DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

CONTROLLED DOCUMENT

DMA Docket No. DMEA-2817

DO NOT DETACH THIS SLIP

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This document has been recorded as

EXPLORATION ASSISTANCE

Any action taken to change the type of request for assistance must be promptly reported to the Reports and Records Branch. Use DMA Form 2 for submitting these reports.

Routing Slip
CYS to USBM, USGS AND REG. III

To:	Code 700 Rm. 4640	Date	12/22/52
To:	Open Com.	Date	2-25-53
To:	Open Com	Date	8- -53
To:	Code 700	Date	8-14-53
To:	Open Com	Date	9-11-53
To:	Open Com	Date	9-3-54
To:		Date	
To:		Date	
To:		Date	
To:		Date	
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To:		Date	
To:		Date	

DO NOT DETACH

CONTROLLED DOCUMENT

700 File Copy
Surname

Ching
Ellis
Johnson
Hedges
Kilgore
Selfridge

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

SEP 3 1954

Mr. Charles Kassabaum
Box 204
Winnemucca, Nevada

Re: Docket No. DMEA-2817 (Mercury)
K & K Quicksilver Mine
Humboldt County, Nevada

Dear Mr. Kassabaum:

Your letter, dated August 9, 1954, regarding reinstatement of the subject docket, has been under consideration by the Defense Minerals Exploration Administration.

Inasmuch as you have given us no indication of any new developments on your property, we are not in a position to reinstate your application. However, if you have done additional work on the property since our denial letter of September 11, 1953, and you think the results warrant reconsideration on our part, please describe such new developments so we can reappraise the proposed project in the light of the new information. We would also be interested in knowing whether you have retorted any of the ore and, if so, the results of such work.

Sincerely yours,

E. O. Mittendorf

Administrator

MChing:ep 9-2-54

Copy to: Docket
Admr's Reading File
Operating Committee
Mr. H. M. Meyer, Rm. 2623
Mr. E. L. Newcomb, Rm. 5227
Field Team, Reg. III (2)
Code 700
Mr. Ching

R.C.G.

8-27-54
Q. Ca.

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

August 27, 1954

Memorandum

To: E. W. Ellis, DMEA

From: C. H. Johnson, for H. M. Meyer, Bureau of Mines

Subject: DMEA-2817 (Mercury) K & K Quicksilver Mine, Humboldt County, Nevada

This has reference to the re-application of Mr. Kassabaum for an exploration contract. The re-application must be based solely on the changed situation in mercury; so far as the record shows, no further work has been done on the prospect.

In view of the current high demand for mercury, and considering the Government's evident desire to stimulate production, as evidenced by the GSA price guarantee, I am of the opinion that the small project outlined as Stage I in the Warne-Pampeyan report dated July 13, 1953 would justify DMEA support.

C. H. Johnson

C. H. Johnson

Copy to - E. L. Newcomb, USGS
Minerals Division
Miss Meyer
Files

6450

8-27-54
a.cu.

IN REPLY REFER TO:

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

August 26, 1954

Re: DMEA-2817
K & K Quicksilver Mine
Humboldt County, Nevada
$18,087.25 - Mercury

Memorandum

To: E. Wm. Ellis, Defense Minerals Exploration Administration

From: E. L. Newcomb, U. S. Geological Survey

Subject: Applicant's request for reconsideration of his application

The applicant's property has been examined by the Field Team and not recommended for exploration assistance.

Apparently no new work has been done by the applicant nor has any new data been presented.

It was the Field Team's conclusion that a significant discovery could not reasonably be expected on this property. Although the price of mercury has reached an alltime high, the ore potential or the chance of successful DMEA exploration on this property have not changed.

I recommend the applicant's request for exploration assistance be denied.

E. L. Newcomb

E. L. Newcomb

8-12-54
G.C.

Winnemucca, Nevada
August 9, 1954

Mr. C. O. Mittendorf, Administrator
Department of the Interior
Defense Minerals Exploration Administration
Washington 25, D. C.

Re: Docket No. DMEA-2817(Mercury)
K & K Quicksilver Mine
Humboldt County, Nevada

Dear Mr. Mittendorf:

In 1953 I submitted an application for financial assistance on the above quicksilver mine and am wondering if it would be possible to have this application reinstated and if at this time there would be any chance of receiving a government loan.

Yours very truly,

Charles Kassabaum

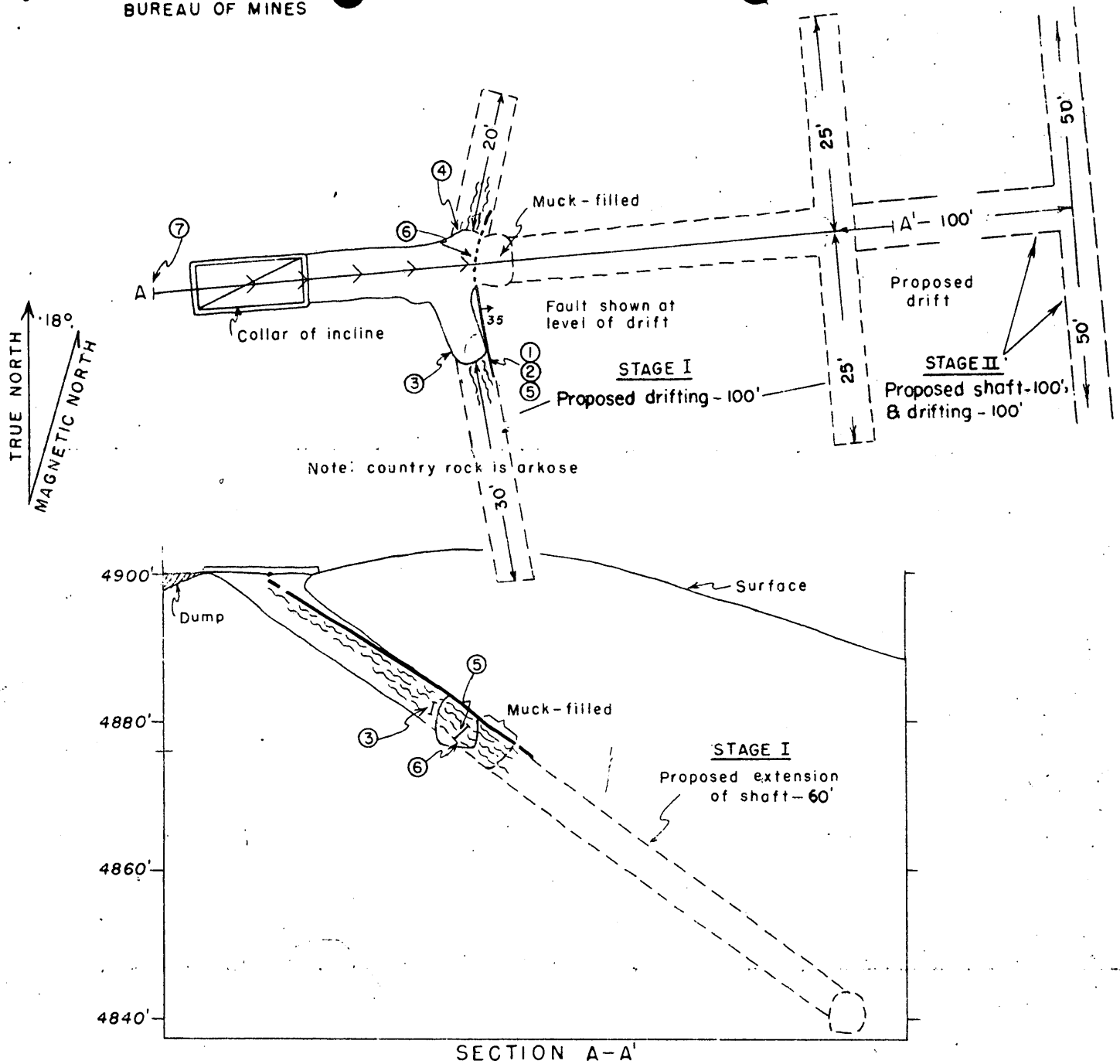
Charles Kassabaum
Box 204
Winnemucca, Nevada

1 copy for Newcomb. U.S.G.S
1 " " Helena Meyer U.S.B.M.

8-24-54 Waiting comments

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
BUREAU OF MINES

DMEA 2817
(MERCURY)



EXPLANATION

35 Fault, showing dip

② Sample locality

Inclined workings (Chevrons point down at 5' vertical intervals)

Sheared arkose

20 0 20 FEET

Mapped by E. H. Pampeyan, D. C. Ross and J. D. Warne

N.E.I/4 Sec. 5
T.37 N., R.40 E.
Scale I" = 2000'

Shaft

N.W.I/4 of S.E. I/4

MAP AND SECTION OF THE K&K QUICKSILVER MINE, HUMBOLDT COUNTY, NEVADA

Datum is approximately sea level

FIGURE 2

FILE COPY
SURNAME:

Murphy
Ellis
Kinkel
Vedars
Bridge
Fitzmorris

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

SEP 11 1953

Mr. Charles Kassabaum
Box 204
Winnemucca, Nevada

Re: Docket No. DMEA-2017 (Mercury)
K & K Quicksilver Mines
Humboldt County, Nevada

Dear Mr. Kassabaum:

Reference is made to your application for Government aid on the proposed captioned project estimated to cost $18,087.25.

Projects approved by the Defense Minerals Exploration Administration must, in its judgment, show definite promise of yielding material of acceptable grade and in quantities that will significantly improve the mineral supply position for the National Defense Program.

A careful study of your application and data available to this Agency and an examination of the property concerned reveal that the probability of disclosing minable ore reserves by your proposed exploration program is not sufficiently promising to justify Government participation. Under these circumstances, we regret to advise that your application for exploration aid is denied.

Your interest in the exploration program of the Defense Minerals Exploration Administration and your willingness to participate therein are appreciated.

Sincerely yours,

C. D. Mitchell (for)

Administrator

FMMurphy/dh
9-9-53
cc to: Adm. Reading File
Operating Committee
Docket
Messrs: A. Renick, Rm. 3061
A. R. Kinkel, Rm. B-2424, GSA
Ellis
Murphy
DMEA Field Team, Region III (2)

HHR
9-11-53

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE Sept. 4, 1953

REFERRED TO:

1. ~~Mr. J. Chambers - Rm.4542~~
2. Oper. Committee - Rm.4624
3. Mr. Mittendorf - Rm.4624
4. Mails & Files - Rm.4070
5. Code 700 (docket) Rm.4640

DMEA-2817

FOR:

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

REMARKS: Please surname

Refused

Check (X) before the items needing attention.

Ernest Wm. Elliot

db *Initials of sender.*

GPO 16—63815-1

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

Mr. H. C. Miller
Executive Officer
DMEA Field Team, Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

Re: Docket No. DMEA-2817 (Mercury)
Charles Kassabaum
K & K Quicksilver Mines
Humboldt County, Nevada

Dear Mr. Miller:

Enclosed with attachments are the original and five copies of a Contract with the captioned Operator signed by the Administrator for the Government.

If the terms and conditions of this proposed contract meet with your approval and the Operator, kindly insert in Article 3 of each copy of the contract the period of time within which the Operator will be required to begin work.

If any part of this proposed contract does not have either your approval or that of the Operator and cannot be amended within your delegated authority, the original and all copies of the proposed contract are to be returned to this office with the proposed changes for consideration.

The Application dated December 16, 1952, was for a total amount of $18,087.25. The Field Team recommended $15,028.40, to which this office has added $300.00 for assays making the total amount of the contract $15,328.40.

Sincerely yours,

Enclosures 6

Chairman, Operating Committee

APPROVED:

Member, Bureau of Mines

Member, Geological Survey

FILE COPY
SURNAME:

Murphy
Ellis
Chamberlin

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

Mr. H. C. Miller
Executive Officer
DMEA Field Team, Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

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Charles Kassabaum
K & K Quicksilver Mines
Humboldt County, Nevada

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Sincerely yours,

Enclosures 6

Chairman, Operating Committee

APPROVED:

FMMurphy/db
9-4-53
cc to: Adm. Reading File
Operating Committee
Docket
Messrs: H.M.Meyer, Rm. 3623
A.R.Kinkel, Rm. B-242A, GSA
Ellis
Murphy

Member, Bureau of Mines

Member, Geological Survey

MF-200 (A)
(February 1952)

DOCKET NO. DMEA 2817

COMMODITY Mercury

Government's Copy

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

EXPLORATION PROJECT CONTRACT[1]

(Short Form)

IT IS AGREED this _____ day of _____, 195__, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] Charles Kassabaum
Box 204
Winnemucca, Nevada

hereinafter called the "Operator," as follows: and as set forth in Annex I

ARTICLE 1. *Authority for contract.*—This agreement is entered into under the authority of the Defense Production Act of 1950, as amended, pursuant to DMEA Order 1 entitled "Government Aid in Defense Exploration Projects."

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of Nevada, County of Humboldt, described as follows:[3] the NE¼, and the NW¼ of the SE¼ of Sec. 5, T.37 N., R.40 E., Mount Diablo, California base and meridian; recorded in Humboldt County Courthouse at Winnemucca, Nevada, and shown on map mentioned in Exhibit "A".

the Operator represents and undertakes:[4]

(*a*) That the Operator is the owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached:

None

~~(*b*) That the Operator is owner, in possession and entitled to possession, and the Owner's Consent to Lien is attached.~~

The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, within _____ days from the date of this contract shall commence work on a project of exploration for[5] Mercury

in or upon the described land; and shall bring the project to completion within a period of 10 months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided. The work shall be performed by the Operator or by independent contractor or contractors efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmen's compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

ARTICLE 4. *Costs of the project.*—The agreed, estimated costs of performing the work, expressed in terms of units of work to be performed (per foot of drifting, per foot of drilling, per cubic yard of material to be moved, etc.) are set forth in Exhibit "A," attached hereto. The Government will pay 75 percent of these agreed, estimated costs, as they accrue, for units of work actually performed that conform with the description or specifications for the work set forth in this contract, in an aggregate total amount not in excess of $11,496.30 which is 75 percent of $15,328.40 the agreed, estimated total cost of the project in which the Government will participate: *Provided,* That until the Operator's final report and final accounting have been rendered to the Government and any final check or auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract. The Government may, as it sees fit, make payments direct to the Operator's independent contractors, if any, for the account of the Operator, rather than to the Operator.

ARTICLE 5. *Reports, accounts, audits.*—(*a*) *Progress reports.* The Operator shall provide the Government with monthly reports of units of work performed under the contract, in quintuplicate (five copies), upon forms provided by the Government. These progress reports shall be certified by the Operator, and shall constitute both the Operator's invoice of units of work performed on the project during the period covered by the report and his voucher for repayment by the Government, unless the Government requires the use of a standard voucher form with invoice attached. Progress reports shall include surface and/or underground engineering-geological maps or sketches showing the progress of the exploration, with assay-reports on samples taken concurrently with the advance in mineralized ground.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property, particularly excluding any land or interest therein to which the Government's lien is not to attach or the production from which is not to be subject to the Government's percentage royalty.
[4] Strike out the provision not applicable.
[5] Name of mineral or minerals.

(*b*) *Final report.*—Upon completion of the exploration work or termination of the contract the Operator shall provide the Government with an adequate geological and engineering report, in quintuplicate (five copies), including an estimate of ore reserves resulting from the exploration work.

(*c*) *Compliance with requirements.*—If, in the opinion of the Government, any of the Operator's reports are insufficient or incomplete, the Government may procure the making or completion of such reports and attachments as an expense of the exploration work; and the Government may withhold approval and payment of any vouchers depending upon insufficient or incomplete reports.

(*d*) *Accounts and audits.*—The Operator shall keep suitable records and accounts of the units of work performed, which the Government may inspect and audit at any time. The Government may at any time require a check of the work performed and an audit of the Operator's records and accounts, by a certified public accountant or otherwise, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract. Upon the completion of the project or termination of the contract the Operator shall render a final account and statement of work performed to accompany his final report.

ARTICLE 6. *Repayment by Operator.*—(*a*) If, at any time, the Government considers that a discovery or a development from which production may be made has resulted from the exploration work, the Government, at any time not later than 6 months after the Operator has rendered the required final report and final account, may so certify in writing to the Operator. The certification shall describe broadly or indicate the nature of the discovery or development. In the event of such certification, any minerals mined or produced from the land described in Article 2 within 10 years from the date of this contract, including any mined or produced before the certification, shall be subject to a percentage royalty which the Operator or his successor in interest shall pay to the Government, upon the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, until the total amount contributed by the Government, without interest, is fully repaid, or said 10 years have elapsed, whichever occurs first, as follows: See Annex I, substituted for that part of 6(a) preceding the colon.

(1) One and one-half (1½) percent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(2) One and one-half (1½) percent of any such net amounts, plus one-half (½) percent of such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such net amounts.

(For instance: The percentage royalty on a net amount of five dollars ($5.00) per ton, would be one and one-half (1½) percent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) percent.)

(*b*) As here used, "net smelter returns," "net concentrator returns," and "other net amounts realized from the sale or other disposition," mean gross revenue from sales, or if not sold, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be the gross income from mining operations for percentage depletion purposes in income-tax determination.

(*c*) To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(*d*) This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

ARTICLE 7. *Assignment, transfer, or loss of Operator's interest.*—Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder. The Operator shall not make any voluntary nor permit any involuntary transfer or conveyance of the Operator's rights in the land described in Article 2, without making suitable provision for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof; *Provided*, that mere failure by the Operator to maintain the Operator's rights in the land, without any consideration running to the Operator other than relief from the cost of maintaining such rights (as by surrender of a leasehold, failure to perform assessment work, or failure to exercise an option), coupled with complete abandonment by the Operator of all interest in or operations on the land for a period of 10 years from the date of this contract, shall not constitute such a transfer or conveyance. Should the Operator make or permit any transfer or conveyance in violation of this provision, the Operator shall be and remain liable for payment to the Government of the same amounts, at the same times, as would have been paid under the terms of the percentage royalty on production. If for any reason the net smelter returns, net concentrator returns, or other net amounts realized from the sale or other disposition of such production are not available as a means of measuring the amount of the Operator's liability, the amount thereof shall be estimated as well as may be, and in the event of dispute as to such estimates, the determination thereof by the Administrator of Defense Minerals Exploration Administration or by his successor shall be final and binding upon the Operator.

ARTICLE 8. *Termination and completion.*—The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if, in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worth while discovery and in the opinion of the Government further operations are not justified.

ARTICLE 9. *Changes and added provisions* _____

_____

_____

_____

_____

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

_____

~~(Operator)~~ XXXXXX

By _____

Administrator, Defense Minerals Exploration Administration

By _____

Charles Kassabaum - Operator

I, _____, certify that I am the _____ secretary of the corporation named as Operator herein; that _____, who signed this contract on behalf of the Operator, was then _____ 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]

U. S. GOVERNMENT PRINTING OFFICE 16—66329-1

CHARLES KASSABAUM
EXPLORATION PROJECT CONTRACT
DOCKET NO. DMEA-2817

EXHIBIT "A"

Description of the Work

The object of this exploration project is the discovery of commercial mercury ores. The work shall be performed in two stages, the second stage to be undertaken only with prior written approval of the Government, if the results of the first stage indicate that ore may be found at deeper horizons. The work to be done in each stage is shown on the attached map entitled "Map and Section of the K & K Quicksilver Mine, Humboldt County, Nevada - Figure 2."

Stage I shall consist of deepening the existing inclined shaft (in the same easterly direction) 60 feet to a depth of 100 feet. In the shaft, at approximately 30 feet below the collar, drift horizontally northward a distance not in excess of 20 feet, and southward a distance not in excess of 30 feet. From the bottom of the shaft, horizontal drifts also shall be driven northerly and/or southerly for a total distance not in excess of 50 feet.

Stage II shall consist of sinking the said shaft from the 100-foot to the 200-foot level, and then driving horizontal drifts northerly and/or southerly on the 200-foot level not in excess of 100 feet.

In both stages, the shaft and drifts shall follow the mineralized structure, and shall approximate 5 feet by 7 feet in cross section in clear of timber. However, in the shaft, the cross-section area may be increased at station levels to approximate 7 feet by 8 feet in clear of timber. The direction and extent of shafts and drifts shall be subject to Government approval.

The work shall be directed by a Government-approved, full-time mining engineer supervisor, who shall perform the necessary surveying, mapping, sampling, writing reports, and other duties required for the satisfactory operation of this project.

Channel samples, across and normal to the vein structure, shall be taken at 5 foot intervals over parts of the shaft or drifts which show mineralization, also a grab sample shall be taken from each round blasted in the shaft and drifts, when they are in probable ore. A complete record of the number, location, and assay value of each sample taken shall be included in the Operator's monthly report to the Government. Methods of sampling and sample analysis shall be subject to Government approval. Not in excess of 70 assays in Stage I and 80 in Stage II shall be done.

Agreed Unit Costs

Shaft sinking - 160 feet @ $53.24/ft.	$ 8,518.40	
Drifting - 200 feet @ $32.55/ft.	6,510.00	
Assays - 150 @ $2.00/ea.1/	300.00	
Total Agreed Unit Costs		$15,328.40
Government Participation @ 75%		$11,496.30

1/ Includes transportation charges.

