Stage I. Stage I was not successful, in the Government's opinion, in locating sufficient showings of mercury mineralization and the contract was terminated on July 25, 1970. A total of $2,715.00 was expended or committed under the contract.

The Horse Heaven Mine is located approximately 43 miles (by road) east of Madras, Oregon. The property envolved under the contract was the E1/2 of the NW1/4 of Section 12 and the NE 1/4 of Section 12, T10S, R18E, Jefferson County Oregon. The land is owned by Cordero Mining Company, Palo Alto, California and is under lease by Humbolt Metals who in turn have assigned it to the operator.

The Horse Heaven Mine was discovered in 1933 by Ray Whiting, one of the partners in the present venture. During the period 1933 through 1958, the mine produced 17,214 flasks

Operator's Final Report

Although the pit had been carried to a depth of over 25 feet by mining operations, underlying bedrock had not been encountered. Mineralization in the pit appeared to have been associated with a fault which trends about N80W and dips about 40 degrees south. With the fault is an associated andestic dike which varies up to several feet in thickness. There was also evidence that the mineralization may have had a northeasterly trend as evidenced by the trends of the mineralization exposed during the mining operations.

Bulldozer trenches were located (see map) to attempt to determine if there was mercury mineralization on the extension of the structures mentioned above. Although the fault and dike was cut in trenches 3 and 3A, mineralization was very sparse. A channel sample (5343) 5 feet in length in the footwall of the fault assayed 1.0 pound per ton mercury. Trench No. 2, located to cut a possible extension of the mineralized fractures in the pit failed to intersect any mineralization. Trench No. 5, was cut to try and locate a source of high grade float found in the immediate vicinity years ago. The cut encountered clays, rhyolite breccia and rhyolite, but failed to intersect significant mineralization. A chip sample (5340) 15 feet in length along the east wall of the trench, assayed 0.8 pounds per ton mercury.

To the west of the West Pit, the fault is exposed in the banks of a branch of Horse Heaven Creek. No mercury mineralization was observed. In Trench No. 1, about 80 feet further west, bedrock was not reached, although the trench was cut to a depth of over 12 feet in the overburden. In a fork of Horse Heaven Creek located further west, Trench No. 1A uncovered Clarno clays but no significant mineralization. A chip sample (5367) along the northwest wall of the creek bed assayed only 0.6 pounds per ton mercury.

Although no areas of economic mineralization were located by the trenching, it is felt that the trenching was not necessarily conclusive in determining that further exploration work is not warranted. The relatively narrow areas exposed by the trenching and the inability to reach bedrock in critical areas, leaves substantial doubt as to whether additional work is not warranted.

While the work carried out under the O.M.E. was going, or shortly after, the property was optioned to Lubicon Mining Ltd., 1502 Cambridge Building, Edmonton, Alta, Canada. It is understood that several holes were drilled in the West Pit area. However, the exact total results of this drilling have not been given to the operator.

All bulldozer trenches were backfilled as called for under the contract.

Attachment: Plan Map, Horse Heaven West

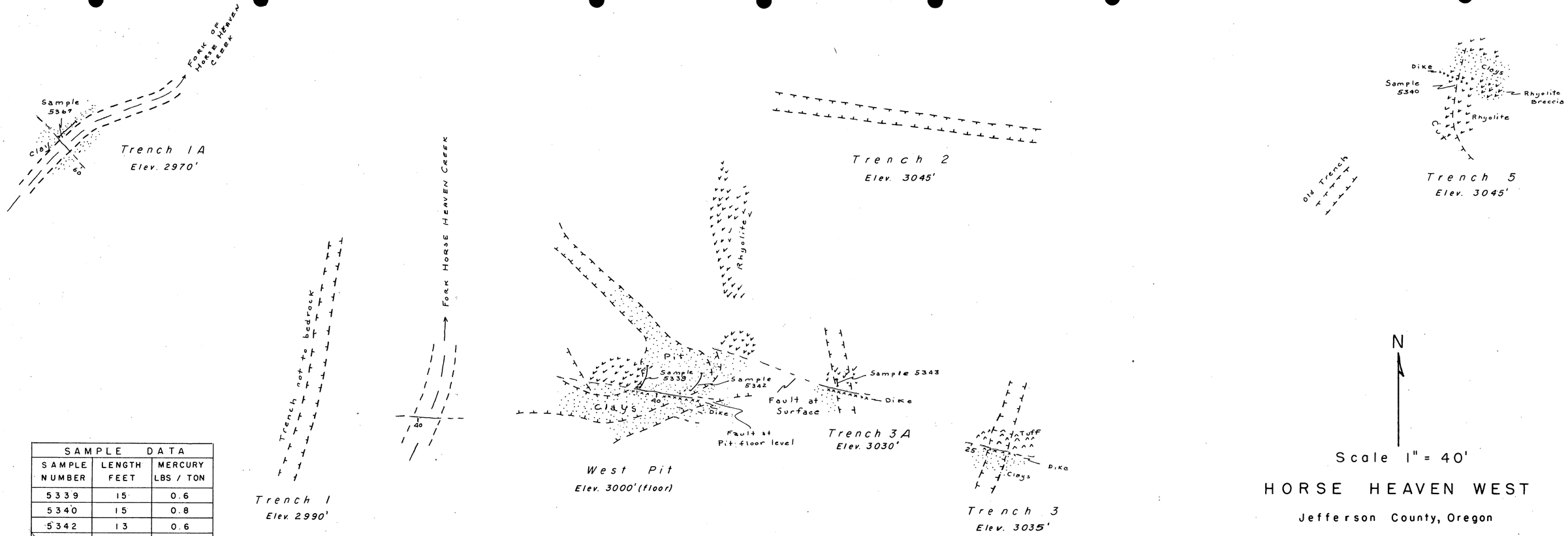
of mercury. In 1967 Ray Whiting made a new discovery of cinnabar in the Clarno clay formation about one-half mile west of the main Horse Heaven Mine workings. Some 17 flasks of mercury were produced during 1967, and 1968, from the new discovery. It is in the area of this new discovery that the work under the exploration project was carried out.

Work under the contract commenced on August 21, 1969, with bulldozer trenching. Breakdown and repairs to the bulldozer delayed the work for over two weeks. Work under Stage I of the contract was completed early in October 1969. This consisted of the following:

Cost Item		Costs
Bulldozing	100 hours	~~$1,500~~ 1365.00
Drilling and Blasting	18 hours	135.00
Supervisor	1 month	800.00
Consultant	2 days	200.00
Office Expense	1 month	50.00
Assaying	5 samples	30.00
	TOTAL COSTS	~~$2,715~~.00 2,580.00

See Audit Dec. 1970

Work carried out under the contract was directed toward extending the limits of the discovery, which had been made at the site of the West Pit (shown on attached Plan Map entitled Horse Heaven West, dated October 1969). This discovery consisted of lenses and disseminated cinnabar in clays (Clarno formation).



SAMPLE DATA		
SAMPLE NUMBER	LENGTH FEET	MERCURY LBS / TON
5339	15	0.6
5340	15	0.8
5342	13	0.6
5343	5	1.0
5367	15	0.6

Assays by Bennetts - Tacoma, Wn.

United States Department of the Interior

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

February 9, 1971

FEB 11 1971
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WE 120 C

Memorandum

To : Chief, Office of Minerals Exploration

From : Field Officer, Region I

Subject: Exploration later than OME contract work
OME-6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon
Contract 2286

In a recent visit to the Horse Heaven mine I learned the results of a churn drilling program completed in the summer of 1970 to search for extensions of mineralized stringers in the small open-pit on the Horse Heaven West property. The exploration was conducted by Lubicon Mining, Ltd., a Canadian company who had a lease from Horse Heaven Mines. The information I obtained is properly classified as company confidential, but I think that it should be a matter of record.

Seven churn drill holes were completed; the deepest was 250 feet. All were in the near vicinity of the open pit; one was from the bottom of the pit. Hole diameter was about 5-1/2 inches. Costs were $4.20/ft. for drilling; progress was as much as 200 feet in 2 shifts.

No ore was found; a few colors could be obtained by panning the cuttings from any part of any of the holes. Water was encountered at a depth of about 60 feet in all the holes. Swelling clay was a problem; all holes are now swelled shut at some distance below their collar. The rhyolite near the pit appears to extend in depth and is probably a plug; the cinnabar was in clays adjacent to the rhyolite. The water and swelling clays would have made shaft-sinking difficult (shaft-sinking was proposed as Stage II in the OME contract).

Willard P. Puffett

Willard P. Puffett

United States Department of the Interior

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

February 9, 1971

Memorandum

To : Chief, Office of Minerals Exploration

From : Field Officer, Region I

Subject: Exploration later than OME contract work
OME-6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon
Contract 2286

In a recent visit to the Horse Heaven mine I learned the results of a churn drilling program completed in the summer of 1970 to search for extensions of mineralized stringers in the small open-pit on the Horse Heaven West property. The exploration was conducted by Lubicon Mining, Ltd., a Canadian company who had a lease from Horse Heaven Mines. The information I obtained is properly classified as company confidential, but I think that it should be a matter of record.

Seven churn drill holes were completed; the deepest was 250 feet. All were in the near vicinity of the open pit; one was from the bottom of the pit. Hole diameter was about 5-1/2 inches. Costs were $4.20/ft. for drilling; progress was as much as 200 feet in 2 shifts.

No ore was found; a few colors could be obtained by panning the cuttings from any part of any of the holes. Water was encountered at a depth of about 60 feet in all the holes. Swelling clay was a problem; all holes are now swelled shut at some distance below their collar. The rhyolite near the pit appears to extend in depth and is probably a plug; the cinnabar was in clays adjacent to the rhyolite. The water and swelling clays would have made shaft-sinking difficult (shaft-sinking was proposed as Stage II in the OME contract).

Willard P. Puffett

Willard P. Puffett

OFFICIAL FILE COPY

FEB 3 2/2/71 1971 Emerick 120

Memorandum 120

To: Chief, Branch of Budget and Finance 130

From: Chief, Office of Minerals Exploration 2/3/71 220

Subject: OME-6772 (Mercury) 120M
Horse HeavenMine
Horse Heaven West Property
Jefferson County, Oregon
Contract 2286

Enclosed is a copy of the Field Officer's letter of January 29, 1971, forwarding a copy of the Report of Review issued in December 1970 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 I
Mr. Emerick
130

BSLong/1 2/3/71

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

January 29, 1971

O. M. E.
RECEIVED
FEB 2 1971
INITIALS CODE
gla 1 30
Gal 1 20
1 10

Mr. Albert M. Franco
Franco, Asia, Bensussen and Coe
Attorneys at Law
602 Tower Building
Seattle, Washington 98101

Re: OME-6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon
Contract 2286

Dear Mr. Franco:

Enclosed is the Operator's copy of a Report of Review issued in December 1970 on the subject contract.

Sincerely,

Willard P. Puffett
Field Officer, Region I
Office of Minerals Exploration

Enclosure

cc: OME (2)

OFFICIAL FILE COPY

1/27/71 120

1/27 cac 220

120M

JAN 27 1971

AIRMAIL

To: Field Officer, Region I

From: Chief, Office of Minerals Exploration

Subject: OME-6651 (Copper)
J. Howard Sims
Pope-Shenon Mine
Lemhi County, Idaho
Contract 2277
and
OME-6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon
Contract 2286

On your advice of January 21, 1971, Exhibit I for each of the Reports of Review sent you on January 19 for the two cited contracts has been corrected. The correct copies of each are enclosed. Please substitute these pages for the original Exhibit I in each review and, if acceptable to you, send a copy to the Operator as directed in our memorandum of January 19.

Harold Kirkemo

Harold Kirkemo

Enclosures

cc: Director's Reading File
Mineral Resources
OME -6651
OME-6772
OME Reading File
Mr. Kirkemo
130

HKirkemo/gla 1-27-71

FRANCO, ASIA, BENSUSSEN & COE
ATTORNEYS AT LAW
602 TOWER BUILDING
SEATTLE, WASHINGTON 98101
MA. 4-5622

ALBERT M. FRANCO
BENJAMIN S. ASIA
EDWARD M. BENSUSSEN
HAROLD B. COE

COPY
O. M. E.
RECEIVED
JAN 25 1971
INITIALS | CODE
Ba | 30
Coe | 20
HK | 20
WS | 20

January 22, 1971

United States Department of Interior
Geological Survey
Washington, D.C.
20242

RE: OME-6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon
Contract 2286

Attention: Mr. Harold Kirkemo, Chief,
Office of Minerals Exploration

Dear Mr. Kirkemo:

I am presently in the process of getting the necessary information and assistance to prepare the final report required by the termination agreement of October 23, 1970. I am reasonably certain it can be sent to you within the next thirty days.

Very truly yours,

ALBERT M. FRANCO

AMF:bb
cc: E. Arba Magill

MME Form 7
(2/63)

OFFICIAL FILE COPY

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

JAN 19 1971

Memorandum

To: Field Officer, Region I

From: Chief, Office of Minerals Exploration

Subject: OME-6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon
Contract 2286

Enclosed are the Field Office's and Operator's copies of a Report of Review issued in December 1970 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

BSLong/1 1/18/71

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
1/12/71	Emerick	120
		120
		220
1/12		120M

130

JAN 12 1971

AIRMAIL

Mr. Albert M. Franco
Franco, Asia, Bensussen & Coe
Attorneys at Law
602 Tower Building
Seattle, Washington 98101

Re: OME-6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon
Contract 2286

Dear Mr. Franco:

Our letter to you of November 25, 1970 indicated that a final report on the project should be prepared as required under Article 5(c) of the contract and Paragraph 3 of the Termination Agreement signed by you on October 23, 1970. Upon receipt of an acceptable final report from you we can release the $200.00 presently withheld from payment on the voucher for August-September 1969.

We would appreciate receiving your final report within the next 30 days. If for some reason it will not be possible for you to prepare the report in the time requested please let us know.

Sincerely yours,

Harold Kirkemo

Harold Kirkemo
Chief, Office of
Minerals Exploration

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

WLEmerick/bsl 1/12/71

MME FORM 6 REFERENCE SLIP
REV. 2-5 OFFICE OF MINERALS EXPLORATION

TO:	DATE	INITIALS
1. Chief, Office of Minerals Expl		
2. Re: OME 6772 (Mercury)		
3. Horse Heaven Mine Horse Heaven West Property Jefferson County, Oregon		
4. Contract 2286		
5. Willard P. Puffett		
FROM: Field Officer Region I	12/1/70	WPP

OFFICIAL COPY
O. M. E.
RECEIVED
DEC 9 1970
INITIALS CODE

FOR: Check items for action desired

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

REMARKS:

Attached are the Government, Operator and Budget and Finance copies of the unsigned Termination Agreement sent to the Operator October 6, 1970. A later Agreement was signed by the Operator.

copies destroyed per H K

INT.-DUP. SEC., WASH., D.C. MS300-62

FRANCO, ASIA, BENSUSSEN & COE
ATTORNEYS AT LAW
602 TOWER BUILDING
SEATTLE, WASHINGTON 98101
MA. 4-5622

ALBERT M. FRANCO
BENJAMIN S. ASIA
EDWARD M. BENSUSSEN
HAROLD B. COE

DEC 3 1970
INITIALS DATE
1/30
1/20
HK
WZ

November 30, 1970

United States Department of the Interior
Geological Survey
Washington, D.C. 20242

RE: OME 6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon
Contract 2286

Attention: Mr. Harold Kirkemo,
Chief, Office of
Minerals Exploration

Dear Mr. Kirkemo:

Thank you very much for your letter of November 25. I am herewith forwarding to Mr. Puffett the original and three copies of the first proposed termination agreement.

In my discussion with Mr. Puffett, he indicated that a narrative form of Operator's Final Report would be acceptable. I have received some information from Mr. Whiting which I have not yet had time to organize, and will do so at the earliest possible date.

Thanking you very much, I am

Very truly yours,

ALBERT M. FRANCO

AMF:bb
cc: Mr. Williard P. Puffett
(w/ enclosures indicated)

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
11/25/70	Emerick	120
11/25	Coe	220
		120M

AIRMAIL

NOV 25 1970

Mr. Albert M. Franco
Franco, Asia, Bensussen & Coe
Attorneys at Law
602 Tower Building
Seattle, Washington 98101

Re: OME-6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon
Contract 2286

Dear Mr. Franco:

Thank you for sending us the three signed copies of the Termination Agreement on the subject contract. Mr. Willard P. Puffett, Field Officer, OME Region I, has not yet received the original and three copies of the first proposed termination agreement which we asked you to send him in our letter of October 23, 1970. Unless you have done so in the past several days, please return them to Mr. Puffett at your earliest convenience.

You should now be preparing a final report on the project as required under Paragraph 3 of the Termination Agreement and Article 5(c) of the contract. Upon receipt of an acceptable Operator's final report, the Government will release the $200 presently withheld from payment on the voucher for August-September 1969. After an audit of the account is made, we will send you a closing letter, but until this is done, provisions of Paragraph 4 of the Termination Agreement remain in effect.

Sincerely yours,

Harold Kirkemo (gla)

Harold Kirkemo
Chief, Office of
Minerals Exploration

cc: Director's Reading File
Mineral Resources
OME docket
OME Reading File
OME Region I w/cy incoming letter
Mr. Kirkemo

HKirkemo/gla 11-25-70

FRANCO, ASIA, BENSUSSEN & COE
ATTORNEYS AT LAW
602 TOWER BUILDING
SEATTLE, WASHINGTON 98101
MA. 3-5622 · MA. 3-5088
NEW PHONE MA 4-5622

ALBERT M. FRANCO
BENJAMIN S. ASIA
EDWARD M. BENSUSSEN
HAROLD B. COE

ORIGINAL COPY
O. M. E.
RECEIVED
NOV 23 1970
INITIALS | CODE
120
120
120

November 18, 1970

Mr. Harold Kirkemo
Chief, Office of
Minerals Exploration
United States Department of the Interior
Geological Survey
Washington, D.C.
20242

RE: OME-6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon
Contract 2286

Dear Mr. Kirkemo:

At the request of your office and Willard Puffett of your Spokane Office, I enclose herewith three signed copies of Termination Agreement of the OME Loan. It is my understanding from my conversation with Mr. Puffett that we will receive in due course a "no discovery" declaration from your office, thus relieving the property involved from any claim by the United States not arising where no discovery is made as the result of the work done under the OME Loan.

I forward the agreement under this condition for the reason that Lubicon Mining, Ltd. or others may do additional work on the property, in addition to drilling recently completed, independent of the work done under the OME Loan.

If there are any questions or comments, please write me promptly.

Very truly yours,

ALBERT M. FRANCO

AMF:bb

Form 7

OFFICIAL FILE COPY

Date	Surname	Code
10/23/70		120
		120E
10/23	Coe	220
		120M

AIRMAIL
RETURN RECEIPT REQUESTED

Mr. Albert M. Franco
Franco, Asia, Bensussen & Coe
Attorneys at Law
602 Tower Building
Seattle, Washington 98101

OCT 23 1970

Re: OME-6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon
Contract 2286

Dear Mr. Franco:

Enclosed are the original and three copies of a revised proposed Termination Agreement (two pages) to the subject contract, signed for the Government. Numbered paragraph 1 therein establishes July 25, 1970, as the effective date of termination rather than October 31, 1969, which was stated in the proposed agreement sent to you October 6, 1970, by Mr. Willard P. Puffett, Field Officer, OME Region I.

The revised agreement was prepared following your telephone discussion with Mr. Puffett on October 21 and 22. The revision is acceptable to the Government.

If the revised proposed agreement is satisfactory to you, all four copies should be signed by you or a duly authorized representative of Horse Heaven Mine. Please retain the Operator's copy, and return the original and two other copies to Mr. Puffett.

If any part of the revised proposed agreement does not have your approval, return the original and all copies to Mr. Puffett together with the proposed changes for consideration.

Please return the first set of the proposed agreement to Mr. Puffett.

Sincerely yours,

Harold Kirkemo (gla)

Harold Kirkemo
Chief, Office of
Minerals Exploration

cc: Director's Reading File
Mineral Resources
OME docket
OME Reading file
Mr. Kirkemo
130
OME Region I w/extra cy TA

HKirkemo/gla 10/23/70

Enclosures

MME FORM REFERENCE SLIP
REV. 2-59 OFFICE OF MINERAL EXPLORATION

TO:	DATE	INITIALS
1. Chief, OME		
2. Re: OME-6772 (Mercury)		
3. Horse Heaven Mine Horse Heaven West Property		
4. Jefferson County, Oregon Contract 2286		
5. Willard P. Puffett	10.12.70	
FROM: Field Officer, Region I		

FOR: Check items for action desired

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

REMARKS:
Attached is copy of letter from Albert M. Franco, concerning termination agreement of the subject contract. I get the idea tht he prefers to change the wording in the agreement and will inform us after getting a final report from Ray Whiting. I have not talked to Franco concerning this letter and will wait instructions from you. The transmittal letter clearly stated that the agreement should be returned if not acceptable to the Operator.

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

FRANCO ASIA BENSUSSEN & COE
ATTORNEYS AT LAW
ACME TOWER BUILDING
SEATTLE, WASHINGTON 98101
[illegible]

ALBERT M. FRANCO
BENJAMIN S. ASIA
EDWARD H. BENSUSSEN
HAROLD B. COE

OFFICIAL COPY
O. M. E.
RECEIVED
OCT 14 1970

INITIALS	CODE
bsl	120
	130
HJC	120

Office of [illegible] Exploration
[illegible] Court House
[illegible]
Spokane, Washington [illegible]

Attention: [illegible] Moffett

[illegible]

Dear [illegible]

[illegible] letter of [illegible] and the enclosed Termination Agreement [illegible] raise two questions.

[illegible] attempt [illegible] report from [illegible] the balance [illegible] be drawn down.

[illegible] the contract remained [illegible] mately [illegible] and there [illegible] it [illegible] to the contract [illegible]

[illegible] to the Government [illegible] under the terms of the contract.

If the spirit of this provision is [illegible] to us, then I think that we can cover the point with other language that will meet the Government's needs but at the same time [illegible] [illegible] shift [illegible]

[illegible] with [illegible]

Very truly [illegible]

[illegible]

[illegible]
[illegible] Maine and [illegible]

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

October 6, 1970

OFFICIAL COPY
O. M. E.
RECEIVED
OCT 9 1970
INITIALS | CODE
bel | 120 m
HK | 120

Mr. Albert M. Franco
Franco, Asia, Bensussen and Coe
Attorneys at Law
602 Tower Building
Seattle, Washington 98101

Re: OME-6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon
Contract 2286

Dear Mr. Franco:

Enclosed are the original and three copies of a proposed Termination Agreement (two pages) to the subject contract, signed for the Government.

If the proposed agreement is satisfactory to you, have all four copies signed by a duly authorized representative of Horse Heaven Mine, retain the Operator's copy, and return the rest to this office.

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

Sincerely,

Enclosures

Willard P. Puffett
Field Officer, Region I
Office of Minerals Exploration

cc: OME

S Form 7
2/63)

OFFICIAL FILE COPY

Date	Surname	Code
9/30/70	Kirkemo	120
10/1	[illegible]	
		220
		120M

OCT 1 1970

AIRMAIL

Memorandum

To: Field Officer, Region I

From: Chief, Office of Minerals Exploration

Subject: OME-6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon
Contract 2286

Enclosed are the original and three copies of proposed Termination Agreement (two pages), to the subject contract, signed for the Government. An extra copy of the Agreement is also enclosed for field use.

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

If any part of the proposed agreement 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 (Bsl)
Harold Kirkemo

Enclosures

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

BSLong/1 9/30/70

120 Emerick

120 Kirkham

120M

to Legal 9/18

DRAFT 9/17/70
WLEmerick/bsl

EXPLORATION CONTRACT
HORSE HEAVEN MINE
OME-6772

Termination Agreement

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 Horse Heaven Mine, hereinafter called the "Operator," parties to that certain Exploration Contract No. 2286 (OME-6772), dated July 25, 1969, hereinafter called the "Contract" that:

1. Effective October 31, 1969, the Contract and all obligations of the parties thereunder, except as otherwise herein expressly provided, shall be and are hereby terminated.

2. The Government shall contribute only to the allowable costs incurred prior to October 31, 1969.

3. The Operator shall promptly perform all winding-up and settlement actions provided for in the Contract, including furnishing to the Government three copies of a final report (in addition to the final monthly report) which 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 related costs thereof.

4. 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.

5. The Operator hereby releases and agrees to save the Government harmless from all claims or demands under or arising out of said contract except as otherwise provided in this termination agreement.

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

THE UNITED STATES OF AMERICA

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

HORSE HEAVEN MINE

By_____

Title_____

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

August 24, 1970

Horse Heaven Mine
602 Tower Building
Seattle, Washington 98101

Re: OME-6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon
Contract 2286

Gentlemen:

The time fixed for the completion of the cited contract expired on July 25, 1970. Please submit your final report as required by Article 5 (c) of the contract. Upon receipt of an acceptable final report we can release the $200.00 that was withheld from payment on your last voucher.

Sincerely,

Willard P. Puffett
Field Officer, Region I

cc: OME

OME Contract 6772 Summary Voucher Payments

	2850.00	21,150.00	24,000.00
	Phase I	Phase II	Total
02596 Bulldozing	1185.00		
Drilling & Blasting	155.00		
Supervision	800.00		
Consultant	200.00		
Office Expense	50.00		2370.00
07297 Bulldozing	180.00		
Assaying	30.00		2580.00

Government Participation 75%.

1777.50

Less 200.00

Vo: 02896 1577.50 Paid

Vo 07297 157.50

FORM 9-1648
MARCH 1968

RECEIVED
MAY 18 1970
SPOKANE, WASH.

