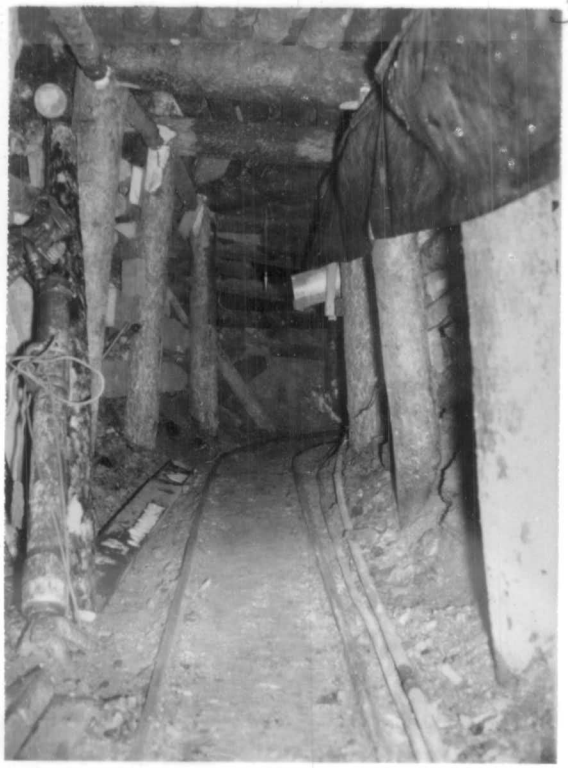
Looking east along site of mining operations on the Nordale group.

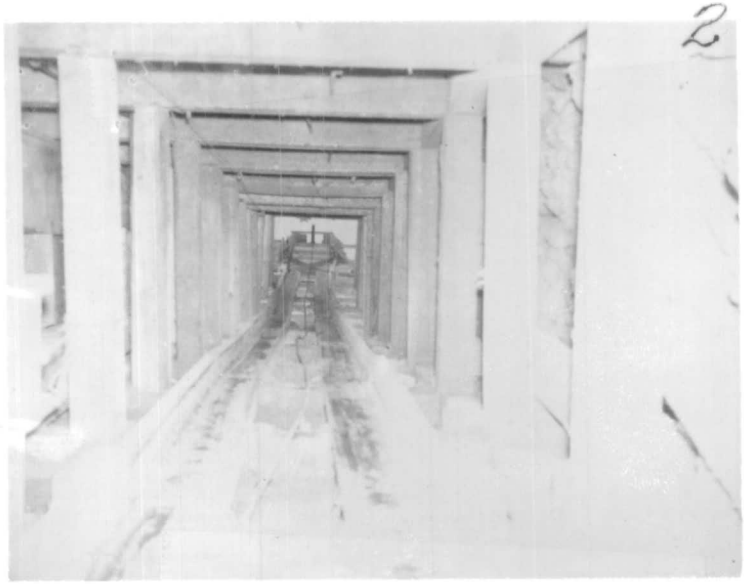
Looking west along site of mining operations on the Nordale group.

Open pit on the Nordale group.
View looking west from the
head of Wolf Creek.

INTERNATIONAL
TD-20

T-340 tractor with blade and backhoe.


3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MME Form 9
Rev. Mar. 59

UNITED STATES
DEPARTMENT OF THE INTERIOR
Office of Minerals Exploration

OFFICIAL DOCKET FILE

Contract No. 14-23-2173 Docket No. MME-6304

Application
- [ ] Denied
- [ ] Withdrawn

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

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

Folder No. 1:

Left Side

- [x] Royalty Audits January 1969
- [x] Certification of Discovery 4-28-66
- [ ] Closing Letter
- [x] Cost Audits March 1966
- [x] Termination ~~Notice or~~ Agreement 4-28-66 eff. 10-31-65
- [ ] Recision Notice
- [ ] Assignment of Contract
- [x] Contract Amendments
- [x] Contract with all exhibits and annexes 8/29/63
- [ ] Owner's Consent to Lien and Subordination Agreement
- [x] Application and Attachments