CHARLES KASSABAUM
EXPLORATION PROJECT CONTRACT
DOCKET NO. DMEA-2817

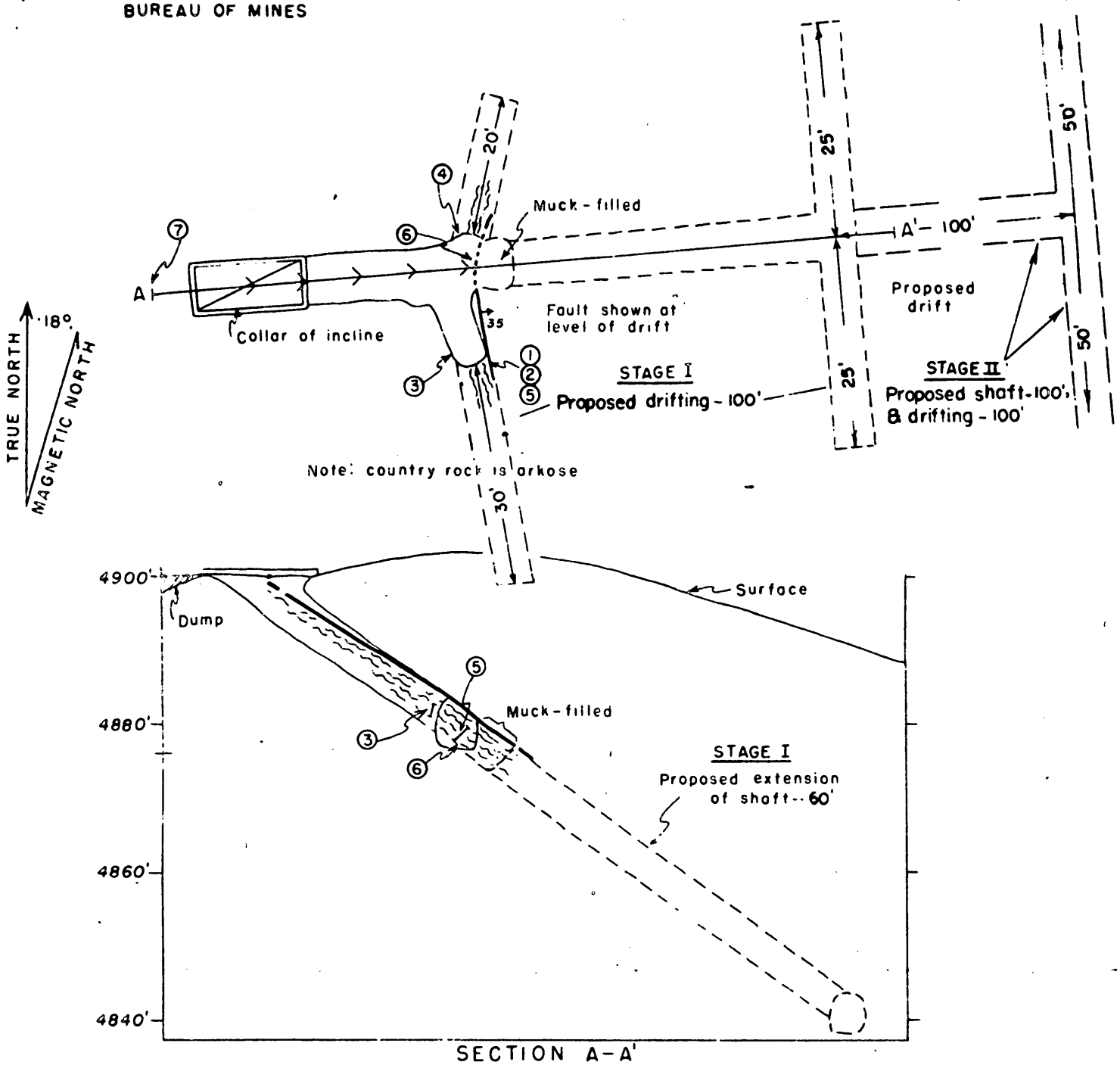
ANNEX I

The following provisions are in lieu of all of paragraph (a) of Article 6 which precedes the colon:

If the Government considers that a discovery or development from which production may be made has resulted from the exploration work, the Government, at any time not later than six months after a sufficient, complete, final report and final account referred to in the contract has been rendered, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development, The Operator, or his successor in interest, shall pay to the Government a royalty on all minerals mined or produced from the land described in Article 2, as follows: (1) Regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification of discovery or development, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first, unless the Government waives its right to a royalty; or (2) if the Government makes a certification of discovery or development, for a period of ten years from the date of the contract, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first. Said royalty shall be a percentage of the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production (including any bonuses), in whatever form disposed of, including ore, concentrates, or metal, as follows:

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY &
BUREAU OF MINES

DMEA 2817
(MERCURY)



EXPLANATION

35 Fault, showing dip

② Sample locality

Inclined workings (Chevrons point down at 5' vertical intervals)

Sheared arkose

20 0 20 FEET

Mapped by E. H. Pampeyan, D. C. Ross and J. D. Warne

N.E.I/4 Sec. 5
T.37 N., R.40 E.
Scale I" = 2000'

Shaft

N.W.I/4 of S.E. I/4

MAP AND SECTION OF THE K&K QUICKSILVER MINE, HUMBOLDT COUNTY, NEVADA

Datum is approximately sea level

FIGURE 2

MF-200 (A)
(February 1952)

DOCKET NO. DMEA 2817

COMMODITY Mercury

Operator's Copy

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

EXPLORATION PROJECT CONTRACT[1]

(Short Form)

IT IS AGREED this _____ day of _____, 195__, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] Charles Kassabaum
Box 204
Winnemucca, Nevada

hereinafter called the "Operator," as follows: and as set forth in Annex I

ARTICLE 1. *Authority for contract.*—This agreement is entered into under the authority of the Defense Production Act of 1950, as amended, pursuant to DMEA Order 1 entitled "Government Aid in Defense Exploration Projects."

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the Operator represents and undertakes:[4]

(*a*) That the Operator is the owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached:

None

~~(b) That the Operator is the owner, in possession and entitled to possession, and that the property is subject only to the Government's Conservation lien as attached.~~

The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, within _____ days from the date of this contract shall commence work on a project of exploration for[5] Mercury

in or upon the described land; and shall bring the project to completion within a period of 10 months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided. The work shall be performed by the Operator or by independent contractor or contractors efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmen's compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

ARTICLE 4. *Costs of the project.*—The agreed, estimated costs of performing the work, expressed in terms of units of work to be performed (per foot of drifting, per foot of drilling, per cubic yard of material to be moved, etc.) are set forth in Exhibit "A," attached hereto. The Government will pay 75 percent of these agreed, estimated costs, as they accrue, for units of work actually performed that conform with the description or specifications for the work set forth in this contract, in an aggregate total amount not in excess of $11,496.30 which is 75 percent of $15,328.40 the agreed, estimated total cost of the project in which the Government will participate: *Provided,* That until the Operator's final report and final accounting have been rendered to the Government and any final check or auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract. The Government may, as it sees fit, make payments direct to the Operator's independent contractors, if any, for the account of the Operator, rather than to the Operator.

ARTICLE 5. *Reports, accounts, audits.*—(*a*) *Progress reports.* The Operator shall provide the Government with monthly reports of units of work performed under the contract, in quintuplicate (five copies), upon forms provided by the Government. These progress reports shall be certified by the Operator, and shall constitute both the Operator's invoice of units of work performed on the project during the period covered by the report and his voucher for repayment by the Government, unless the Government requires the use of a standard voucher form with invoice attached. Progress reports shall include surface and/or underground engineering-geological maps or sketches showing the progress of the exploration, with assay-reports on samples taken concurrently with the advance in mineralized ground.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property, particularly excluding any land or interest therein to which the Government's lien is not to attach or the production from which is not to be subject to the Government's percentage royalty.
[4] Strike out the provision not applicable.
[5] Name of mineral or minerals.

(*b*) *Final report.*—Upon completion of the exploration work or termination of the contract the Operator shall provide the Government with an adequate geological and engineering report, in quintuplicate (five copies), including an estimate of ore reserves resulting from the exploration work.

(*c*) *Compliance with requirements.*—If, in the opinion of the Government, any of the Operator's reports are insufficient or incomplete, the Government may procure the making or completion of such reports and attachments as an expense of the exploration work; and the Government may withhold approval and payment of any vouchers depending upon insufficient or incomplete reports.

(*d*) *Accounts and audits.*—The Operator shall keep suitable records and accounts of the units of work performed, which the Government may inspect and audit at any time. The Government may at any time require a check of the work performed and an audit of the Operator's records and accounts, by a certified public accountant or otherwise, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract. Upon the completion of the project or termination of the contract the Operator shall render a final account and statement of work performed to accompany his final report.

ARTICLE 6. *Repayment by Operator.*—(*a*) If, at any time, the Government considers that a discovery or a development from which production may be made has resulted from the exploration work, the Government, at any time not later than 6 months after the Operator has rendered the required final report and final account, may so certify in writing to the Operator. The certification shall describe broadly or indicate the nature of the discovery or development. In the event of such certification, any minerals mined or produced from the land described in Article 2 within 10 years from the date of this contract, including any mined or produced before the certification, shall be subject to a percentage royalty which the Operator or his successor in interest shall pay to the Government, upon the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, until the total amount contributed by the Government, without interest, is fully repaid, or said 10 years have elapsed, whichever occurs first, as follows: **See Annex I, substituted for that part of 6(a) preceding the colon.**

(1) One and one-half (1½) percent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(2) One and one-half (1½) percent of any such net amounts, plus one-half (½) percent of such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such net amounts.

(For instance: The percentage royalty on a net amount of five dollars ($5.00) per ton, would be one and one-half (1½) percent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) percent.)

(*b*) As here used, "net smelter returns," "net concentrator returns," and "other net amounts realized from the sale or other disposition," mean gross revenue from sales, or if not sold, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be the gross income from mining operations for percentage depletion purposes in income-tax determination.

(*c*) To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(*d*) This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

ARTICLE 7. *Assignment, transfer, or loss of Operator's interest.*—Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder. The Operator shall not make any voluntary nor permit any involuntary transfer or conveyance of the Operator's rights in the land described in Article 2, without making suitable provision for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof; *Provided,* that mere failure by the Operator to maintain the Operator's rights in the land, without any consideration running to the Operator other than relief from the cost of maintaining such rights (as by surrender of a leasehold, failure to perform assessment work, or failure to exercise an option), coupled with complete abandonment by the Operator of all interest in or operations on the land for a period of 10 years from the date of this contract, shall not constitute such a transfer or conveyance. Should the Operator make or permit any transfer or conveyance in violation of this provision, the Operator shall be and remain liable for payment to the Government of the same amounts, at the same times, as would have been paid under the terms of the percentage royalty on production. If for any reason the net smelter returns, net concentrator returns, or other net amounts realized from the sale or other disposition of such production are not available as a means of measuring the amount of the Operator's liability, the amount thereof shall be estimated as well as may be, and in the event of dispute as to such estimates, the determination thereof by the Administrator of Defense Minerals Exploration Administration or by his successor shall be final and binding upon the Operator.

ARTICLE 8. *Termination and completion.*—The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if, in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worth while discovery and in the opinion of the Government further operations are not justified.

ARTICLE 9. *Changes and added provisions* _____

_____

_____

_____

_____

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

_____

~~(Operator)~~ ~~XXXXXX~~

By _____

Administrator, Defense Minerals Exploration Administration

By _____

Charles Kassabaum - Operator

_____

I, _____, certify that I am the _____ secretary of the corporation named as Operator herein; that _____, who signed this contract on behalf of the Operator, was then _____ 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]

U. S. GOVERNMENT PRINTING OFFICE 16—66329-1

CHARLES KASSABAUM
EXPLORATION PROJECT CONTRACT
DOCKET NO. DMEA-2817

EXHIBIT "A"

Description of the Work

The object of this exploration project is the discovery of commercial mercury ores. The work shall be performed in two stages, the second stage to be undertaken only with prior written approval of the Government, if the results of the first stage indicate that ore may be found at deeper horizons. The work to be done in each stage is shown on the attached map entitled "Map and Section of the K & K Quicksilver Mine, Humboldt County, Nevada - Figure 2."

Stage I shall consist of deepening the existing inclined shaft (in the same easterly direction) 60 feet to a depth of 100 feet. In the shaft, at approximately 30 feet below the collar, drift horizontally northward a distance not in excess of 20 feet, and southward a distance not in excess of 30 feet. From the bottom of the shaft, horizontal drifts also shall be driven northerly and/or southerly for a total distance not in excess of 50 feet.

Stage II shall consist of sinking the said shaft from the 100-foot to the 200-foot level, and then driving horizontal drifts northerly and/or southerly on the 200-foot level not in excess of 100 feet.

In both stages, the shaft and drifts shall follow the mineralized structure, and shall approximate 5 feet by 7 feet in cross section in clear of timber. However, in the shaft, the cross-section area may be increased at station levels to approximate 7 feet by 8 feet in clear of timber. The direction and extent of shafts and drifts shall be subject to Government approval.

The work shall be directed by a Government-approved, full-time mining engineer supervisor, who shall perform the necessary surveying, mapping, sampling, writing reports, and other duties required for the satisfactory operation of this project.

Channel samples, across and normal to the vein structure, shall be taken at 5 foot intervals over parts of the shaft or drifts which show mineralization, also a grab sample shall be taken from each round blasted in the shaft and drifts, when they are in probable ore. A complete record of the number, location, and assay value of each sample taken shall be included in the Operator's monthly report to the Government. Methods of sampling and sample analysis shall be subject to Government approval. Not in excess of 70 assays in Stage I and 80 in Stage II shall be done.

Agreed Unit Costs

Shaft sinking - 160 feet @ $53.24/ft.	$ 8,518.40	
Drifting - 200 feet @ $32.55/ft.	6,510.00	
Assays - 150 @ $2.00/ea.1/	300.00	
Total Agreed Unit Costs		$15,328.40
Government Participation @ 75%		$11,496.30

1/ Includes transportation charges.

CHARLES KASSABAUM
EXPLORATION PROJECT CONTRACT
DOCKET NO. DMEA-2817

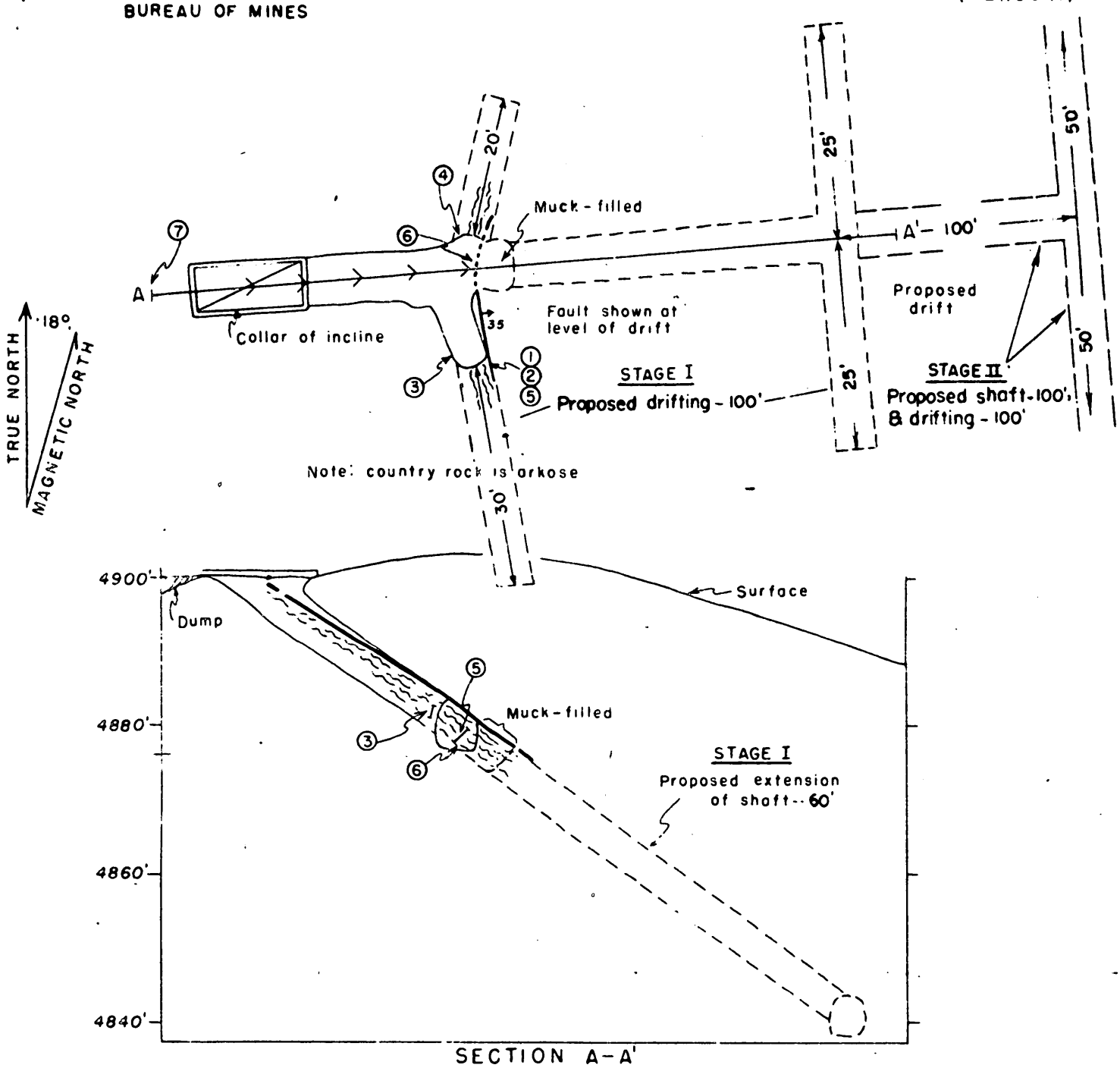
ANNEX I

The following provisions are in lieu of all of paragraph (a) of Article 6 which precedes the colon:

If the Government considers that a discovery or development from which production may be made has resulted from the exploration work, the Government, at any time not later than six months after a sufficient, complete, final report and final account referred to in the contract has been rendered, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development, The Operator, or his successor in interest, shall pay to the Government a royalty on all minerals mined or produced from the land described in Article 2, as follows: (1) Regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification of discovery or development, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first, unless the Government waives its right to a royalty; or (2) if the Government makes a certification of discovery or development, for a period of ten years from the date of the contract, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first. Said royalty shall be a percentage of the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production (including any bonuses), in whatever form disposed of, including ore, concentrates, or metal, as follows:

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY &
BUREAU OF MINES

DMEA 2817
(MERCURY)



EXPLANATION

35
Fault, showing dip

Sample locality

Inclined workings (Chevrons point down at 5' vertical intervals)

Sheared arkose

20 0 20 FEET

Mapped by E. H. Pampeyan, D. C. Ross and J. D. Warne

N.E.I/4 Sec. 5
T.37 N., R.40 E.
Scale I" = 2000'

Shaft

N.W.I/4 of S.E. I/4

MAP AND SECTION OF THE K&K QUICKSILVER MINE, HUMBOLDT COUNTY, NEVADA

Datum is approximately sea level

FIGURE 2

MF-200 (A)
(February 1952)

DOCKET NO. DMEA 2817

COMMODITY Mercury

Field Team's Copy

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

EXPLORATION PROJECT CONTRACT[1]

(Short Form)

IT IS AGREED this ..... day of ....., 195..., between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] Charles Kassabaum
Box 204
Winnemucca, Nevada

hereinafter called the "Operator," as follows: and as set forth in Annex I

ARTICLE 1. *Authority for contract.*—This agreement is entered into under the authority of the Defense Production Act of 1950, as amended, pursuant to DMEA Order 1 entitled "Government Aid in Defense Exploration Projects."

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of Nevada, County of Humboldt, described as follows:[3] the NE¼, and the NW¼ of the SE¼ of Sec. 5, T.37 N., R.40 E., Mount Diablo, California base and meridian; recorded in Humboldt County Courthouse at Winnemucca, Nevada, and shown on map mentioned in Exhibit "A".

the Operator represents and undertakes:[4]

(*a*) That the Operator is the owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached:

None

~~(b) That the Operator is the owner, in possession and entitled to possession, and the property is subject to the claims~~
The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, within ..... days from the date of this contract shall commence work on a project of exploration for[5] Mercury

in or upon the described land; and shall bring the project to completion within a period of 10 months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided. The work shall be performed by the Operator or by independent contractor or contractors efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmen's compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

ARTICLE 4. *Costs of the project.*—The agreed, estimated costs of performing the work, expressed in terms of units of work to be performed (per foot of drifting, per foot of drilling, per cubic yard of material to be moved, etc.) are set forth in Exhibit "A," attached hereto. The Government will pay 75 percent of these agreed, estimated costs, as they accrue, for units of work actually performed that conform with the description or specifications for the work set forth in this contract, in an aggregate total amount not in excess of $11,496.30 which is 75 percent of $15,328.40 the agreed, estimated total cost of the project in which the Government will participate: *Provided,* That until the Operator's final report and final accounting have been rendered to the Government and any final check or auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract. The Government may, as it sees fit, make payments direct to the Operator's independent contractors, if any, for the account of the Operator, rather than to the Operator.

ARTICLE 5. *Reports, accounts, audits.*—(*a*) *Progress reports.* The Operator shall provide the Government with monthly reports of units of work performed under the contract, in quintuplicate (five copies), upon forms provided by the Government. These progress reports shall be certified by the Operator, and shall constitute both the Operator's invoice of units of work performed on the project during the period covered by the report and his voucher for repayment by the Government, unless the Government requires the use of a standard voucher form with invoice attached. Progress reports shall include surface and/or underground engineering-geological maps or sketches showing the progress of the exploration, with assay-reports on samples taken concurrently with the advance in mineralized ground.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property, particularly excluding any land or interest therein to which the Government's lien is not to attach or the production from which is not to be subject to the Government's percentage royalty.
[4] Strike out the provision not applicable.
[5] Name of mineral or minerals.

(*b*) *Final report.*—Upon completion of the exploration work or termination of the contract the Operator shall provide the Government with an adequate geological and engineering report, in quintuplicate (five copies), including an estimate of ore reserves resulting from the exploration work.

(*c*) *Compliance with requirements.*—If, in the opinion of the Government, any of the Operator's reports are insufficient or incomplete, the Government may procure the making or completion of such reports and attachments as an expense of the exploration work; and the Government may withhold approval and payment of any vouchers depending upon insufficient or incomplete reports.

(*d*) *Accounts and audits.*—The Operator shall keep suitable records and accounts of the units of work performed, which the Government may inspect and audit at any time. The Government may at any time require a check of the work performed and an audit of the Operator's records and accounts, by a certified public accountant or otherwise, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract. Upon the completion of the project or termination of the contract the Operator shall render a final account and statement of work performed to accompany his final report.

ARTICLE 6. *Repayment by Operator.*—(*a*) If, at any time, the Government considers that a discovery or a development from which production may be made has resulted from the exploration work, the Government, at any time not later than 6 months after the Operator has rendered the required final report and final account, may so certify in writing to the Operator. The certification shall describe broadly or indicate the nature of the discovery or development. In the event of such certification, any minerals mined or produced from the land described in Article 2 within 10 years from the date of this contract, including any mined or produced before the certification, shall be subject to a percentage royalty which the Operator or his successor in interest shall pay to the Government, upon the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, until the total amount contributed by the Government, without interest, is fully repaid, or said 10 years have elapsed, whichever occurs first, as follows: **See Annex I, substituted for that part of 6(a) preceding the colon.**

(1) One and one-half (1½) percent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(2) One and one-half (1½) percent of any such net amounts, plus one-half (½) percent of such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such net amounts.

(For instance: The percentage royalty on a net amount of five dollars ($5.00) per ton, would be one and one-half (1½) percent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) percent.)

(*b*) As here used, "net smelter returns," "net concentrator returns," and "other net amounts realized from the sale or other disposition," mean gross revenue from sales, or if not sold, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be the gross income from mining operations for percentage depletion purposes in income-tax determination.

(*c*) To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(*d*) This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

ARTICLE 7. *Assignment, transfer, or loss of Operator's interest.*—Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder. The Operator shall not make any voluntary nor permit any involuntary transfer or conveyance of the Operator's rights in the land described in Article 2, without making suitable provision for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof; *Provided,* that mere failure by the Operator to maintain the Operator's rights in the land, without any consideration running to the Operator other than relief from the cost of maintaining such rights (as by surrender of a leasehold, failure to perform assessment work, or failure to exercise an option), coupled with complete abandonment by the Operator of all interest in or operations on the land for a period of 10 years from the date of this contract, shall not constitute such a transfer or conveyance. Should the Operator make or permit any transfer or conveyance in violation of this provision, the Operator shall be and remain liable for payment to the Government of the same amounts, at the same times, as would have been paid under the terms of the percentage royalty on production. If for any reason the net smelter returns, net concentrator returns, or other net amounts realized from the sale or other disposition of such production are not available as a means of measuring the amount of the Operator's liability, the amount thereof shall be estimated as well as may be, and in the event of dispute as to such estimates, the determination thereof by the Administrator of Defense Minerals Exploration Administration or by his successor shall be final and binding upon the Operator.

ARTICLE 8. *Termination and completion.*—The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if, in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worth while discovery and in the opinion of the Government further operations are not justified.

ARTICLE 9. *Changes and added provisions* _____

_____

_____

_____

_____

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

_____

~~(Operator)~~

By _____

Administrator, Defense Minerals Exploration Administration

By _____

Charles Kassabaum - Operator

I, _____, certify that I am the _____ secretary of the corporation named as Operator herein; that _____, who signed this contract on behalf of the Operator, was then _____ 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]

U. S. GOVERNMENT PRINTING OFFICE 16—66329-1

CHARLES KASSABAUM
EXPLORATION PROJECT CONTRACT
DOCKET NO. DMEA-2817

EXHIBIT "A"

Description of the Work

The object of this exploration project is the discovery of commercial mercury ores. The work shall be performed in two stages, the second stage to be undertaken only with prior written approval of the Government, if the results of the first stage indicate that ore may be found at deeper horizons. The work to be done in each stage is shown on the attached map entitled "Map and Section of the K & K Quicksilver Mine, Humboldt County, Nevada - Figure 2."