OFFICIAL COPY
O. & E.
RECEIVED
JUN 1 1970

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

OPERATOR'S MONTHLY VOUCHER

For Month of October, 1969

Docket No. OME- 6772 (Mercury)
Contract 14-08-0001 2286
Contract Amount $ 24,000
Gov't. Participation % 75 $

Operator's Name Horseheaven Mine
Address 602 Tower Bldg., Seattle, Wash. 98101

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
		$		$		$	11	$
Bulldozing	12	180.00	100	1,365.00	12 hrs.	180.00	9 hrs.	1,365.00
Drilling & Blast.			18	135.00			18 hrs.	135.00
Supervisor			1	800.00			1 month	800.00
Consultant			2	200.00			2 days	200.00
Office Expense			1	50.00			1 month	50.00
Assaying	5	30.00	5	30.00	5	30.00	5	30.00
TOTALS		$ 210.00		$ 2,580.00		$ 210.00		$ 2,580.00

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

Date 4-23-70 *Payee Horseheaven Mine

Per Ray Watt Title Partner

*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 Willard P. Ruffett 5/18/70
OME Field Officer Date

(63) 14X0804

Approved for: $ 157.50
(SUBJECT TO AUDIT)

Signature ms

Date JUN 9 1970 Vou. No. 07207
(SEE OTHER SIDE)

FOR OPERATOR'S USE	FOR GOVERNMENT USE
REMARKS	REMARKS
RECEIVED U.S. GEOLOGICAL SURVEY MAY 26 9 00 AM '70 ... ANCE	1.] Previous voucher listed 79 hrs. Total is 79+12 = 91 hrs.; not 100 as shown by Operator. 2] continue to withhold $200.00 pending decision to continue contract, and if not, until receipt of Operator's final report.

OPERATOR'S MONTHLY REPORT

The Operator, under an Office of Minerals Exploration contract, is required to report monthly to the Government. The report consists of two parts.

FIRST, the Operator's Monthly Voucher on Form 9-1648 listing the project costs incurred and claimed by the Operator is the voucher basis for payment of the Government's share of the cost.

SECOND, the Operator's Narrative Report is a concise description of the work performed, results accomplished, and any unusual situations encountered, illustrated and supported by engineering-geological maps or sketches, drill hole logs, assay reports, etc., as pertinent.

The Operator submits the original and three copies of each of the two sections of this report to the OME regional Field Officer at the end of each month during the life of the contract.

PREPARATION OF OPERATOR'S MONTHLY VOUCHER, FORM 9-1648

In the left hand column list the items for which costs were incurred during the month, and also the items for which costs were previously reported. For items previously reported, show only UNITS TO DATE and COSTS TO DATE. Items listed should conform to Exhibit A of the contract (Estimated Costs of the Work). The total of COSTS THIS MONTH followed by the Operator's signature constitutes a claim for payment of the Government's share of the costs. The Operator or his agent must sign the certification in the lower left corner.

Except for amounts claimed under "fixed unit costs" provisions of the contract, all costs claimed in this voucher must be supported by documentary evidence consisting of: (a) certified copies or transcripts of payrolls which list each employee, wage rate, period of employment, gross earnings, and net earnings; (b) original or certified copies of invoices, statements of accounts, or purchase orders which indicate items of materials or services, quantities, unit prices, total charges, and payment terms; and (c) certified memoranda of the Operator for such items as unemployment taxes, employee's liability insurance, and depreciation of Operator-owned equipment. The certification may be stated thus, "Certified True Copy", followed by the signature of the Operator or his agent. One copy of each document should accompany the original of this voucher.

The requirement for submitting documentary evidence of claimed costs may be waived by the OME regional Field Officer if he determines that it is impracticable for an Operator to submit this material. In any case of waiver of this requirement an "on-site" audit by an OME auditor is mandatory prior to payment of the final Operator's Monthly Voucher.

Willard Puffett
U.S. Court House, RM. 656
Spokane, Wash.

RECEIVED
MAY 4 1970
O.M.E.
SPOKANE, WASH.

May 1, 1970

Re: OME 6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Ore.

Dear Willard,

Enclosed last phase of the work done, on the trenching program.

The Lubicon Co has completed its negotiating with the Horse Heaven group. They plan to have some drilling done at Horse Heaven West pit area, and along the fault line. This work is planned last part of May. When I get a firm date will let you know. Maybe you would like to come over, would like to have you.

As ever,

RECEIVED
MAY 4 1970
O. M. E.
SPOKANE, WASH.

Horse Heaven Mine,
Jefferson County, Oregon
Docket OME 6772 (mercury)

Narrative Report for October 1969

Bulldozer trenching and backfilling of the trenches was completed in October 1969. This essentially completed all the work authorized under Stage I of the OME contract. Location of the trenches, along with sample data, is shown on the attached plan map of the West Pit area. Altogether six trenches were cut in the areas designated in the contract.

As shown on the attached map the fault which is exposed in the West pit was cut by trenches 3 and 3A. Unfortunately trench 1 failed to reach bedrock, so the westward extension of the fault zone could not be observed. However, trench 1A further to the west disclosed a fault which strikes at about a 45 degree angle to the general trend of the fault in the West Pit area. It is possible that this may be a westward extension. Just how important the fault is, as a mineralization control is unknown at the present stage of exploration.

Assays and pannings from the trenches were disappointing. Five chip samples, from 5 to 15 feet in length contained from 0.6 to 1.0 pounds per ton of mercury. Assays were by Bennetts Chemical Laboratory Inc., Tacoma, Wash. (copy of assay sheet attached).

Although no areas of economic mineralization were located by the trenches, it is felt that the trenching was not conclusive in determing that further exploration work is not warranted. It is perhaps unfortunate that no exploration was carried out in the pit itself, however this should be remedied in the near future.

Early in 1970 an agreement was entered into between Horse Heaven Mine and Lubicon Mining Ltd., 1502 Cambridge Bldg., Edmonton, Alta., Canada. This company plans additional exploration in the West Pit area, and several rotary drill holes are scheduled to be drilled in the near future. It is hoped that these holes will indicate sufficient mercury mineralization to warrant entering into Stage II of the OME contract. Data on the finding in these holes will be furnished as soon as it is available.

BENNETTS CHEMICAL LABORATORY, INC.
ANALYTICAL AND CONSULTING
CHEMISTS, ASSAYERS AND METALLURGISTS
901 SOUTH 9th PHONE BR 2-4507 or BR 2-7969 TACOMA, WASHINGTON 98405

REPORT OF ANALYSIS

November 13, 1969

RECEIVED
MAY 4 1970
O. M. E.
SPOKANE, WASH.

Our analysis of the sample of Mine Samples
From Magill and Associates
Marked: As Shown

Sample No.	Mercury %	Mercury Troy lbs. per ton
5338	2.68	53.6
5339	.03	0.6
5340	.04	0.8
5341	.28	5.6
5342	.03	0.6
5343	.05	1.0
5349	.01	0.2
5367	.03	0.6
5380	.04	0.8

Note: 5338 - sample weight - 79.2 grams

Horse Heaven Mine, Jefferson County, Oregon

5338 - Concentrates from 120 pound sample from same location as 5380, top of waste dump.
5339 - West wall of main West Pit, 15' sample from fault north.
5340 - On west side of knoll, east trench (Ray's father's discovery). 15' chip sample.
5341 - Underground No. 3 level clay, from cave at contact.
5342 - East wall of Main West Pit, from fault north for 13', 15' above floor of pit.
5343 - First trench to east of West Pit, 5' across footwall of fault, grey dike.
5349 - Sample from southwest corner of underground waste dump from backhoe cut.
5367 - From West Gulch to west of West Pit, 15' west wall including fault and fault zone.
5380 - Sample from backhoe trench near center underground waste dump, sample from this same location was concentrated and formed sample 5338.

To Magill and Associates
P. O. Box 746
Mercer Island, Washington 98040

BENNETTS CHEMICAL LABORATORY, Inc.
ORIGINAL SIGNED BY
Galen B. Prine
By

INSTRUCTIONS TO DELIVERING EMPLOYEE

☐ Show to whom, date, and address where delivered ☐ Deliver ONLY to addressee

(*Additional charges required for these services*)

RECEIPT

Received the numbered article described below.

REGISTERED NO.

CERTIFIED NO.
133582

INSURED NO.

DATE DELIVERED
OCT 26 1970

1 SIGNATURE OR NAME OF ADDRESSEE (*Must always be filled in*)

2 SIGNATURE OF ADDRESSEE'S AGENT, IF ANY

3 SHOW WHERE DELIVERED (*only if requested*)

POST OFFICE DEPARTMENT
OFFICIAL BUSINESS

PENALTY FOR PRIVATE USE TO AVOID PAYMENT OF POSTAGE, $300

POD Form 3811 Apr. 1967 c55—16—71548-10

POSTMARK OF DELIVERING OFFICE

INSTRUCTIONS: Show name and address below and complete instructions on other side, where applicable. Moisten gummed ends, attach and hold firmly to back of article. Print on front of article *RETURN RECEIPT REQUESTED.*

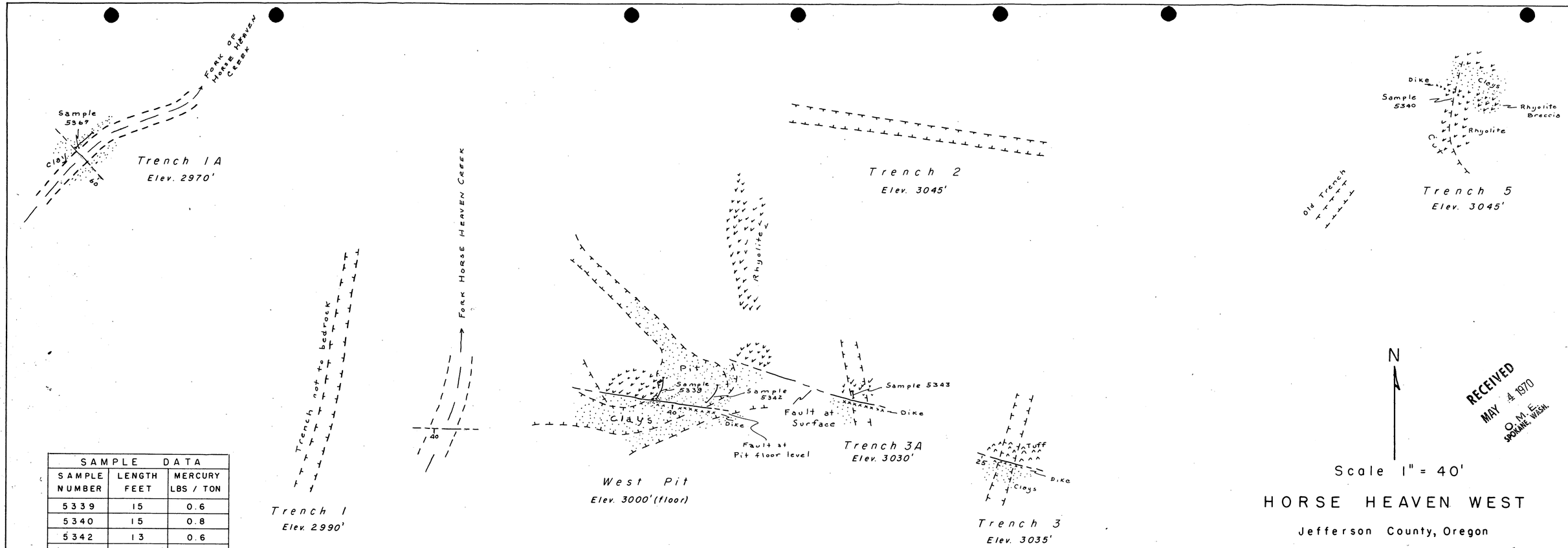
RETURN TO

NAME OF SENDER U. S. Geological Survey
Office of Minerals Exploration

STREET AND NO. OR P.O. BOX
Dept. of Interior Building

POST OFFICE, STATE, AND ZIP CODE
Washington, D. C. 20242

6772-Horse Heaven



SAMPLE DATA		
SAMPLE NUMBER	LENGTH FEET	MERCURY LBS / TON
5339	15	0.6
5340	15	0.8
5342	13	0.6
5343	5	1.0
5367	15	0.6

Assays by Bennetts - Tacoma, Wn.

RECEIVED
MAY 4 1970
O. M. E.
SPOKANE, WASH.

HORSE HEAVEN WEST

Jefferson County, Oregon

Oct. 1969

M. & A.

Elevation base assumed

FRANCO, ASIA, BENSUSSEN & COE
ATTORNEYS AT LAW
602 TOWER BUILDING
SEATTLE, WASHINGTON 98101
MA. 3-5622 · MA. 3-5088

ALBERT M. FRANCO
BENJAMIN S. ASIA
EDWARD M. BENSUSSEN
HAROLD B. COE

NEW PHONE MA 4-5622

March 19, 1970

RECEIVED
MAR 25 1970
INITIALS

Copy to R-I

United States Department of the Interior
Geological Survey
Washington, D.C.
20242

RE: OME-6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon Contract 2286.

Attention: Mr. Harold Kirkemo, Chief
Office of Minerals Exploration

Dear Mr. Kirkemo:

In accordance with your letter of March 17, 1970 enclosed find two copies of Page 3 for the Sub-lease executed between Horseheaven Mine and the Horse Heaven Mining Company, Inc. For your information, the hand-written sentence reads:

> "Lessee's rights are subject to terms of Paragraph 2 (c) of said agreement, under which the right of the United States to a royalty on production and lien for payment are produced."

If you have any further questions, please contact me.

Very truly yours,

ALBERT M. FRANCO

AMF:bb
Encl

Lessor or any third person or persons with whom its contracts until June 30, 1973, shall be entitled to maintain upon the premises at its sole expense a reasonable amount of personnel and equipment in order to process and mill the aforementioned ore, waste, or tailings. PROVIDED ALWAYS that Lessor or any third person or persons with whom it contracts shall not interfere with Lessee's reasonable mining operations and shall indemnify Lessee from all loss damage claims demands or expenses ariging from the operations of the Lessor or any third person or persons with shom it contracts or their officers agents or employees.

4. Lessor has previously entered into an agreement with the Office of Minerals Exploration of the United States Geological Survey. Said United States government agency has a lien upon the premises to the extent of any monies advanced under said loan. At the time of this Agreement, $1,577.00 has been so advanced and the said premises shall be subject to a lien in respect of monies advanced hereunder. LESSEE'S RIGHTS ARE SUBJECT TO TERMS OF PARAGRAPH 2(c) OF SAID AGREEMENT, UNDER WHICH THE RIGHT OF THE UNITED STATES TO A ROYALTY ON PRODUCTION AND LIEN FOR PAYMENT ARE PROVIDED

5. A Plan of Reorganization and Agreement are being executed contemporaneously with this Sub-Lease by Lessor and Lubicon Mining, Ltd. a British Columbia, Canada, corporation and the shares of stock owned by this Lessor in Lessee corporation are being traded for shares of stock in Lubicon Mining Ltd., pursuant to a plan of reorganization under appropriate provisions of the United States Internal Revenue Code. It is agreed and covenanted by Lessee that Lubicon Mining Ltd. or any other corporation which is a part of the plan of reorganization involving Lessee corporation shall cause the stock of said Lubicon Mining Ltd. or such other corporation with which Lessee is engaged in the plan of reorganization to be quoted as a fully listed company on the Vancouver Stock Exchange in the Province of British Columbia, Canada, not later than fifteen (15) months from the date any shares owned by this Lessor in Lubicon Mining Ltd. or such other corporation are quoted on the Interim list on the said Vancouver Stock Exchange. Lessor may accept full listing upon any other stock exchange in Canada, at its option, in fulfillment of this covenant.

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
3/17/70	Peterson	120
		120
3/17	Cal	220
		120M

MAR 17 1970

AIRMAIL

Mr. Albert M. Franco
Franco, Asia, Bensussen and Coe
Attorneys at Law
602 Tower Building
Seattle Washington 98101

Re: OME-6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon
Contract 2286

Dear Mr. Franco:

This will acknowledge receipt of your letter of February 28 enclosing two copies each of the Plan of Reorganization and Agreement, and the Sub-Lease executed between Horseheaven Mine and the Horse Heaven Mining Company, Inc. We retained one copy of these documents for our files, and forwarded the other to Mr. Willard Puffett in Spokane for his information.

Because the Plan of Reorganization and Agreement has not been executed, we have not fully reviewed this document with regard to preservation of the Government's rights to royalty on any production and liens for the payment thereof. However, we note on our copy of the Sub-Lease that a handwritten illegible sentence has been inserted in Paragraph 4, page 3, which pertains to the Government's loan under the subject OME contract. Would you please furnish two legible copies of this page?

If the results of the current drilling program on the Horse Heaven property are favorable and work under Stage II is warranted, it will also be necessary for you to submit a new lease assignment, new lease amendment, and new Lien and Subordination Agreements in accordance with our letter to you of December 31, 1969, before we could consider further action in this case.

In the meantime we suggest that you submit your monthly report and voucher to Mr. Puffett for work done under Stage I during October 1969.

Sincerely yours,

Harold Kirkemo (gla)

Harold Kirkemo

Chief, Office of
Minerals Exploration

cc: Director's Reading File
Mineral Resources File
OME Docket
OME Reading File
OME Region I - Mr. Peterson
ECPeterson/bsl 3/17/70

FRANCO, ASIA, BENSUSSEN & COE
ATTORNEYS AT LAW
602 TOWER BUILDING
SEATTLE, WASHINGTON 98101
MA. 3-5622 · MA. 3-5088

ALBERT M. FRANCO
BENJAMIN S. ASIA
EDWARD M. BENSUSSEN
HAROLD B. COE

NEW PHONE MA 4-5622

February 27, 1970

U.S. Department of the Interior
U. S. Geological Service
Office of Mineral Exploration
656 U. S. Court House
Spokane, Washington

Attention: Mr. Willard P. Puffett

RE: Horseheaven Mine
OME 6772 (Mercury)

Dear Mr. Puffett:

Enclosed please find copy of letter written to the OME.

I have previously advised your Washington office that we were in the process of making this transaction. Actually, I had not hurried to send them any of the documentation as it really is still not a completely consummated one until Lubicon Mining, Ltd. performs all of its covenants under the Plan of Reorganization and Agreement.

If you have any questions, let me know.

Sincerely,

ALBERT M. FRANCO

AMF:bb

FRANCO, ASIA, BENSUSSEN & COE
ATTORNEYS AT LAW
602 TOWER BUILDING
SEATTLE, WASHINGTON 98101
MA. 3-5622 · MA. 3-5088

ALBERT M. FRANCO
BENJAMIN S. ASIA
EDWARD M. BENSUSSEN
HAROLD B. COE

NEW PHONE MA 4-5622

February 28, 1970

MAR 4 1970
CODE
130
bal 120
120
120
Copy to R-I

United States Department of the Interior
Geological Survey
Washington, D.C.
20242

RE: OME 6772 (Mercury)

Attention: Harold Kirkemo
Chief, Office of
Minerals Exploration

Gentlemen:

Enclosed please find two copies of Plan of Reorganization and Agreement dated January 14, 1970 between Horseheaven Mine, a co-partnership, and Lubicon Mining, Ltd., attached to which is a sub-lease executed between Horseheaven Mine, a co-partnership, and The Horse Heaven Mining Company, Inc., a Washington corporation, covering the Horseheaven Mine in Jefferson County, Oregon.

The contract between the Horseheaven Mine, a co-partnership, and Lubicon Mining, Ltd. is still executory as there are certain requirements that must be performed as conditions to both the "Plan of Reorganization and Agreement " and Sub-Lease, as amended.

If, for any reason, all of the conditions are not met, then the transaction will not be consummated, and it is then likely that the operation of the property would remain in the hands of Horseheaven Mine, a co-partnership.

PLAN OF REORGANIZATION and AGREEMENT made

this 14th day of January, 1970,

BETWEEN:

THE HORSE HEAVEN MINE, a co-partnership consisting of Ray R. Whiting Jr., Milton P. Roumm, Albert M. Franco, Charles S. Fine and Ruth J. Roumm

(hereinafter called "the Vendors")

OF THE FIRST PART

AND

LUBICON MINING LTD., (N.P.L.) a body corporate duly incorporated under the laws of the Province of British Columbia, and having its registered office at 1012 Hornby Street, Vancouver, British Columbia,

(hereinafter called "The Purchaser")

OF THE SECOND PART

WHEREAS:

A. The Vendors are the registered and beneficial owners of all of the issued and outstanding shares in the capital of Horse Heaven Mining Company Inc. a corporation incorporated in the State of Washington, one of the United States of America and having its principal place of business at 602 Tower Building, Seattle, Washington, one of the United States of America (hereinafter called "the Company").

B. The Company is the Lessee of and has the right to mine, explore and develop mineral deposits in or about the parcel or tract of land situated in the State of Oregon, one of the United States of America, more particularly described in that certain title insurance policy No. 21-6143 issued by Oregon Title Insurance Company on September 8, 1967, a copy of which is attached hereto as Schedule "A" (hereinafter called "the property")

C. The Vendors own certain machinery and equipment located on the property which equipment is listed in Schedule "B" hereto (hereinafter called "the equipment")

D. The Vendors have agreed to sell and the Purchaser has agreed to purchase all of the said shares in the Company together with the equipment for the purchase price and upon the terms and conditions hereinafter set forth.

NOW THEREFORE THIS AGREEMENT WITNESSETH that in consideration of the purchase price and the mutual promises, undertakings, covenants, representations and warranties hereinafter contained it is hereby agreed by and between the parties hereto as follows:

1. The Vendors hereby sell and the Purchaser hereby purchases the shares in the capital of the Company in consideration of the Purchaser allotting to the Vendors 110,000 shares in the capital of the Purchaser.

2. The Vendors hereby sell and the Purchaser hereby purchases the equipment at a purchase price of $15,000.00 of lawful money of the United States of America payable as follows:

(a) Upon the execution hereof of the sum of $7,500.00 U.S. which sum shall belong to the Vendors absolutely.

(b) Upon the completion date as hereinafter defined the sum of $7,500.00 U. S.

3. The Vendors hereby covenant, warrant and represent with and to the Purchaser that:

(a) The company is duly incorporated validly existing and in good standing under the laws of the State of Washington, one of the United States of America, has corporate power to carry on its business as it now is and is duly qualified to do business.

(b) The Vendors own beneficially all of the outstanding shares in the capital of the Company.

(c) The authorized capital of the company consists of 1,000 shares without nominal or par value

of which 700 are outstanding and issued as fully paid and non assessable.

(d) The shares are owned by the Vendors free of liens, charges and encumbrances whatsoever.

(e) No person firm or corporation has any agreement of option or any right becoming capable of being an agreement for the purchase from the Vendor or any agreement or option or any right capable of becoming an agreement for the purchase subscription or issuance of any unissued shares or other security of the company.

(f) As at the completion date the company will have no liabilities or obligations (whether accrued, absolute contingent or of a capital nature or otherwise) including without limiting the generality of the foregoing liabilities for taxes (including taxes on income) rates assessments or other charges or liabilities or expenditures.

(g) At the date of completion as hereinafter defined the company will not have since the date of its incorporation declared, set aside or paid any dividend or other distribution in respect of the shares of the company.

(h) At the date of completion there will be no contracts of employment between the company its employees or officers.

(i) At the date of completion all accrued and unpaid federal or state county or local taxes of the company since the date of the company's incorporation will have been paid or there shall be available cash to pay such taxes.

(j) Threre are not now any actions suits or proceedings pending or to the knowledge of the Vendors threatened against

or affecting the company at law or in equity on behalf of any federal, state, municipal or other governmental department commission board, bureau, agency or instrumentality domestic or foreign.

(k) The Company shall be the Lessee of the property pursuant to the lease a copy of which is attached hereto as Schedule "C" that the said Lease is validly and duly executed by the parties thereto and that the said lease is in good standing.

4. The Purchaser hereby covenants, warrants and represents with and to the Vendors that:

(a) It shall as soon as possible after the execution of these presents take all necessary steps to enable its shares to be quoted on the interim listings of the Vancouver Stock Exchange, in the Province of British Columbia and without limiting the generality of the foregoing shall obtain audited financial statements of the company and an engineering report recommending expenditures on the property of approximately $75,000.00 and shall arrange for its shares to be quoted on the interim list on the Vancouver Stock Exchange not later than 4 months from the date hereof except with the consent in writing of the Vendors.

(b) It shall as soon as reasonably practicable after the execution hereof obtain an underwriting commitment of not less than $75,000.00 which sum shall be expended on the property in accordance with the recommendations of the said engineering report with work on the property to commence without unreasonable delay and the said underwriting commitment shall be obtained not later than 60 days from the date hereof except with the consent in writing of the Vendors.

(c) Within 15 months from the date of the Purchaser's shares being quoted on the interim list on the Vancouver Stock Exchange

to complete all necessary documents and comply with all the conditions imposed by the Vancouver Stock Exchange and to apply for and use its best endeavours to have its shares quoted as a fully listed company on the Vancouver Stock Exchange in the Province of British Columbia.

(d) It shall not dissolve, merge or voluntarily liquidate or increase the capital stock of the company except for the purpose of reorganization as may be agreed by the Vendors in writing for a period of 3 years from the date hereof.

5. The completion date herein referred to shall be deemed to be 11 o'clock in the morning of the day immediately following the execution of the underwriting agreement hereinbefore referred to.

6. Upon the execution hereof the Vendors shall deliver share certificates duly endorsed for transfer in respect of the said shares together with Bills of Sale in respect of the equipment to The Canada Permanent Trust Ltd., 455 Burrard Street, Vancouver, British Columbia to be held by it in escrow until the delivery to it of a Statutory Declaration by the President of the Purchaser stating that the underwriting agreement has been executed and documents submitted to the Vancouver Stock Exchange for an interim listing and upon delivery of such Statutory Declaration the said Trust Company shall notify the Vendors of the receipt by it of such Statutory Declaration and shall at the expiry of 7 days thereafter delivery the share certificates to the Purchaser unless it shall have within the said period of 7 days received from the Vendors or any of them a notice disputing the execution of the said underwriting agreement. In the event that the said underwriting agreement shall not have been executed by the 15th day of March, 1970 (hereinafter called "the final date") the Vendors or any of them shall be entitled to deliver to the said Trust Company a Statutory Declaration stating that the said underwriting agreement has not been executed and the said Trust Company shall there upon deliver notice of such Statutory Declaration to the Purchaser and if within

7 days of the date of such notice the Purchaser shall not have disputed the statements contained in the said Statutory Declaration shall deliver the share certificates in the name of the Vendors or of any of them who have submitted such Statutory Declaration to such Vendor or Vendors. In the event that the said Trust Company shall receive a notice of dispute it shall retain the said share certificates until the matter in dispute is settled by the parties hereto or by a court having jurisdiction.

7. At the completion date the Vendors shall deliver to the Purchaser:

(a) The corporate books, records, documents, accounts, vouchers and other papers relating to the company.

(b) The corporate seal of the Company.

(c) The resignations of the directors of the company.

(d) Such minutes of directors and shareholders as may be necessary to ratify and approve this transaction.