Right Side

- [ ] Project Summary (final)
- [ ] Work Completed Analysis (final)
- All other material filed in chronological order including the following reports if checked:
- [ ] Field Team Semiannual Report for Certified Project
- [x] Final Field Team Report (Tab) 7/25/69
- [x] Operator's Final Report (Tab)
- [x] Interim Field Team Reports
- [x] Operator's monthly reports and all attachments
- [x] On-site Exam. Report (Tab)
- [x] Settlement Sheets
- [ ] Drill Logs

Additional Folders:

Left Side

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

Right Side

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

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

Folders No._____: Settlement Sheets

Folders No._____: Drill Logs

Folders No._____: Royalty Material

52615

I-C-DC-OME-13-69

NMM
90

UNITED STATES
DEPARTMENT OF THE INTERIOR

Office of Survey and Review

Audit Operations

OFFICIAL COPY
O. M. E.
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FEB 28 1969

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Report of Royalty Review Contract 2173
Docket No. OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Fairbanks District, Alaska

Washington, D.C.
January 1969

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF THE SECRETARY
OFFICE OF SURVEY AND REVIEW
AUDIT OPERATIONS, REGION I
1325 K STREET, N. W., ROOM 614
WASHINGTON, D. C. 20005

FEB 12 1969

Memorandum

To: Director, Geological Survey

From: Regional Director

Subject: Review of Contract 2173
Docket No. OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Fairbanks District, Alaska

As requested by the Chief, Office of Minerals Exploration, we made a royalty review of contract No. 2173. The results of our review are shown in the attached report.

C. D. Bar

Attachment

We examined the cash receipt records in the Branch of Budget and Finance, Administrative Division, Geological Survey, and reviewed the contract file of the Office of Minerals Exploration (OME), pertaining to royalty due to the Government on the value of production from the property included in the minerals exploration contract No. 2173. The review was made at Washington, D.C., during January 1969.

The Government's participation in the cost of the exploration amounted to $23,939, subject to repayment plus 6¼ percent simple interest, through royalty on the value of any production from the property between August 29, 1963, and August 29, 1974.

A cost review performed in March 1966, established the Government participation at $23,939, and during the period of exploratory operations, the net value of ore produced was $170,359, and royalty payments of $8,520, were received.

The present royalty review covered ore shipments from October 1965, through October 1968, the last reported sales.

Period	Sale Proceeds	Royalty Received
Prior Cost Review	$170,359	$ 8,520
Present Royalty Review	40,104	2,005
Totals	$210,463	$10,525

Royalty received is $2.50 in excess of the amount due the Government as indicated in prior cost review.

C. D. Bar

Regional Director

Government's Copy

EXPLORATION CONTRACT
KEYSTONE MINES, INC.
OME-6304

TERMINATION AGREEMENT

It is agreed this 28th day of April, 1966, between the United States of America, acting through the Department of the Interior, U. S. Geological Survey, hereafter called the "Government," and Keystone Mines, Inc., hereafter called the "Operator," parties to that certain Exploration Contract 2173 (OME-6304), dated August 29, 1963, as amended, hereinafter called the "Contract," that:

1. Effective October 31, 1965, the Contract and all obligations of the parties thereunder, except as otherwise herein expressly provided, shall be and are hereby terminated.

2. The Government will contribute only to the allowable costs incurred prior to said effective date.

3. The Operator shall promptly perform all winding-up and settlement actions provided for in the Contract, including furnishing the Government three copies of a final report (in addition to the final monthly report) which shall include a geological and engineering evaluation of the results of the work performed under the Contract with an estimate of the ore reserves resulting from such work, complete assay data, adequate geological and engineering maps or sketches, and a summary of the work performed and the related costs thereof.

4. All rights of the Government respecting percentage royalty and liens to secure payment thereof, reports (including preservation of the Operator's records), accounts, audits, and the right to recover any overpayment are hereby preserved.