Stage I shall consist of deepening the existing inclined shaft (in the same easterly direction) 60 feet to a depth of 100 feet. In the shaft, at approximately 30 feet below the collar, drift horizontally northward a distance not in excess of 20 feet, and southward a distance not in excess of 30 feet. From the bottom of the shaft, horizontal drifts also shall be driven northerly and/or southerly for a total distance not in excess of 50 feet.

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In both stages, the shaft and drifts shall follow the mineralized structure, and shall approximate 5 feet by 7 feet in cross section in clear of timber. However, in the shaft, the cross-section area may be increased at station levels to approximate 7 feet by 8 feet in clear of timber. The direction and extent of shafts and drifts shall be subject to Government approval.

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Channel samples, across and normal to the vein structure, shall be taken at 5 foot intervals over parts of the shaft or drifts which show mineralization, also a grab sample shall be taken from each round blasted in the shaft and drifts, when they are in probable ore. A complete record of the number, location, and assay value of each sample taken shall be included in the Operator's monthly report to the Government. Methods of sampling and sample analysis shall be subject to Government approval. Not in excess of 70 assays in Stage I and 80 in Stage II shall be done.

Agreed Unit Costs

Shaft sinking - 160 feet @ $53.24/ft.	$ 8,518.40	
Drifting - 200 feet @ $32.55/ft.	6,510.00	
Assays - 150 @ $2.00/ea.1/	300.00	
Total Agreed Unit Costs		$15,328.40
Government Participation @ 75%		$11,496.30

1/ Includes transportation charges.

CHARLES KASSADAUM
EXPLORATION PROJECT CONTRACT
DOCKET NO. DMEA-2817

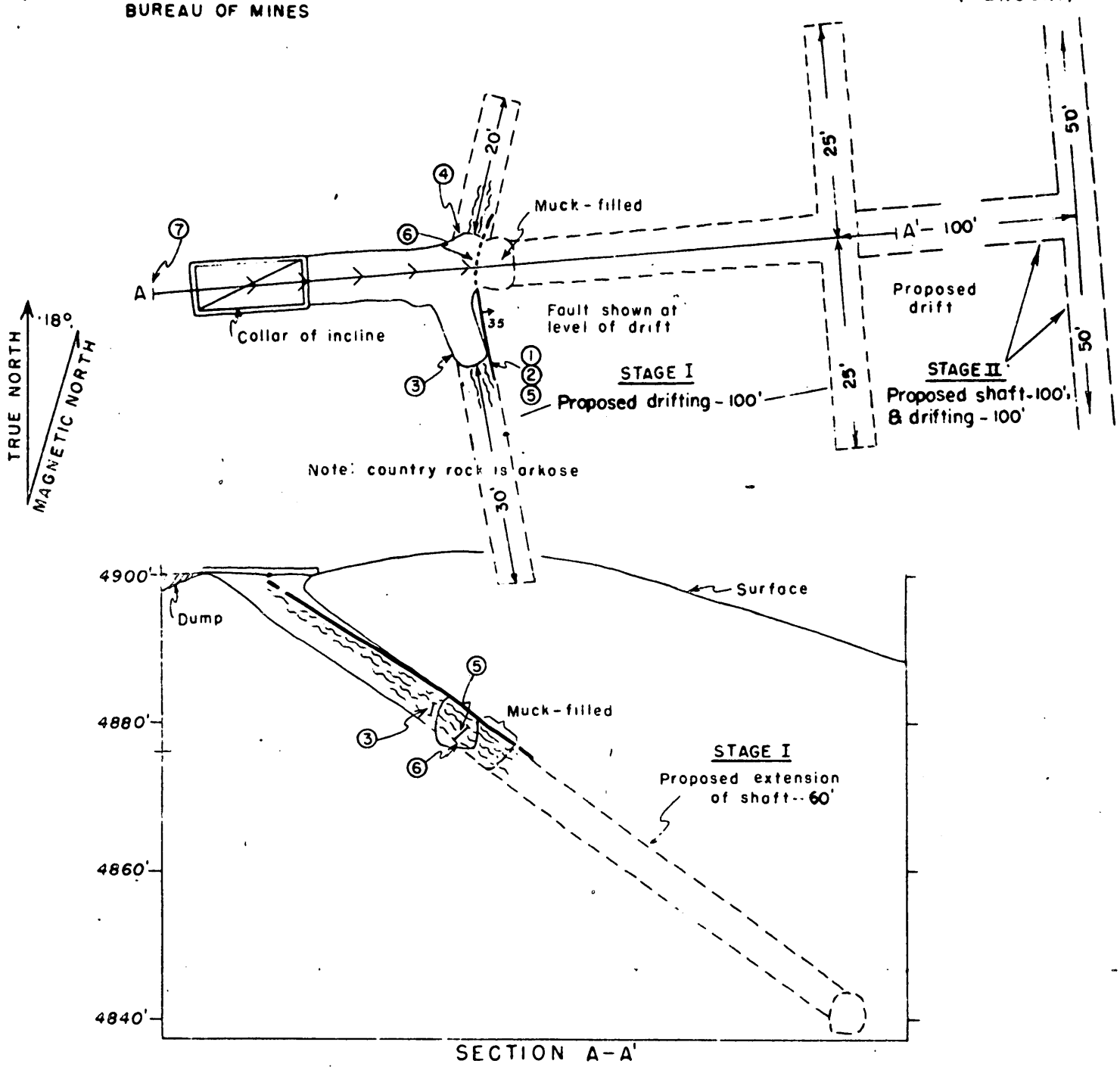
ANNEX I

The following provisions are in lieu of all of paragraph (a) of Article 6 which precedes the colon:

If the Government considers that a discovery or development from which production may be made has resulted from the exploration work, the Government, at any time not later than six months after a sufficient, complete, final report and final account referred to in the contract has been rendered, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development, The Operator, or his successor in interest, shall pay to the Government a royalty on all minerals mined or produced from the land described in Article 2, as follows: (1) Regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification of discovery or development, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first, unless the Government waives its right to a royalty; or (2) if the Government makes a certification of discovery or development, for a period of ten years from the date of the contract, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first. Said royalty shall be a percentage of the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production (including any bonuses), in whatever form disposed of, including ore, concentrates, or metal, as follows:

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY &
BUREAU OF MINES

DMEA 2817
(MERCURY)



EXPLANATION

35
Fault, showing dip

Sample locality

Inclined workings (Chevrons point down at 5' vertical intervals)

Sheared arkose

20 0 20 FEET

Mapped by E. H. Pampeyan, D. C. Ross and J. D. Warne

N.E.I/4 Sec. 5
T.37 N., R.40 E.
Scale I" = 2000'

Shaft

N.W.I/4 of S.E. I/4

MAP AND SECTION OF THE K&K QUICKSILVER MINE, HUMBOLDT COUNTY, NEVADA

Datum is approximately sea level

FIGURE 2

MF-200 (A)
(February 1952)

DOCKET NO. DMEA 2017

COMMODITY Mercury

Division Copy

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

EXPLORATION PROJECT CONTRACT[1]

(Short Form)

IT IS AGREED this _____ day of _____, 195__, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] Charles Kassabian
Box 204
Winnemucca, Nevada

hereinafter called the "Operator," as follows: and as set forth in Annex I

ARTICLE 1. *Authority for contract.*—This agreement is entered into under the authority of the Defense Production Act of 1950, as amended, pursuant to DMEA Order 1 entitled "Government Aid in Defense Exploration Projects."

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of Nevada County of Humboldt described as follows:[3] the NE¼, and the NW¼ of the SE¼ of Sec. 5, T.37 N., R.40 E., Mount Diablo, California base and meridian; recorded in Humboldt County Courthouse at Winnemucca, Nevada, and shown on map mentioned in Exhibit A.

the Operator represents and undertakes:[4]

(*a*) That the Operator is the owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached: _____

None

~~(b) The Operator is the owner, in possession and entitled to possession, and that the property is free and clear of all claims, liens, or encumbrances.~~

The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, within _____ days from the date of this contract shall commence work on a project of exploration for[5] Mercury

in or upon the described land; and shall bring the project to completion within a period of 10 months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided. The work shall be performed by the Operator or by independent contractor or contractors efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmen's compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

ARTICLE 4. *Costs of the project.*—The agreed, estimated costs of performing the work, expressed in terms of units of work to be performed (per foot of drifting, per foot of drilling, per cubic yard of material to be moved, etc.) are set forth in Exhibit "A," attached hereto. The Government will pay 75 percent of these agreed, estimated costs, as they accrue, for units of work actually performed that conform with the description or specifications for the work set forth in this contract, in an aggregate total amount not in excess of $11,496.30, which is 75 percent of $15,328.40, the agreed, estimated total cost of the project in which the Government will participate: *Provided,* That until the Operator's final report and final accounting have been rendered to the Government and any final check or auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract. The Government may, as it sees fit, make payments direct to the Operator's independent contractors, if any, for the account of the Operator, rather than to the Operator.

ARTICLE 5. *Reports, accounts, audits.*—(*a*) *Progress reports.* The Operator shall provide the Government with monthly reports of units of work performed under the contract, in quintuplicate (five copies), upon forms provided by the Government. These progress reports shall be certified by the Operator, and shall constitute both the Operator's invoice of units of work performed on the project during the period covered by the report and his voucher for repayment by the Government, unless the Government requires the use of a standard voucher form with invoice attached. Progress reports shall include surface and/or underground engineering-geological maps or sketches showing the progress of the exploration, with assay-reports on samples taken concurrently with the advance in mineralized ground.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property, particularly excluding any land or interest therein to which the Government's lien is not to attach or the production from which is not to be subject to the Government's percentage royalty.
[4] Strike out the provision not applicable.
[5] Name of mineral or minerals.

(*b*) *Final report.*—Upon completion of the exploration work or termination of the contract the Operator shall provide the Government with an adequate geological and engineering report, in quintuplicate (five copies), including an estimate of ore reserves resulting from the exploration work.

(*c*) *Compliance with requirements.*—If, in the opinion of the Government, any of the Operator's reports are insufficient or incomplete, the Government may procure the making or completion of such reports and attachments as an expense of the exploration work; and the Government may withhold approval and payment of any vouchers depending upon insufficient or incomplete reports.

(*d*) *Accounts and audits.*—The Operator shall keep suitable records and accounts of the units of work performed, which the Government may inspect and audit at any time. The Government may at any time require a check of the work performed and an audit of the Operator's records and accounts, by a certified public accountant or otherwise, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract. Upon the completion of the project or termination of the contract the Operator shall render a final account and statement of work performed to accompany his final report.

ARTICLE 6. *Repayment by Operator.*—(*a*) If, at any time, the Government considers that a discovery or a development from which production may be made has resulted from the exploration work, the Government, at any time not later than 6 months after the Operator has rendered the required final report and final account, may so certify in writing to the Operator. The certification shall describe broadly or indicate the nature of the discovery or development. In the event of such certification, any minerals mined or produced from the land described in Article 2 within 10 years from the date of this contract, including any mined or produced before the certification, shall be subject to a percentage royalty which the Operator or his successor in interest shall pay to the Government, upon the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, until the total amount contributed by the Government, without interest, is fully repaid, or said 10 years have elapsed, whichever occurs first, as follows: **See Annex I, substituted for that part of 6(a) preceding the colon.**

(1) One and one-half (1½) percent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(2) One and one-half (1½) percent of any such net amounts, plus one-half (½) percent of such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such net amounts.

(For instance: The percentage royalty on a net amount of five dollars ($5.00) per ton, would be one and one-half (1½) percent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) percent.)

(*b*) As here used, "net smelter returns," "net concentrator returns," and "other net amounts realized from the sale or other disposition," mean gross revenue from sales, or if not sold, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be the gross income from mining operations for percentage depletion purposes in income-tax determination.

(*c*) To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(*d*) This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

ARTICLE 7. *Assignment, transfer, or loss of Operator's interest.*—Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder. The Operator shall not make any voluntary nor permit any involuntary transfer or conveyance of the Operator's rights in the land described in Article 2, without making suitable provision for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof; *Provided,* that mere failure by the Operator to maintain the Operator's rights in the land, without any consideration running to the Operator other than relief from the cost of maintaining such rights (as by surrender of a leasehold, failure to perform assessment work, or failure to exercise an option), coupled with complete abandonment by the Operator of all interest in or operations on the land for a period of 10 years from the date of this contract, shall not constitute such a transfer or conveyance. Should the Operator make or permit any transfer or conveyance in violation of this provision, the Operator shall be and remain liable for payment to the Government of the same amounts, at the same times, as would have been paid under the terms of the percentage royalty on production. If for any reason the net smelter returns, net concentrator returns, or other net amounts realized from the sale or other disposition of such production are not available as a means of measuring the amount of the Operator's liability, the amount thereof shall be estimated as well as may be, and in the event of dispute as to such estimates, the determination thereof by the Administrator of Defense Minerals Exploration Administration or by his successor shall be final and binding upon the Operator.

ARTICLE 8. *Termination and completion.*—The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if, in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worth while discovery and in the opinion of the Government further operations are not justified.

ARTICLE 9. *Changes and added provisions* _____

_____

_____

_____

_____

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

_____

Witness

By _____

Charles Kassabaum - Operator

By _____

Administrator, Defense Minerals Exploration Administration

_____

I, _____, certify that I am the _____ secretary of the corporation named as Operator herein; that _____, who signed this contract on behalf of the Operator, was then _____ 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]

U. S. GOVERNMENT PRINTING OFFICE 16—66329-1

CHARLES KASSABAUM
EXPLORATION PROJECT CONTRACT
DOCKET NO. DMEA-2817

EXHIBIT "A"

Description of the Work

The object of this exploration project is the discovery of commercial mercury ores. The work shall be performed in two stages, the second stage to be undertaken only with prior written approval of the Government, if the results of the first stage indicate that ore may be found at deeper horizons. The work to be done in each stage is shown on the attached map entitled "Map and Section of the K & K Quicksilver Mine, Humboldt County, Nevada - Figure 2."

Stage I shall consist of deepening the existing inclined shaft (in the same easterly direction) 60 feet to a depth of 100 feet. In the shaft, at approximately 30 feet below the collar, drift horizontally northward a distance not in excess of 20 feet, and southward a distance not in excess of 30 feet. From the bottom of the shaft, horizontal drifts also shall be driven northerly and/or southerly for a total distance not in excess of 50 feet.

Stage II shall consist of sinking the said shaft from the 100-foot to the 200-foot level, and then driving horizontal drifts northerly and/or southerly on the 200-foot level not in excess of 100 feet.

In both stages, the shaft and drifts shall follow the mineralized structure, and shall approximate 5 feet by 7 feet in cross section in clear of timber. However, in the shaft, the cross-section area may be increased at station levels to approximate 7 feet by 8 feet in clear of timber. The direction and extent of shafts and drifts shall be subject to Government approval.

The work shall be directed by a Government-approved, full-time mining engineer supervisor, who shall perform the necessary surveying, mapping, sampling, writing reports, and other duties required for the satisfactory operation of this project.

Channel samples, across and normal to the vein structure, shall be taken at 5 foot intervals over parts of the shaft or drifts which show mineralization, also a grab sample shall be taken from each round blasted in the shaft and drifts, when they are in probable ore. A complete record of the number, location, and assay value of each sample taken shall be included in the Operator's monthly report to the Government. Methods of sampling and sample analysis shall be subject to Government approval. Not in excess of 70 assays in Stage I and 80 in Stage II shall be done.

Agreed Unit Costs

Shaft sinking - 160 feet @ $53.24/ft.	$ 8,518.40	
Drifting - 200 feet @ $32.55/ft.	6,510.00	
Assays - 150 @ $2.00/ea.1/	300.00	
Total Agreed Unit Costs		$15,328.40
Government Participation @ 75%		$11,496.30

1/ Includes transportation charges.

CARTO RESTORATION
EXPLORATION PROJECT OFFICE
TUCSON, ARIZ.

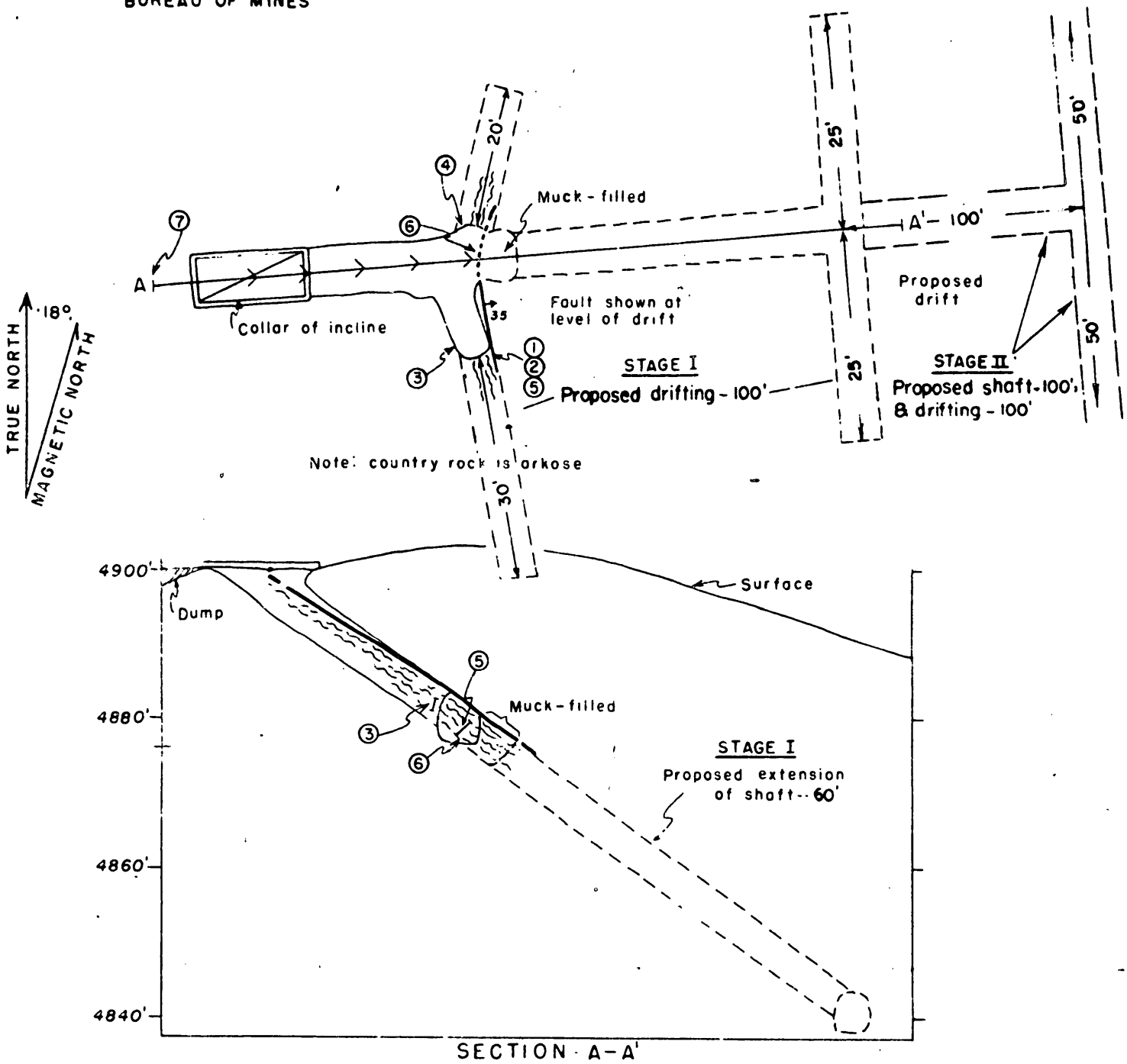
ANNEX I

The following provisions are in lieu of all of paragraph (a) of Article 6 which precedes the colon:

If the Government considers that a discovery or development from which production may be made has resulted from the exploration work, the Government, at any time not later than six months after a sufficient, complete, final report and final account referred to in the contract has been rendered, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development. The Operator, or his successor in interest, shall pay to the Government a royalty on all minerals mined or produced from the land described in Article 2, as follows: (1) Regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification of discovery or development, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first, unless the Government waives its right to a royalty; or (2) if the Government makes a certification of discovery or development, for a period of ten years from the date of the contract, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first. Said royalty shall be a percentage of the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production (including any bonuses), in whatever form disposed of, including ore, concentrates, or metal, as follows:

UNITED STATES DEPARTMENT OF INTERIOR
GEOLOGICAL SURVEY &
BUREAU OF MINES

DMEA 2817
(MERCURY)



EXPLANATION

35 Fault, showing dip

② Sample locality

Inclined workings (Chevrons point down at 5' vertical intervals)

Sheared arkose

20 0 20 FEET

Mapped by E. H. Pampeyan, D. C. Ross and J. D. Warne

N.E.I/4 Sec. 5
T.37 N., R.40 E.
Scale I" = 2000'

Shaft

N.W.I/4 of S.E. I/4

MAP AND SECTION OF THE K&K QUICKSILVER MINE, HUMBOLDT COUNTY, NEVADA

Datum is approximately sea level

FIGURE 2

MF-200 (A)
(February 1952)

DOCKET NO. DMEA 2317

COMMODITY Mercury

Docket Copy

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

EXPLORATION PROJECT CONTRACT[1]

(Short Form)

IT IS AGREED this ..... day of ....., 195..., between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] Charles Kassabaum
Box 204
Winnemucca, Nevada

hereinafter called the "Operator," as follows: and as set forth in Annex I

ARTICLE 1. *Authority for contract.*—This agreement is entered into under the authority of the Defense Production Act of 1950, as amended, pursuant to DMEA Order 1 entitled "Government Aid in Defense Exploration Projects."

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of Nevada, County of Humboldt, described as follows:[3] the NE¼ and the NW¼ of the SE¼ of Sec. 5, T.37 N., R.40 E., Mount Diablo, California base and meridian; recorded in Humboldt County Courthouse at Winnemucca, Nevada, and shown on map mentioned in Exhibit "A".

the Operator represents and undertakes:[4]

(*a*) That the Operator is the owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached:

None

~~(b) That the Operator is entitled to possession under the Owner's Government lease attached~~

The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, within ..... days from the date of this contract shall commence work on a project of exploration for[5] Mercury

in or upon the described land; and shall bring the project to completion within a period of 10 months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided. The work shall be performed by the Operator or by independent contractor or contractors efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmen's compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

ARTICLE 4. *Costs of the project.*—The agreed, estimated costs of performing the work, expressed in terms of units of work to be performed (per foot of drifting, per foot of drilling, per cubic yard of material to be moved, etc.) are set forth in Exhibit "A," attached hereto. The Government will pay 75 percent of these agreed, estimated costs, as they accrue, for units of work actually performed that conform with the description or specifications for the work set forth in this contract, in an aggregate total amount not in excess of $11,496.30 which is 75 percent of $15,328.40 the agreed, estimated total cost of the project in which the Government will participate: *Provided,* That until the Operator's final report and final accounting have been rendered to the Government and any final check or auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract. The Government may, as it sees fit, make payments direct to the Operator's independent contractors, if any, for the account of the Operator, rather than to the Operator.

ARTICLE 5. *Reports, accounts, audits.*—(*a*) *Progress reports.* The Operator shall provide the Government with monthly reports of units of work performed under the contract, in quintuplicate (five copies), upon forms provided by the Government. These progress reports shall be certified by the Operator, and shall constitute both the Operator's invoice of units of work performed on the project during the period covered by the report and his voucher for repayment by the Government, unless the Government requires the use of a standard voucher form with invoice attached. Progress reports shall include surface and/or underground engineering-geological maps or sketches showing the progress of the exploration, with assay-reports on samples taken concurrently with the advance in mineralized ground.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property, particularly excluding any land or interest therein to which the Government's lien is not to attach or the production from which is not to be subject to the Government's percentage royalty.
[4] Strike out the provision not applicable.
[5] Name of mineral or minerals.