8. In the event the interim listing and under[illegible] not obtained by the Purchaser as aforesaid the Vendors may at their option in addition to any other remedies they may have on thirty (30) days' notice declare a forfeiture of all rights and grants made hereunder to purchase and retain any consideration or property therefore delivered to them pursuant to this Plan of Reorganization and Agreement.

9. All notices, requests, demands and other communications hereunder shall be in writing and shall be deemed to have been duly given and delivered if delivered in person or if sent by registered mail postage prepaid to the parties hereto at their respective addresses herein written or at such addresses as each of the parties may notify the other in writing. Notices given in person shall be deemed to have been delivered at the time of delivery and if sent by mail shall be deemed to have been delivered 72 hours from the date of posting of such notice.

10. Whenever the singular and masculine is used through-

We will advise you when all of the conditions of the transaction have been met and it is considered a consummated transfer of the possession of the property.

If you have any comments or questions, do not hesitate to write me.

Very truly yours,

ALBERT M. FRANCO

AMF:bb
Enclosures
cc: U. S. Department of the Interior
U.S. Geological Service
Office of Minerals Exploration
Spokane, Washington

out this agreement the same shall be construed to mean the plural or the feminine or the body corporate where the context so requires.

11. Time shall be of the essence of this Agreement.

12. This Agreement shall enure to the benefit of and be binding upon the parties hereto and their respective heirs, executors, administrators, successors and assigns.

13. This Plan of Reorganization and Agreement shall be interpreted under the laws of the Province of British Columbia and Alberta Canada insofar as the listing of securities and underwriting are concerned, and as to all other matters under the laws of the State of Washington, one of the United States of America.

IN WITNESS WHEREOF the parties hereto have hereunto set their hands and seals the day and year first above written and the corporate seal of Lubicon Mining Ltd.(N.P.L.) was hereunto affixed in the presence of its proper officers in that behalf.

SIGNED, SEALED and DELIVERED in the presence of:

HORSEHEAVEN MINE, a copartnership

Ray R. Whiting Jr.

SIGNED, SEALED AND DELIVERED in the presence of:

Albert M. Franco

SIGNED, SEALED AND DELIVERED in the presence of:

Milton P. Roumm

SIGNED, SEALED AND DELIVERED in the presence of:

Charles S. Fine

SIGNED, SEALED AND DELIVERED in the presence of:

Ruth J. Roumm

THE CORPORA[illegible] LUCON MINING L[illegible] hereunto [illegible] presence of its pr[illegible] that behalf.

OREGON TITLE
INSURANCE CO.

BORDER TO BORDER LAND TITLE SERVICE

731 Southwest Stark Street Portland, Oregon 97205 Tel. 226-1251

Premium $ 70.00

TITLE INSURANCE POLICY

Oregon Land Title Association Standard Leasehold Policy

OREGON TITLE INSURANCE CO., a corporation, (incorporated under the laws of the State of Oregon), hereinafter called the Company, for a valuable consideration paid for this policy of title insurance, the number, date, and amount of which are shown in Schedule A, does hereby insure the parties named as Insured in Schedule A, the heirs, devisees, personal representatives of such Insured, or, if a corporation, its successors by dissolution, merger or consolidation, against direct loss or damage not exceeding the amount stated in Schedule A, together with costs, attorneys' fees and expenses which the Company may be obligated to pay as provided in the Conditions and Stipulations hereof, which the Insured shall sustain by reason of:

1. Title to the leasehold estate described in Schedule A being vested, at the date hereof, otherwise than as herein stated; or
2. Any defect in, or lien or encumbrance on the title to said leasehold estate existing at the date hereof, not shown or referred to in Schedule B; or
3. Priority, at the date hereof, over said leasehold estate, of any lien or encumbrance upon the land described in Schedule A, except as shown or referred to in Schedule B; or
4. Any defect in the execution of any mortgage or deed of trust shown in Schedule B securing an indebtedness, the owner of which is insured by this policy, but only insofar as such defect affects the lien or charge of such mortgage or deed of trust upon said leasehold estate; or
5. Priority, at the date hereof, over any such mortgage or deed of trust, of any lien or encumbrance upon said leasehold estate, except as shown in Schedule B, such mortgage or deed of trust being shown in the order of its priority or
6. Unmarketability, at the date hereof, of the title of the lessor in the lease described in Schedule A, unless such unmarketability exists because of defects, liens, encumbrances, or other matters shown or referred to in Schedule B.

all subject, however, to SCHEDULES A and B, and the CONDITIONS and STIPULATIONS herein, all of which are hereby made a part of this policy.

In witness whereof, OREGON TITLE INSURANCE CO. has caused this policy to be sealed and authenticated by the facsimile signature of its President, but this policy is not valid unless attested by the Secretary, Assistant Secretary, Vice-President or Assistant Vice-President.

OREGON TITLE
INSURANCE CO.

OREGON TITLE INSURANCE CO. CORPORATE SEAL 1955 OREGON

By Roy N. Vonderhaar President

Attest: Jack H. Boon

OTI-160
REV. 4-65

21-6143

SCHEDULE A

Amount $ 10,000.00 Date September 8, 1967, At 5:00 P.M.

INSURED

Humbolt Metals Company, a co-partnership consisting of Ray P. Whiting, Jr., Albert M. Franco, Milton P. Roumm, Charles S. Fine and Ruth J. Roumm

Title to the leasehold estate described in this Schedule is vested in:

Humbolt Metals Company, a co-partnership consisting of Ray P. Whiting, Jr., Albert M. Franco, Milton P. Roumm, Charles S. Fine and Ruth J. Roumm

The leasehold estate, title to which is insured by this policy, is the estate of the lessee in the land described in this schedule, as set forth in that certain lease, together with and subject to the terms, covenants, and conditions thereof:

That certain lease, dated December _, 1966, recorded March 9, 1967, in Jefferson County Deed Book 41, page 155, between Cordero Mining Company, a corporation, and Humbolt Metals Company, a co-partnership consisting of Ray P. Whiting, Jr., Albert M. Franco, Milton P. Roumm, Charles S. Fine and Ruth J. Roumm.

The above lease was also recorded March 23, 1967, in Jefferson County Deed Book 41, page 205, and amended by that certain instrument recorded September 8, 1967, in Jefferson County Deed Book 41, page 663.

Description of the tract of land subject to said lease:

TOWNSHIP 10 SOUTH, RANGE 18 EAST OF THE WILLAMETTE MERIDIAN, JEFFERSON COUNTY, OREGON:

Section 1: Lots 1 and 2; S½NE¼; N½SE¼; S½S½;
Section 2: SE¼SE¼;
Section 11: E½E½;
Section 12: All;
Section 13: N½, N½SE¼;
Section 14: E½E½;
Section 22: NE¼NE¼, S½NE¼, N½SE¼, SW¼SE¼;
Section 23: N½, NW¼SW¼;

SCHEDULE B

This policy does not insure against loss by reason of the matters shown or referred to in this Schedule except to the extent that the owner of any mortgage or deed of trust is expressly insured in Paragraphs numbered 4 and 5 on page 1 of this policy.

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records; pending proceedings for vacating, opening or changing of streets or highways preceding entry of the ordinance or order therefor.

2. Any facts, rights, interests, or claims which are not shown by the public records but which could be ascertained by an inspection of said land or by making inquiry of persons in possession thereof.

3. Easements, claims of easement or encumbrances which are not shown by the public records; unpatented mining claims; reservations or exceptions in patents or in Acts authorizing the issuance thereof; water rights, claims or title to water.

4. Discrepancies, conflicts in boundary lines, shortage in area, encroachments or any other facts which a correct survey would disclose.

5. 1967-68 taxes are now a lien but not yet payable.

6. Rights of the public in and to those portions of the herein described property lying in roads.

OREGON LAND TITLE ASSOCIATION
STANDARD COVERAGE POLICY
OTI 130-3 (Rev. 4-63)

CONDITIONS AND STIPULATIONS

(Includes those in the American Title Association-Owner's Policy — Standard Form B-1962)

1. DEFINITION OF TERMS

The following terms when used in this policy mean:

(a) "land": the land described, specifically or by reference, in Schedule A and improvements affixed thereto which by law constitute real property;

(b) "public records": those records which impart constructive notice of matters relating to said lands;

(c) "knowledge": actual knowledge, not constructive knowledge or notice which may be imputed to the Insured by reason of any public records;

(d) "date": the effective date;

(e) "mortgage": mortgage, deed of trust, trust deed, or other security instrument; and

(f) "insured": the party or parties named as Insured, and if the owner of the indebtedness secured by a mortgage shown in Schedule B is named as an Insured in Schedule A, the Insured shall include (1) each successor in interest in ownership of such indebtedness, (2) any such owner who acquires the estate or interest referred to in this policy by foreclosure, trustee's sale, or other legal manner in satisfaction of said indebtedness, and (3) any federal agency or instrumentality which is an insurer or guarantor under an insurance contract or guaranty insuring or guaranteeing said indebtedness, or any part thereof, whether named as an Insured herein or not, subject otherwise to the provisions hereof.

2. BENEFITS AFTER ACQUISITION OF TITLE

If an insured owner of the indebtedness secured by a mortgage described in Schedule B acquires said estate or interest, or any part thereof, by foreclosure, trustee's sale, or other legal manner in satisfaction of said indebtedness, or any part thereof, or if a federal agency or instrumentality acquires said estate or interest, or any part thereof, as a consequence of an insurance contract or guaranty insuring or guaranteeing the indebtedness secured by a mortgage covered by this policy, or any part thereof, this policy shall continue in force in favor of such Insured, agency or instrumentality, subject to all of the conditions and stipulations hereof.

3. EXCLUSIONS FROM THE COVERAGE OF THIS POLICY

This policy does not insure against loss or damage by reason of the following:

(a) Any law, ordinance or governmental regulation (including but not limited to building and zoning ordinances) restricting or regulating or prohibiting the occupancy, use or enjoyment of the land, or regulating the character, dimensions, or location of any improvement now or hereafter erected on said land, or prohibiting a separation in ownership or a reduction in the dimensions or area of any lot or parcel of land.

(b) Governmental rights of police power or eminent domain unless notice of the exercise such rights appears in the public records at the date hereof.

(c) Title to any property beyond the lines of the land expressly described in Schedule A, or title to streets, roads, avenues, lanes, ways or waterways on which such land abuts, or the right to maintain therein vaults, tunnels, ramps or any other structure or improvement, or any rights or easements therein unless this policy specifically provides that such property, rights or easements are insured, except that if the land abuts upon one or more physically open streets or highways this policy insures the ordinary rights of abutting owners for access to one of such streets or highways, unless otherwise excepted or excluded herein.

(d) Defects, liens, encumbrances, adverse claims against the title as insured or other matters (1) created, suffered, assumed or agreed to by the Insured claiming loss or damage; or (2) known to the Insured Claimant either at the date of this policy or at the date such Insured Claimant acquired an estate or interest insured by this policy and not shown by the public records, unless disclosure thereof in writing by the Insured shall have been made to the Company prior to the date of this policy; or (3) resulting in no loss to the Insured Claimant; or (4) attaching or created subsequent to the date hereof.

(e) Loss or damage which would not have been sustained if the insured were a purchaser or encumbrancer for value without knowledge.

4. DEFENSE AND PROSECUTION OF ACTIONS — NOTICE OF CLAIM TO BE GIVEN BY THE INSURED

(a) The Company, at its own cost and without undue delay shall provide for the defense of the Insured in all litigation consisting of actions or proceedings commenced against the Insured, or defenses, restraining orders, injunctions interposed against a foreclosure or sale of the mortgage and indebtedness covered by this policy or a sale of the estate or interest in said land; or (2) for such action as may be appropriate to establish the title of the estate or interest or the lien of the mortgage as insured, which litigation or action in any of such events is founded upon an alleged defect, lien or encumbrance insured against by this policy, and may pursue any litigation to final determination in the court of last resort.

(b) In case any such action or proceeding shall be begun, or defense interposed, or in case knowledge shall come to the Insured of any claim of title or interest which is adverse to the title of the estate or interest or lien of the mortgage as insured, or which might cause loss or damage for which the Company shall or may be liable by virtue of this policy, or if the Insured shall in good faith contract to sell the indebtedness secured by a mortgage covered by this policy, or, if an Insured in good faith creates or contracts to sell, lease or mortgage the same, or if the successful bidder at a foreclosure sale under a mortgage covered by this policy refuses to purchase and in any such event the title to said estate or interest is rejected as unmarketable, the Insured shall notify the Company thereof in writing. If such notice shall not be given to the Company within ten days of the receipt of process or pleadings or if the Insured shall not, in writing, promptly notify the Company of any defect, lien or encumbrance insured against which shall come to the knowledge of the Insured, or if the Insured shall not, in writing, promptly notify the Company of any such rejection by reason of claimed unmarketability of title, then all liability of the Company in regard to the subject matter of such action, proceeding or matter shall cease and terminate, provided, however, that failure to notify shall in no case prejudice the claim of any Insured unless the Company shall be actually prejudiced by such failure and then only to the extent of such prejudice.

(c) The Company shall have the right at its own cost to institute and prosecute any action or proceeding or do any other act which in its opinion may be necessary or desirable to establish the title of the estate or interest or the lien of the mortgage as insured, and the Company may take any appropriate action under the terms of this policy whether or not it shall be liable thereunder and shall not thereby concede liability or waive any provision of this policy.

(d) In all cases where this policy permits or requires the Company to prosecute or provide for the defense of any action or proceeding, the Insured shall secure to it the right to so prosecute or provide defense in such action or proceeding, and all appeals therein, and permit it to use, at its option, the name of the Insured for such purpose. Whenever requested by the Company the Insured shall give the Company all reasonable aid in any such action or proceeding, in effecting settlement, securing evidence, obtaining witnesses, or prosecuting or defending such action or proceeding, and the Company shall reimburse the Insured for any expense so incurred.

5. NOTICE OF LOSS – LIMITATION OF ACTION

In addition to the notices required under paragraph 4(b), a statement in writing of any loss or damage for which it is claimed the Company is liable under this policy shall be furnished to the Company within sixty days after such loss or damage shall have been determined and no right of action shall accrue to the Insured under this policy until thirty days after such statement shall have been furnished, and no recovery shall be had by the Insured under this policy unless action shall be commenced thereon within five years after expiration of said thirty day period. Failure to furnish such statement of loss or damage, or to commence such action within the time hereinbefore specified, shall be a conclusive bar against maintenance by the Insured of any action under this policy.

6. OPTION TO PAY, SETTLE OR COMPROMISE CLAIMS

The Company shall have the option to pay or settle or compromise for or in the name of the Insured any claim insured against or to pay the full amount of this policy, or, in case loss is claimed under this policy by the owner of the indebtedness secured by a mortgage covered by this policy, the Company shall have the option to purchase said indebtedness; such purchase, payment or tender of payment of the full amount of this policy, together with all costs, attorneys' fees and expenses which the Company is obligated hereunder to pay, shall terminate all liability of the Company hereunder. In the event, after notice of claim has been given to the Company by the Insured, the Company offers to purchase said indebtedness, the owner of such indebtedness shall transfer and assign said indebtedness and the mortgage securing the same to the Company upon payment of the purchase price.

7. PAYMENT OF LOSS

(a) The liability of the Company under this policy shall in no case exceed, in all, the actual loss of the insured and costs and attorneys' fees which the Company may be obligated hereunder to pay.

(b) The Company will pay, in addition to any loss insured against by this policy, all costs imposed upon the Insured in litigation carried on by the Company for the Insured, and all costs and attorneys' fees in litigation carried on by the Insured with the written authorization of the Company.

(c) No claim for damages shall arise or be maintainable under this policy (1) if the Company, after having received notice of an alleged defect, lien or encumbrance not excepted or excluded herein removes such defect, lien or encumbrance within a reasonable time after receipt of such notice, or (2) for liability voluntarily assumed by the Insured in settling any claim or suit without written consent of the Company, or (3) in the event title is rejected as unmarketable because of a defect, lien or encumbrance not excepted or excluded in this policy, until there has been a final determination by a court of competent jurisdiction sustaining such rejection.

(d) All payments under this policy, except payments made for costs, attorneys' fees and expenses, shall reduce the amount of the insurance pro tanto and no payment shall be made without producing this policy for endorsement of such payment unless the policy be lost or destroyed, in which case proof of such loss or destruction shall be furnished to the satisfaction of the Company, provided, however, if the owner of an indebtedness secured by a mortgage shown in Schedule B is an Insured hereunder, such payments shall not reduce pro tanto the coverage of the insurance afforded herein as to such indebtedness, except to the extent that such payments reduce the amount of the indebtedness secured by such mortgage. Payment in full by any person or voluntary satisfaction or release by the Insured of a mortgage covered by this policy shall terminate all liability of the Company to the insured owner of the indebtedness secured by such mortgage, except as provided in paragraph 2 hereof.

(e) When liability has been definitely fixed in accordance with the conditions of this policy the loss or damage shall be payable within thirty days thereafter.

8. LIABILITY NONCUMULATIVE

It is expressly understood that the amount of this policy is reduced by any amount the Company may pay under any policy insuring the validity or priority of any mortgage shown or referred to in Schedule B hereof or any mortgage hereafter executed by the Insured which is a charge or lien on the estate or interest described or referred to in Schedule A, and the amount so paid shall be deemed a payment to the Insured under this policy. The provisions of this paragraph numbered 8 shall not apply to an Insured owner of an indebtedness secured by a mortgage shown in Schedule B unless such Insured acquires title to said estate or interest in satisfaction of said indebtedness or any part thereof.

9. COINSURANCE AND APPORTIONMENT

(a) In the event there is a partial loss or claim after the Insured makes an improvement subsequent to the date of this policy, and only in that event, the Insured becomes a coinsurer to the extent hereinafter set forth.

If the cost of the improvement exceeds twenty per centum of the amount of this policy, such percentage of any partial loss established shall be borne by the Company as one hundred twenty per centum of the amount of this policy bears to the sum of the amount of this policy and the amount expended for the improvement. The foregoing provisions shall not apply to costs and attorneys' fees incurred by the Company in prosecuting or providing for the defense of actions or proceedings, and shall apply only to that portion of losses which exceed in the aggregate ten per cent of the face of the policy.

Provided, however, that the foregoing coinsurance provisions shall not apply to any loss arising out of a lien or encumbrance for a liquidated amount which existed on the date of this policy and was not shown in Schedule B, and provided further, such coinsurance provisions shall not apply to any loss if, at the time of the occurrence of such loss, the fair value of the premises, as so improved, does not exceed one hundred twenty per centum of the amount of this policy.

(b) If the land described or referred to in Schedule A is divisible into separate and distinct contiguous parcels, or if contiguous and such parcels are not used as one single site, and a loss is established affecting one or more of said parcels but not all, the loss shall be computed and settled on a pro rata basis as if the face amount of this policy was divided pro rata as to the value on the date of this policy of each separate independent parcel to the whole, exclusive of any improvements made subsequent to the date of this policy, and no liability or value has otherwise been agreed upon as to each such parcel by the Company and the Insured at the time of the issuance of this policy and shown by an express statement herein, by an endorsement attached hereto.

10. SUBROGATION UPON PAYMENT OR SETTLEMENT

Whenever the Company shall have settled a claim under this policy, all right of subrogation shall vest in the Company unless prior to any act of the Insured, and it shall be subrogated to and be entitled to all rights and remedies which the Insured would have had against any person or property in respect to such claim had this policy not been issued. If the payment does not cover the loss of the Insured, the Company shall be subrogated to such rights and remedies in the proportion which said payment bears to the amount of said loss. If loss should result from any act of the Insured, such act shall not void this policy, but the Company, in that event, shall be required to pay only that part of any losses insured against hereunder which shall exceed the amount, if any, lost to the Company by reason of the impairment of the right of subrogation. The Insured, if requested by the Company, shall transfer to the Company all rights and remedies against any person or property necessary in order to perfect such right of subrogation, and shall permit the Company to use the name of the Insured in any transaction or litigation involving such rights or remedies.

If the insured is the owner of the indebtedness secured by a mortgage covered by this policy, such Insured may release or substitute the personal liability of any debtor or guarantor, or extend or otherwise modify the terms of payment, or release a portion of the estate or interest from the lien of the mortgage, or release any collateral security for the indebtedness, provided such act does not result in any loss of priority of the lien of the mortgage.

11. POLICY ENTIRE CONTRACT

Any action or actions or rights of action that the Insured may have or may bring against the Company arising out of the status of the lien of the mortgage covered by this policy or the title of the estate or interest insured herein must be based on the provisions of this policy.

No provision or condition of this policy can be waived or changed except by writing endorsed hereon or attached hereto signed by the President, a Vice President, the Secretary, an Assistant Secretary or other validating officer of the Company.

12. NOTICES, WHERE SENT

All notices required to be given the Company and any statement in writing required to be furnished the Company shall be addressed to it at the office which issued this policy.

SUB - LEASE

THIS INDENTURE made this 4 day of 19__ by and between HORSEHEAVEN MINE, a co-partnership, consisting of Ray R. Whiting Jr., Albert M. Franco, Milton P. Roumm, Charles S. Fine and Ruth J. Roumm, hereinafter referred to as "Lessor" and THE HORSE HEAVEN MINING COMPANY INC., a Washington corporation hereinafter referred to as "Lessee".

W I T N E S S E T H :

That the Lessor, for and in consideration of the covenants and agreements hereinafter expressed to be kept and performed by the Lessee, hereby subleases unto the Lessee the following described premises, situate, lying and being in Jefferson County, State of Oregon, to wit:

> The N.E. 1/4 of the N. E. 1/4 and the South 1/2 of the N.E. 1/4, and the North 1/2 of the S. E. 1/4, and the S.W. 1/4 of the S.E. of Section 22; the North 1/2 and the NW 1/4 of the S.W. 1/4 of Section 23; the East 1/2 of the East 1/2 of Section 14; the North 1/2 and the North 1/2 of the S.E. 1/4 of Section 13; all of Section 12; the East 1/2 of the East 1/2 of Section 11; the SE 1/4 of the SE 1/4 of Section 2, the South 1/2 of the NE 1/4, and the North 1/2 of the SE 1/4 and the South 1/2 of the South 1/2 of Section 1; and Lots 1 and 2 of Section 1; all of the foregoing situated in Township 10 South, Range 18, E.W.M., Jefferson County, Oregon.
>
> TOGETHER WITH all mineral rights thereto and minerals of any kind whatsoever lying beneath the surface of the foregoing property, all under the following terms and conditions:

1. This Sub-Lease is subject to all the terms and conditions of that certain lease, with all amendments and modifications thereto, between CORDERO MINING COMPANY, a corporation, as Lessor, and HUMBOLDT METALS COMPANY a co-partnership as Lessee, the Lessee's interest having been assigned to Ray R. Whiting Jr., Albert M. Franco, Milton P. Roumm, Charles S. Fine and Ruth J. Roumm as their interest may appear, doing business as Horse Heaven Mine.

2. In lieu of a minimum production requirement by Lessee from the demised premises, Lessee's right to maintain its leasehold may be held

by payment to Lessor of a minimum monthly royalty of $300.00, commencing February 1, 1970.

3. Lessee shall pay to Lessor, from production of minerals from the above-described property, a sum equal to 10% of any monies received from the sale of such minerals by Lessee. The amount of royalty shall be determined by the sales records of the Lessee, and royalty payments are to be scheduled monthly beginning thirty (30) days after the first shipment has been made and after the first settlement with the buyers of said minerals. Royalties based on 10% of monies received by Lessee from production shall continue until Lessor has received from such royalties a total sum of $100,000.00, at which time the royalties shall cease, and the Lessor shall execute or cause to be executed by the fee owner of the said premises a warranty deed conveying to the lessee up to fifty (50) acres thereof and not necessarily contiguous, as selected by Lessee. In any event, any selection of the aforementioned portions of the said premises made by Lessee shall be as reasonably needed for mining purposes and mine development, and shall not be selected without such reasonable need. Royalties shall continue thereafter from mineral sales from undeeded land except that Lessee may select thereafter any additional fifty (50) acres from the said premises which are to be contiguous to any one or more other parcels previously deeded to Lessee and which additional parcel or parcels of fifty (50) acres shall be deeded for $50,000.00 in royalties. Any ore, waste or "tailings" extracted from the demised premises by Lessor or its predecessor or predecessors in interest prior to the date hereof shall not be covered by this indenture, and shall remain the sole and exclusive property of Lessor. Lessee hereby grants to Lessor the right to store without charge any of such previously extracted ore, waste or "tailings" upon the demised premises until June 30, 1973, so long as the storage thereof shall not substantially interfere with mining operations conducted upon the demised premises; after said date, any such ore, waste or tailings shall become the property of Lessee. In addition thereto,

Lessor or any third person or persons with whom its contracts until June 30, 1973, shall be entitled to maintain upon the premises at its sole expense a reasonable amount of personnel and equipment in order to process and mill the aforementioned ore, waste, or tailings. PROVIDED ALWAYS that Lessor or any third person or persons with whom it contracts shall not interfere with Lessee's reasonable mining operations and shall indemnify Lessee from all loss damage claims demands or expenses ariging from the operations of the Lessor or any third person or persons with shom it contracts or their officers agents or employees.

4. Lessor has previously entered into an agreement with the Office of Minerals Exploration of the United States Geological Survey. Said United States government agency has a lien upon the premises to the extent of any monies advanced under said loan. At the time of this Agreement, $1,577.00 has been so advanced and the said premises shall be subject to a lien in respect of monies advanced hereunder.

5. A Plan of Reorganization and Agreement are being executed contemporaneously with this Sub-Lease by Lessor and Lubicon Mining, Ltd. a British Columbia, Canada, corporation and the shares of stock owned by this Lessor in Lessee corporation are being traded for shares of stock in Lubicon Mining Ltd., pursuant to a plan of reorganization under appropriate provisions of the United States Internal Revenue Code. It is agreed and covenanted by Lessee that Lubicon Mining Ltd. or any other corporation which is a part of the plan of reorganization involving Lessee corporation shall cause the stock of said Lubicon Mining Ltd. or such other corporation with which Lessee is engaged in the plan of reorganization to be quoted as a fully listed company on the Vancouver Stock Exchange in the Province of British Columbia, Canada, not later than fifteen (15) months from the date any shares owned by this Lessor in Lubicon Mining Ltd. or such other corporation are quoted on the Interim list on the said Vancouver Stock Exchange. Lessor may accept full listing upon any other stock exchange in Canada, at its option, in fulfillment of this covenant.