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

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

THE UNITED STATES OF AMERICA

By Frank E. Johnson
Chief, Office of Minerals Exploration
U. S. Geological Survey

KEYSTONE MINES, INC.

By Arnold M. Nordale

Title President

Long
Appt. Sec. Off.
Johnson
Sikerno
Kingsrud
Lutts
Kuzen

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
4/20	Johnson	110
"	Shirkemo	120
		220
	Long	240
4/26	Kilgrand	130
4/27	Swift	
4/27	Hempin	110
4/27	cac	220

120M

APR 28 1966

AIRMAIL

CERTIFICATION OF POSSIBLE PRODUCTION
UNDER AN EXPLORATION CONTRACT

Keystone Mines, Inc.
P. O. Box 630
Fairbanks, Alaska

Re: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2173

Gentlemen:

Pursuant to Article 6 of the subject contract, as amended, the Government hereby certifies that mineral or metal production may be possible as a result of the exploration work.

Therefore, royalties shall be paid to the Government as provided in the contract on all production from the land described in the contract from August 29, 1963, to August 29, 1974, or until the amount contributed by the Government is fully repaid with interest at the rate of 6% percent per annum, whichever occurs first. The payment of royalties is secured by a lien upon the land and upon any production therefrom.

As has been done in the past, royalty payments on any production computed as provided in the contract should be made in favor of the U. S. Geological Survey and should be mailed or delivered to the Field Officer, Office of Minerals Exploration, U. S. Geological Survey, Region I, South 137 Howard Street, Spokane, Washington 99204. As heretofore, each payment should be accompanied by two copies of settlement sheets or other suitable sales evidence showing the name of the purchaser, the quantity and grade of the production sold, the price per unit, and the gross proceeds and allowable deductions therefrom.

The Field Officer should be promptly notified upon the resumption of operations, of any production, and cessation thereof. Production unsold or unused six months after extraction from the ground should be reported promptly to the Field Officer.

23263

Attention is specifically invited to the provisions of Article 2(c) of the contract referring to the preservation of the Government's royalty rights. Two true copies of any instrument transferring, surrendering, or encumbering any of said rights shall be furnished to the Field Officer.

Dated this 28th day of April, 1966.

THE UNITED STATES OF AMERICA

FRANK E. JOHNSON

Frank E. Johnson
Chief, Office of Minerals Exploration
U. S. Geological Survey

cc: The Algo Company, Box 1537, Fairbanks, Alaska
Nordale Corporation, 517 - 2nd Avenue, Fairbanks, Alaska
Eugene F. Schreiber, 224 - 3rd Avenue, Fairbanks, Alaska

cc: Director's Reading File
Division File
Economic Geology File
Branch of Budget & Finance
OME Docket
OME Region I
OME Reading File
Mr. Johnson
130 (2)
Mr. Long, Rm. 6554

FEJohnson/gla 4-20-66

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
4/20	Johnson	110
"	Kirkham	120
		220
	Long	140
4/26	Kilgard	130
4/27	Lewis	
4/27	Keyes	110
		220

'20M

AIRMAIL

Mr. Eugene F. Schreiber
224 - 3rd Avenue
Fairbanks, Alaska

Re: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2173

Dear Mr. Schreiber:

Enclosed is a copy of a self-explanatory letter of today to the Operator under the subject contract. This relates to the Lien and Subordination Agreements signed by you on August 28, 1963, under the Office of Minerals Exploration program.

The Government's prior lien on the land and upon any production therefrom will continue in existence for the length of time mentioned in the enclosed copy of the letter to the Operator. You are obligated during that period to commit no act and to assert no claim in conflict with the Government's rights under the agreement signed by you, and to give advance notice of the Government's rights to any transferee or lessee of any part of your interest in the land or the production therefrom.