(*b*) *Final report.*—Upon completion of the exploration work or termination of the contract the Operator shall provide the Government with an adequate geological and engineering report, in quintuplicate (five copies), including an estimate of ore reserves resulting from the exploration work.

(*c*) *Compliance with requirements.*—If, in the opinion of the Government, any of the Operator's reports are insufficient or incomplete, the Government may procure the making or completion of such reports and attachments as an expense of the exploration work; and the Government may withhold approval and payment of any vouchers depending upon insufficient or incomplete reports.

(*d*) *Accounts and audits.*—The Operator shall keep suitable records and accounts of the units of work performed, which the Government may inspect and audit at any time. The Government may at any time require a check of the work performed and an audit of the Operator's records and accounts, by a certified public accountant or otherwise, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract. Upon the completion of the project or termination of the contract the Operator shall render a final account and statement of work performed to accompany his final report.

ARTICLE 6. *Repayment by Operator.*—(*a*) If, at any time, the Government considers that a discovery or a development from which production may be made has resulted from the exploration work, the Government, at any time not later than 6 months after the Operator has rendered the required final report and final account, may so certify in writing to the Operator. The certification shall describe broadly or indicate the nature of the discovery or development. In the event of such certification, any minerals mined or produced from the land described in Article 2 within 10 years from the date of this contract, including any mined or produced before the certification, shall be subject to a percentage royalty which the Operator or his successor in interest shall pay to the Government, upon the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, until the total amount contributed by the Government, without interest, is fully repaid, or said 10 years have elapsed, whichever occurs first, as follows: **See Annex I, substituted for that part of 6(a) preceding the colon.**

(1) One and one-half (1½) percent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(2) One and one-half (1½) percent of any such net amounts, plus one-half (½) percent of such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such net amounts.

(For instance: The percentage royalty on a net amount of five dollars ($5.00) per ton, would be one and one-half (1½) percent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) percent.)

(*b*) As here used, "net smelter returns," "net concentrator returns," and "other net amounts realized from the sale or other disposition," mean gross revenue from sales, or if not sold, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be the gross income from mining operations for percentage depletion purposes in income-tax determination.

(*c*) To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(*d*) This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

ARTICLE 7. *Assignment, transfer, or loss of Operator's interest.*—Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder. The Operator shall not make any voluntary nor permit any involuntary transfer or conveyance of the Operator's rights in the land described in Article 2, without making suitable provision for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof; *Provided,* that mere failure by the Operator to maintain the Operator's rights in the land, without any consideration running to the Operator other than relief from the cost of maintaining such rights (as by surrender of a leasehold, failure to perform assessment work, or failure to exercise an option), coupled with complete abandonment by the Operator of all interest in or operations on the land for a period of 10 years from the date of this contract, shall not constitute such a transfer or conveyance. Should the Operator make or permit any transfer or conveyance in violation of this provision, the Operator shall be and remain liable for payment to the Government of the same amounts, at the same times, as would have been paid under the terms of the percentage royalty on production. If for any reason the net smelter returns, net concentrator returns, or other net amounts realized from the sale or other disposition of such production are not available as a means of measuring the amount of the Operator's liability, the amount thereof shall be estimated as well as may be, and in the event of dispute as to such estimates, the determination thereof by the Administrator of Defense Minerals Exploration Administration or by his successor shall be final and binding upon the Operator.

ARTICLE 8. *Termination and completion.*—The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if, in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worth while discovery and in the opinion of the Government further operations are not justified.

ARTICLE 9. *Changes and added provisions* _____

_____

_____

_____

_____

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

_____
(Operator)
~~xxxxxx~~

By _____
Charles Kassabaum - Operator

By _____
Approved Rutin Chamber
Administrator, Defense Minerals Exploration Administration

I, _____, certify that I am the _____ secretary of the corporation named as Operator herein; that _____, who signed this contract on behalf of the Operator, was then _____ 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]

U. S. GOVERNMENT PRINTING OFFICE 16—66329-1

CHARLES KASSABAUM
EXPLORATION PROJECT CONTRACT
DOCKET NO. DMEA-2817

EXHIBIT "A"

Description of the Work

The object of this exploration project is the discovery of commercial mercury ores. The work shall be performed in two stages, the second stage to be undertaken only with prior written approval of the Government, if the results of the first stage indicate that ore may be found at deeper horizons. The work to be done in each stage is shown on the attached map entitled "Map and Section of the K & K Quicksilver Mine, Humboldt County, Nevada - Figure 2."

Stage I shall consist of deepening the existing inclined shaft (in the same easterly direction) 60 feet to a depth of 100 feet. In the shaft, at approximately 30 feet below the collar, drift horizontally northward a distance not in excess of 20 feet, and southward a distance not in excess of 30 feet. From the bottom of the shaft, horizontal drifts also shall be driven northerly and/or southerly for a total distance not in excess of 50 feet.

Stage II shall consist of sinking the said shaft from the 100-foot to the 200-foot level, and then driving horizontal drifts northerly and/or southerly on the 200-foot level not in excess of 100 feet.

In both stages, the shaft and drifts shall follow the mineralized structure, and shall approximate 5 feet by 7 feet in cross section in clear of timber. However, in the shaft, the cross-section area may be increased at station levels to approximate 7 feet by 8 feet in clear of timber. The direction and extent of shafts and drifts shall be subject to Government approval.

The work shall be directed by a Government-approved, full-time mining engineer supervisor, who shall perform the necessary surveying, mapping, sampling, writing reports, and other duties required for the satisfactory operation of this project.

Channel samples, across and normal to the vein structure, shall be taken at 5 foot intervals over parts of the shaft or drifts which show mineralization, also a grab sample shall be taken from each round blasted in the shaft and drifts, when they are in probable ore. A complete record of the number, location, and assay value of each sample taken shall be included in the Operator's monthly report to the Government. Methods of sampling and sample analysis shall be subject to Government approval. Not in excess of 70 assays in Stage I and 80 in Stage II shall be done.

Agreed Unit Costs

Shaft sinking - 160 feet @ $53.24/ft.	$ 8,518.40	
Drifting - 200 feet @ $32.55/ft.	6,510.00	
Assays - 150 @ $2.00/ea.1/	300.00	
Total Agreed Unit Costs		$15,328.40
Government Participation @ 75%		$11,496.30

1/ Includes transportation charges.

CHAPIAS KASSALAM
EXPLORATION PROJECT CONTRACT
DOCKET NO. DMEA-231

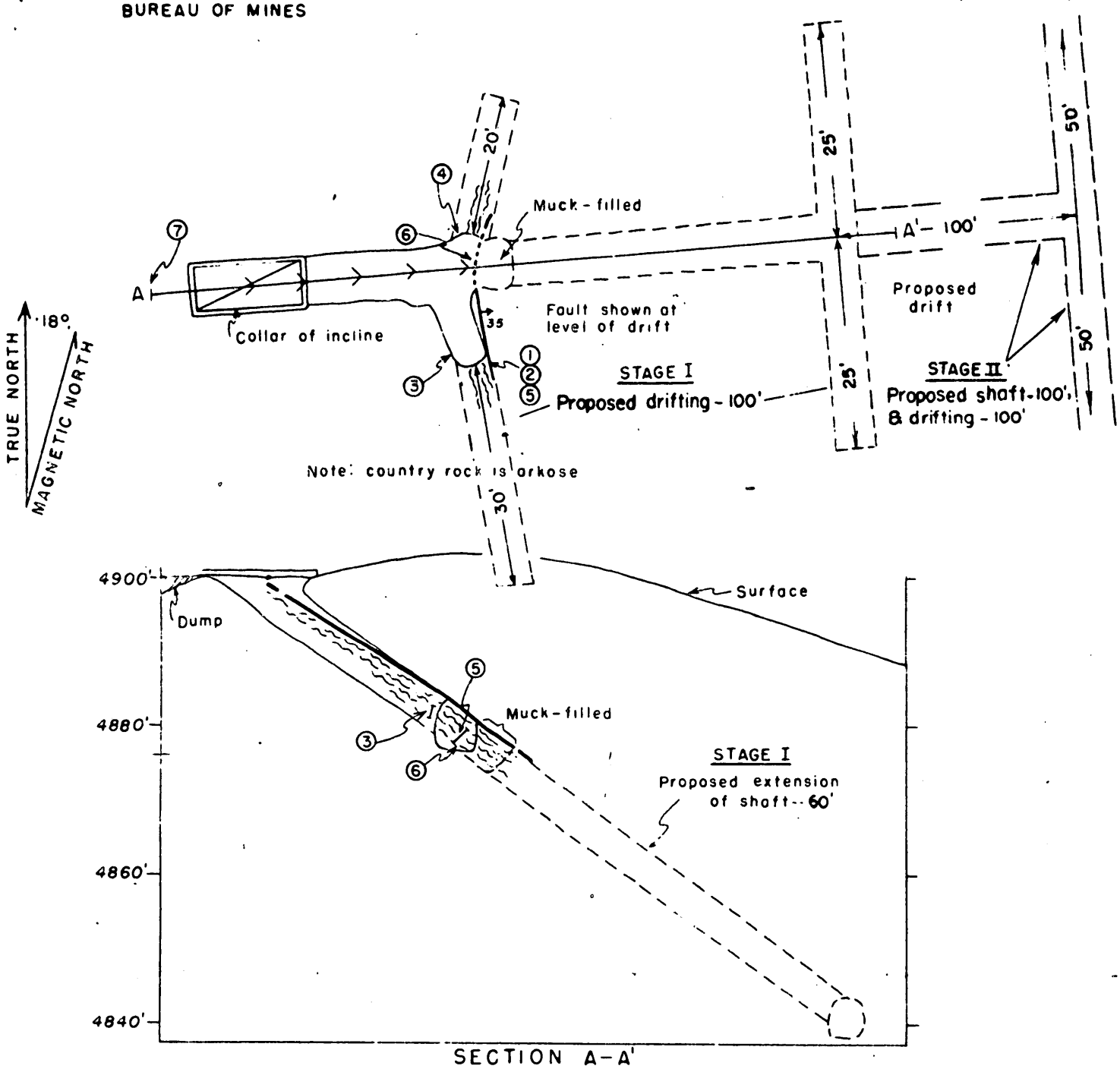
ANNEX I

The following provisions are in lieu of all of paragraph (a) of Article 6 which precedes the colon:

If the Government considers that a discovery or development from which production may be made has resulted from the exploration work, the Government, at any time not later than six months after a sufficient, complete, final report and final account referred to in the contract has been rendered, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development, The Operator, or his successor in interest, shall pay to the Government a royalty on all minerals mined or produced from the land described in Article 2, as follows: (1) Regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification of discovery or development, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first, unless the Government waives its right to a royalty; or (2) if the Government makes a certification of discovery or development, for a period of ten years from the date of the contract, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first. Said royalty shall be a percentage of the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production (including any bonuses), in whatever form disposed of, including ore, concentrates, or metal, as follows:

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY &
BUREAU OF MINES

DMEA 2817
(MERCURY)



SECTION A-A'

EXPLANATION

Fault, showing dip

Sample locality

Inclined workings (Chevrons point down at 5' vertical intervals)

Sheared arkose

20 0 20 FEET

Mapped by E. H. Pampeyan, D. C. Ross and J. D. Warne

N.E.I/4 Sec. 5
T.37 N., R.40 E.
Scale 1" = 2000'

Shaft

N.W.I/4 of S.E. I/4

MAP AND SECTION OF THE K&K QUICKSILVER MINE, HUMBOLDT COUNTY, NEVADA

Datum is approximately sea level

FIGURE 2

MF-200 (A)
(February 1952)

DOCKET NO. DMEA 2817

COMMODITY Mercury

Finance Office's Copy

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

EXPLORATION PROJECT CONTRACT[1]

(Short Form)

IT IS AGREED this _____ day of _____, 195__, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] Charles Kassabaum
Box 204
Winnemucca, Nevada

hereinafter called the "Operator," as follows: and as set forth in Annex I

ARTICLE 1. *Authority for contract.*—This agreement is entered into under the authority of the Defense Production Act of 1950, as amended, pursuant to DMEA Order 1 entitled "Government Aid in Defense Exploration Projects."

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of Nevada, County of Humboldt, described as follows:[3] the NE¼, and the NW¼ of the SE¼ of Sec. 5, T.37 N., R.40 E., Mount Diablo, California base and meridian; recorded in Humbolt County Courthouse at Winnemucca, Nevada, and shown on map mentioned in Exhibit "A".

the Operator represents and undertakes:[4]

(*a*) That the Operator is the owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached:

None

~~(b) That the Government is entitled to possession of the property, the Operator's Operator's [illegible]~~
The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, within _____ days from the date of this contract shall commence work on a project of exploration for[5] Mercury

in or upon the described land; and shall bring the project to completion within a period of 10 months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided. The work shall be performed by the Operator or by independent contractor or contractors efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmen's compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

ARTICLE 4. *Costs of the project.*—The agreed, estimated costs of performing the work, expressed in terms of units of work to be performed (per foot of drifting, per foot of drilling, per cubic yard of material to be moved, etc.) are set forth in Exhibit "A," attached hereto. The Government will pay 75 percent of these agreed, estimated costs, as they accrue, for units of work actually performed that conform with the description or specifications for the work set forth in this contract, in an aggregate total amount not in excess of $11,496.30 which is 75 percent of $15,328.40 the agreed, estimated total cost of the project in which the Government will participate: *Provided,* That until the Operator's final report and final accounting have been rendered to the Government and any final check or auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract. The Government may, as it sees fit, make payments direct to the Operator's independent contractors, if any, for the account of the Operator, rather than to the Operator.

ARTICLE 5. *Reports, accounts, audits.*—(*a*) *Progress reports.* The Operator shall provide the Government with monthly reports of units of work performed under the contract, in quintuplicate (five copies), upon forms provided by the Government. These progress reports shall be certified by the Operator, and shall constitute both the Operator's invoice of units of work performed on the project during the period covered by the report and his voucher for repayment by the Government, unless the Government requires the use of a standard voucher form with invoice attached. Progress reports shall include surface and/or underground engineering-geological maps or sketches showing the progress of the exploration, with assay-reports on samples taken concurrently with the advance in mineralized ground.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property, particularly excluding any land or interest therein to which the Government's lien is not to attach or the production from which is not to be subject to the Government's percentage royalty.
[4] Strike out the provision not applicable.
[5] Name of mineral or minerals.

(*b*) *Final report.*—Upon completion of the exploration work or termination of the contract the Operator shall provide the Government with an adequate geological and engineering report, in quintuplicate (five copies), including an estimate of ore reserves resulting from the exploration work.

(*c*) *Compliance with requirements.*—If, in the opinion of the Government, any of the Operator's reports are insufficient or incomplete, the Government may procure the making or completion of such reports and attachments as an expense of the exploration work; and the Government may withhold approval and payment of any vouchers depending upon insufficient or incomplete reports.

(*d*) *Accounts and audits.*—The Operator shall keep suitable records and accounts of the units of work performed, which the Government may inspect and audit at any time. The Government may at any time require a check of the work performed and an audit of the Operator's records and accounts, by a certified public accountant or otherwise, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract. Upon the completion of the project or termination of the contract the Operator shall render a final account and statement of work performed to accompany his final report.

ARTICLE 6. *Repayment by Operator.*—(*a*) If, at any time, the Government considers that a discovery or a development from which production may be made has resulted from the exploration work, the Government, at any time not later than 6 months after the Operator has rendered the required final report and final account, may so certify in writing to the Operator. The certification shall describe broadly or indicate the nature of the discovery or development. In the event of such certification, any minerals mined or produced from the land described in Article 2 within 10 years from the date of this contract, including any mined or produced before the certification, shall be subject to a percentage royalty which the Operator or his successor in interest shall pay to the Government, upon the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, until the total amount contributed by the Government, without interest, is fully repaid, or said 10 years have elapsed, whichever occurs first, as follows: **See Annex I, substituted for that part of 6(a) preceding the colon.**

(1) One and one-half (1½) percent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(2) One and one-half (1½) percent of any such net amounts, plus one-half (½) percent of such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such net amounts.

(For instance: The percentage royalty on a net amount of five dollars ($5.00) per ton, would be one and one-half (1½) percent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) percent.)

(*b*) As here used, "net smelter returns," "net concentrator returns," and "other net amounts realized from the sale or other disposition," mean gross revenue from sales, or if not sold, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be the gross income from mining operations for percentage depletion purposes in income-tax determination.

(*c*) To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(*d*) This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

ARTICLE 7. *Assignment, transfer, or loss of Operator's interest.*—Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder. The Operator shall not make any voluntary nor permit any involuntary transfer or conveyance of the Operator's rights in the land described in Article 2, without making suitable provision for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof; *Provided*, that mere failure by the Operator to maintain the Operator's rights in the land, without any consideration running to the Operator other than relief from the cost of maintaining such rights (as by surrender of a leasehold, failure to perform assessment work, or failure to exercise an option), coupled with complete abandonment by the Operator of all interest in or operations on the land for a period of 10 years from the date of this contract, shall not constitute such a transfer or conveyance. Should the Operator make or permit any transfer or conveyance in violation of this provision, the Operator shall be and remain liable for payment to the Government of the same amounts, at the same times, as would have been paid under the terms of the percentage royalty on production. If for any reason the net smelter returns, net concentrator returns, or other net amounts realized from the sale or other disposition of such production are not available as a means of measuring the amount of the Operator's liability, the amount thereof shall be estimated as well as may be, and in the event of dispute as to such estimates, the determination thereof by the Administrator of Defense Minerals Exploration Administration or by his successor shall be final and binding upon the Operator.

ARTICLE 8. *Termination and completion.*—The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if, in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worth while discovery and in the opinion of the Government further operations are not justified.

ARTICLE 9. *Changes and added provisions* _____

_____

_____

_____

_____

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

_____

(Operator)
xxxxxx

By _____
Administrator, Defense Minerals Exploration Administration

By _____
Charles Kassabaum - Operator

_____

I, _____, certify that I am the _____ secretary of the corporation named as Operator herein; that _____, who signed this contract on behalf of the Operator, was then _____ 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]

U. S. GOVERNMENT PRINTING OFFICE 16—66329-1

CHARLES KASSABAUM
EXPLORATION PROJECT CONTRACT
DOCKET NO. DMEA-2817

EXHIBIT "A"

Description of the Work

The object of this exploration project is the discovery of commercial mercury ores. The work shall be performed in two stages, the second stage to be undertaken only with prior written approval of the Government, if the results of the first stage indicate that ore may be found at deeper horizons. The work to be done in each stage is shown on the attached map entitled "Map and Section of the K & K Quicksilver Mine, Humboldt County, Nevada - Figure 2."

Stage I shall consist of deepening the existing inclined shaft (in the same easterly direction) 60 feet to a depth of 100 feet. In the shaft, at approximately 30 feet below the collar, drift horizontally northward a distance not in excess of 20 feet, and southward a distance not in excess of 30 feet. From the bottom of the shaft, horizontal drifts also shall be driven northerly and/or southerly for a total distance not in excess of 50 feet.

Stage II shall consist of sinking the said shaft from the 100-foot to the 200-foot level, and then driving horizontal drifts northerly and/or southerly on the 200-foot level not in excess of 100 feet.

In both stages, the shaft and drifts shall follow the mineralized structure, and shall approximate 5 feet by 7 feet in cross section in clear of timber. However, in the shaft, the cross-section area may be increased at station levels to approximate 7 feet by 8 feet in clear of timber. The direction and extent of shafts and drifts shall be subject to Government approval.

The work shall be directed by a Government-approved, full-time mining engineer supervisor, who shall perform the necessary surveying, mapping, sampling, writing reports, and other duties required for the satisfactory operation of this project.

Channel samples, across and normal to the vein structure, shall be taken at 5 foot intervals over parts of the shaft or drifts which show mineralization, also a grab sample shall be taken from each round blasted in the shaft and drifts, when they are in probable ore. A complete record of the number, location, and assay value of each sample taken shall be included in the Operator's monthly report to the Government. Methods of sampling and sample analysis shall be subject to Government approval. Not in excess of 70 assays in Stage I and 80 in Stage II shall be done.

Agreed Unit Costs

Shaft sinking - 160 feet @ $53.24/ft.	$ 8,518.40	
Drifting - 200 feet @ $32.55/ft.	6,510.00	
Assays - 150 @ $2.00/ea.1/	300.00	
Total Agreed Unit Costs		$15,328.40
Government Participation @ 75%		$11,496.30

1/ Includes transportation charges.