6. Lessor has covenanted or is covenanting to sell a small mercury mill and a back-hoe situated upon the demised premises for a price and under certain terms and conditions. Until title thereto actually passes in accordance with the terms of said sale, full and complete control thereof shall belong to Lessor. Upon title passing Lessor shall retain the right to make reasonable use of said mill until June 30, 1973 and shall permit the use thereof by any third person processing or milling the previously extracted ore, waste or tailings hereinbefore referred to. PROVIDED ALWAYS that Lessor or any third person or persons with whom it contracts shall not interfere with Lessees reasonable mining operations and shall indemnify Lessee from all loss damage claims demands or expenses arising from the operations of the Lessor or any third person or persons with whom it contracts or their officers agents or employees.

7. On or before June 30, 1971 Lessee or any other corporation, association or partnership controlling it (control constituting ownership of not less than 80% of the stock), shall expend the sum of not less than $75,000.00 upon the demised premises for exploration, development and mining.

8. If Lessor deems that Lessee has breached any covenant or condition contained herein, it shall give to Lessee by certified mail of the United States of America notice of said default wherein said notice shall give to the said Lessee thirty (30) days within which to correct said default or said lease shall be considered null and void at the expiration of said period. Notices shall be addressed to Lessee to its registered agent in the State of Washington, or to such other address as Lessee shall give in writing.

9. Lessee shall assume all liabilities to itself or its employees as relates to any work it does upon the demised premises. Lessor shall not be responsible for any debts contracted by Lessee or its successors or assigns, and the property demised herein shall be kept free

of all indebtedness except the said lien in favour of the Office of Mineral Exploration or unless otherwise agreed and put in writing by the Lessor. It is understood that at the present time Lessor has executed a grazing lease to one Raymond Crowley of Ashwood, Oregon, and it is agreed by the parties that the rights given hereunder by Lessor to Lessee shall permit the Lessee to prospect, develop and mine on any of the above-described property, but without substantially interfering with said grazing rights. Nothing herein contained shall substantially interfere with Crowley's use of water for his cattle, horses or other livestock.

10. Lessor agrees to cooperate with Lessee in attempting to secure an assignment of the United States Geological Survey CME Contract, but without obligation by Lessor for repayment of any sums hereafter advanced to Lessee by the United States Government.

11. All property on said leased premises shall be at the risk of Lessee. Lessor, or Lessor's agent shall not be liable for any damage either to person or property sustained by Lessee or others caused by any defects now on said premises, or hereafter occurring therein. Lessee agrees to defend and hold Lessor harmless from any and all claims for damages suffered or alleged to be suffered in or about the leased premises by any person, firm or corporation subject to the terms of paragraphs 3 and 6 hereof.

12. Lessee shall keep the leased premises free from any liens arising out of any work performed, materials furnished or obligations incurred by Lessee except the said lien in favour of the office of Mineral Exploration. In the event Lessee becomes insolvent, voluntarily or involuntarily bankrupted, or a receiver, assignee, or other liquidating officer is appointed for the business of the Lessee, then the Lessor may cancel this lease at Lessor's option. Lessee shall not without the written consent of Lessor let or sublet the whole or any part of the demised premises nor assign this lease or any part thereof to any corpor-

ation except its controlling corporation or a subsidiary thereof without the written consent of the Lessor, first obtained which consent shall not be unreasonably withheld. This lease shall not be assignable by operation of law. If consent is once given by the Lessor to the assignment of this lease or of any interest therein Lessor shall not be barred from afterwards refusing to consent to any further assignment. By reason of a default on the part of the Lessee in the performance of any of the provisions of this lease, it becomes necessary for the Lessor to employ an attorney, the Lessee agrees to pay all costs, expenses and attorney's fees expended or incurred by the Lessor in connection therewith.

13. The failure of the Lessor to insist upon strict performance of any of the covenants and agreements of this lease, or to exercise any option herein conferred in any one or more instances, shall not be construed to be a waiver or relinquishment of any such or any other covenants or agreements, but the same shall be and remain in full force and effect.

14. Subject to the provisions hereof pertaining to assignment and subletting, the covenants and agreements of this lease shall be binding upon the heirs, legal representatives, successors and assigns of any and all of the parties hereto.

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

THE HORSE HEAVEN MINING COMPANY INC.

Vice President (Milton P. Roumm)

Secretary (Albert M. Franco)

This Sub-Lease and its terms and conditions are approved by LUBICON MINING, LTD. and its successors and assigns, which agrees to be bound thereby.

LUBICON MINING, LTD.
By

President

Secretary

APPROVED:

Clyde Whiting

HORSEHEAVEN MINE,
a co-partnership

Ray R. Whiting Jr.

Albert M. Franco

Milton P. Roumm

Charles S. Fine

Ruth J. Roumm

Reva Fine

STATE OF WASHINGTON)
ss
COUNTY OF KING)

On this 14 day of Jan, 19 [illegible], before me, the undersigned, a Notary Public in and for the State of Washington, duly commissioned and sworn, personally appeared Ray R. Whiting, Jr., Albert M. Franco, Milton P. Roumm, Ruth J. Roumm and Charles S. Fike, to be known to be the individuals described in and who executed the foregoing instrument, and acknowledged to me that they signed and sealed the said instrument as their free and voluntary act and deed for the uses and purposes therein mentioned.

WITNESS my hand and official seal hereto affixed the day and year first above written.

NOTARY PUBLIC in and for the State of Washington, residing at Seattle.

STATE OF WASHINGTON)
ss
COUNTY OF KING)

On this 14 day of Jan, 19 [illegible], before me personally appeared _____ and _____ to me known to be the President and Secretary, respectively, of The Horse Heaven Mining Company, Inc., the corporation that executed the within instrument and acknowledged that they signed and sealed the same as their free and voluntary act and deed for the uses and purposes herein mentioned.

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

NOTARY PUBLIC in and for the State of Washington, residing at Seattle.

ADDENDUM

THIS ADDENDUM is a part of the Sub-lease between HORSEHEAVEN MINE, a co-partnership, consisting of Ray R. Whiting, Jr., Milton P. Roumm, Albert M. Franco, Charles S. Fine and Ruth J. Roumm, and The Horseheaven Mining Company, Inc., dated January __/__, 1970.

This Sublease has been executed in compliance with paragraph 4(d) of "Plan of Reorganization and Agreement" between these sub-lessors as vendors of stock of The Horseheaven Mining Company, Inc. and Lubicon Mining, Ltd., as vendees of said stock, and it is agreed that there is an interrelationship between said agreement and this sublease.

Therefore, in the event of completion of said sale of stock as called for in said agreement with Lubicon Mining, Ltd., whereupon said Lubicon Mining, Ltd. controls this sub-lessee, it is agreed that any default by Lubicon Mining, Ltd. in the performance of its covenants under said sale agreement shall, at the option of these sub-lessors, constitute a default by this sub-lessee of this Sub-Lease.

Any assignment or sub-letting of this Sub-Lease made by sub-lessee under paragraph 12 of said Sub-Lease shall be deemed to preserve the lien of the Office of Minerals Exploration, U.S. Geological Service, an agency of the United States of America, for monies loaned by it to the sub-lessors, whether or not said preservation of lien is stated in said assignment or subletting.

Any assignment or sub-letting permitted under paragraph 12 or any other provision of said sub-lease, when made,

shall not relieve sub-lessee, its assignees or sub-lessees, or further assignees or sub-lessees, from the performance of covenants hereunder.

THE HORSE HEAVEN MINING COMPANY, INC.

By _____
Milton P. Roumm VicePresident

_____
Albert M. Franco Secretary

HORSEHEAVEN MINE,
a co-partnership

_____
Ray P. Whiting, Jr.

_____
Albert M. Franco

_____
Milton P. Roumm

_____
Charles S. Fine

_____
Ruth J. Roumm

APPROVED:

_____
Clyde Whiting

_____
Reva Fine

CORRECTION AND AMENDMENT
OF SUB-LEASE

THAT CERTAIN SUB-LEASE of January 14, 1970 by and between HORSEHEAVEN MINE, a co-partnership, and THE HORSE HEAVEN MINING COMPANY, INC., a Washington corporation, is hereby corrected so that the last complete sentence of Paragraph Three on Page Two of said Sub-Lease, which now reads as follows:

> "Lessee hereby grants to Lessor the right to store without charge any of such previously extracted ore, waste or "tailings" upon the demised premises until June 30, 1973, so long as the storage thereof shall not substantially interfere with mining operations conducted upon the demised premises; after said date, any such ore, waste or tailings shall become the property of Lessee",

shall be corrected and amended to read, so that after the last word of said sentence, to-wit, the word "Lessee", there shall be added the following words:

> "subject to any right or title of Cordero Mining Company therein".

DATED this ___ day of January, 1970.

THE HORSE HEAVEN MINING COMPANY, INC.

By _____
Milton P. Roumm, Vice-President

_____
Albert M. Franco, Secretary

HORSEHEAVEN MINE, a co-partnership

By _____
Ray R. Whiting, Jr.

_____
Albert M. Franco

_____
Milton P. Roumm

_____
Charles S. Fine

_____
Ruth J. Roumm

APPROVED:

_____
Reva Fine

This Correction and Amendment of Sub-Lease is approved by LUBICON MINING, LTD. and its successors and assigns, which agrees to be bound thereby.

LUBICON MINING, LTD.

By _____
President

_____
Secretary

APPROVED:

_____
Clyde Whiting

OFFICIAL COPY
O. M. E.
RECEIVED
MAR 10 1970
INITIALS CODE

RECEIVED
MAR 16 1970
O. M. E.
SPOKANE, WASH.

L.B. HALFERDAHL & ASSOCIATES LTD.

11539 - 73rd Avenue
Edmonton 62, Alberta
March 3, 1970

Mr. Willard P. Puffett
Office of Minerals Exploration
United States Geological Survey
Court House
West 920, Riverside Avenue
Spokane, Washington 99201

Dear Mr. Puffett:

We were sorry to have missed you when we passed through Spokane last month. At that time we were making arrangements with Boyles Bros. in Spokane for some drilling on the Horse Heaven west showing.

This drilling is now scheduled to start March 14, 1970. We should be happy to have you visit the Horse Heaven while it is in progress. It is expected to last as much as a week or ten days.

Yours very truly,

L. B.HALFERDAHL & ASSOCIATES LTD.

L. B. Halferdahl

L. B. Halferdahl, P. Geol.

LBH/jm

O. M. E.
RECEIVED
MAR 10 1970
INITIALS CODE

re: OME-6772 (Mercury)
Horse Heaven Mine
Jefferson County, Oregon
Contract 2286

OFFICIAL
COPY
M. E.
RECEIVED
FEB 27 1970
MINERALS CODE
120
Col 120
HK 120
Copy 120

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

February 24, 1970

Mr. Albert M. Franco
Franco, Asia, Bensussen and Coe
Attorneys at Law
602 Tower Building
Seattle, Wash. 98101

Re: OME 6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon
Contract 2286

Dear Mr. Franco:

To date I have received only your monthly report and voucher for work done during August and September 1969. It is my understanding that you were going to submit a voucher for work done under Stage I during October 1969.

On Friday, February 13, 1970, I learned, in a telephone conversation with Ray Whiting, that you had completed arrangements with Lubicon Mining Ltd., to carry out some exploration on the Horse Heaven Mining property. The cash consideration was reportedly about $15,000.00 and Lubicon is obligated to spend an additional several thousand dollars in their exploration activities.

No copies of the above agreement have come to this office; possibly you forwarded them directly to our office in Washington, D.C. I must remind you again that the contract requires that we receive two copies of any agreement whereby you transfer interest in the property to other parties.

Sincerely,

Willard P. Puffett
Field Officer, Region I
OME

cc: OME ✓

FRANCO, ASIA, BENSUSSEN & COE
ATTORNEYS AT LAW
602 TOWER BUILDING
SEATTLE, WASHINGTON 98101
MA. 3-5622 · MA. 3-5088

ALBERT M. FRANCO
BENJAMIN S. ASIA
EDWARD M. BENSUSSEN
HAROLD B. COE

January 6, 1970

United States Department of the Interior
Geological Survey
Washington, D.C.
20242

OFFICIAL
COPY
JAN 12

RE: OME 6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon
Contract 2286

Attention: Harold Kirkemo
Chief, Office of
Minerals Exploration

Dear Mr. Kirkemo:

Thank you for your letter of December 31st and the comments made therein. First it is not our intent to dissolve the partnership. We will hold the original lease presently existing from Cordero Mining Company.

As to the proposed sub-lease, we are reserving the Government's right to royalties on production and liens for the payment thereof, as provided in the contract and will furnish copies as so provided.

Thanking you very much, I am

Very truly yours,

ALBERT M. FRANCO

AMF:bb

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
12/31/69		120
		220
		120M

DEC 31 1969

AIRMAIL

Mr. Albert M. Franco
Franco, Asia, Bensussen & Coe
Attorneys at Law
602 Tower Building
Seattle, Washington 98101

Re: OME-6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon
Contract 2286

Dear Mr. Franco:

This is in reply to your letter, dated December 15, 1969, to Mr. Willard P. Puffett, OME Field Officer, Region I, advising that the partnership Horse Heaven Mine is contemplating incorporating itself as Horse Heaven Mining Company, Inc., possible exchange of the corporation stock for stock in Lubicon Mining, Ltd., Edmonton, Alberta, Canada, under a plan of reorganization, and requesting consent of the Government for assignment of the partnership's leasehold to the proposed corporation or to "the entry of an execution of a sublease to said corporation, ...".

It is not the practice of the Government to give prior approval to any actions affecting the Operators under OME contracts. Your attention is directed to Article 2(c) of the contract which reads as follows:

> "(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 claims, 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."

If the partnership is dissolved, please furnish us with two copies of the documents as directed in Article 2(c), new assignment of lease from Humboldt Metals Company, new lease amendment from Cordero Mining Company, and new Lien and Subordination Agreements signed by Cordero Mining Company, owner of the property. These documents will be reviewed to determine if the Government's right to royalty on production is preserved and if other provisions of the contract are maintained in force. Based on this review, we would either approve or disapprove the actions as they affect the Government's interests in the contract.

The present situation with respect to this contract is that work under Stage I was completed and the results did not justify work under proposed Stage II. Termination of the contract is held in abeyance temporarily in event the Operator should continue work on its own funds and find evidence of extensions of ore to justify work under Stage II. If evidence to support Stage II work is forthcoming, we should receive it in the near future. The contract cannot remain inactive indefinitely as the time for completion of work expires July 25, 1970. A new set of Lien and Subordination Agreements is enclosed.

Sincerely yours,

Harold Kirkemo

Harold Kirkemo
Chief, Office of
Minerals Exploration

Enclosures

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

HKirkemo/RWLong/gla 12-31-69

MME FORM 6 REFERENCE SLIP

REV.-2-59 - OFFICE OF MINERALS EXPLORATION

TO:		DATE	INITIALS
	Chief, OME	12/16/69	
1.			
	Re: OME-6772 (Mercury)		
2.	Horse Heaven Mine		
	Horse Heaven West Property		
3.	Jefferson County, Oregon		
	Contract 2286		
4.			
5.	Willard P. Puffett	WPP	
FROM:	Field Officer, Region I		

FOR: Check items for action desired

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

REMARKS: Letter from Operator relating plans for incorporating and possibly transferring ownership of property. I think we need a copy of the documents before we can take action on the request.

Willard P. Puffett

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

FRANCO, ASIA, BENSUSSEN & COE
ATTORNEYS AT LAW
602 TOWER BUILDING
SEATTLE, WASHINGTON 98101
MA. 3-5622 · MA. 3-5088

ALBERT M. FRANCO
BENJAMIN S. ASIA
EDWARD M. BENSUSSEN
HAROLD B. COE

RECEIVED
DEC 16 1969 W OP
O. M. E.
SPOKANE, WASH

December 15, 1969

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

United States Department of the Interior
Geological Survey
U. S. Court House
Room 656
West 920 Riverside Avenue
Spokane, Washington
99201

Attention: Mr. Willard Puffett, Field Officer, OME

RE: OME - 6772 (Mercury)
The Horse Heaven Mine
Jefferson County, Oregon

Dear Mr. Puffett:

The purpose of this letter is to notify you that Horse Heaven Mine, a co-partnership, consisting of Charles S. Fine, Albert M. Franco, Milton P. Roumm, Ruth J. Roumm, and Ray R. Whiting, Jr. is contemplating incorporating itself and issuing stock to the partners. It is planned that the partnership known as the Horse Heaven Mine will sublet the Horse Heaven Mine property to the corporation to be formed, which will then perform the mining thereon.

The partnership has also been negotiating with Lubicon Mining, Ltd, Edmonton, Alberta, Canada, under a plan of reorganization wherein stock of Horse Heaven Mining Company, Inc., our proposed corporation, will be exchanged for stock in Lubicon Mining, Ltd., pursuant to several terms and conditions which will be agreed upon in the proposed plan of reorganization.

I have been ~~orally~~ advised that if an agreement for reorganization is entered into, the Lubicon people intend to expend funds for exploration as early as February, 1970, which time would very likely be in advance of the actual completion of the reorganization and prior to the actual

transfer or exchange of the stock.

If, for some reason, the agreement with the Lubicon people is not signed in the first place, and further if signed, the conditions of the terms of the reorganization plan are not met, we will nonetheless have incorporated the Horse Heaven Mine, and in any event would have to have the OME Contract transferred to this corporation.

It is my opinion that the possibility of getting outside parties to expend what may be substantial sums of money in the development of this Oregon mercury property can be highly beneficial to the OME program. Accordingly, on behalf of the partnership, I request that the U. S. Geological Service consent to either the assignment of our leasehold to the corporation to be formed, or the entry of an execution of a sublease to said corporation, so that in the event Stage Two of the OME Contract is carried through, it may be done by the corporation. We would, of course, reserve the right not to assign the contract if for any reason we should decide not to incorporate and leave things as they are.

Your early attention to this matter would be most appreciated.

Thanking you very much, I am

Very truly yours,

ALBERT M. FRANCO

AMF:bb

FORM 9-1648
MARCH 1963

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

RECEIVED OCT 16 1969 O.M.E. SPOKANE, WASH.

OFFICIAL COPY M.E.S. RECEIVED OCT 27 1969 INITIALS CODE

OPERATOR'S MONTHLY VOUCHER

For Month of Aug-Sept., 1969

Docket No. OME- 6772 (Mercury)
Contract 14-08-0001 2286
Contract Amount $ 24,000.00
Gov't. Participation % 75 $ 18,000.00

Operator's Name Horse Heaven Mine
Address 602 Tower Bldg, Seattle, Wash.98101

COST ITEMS (FROM EXHIBIT A)	FOR OPERATOR'S USE: THIS MONTH UNITS	THIS MONTH COSTS	TO DATE UNITS	TO DATE COSTS	FOR GOVERNMENT USE ONLY: THIS MONTH UNITS	THIS MONTH COSTS	TO DATE UNITS	TO DATE COSTS
		$		$		$		$
Bulldozing	79	1,185.00	79	1,185.00	79 hrs.	1,185.00	79 hrs.	1,185.00
Drilling & Blasting	18	135.00	18	135.00	18 hrs.	135.00	18 hrs.	135.00
Supervisor	1	800.00	1	800.00	1 month	800.00	1 month	800.00
Consultant	2	200.00	2	200.00	2 days	200.00	2 days	200.00
Office Expense	1	50.00	1	50.00	1 month	50.00	1 month	50.00
TOTALS		$ 2370.00		$ 2370.00		$ 2,370.00		$ 2,370.00

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

Date Oct. 14, 1969 *Payee Horse Heaven Mine

Per [signature] Title Partner

*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 Willard P. Pepper OME Field Officer Date 10/16/69

1,777.50 (63) 14X0804
200.00 14X6875(08)

Approved for: $ 1,577.50
(SUBJECT TO AUDIT)

Signature MW

Date OCT 27 1969 Vou. No. 0259

(SEE OTHER SIDE)

FOR OPERATOR'S USE

REMARKS

0 3 5 2 5 4

U.S. GEOLOGICAL SURVEY
OCT 23 12 09 PM '69
DIVISION

FOR GOVERNMENT USE

REMARKS

1/ Withhold $200.00 pending decision as to whether to continue contract, and if not, until receipt of Operator's final report.

OPERATOR'S MONTHLY REPORT

The Operator, under an Office of Minerals Exploration contract, is required to report monthly to the Government. The report consists of two parts.

FIRST, the Operator's Monthly Voucher on Form 9-1648 listing the project costs incurred and claimed by the Operator is the voucher basis for payment of the Government's share of the cost.

SECOND, the Operator's Narrative Report is a concise description of the work performed, results accomplished, and any unusual situations encountered, illustrated and supported by engineering-geological maps or sketches, drill hole logs, assay reports, etc., as pertinent.

The Operator submits the original and three copies of each of the two sections of this report to the OME regional Field Officer at the end of each month during the life of the contract.

PREPARATION OF OPERATOR'S MONTHLY VOUCHER, FORM 9-1648

In the left hand column list the items for which costs were incurred during the month, and also the items for which costs were previously reported. For items previously reported, show only UNITS TO DATE and COSTS TO DATE. Items listed should conform to Exhibit A of the contract (Estimated Costs of the Work). The total of COSTS THIS MONTH followed by the Operator's signature constitutes a claim for payment of the Government's share of the costs. The Operator or his agent must sign the certification in the lower left corner.

Except for amounts claimed under "fixed unit costs" provisions of the contract, all costs claimed in this voucher must be supported by documentary evidence consisting of: (a) certified copies or transcripts of payrolls which list each employee, wage rate, period of employment, gross earnings, and net earnings; (b) original or certified copies of invoices, statements of accounts, or purchase orders which indicate items of materials or services, quantities, unit prices, total charges, and payment terms; and (c) certified memoranda of the Operator for such items as unemployment taxes, employee's liability insurance, and depreciation of Operator-owned equipment. The certification may be stated thus, "Certified True Copy", followed by the signature of the Operator or his agent. One copy of each document should accompany the original of this voucher.

The requirement for submitting documentary evidence of claimed costs may be waived by the OME regional Field Officer if he determines that it is impracticable for an Operator to submit this material. In any case of waiver of this requirement an "on-site" audit by an OME auditor is mandatory prior to payment of the final Operator's Monthly Voucher.

02596

UNITED STATES
DEPARTMENT OF THE INTERIOR
Geological Survey
Branch of Budget and Finance
Washington, D. C. 20242

ADMINISTRATIVE SUSPENSION STATEMENT

Name and Address of Payee: Horse Heaven Mine
602 Tower Bldg.
Seattle, Wash. 98101

Amount Claimed:	Differences (Explained Below)	Amount Approved
2,370.00	200.00	2,370.00 1,777.50 Gov. Part. Less 200.00 1,577.50
Bu. Voucher No.	Payee's Invoice No.	Period

EXPLANATION

Withholding $200.00 pending decision to continue contract uruntil receipt of final report.

Any reclaim for items deducted must be included as a separate item on subsequent monthly voucher and supported by the original of this statement.

Branch of Budget and Finance

October 14, 1969.

NARRATIVE REPORT, AUGUST AND SEPTEMBER, 1969.

Horse Heaven Mine, Jefferson County,
Oregon; Docket OME 6772 (Mercury).

Work under the contract commenced August 21, 1969 with bulldozer trenching. Twenty hours of dozing were spent in Trench No. 1. This trench was cut to a depth of 12 feet, but failed to reach bedrock.

The bulldozer broke down before Trench No. 2 could be completed. Repairs took two weeks (because of delay in parts delivery), and it was not until September 18th that bulldozer work was started again. By September 30th, Trenchs 2, 3 and 5 (as shown on the sketch attached to the contract) were completed for a total of 79 hours of dozer work. Drilling and blasting were carried out in Trench No. 3. Trenchs 3 and 5 cut the eastward extension of the fault zone exposed in the west pit. As far as could be determined by visual examination no mercury mineralization was encountered in the trenchs, however, by panning, a small trace of cinnabar could be obtained. Results of samples taken for assay in the trenchs have not as yet been received.

E. A. Magill, our consulting engineer, visited the property on September 17 and 18. Mr. Willard Puffett of the OME visited the property on September 18th.

Bulldozer trenching was completed early in October and the trenchs backfilled as required by the contract. A detailed description of the work, assay results and geological maps will be submitted with the October voucher.

Ray R. Whiting, Jr.

AME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
10/22/69	Peterson	120
		120
10/22	Cal	220
		120M

OCT 22 1969

Memorandum

To: Chief, Branch of Budget and Finance

From: Chief, Office of Minerals Exploration

Subject: OME-6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon
Contract 2286

Enclosed are the original and two copies of the Operator's Monthly voucher for August and September 1969. Please withhold $200.00 from payment of this voucher pending decision whether to authorize Stage II work or terminate the contract.

Harold Kirkemo (glc)
Harold Kirkemo

Enclosure

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

ECPeterson/bsl 10/22/69

UNITED STATES
DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY
U.S. Court House, Rm. 656
West 920 Riverside Avenue
Spokane, Washington 99201
October 7, 1969

OFFICIAL COPY
O. M. E.
RECEIVED
OCT 9 1969
INITIALS | CODE
gla 130
bal 120
HX 120
EM 120

Memorandum

To: Chief, Office of Minerals Exploration

From: Field Officer, Region I

Subject: Interim Inspection
OME-6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon
Contract 2286

Mr. Ray Whiting, Jr., telephoned me on Tuesday, September 30, 1969, to report that the required trenches had been excavated at the Horse Heaven West property. He asked if I would examine them soon so that they could be back filled. I visited the property on Thursday, October 2, 1969, and made a Brunton and tape survey of the area (fig. 1).

The purpose of the trenching was to seek extensions of the cinnabar-mineralized rock that had been exposed in the Horse Heaven West Discovery pit. In this pit there are a few stringers of cinnabar that strike northeasterly and dip southeasterly; these apparently terminate along an east-west fault that dips southerly. The trenches were planned to test for extensions of the cinnabar along the projection of the stringers northeast of the pit and along the projections of the fault east and west from the pit.

Trench 1 (fig. 1) explored west from the pit. The overburden in this area is as much as 6 feet thick and the results are inconclusive as bedrock is exposed in only a short length of the trench. The bulldozer was used to freshen up the exposures in the tributary west of this trench; although a few colors were found by panning the clay near the south end of the cut, no cinnabar was exposed.