Sincerely yours,

FRANK E. JOHNSON

Frank E. Johnson
Chief, Office of
Minerals Exploration

Enclosure

cc: Director's Reading File
Division File
Economic Geology File
OME File
OME Region I
OME Reading File
130 (2)

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23263

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
4/20	Johnson	110
"	Kirkemo	120
		220
	Long	140
	Kilgard	130
4/27	Zuck	
4/27	Keys	110
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AIRMAIL

4/26

Nordale Corporation
517 - 2nd Avenue
Fairbanks, Alaska

INTERIOR DEPT.
APR 21 1966
SOLICITOR

Re: OME-6304 (Cold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2173

Gentlemen:

Enclosed is a copy of a self-explanatory letter of today to the Operator under the subject contract. This relates to the Lien and Subordination Agreements executed on August 28, 1963, by Mr. Arnold M. Nordale, president of your company, under the Office of Minerals Exploration program.

The Government's prior lien on the land and upon any production therefrom will continue in existence for the length of time mentioned in the enclosed copy of the letter to the Operator. You are obligated during that period to commit no act and to assert no claim in conflict with the Government's rights under the agreement signed by Mr. Nordale, and to give advance notice of the Government's rights to any transferee or lessee of any part of your interest in the land or the production therefrom.

Sincerely yours,

FRANK E. JOHNSON (gla)

Frank E. Johnson
Chief, Office of
Minerals Exploration

Enclosure

cc: Director's Reading File
Division File
Economic Geology File
OME File
OME Region I
OME Reading File
130 (2)

GLAult/gla 4-20-66

23263

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
4/20	Johnson	110
"	Kirkemo	120
		220
	Long	140
4/26	Kilbourne	~~130~~
4/27	Jewett	
4/27	Keyes	110
		220

20M

AIRMAIL

The Algo Company
Box 1537
Fairbanks, Alaska

INTERIOR DEPT.
APR 21 1966
SOLICITOR

Re: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2173

Gentlemen:

Enclosed is a copy of a self-explanatory letter of today to the Operator under the subject contract. This relates to the Lien and Subordination Agreements executed on August 28, 1963, by Mr. William L. Basham, president of your company, under the Office of Minerals Exploration program.

The Government's prior lien on the land and upon any production therefrom will continue in existence for the length of time mentioned in the enclosed copy of the letter to the Operator. You are obligated during that period to commit no act and to assert no claim in conflict with the Government's rights under the agreement signed by Mr. Basham, and to give advance notice of the Government's rights to any transferee or lessee of any part of your interest in the land or the production therefrom.

Sincerely yours,

FRANK E. JOHNSON (gla)

Frank E. Johnson
Chief, Office of
Minerals Exploration

Enclosure

cc: Director's Reading File
Division File
Economic Geology File
OME File
OME Region I
OME Reading File
130 (2)

GLAult/gla 4-20-66

OME Docket

United States
Department of the Interior

GEOLOGICAL SURVEY

OFFICE OF THE CHIEF AUDITOR

GEOLOGIC DIVISION

OFFICE OF MINERALS EXPLORATION

WASHINGTON, D.C.

Report of Review - Contract 2173
Docket No. OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Fairbanks District, Alaska

Report Issued: March 1966

United States
Department of the Interior

GEOLOGICAL SURVEY

OFFICE OF THE CHIEF AUDITOR

GEOLOGIC DIVISION

OFFICE OF MINERALS EXPLORATION

WASHINGTON, D.C.

Report of Review - Contract 2173
Docket No. OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Fairbanks District, Alaska

Report Issued: March 1966

Auditor-in-Charge: William H. Wilkerson, Jr.

Report Approved: William T. McClelland, Chief Auditor

Audit Performed During Period: March 2-3, 1966

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON, D.C. 20242

OFFICE OF THE DIRECTOR

March 17, 1966

Memorandum

To: Director

From: Chief Auditor

Subject: Internal Audit of Contract 2173
Docket No. OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Fairbanks District, Alaska

We have made a cost and repayment review of Contract 2173, examining the contract and accounting records and files of the Office of Minerals Exploration and the Branch of Budget and Finance. We examined the Contract Operator's reimbursement vouchers from November 1963 to October 1965. Also, we reviewed the three repayments received by OME from the Operator based on his sales of gold and silver.