CHARLES KASSADAUM
EXPLORATION PROJECT CONTRACT
DOCKET NO. DMEA-2817

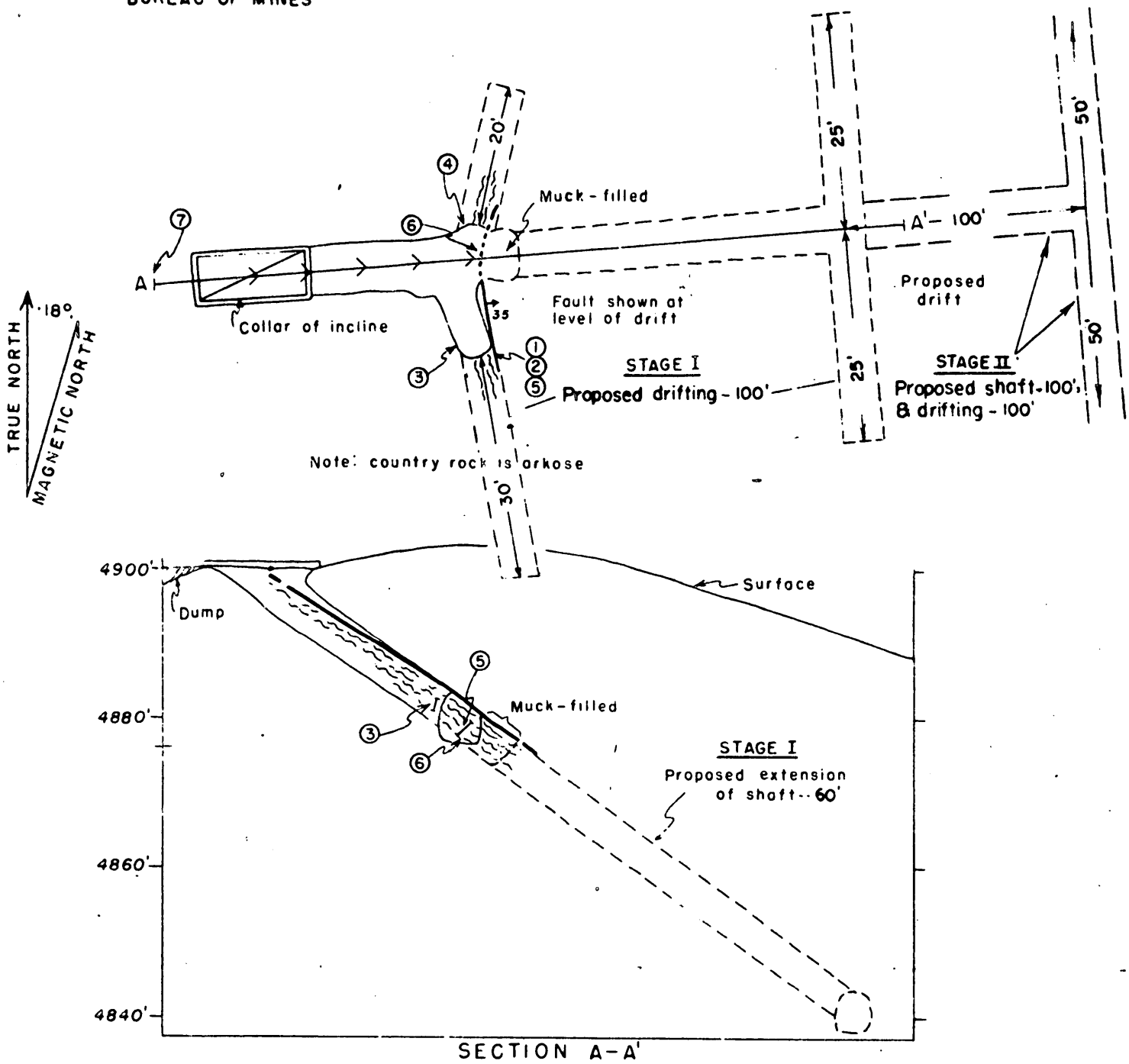
ANNEX I

The following provisions are in lieu of all of paragraph (a) of Article 6 which precedes the colon:

If the Government considers that a discovery or development from which production may be made has resulted from the exploration work, the Government, at any time not later than six months after a sufficient, complete, final report and final account referred to in the contract has been rendered, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development, The Operator, or his successor in interest, shall pay to the Government a royalty on all minerals mined or produced from the land described in Article 2, as follows: (1) Regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification of discovery or development, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first, unless the Government waives its right to a royalty; or (2) if the Government makes a certification of discovery or development, for a period of ten years from the date of the contract, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first. Said royalty shall be a percentage of the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production (including any bonuses), in whatever form disposed of, including ore, concentrates, or metal, as follows:

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY &
BUREAU OF MINES

DMEA 2817
(MERCURY)



SECTION A-A'

EXPLANATION

Fault, showing dip

Sample locality

Inclined workings (Chevrons point down at 5' vertical intervals)

Sheared arkose

20 0 20 FEET

Mapped by E. H. Pampeyan, D. C. Ross and J. D. Warne

N.E.I/4 Sec. 5
T.37 N., R.40 E.
Scale 1" = 2000'

Shaft

N.W.I/4 of S.E. I/4

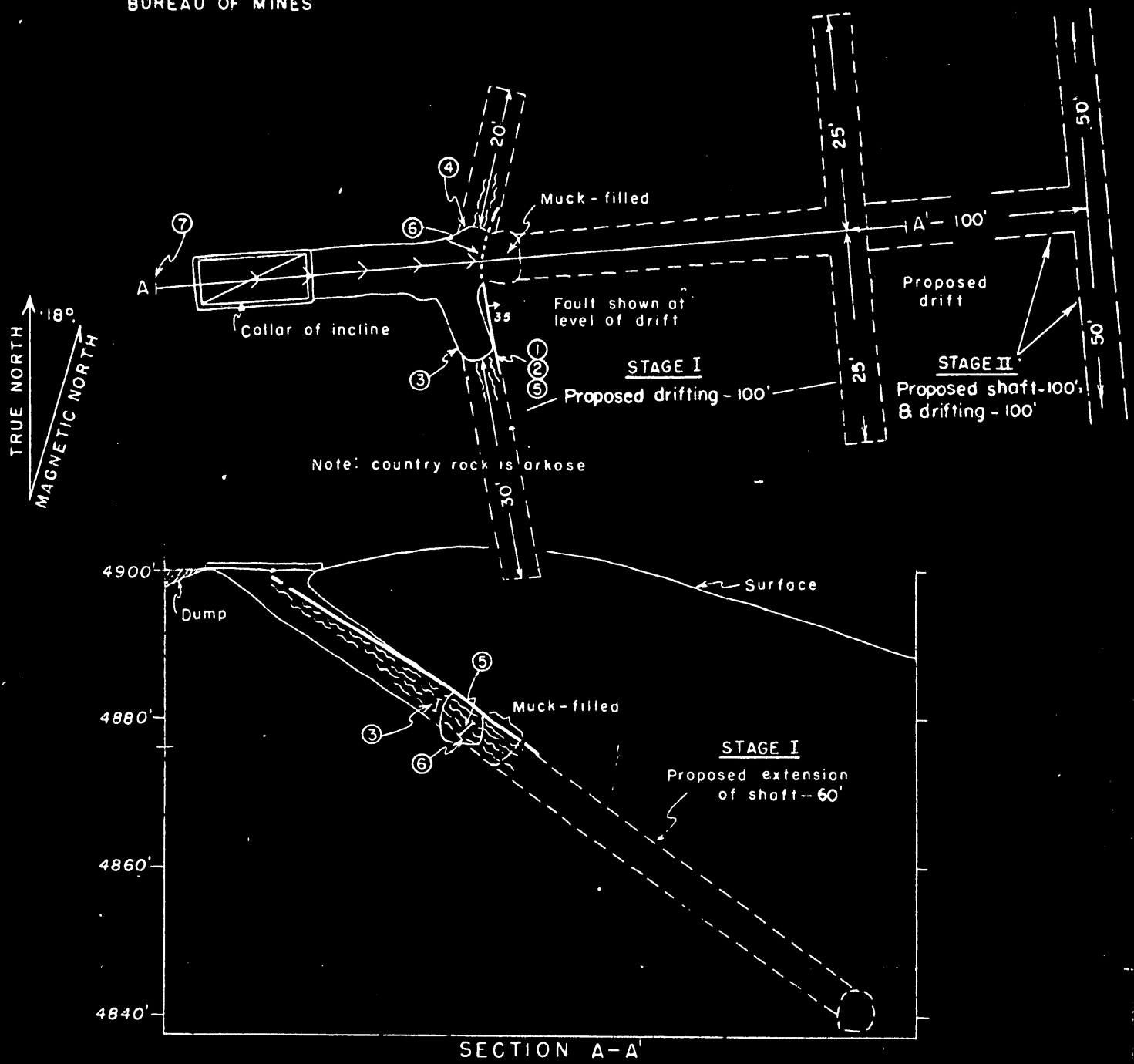
MAP AND SECTION OF THE K&K QUICKSILVER MINE, HUMBOLDT COUNTY, NEVADA

Datum is approximately sea level

FIGURE 2

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
BUREAU OF MINES

DMEA 2817
(MERCURY)



SECTION A-A'

EXPLANATION

Fault, showing dip

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Inclined workings (Chevrons point down at 5' vertical intervals)

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Mapped by E. H. Pampeyan, D. C. Ross and J. D. Warne

N.E.I/4 Sec. 5
T.37 N., R.40 E.
Scale 1" = 2000'

Shaft

N.W.I/4 of S.E. I/4

MAP AND SECTION OF THE K&K QUICKSILVER MINE, HUMBOLDT COUNTY, NEVADA

Datum is approximately sea level

FIGURE 2

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

SEPTEMBER 10, 1953

SUMMARY OF PROPOSED PROJECT

Docket No. DMEA-2817
Applicant: Charles Kassabaum

Subject: Denial of application
Commodity: Mercury

Location of property: Humboldt County, Nevada Region III
Amount of application: $18,087.25

Date of application: December 16, 1952
Outline of project:

STAGE I	a)shaft sinking 60 feet	$ 3,194.40	
	b)Drifting 100 feet	$ 3,255.00	
	c)70 samples @ $2.00	$ 140.00	
			$ 6,589.40
STAGE II	a)shaft sinking 100 feet	$ 5,324.00	
	b)Drifting 100 feet	$ 3,255.00	
	c)80 samples @ $2.00	$ 160.00	
			$ 8,739.00
	T O T A L		$15,328.40

Field Team Report: dated July 13, 1953
by John D. Warne - Bureau of Mines and Earl H. Pampeyan, Geological Survey.

Recommendations: USBM engineer and Executive Officer F.T. agree to a limited amount of exploration at the start. USGS geologist concluded the geological setting indicated little possibility of substantial amount of ore, estimates production at not more than 150 flasks of mercury and therefore recommended denial.

Commodity Members Comments:

Bureau of Mines: Helena M. Meyer, August 26, 1953, approves STAGE I outlined above.

Geological Survey: E. L. Newcomb, August 20, 1953, recommends denial for same reason as field geologist.

Rare & Misc. Metals Division Engineer: F. M. Murphy

Approved - Stage I with Stage II work to be done

only on written approval of Government based on results obtained in Stage I. This approval was based on the field and commodity recommendations by Bureau of Mines members and that of Executive Officer. Also University of Nevada Bull 41 "Quicksilver Deposits in Nevada" by E. H. Bailey and D. A. Phoenix, Vol. 38, No. 5, December 1944, which states: "14 mines in areas where country rock is composed of interbedded sediments have had an average production of 1209 flasks of mercury". The bulletin also states that this type of structure has proven to be the best producer in the state.

A contract was drafted, however, the application was denied by the Operating Committee as the result of the denial by the Geological Survey members.

Ernest Wm. Ellis

Ernest Wm. Ellis, Chief
Rare & Misc. Metals Division

8/26/53 gla

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

August 26, 1953

Memorandum

To: E. W. Ellis

From: Helena M. Meyer

Subject: DMEA Docket - 2817, K & K Quicksilver mine, Humboldt County, Nev., Exploration loan, Mercury

I have read the field team report, indicating that there is believed to be no more than a remote chance of developing a reserve that would yield more than 150 flasks of mercury. I would be willing to go along with Miller and Bailey that the loan should be denied, but would likewise not be averse to approving a loan of $6,500, to extend the shaft a distance of 60 feet on the incline and drift not more than 50 feet on the 30-foot and 100-foot levels.

Helena M. Meyer

Helena M. Meyer

Copy to: Minerals Division
Base Metals Branch
H. M. Meyer
Files
Mr. A. R. Kinkle, Jr. Rm. 4234 GSA

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

August 26, 1953

Memorandum

To: E. W. Ellis

From: Helena M. Mayer

Subject: DMEA Docket - 2817, K & K Quicksilver mine, Humboldt County, Nev., Exploration loan, Mercury

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Signed

Helena M. Mayer

HMMEYER/jb

Copy to: Minerals Division
Base Metals Branch
H. M. Mayer
Files
Mr. A. R. Kinkle, Jr. Rm. 4234 GSA

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

August 26, 1953

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To: E. W. Ellis

From: Helena M. Meyer

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Helena M. Meyer

HMMEYER/jb

Copy to: Minerals Division
Base Metals Branch
H. M. Meyer
Files
Mr. A. R. Kinkle, Jr. Rm. 4234 GSA

8/21/53 gla

IN REPLY REFER TO:

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 20 1953

August 20, 1953

Memorandum

To: E. Wm. Ellis

From: E. L. Newcomb

Subject: Recommendation for denial

Re: DMEA-2817
K and K Quicksilver Mine
Humboldt County, Nevada
$15,028.40
Mercury

Kassebaum

The geological data and conclusions in the field team report indicate that the proposed exploration work is unlikely to discover a significant quantity of mercury ore.

The deposit is confined to a narrow shear zone and mineralization is limited to individual shear planes. The host rock is entirely barren outside the shear zone.

The nature of the deposit and the small past production in the district indicate that this property cannot reasonably be expected to produce a significant amount of mercury for the Defense effort.

I recommend that the application be denied.

E. L. Newcomb

E. L. Newcomb
Geologist

Strategic Minerals Management
RECEIVED
AUG 20 1953

August 20, 1953

Memorandum

Re: [illegible]A-2817
K and K Quicksilver Mine
Humboldt County, Nevada
$15,028.10
Mercury

To: F. Wm. Ellis

From: F. L. Newcomb

Subject: Recommendation for denial

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The deposit is confined to a narrow shear zone and mineralization is limited to individual shear planes. The host rock is entirely barren outside the shear zone.

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I recommend that the application be denied.

F. L. Newcomb
Geologist

LNewcomb:khs

G-8/20/53

Copies to: Geol. Div. files
Branch files
Director's r. file
Branch r. files
H. M. Meyer-Room 3623
A. R. Kinkel-Room B-242-A

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

Defense Minerals Administration
RECEIVED
AUG 2 3 1953

1012 Flood Bldg.
870 Market Street
San Francisco 2, Calif.

August 20, 1953

Memorandum

To: W. S. Martin, Acting Chairman, Operating Committee, DMEA, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-2817 (Mercury)
Charles Kassabaum
K & K Quicksilver Mine, Humboldt County, Nevada

Answering your inquiry of August 13, we are pleased to inform you that report covering field examination of subject property was mailed to Mr. George C. Selfridge with our memorandum of August 6, 1953.

H. C. Miller
Executive Officer, DMEA Field Team
Region III

Copy to: E. H. Bailey, USGS

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 20 1953

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870 Market Street
San Francisco 2, Calif.

August 20, 1953

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H. C. Miller
Executive Officer, DMEA Field Team
Region III

Copy to: E. H. Bailey, USGS

8/13/53 gla

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

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

August 6, 1953

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-2817, (Mercury)
K & K Quicksilver Mine
Humboldt County, Nevada

Reference is made to your letter dated February 26, 1953, requesting a field examination of the K & K Quicksilver Mine.

Attached are four copies of a report entitled "DMEA-2817, K & K Quicksilver Mine, Humboldt County, Nevada, (Mercury)," by John D. Warne, Mining Engineer, U. S. Bureau of Mines, and Earl H. Pampeyan, Geologist, U. S. Geological Survey, dated July 13, 1953.

The engineer and the geologist who examined the property are not in agreement and all efforts to bring them together have failed. They are in agreement, however, on the best method for exploring the property but not on whether such exploration is worthwhile. The geologist concludes that the geologic setting indicates little possibility of the deposit developing a substantial amount of ore, that the moderate showings in the workings cannot be used to grade the deposit because of the limited exposure of mineralized ground, and that it is unlikely more than 150 flasks of mercury would be recovered from the deposit.

Mr. A. C. Johnson is of the opinion a small amount of exploration is warranted; Mr. Bailey is not entirely adverse to spending a small amount of money, although he does not expect the results to be too encouraging. I am not familiar with the property and I know virtually nothing about it other than what I read in the report.

I recalled, however, that Malcolm B. (Scotty) Gould, of H. W. Gould and Company, mining engineers, told me some weeks ago that he was interested in acquiring the K & K Quicksilver Mine because his preliminary examination of it showed what he thought was some pretty good ore. At the time of his call, however, he stated that he was a little suspicious of his sampling, so he planned to go back and examine the property a little more.

I called him on Tuesday to find out if he was still contemplating taking over the property. He told me that he found the mercury was only in the minute seams of the rock and that the rock itself is barren. It was because of this mode of occurrence that his panning showed such good results. He told me also that the operator-Mr. Charles Kassabaum, screens all his rock before retorting it, which seems to verify that the rock itself is barren and only that to which mercury adheres is ore. Mr. Gould also told me that he estimates the rock ought to run 12-14 pounds per ton to make the property attractive. All the samples, excepting one, taken by the engineer and geologist ran less than that. His company is giving no further consideration to acquiring the property.

This application is a decidedly borderline case and it would seem best to Mr. Bailey and me to deny the applicant a loan. However, neither of us is adverse to taking a chance, and if you in Washington consider it desirable to grant a small loan with the expectation of producing a small number of flasks of mercury, we would agree to such a proposal. We believe, however, that the work should be limited, at the start at least, to extending the shaft a distance of 60 feet on the incline and drifting not over 50 feet on the 30-foot and 100-foot levels at a cost of approximately $6,500.

H. C. MILLER

H. C. Miller
Executive Officer
DMEA Field Team, Region III

Attachments

Copy to: E. H. Bailey, USGS
A. C. Johnson, Reno

9/9/53

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

DMEA-2817, K & K Quicksilver Mine

Humboldt County, Nev.

(Mercury)

John D. Warne, Mining Engineer
U. S. Bureau of Mines

Earl H. Pampeyan, Geologist
U. S. Geological Survey

July 13, 1953

Reviewed by
DMEA OPERATING COMMITTEE
8-17-53
(date)

EXAMINATION REPORT

Docket No.: DMEA-2817 (Mercury) July 10, 1953

Name and address of applicant: Charles Kassabaum
P. O. Box 204
Winnemucca, Nev.

Name and location of property: K & K Quicksilver Mine,
located in sec. 5, T. 37 N.,
R. 40 E., Humboldt County, Nev.

SUMMARY

The K & K, quicksilver mine, was examined by an engineer[1] of the Bureau of Mines, Region III, on March 23, 1953, and was later examined by a geologist[2] of the U. S. Geological Survey on These examinations were made in connection with an application for an exploration loan (Docket DMEA-2817) by Charles Kassabaum of Winnemucca, Nev.

The mine is located about 13 miles north of Golconda, Nevada (fig. 1), and it is accessible by automobile throughout most of the year.

Mercury was discovered on the property in 1941, and development to date consists of a 40-foot inclined shaft averaging 36 degrees in dip, in a N. 86° E. direction; and a drift of 12 feet in length bearing S. 20° E. from the 30-foot level of the shaft (fig. 2).

The applicants final proposal coincides with recommendations in this report approving an exploration project estimated to cost $15,028.40. This exploration work consists of deepening the shaft

1/ John D. Warne
2/ Earl H. Pampeyan

from 40 feet to 200 feet in length; driving exploration drifts aggregating 50 feet in length on the 30-foot level, 50 feet in length on the 100-foot level, and 100 feet in length on the 200-foot level.

CONCLUSIONS

The applicants' final proposal for exploration work is reasonable and he is qualified to properly conduct the project work. Sufficient equipment is on hand to proceed with the work.

Samples taken from the 30-foot level drift show that the flat-dipping mineralized zone averages from 5.5 to 6.3 feet in thickness, from 4.3 to 7.2 pounds of mercury per ton, with a weighted average of 5.9 feet thickness of 5.8 pounds of mercury per ton. Samples from the south face of the 30-foot level drift ranged from 7.7 to 17.9 lbs. Hg per ton; and a weighted average of samples adjacent to the hanging wall contained 14.02 lbs. Hg per ton for a thickness of 2.5 feet. Ore of this quality is considered worthy of further exploration.

RECOMMENDATIONS

It is recommended that the deposit be further explored by deepening the present shaft from 40 feet to 100 feet (inclined length); drifting 20 feet northward and 30 feet southward on the 30-foot level, and 25 feet northward and 25 feet southward on the 100-foot level under Stage I of the project. This work is estimated to cost $6,449.40.

Further exploration, as Stage II, should consist of deepening the shaft from 100 feet to 200 feet; and drifting 50 feet north-

ward, and 50 feet southward on the 200-foot level. This phase of the project is estimated to cost $8,579.00, but should not be undertaken unless exploration work performed under Stage I is successful. Figure 2 illustrates the recommended exploration work.

LOCATION AND ACCESSIBILITY

The K & K quicksilver mine property is situated at the southern extremity of the Hot Springs Range, in sec. 5, T. 37 N., R. 40 E., about 11 miles north of Golconda, Nev. (fig. 1).

Altitudes at the property range from 4800 to 5000 feet above sea level.

The mine is accessible by automobile by traveling 15.6 miles east from Winnemucca along U.S. Highway 40 to Golconda, Nevada, turn north on a gravel and dirt road leading northward a distance of 9.9 miles, and finally a sandy, steep, and unimproved access road leads northwestward to the mine a distance of 3 miles. The last 0.6 miles of road are occasionally inaccessible during dry periods due to deep sand and steep grades.

OWNERSHIP

The property consists of approximately 197 acres of land held under fee simple title by Charles Kassabaum, 108 Melarky Street, Winnemucca, Nev. This property is recorded in the Humboldt County courthouse at Winnemucca.

HISTORY AND PRODUCTION

Cinnabar mercury ore was discovered on the property during 1941 and the property was purchased from the Southern Pacific Railroad by Major Estridge of Winnemucca, Nev. The only work performed

on the property (as shown in fig. 2) was done immediately following the discovery, however, there are no production records now available.

Mr. Charles Kassabaum acquired the property in July 1950 under a quit claim deed from Humboldt County, Nev. No recent exploration or development work has been performed by the present owner, but he was engaged in constructing a brick retort on the property at the time of this examination.

DESCRIPTION OF THE PROPERTY

The mine workings consist of an inclined shaft averaging 36 degrees in a N. 86 E. direction, of 40 feet in length. A drift, bearing S. 20° E., of 12 feet in length, intersects the shaft at 30 feet from the surface (fig. 2).

An inventory of equipment and supplies furnished by the applicant to be used on the proposed exploration project follows:

1 Compressor, 300 cu. ft. capacity
1 Jackhammer
250 feet drill steel, 7/8" size
1 Air and water hose assembly
2 Shaft buckets, no size given
300 feet air and water line
1 Pressure tank
1 Chevrolet pickup, 1951
1 Tugger hoist with cable
Miscellaneous small tools

SAMPLING

Four samples were taken from the 30-foot level drift as shown in figure 2 in connection with this examination. Descriptions and analysis of these samples by the Hydrometallurgical and Ore Dressing Branch of the Bureau of Mines, Reno, Nevada, are as follows:

Sample No.	Lbs. Hg/T	Description
1	8.2	Channel sample taken perpendicular to the mineralized zone at the face of 30-foot level drift, adjacent to hanging wall, 2.0 feet in length.
2	7.7	Channel sample taken perpendicular to the mineralized zone at face of 30-foot level drift, adjacent to sample No. 1 and footwall, 2.3 feet in length.
3	5.6	Chip sample taken from lowest portion of 30-foot level drift at footwall, 2.0 feet in length.
4	4.3	Channel sample taken perpendicular to mineralized zone from North side of shaft at 30-foot level, 5.5 feet in length.

Note: Three additional samples which were taken by the Geological Survey are listed in the geological section of this report.

STATEMENT OF APPLICANT'S PROPOSAL

The applicant originally proposed deepening the 40-foot, 36 degree inclined shaft a distance of 100 feet to 140 feet in inclined length at a cost of $53.66 per foot; and 350 feet of drifting at the 140 foot level at an estimated cost of $32.57 per foot. He also requested the construction of one-half a mile of access road to the mine involving a total cost of $1,320.00 for bulldozer work and supervision. This application was incomplete and improperly prepared; the applicant later revised this proposal. On April 23, 1953 Mr. Kassabaum visited the Mining Branch, Region III office at Reno, Nevada and made verbal request for a revised exploration project similar to that recommended by this report.

GEOLOGY

The southern end of the Hot Springs Range, the locality of the K & K Quicksilver Mines, is composed of Paleozoic sediments that are intruded by granitic rock and overlain by remnants of Tertiary volcanic flows. The area immediately surrounding the mine is underlain by arkose with minor interbedded limestone. The regional trend of the rocks is northeast.

The arkose crops out as small, resistant knobs, and forms the walls of the inclined shaft. It is a clastic rock that ranges from a conglomeratic sandstone to a sandy conglomerate and is reddish-brown in color owing to a ferruginous cement. No bedding was seen. The matrix consists of grains of feldspar and quartz an average of 2 mm. in diameter, but angular fragments as large as 10 mm. on a side are found locally. The feldspar forms about 40 percent of the rock. Numerous quartz veinlets cut the arkose.

The limestone crops out 100 feet southwest and 150 feet north of the collar of the inclined shaft. Other outcrops were seen farther west. None was seen in the inclined shaft. The limestone is light gray, sandy, and thin bedded. The bedding in the vicinity of the shaft strikes N. 10-30° E. and dips about 65° northwest. Locally, the limestone is not sandy.

ORE DEPOSIT

Quicksilver deposits in Nevada have been described and classified into different types by Bailey and Phoenix[3/]. According to their classification, the K & K deposit falls under the "interbedded sediments"

3/ Bailey, E. H., and Phoenix, D. A., Quicksilver deposits in Nevada: Univ. of Nevada Bull. 41, v. 38, no. 5, Dec. 1944.

grouping. The structural control of ore deposition is a fault that cuts the arkose. The fault strikes almost north and dips 35° east, and the fault surface forms the back of the inclined shaft. (See fig. 2). The well-cemented arkose provided a lithologic control. Ore-bearing solutions seem to have migrated along the fault, and were partially or totally arrested by the roll in the fault. The arkose in the hanging wall was impermeable enough to confine the deposition of cinnabar to the sheared material along the fault.