Trench 2, northeast of the discovery pit (fig. 1), exposed bedrock for more than 100 feet through an area in which the cinnabar-mineralized stringers project. No cinnabar was found in this trench. However, there is chalky white rhyolite exposed between the trench and the pit; if this rhyolite is an intrusive plug, then it might cut off the stringers, or conversely, the stringers might extend

southwest from the plug. Basalt is exposed northwest of Trench 2. A bulldozer cut exposed the contact between the basalt and tuff; no cinnabar was found. The basalt is probably an extension of a basalt dike exposed in the tributary of Horse Heaven Creek south of the Gonser Road. The rocks in Trench 2 are mainly variegated tuffs and there is very little clay exposed. These tuffs abut against the white rhyolite; bulldozing along this contact failed to expose cinnabar-mineralized rock.

Trenches 3 and 4 were to explore for eastern extensions of the fault in the discovery pit. A gray siliceous tuff bed, about a foot thick, can be traced between the two trenches; this tuff bed is similar to siliceous gray rock that is along the fault plane in the pit. In the pit, the gray rock dips to the south and in both Trenches 3 and 4 it dips about 30° S. It appears to be a bed or layer in the tuffs. Thick white clay is in the discovery pit south of the gray tuff bed, but this type of clay was not cut in Trenches 3 and 4.

Mr. Whiting had reported that some good indications of mercury were found in former years by panning near rhyolite about 550 feet northeast of the discovery pit. An old bulldozer cut was freshened up in this area in the hopes of finding the source of the cinnabar; no positive evidence of cinnabar was found in this cut.

The results of the bulldozing are negative in that no extension of the cinnabar-bearing clays were found away from the discovery pit. Perhaps, the bulldozer cuts east of the pit did not go deep enough to thoroughly explore the ground. The bulldozer used, a TD-14A, was unable to dig into the bedded tuffs for more than 2 or 3 feet. It had been hoped that only thin beds of hard rock would be found above the expected clays.

Mr. Whiting was advised that the results of the bulldozing did not justify work to be done under Stage II of the contract. However, as the bulldozing was somewhat inconclusive, Stage II work might be justified if the Operator found other evidence for extensions of ore away from the discovery pit. If the Operator drilled and found ore at depth, then perhaps further work would be justified. Drilling could not be justified under the contract for this had been suggested strongly as an exploration possibility to the applicant, but he had rejected it.

Willard P. Puffett

Willard P. Puffett

Enclosure
Distribution:
OME(Orig.&1)
Docket

U.S. GEOLOGICAL SURVEY
OFFICE OF MINERALS EXPLORATION

OME 6772 (MERCURY)

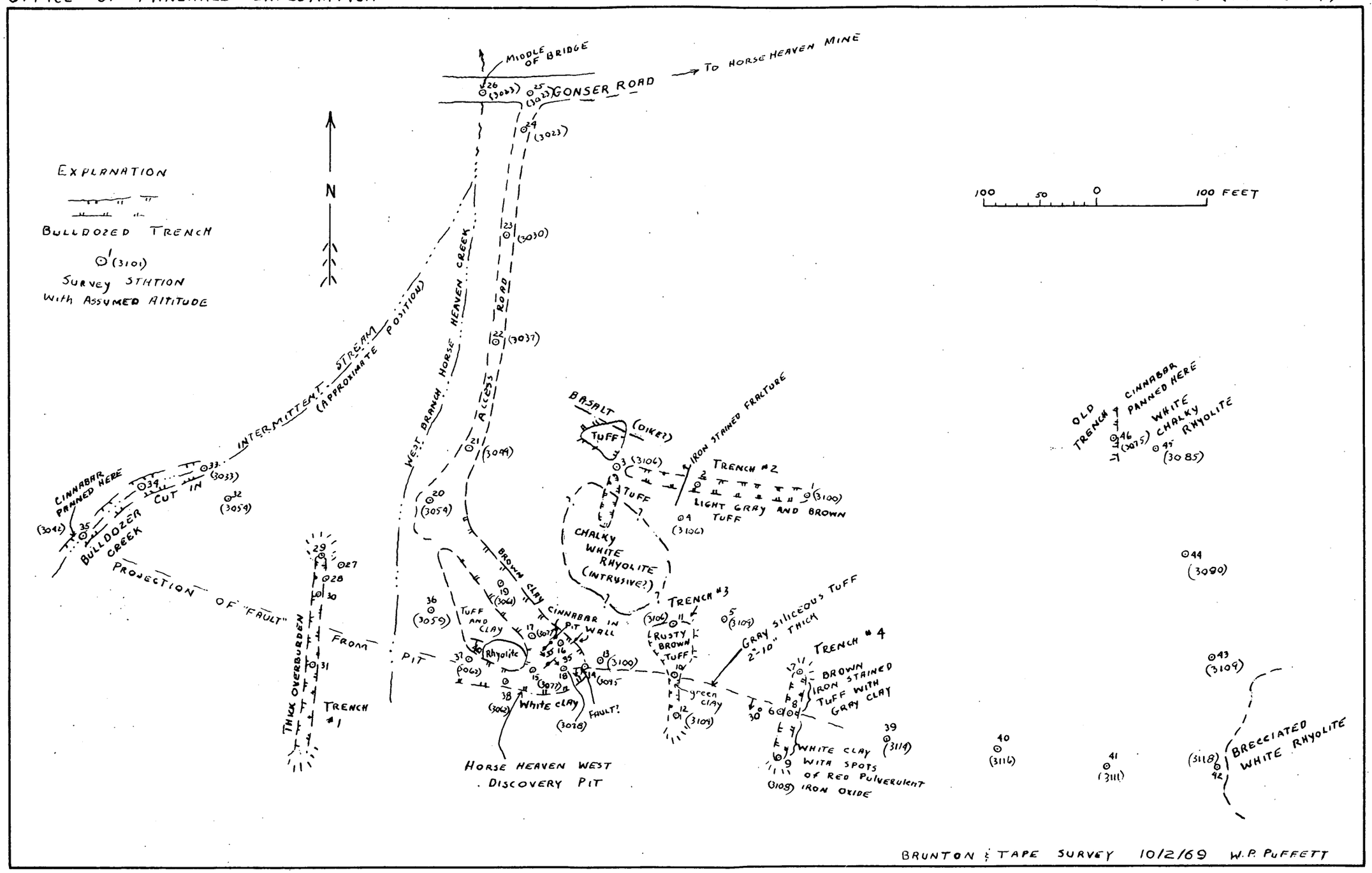


FIGURE 1. OME TRENCHES, HORSE HEAVEN WEST PROSPECT
SEC. 12, T. 10S., R. 18E., JEFFERSON COUNTY, OREGON

UNITED STATES
DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY
U.S. Court House, Rm. 656
West 920 Riverside Avenue
Spokane, Washington 99201
September 26, 1969

OFFICIAL COPY
O. M. E.
RECEIVED
SEP 29 1969
INITIALS | CODE
gla | 120
bol | 120 M
HK | 120
WP | 120 P

Memorandum

To: Chief, Office of Minerals Exploration

From: Field Officer, OME, Region I

Subject: Interim Inspection
OME-6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon
Contract 2286

I visited the Horse Heaven property on Thursday, September 18, 1969. Mr. Ray Whiting, Jr., was there and was accompanied by Mr. E. A. Magill, Consultant. About 4 hours were spent on the inspection.

Work under Stage I of the contract had started. Trench 1 had been excavated to a depth of about 6 feet; the overburden was deeper than had been expected and the bedrock had not been exposed in some parts of the trench. Trench 2 had been started and had penetrated to bedrock; the trench will be deepened. Mechanical troubles with the bulldozer had interrupted the work. About a week had been spent in waiting for new parts. Hopefully, the trenching would be resumed the day following the inspection.

The location of Trenches 3 and 4 were flagged and the future contract work was discussed. No cinnabar had been exposed in the trenches that had been done. Mr. Whiting was advised that work under Stage II of the contract would probably not be approved if the trenching failed to find extensions of the cinnabar he had found in the discovery or west pit.

Willard P. Puffett
Willard P. Puffett

Distribution:
OME(Orig.&1)
Docket

U.S. Court House, Rm. 656
West 920 Riverside Avenue
Spokane, Washington 99201
August 25, 1969

OFFICIAL
COPY
O. M. E.
RECEIVED
AUG 27 1969
INITIALS | CODE
| 30
Gal | 20
HR | 20
| 120

Mr. Albert M. Franco
Franco, Asia, Bensussen & Coe
Attorneys at Law
602 Tower Building
Seattle, Washington 98101

Re: OME-6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon

Dear Mr. Franco:

We are enclosing a three-month supply of the Operator's Monthly Voucher, Form 9-1648. The original and three copies of the completed report forms as well as the narrative, maps, assays, and all technical data, should be submitted for each month in which costs have been incurred under the contract. However, in the event that you do not wish to submit a voucher for any month, the narrative report for the work done in that month is required. Delay in processing can be avoided if reports are submitted promptly to this office.

Also enclosed are three copies of Standard Form 38, entitled "Notice of Nondiscrimination in Employment." In accordance with Executive Order 11246, which is Exhibit B of your contract, you should complete one copy and send it to any labor union that may be involved in your OME contract work and should post one or more copies in conspicuous places available to employees or applicants for employment. The enclosed poster should be kept exhibited in a conspicuous place available to both employees and applicants for employment.

We would appreciate your advising us when the OME contract work has started.

Sincerely,

Willard P. Puffett
Field Officer, OME
Region I

Enclosures
cc: Mr. Ray Whiting, Jr.
Horse Heaven Mine
P. O. Box 3
Ashwood, Oregon 97711

MLSmelser:mls cc: OME
Director's Reading File

OFFICIAL COPY
O. M. E.
RECEIVED
JUL 30 1969
INITIALS CODE

U.S. Court House, Rm. 656
West 920 Riverside Avenue
Spokane, Washington 99201
July 28, 1969

Mr. Albert M. Franco
Franco, Asia, Bensussen & Coe
Attorneys at Law
602 Tower Building
Seattle, Washington 98101

Re: OME-6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon

Dear Mr. Franco:

Enclosed are the original and three copies of a proposed contract for the subject property. The contract consists of MME Form 51 (five pages), Annex I (one page), one Lien and Subordination Agreements, Exhibit A (five pages), Exhibit B (one page) and two maps (Figures 1 and 2). The date for commencement of the work should be inserted in Article 1(a) of the contract. All copies of the contract have been signed by the Acting Director for the Government.

You or whoever will be in charge of carrying out the project work under this contract are urged to read carefully all the specifications set forth in Exhibit A. Without prior Government approval subsequently confirmed in writing, the Government may refuse to contribute to the cost of any work that does not conform to those specifications. Your attention is specifically directed to Article 10 and Exhibit B. Appropriate forms to meet the compliance requirements will be sent with forms for reporting monthly progress and vouchering.

If the terms and conditions are satisfactory, sign all copies, keep the Operator's copy, and return the other copies to this office.

If any part of the proposed contract is not satisfactory, please return all copies unsigned to this office with a statement of your proposed changes for consideration.

The 8-1/2 percent interest accrues from the dates on which the individual payments are made by the Government and like the principal is payable from royalty on production.

Sincerely,

Willard P. Puffett
Field Officer, OME
Region I

Enclosures

cc: Mr. Ray Whiting, Jr.
Horse Heaven Mine
P. O. Box 3
Ashwood, Oregon 97711

MLSmelser:mls
cc: OME
Director's Reading File

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
7/22/69	Kirkemo	120
7/23	Peterson	120
7/23	Cepp	
7/25	cc	220
		120M

AIRMAIL

JUL 25 1969

Memorandum

To: Field Officer, Region I

From: Chief, Office of Minerals Exploration

Subject: OME-6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon

Enclosed are the original and three copies of a proposed contract for the subject property. The contract consists of MME Form 51 (five pages), Annex I (one page), one Lien and Subordination Agreements, Exhibit A (five pages), Exhibit B (one 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 one of the partners. Thereafter, please distribute the copies as usual.

Please advise the Applicant that the 8-1/2 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.

Harold Kirkemo (bsl)
Harold Kirkemo

Enclosures

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

BSLong/1 7/22/69

OFFICIAL COPY
O. M. E.
RECEIVED
JUL 3 1969

INITIALS	CODE
	130
bal	120
HK	120
CR	100 P

U.S. Court House, Rm. 656
West 920 Riverside Avenue
Spokane, Washington 99201
July 1, 1969

AIRMAIL

Horse Heaven Mine
602 Tower Building
Seattle, Washington 98101

Re: OME-6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon

Gentlemen:

We need some additional documentation to insure us that your lease with Cordero Mining Company is still in effect. The lease states that it is for a period of 2 years unless written notice is given that you plan to proceed with development and production. As the lease is dated in December 1966 and signed on January 23, 1967, and hence is more than 2 years old, we will need true copies of the written notice to Cordero Mining Company of your plans.

Please send copies of this notice to our office at an early date. We cannot complete processing your application until we have assurance that your lease is still in effect.

Sincerely,

Willard P. Puffett
Field Officer, OME
Region I

WPPuffett:mls
cc: OME
Director's Reading File

cc: Mr. Ray Whiting, Jr.
Horse Heaven Mine
P. O. Box 3
Ashwood, Oregon 97711

OFFICIAL COPY
O. M. E.
RECEIVED
JUL 3 1969
INITIALS | CODE

MME REFERENCE SLIP
REV. 2-59 OFFICE OF MINERALS EXPLORATION

TO:	DATE	INITIALS
1. Assoc. Sol. MR, Rm. 6554, Interior (Through Room 6042)		
2. Mr. Peterson, Rm. 4457, Interior		
3.		
4.		
5.		
FROM: Chief, OME, Rm. 5559		

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 18797 3123

FROM SOLICITOR JUL 14 1969

JUL 1 1969

FOR SIGNATURE INTERIOR DEPT.

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

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MME Form 51
July 1965

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

120M

EXPLORATION CONTRACT
(Short Form)

Docket	Commodity	Contract No.	County	State
OME -6772	Mercury		Jefferson	Oregon

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

Horse Heaven Mine

_____,

whose mailing address is **602 Tower Building, Seattle, Washington 98101**, 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 **12** 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 $24,000.00. The Government will contribute 75 percent of the total fixed unit costs of the work performed, not in excess of $18,000.00 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.

HORSE HEAVEN MINE
(Operator)

By _____

Title _____

THE UNITED STATES OF AMERICA

By _____
Director, U. S. Geological Survey

_____

I, _____, certify that I am the
(Name)

_____ secretary of the corporation named as Operator herein; that

_____, who signed this contract on behalf of the Operator, was then
(Name)

_____ of said corporation; that said contract was duly signed for
(Title)

and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

_____

[CORPORATE SEAL]

E. C. PETERSON/bsl
DRAFT 6/11/69

EXPLORATION CONTRACT
HORSE HEAVEN MINE
OME-6772

ANNEX I

The land including all rights pertaining thereto, referred to in Article 2 of the contract consists of the E½NW¼ andNE¼, sec. 12, T. 10 S., R. 18 E., WB&M, Jefferson County, Oregon. The tract of land is shown outlined in green on Figure 1 entitled, "Property map, Horse Heaven Mine, Jefferson County, Oregon," attached and made part hereof.

The Operator is in possession of the land by virtue of an Assignment of Lease dated February 3, 1969, from Humbolt Metals Company, lessees under a Lease, as amended, executed by the owner, Cordero Mining Company, on January 23, 1967, and by the Humbolt Metals Company on March 10, 1967, and March 18, 1967.

Lien and Subordination Agreements executed August 6, 1968, by the property owner is attached and made a part hereof.

EXPLORATION CONTRACT
HORSE HEAVEN MINE
OME-6772

EXHIBIT A

The purpose of this project is to explore by trenching, shaft sinking, drifting, and long-hole drilling for mercury-bearing ore bodies occurring in brecciated rocks and clays of the Clarno formation of Eocene age which underlie the post-Clarno soils.

General Provisions

A bulldozer no smaller than a International TD-14A or equivalent unit of any other make shall be used for trenching and backfilling.

The inclined shaft shall be not less than 4 by 6 feet in the clear of timber and shall be timbered as necessary. Shaft timber shall be of not less than 6- by 6-inch or equivalent round timber. Suitable ladders and rail shall be installed for the full length of the shaft.

All drifts shall be not less than 5 by 7 feet in cross section and shall be timbered as necessary using standard 8- by 8-inch drift sets or equivalent round timber.

Mine rails shall be not less than 12-pound size, air lines not less than 2-inch diameter, water lines not less than ½-inch in diameter, and vent lines not less than 8-inch diameter.

All significantly mineralized areas exposed by the trenching and by underground exploratory workings shall be sampled. A representative bulk sample shall be collected from each round broken in mineralized rock. Channel samples shall be cut normal to the trends

of the deposit at intervals of not more than 5 feet. Significantly mineralized cuttings from the long-holes shall be sampled, and no individual sample shall represent more than 5 linear feet of hole.

All samples, from whatever source, shall be split as necessary and one split assayed for mercury. The Operator shall store one split of each sample in a suitable container properly identified as to source and location for Government inspection and possible use. With prior Government approval, the Operator may dispose of the stored samples.

True copies of assay certificates and maps or sketches showing the work completed, the location, width, and assay value of samples, and the geological formations and structures traversed by the workings shall be furnished monthly to the Government.

No work under this contract shall be performed within 100 feet of the outer boundary of the project area.

The Operator shall provide such supervision, labor, and technical services 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.

The work shall be divided into two stages. The Operator shall complete all of Stage I and as much of Stage II as is authorized in advance by the Government and confirmed in writing. Approval of Stage II shall depend upon the results obtained in Stage I.

Description of the Work

The work shall consist of bulldozing and backfilling ~~a maximum of~~ 5 trenches. Each trench shall be approximately 100 feet long and ~~at least 5 feet deep and should~~ deep enough to cut through at least the upper part of the clays of the post-Clarno soil for sampling purposes, but not exceeding a depth of five feet into the clays. Bedrock above the clays shall be broken by drilling and blasting when necessary.

All trenches shall be mapped and sampled, and with Government approval, backfilled to the level of the original surface.

The approximate locations of the trenches are shown on Figure 2 entitled, "Proposed Stage I exploration, Horse Heaven mine, Jefferson County, Oregon," attached and made part hereof.

Stage II

From a prepared site determined after careful study of Stage I results, an inclined shaft shall be sunk approximately 110 feet on the dip of the mineralized zone.

At a point above the bottom of the shaft a station shall be established from which drifts shall be driven along the mineralized structure for not more than an aggregate of 175 feet.

To further test the extent of mineralization, percussion long-holes shall be drilled into the walls of the exploratory drifts from sites selected by the Operator. The long-holes shall be spaced at intervals of not less than 10 feet and the aggregate footage of all holes drilled shall not exceed 900 feet.

Estimated Cost of the Work

Stage I

Fixed Unit Costs 1/

Bulldozing and backfilling trenches,		
100 hours @ $15.00/hour	$1,500.00	
Drilling and blasting bedrock, as required, including labor, equipment rental, and supplies,		
24 hours @ $7.50/hour	180.00	
1-Supervisor-engineer		
1 month @ $800.00/month	800.00	
1-Outside consultant, including per diem and travel		
2 days @ $100.00/day	200.00	
Office expenses,		
1 month @ $50.00/month	50.00	
Assaying,		
20 samples for mercury @ $6.00/sample	120.00	
Total Estimated Costs, Stage I		$2,850.00

Stage II

Fixed Unit Costs 1/

Construct headframe, including labor, materials, and supplies	$1,000.00 2/
Construct ~~a~~ 8' x 12' frame tool shed	250.00 2/
Install water and electric power lines to shaft site	500.00 2/
Shaft sinking, 110 feet @ $72.00/foot	7,920.00
Timbering shaft, 100 feet @ $25.00/foot	2,500.00
Establish shaft station, including timbering as necessary	175.00 2/
Drifting, 175 feet @ $35.00/foot	6,125.00
Timbering drifts, 75 feet @ $12.00/foot	900.00
Long-hole drilling, 900 feet @ $1.00/foot	900.00
Assaying, 30 samples for mercury @ $6.00/sample	180.00
1-Outside consultant, 4 days @ $100.00/day, including per diem and travel	400.00

Office expenses,

6 months @ $50.00/month	$ 300.00	
Total Estimated Costs, Stage II		$21,150.00

S U M M A R Y

Total Estimated Costs of Stage I	$2,850.00
Total Estimated Costs of Stage II	$21,150.00
Total Estimated Costs of Project	$24,000.00
Government Participation @ 75%	$18,000.00

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

2/ The completed job is the unit of work.

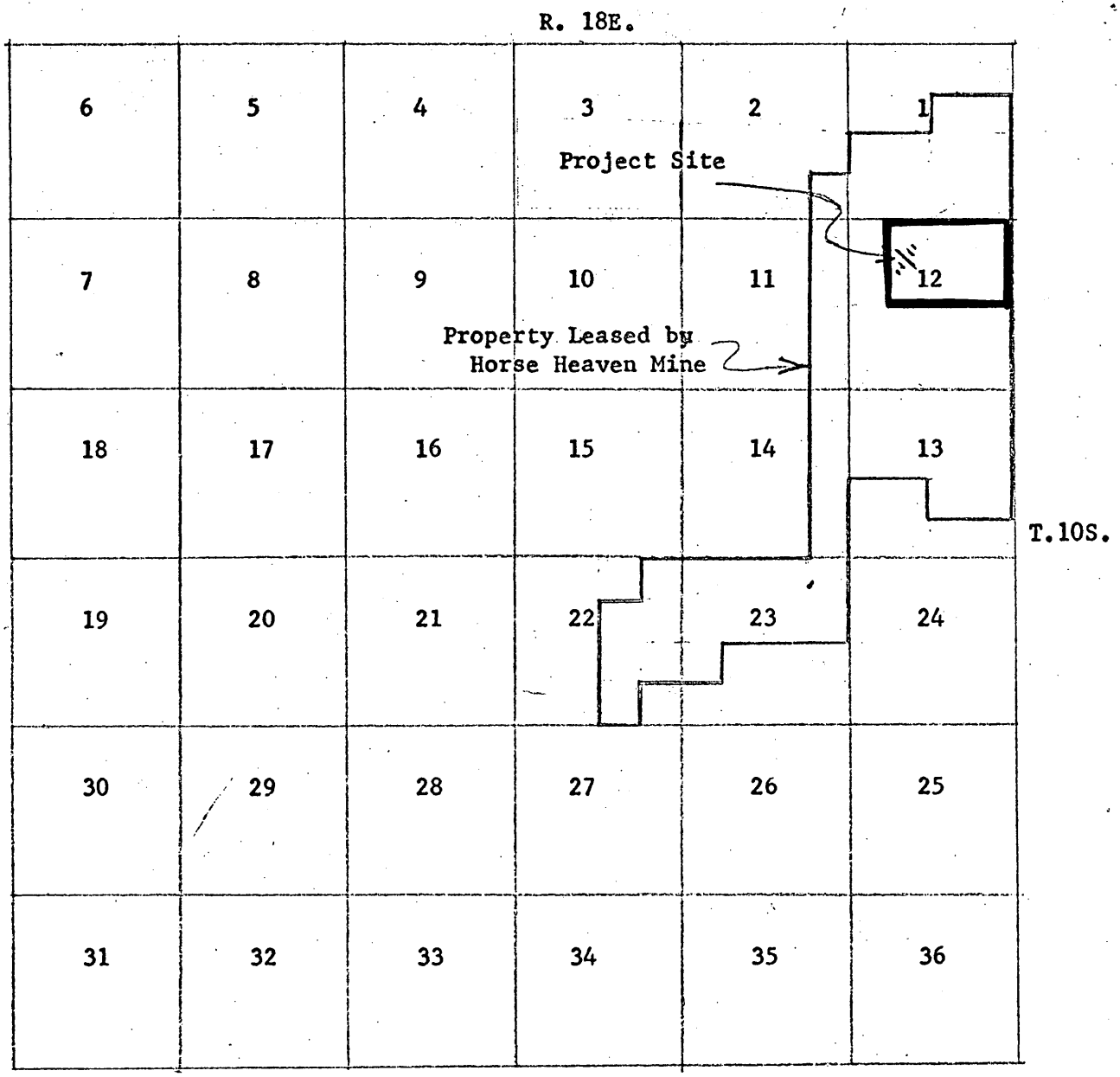

Figure 1. Property map, Horse Heaven Mine, Jefferson County, Oregon

E½NW¼

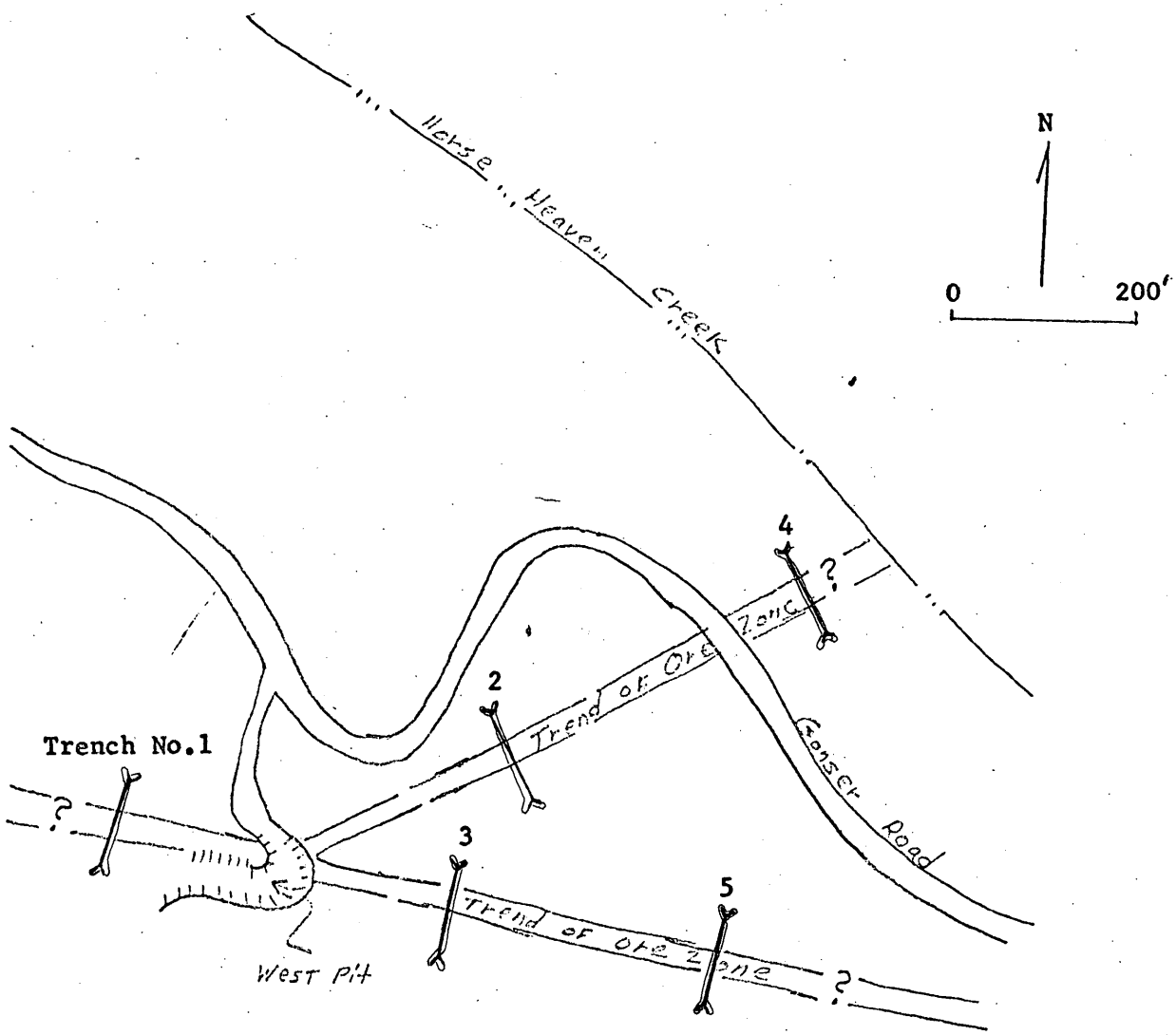

Figure 2. Proposed Stage I exploration, Horse Heaven Mine, Jefferson County, Oregon

IN REPLY REFER TO

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
U.S. Court House, Rm. 656
West 920 Riverside Avenue
Spokane, Washington 99201
May 29, 1969

JUN 3 1969
(Dispatched)

OFFICIAL COPY
O. M. E.
RECEIVED
JUN 5 1969

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On-Site Exam Report

Memorandum

To: Chief, Office of Minerals Exploration

From: Willard P. Puffett, Geologist, OME, Region I

Subject: Application Examination Report
OME-6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon

INTRODUCTION

A partnership, Horse Heaven Mine, has requested OME assistance in exploring for extensions of mercury ore that they have exposed in an open-cut about a half of mile west of the old Horse Heaven mine. Seventeen flasks of quicksilver have been produced from this new discovery by retorting selected rock from the open-cut.