Ore.--Cinnabar is the only mercury-bearing mineral seen, and is found disseminated throughout the sheared material along the fault. Only a few specks of crystalline cinnabar were seen in the face of the short drift. The arkose that has not been sheared is barren.

Seven samples of ore taken for assay show that the ore on the south side of the shaft is richer than on the north side. The south side of the shaft is in the south limb of the roll in the fault, and it is possible that the ore would be located in this position down-dip along the fault. The best assay shows 17.9 pounds of mercury per tons of rock in the face of the short drift on the south side of the shaft. The dimensions of the ore body are not known, owing to the small amount of underground work that has been done, and it is not feasible to estimate the average grade. It is likely, however, that the deposit is small and of moderately low grade.

ORE RESERVES

The K & K property is still in the prospect stage with only a 45-foot shaft and a 12-foot drift showing ore in the face; there are no measured or indicated reserves. Inferred reserves are small;

35 flasks of quicksilver probably could be produced during the first stage of exploration work, and a reserve of indicated ore containing about 128 flasks of mercury might be proved in addition--if ore grade did not fall below the weighted sample average of 14 pounds per ton. Assuming again that the grade remained constant, stage two exploration could produce about 47 flasks and prove reserves of 320 flasks of metal. There is no assurance, however, that the deposit will contain ore that averages 14 pounds of mercury per ton of rock; it is likely that the grade will drop rather than rise.

GEOLOGIST'S CONCLUSIONS

The underground exploration program outlined by the Bureau of Mines and the Geological Survey offers the most practical method of exploring the property. The operator's costs are reasonable. It is unlikely, however, that more than 150 flasks of quicksilver would be recovered from the deposit--a production record which, if achieved, would double the existing record of the most productive quicksilver mine in the district.

It is the geologist's conclusion that the applicant's request for Government participation in a DMEA loan be denied because: The geologic setting indicates little possibility of the deposit developing a substantial amount of ore, the moderate showings in the workings cannot be used to grade the deposit because of the limited exposure of mineralized ground, and the amount of quicksilver that might be produced is not likely to appreciably add to the domestic reserve of quicksilver.

GEOLOGICAL SAMPLING

Sample No.	Lbs. Hg/T	Description
5	17.9	3-foot chip sample across face of the drift normal to the fault.
6	0.9	Grab sample from floor at foot of drift.
7	1.9	Grab sample from "high-grade" dump at collar.

RECOMMENDED EXPLORATION PROJECT

An exploration project which consists of two stages is recommended. The first stage should consist of deepening the inclined shaft from 40 to 100 feet (inclined distance) in an eastward direction at an approximate inclination of 36 degrees, and drifting southward a distance of 30 feet, and northward a distance of 20 feet on the 30-foot shaft level, and drifting 25 feet northward and 25 feet southward on the 100-foot level. Both the shaft and drift should follow the mineralized structure. Figure 2 illustrates this stage of the project.

Stage II will consist of deepening the inclined shaft from 100 to 200 feet and 50 feet of drifting northward and 50 feet of drifting southward from the 200-foot shaft level. This work to be performed only if the exploration work under Stage I is successful.

DETAILED COST ESTIMATE

Stage I

Shaft sinking:

Deepening the shaft from 40 to 100 feet (inclined length) - total 60 feet, 5-day week; complete 12 feet weekly = 25 work days, 5 weeks, or 1.2 months.

Supervision and labor:

1 Mine engineer, superintendent @ $500/month - 1.25 months	$625.00
2 Miners @ $16.00/shift, 25 work days	800.00
1 Hoistman and compressor operator @ $14.00 per shift, 25 work days	350.00
	$1,775.00
Add 15.2 percent insurance, etc.	269.80
Total	$2,044.80

Samples.

	Per foot
Supervision and labor @ 2.4 feet advance per day	$4.08
Powder, fuse, detonators	2.50
Timber	6.00
Compressor supplies	1.50
Steel and bits	1.50
Repairs	1.50
Office and accounting	1.25
Installing air and water lines, etc.	.50
Assaying	1.00
Transportation (supplies to camp, etc.)	1.00
Rental of equipment furnished by operator	2.41
	$ 53.24
Total cost of shaft sinking	$3,194.40

$53.24

The operator will furnish all equipment	Est. value
Compressor	$3,500.00
Jackhammer and steel	575.00
Air and water hose	250.00
Shaft bucket	57.50
Mine cars	100.00
Column and arm	100.00
Air and water pipe (125 feet)	75.00
Air pressure tank	27.00
Water tank	27.50
Engineering and office equipment	150.00
Miscellaneous tools	350.00
Chevrolet pickup, 1/2-ton, 1951 model	1,250.00
Hoist and cable	450.00
	$6,942.00

$2.41

Tot 55.65/ft

$\frac{\$6,942.00}{60}$ = $115.70 per month; 1.25 months shaft sinking = $144.63 = $2.41/ft.

Drifting:

Drifting 30 feet southward and 20 feet northward on the 30-foot level; and 25 feet northward and 25 feet southward from the 100-foot shaft level - total 100 feet; 5-day week, complete 4 feet per day, 20 feet weekly = 25 work days, 5 weeks, or 1.2 months.

Supervision and labor:

Same as for shaft sinking - total $2,044.80

	Per foot
Supervision and labor @ 4.0 feet advance per day	$20.45
Powder, fuse, detonators	3.00
Timber (as required)	2.50
Compressor supplies	1.00
Steel and bits	1.00
Repairs	0.90
Office and accounting	0.75
Installing air and water lines	0.30
Assaying	0.60
Transportation	0.60
Rental of equipment furnished by operator at $115.70/month, 1.25 months drifting = $144.63 = $1.45/ft.	1.45
Total estimated cost per foot	$32.55
Total cost of drifting (100 feet)	$3,255.00

Stage II

Shaft sinking:

Deepening shaft from 100 to 200 feet (inclined length) total 100 feet, at an estimated cost of $53.24/ft. $5,324.00

Drifting:

Drifting 50 feet northward and 50 feet southward from 200-foot shaft level; total 100 feet @ $32.55/ft. $3,255.00

Total estimated cost $8,579.00

Resume of estimated costs

Stage I:

(1)	Shaft sinking, 60 feet @ $53.24/ft.	$3,194.40
(2)	Drifting, 100 feet @ $32.55/ft.	3,255.00
	Total	$6,449.40

StageII:

(1)	Shaft sinking, 100 feet @ $53.24/ft.	$5,324.00
(2)	Drifting, 100 feet @ $32.55/ft.	3,255.00
	Total	$8,579.00

Total cost of project	$15,028.40
Government participation 75 percent	$11,271.30

Work under Stage I can be completed within 2½ months (but 90 days should be allowed); and 3½ months (or allow 110 days) will

be required to complete Stage II if it is undertaken. A total of 200 days (allowing for possible delays) should be allowed to complete the project.

OTHER CONTRACT DATA

The following data should be incorporated in the contract:

Stage I:

The inclination and direction of the shaft and directions of the drifts from the 30-foot and 100-foot shaft levels shall be chosen in such a manner as to follow the mineralized structure if possible - subject to the approval of the Government.

Stage II:

This phase of the work will not be undertaken unless work under Stage I is successful and performed in a satisfactory manner at the discretion of the Government.

GENERAL INFORMATION

The applicant has constructed a furnace retort on the property to recover mercury from ore stockpiled as a result of previous development work.

Mr. Kassabaum has had about 35 years previous mining experience; and he is considered to be capable of performing the exploration project.

This report was revised in order to consolidate recommendations of the examining engineer and geologist.

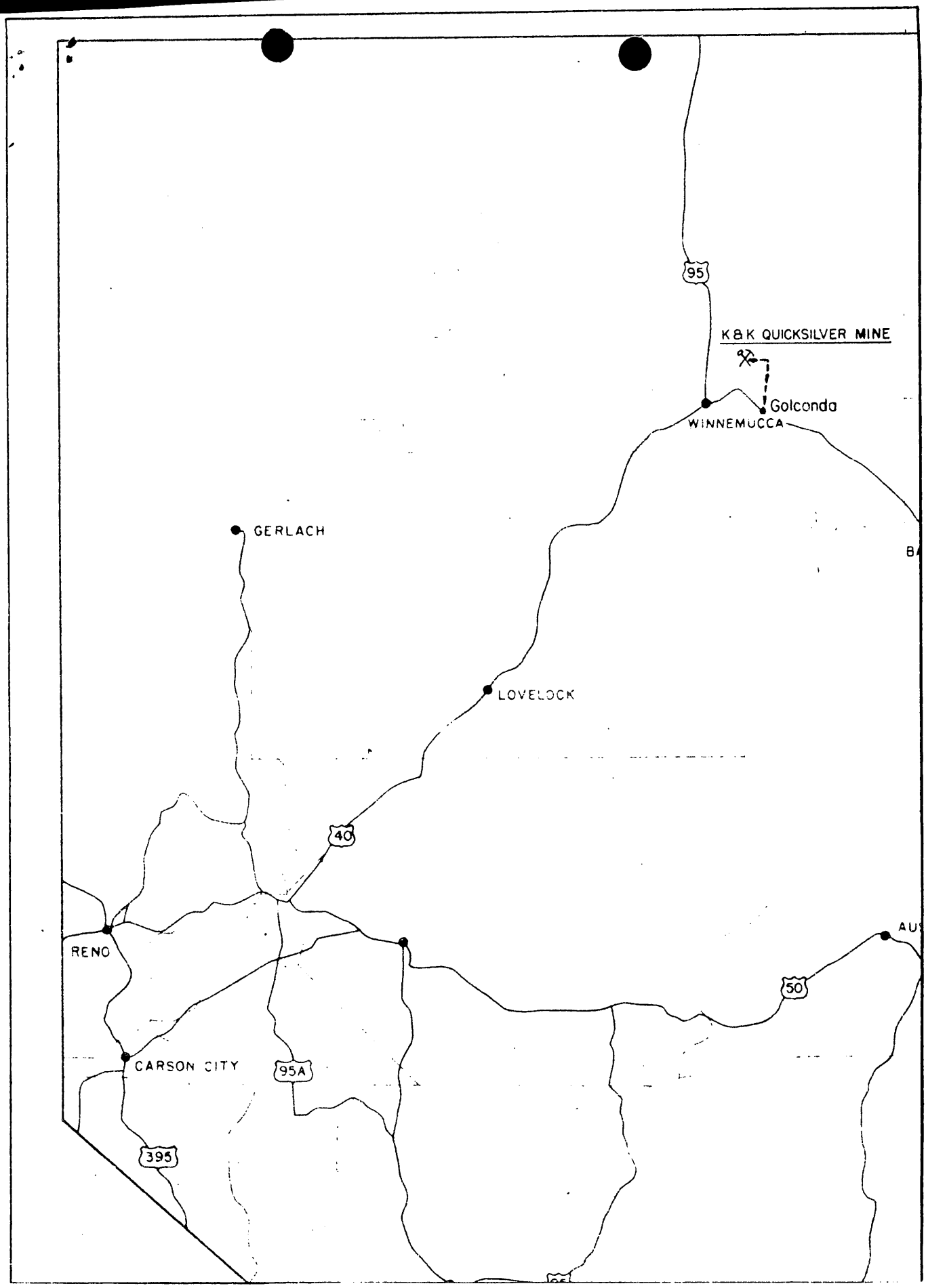

FIG. 1 LOCATION MAP

8/18/53 gla

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

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

August 6, 1953

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-2817, (Mercury)
K & K Quicksilver Mine
Humboldt County, Nevada

Reference is made to your letter dated February 26, 1953, requesting a field examination of the K & K Quicksilver Mine.

Attached are four copies of a report entitled "DMEA-2817, K & K Quicksilver Mine, Humboldt County, Nevada, (Mercury)," by John D. Warne, Mining Engineer, U. S. Bureau of Mines, and Earl H. Pampeyan, Geologist, U. S. Geological Survey, dated July 13, 1953.

The engineer and the geologist who examined the property are not in agreement and all efforts to bring them together have failed. They are in agreement, however, on the best method for exploring the property but not on whether such exploration is worthwhile. The geologist concludes that the geologic setting indicates little possibility of the deposit developing a substantial amount of ore, that the moderate showings in the workings cannot be used to grade the deposit because of the limited exposure of mineralized ground, and that it is unlikely more than 150 flasks of mercury would be recovered from the deposit.

Mr. A. C. Johnson is of the opinion a small amount of exploration is warranted; Mr. Bailey is not entirely adverse to spending a small amount of money, although he does not expect the results to be too encouraging. I am not familiar with the property and I know virtually nothing about it other than what I read in the report.

Reviewed by
DMEA OPERATING COMMITTEE
8-17-53
(date)

I recalled, however, that Malcolm B. (Scotty) Gould, of N. W. Gould and Company, mining engineers, told me some weeks ago that he was interested in acquiring the K & K Quicksilver Mine because his preliminary examination of it showed what he thought was some pretty good ore. At the time of his call, however, he stated that he was a little suspicious of his sampling, so he planned to go back and examine the property a little more.

I called him on Tuesday to find out if he was still contemplating taking over the property. He told me that he found the mercury was only in the minute seams of the rock and that the rock itself is barren. It was because of this mode of occurrence that his panning showed such good results. He told me also that the operator-Mr. Charles Kassabaum, screens all his rock before retorting it, which seems to verify that the rock itself is barren and only that to which mercury adheres is ore. Mr. Gould also told me that he estimates the rock ought to run 12-14 pounds per ton to make the property attractive. All the samples, excepting one, taken by the engineer and geologist ran less than that. His company is giving no further consideration to acquiring the property.

This application is a decidedly borderline case and it would seem best to Mr. Bailey and me to deny the applicant a loan. However, neither of us is adverse to taking a chance, and if you in Washington consider it desirable to grant a small loan with the expectation of producing a small number of flasks of mercury, we would agree to such a proposal. We believe, however, that the work should be limited, at the start at least, to extending the shaft a distance of 60 feet on the incline and drifting not over 50 feet on the 30-foot and 100-foot levels at a cost of approximately $6,500.

H. C. Miller
Executive Officer
DMEA Field Team, Region III

Attachments

Copy to: E. H. Bailey, USGS
A. C. Johnson, Reno

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

DMEA-2817, K & K Quicksilver Mine

Humboldt County, Nev.

(Mercury)

John D. Warne, Mining Engineer
U. S. Bureau of Mines

Earl H. Pampeyan, Geologist
U. S. Geological Survey

July 15, 1953

Reviewed by
DMEA OPERATING COMMITTEE
8-17-53
(date)

EXAMINATION REPORT

Docket No.: DMEA-2817 (Mercury) July 10, 1953

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3/ Bailey, E. H., and Phoenix, D. A., Quicksilver deposits in Nevada: Univ. of Nevada Bull. 41, v. 38, no. 5, Dec. 1944.

grouping. The structural control of ore deposition is a fault that cuts the arkose. The fault strikes almost north and dips 35° east, and the fault surface forms the back of the inclined shaft. (See fig. 2). The well-cemented arkose provided a lithologic control. Ore-bearing solutions seem to have migrated along the fault, and were partially or totally arrested by the roll in the fault. The arkose in the hanging wall was impermeable enough to confine the deposition of cinnabar to the sheared material along the fault.

Ore.--Cinnabar is the only mercury-bearing mineral seen, and is found disseminated throughout the sheared material along the fault. Only a few specks of crystalline cinnabar were seen in the face of the short drift. The arkose that has not been sheared is barren.

Seven samples of ore taken for assay show that the ore on the south side of the shaft is richer than on the north side. The south side of the shaft is in the south limb of the roll in the fault, and it is possible that the ore would be located in this position down-dip along the fault. The best assay shows 17.9 pounds of mercury per tons of rock in the face of the short drift on the south side of the shaft. The dimensions of the ore body are not known, owing to the small amount of underground work that has been done, and it is not feasible to estimate the average grade. It is likely, however, that the deposit is small and of moderately low grade.

ORE RESERVES

The K & K property is still in the prospect stage with only a 45-foot shaft and a 12-foot drift showing ore in the face; there are no measured or indicated reserves. Inferred reserves are small;

35 flasks of quicksilver probably could be produced during the first stage of exploration work, and a reserve of indicated ore containing about 128 flasks of mercury might be proved in addition--if ore grade did not fall below the weighted sample average of 14 pounds per ton. Assuming again that the grade remained constant, stage two exploration could produce about 47 flasks and prove reserves of 320 flasks of metal. There is no assurance, however, that the deposit will contain ore that averages 14 pounds of mercury per ton of rock; it is likely that the grade will drop rather than rise.

GEOLOGIST'S CONCLUSIONS

The underground exploration program outlined by the Bureau of Mines and the Geological Survey offers the most practical method of exploring the property. The operator's costs are reasonable. It is unlikely, however, that more than 150 flasks of quicksilver would be recovered from the deposit--a production record which, if achieved, would double the existing record of the most productive quicksilver mine in the district.

It is the geologist's conclusion that the applicant's request for Government participation in a DMEA loan be denied because: The geologic setting indicates little possibility of the deposit developing a substantial amount of ore, the moderate showings in the workings cannot be used to grade the deposit because of the limited exposure of mineralized ground, and the amount of quicksilver that might be produced is not likely to appreciably add to the domestic reserve of quicksilver.

GEOLOGICAL SAMPLING

Sample No.	Lbs. Hg/T	Description
5	17.9	3-foot chip sample across face of the drift normal to the fault.
6	0.9	Grab sample from floor at foot of drift.
7	1.9	Grab sample from "high-grade" dump at collar.

RECOMMENDED EXPLORATION PROJECT

An exploration project which consists of two stages is recommended. The first stage should consist of deepening the inclined shaft from 40 to 100 feet (inclined distance) in an eastward direction at an approximate inclination of 36 degrees, and drifting southward a distance of 30 feet, and northward a distance of 20 feet on the 30-foot shaft level, and drifting 25 feet northward and 25 feet southward on the 100-foot level. Both the shaft and drift should follow the mineralized structure. Figure 2 illustrates this stage of the project.

Stage II will consist of deepening the inclined shaft from 100 to 200 feet and 50 feet of drifting northward and 50 feet of drifting southward from the 200-foot shaft level. This work to be performed only if the exploration work under Stage I is successful.

DETAILED COST ESTIMATE

Stage I

Shaft sinking:

Deepening the shaft from 40 to 100 feet (inclined length) - total 60 feet, 5-day week; complete 12 feet weekly = 25 work days, 5 weeks, or 1.2 months.

Supervision and labor:

1 Mine engineer, superintendent @ $500/month - 1.25 months	$625.00
2 Miners @ $16.00/shift, 25 work days	800.00
1 Hoistman and compressor operator @ $14.00 per shift, 25 work days	350.00
	$1,775.00
Add 15.2 percent insurance, etc.	269.80
Total	$2,044.80

	Per foot
Supervision and labor @ 2.4 feet advance per day	$4.08
Powder, fuse, detonators	2.50
Timber	6.00
Compressor supplies	1.50
Steel and bits	1.50
Repairs	1.50
Office and accounting	1.25
Installing air and water lines, etc.	.50
Assaying	1.00
Transportation (supplies to camp, etc.)	1.00
Rental of equipment furnished by operator	2.41
	$ 53.24

Total cost of shaft sinking	$3,194.40

The operator will furnish all equipment	Est. value
Compressor	$3,500.00
Jackhammer and steel	575.00
Air and water hose	250.00
Shaft bucket	57.50
Mine cars	100.00
Column and arm	100.00
Air and water pipe (125 feet)	75.00
Air pressure tank	27.00
Water tank	27.50
Engineering and office equipment	150.00
Miscellaneous tools	350.00
Chevrolet pickup, 1/2-ton, 1951 model	1,250.00
Hoist and cable	450.00
	$6,942.00

$\frac{\$6,942.00}{60}$ = $115.70 per month; 1.25 months shaft sinking = $144.63 = $2.41/ft.

Drifting:

Drifting 30 feet southward and 20 feet northward on the 50-foot level; and 25 feet northward and 25 feet southward from the 100-foot shaft level - total 100 feet; 5-day week, complete 4 feet per day, 20 feet weekly = 25 work days, 5 weeks, or 1.2 months.

Supervision and labor:

Same as for shaft sinking - total $2,044.80

	Per foot
Supervision and labor @ 4.0 feet advance per day	$20.45
Powder, fuse, detonators	3.00
Timber (as required)	2.50
Compressor supplies	1.00
Steel and bits	1.00
Repairs	0.90
Office and accounting	0.75
Installing air and water lines	0.30
Assaying	0.60
Transportation	0.60
Rental of equipment furnished by operator at $115.70/month, 1.25 months drifting = $144.63 = $1.45/ft.	1.45
Total estimated cost per foot	$32.55
Total cost of drifting (100 feet)	$3,255.00

Stage II

Shaft sinking:
Deepening shaft from 100 to 200 feet (inclined length) total 100 feet, at an estimated cost of $53.24/ft. $5,324.00

Drifting:
Drifting 50 feet northward and 50 feet southward from 200-foot shaft level; total 100 feet @ $32.55/ft. $3,255.00

Total estimated cost $8,579.00

Resume of estimated costs

Stage I:

(1)	Shaft sinking, 60 feet @ $53.24/ft.	$3,194.40
(2)	Drifting, 100 feet @ $32.55/ft.	3,255.00
	Total	$6,449.40

StageII:

(1)	Shaft sinking, 100 feet @ $53.24/ft.	$5,324.00
(2)	Drifting, 100 feet @ $32.55/ft.	3,255.00
	Total	$8,579.00

Total cost of project	$15,028.40
Government participation 75 percent	$11,271.30

Work under Stage I can be completed within 2½ months (but 90 days should be allowed); and 3½ months (or allow 110 days) will

be required to complete Stage II if it is undertaken. A total of 200 days (allowing for possible delays) should be allowed to complete the project.

OTHER CONTRACT DATA

The following data should be incorporated in the contract:

Stage I:

The inclination and direction of the shaft and directions of the drifts from the 30-foot and 100-foot shaft levels shall be chosen in such a manner as to follow the mineralized structure if possible - subject to the approval of the Government.

Stage II:

This phase of the work will not be undertaken unless work under Stage I is successful and performed in a satisfactory manner at the discretion of the Government.

GENERAL INFORMATION

The applicant has constructed a furnace retort on the property to recover mercury from ore stockpiled as a result of previous development work.

Mr. Kassabaum has had about 35 years previous mining experience; and he is considered to be capable of performing the exploration project.

This report was revised in order to consolidate recommendations of the examining engineer and geologist.

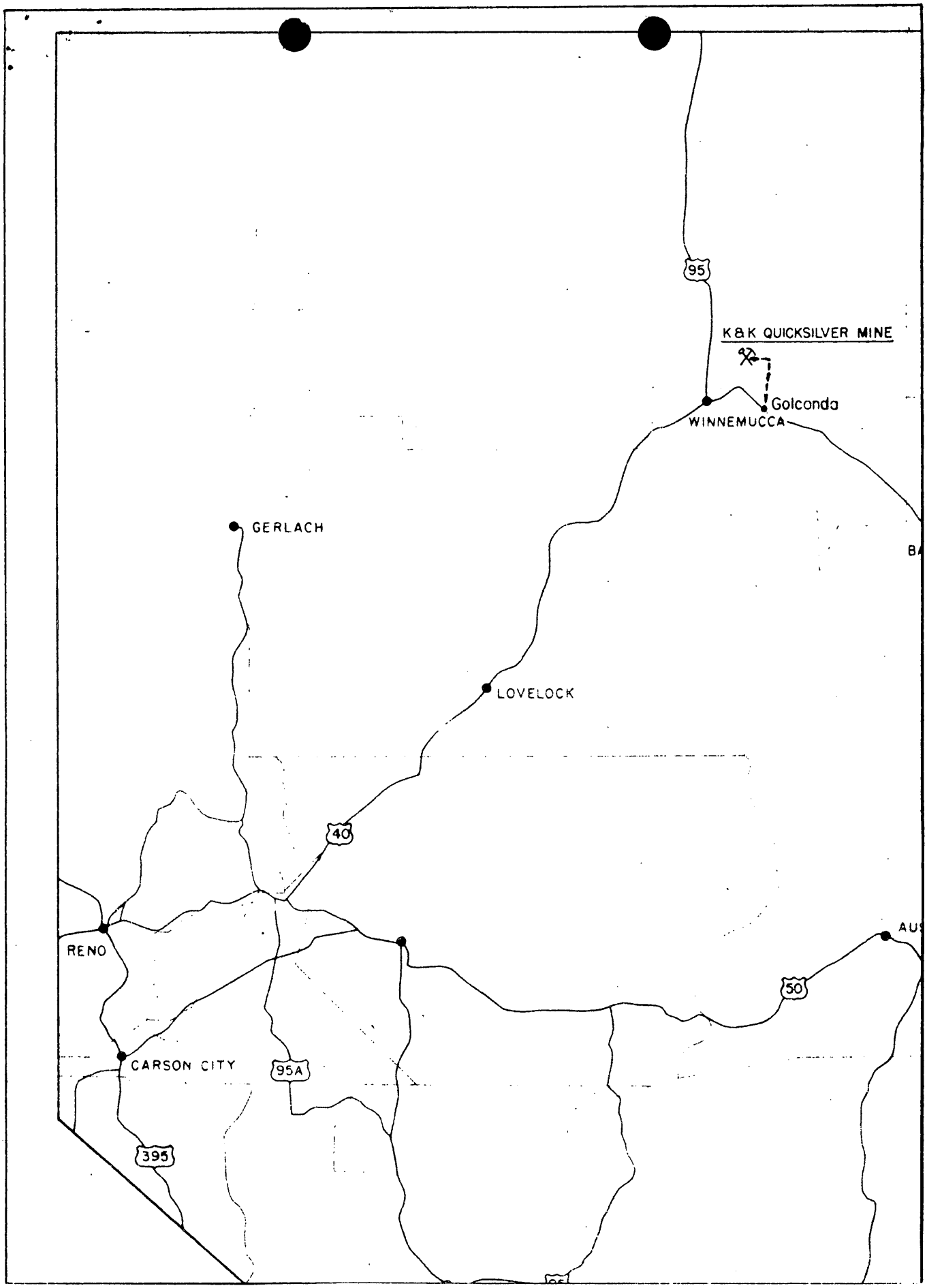


FIG. 1 LOCATION MAP

FILE COPY
SURNAME:

Ellis
Martin
Selfridge
Matteucci

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

AUG 13 1953

Mr. H. C. Miller
Executive Officer
DMEA Field Team, Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

Re: Docket No. DMEA-2317 (Mercury)
Charles Rassebaum
K & K Quicksilver Mine
Humboldt County, Nevada

Dear Mr. Miller:

We enclose herewith a copy of Mr. Rassebaum's inquiry dated July 30, 1953, regarding his above-docketed application, together with a copy of our reply.

We would appreciate being advised whether a field examination of the property was made and the status of the Field Team report.

Sincerely yours,

W. S. Martin
ES
ACTING Chairman, Operating Committee

Enclosures 3

APPROVED:

J. H. Hedges ES
Member, Bureau of Mines

A. R. Kinkel, Jr. ES
Member, Geological Survey

EWEllis/gla/db
8-11-53
cc to: Adm. Reading File
Docket
Operating Committee
Messrs: H. M. Meyer, Rm. 3623
A. R. Kinkel, Rm. B-242A, GSA
Ellis

8-13-53

FILE COPY
SURNAME:

Ellis
Martin
Kinkel
Selridge
Secretary

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

AUG 13 1953

Mr. Charles Kassebaum
Box 204
Winnemucca, Nevada

Re: Docket No. DMEA-2017 (Mercury)
K & K Quicksilver Mine
Humboldt County, Nevada

Dear Mr. Kassebaum:

This will acknowledge your letter of July 30, 1953, addressed to Mr. C. G. Wittendorf, Administrator, requesting information on your above-docketed application.

We have not as yet received the Field Team's report on which to base our determination. However, we have written Mr. H. C. Miller, Executive Officer, DMEA Field Team, Region III, 1012 Flood Building, 870 Market Street, San Francisco 2, California, regarding this matter, and will advise you as promptly as possible.

Sincerely yours,

SIGNED

Ernest Wm. Ellis, Chief
Rare and Misc. Metals Division

EWEllis/gla/db
8-11-53
cc to: Adm. Reading File
Docket
Messrs: H. M. Meyer, Rm. 3623
A. R. Kinkel, Rm. B-2424, GSA
Ellis
DMEA Field Team, Region III (2)

8-13-53

8/10/53 gla

DEPARTMENT OF THE INTERIOR
Bureau of Land Management
RECEIVED
AUG 10 1953

Winnemucca, Nevada
July 30, 1953

Mr. C. O. Mittendorf, Administrator
Defense Minerals Exploration Administration
Washington 25, D. C.

Re: Docket No.DMEA 2817 Mercury
K & K Quicksilver Mine
Humboldt County, Nevada

Dear Sir:

If possible, would appreciate any information you could give me regarding my application for a loan on the above.

Inasmuch as fall is now approaching it would be a big benefit to me to have some idea whether or not there is a possibility of the loan being granted.

Yours very truly,

Charles Kassabaum

Charles Kassabaum
Box 204
Winnemucca, Nevada

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 15 1953

Office of
DMEA Field Team
Region III

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

June 10, 1953

Mr. Charles Kassabaum
Box 204
Winnemucca, Nevada

Re: Docket DMEA-2817 (Mercury)
K & K Quicksilver Mine
Humboldt County, Nevada

Dear Mr. Kassabaum:

We acknowledge your letter of June 4, advising us that in response to Mr. C. O. Mittendorf's telegram you wish to inform us that you desire to have your application reactivated.

The Washington Office is being advised of your wishes by means of a carbon copy of this letter.

Sincerely yours,

H. C. MILLER

H. C. Miller
Executive Officer
DMEA Field Team, Region III

Copy to: DMEA, Washington, D. C.
E. H. Bailey, USGS

CLASS OF SERVICE

This is a full-rate Telegram or Cablegram unless its deferred character is indicated by a suitable symbol above or preceding the address.

WESTERN UNION

1201

JUN 4 PM (25)

L 36

W. P. MARSHALL, PRESIDENT

SYMBOLS
DL=Day Letter
NL=Night Letter
LT=Int'l Letter Telegram
VLT=Int'l Victory Ltr.

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

WP043 PD=WINNEMUCCA NEV 4 939A=

DEFENSE MINERALS EXPLORATION ADMIN=

CARE MITTENDORF ADMINISTRATOR=

REGARDING YOUR WIRE ON DMEA-2817 WOULD APPRECIATE CONTINUATION PROCESSING APPLICATION=

CHARLES KASSABAUM=

Bahama Minerals
JUN 1958

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

EWELLIS/db

FILE COPY
SURNAME:

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

DMEA

Docket

14X3923.970 Working Fund, DMEA, Interior

Ellis

JUN 3 1953

CHARLES KASSABAUM
108 MELARKEY STREET
WINNEMUCCA, NEVADA

REOURLET MAY 19 DENYING YOUR EXPLORATION APPLICATION, DOCKET NUMBER DMEA-2817, THIS IS TO ADVISE YOU THAT RESTRICTED PROGRAM DIRECTIVE DATED APRIL 15 MODIFIED ON JUNE 1 GIVING DMEA AUTHORITY TO CONTINUE PROCESSING YOUR APPLICATION WHICH WAS PENDING PRIOR TO MAY 15. KINDLY ADVISE THIS OFFICE AND EXECUTIVE OFFICER AT SAN FRANCISCO, CALIFORNIA, WHETHER OR NOT YOU DESIRE SUBJECT APPLICATION TO BE REACTIVATED.

C. O. Mittendorf (for)

C. O. MITTENDORF, ADMINISTRATOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

S.H.
6-3-53

EWEllis/db
6-3-53
cc to: Adm. Reading File
Docket
Messrs: H.M.Meyer, Rm. 3623
A.R.Kinkel, Jr., Rm.B-242A, GSA
Ellis
DMEA Field Team, Region III (2)

FILE COPY
SURNAME:

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

MAY 19 1953
AIR MAIL

Mr. Charles Wassabaum
100 Kelarney Street
Winnemucca, Nevada

re: Docket No. DMA-2817 (Mercury)
K & K Quicksilver Mine
Humboldt County, Nevada

Dear Mr. Wassabaum:

This is to inform you that, effective April 15, 1953, the commitment of funds allocated to the DMA for exploration assistance under the Defense Production Act was restricted to certain specified metals and minerals still in short supply. Mercury was not specified, and consequently is automatically removed from the list of metals or minerals eligible for exploration assistance.

I regret to advise you that, since your application relates to mercury and was pending on the date of the restrictive order, we are without authority or funds to enter into a contract for exploration, and your application is accordingly denied. This action is taken without prejudice to the merits of your proposed project.

The staff of the DMA wishes to express its appreciation for your interest in the exploration program and for your cooperation during the period your application has been under consideration.

Sincerely yours,

C. O. Mittendorf

Administrator

DMEllis/gla
5-18-53
cc to: Adm. Reading File
Operations Docket
Messrs. H. W. Meyer, Rm. 3623
A. J. Finkel, Jr., Rm. B-242A, DMA
Ellis
DMA Field Team, Region III (2)

S.H.
5-19-53

700
FILE COPY
SURNAME:

Ellis
Hedges
Selfridge

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

FEB 1953

Mr. Charles Kassabaum
108 Melarkey Street
Winnemucca, Nevada

Re: Docket No. DMEA-2617 (Mercury)
K & K Quicksilver Mine
Humboldt County, Nevada

J.C. 2/26/53

Dear Mr. Kassabaum:

The application for assistance in exploring your property, under the above captioned docket number, has been reviewed by the Rare and Miscellaneous Metals Division of the Defense Minerals Exploration Administration. Your application has been referred to the Executive Officer of Region III at the following address:

Mr. H. C. Miller
Executive Officer
DMEA Field Team, Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

The Regional Office will contact you in the event that further information is required.

Sincerely yours,

C. O. Mittendorf

Administrator

EWEllis/gla
2-25-53
cc to: Adm. Reading File
Operating Committee
Docket
Mr. Ellis
DMEA Field Team, Region III (2)

FILE COPY
SURNAME:

Ellis
Selfridge

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

Mr. H. C. Miller
Executive Officer
DMEA Field Team, Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

FEB 26 1953

Re: Docket No. DMEA-2017 (Secretary)
K & K Quicksilver Mine
Humboldt County, Nevada

F.C. 2/26/53

Dear Mr. Miller:

Subject application is referred to you for a Field Team recommendation based on the facts presented and, if deemed necessary, a field examination.

On January 30, 1953, a letter was addressed to the applicant requesting clarification of the application and additional information. A copy of this letter was forwarded to you. Enclosed is a copy of applicant's reply dated February 5.

Also enclosed are copies of memoranda from Miss Helena M. Meyer, dated February 20, 1953, and Mr. Irwin J. Lyons, dated February 11. You will note that Mr. Lyons is of the opinion that the proposed work "would reveal insufficient reserves of ore of a high enough grade to protect the Government's investment." While it is true that the Government's interest should be fully protected, especially in the event of a possible discovery, nevertheless it should not be of prime importance in deciding whether a project should be considered favorably. Of far greater importance is whether the proposed project might result in revealing deposits of strategic metals or minerals that might now or later produce these needed commodities as an aid to the defense program. In other words, you might estimate that an ore body would be encountered which would produce a certain commodity at a profit and if said commodity was high on the list of required metals, all other things being equal, a contract could be drawn up even though at the time you were not fully sure that all the exploration funds would be repaid.

Hence, we are hesitant to deny this application, without the benefit of a Field Team report, based solely on the decision that the Dutch Flat Mines, Inc. (Docket DMEA-2332), situated some five miles from subject property,

showed little promise of materially aiding the defense program and subsequent repayment of funds. We refer you further to the paragraph beginning at the bottom of page 3 of Mr. Moorhorf's letter dated November 1 , 1952, and addressed to Mr. A. E. King, Executive Officer, Field Team, Region IV, a copy of which was transmitted to your office.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (JHB)

Enclosures 3

E.M.Ellis/gla
2-25-53
cc to: Adm. Reading File
Operating Committee
Docket

J. H. Hedson (JHB)
Member, Bureau of Mines

Messrs. Miss H.M.Meyer, Rm. 3623
A. R. Kinkel, Jr., Rm.4234 GSA
Ellis
DMA Field Team, Region III

T. P. Thayer (JHB)
Member, Geological Survey

2/20/53 gla

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

February 20, 1953

Memorandum

To: E. W. Ellis

From: Helena M. Meyer

Subject: DMEA Docket 2817, Charles Kassabaum, Exploration loan, $18,087.25, Mercury

The additional information supplied by Mr. Kassabaum February 3, and the material appended to his original application (and not a part of the file forwarded to me in December) have been reviewed and I find that there remains insufficient data on which to base a recommendation either for approval or disapproval of the loan.

Mr. Kassabaum should furnish a map showing where the samples were taken, and also information indicating what basis there is for believing that reserves of mercury may be developed. Even in the absence of these data, in the interest of obtaining information on the area in question, I would be willing to approve referral of the application to the field team for review.

Helena M. Meyer

Helena M. Meyer

Attachment

Copy to: Minerals Division
Base Metals Branch
H. M. Meyer
Files
A. R. Kinkle, Jr. Room 4234 GSA

C
O
P
Y

February 11, 1953

Memorandum

Re: Docket DMEA-2817
Charles Kassabaum
K and K Quicksilver Mine
Humboldt County, Nevada
Total cost: $18,087.25
Mercury

To: Mr. E. Wm. Ellis

From: Erwin J. Lyons, USGS

Subject: Recommendation for denial

The letter of February 3, 1953 from the applicant in response to a request for more information has been reviewed. No additional geologic information was submitted.

Assays submitted with the original application have an arithmetical average of 12 lbs. of mercury per ton. The type of sample, location, and other pertinent data necessary to properly evaluate the assays are not given other than that the samples were taken in the drift and bottom of the shaft. Three samples assayed from 6 to 20 lbs. per ton, which probably indicates selected samples.

The U. S. Geological Survey has no information on this particular property. So far as can be determined, the nearest mine or prospect is that of the Dutch Flat Mines, Inc., which is about 5 miles due north of this property. An application for exploration aid to explore the Dutch Flat mine was denied on the basis that exploration would reveal insufficient reserves of ore of a high enough grade to protect the Government's investment. Approval was suggested only if there was a great need for mercury.

The present reviewer believes that the above recommendation probably would apply in the present case and furthermore believes that the applicant's failure or inability to supply essential data justifies a denial. It is therefore recommended that the application be denied.

Erwin J. Lyons
Geologist

2/11/53 gla

IN REPLY REFER TO:

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

February 11, 1953

Memorandum

To: Mr. E. Wm. Ellis

From: Erwin J. Lyons, USGS

Subject: Recommendation for denial

Re: Docket DMEA-2817
Charles Kassabaum
K and K Quicksilver Mine
Humboldt County, Nevada
Total cost: $18,087.25
Mercury

The letter of February 3, 1953 from the applicant in response to a request for more information has been reviewed. No additional geologic information was submitted.

Assays submitted with the original application have an arithmetical average of 12 lbs. of mercury per ton. The type of sample, location, and other pertinent data necessary to properly evaluate the assays are not given other than that the samples were taken in the drift and bottom of the shaft. Three samples assayed from 6 to 20 lbs. per ton, which probably indicates selected samples.

The U. S. Geological Survey has no information on this particular property. So far as can be determined, the nearest mine or prospect is that of the Dutch Flat Mines, Inc., which is about 5 miles due north of this property. An application for exploration aid to explore the Dutch Flat mine was denied on the basis that exploration would reveal ~~there were~~ insufficient reserves of ore of a high enough grade to protect the Government's investment. Approval was suggested only if there was a great need for mercury.

The present reviewer believes that the above recommendation probably would apply in the present case and furthermore believes that the applicant's failure or inability to supply essential data justifies a denial. It is therefore recommended that the application be denied.

Erwin J. Lyons
Erwin J. Lyons
Geologist

2/6/53 gla

Winnemucca, Nevada
February 3, 1953

United States Department of The Interior
Defense Minerals Exploration Administration
Washington 25, D. C.

Re: Docket No. DMEA-2817 (Mercury)
K & K Quicksilver Mine
Humboldt County, Nevada

Gentlemen:

In reply to your letter of January 30, I am supplying more detailed information as follows:

1. Paragraph No. 1, was a description error; however the N.E.¼ and the N.W. ¼ of S.E.¼ of section 5 containing 197.43 is correct and I am mailing you a map showing ownership enclosed in red. Location of shaft is indicated by red dot, also drifts are to be driven off main shaft.

2. The shaft that is to be worked is in the N.W.¼ of N.E.¼, Section 5. The shaft and drift can be sampled at anytime.

3. The samples were taken in the drift and bottom of shaft; average width from 4 to 8 feet.

4. However, this may be under 7 (B) the machinery will be on the property.

5. The man who furnishes the bulldozer also delivers bulldozer to and from property and furnishes driver and fuel and all repairs.

6. In sinking the shaft, we should average not less than 2 feet per shift and possibly 3 feet, so let us call it 2 feet per day, total time 50 days with good luck.

Drift on vein and crosscut: 350 feet average, 4 feet per day; 87½ days with good luck and no trouble.

The shaft is about 7 x 5 and is driven on a 45 degree to the depth of 25 feet, dipping East.

The drift is a 7 x 5 approximately driven south 18 feet.

This information is all given to the best of my ability as I am not a mining engineer.

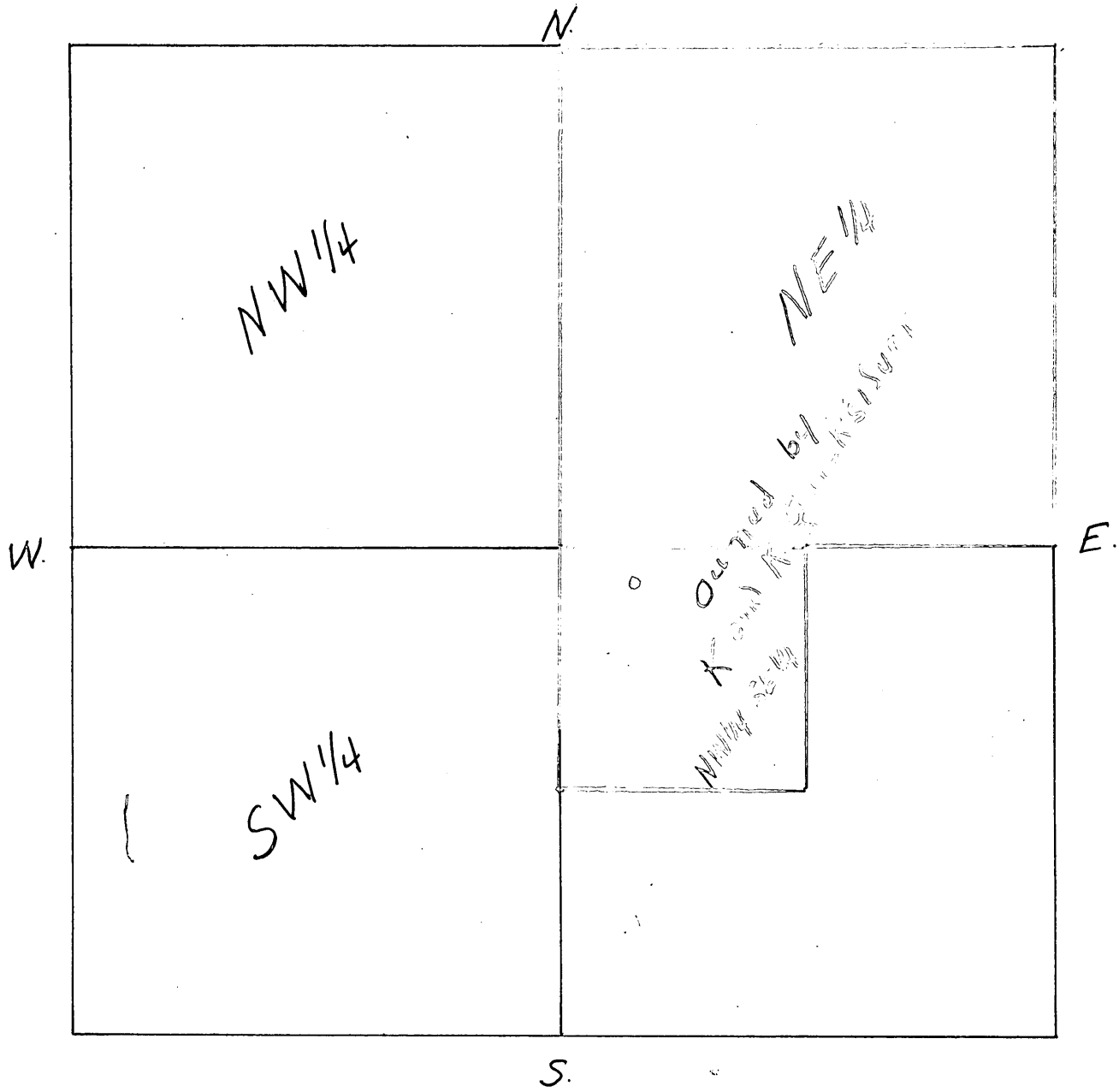
Yours very truly,

Charles Kassabaum

Charles Kassabaum
Box 204
Winnemucca, Nevada

Township 37 Range
M.D.B.&M.

Section 5



Scale 1" = 880 feet

Township *Range* *Meridian*

	31	32	33	34	35	36	
1	6	5	4	3	2	1	6
12	7	8	9	10	11	12	7
13	18	17	16	15	14	13	18
24	19	20	21	22	23	24	19
25	30	29	28	27	26	25	30
36	31	32	33	34	35	36	31
	6	5	4	3	2	1	

True Meridian

Scale—One Inch=1 Mile (80 Chains)

Remarks:

700 FILE COPY
SURNAME:

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

Mr. Charles Kassabaum
108 Melarkey Street
Winnemucca, Nevada

JAN 30 1953

Re: Docket No. DMEA-2817 (Mercury)
K & K Quicksilver Mine
Humboldt County, Nevada

Dear Mr. Kassabuam:

We wish to refer you to the captioned application now being processed by this office. In order for us to continue with this processing we will require more detailed information as follows:

1. Your application (Form MF-103) shows the location of the proposed project in the "N. W. 1/4 of the S. E. 1/4 of N. W. 1/4" of Section 5, Township 37 North, Range 40 East, M.D.M. However, the area plat submitted with the application shows the location to include all of the N. E. 1/4 and the N. W. 1/4 of S. E. 1/4 of Section 5, and containing some 197.43 acres. Obviously, the two location descriptions are not in accord.

2. The rough sketch map shows a 25-ft. shaft and an 18-ft. drift in the N. W. 1/4 of the S. E. 1/4 and a short working (shaft or drift ?) in the S. W. 1/4 of the N. E. 1/4 of Section 5. Presumably these workings are presently available for inspection. However, the locations of the proposed shaft, and the drifting and crosscutting are not shown in the application, nor is the proposed footage of such work given. These should be shown on a sketch map drawn approximately to scale.

3. The application includes several assay reports of samples evidently procured on subject property. Kindly show on the requested sketch map where the samples were taken and across what widths they were cut.

4. Under 7(b) you have answered the question "How do you propose to furnish your share of the costs?" by indicating that your share, or 25%, is to be supplied by equipment you now own. We wish to draw to your attention that equipment furnished by the Operator is figured on a depreciation basis of 1/60th per month of the present value of said equipment, or, in this case, dividing $7,570.25 by 60,

you would be entitled to $126.30 per month. In other words, that is the amount which would be credited to you for each month of the operation. Therefore, your share of the estimated cost which is stated at $16,037.25, would be $4,521.31, against which you would receive a credit of some $126.30 for each month of the project.