The Horse Heaven West property was examined on Friday, April 11, 1969. Mr. Ray Whiting, Jr., and son, Dennis, met me at the Horse Heaven mine. We examined the new open-cut and adjoining area and then examined outcrops near the now inactive Horse Heaven mine. I collected 2 samples of mineralized rock from the walls of the open-cut and 2 samples of ore that was stockpiled near the retort. About 9 hours were spent at the property.

RECOMMENDATION

It is recommended that a contract be prepared to assist in exploring for extensions of the newly found cinnabar deposit at the Horse Heaven West property. The work should be done in two stages, and no work should be done under Stage II unless favorable results are found in Stage I. Stage I will consist of bulldozing trenches to learn the trend, width, and extension of the zone exposed in the open-cut. Stage II will explore the most favorable part of the zone at depth by sinking a shaft, drifting 200 feet from the bottom of the shaft, and drilling long holes into the drift walls. The estimated total cost of the exploration is $28,709.00, of which the Government's share, at 75 percent, is $21,531.75.

APPLICANT

The business address of the applicant is:

Horse Heaven Mine
602 Tower Building
Seattle, Washington 98101

The applicant is a partnership of the following five individuals:

Charles S. Fine, 340 Stimson Medical Center, Seattle, Washington 98101

Albert M. Franco, 602 Tower Building, Seattle, Washington 98101

Milton P. and Ruth Roumm, 9838 NE. 21st Street, Bellevue, Washington 98004

Ray R. Whiting, Jr., P. O. Box 3, Ashwood, Oregon 97711

PROPERTY

A lease from Cordero Mining Company to Humboldt Metals Company has been assigned to Horse Heaven mine. The lease is recorded on page 663 of Book 41 of Record of Deeds, Jefferson County, Oregon. An outline of the area described in the lease is shown on figure 1. Included within this area is the subject land of the application which includes only the E$\frac{1}{2}$NW$\frac{1}{4}$ and NE$\frac{1}{4}$ sec. 12, T. 10 S., R. 18 E., W.M., Jefferson County, Oregon (fig. 1). The lease is dated December 1966 and is for a duration of 2 years; however, if the lessee develops the property and production results, the lease is for the life of the mine. The lessee produced and sold 17 flasks of quicksilver in 1968, so presumably the lease is now for the life of the mine. Lien and Subordination Agreements, signed by Cordero Mining Company, was submitted with the application.

LOCATION AND ACCESSIBILITY

The land to be explored is about a half a mile west of the old Horse Heaven mine in the northeastern part of Jefferson County, Oregon. An unsurfaced road, the Gonser Road (fig. 1), leads from Ashwood to Mitchell, Oregon, and crosses the applicant's property about 17 miles east of Ashwood. The nearest shipping and supply point is Madras, Oregon, about 43 miles west of the property. The altitude at the property is between 3,000 and 3,200 feet (Bend, Oregon, 2-degree topographic sheet). The area to be explored is relatively flat with a few ravines identing the surface from 10 to 40 feet. Scattered juniper dot the landscape and sagebrush is common.

Bedrock is near the surface and is exposed in many areas; the covering material is residual soil, alluvium, or, in some areas, colluvium.

GEOLOGY

The Horse Heaven Mining District has been mapped and described by Waters and others (1951). The Clarno Formation of Eocene age underlies most of the area and consists of interbedded tuffs and breccia, gravel, tuffaceous clays, and andesite flows. These rocks have been tilted and eroded, and a thick soil was developed on the eroded surface. Rhyolite, felsite, and basaltic andesite intruded the rocks and formed many near-circular plugs. Flows of porphyritic rhyolite, augite andesite, and biotite rhyolite preceded or were contemporaneous with the intrusions. Thick deposits of rhyolite tuff and tuff breccia border many of the intrusives and locally have been preserved in conspicuous hills. Much of the breccia was deposited on the post-Clarno soil. Landslides and creeping soil mantle the slopes of some of the hills, and thin deposits of alluvium are along and near the shallow valleys of ephemeral streams. The general area is a somewhat elevated highland, and drainage is peripherally away from the central part of the district. The streams drain easterly into Cherry Creek and northerly into Muddy Creek, both of which are tributaries of the north-flowing John Day River.

Quicksilver deposits in the area are spatially related to the volcanic plugs and are more common near biotite rhyolite. The ore has been localized in brecciated rock below the clays of the post-Clarno soils, and also below andesite flows that overly the rhyolite. Autobrecciated rhyolite is the host rock for much of the ore that was in the Horse Heaven mine. Cinnabar is the main ore mineral, but native mercury is locally abundant. Gangue minerals include marcasite, carbonate, and silica minerals.

The ore body in the Horse Heaven mine is the largest one known in the area. From it has been furnaced a total of 128,216 tons that yielded 17,214 flasks of quicksilver (Brooks, 1963, p. 119), or an average of 10.2 pounds of mercury per ton. The mine was operated continuously from 1934 until 1945; and from 1955 until 1958. The central and most productive part of the mine is now caved and inaccessible.

A new deposit of cinnabar was found by the applicant in 1968 about a half of mile west of the Horse Heaven mine and is here referred to as the Horse Heaven West prospect, pit, or open-cut (figs. 1 and 2). According to Waters and others (1951, pls. 21 and 22), the bedrock at the site of the new discovery is hydrothermally altered post-Clarno soil that is covered in part by a small patch of basaltic andesite. The rocks south of the discovery are rhyolite tuff and tuff breccia. The mercury ore was exposed in clays by a bulldozer cut that has been deepened to about 10-15 feet (figs. 1 and 2, and applicant's map).

Figure 2 includes a sketch of the northeast wall of the open-cut and shows the general geologic environment of the cinnabar. Apparently, flat-lying or slightly dipping rhyolite forms thin patches on the surface. Below the rhyolite are iron-stained clays. The upper part of the clays appears to be highly altered rhyolite for there are subspherical remnants of rhyolite surrounded by clay. The lower part of the clay is olive gray and is structureless. White clay that is devoid of iron stain and apparently barren of cinnabar is exposed along the south wall of the open-cut. There is a sharp demarcation (fault?) between the iron-stained and the white clay. A dike(?) of gray rhyolite about 6 inches thick fills part of the fault(?).

The cinnabar is fine-grained and crystalline. It has been deposited on fracture or parting surfaces in the clay and, as it has not been smeared along any of these surfaces, probably has been deposited long after any other significant geologic event that has affected the rocks. The cinnabar is widely but sparsely distributed in the clay but is heavily concentrated along some dark-brown iron-stained seams that strike northeasterly and dip 30°-40° SE. Two mineralized iron-stained seams are shown in the sketch on figure 2. Cinnabar occurs in a zone about 14 inches thick along the north seam and is in a zone 5-8 inches thick along the south seam. The cinnabar could not be traced to the bottom of the pit on either seam. Samples from the two seams yielded 17.6 and 24.6 pounds of mercury per ton. There are no assay data on the relatively barren clay between the two seams. Mr. Whiting said that cinnabar could be found along seams in the bottom of the pit; however, on the date of the examination the pit bottom was covered with sloughed clay.

The applicant's map shows a fault trending about N. 80° W. and dipping 40° S. in the southern part of the open-cut. North of this fault are shown several northeast-trending cinnabar-mineralized stringers. His map indicates that the stringers terminate against the fault.

From what I could see in the open-cut, the fault against which the cinnabar terminates is steeply dipping and the mineralized seams intersect it at a large angle, both on strike and along dip. I interpret the gently dipping rhyolite on the northwest side of the pit to be tilted by drag along the fault. This slab of rhyolite, about 6 feet thick, slid further into the pit during the past winter, probably because the underlying clay was lubricated by moisture. Perhaps, the slight shifting of the rhyolite has obscured the fault indicated by the applicant's map.

Rhyolite is exposed near the top of the northeast wall of the open-cut. Shallow trenches east of the open-cut terminated downward against extensions of this rhyolite, and thus it appears that a

thin layer of rhyolite is beneath the soil east of the open-cut. Perhaps erosion has removed extensions of the rhyolite west of the pit except for the small remnant adjacent to the west wall. Exposures in the open-cut indicate that the cinnabar-mineralized seams terminate upward against the base of the rhyolite.

Mineralized rock from the open-cut has been burned in a small Champion rotary retort that has been installed near the camp area of the Horse Heaven mine. Seventeen flasks of quicksilver have been sold. Two piles of ore stockpiled near the retort were sampled. The high-grade stockpile assayed 35.8 pounds, and the lower grade pile assayed 8 pounds of mercury per ton. These values represent selected parts of rock in the open-cut. Obviously, a bulk sample of the entire zone in which the rich seams occur will contain much less cinnabar.

The dimensions and the trend of the zone of mineralized rock in the open-cut has not been definitely determined. The stringers strike NE. and dip SE. The fault(?) against which they terminate strikes about due E. and dips steeply. The ore terminates upward against the base of the rhyolite. Perhaps the mineralized zone trends easterly and consists of stringers of cinnabar horsetailing out to the northeast. Another possibility is that the mineralized zone trends northeasterly to the large rhyolite plug that outcrops north of Horse Heaven Creek (fig. 1). If the ore zone is covered by a thin layer of rhyolite, the ore cannot be detected in the overlying thin soils.

APPLICANT'S PROPOSAL

The applicant proposes to explore extensions of the new ore zone by two methods. One is to bulldoze trenches at right angles to the supposed trend of the zone both east and west of the open-cut. The other method is to explore the ore to depth by sinking an inclined shaft for 110 feet from the bottom of the open-cut and drifting 200 feet along the ore zone from near the bottom of the shaft. The width of the mineralized zone at depth will be explored by drilling 1,000 feet of long holes from the walls of the drift. The bulldozing and shaft-sinking would be carried on concurrently.

The applicant has requested a unit-cost type of contract with unit costs as follows:

			Total requested
Bulldozer with operator		$20.00 per hour	$ 3,000.00
Shaft sinking	without timber	$87.53 per foot	
	with timber	110.53 per foot	12,158.30
Drifting	without timber	$58.15 per foot	
	with timber	79.58 per foot	15,916.00
Long-hole drilling		1.50 per foot	1,500.00

There are provisions for the following in addition to the unit costs:

Rehabilitate water supply (job)	$ 500.00
Accountant, 5 days at $50/day	250.00
Geologic consultant, 12 days at $150/day	1,800.00
Assays, 30 samples at $6 each	180.00
Supervisor at $40 per day for surface work	1,250.00

APPRAISAL OF APPLICANT'S PROPOSAL

The exposures of cinnabar-bearing rock in the new open-cut at the Horse Heaven West property are sufficiently promising to merit further exploration. The new work should be directed toward determining the trend and width of the ore zone and what, if any, are the geologic features that define.* Sufficient information is not now available to justify sinking a shaft from the bottom of the open-cut.

The bulldozing as proposed by the applicant can explore successfully if no hard rock is encountered at or near the surface. If only thin layers of rhyolite or basalt are present, some blasting could permit the trenching to explore the underlying clays. Bulldozing can be planned between the two streams west of the open-cut for there is no hard rock near the surface in this area. There is hard rock at or near the surface east and northeast of the open-cut and bulldozing might not be able to cut through it.

*it

The clays that are the host rock for the cinnabar get very sticky when wet. If the shaft is to be sunk in the clays, some information should be learned about water at depth before sinking is started. Bulldozing cannot cut deep enough to learn this.

It has been suggested to Mr. Whiting, both in conversation and in letters, that he consider some type of drilling program to explore extensions of the ore zone. The drilling could be in addition or in place of the bulldozing. A large diameter (3-5 inches) rotary-percussion type of wagon-mounted drill could penetrate to depths of 100-150 feet at modest cost and could yield some positive information about rock types, water, and degree of cinnabar mineralization at depth. Mr. Whiting informed me in a telephone conversation on May 25, 1969 that he is not willing to plan on any drilling as suggested.

As the applicant is not willing to consider drilling from the surface, the exploration that can be planned as a first stage is to bulldoze trenches to determine the trend of the zone that contains the cinnabar. All trenches should be at least 5 feet deep and should cut through at least the upper part of the clays of the old post-Clarno soil. Bedrock above the clays should be broken by drilling and blasting if necessary. The trenches should explore west, east, and northeast of the open-cut. After the trend of the mineralized zone is learned, additional trenches should be planned at right angles to this trend. Provisions should be made for back filling of the trenches after they have been carefully mapped and sampled. Locations of five of the trenches are shown on figure 1; the locations of other trenches will depend on what is found in the first five.

If the trenching indicates the presence of a continuously mineralized zone containing cinnabar that is of ore grade, consideration should be given to exploring it at depth by sinking a shaft and drifting from the bottom of the shaft. Long-hole drilling from the walls of the shaft and drift can test the full width of the zone, if necessary. It will now have to be assumed that the shaft and drift will be dry.

Estimated costs have been calculated for the various phases of the exploration. These differ from those submitted by the applicant and are somewhat lower. No provisions have been made for a supervisor for the underground work as one of the miners will probably be in charge of the work. To provide for a separate supervisor in sinking a prospect-type shaft seems a needless expense. The calculated costs for drifting are probably too low as no provision has been included for the added expense of hoisting the broken rock. Inasmuch as some of the rock will be of ore grade, it can be burned in the retort and the recovery mercury will help defray the expense to the operator.

ESTIMATE OF COSTS

Stage I

Bulldoze trenches 100 feet long at right angles to trend of mineralized zone. Trenches to be deep enough to expose clays of post-Clarno soil but not to exceed 5 feet depth into clay. Average time to excavate each trench, which will include time necessary for drilling and blasting thin layers of rhyolite that might be encountered, is 16 hours. Maximum of 10 trenches. It is estimated that drilling and blasting of hard-rock ledges in trench sites will take 2 weeks. Refilling of trenches with bulldozer will take 1 week. Total time, with allowance for bad weather, 6 weeks.

(a) Independent Contracts

Bulldozing trenches 200 hrs at $15/hr (TD-14A bulldozer with operator. No mobilization or demobilization.)		$3,000.00

(b) Personal Services

Supervisor, 1½ mos at $800/mo	$1,200.00	
1 miner, $3.50/hr - 80 hrs	280.00	
Geologist-Engineer-Consultant 2 days at $150/day	300.00	
(includes per diem and transportation)		1,780.00

(c) Operating Materials and Supplies

Powder, 200 lbs at $30/cwt	$60.00	
Caps, 100 at $0.04 each	4.00	
Fuse, 1,000 ft at $0.02/ft	20.00	
Steel and bits	50.00	134.00

(d) Operating Equipment

To be rented:

Joy 105 compressor with hose, hammer, drill steel, and bits. All replaced bits and steel extra - 1 mo	200.00

(e) and (f) None

(g) Miscellaneous

Sample assayed for mercury 30 samples at $6 each	$180.00	
Accounting and office expenses 2 mos at $50/mo	100.00	$ 280.00
Total estimated cost - Stage I		$5,394.00
Government participation at 75 percent		$4,045.50

Stage II

If the surface trenching proves that the mineralized zone is continuous, then a prospect shaft, 4' x 6' in the clear, will be sunk, either on an incline or vertically, to explore the zone at depth. The shaft will be 110 feet deep and from near the bottom of it, drifts, 5' x 7' in the clear, will be driven 200 feet along the zone. Long holes will be drilled into the walls of the drift at 10-foot intervals to test the width of the zone; total number of long holes will not exceed 40 or an aggregate of 1,000 feet.

Surface work - Time to complete - 1 month.

Construct headframe with waste and/or ore pocket, sheave wheel, collar set, and hoist foundation - per job	$1,000.00	
Construct tool shed, 8' x 12', with galvanized or plywood sheeting, near headframe - per job	250.00	
Install water supply line from main water line to shaft site - 2,000 ft of ½" plastic pipe - per job	200.00	
Install electric power from REA line to shaft - per job	300.00	$1,750.00

Stage II (Cont'd.)

Shaft sinking - 2 ft per day - 55 days, say 3 months to complete.

(a) Independent Contracts		None
(b) Personal Services		
(One of the miners will also be supervisor; no extra charge for supervision is necessary)		
2 miners at $30/day	$60.00	
1 surface and hoistman	25.00	
	$85.00	
FICA and other insurance at 15 percent	12.75	
	$97.75	
At 2 feet per day		$48.88/ft
Geologist-Engineer-Consultant 3 days at $150/day (includes per diem and travel)	$450.00	

(c) Operating Materials and Supplies (per 4-foot round)

Powder, 35 lbs at $30/cwt	$10.50	
Caps with wire, 22 at $0.30 each	6.60	
Air line, 2" w/fittings, 100 ft at $0.65/ft, delivered (less 50%--no salvage)	1.48	
Water line, ½" w/fittings, 100 ft at $0.25/ft, delivered (less 50%--no salvage)	.57	
Vent line, 12", 80 ft at $1.25/ft, delivered (less 50%--no salvage)	2.28	
Rail, 20#, 0.8T at $300/T (less 50%--no salvage)	5.45	
1 track switch at $70 (less 50%--no salvage)	1.60	
Fish plates, spikes, etc., $0.60/ft	2.40	
Ties, 30 at $0.25 each	.35	
Fuel, oil, and gas	4.50	
Steel, 1 replaced each 300 ft, $16 each at 110 ft/rd	5.86	
Bits, 1 replaced each 300 ft, $7 each at 110 ft/rd	2.56	
Repairs and upkeep, $0.60/ft	2.40	
Air hose, 100 ft at $0.60/ft	2.95	
Water hose, 100 ft at $0.25/ft	1.13	
	$50.63	$12.66/ft
Without track	$43.23	$10.80/ft

(d) Operating Equipment

To be purchased:

	Total cost	Less 50% No salvage
Skip for shaft	$250.00	$ 125.00
Hoist, gas driven, with 175' cable (used)	500.00	250.00
Jackhammer w/leg	800.00	400.00
Fan w/electric motor	350.00	175.00
2 mines cars (used)	300.00	150.00
		$1,100.00

50% of total allocated against shaft sinking	$5.00/ft
50% of total allocated against drifting	$2.75/ft

(d) Operating Equipment (Cont'd.)

To be rented:

Air compressor at $200/mo

Shaft sinking	$600.00	$5.45/ft
Drifting	600.00	3.00/ft

To be furnished by applicant:

None that will apply toward contract.

Total cost per foot for untimbered shaft sinking with track $71.99, say	$72.00
Total cost per foot for untimbered shaft sinking without track $70.13, say	$70.00

Timbering in shaft

It is assumed that the shaft will be timbered all the way from the surface to the bottom and will be lagged on three sides. The sets will be spaced 4 feet apart. Two miners and a hoistman can stand, block, and lag two sets per shift. Fourteen shifts or 3 weeks required.

(b) Personal Services

2 miners at $30/day	$60.00	
1 surface and hoistman	25.00	
	$85.00	
FICA and other insurance at 15 percent	12.75	
	$97.75	
At 8 feet per day		$12.20/ft

(c) Operating Materials and Supplies

(Assume 100 ft of shaft timbered; shaft pocket at bottom will be calculated as separate job)

52 posts, 8"x8"x6'	= 1,664 bf		
26 caps, 8"x8"x5'4"	= 740 bf		
50 wall plates, 8"x8"x4'4"	= 1,156 bf		
424 lagging, 3"x12"x5'	= 6,360 bf		
	9,920 bf at $125/M	$1,240.00	
Plus 10% for wedges, etc.		124.00	
		$1,364.00	or $13.64/ft

Total timbering in shaft $25.85/ft

Total cost per foot for timbered shaft with track $97.84, say $98.00

Total cost per foot for timbered shaft without track $95.98, say $96.00

Shaft pocket at bottom of shaft

To be adequate to handle transfer of broken rock that is removed from drift. Possibly, not necessary with inclined shaft. Unit cost per job $200.00

Drifting

Two hundred feet, 5'x7' in clear, 5 feet per round, 20 rounds per month. Total time, 3 months, if timbered. Assume 22 holes per round.

(a) Independent Contracts None

(b) Personal Services

(One miner will be supervisor; no extra charge for supervision is required.)

2 miners at $30/day	$60.00	
1 surface and hoistman	25.00	
	$85.00	
FICA and other insurance at 15 percent	12.75	
	$97.75	$19.55/ft

Geologist-Engineer-Consultant
3 days at $150/day
(includes per diem and travel $450.00

(c) Operating Materials and Supplies (per 5-foot round)

Powder, 35 lbs at $30/cwt	$10.50	
Caps with lead wire, 22 at $0.30 each	6.60	
Air line, 2" w/fittings, 175 ft at $0.65/ft, delivered (less 50%--no salvage)	1.42	
Water line, 3/4" w/fittings, 175 ft at $0.25/ft, delivered (less 50%--no salvage)	.55	
Vent line, 12", 175 ft at $1.25/ft, delivered (less 50%--no salvage)	2.73	
Rail, 20#, 1.33T at $300/T (less 50%--no salvage)	5.00	
2 track switches at $70 (less 50%--no salvage)	1.90	
Fish plates, spikes, etc., $0.60/ft	2.40	
Fuel, oil, and gas	4.50	
Ties, 70 at $0.25 each	.44	
Steel, 1 replaced each 300 ft, $16 each at 110 ft/rd	5.84	
Bits, 1 replaced each 300 ft, $7 each at 110 ft/rd	2.55	
Repairs and upkeep, $0.60/ft	2.40	
Air hose, 50 ft at $0.65/ft	.79	
Water hose, 50 ft at $0.65/ft	.79	
	$48.41	$9.68/ft

(d) Operating Equipment

See under shaft sinking

New equipment allocated against drifting	$2.75/ft	
Rental equipment allocated against drifting	3.00/ft	$5.75/ft
Total cost per foot of untimbered drift $34.98, say		$35.00

Timbering

It is assumed that 50 percent or 100 feet of drift will be timbered and lagged. Two miners and a surface man should be able to stand, block, and lag 15 feet or 3 sets per shift. Total length of 100 feet requires 6-2/3 shift (say 7), or 1½ weeks.

(b) Personal Services

2 miners at $30/day	$60.00	
1 surface and hoistman	25.00	
	$85.00	
FICA and other insurance at 15 percent	12.75	
	$97.75	
At 15 feet per day		$6.52/ft

(c) Operating Materials and Supplies

42 posts, 8"x8"x7'	= 1,568 bf		
21 caps, 8"x8"x6'4"	= 709 bf		
40 collar braces, 4"x4"x4'4"	= 347 bf		
140 lagging (in back only) 3"x12"x5'	= 2,100 bf		
	4,274 bf at $125/M	$534.25	
Plus 10% for blocks, wedges, etc.		53.42	
		$587.67	
100 feet of timbering			$5.88/ft
Total timbering, $12.40 per foot, say			$12.50

(e) None

(f) New Buildings, Fixtures, Installations

See under surface work

(g) Miscellaneous

Samples assayed for mercury		
60 samples at $6 each	$360.00	
Accounting and office expenses		
7 mos at $50/mo	350.00	$710.00
Total estimated cost - Stage II		$23,315.00
Government participation at 75 percent		$17,411.25

RECAPITULATION

Stage I

Bulldoze 10 trenches, 200 hrs	$ 3,000.00	
Supervisor, miner, and consultant	1,780.00	
Operating equipment rental and supplies	334.00	
30 assays for mercury	180.00	
Accounting and office expense	100.00	
Total cost - Stage I		$ 5,394.00

Stage II

Surface work - construct headframe, etc.	$ 1,750.00	
Shaft sinking, 110 ft at $72/ft	7,920.00	
Timbering in shaft, 100 ft at $25.85/ft	2,585.00	
Construction of shaft pocket (job)	200.00	
Drifting, 200 ft at $35/ft	7,000.00	
Timbering in drift, 100 ft at $12.50/ft	1,250.00	
Long-hole drilling, 1,000 ft at $1/ft	1,000.00	
Geologist-engineer-consultant, 6 days at $150	900.00	
60 assays for mercury	360.00	
Accounting and office expenses 7 mos at $50/mo	350.00	
Total cost - Stage II		$23,315.00
Total estimated cost of project		$28,709.00
Government participation at 75 percent		$21,531.75

Willard P. Puffett

Willard P. Puffett

Enclosures
Distribution:
OME ✓ Docket
USGS(SRO) Puffett

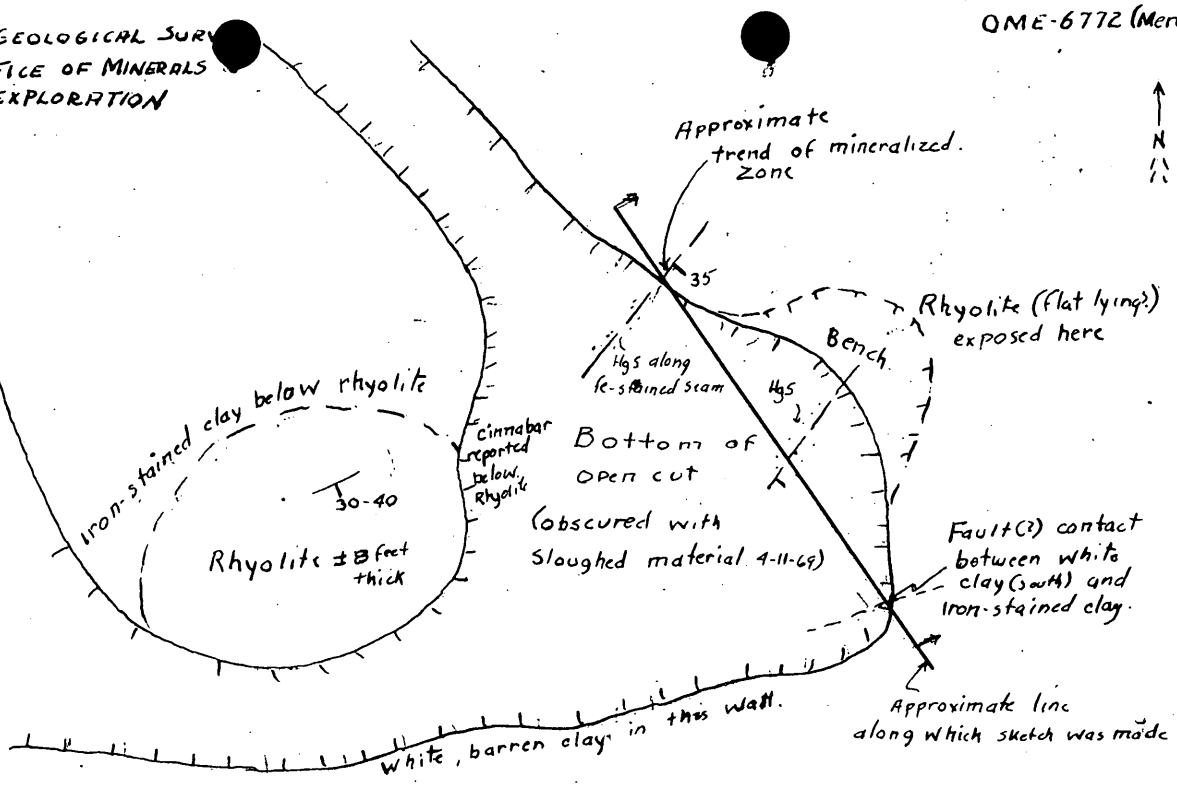
REFERENCES CITED

Brooks, H. C., 1963, Quicksilver in Oregon: Oregon Dept. Geology and Mineral Industries Bull. 55, 223 p.

Waters, A. C., Brown, R. E., Compton, R. R., Staples, L. W., Walker, G. W., and Williams, Howell, 1951, Quicksilver deposits of the Horse Heaven mining district, Oregon: U.S. Geol. Survey Bull. 969-E, p. 105-149.

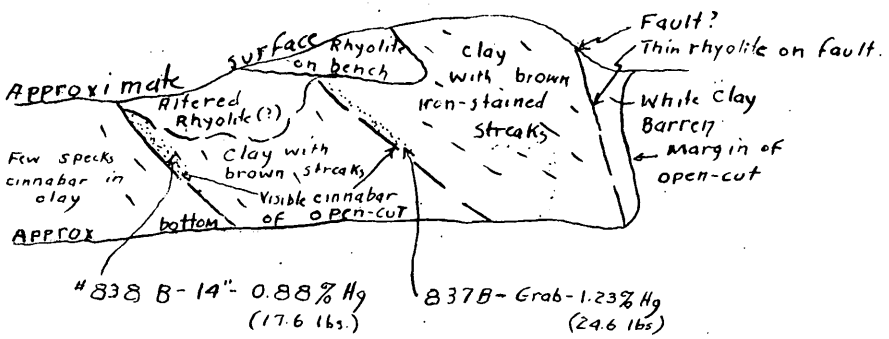
U.S. GEOLOGICAL SURVEY
OFFICE OF MINERALS EXPLORATION

OME-6772 (Mercury)



Plan map of open-cut (modified from applicants map).

0 10 20 30 FEET



Sketch of part of northeast wall of open-cut

FIGURE 2. MAP OF HORSE HEAVEN WEST OPEN-CUT

OME

U.S. Court House, Rm. 656
West 920 Riverside Avenue
Spokane, Washington 99201
May 5, 1969

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O. M. E.
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MAY 8 1969

INITIALS	CODE
	130
bal	170
HK	170
	170

Mr. Ray Whiting, Jr.
Horse Heaven Mine
P.O. Box 3
Ashwood, Oregon 97711

Re: OME-6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon

Dear Mr. Whiting:

I have received two of the bids for bulldozing and one bid for rental of a compressor that you recently mailed. As you indicated in your letter, I can expect the third bid for bulldozing to arrive soon.

There is some more information that I will need before I complete the processing of your application in this office. If you have given further consideration to some kind of drilling program to follow or to be carried on concurrently with the bulldozing, send some details. If the drilling is to be contracted, submit two copies of three bids. Let me know if you don't plan a drilling program.

There is no provision in your application for pumping in case your proposed shaft hits water-bearing rock. Can you be sure that the ground will be dry; for example, was there water in the lower part of the Horse Heaven mine? Without some prior drilling to the depth of the proposed drift level, it might be only a wild guess as to how wet the ground will be. For the record, I would like to have your comments regarding this.

Nothing in this letter is to be considered as any assurance that a contract will be offered.

Sincerely,

Willard P. Puffett
Geologist, OME, Region I

WPPuffett:mls
cc: OME
Director's Reading File

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COPY
O. M. E.
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MY 8 1959
INITIALS CODE

FRANCO, ASIA, BENSUSSEN & COE
ATTORNEYS AT LAW
602 TOWER BUILDING
SEATTLE, WASHINGTON 98101
MA. 3-5622 · MA. 3-5088

ALBERT M. FRANCO
BENJAMIN S. ASIA
EDWARD M. BENSUSSEN
HAROLD B. COE

WBP
Noted
3/19/69

March 18, 1969

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MAR 2 1969

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United States Department of The Interior
U. S. Court House
Room 656
West 920 Riverside Avenue
Spokane, Washington 99201

RE: OME-6772 (Mercury)
Horse Heaven Mine
Jefferson County, Oregon

Attention: Mr. D. R. MacLaren
Field Officer, OME
Region I

Dear Mr. MacLaren:

I am referring your letter of March 13th to Mr. Ray Whiting, manager at the Horse Heaven property, and he will contact you as soon as the property is ready for a field examination.

Thanking you very much for your attention to this matter, I am

Very truly yours,

ALBERT M. FRANCO

AMF:bb

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MAR 19 1969
U. S. G. S.
SPOKANE, WASH.

OME

U.S. Court House, Rm. 656
West 920 Riverside Avenue
Spokane, Washington 99201
March 13, 1969

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MAR 17 1969

INITIALS	CODE
	130
bsf	120
WE	120
+	120

Horse Heaven Mine
602 Tower Building
Seattle, Washington 98101

Re: OME-6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon

Gentlemen:

Your application for OME assistance has been referred to this office for further processing.

It will be necessary for the ground to be free from snow so that all surface and trench showings can be carefully examined.

If you will notify us when the surface is clear, we will schedule an inspection as soon as possible thereafter.

Sincerely,

D. R. MacLaren
Field Officer, OME
Region I

DRMacLaren;mls

cc: OME

Director's Reading File

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
3/5/69	Peterson	120
		120
		120M
		220

MAR 5 1969

AIRMAIL

Horse Heaven Mine
602 Tower Building
Seattle, Washington 98101

Re: OME-6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon

Gentlemen:

Thank you for your letter of February 26 enclosing additional information in support of the subject application for financial assistance.

For your information, allowances for use of equipment owned by the Operator is calculated in an OME contract by allowing depreciation to the extent of 1/60th of its fair market value, or its book value, whichever is less for each month used on the project. If the equipment is rented, a fair rental charge per month is allowed.

We are referring the application for further consideration to Mr. D. R. MacLaren, Field Officer, Region I, U. S. Geological Survey, U. S. Courthouse, Room 656, West 920 Riverside Avenue, Spokane, Washington 99201.

Mr. MacLaren will notify you if he requires additional information concerning the application, and possibly to make arrangements for a field examination.

Sincerely yours,

Harold Kirkemo (gla)

Harold Kirkemo, Assistant Chief
Office of Minerals Exploration

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

ECPeterson/bsl 3/5/69

OME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
3/5/69	Peterson	120
		120
		220
		120M

AIRMAIL

Memorandum

MAR 5 1969

To: Field Officer, Region I

From: Assistant Chief
Office of Minerals Exploration

Subject: OME-6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon

We are referring the subject application to you for further study, a field examination if warranted, and recommendations.

The application is well prepared and we have no specific questions on the geology or other preliminary considerations. If a project is warranted, it seems that the initial work should be limited to the proposed trenching program. If favorable results are obtained, the underground work could then be considered. We note that the Applicant plans to carry out a soil sampling program early this spring in the area he wishes to trench. Perhaps additional supporting evidence will be obtained during this preliminary work.

If a contract is recommended, allowances for refilling trenches should be included in the cost estimate. Also, bids for the rental of a bulldozer and backhoe, including operators, should be furnished by the Applicant. We note that estimated cost for the underground work is high compared to similar work that has been performed in the region.

For your records, we are enclosing the duplicate copy of the material submitted by the Applicant in response to our letter of February 13.

Harold Kirkemo (gla)
Harold Kirkemo

Enclosure

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

ECPeterson/bsl 3/5/69

February 26, 1969

OFFICIAL COPY
O. M. E.
RECEIVED
FEB 28 1969
INITIALS CODE
130
gla 170
120
120

Mr. Frank E. Johnson
Chief Office of Minerals Exploration
Geological Survey
Washington, D.C.
20242

RE: OME-6772 (Mercury)
The Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon

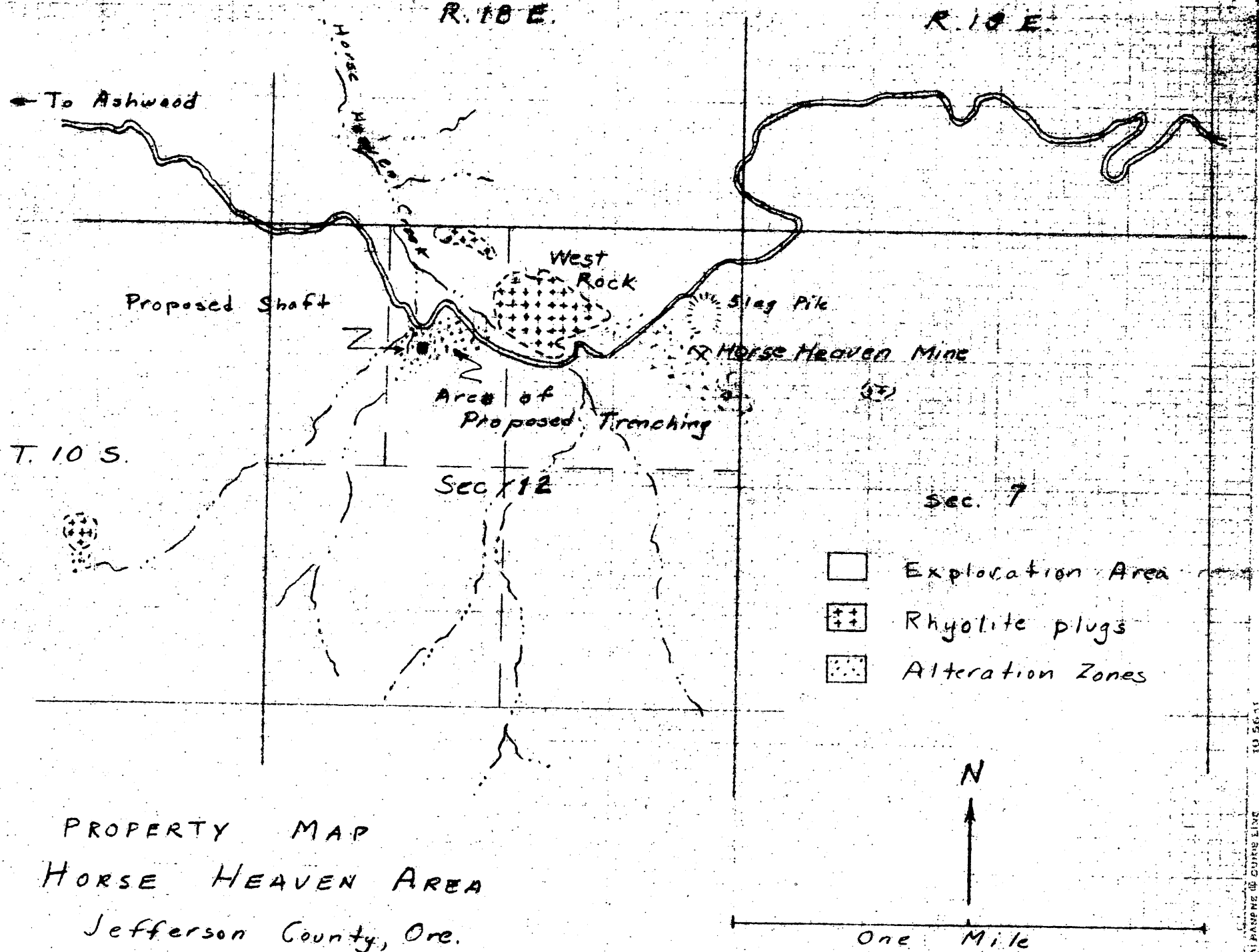
Dear Mr. Johnson:

Thank you very much for your prompt attention to our application. In reply to your letter of February 13, 1969 regarding additional information and questions you have raised, we will try to handle them in the order set forth:

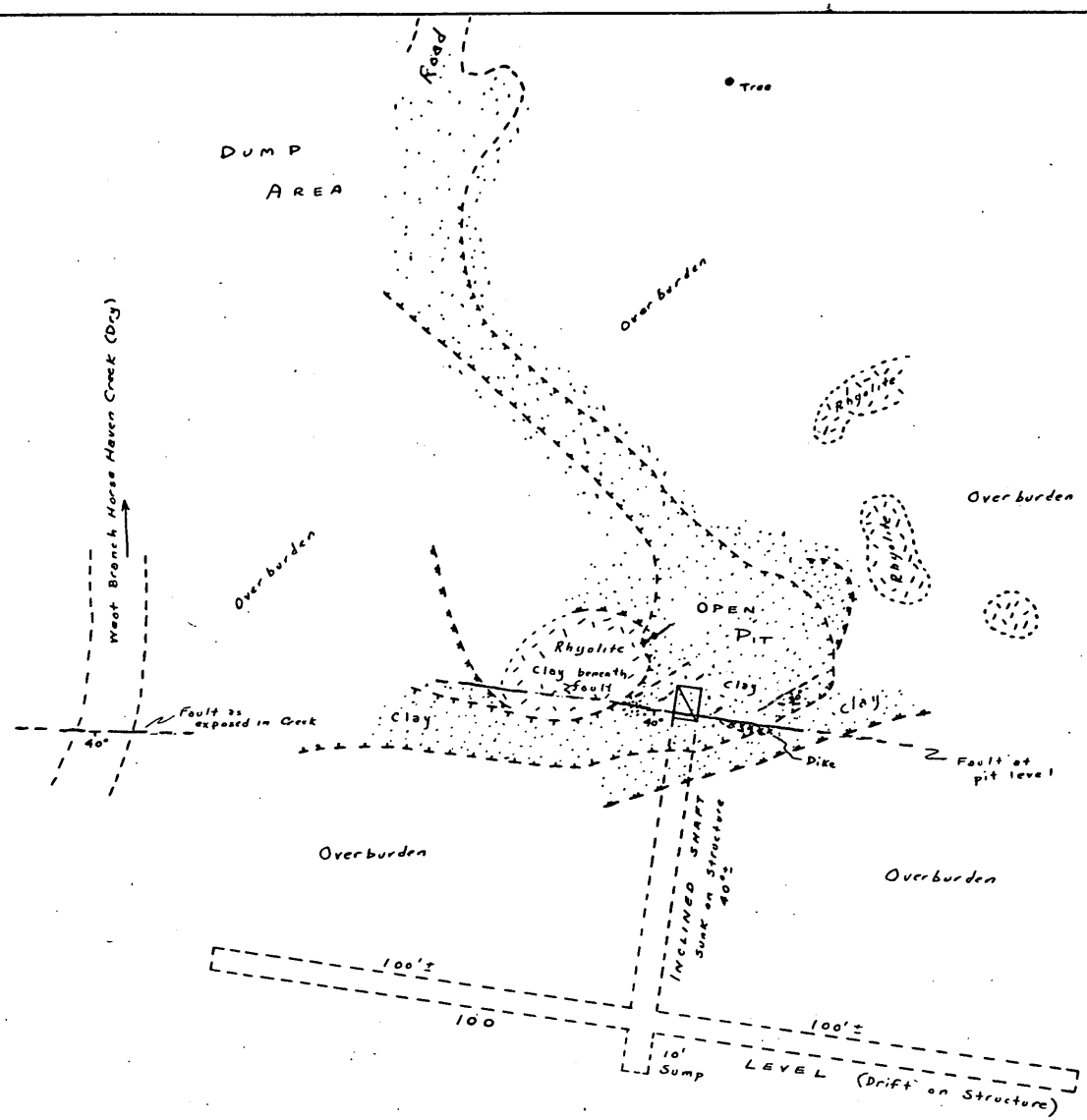
P. 1 p. 2. Copies of certain correspondence to the two banks requesting loans were forwarded to your Spokane office on February 12, 1969. Upon review of your recent letter, it is evident that the amount and form of the earlier requests were incorrect and, accordingly, new written applications were made to the banks. Copies of applications and replies are attached for inclusion with our O. M.E. Loan Application.

P. 1 p. 3. The structure which we wish to explore by sinking and drifting has to date produced 17 flasks of mercury from the open pit shown in Figure A accompanying our application.Unfortunately, the copies of Figure A which we submitted with our Application were not colored. We are therefore submitting properly colored copies. Copies of settlement sheets on these flasks are attached for your information.

Although some very rich concentrations of cinnabar were mined from the open pit, over-all costs have only been (including erection of 2 ton per day retort) on a break-even basis. The work has, however, given valuable information



PROPERTY MAP
HORSE HEAVEN AREA
Jefferson County, Ore.
Figure "D"



PROPOSED UNDERGROUND EXPLORATION

HORSE HAVEN WEST PIT AREA

JEFFERSON CO., ORE.

Scale 1" = ~~20~~ 45'

12/68

MANUFACTURERS OF
PALLARD'S REAGENT MERCURY
PALLARD'S TRIPLE DISTILLED C. P. MERCURY
PALLARD'S REDISTILLED N. F. MERCURY
PALLARD'S SPECIALLY REFINED TECH. MERCURY

ME VIRGIN QUICKSILVER

PALLARD'S IMPROVED
AMALGAMATOR & PLATE DRESSING

QUICKSILVER PRODUCTS, INC.

556 CLAY STREET
SAN FRANCISCO 94111
SUTTER 1-1988

5404 ALHAMBRA AVENUE
LOS ANGELES 32
CAPITOL 5-2395

PURCHASED FROM

AL FRANCO
602 Tower Bldg.
SEATTLE, WASHINGTON 98101

DATE October 6, 1967
YOUR LOT NO.
OUR PURCHASE NO. 46232
F.O.B. S.F., CALIF.
SHIPPED VIA YOUR DEL.

2 x 76# Flasks	PRIME VIRGIN MERCURY	@ $458.00	$ 916.00
1 x 2-3/4# Flask	PRIME VIRGIN MERCURY	6.02#	16.56
			$ 932.56
		Less Freight	7.00
			$ 925.56

The above shipment was retorted from approximately 12 tons of hand sorted ore from the Horse Heaven West pit.

Ray R. Whitney

MANUFACTURERS OF
[illegible]LLARD'S REAGENT MERCURY
[illegible]'S TRIPLE DISTILLED C. P. MERCUR[illegible]
[illegible]LLARD'S REDISTILLED N. F. MERCURY
[illegible]'S SPECIALLY REFINED TECH. MERCURY

DEALERS IN
PRIME VIRGIN QUICKSILVER

BA[illegible]D'S IMPROVED
AMALGAMATOR & PLATE DRESSING

QUICKSILVER PRODUCTS, INC.

556 CLAY STREET
SAN FRANCISCO 94111
SUTTER 1-1988

5404 ALHAMBRA AVENUE
LOS ANGELES 32
CAPITOL 5-2395

PURCHASED FROM
MR. AL FRANCO
HUMBOLDT METALS COMPANY
C/o HORSE HEAVEN ACCOUNT
602 TOWER BUILDING
SEATTLE, WASHINGTON 98101

DATE November 27, 19[illegible]7
YOUR LOT NO.
OUR PURCHASE NO. 46[illegible]
F.O.B. S.F., Calif.
SHIPPED VIA Your [illegible]l.

2 x 76# Flasks	PRIME VIRGIN MERCURY	@ $465.00	$ 930.00
1 x 75-1/4# Flask	PRIME VIRGIN MERCURY	6.11#	459.78
			$1,389.78
		Less Freight	8.91
			$1,380.87

----- SEND: TO

AL FRANCO
602 - TOWER BUILDING
SEATTLE, WASHINGTON 98101

The above shipment was retorted from approximately 18 tons of hand sorted ore from the Horse Heaven West pit.

[illegible]

[illegible]

DEALERS IN
PRIME VIRGIN QUICKSILVER

BALLARD'S IMPROVED
AMALGAMATOR & PLATE DRESSING

QUICKSILVER PRODUCTS, INC.

[illegible] CLAY STREET
SAN FRANCISCO 94111
[illegible]

5404 ALHAMBRA AVENUE
LOS ANGELES 32
CAPITOL 5-6295

PURCHASED FROM

HANSOLDT MINERALS COMPANY
c/o Morse Brown Act.
602 Tower Bldg.
SPOKANE, WASHINGTON 99201

DATE March 25, 1968
YOUR LOT NO.
OUR PURCHASE NO. 46770
F.O.B. S.F., Ca.
SHIPPED VIA Your Del.

2 x 76# Flasks	PRIME VIRGIN MERCURY	@ $545.00	$1,090.00
1 x 76-3/4# Flask	PRIME VIRGIN MERCURY	7.17#	514.45
			$1,604.45
		LESS FREIGHT	8.84
			$1,595.61

...SEND CHECK TO: MR. AL FRANCO
602 - TOWER BUILDING
SPOKANE, WASH. 9810.

The above shipment was retorted from approximately 14 tons of hand sorted ore from the Horse Heaven West pit.

Ray R Hetherington Jr

PRIME VIRGIN QUICKSILVER

LLARD'S IMPROVED
AMAL ATOR & PLATE DRESSING

QUICKSILVER PRODUCTS, INC.

500 CLAY STREET
SAN FRANCISCO 94111
SUTTER 1-1966

5404 ALHAMBRA AVENUE
LOS ANGELES 32
CAPITOL 5-2395

PURCHASED FROM

AL FRANCO
H HEAVEN MINE
MADRAS, OREGON

DATE	MAY 13, 1968
YOUR LOT NO.	
OUR PURCHASE NO.	46906
F.O.B.	San Francisco
SHIPPED VIA	Your Delivery

Gross	Tare	Net
252 1/2	23 1/4	229 1/4

3	X 76#	FLASKS	PRIME VIRGIN	@ $520.00	$1,560.00
1	X 1 1/4#		PRIME VIRGIN	@ $ 6.84#	$ 8.55
					$1,568.55
				Less Freight	8.99
					$1,559.56

The above shipment was retorted from approximately 14 tons of hand sorted ore from the Horse Heaven West pit.

MANUFACTURER OF
BALLARD'S REAGENT MERCURY
BALLARD'S TRIPLE DISTILLED C. P. MERCURY
BALLARD'S REDISTILLED N. F. MERCURY
BALLARD'S SPECIALLY REFINED TECH. MERCURY

F 1C
HORSEHEAVEN

DEALERS IN
PRIME VIRGIN QUICKSILVER

BALLARD'S IMPROVED
AMALGAMATOR & PLATE DRESSING

QUICKSILVER PRODUCTS, INC.

556 CLAY STREET
SAN FRANCISCO 94111
SUTTER 1-1988

5404 ALHAMBRA AVENUE
LOS ANGELES 32
CAPITOL 5-2395

PURCHASED FROM

HORSE HAVEN RANCH
RAY WHITING, JR.
MADRAS, OREGON

DATE SEPTEMBER 16, 1968
YOUR LOT NO.
OUR PURCHASE NO. 28183
F.O.B. SAN FRANCISCO
SHIPPED VIA YOUR DELIVERY

5	X 76# FLASKS	PRIME VIRGIN MERCURY	@	517.50	$2,587.50
1	X 62-3/4#	PRIME VIRGIN MERCURY	@	6.80#	426.70
					$3,014.20

SETTLEMENT: MAIL CHECK AND TWO COPIES TO:
FRANCO, ASIA, BENSUSSEN & COE
602 TOWERS BUILDING
SEATTLE, WASHINGTON 98101

ONE COPY TO:
RAY WHITING, JR.
HORSEHAVEN RANCH
MADRAS, OREGON

The above shipment was retorted from approximately 16 tons of hand sorted ore from the Horse Heaven West pit.

Ray Whiting Jr.

500 OLIVE WAY

P. O. BOX 40, SEATTLE, WASHINGTON 98111

February 24, 1969

Horse Heaven Mine
c/o Mr. Al Franco
602 Tower Building
Seattle, Washington 98101

RE: Horse Heaven Mine in
Jefferson County, Oregon

Gentlemen:

Our loan committee after due consideration is unable to grant your request for a term loan of $28,500 as proposed in your recent credit application.