5. It is assumed that the $14.00 per hour rental on the bulldozer includes the operator, supplies and repairs. Kindly verify this point.

6. While the costs per day for shaft sinking and for drifting and crosscutting are shown, you should state the number of days you will require to do each phase of the proposed work.

7. Kindly note that in preparing the above information it should be submitted in quadruplicate (4 copies) in accordance with paragraph 2. General of Form MF-103 (Revised April 15, 1952).

We trust you will favor us with a prompt reply in order that your application may receive our early consideration.

Sincerely yours,

SIGNED

Ernest W. Ellis, Chief
Rare and Misc. Metals Division

EWEllis/gla 1-30-53
cc to: Adm. Reading File
Docket
Messrs. A. R. Kinkel, Jr. Rm. 4234 GSA
H. H. Meyer, Rm. 3623
Ellis
DMEA FT, Region III (2)

P.H.
1-30-53

1/21/53 gla

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

January 19, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 21 1953

Memorandum

To: E. W. Ellis

From: Helena M. Meyer

Subject: DMEA Docket 2817, Charles Kassabaum, Exploration loan, amount not given.

The applicant has given virtually no information and it is impossible to make any recommendation unless supplementary data are obtained.

Helena M. Meyer

Helena M. Meyer

Copy to: Minerals Division
Base Metals Branch
H. M. Meyer
F I L E S

12/29/52 gla

IN REPLY REFER TO:

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

December 24, 1952

Memorandum

Re: Docket DMEA-~~2871~~ 2817
Charles Kassebaum
Kand K. Quicksilver Mine
Humboldt County, Nevada
Total Cost: $18,087.25
Mercury

To: Mr. E. Wm. Ellis

From: Erwin J. Lyons, USGS

Subject: Recommendation for request for further information.

The subject docket has been reviewed and has been found to contain insufficient information. It is recommended that the applicant be requested to furnish more complete and specific data concerning the geology and nature of the deposit, locations, widths, and types of assayed samples, past production and development if any, and a map showing location and type of exploration to be done.

Erwin J. Lyons

Erwin J. Lyons
Geologist

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

December 24, 1952

Memorandum

To: Mr. E. Wm. Ellis

From: Erwin J. Lyons, USGS

Subject: Recommendation for request for further information.

Re: Docket DMEA-2871
Charles Kassabaum
Kand K. Quicksilver Mine
Humboldt County, Nevada
Total Cost: $18,087.25
Mercury

The subject docket has been reviewed and has been found to contain insufficient information. It is recommended that the applicant be requested to furnish more complete and specific data concerning the geology and nature of the deposit, locations, widths, and types of assayed samples, past production, development if any, and a map showing location and type of exploration to be done.

Erwin J. Lyons
Geologist

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 22 1952

(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

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

Not to be filled in by applicant

Docket No. DMEA-2811
Metal or Mineral
Date Received 12/22/52
Estimated Cost
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: Charles Kassabaum
100 Melarkey St.
Winnemucca, Nevada

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

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

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

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

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract N.W.1/4 of S.E.1/4 of N.W 1/4 of Section 5 Township 37, North Range 40 Meridian

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

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Owner
Patented containing 197.43 acres

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

(*e*) If you own the land, describe any liens or encumbrances on it None

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice.

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

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

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

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

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

5. *The exploration project.*—(*a*) [redacted]te the mineral or minerals for which you wi[redacted] explore Quicksilver

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

(*c*) The work will start within 30 days and be completed within 6 months from the date of an exploration project contract.

(*d*) State the operating experience and background of the applicant with relation to the ability to carry out such exploration project, and also that of the person or persons who will supervise the operations. 25 years operating for self

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

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

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

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

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

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

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

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

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

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

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

(*b*) How do you propose to furnish your share of the costs?

☐ Money ☒ Use of equipment owned by you ☐ Other

Explain in detail on acompanying paper.

CERTIFICATION

The undersigned, whether as an individual, corporate officer, partner, or otherwise, both in his own behalf and acting for the applicant, certifies that the information set forth in this form and accompanying papers is correct and complete, to the best of his knowledge and belief.

Dated Dec 16, 1952

Charles Kassabaum
(Applicant)

By Box 204
Wadsworth
Nevada

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

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 22 1952

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

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

Not to be filled in by applicant

Docket No. DMEA-2817
Metal or Mineral
Date Received 12/22/52
Estimated Cost
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: Charles Kassabaum
108 Melarkey St.
Winnemucca, Nevada

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

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

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

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

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract N. W. 1/4 of S.E 1/4 of N. W 1/4 of Section 5 Township 37. North Range of 40 Meridian

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

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Owner Patented containing 197.43 acres

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

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

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

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

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

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

(*c*) The work will start within 30 days and be completed within 6 months from the date of an exploration project contract.

(*d*) State the operating experience and background of the applicant with relation to the ability to carry out such exploration project, and also that of the person or persons who will supervise the operations. 25 Years operating for self

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

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

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

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

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

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

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

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

(*b*) How do you propose to furnish your share of the costs?

☐ Money ☐ Use of equipment owned by you ☐ Other

Explain in detail on acompanying paper.

CERTIFICATION

The undersigned, whether as an individual, corporate officer, partner, or otherwise, both in his own behalf and acting for the applicant, certifies that the information set forth in this form and accompanying papers is correct and complete, to the best of his knowledge and belief.

Dated Dec 16, 1952

Charles Kassabaum
(Applicant)

By Box 204
Wanamucca
Nevada

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

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

December 22, 1952

Mr. Charles Kassabaum
108 Melarkey Street
Winnemucca, Nevada

Subject: DMEA-2817
Re: Exploration Assistance
K & K Quicksilver Mine

My dear Mr. Kassabaum:

The receipt of your application dated December 16, 1952 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-2817 and referred to the Rare and Miscellaneous Metals Division.

Kindly refer to DMEA-2817 in any future correspondence relating to your application.

Sincerely yours,

ROBERT E. ADAMS

Robert E. Adams, Chief
Operation's Control and
Statistics Division

25451

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 22 1952

Winnemucca, Nevada
December 16, 1952

United States Department of The Interior
Defense Minerals Exploration Administration
Washington 25, D. C.

Gentlemen:

I am enclosing the application forms for the development loan and trust they are made out correctly.

Yours very truly,

Charles Kassabaum

Charles Kassabaum
Box 204
Winnemucca, Nevada

COST OF EXPLORATION

1. Construction of Road 1/2 Mile

80 hrs. @ $14.00 per hr. Rental of Bulldozer	$1,120.00
Supervision, construction of road	
10 days @ $20.00 per day	200.00
	$1,320.00

2. Sinking Incline Shaft

Labor @ $2.00 per hr. for 2 men per day	32.00
Overtime per shift per 2 men	16.00
1-Hoist man @ $1.75 per hr.	14.00
Overtime for one shift	7.00
Insurance & Social Security Taxes per day	8.20
Powder, caps & fuses per day	10.00
Cost per set of timber per day	29.30
Compressor steel & bits & fuel per day	16.50
Cost of assaying per day	8.00
Supervising @ $20.00 per day	20.00
	161.00

Cost per day per foot $53.66 Total per day $161.00

3. Drifting on vein and crosscut

Cost per day for 6 days per week for 350 ft.

2 Miners @ $2.00 per hr.	32.00
Overtime per shift for 2 men	16.00
1 Hoist man @ $1.75 per hr.	14.00
Overtime for one man	7.00
Powder, cap & fuse per day	7.50
Timber per shift	7.30
Compressor steel & fuel	16.50
Accounting per day	10.00
Supervising @ 600 per month or $20.00 per day	20.00
	130.30

Cost per day per foot $32.575 Total per day $130.30

The owner will furnish all equipment as follows:

1-300 ft. compressor	3,500.00
Jack Hammer & Steel	475.75
Air Hose & Water Hose	350.00
2 Buckets	175.00
Mine rail & timber	27.50
Air & Water line	550.00
Pressure Tanks	50.00
Chevrolet Pickup 1951	1,250.00
1-Tugger	750.00
Tugger Cable	200.00
Tools	250.00
	$7,578.25

Cost per construction of road	$1,320.00
Cost for sinking 100 feet incline shaft	5,366.00
Cost for drifting on vein and crosscut	11,401.25
Total Cost	18,087.25

The foregoing costs have been estimated on a daily basis.

FORM A-8

REPORT OF ASSAY

ABBOT A. HANKS, INC.

ASSAYERS, CHEMISTS, ENGINEERS
624 SACRAMENTO STREET
SAN FRANCISCO.

19

October 22, 1952

DEPOSITED BY Joe Stokes
Route 1, 2562 Glen Canyon Road
Santa Cruz, California

SAMPLE OF ORE

Labty. No.	Mark	GOLD, per ton of 2,000 lbs.		SILVER, per ton of 2,000 lbs.		Percentages
		Troy Ounces	Value @ $35.00 oz.	Troy Ounces	Value @ $	
48773	#3					Mercury 0.65 %

13.0 # per ton

ABBOT A. HANKS, INC.

Martin P. Quist

bob

J. BENJ. PARKER

JOHN H. UHALDE

NEVADA MINERAL LABORATORIES

336 MORRILL P. O. BOX 387 PHONE RENO 21001
RENO, NEVADA

ASSAY CERTIFICATE

M. Charles Kassalbaum 12-3-52

WE HAVE ASSAYED YOUR ..... SAMPLES AND FIND ..... CONTAINS: (PER TON OF 2000 LBS.)

NO.	MARK	GOLD Ozs. per Ton	VALUE GOLD	SILVER Ozs. per Ton	LEAD Per Cent Wet	COPPER Per Cent	MERCURY Lbs. Per Ton	ZINC Per Cent	WO_3 Per Cent	LIME CaO	Per Cent
1							9.0		24.75		
2							10.3		27.58		
3							7.2		19.80		

Remarks:

Charges: $ Paid

J. Benj. Parker

C. C. CRISMON
PRESIDENT

F[redacted] CRISMON
PRESIDENT

ORRIN [redacted]ER
SECRETARY

R. R. CASTO
TREASURER

PHONE 3-7417

CRISMON & NICHOLS

229-231 SO. WEST TEMPLE ST.

P. O. BOX 1708

CERTIFICATE OF ASSAY

SALT LAKE CITY 10, UTAH June 18, 1951

Simplot Fertilizer Co. - Attn. Mr. Chas. A. Lee

WE HAVE ASSAYED YOUR four SAMPLES AND FIND them TO CONTAIN AS FOLLOWS:

DESCRIPTION	NO.	Per-cent Mercury	lbs per Ton	WT	SIZE		
#3 grab	1	0.42	8.4#	1160 grams	+ 1/2"	2760 grams	
	2	0.98	19.6#	1600 grams	- 1/2"		
#4 grab	3	0.31	6.2#	1595 grams	+ 1/4"	2865 grams	
	4	0.93	18.6#	1270 grams	- 1/4"		

REMARKS:

CHARGES $ 8.00

CRISMON & NICHOLS

BY [signature]

C. C. CRISMON
PRESIDENT

[redacted] CRISMON
[redacted]-PRESIDENT

ORRIN [redacted]HER
SECRETARY

R. R. CASTO
TREASURER

PHONE 3-7417

CRISMON & NICHOLS

229-231 SO. WEST TEMPLE ST.

P. O. BOX 1708

CERTIFICATE OF ASSAY

SALT LAKE CITY 10, UTAH June 7, 1951

Simplot Fertilizer Co.- Attn. Charles A. Lee

WE HAVE ASSAYED YOUR three SAMPLES AND FIND them TO CONTAIN AS FOLLOWS:

DESCRIPTION	NO.	Weight in Grams	Per-cent Mercury			
Heads, ~~Minus~~ ~~½ inch~~		1205.12	0.76			
#1 Coarse ~~Minus~~ ½ Inch Minus		932.06	1.46	2662.46 grams		
#1 Fine ~~Minus~~ ½ Inch Plus		1730.40	0.66			
		2662.46	2.12			

REMARKS:

CHARGES $ 6.00

CRISMON & NICHOLS

BY [signature]

C. C. CRISMON
PRESIDENT

P. M[illegible]SMON
VICE[illegible]SIDENT

[illegible]N FISHER
SECRETARY

R. R. CASTO
TREASURER

PHONE 3-7417

CRISMON & NICHOLS

229-231 SO. WEST TEMPLE ST.

P. O. BOX 1708

CERTIFICATE OF ASSAY

SALT LAKE CITY 12, UTAH May 15, 1951

Charles Kassabaum

WE HAVE ASSAYED YOUR one SAMPLES AND FIND it TO CONTAIN AS FOLLOWS:

DESCRIPTION	NO.	Per-cent Mercury				
Dump Screenings		0.97				

REMARKS:

CHARGES $ 2.00

CRISMON & NICHOLS

BY C. C. Crismon

J. BENJ. PARKER

JOHN H. UHALDE

NEVADA MINERAL LABORATORIES

336 MORRILL P. O. BOX 387 PHONE RENO 21001

RENO, NEVADA

ASSAY CERTIFICATE

M. Charles Kasselbaum 9-24-52

WE HAVE ASSAYED YOUR ..... SAMPLES AND FIND ..... CONTAINS: (PER TON OF 2000 LBS.)

NO.	MARK	GOLD Ozs. per Ton	VALUE GOLD	SILVER Ozs. per Ton	LEAD Per Cent Wet	COPPER Per Cent	MERCURY Lbs. Per Ton	ZINC Per Cent	WO_3 Per Cent	LIME CaO	Per Cent
	Medium						12				
	-½ inch						15				
	Coarse						trace				
	~~Finemuck~~	X	X X	X	X	X	~~2.0~~				

Remarks:

Charges: $ 8.00 large samples 2.00 $10.00

J. Benj. Parker

K. & K. Quicksilver Mines. (Mercury) Humboldt County
Docket No. MER - 2817

Reason for approval (Morphy)
References:

Bailey, E.H. and Phoenix, D.A.
"Quicksilver Deposits in Nevada."
Univ. of Nevada Bull. 41
V. 38, No. 5, Dec 1944

same mine
Red Devil Mine -
Sec. 9
T. 37N - R. 40E.

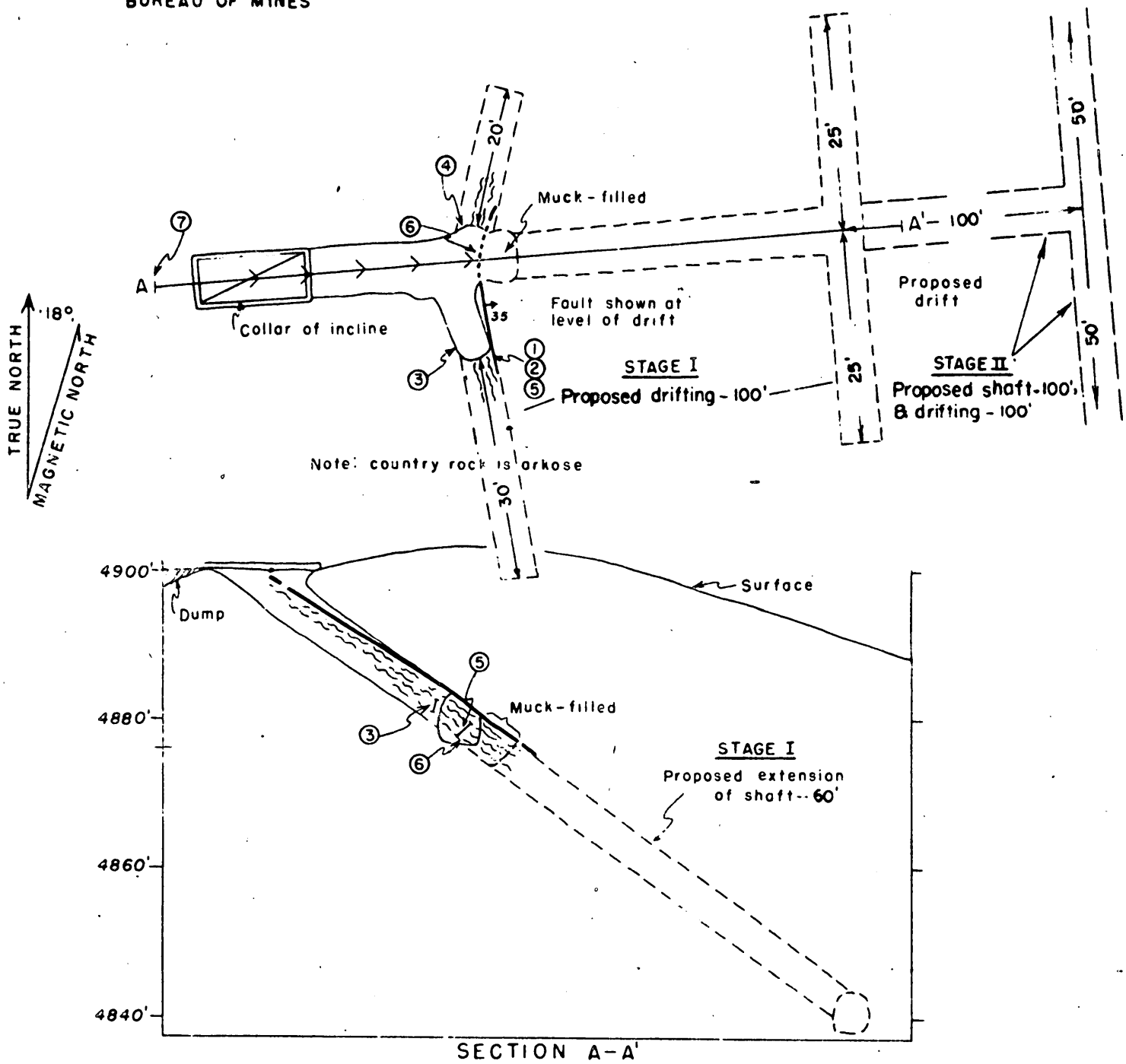
a) Bull. states 14 mines in area where country rock is composed of interbedded sediments have had an average production of 1200 flasks of Hg. (This structure has proven to be the best producer in the state)

b) Prospect shaft and short drift samples indicate commercial ore of percent on water process.

c) If not commercially capable now, shaft could be reopened at small cost in case Hg returned to critical list.

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY &
BUREAU OF MINES

DMEA 2817
(MERCURY)



EXPLANATION

35
Fault, showing dip

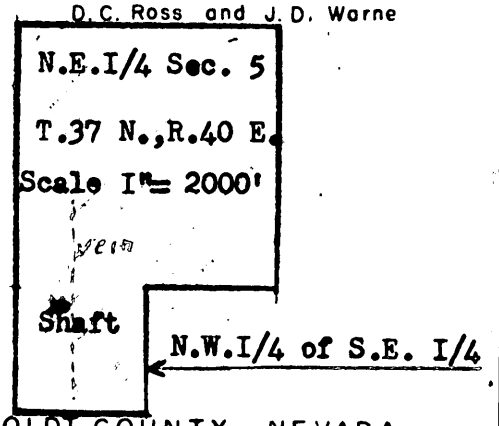
②
Sample locality

Inclined workings
(Chevrons point down at 5' vertical intervals)

Sheared arkose

20 0 20 FEET

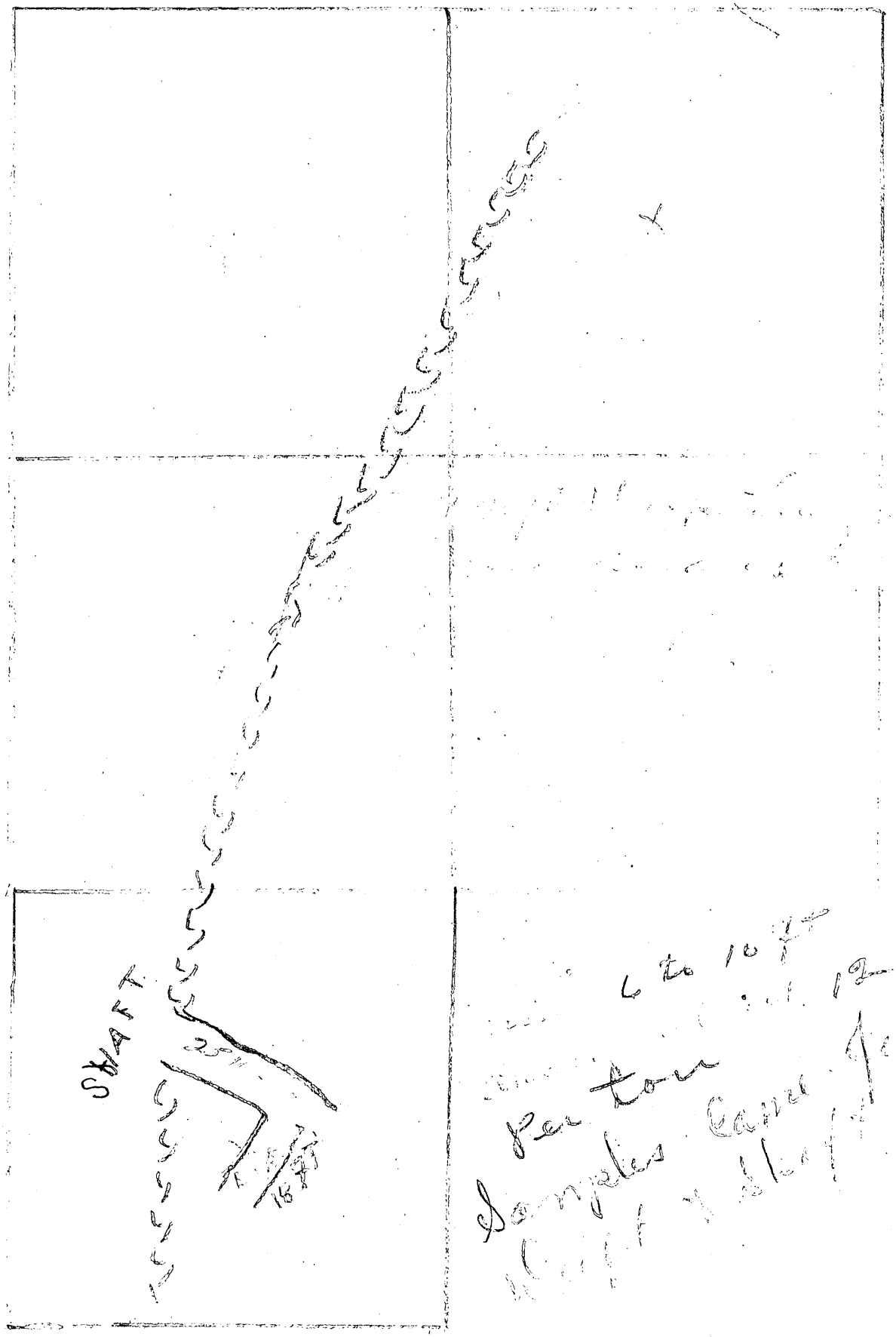
Mapped by E. H. Pampeyan, D. C. Ross and J. D. Warne



MAP AND SECTION OF THE K&K QUICKSILVER MINE, HUMBOLDT COUNTY, NEVADA

Datum is approximately sea level

FIGURE 2


SHAFT
25'
18'
6 to 10
Sectour
Angeles Cave

Township 37 Range 40 Meridian _____

N

W

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

E

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

OFFICIAL BUSINESS

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

KNOXVILLE
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1952
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~~FRANK E. JOHNSON, CHAIRMAN~~
~~OPERATING COMMITTEE - D. M. E. A.~~
~~DEPARTMENT OF THE INTERIOR~~
~~WASHINGTON 25, D. C.~~

Long Springs Sec'd
12/22/52