Long term loans for capital investment purposes are unavailable at this particular time. This is especially so since these funds are to be used for mining exploration purposes in an area somewhat remote from Seattle.

Perhaps at some future date we might entertain the possibilities of looking further into your capital loan requirements.

Sincerely,

J. A. Daly

~~J. A. Daly~~
Assistant Vice President

JAD:jb

FRANCO, ASIA, BENSUSSEN & COE
ATTORNEYS AT LAW
602 TOWER BUILDING
SEATTLE, WASHINGTON 98101
MA 3-5622 · MA 3-5086

ALBERT M. FRANCO
BENJAMIN S. ASIA
EDWARD H. BENSUSSEN
HAROLD B. COE

February 20, 1969

The Canadian Imperial Bank of Commerce
Second and Columbia Streets
Seattle, Washington

Gentlemen:

The Horse Heaven Mine, a partnership, consisting of Dr. Charles S. Fine, Albert M. Franco, Ray R. Whiting, Jr., Milton P. Roumm and Ruth J. Roumm, requires a long term loan in the sum of $28,500.00, constituting seventy-five percent of a proposed exploration program of $38,000.00 to be undertaken at the Horse Heaven Mine in Jefferson County, Oregon.

The proposed use of the loan funds is to accomplish the following:

To explore a new discovery at the Horse Heaven Mine, which exploration is directed towards exploring a mineralized zone at the depth of 100 feet. To trench an area to the west of an existing pit area where high grade float cinnabar has been found. While known ore reserves are nil, there are a number of areas in the Horse Heaven Mine which warrant exploration along with a new discovery and a new discovery offers excellent possibilities for the development of high grade ore.

We will furnish further information at your request.

Kindly advise if the Horse Heaven Mine can secure a long term loan of $28,500.00 at an interest rate not to exceed 8% per annum for the proposed uses indicated in

PLEASE ADDRESS
REPLY TO
THE MANAGER

CANADIAN IMPERIAL BANK OF COMMERCE

P.O. BOX 100
SEATTLE 11, WASHINGTON

CABLE ADDRESS:
"CANBANK"

February 21, 1969

Horse Heaven Mine
602 Tower Building
Seattle, Washington 98101

Gentlemen:

Referring to your letter of February 20, we regret to advise that we are not currently considering long term loans for the purpose of financing mining explorations.

It follows, therefore, that your request for a loan of $28,500 constituting 75 percent of the proposed exploration program is declined.

Yours very truly,

D. W. C. Podgerson,
Assistant Manager

this application.

Thanking you very much, I am

Very truly yours,

ALBERT M. FRANCO

AMF:bb

MME FORM 6 REFERENCE SLIP

REV. 2- OFFICE OF MINERALS EXPLORATION

TO: Chief, OME	DATE	INITIALS
1. OME6772	2/14/69	
Re: Application for Assistance (Mercury)		
2. Horse Heaven Mine		
Horse Heaven West		
3. Jefferson County, Oregon		
4.		
5. Willard P. Puffett		
FROM: Geologist, OME, Reg. I		

FOR: Check items for action desired

X Action ____ Reply for signature of ____

____ Approval ____ Investigate ____ Surname

____ Comment ____ Recommendations ____ Signature

____ Conference ____ Rewrite ____ File

____ Instructions ____ Your information

REMARKS:

Attached are the Applicant's letters to the banks that were missing from the application which was forwarded to you on 2/10/69.

Place in dev. rpt

Willard P Puffett

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

WRP

Feb. 12, 1969.

Office of Minerals Exploration.
U. S. Court House.
Spokane, Wash.

Dear Sir.

Enclosed please find two letters concerning discussion of bank loans, regarding money to be used for exploration at the Horse heaven mine.

The letters to be added to the folders submitted, for Horse Heaven Exploration Corp.

Yours truly,
Ray R. Mathews II

RECEIVED
FEB 14 1969
O. M. E.
SPOKANE, WASH.

047035

RECEIVED
FEB 18 12 07 PM '69
BUDGET&FINANCE

February 12, 1969

The National Bank of Commerce
Central Branch
P.O. Box 40
Seattle, Washington
98111

RE: The Horse Heaven Mine

Attention: J. A. Daly,
Assistant Vice-President

Dear Mr. Daly:

In connection with our previous telephonic application for a $50,000.00 development loan at the Horse Heaven Mine in Jefferson County, Oregon, the purpose of this letter is to repeat in writing our previous request for the loan pursuant to which your refusal of the 21st day of January, 1969 was sent to us.

As with previous experience with your bank, the loan would be either short term for 90 days or payable on demand with renewals and extensions at the pleasure of your bank.

This letter will provide your bank with a record of the request of the Horse Heaven Mine for such loan, there already being written record of your refusal to grant the loan.

Very truly yours,

THE HORSEHEAVEN MINE

By Ray R. Whiting, Jr.
Ray R. Whiting, Jr.

:bb

047035

FEB 18 12 07 PM '69

February 12, 1969

Canadian Imperial Bank of Commerce
P.O. Box 100
Seattle, Washington
98111

Attention: D.W.C. Rodgerson,
Assistant Manager

RE: The Horse Heaven Mine

Dear Mr. Rodgerson:

In connection with our previous telephonic application for a $50,000.00 development loan at the Horse Heaven Mine in Jefferson County, Oregon, the purpose of this letter is to repeat in writing our previous request for the loan pursuant to which your refusal of the 29th day of January, 1969, was sent to us.

As with previous experience with your bank, the loan would be either short term for 90 days or payable on demand with renewals and extensions at the pleasure of your bank.

This letter will provide your bank with a record of the request of the Horse Heaven Mine for such loan, there already being written record of your refusal to grant the loan.

Very truly yours,

THE HORSEHEAVEN MINE

By Ray R. Whiting, Jr.
Ray R. Whiting, Jr.

:bb

047035

FEB 18 12 07 PM '69

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
2/13/69	Peters	120
2/13/69	Kirkemo	120
		110
2/13	CAL	220
		120M

AIRMAIL

Horse Heaven Mine
602 Tower Building
Seattle, Washington 98101

FEB 13 1969

Re: OME-6772 (Mercury)
Horse Heaven Mine
Horse Heaven West Property
Jefferson County, Oregon

Gentlemen:

Our review of your application for financial assistance indicates that the following additional information is needed to continue its processing.

Furnish copies of your correspondence to the two banks requesting an exploration loan. The letters should state the amount of the loan (estimated Government participation), purpose, date, and terms requested. The requirement to supply both the letters to the banks and their replies cannot be waived.

The information necessary for us to determine whether eligible minerals may occur in the area you wish to test has not been furnished. Therefore, we suggest that representative samples be taken of the mineralized structure (target?) outcroppings and assayed. Information as to the location of samples taken, how sampled, sample widths, and copies of the assay certificates should be forwarded for our evaluation.

Please furnish more details on the proposed trenching work. Show on a map or sketch the areas to be trenched and indicate the extent of the target. From the information submitted it appears that this work is designed to gather additional geologic data rather than to find ore, and therefore, may not be eligible for Government assistance.

The OME program is limited to the exploration of specific geologic targets in specific areas, and excludes participation in the preliminary work required to delineate these targets and obtaining the necessary supporting evidence. Such information should be obtained by the Applicant at his own expense prior to the submittal of an application.

If any of the proposed work is to be contracted (drilling, drifting, bulldozing, etc.), cost estimates should be supported by bids from three contractors for each work item, if possible.

Submit a property map showing the boundaries and the relationship of present mine workings and the proposed work to these boundaries.

We shall be pleased to continue the processing of your application upon receipt of the requested information. However, nothing in this letter should be construed as a commitment by the Government to grant an exploration contract.

Sincerely yours,

FRANK E. JOHNSON (glm)

Frank E. Johnson
Chief, Office of
Minerals Exploration

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

ECPeterson/bsl 2/13/69

February 12, 1969

Horse Heaven Mine
602 Tower Building
Seattle, Washington 98101

Subject: OME-6772

Gentlemen:

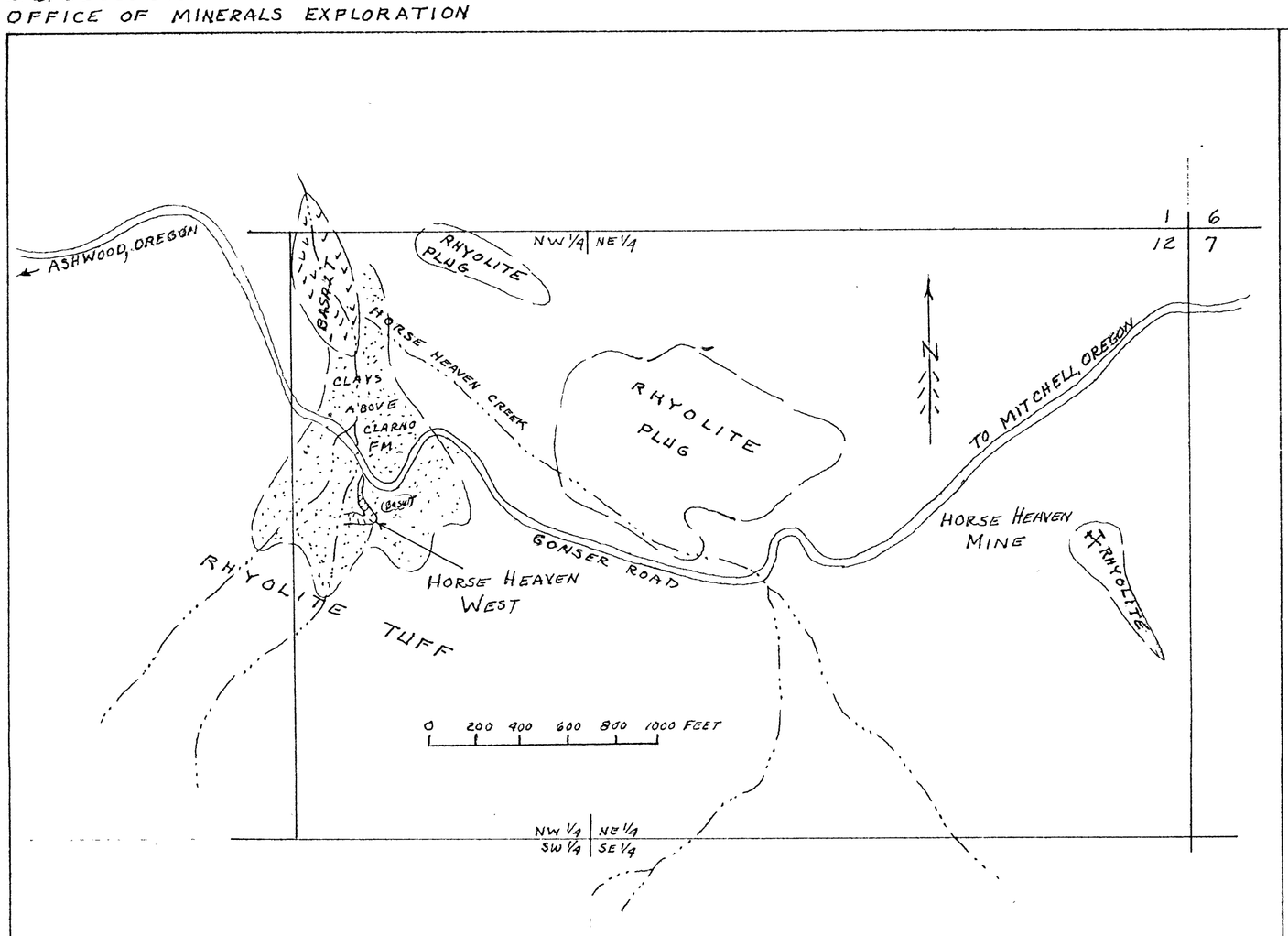
Your application for exploration assistance, dated February 7, 1969, submitted to our office at Spokane, Washington, has been assigned Docket No. OME-6772.

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

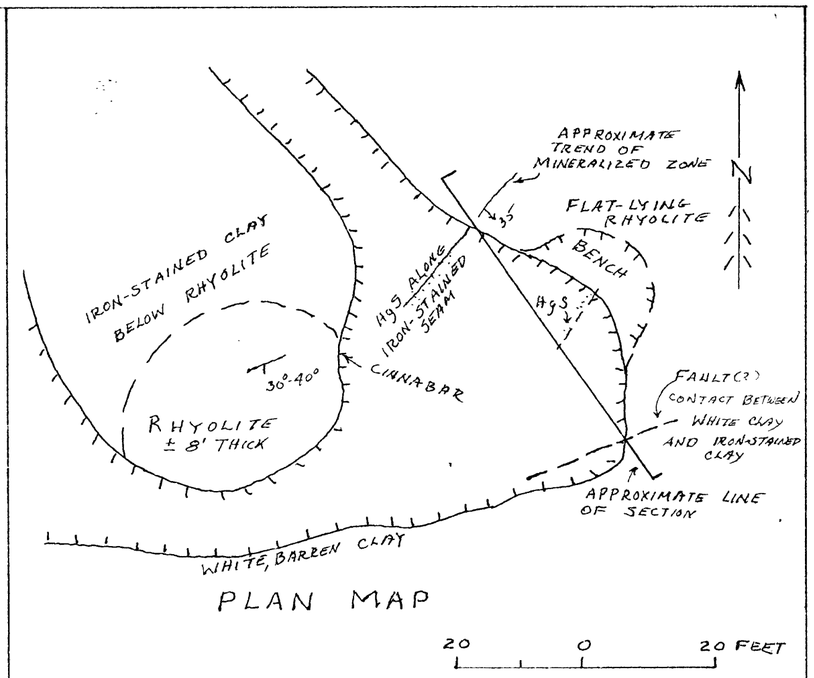
Sincerely yours,

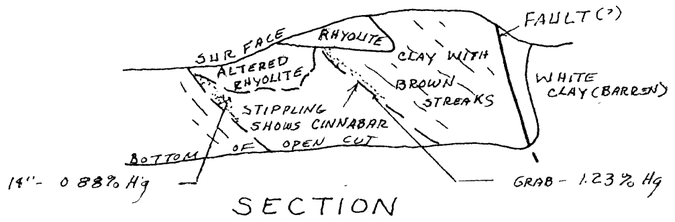
Frank E. Johnson
Chief, Office of
Minerals Exploration

Copy R-I



GENERALIZED GEOLOGIC AND INDEX MAP OF HORSE HEAVEN MINE AREA





PLAN MAP AND SECTION OF HORSE HEAVEN WEST DISCOVERY PIT

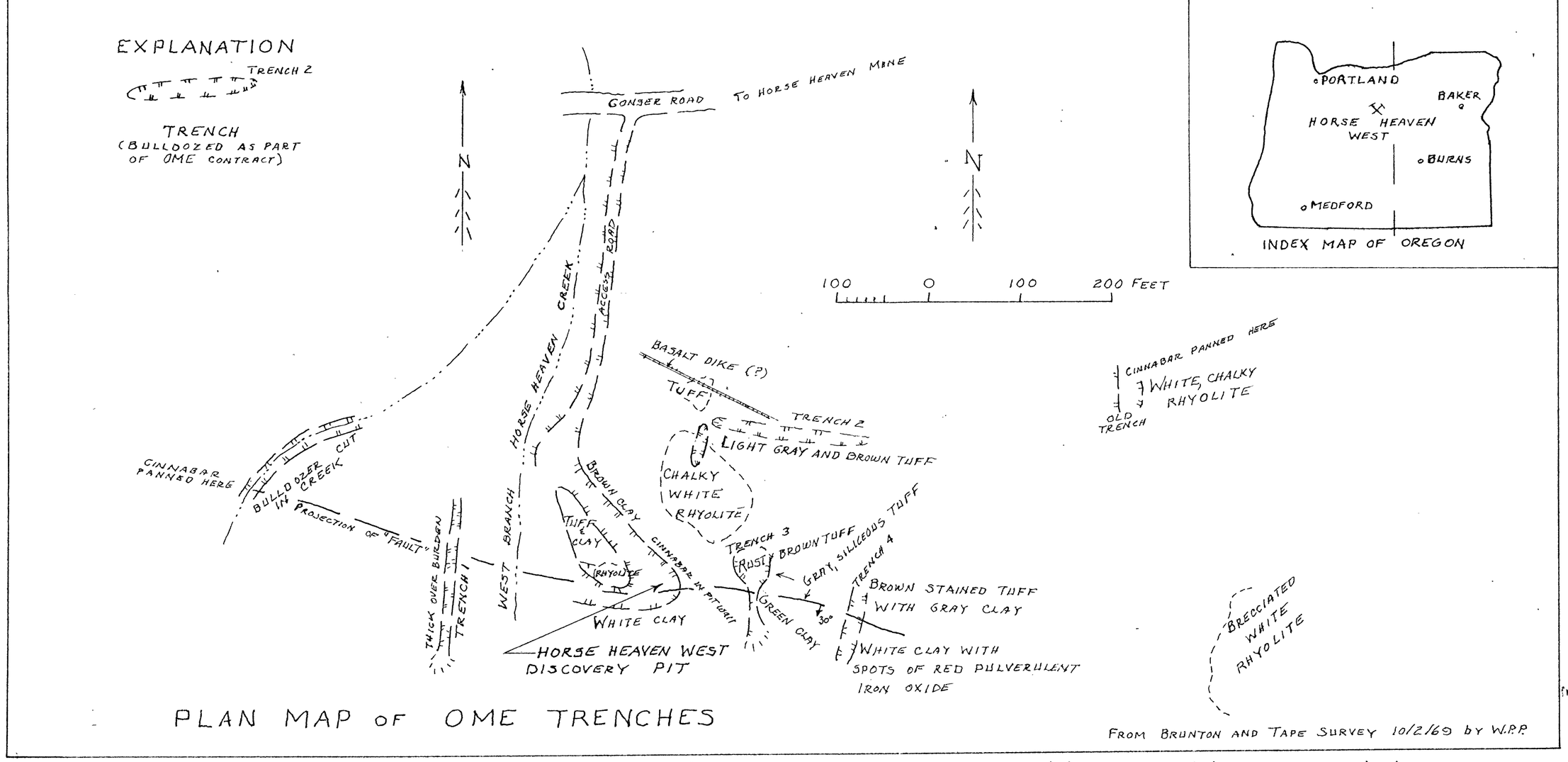
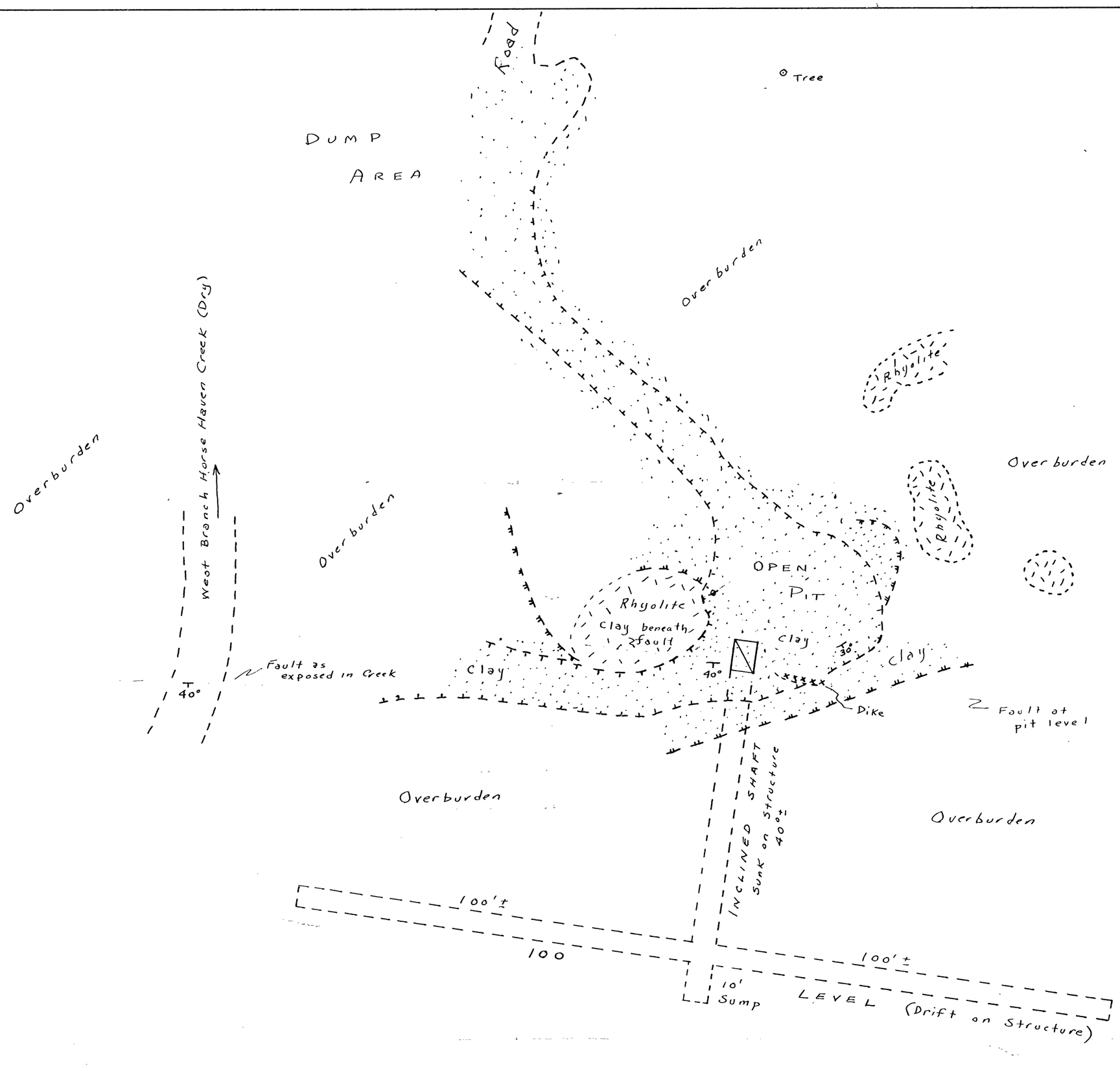


FIGURE 1- INDEX, PLAN, GEOLOGIC MAPS, AND SECTION, HORSE HEAVEN WEST, SEC. 12, T.10 S., R.18 E., JEFFERSON COUNTY, OREGON



N

PROPOSED UNDERGROUND EXPLORATION

HORSE HAVEN WEST PIT AREA

JEFFERSON CO., ORE.

Scale 1" = 20'

12/68

U.S. GEOLOGICAL SURVEY
OFFICE OF MINERALS EXPLORATION

OME-6772 (MERCURY)

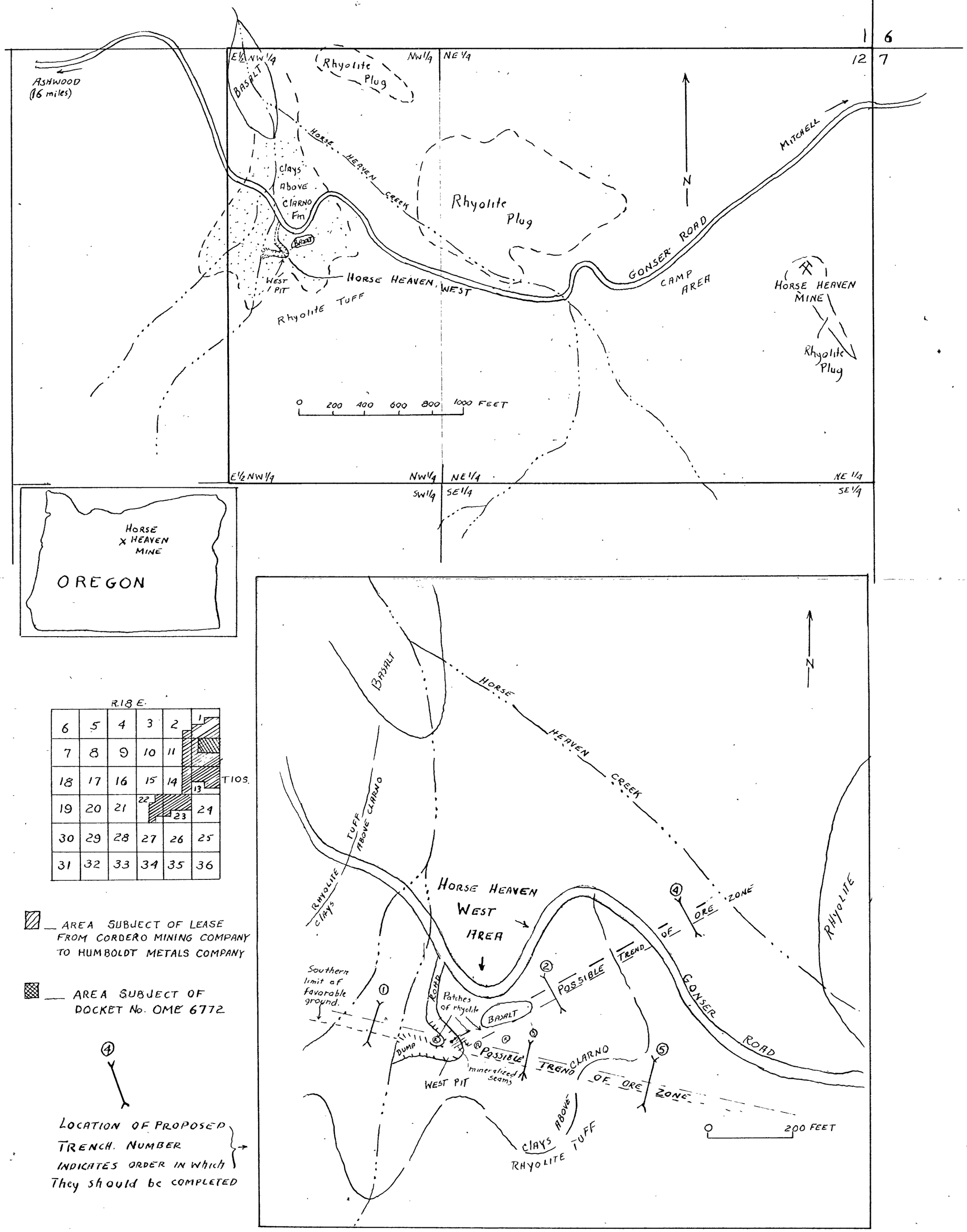


FIGURE 2. INDEX MAP OF HORSE-HEAVEN WEST PROPERTY SHOWING LOCATIONS OF PROPOSED TRENCHES.