Our examination of the October 1965 reimbursement voucher was a preaudit before payment had been made and before OME received the final Operator's report. The reimbursements claimed by the Operator on this voucher and the previously paid vouchers were in compliance with the contract and proper for payment. At the time the mine operations closed-down the reimbursements claimed by the Operator totaled $23,938.75, and his repayments, based on mined ore, to January 1966 aggregated $8,520.45. We noted that the Operator had repaid $2.50 more than the contract provisions required.

Prior to receiving the October voucher, $200 due the Operator had been held in abeyance by OME pending receipt of the Operator's final report on the exploratory operations. We concur in this retention. Also, we believe that the unpaid October 1965 voucher may be paid in the amount of $110, and that the over-payment of $2.50 in royalties by the Operator may be refunded to him.

William T. McClelland

William T. McClelland

TABLE OF CONTENTS

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AUDIT FINDINGS	
Allowable Costs	3
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REPORT OF REVIEW - CONTRACT 2173
DOCKET NO. OME-6304 (GOLD-SILVER)
KEYSTONE MINES, INC.
FAIRBANKS DISTRICT, ALASKA

INTRODUCTION

On February 8, 1966, the Chief, Office of Minerals Exploration (OME), Geologic Division, requested a report of review of Contract 2173. The exploratory and mining operations under this contract were stopped on October 9, 1965, due to heavy ground conditions. Pumping of water was stopped on October 12, and the mine workings became completely filled with water. The Operator had been reimbursed for $23,628.75 of the exploration costs, $200 had been withheld pending receipt of the Operator's final report, and his October 1965 voucher for $110 of reimbursable costs was ready for preaudit before payment. Also, under this contract the Operator had made royalty repayments of $8,520.45 based on gold and silver deposits to the U.S. Assay Office in San Francisco. Accordingly, this contract audit was a cost and repayment review.

The audit was authorized by the Chief Auditor on March 2, 1966, under Audit Assignment No. 50. A review of the OME contract files and an examination of the Bureau's disbursement and repayment records in the Branch of Budget and Finance, Administrative Division, was made at Washington, D.C., on March 2 and 3, 1966. This was the first audit to have been made under Contract 2173.

The contract was entered into on August 29, 1963, with Keystone Mines, Inc., an Alaskan corporation. The purpose of the contract was to assist the Operator financially in his project to explore for gold- and silver-bearing ore bodies by means of sinking a shaft, crosscutting,

and drifting on a vein traversing Precambrian Birch Creek schist country rock on the Kawilita patented claim, Fairbanks Mining and Recording Precinct, Fourth District, Alaska. In summary, the contract provided: (a) that the Operator's exploratory operations be completed within 31 months, (b) that the Government pay 50 percent of the agreed costs as incurred in a sum not to exceed $35,095, and (c) that the Operator repay these costs plus simple interest at 6½ percent to the Government at a 5-percent royalty rate, based on ore mined or produced from the mining property over a period of 11 years from the date of the contract, should the Government certify that mineral or metal production was possible as a result of exploratory operations under this contract.

SCOPE OF THE AUDIT

Our examination of OME Contract 2173 with Keystone Mines, Inc. included: (a) a review of the official accounting records and contract files, (b) a detailed examination of the Operator's vouchers previously paid, and a preaudit examination of the Operator's reimbursement voucher for October 1965 and supporting documents, and (c) an analysis of the royalty repayment records and related ore purchasers settlement sheets to date. All of the claimed costs were compared to the amounts allowed by the contract, and a determination was made of reasonableness and propriety of these costs.

The principal objective of our examination was to ascertain whether or not the Contract Operator had complied with the provisions of the contract, and to determine the effectiveness of contract administration and supervision by OME as well as the degree of compliance with the laws, policy determinations, and administrative regulations and procedures governing the Geological Survey and its predecessor mineral exploration agencies. The report presents our findings and conclusions.

AUDIT FINDINGS

Allowable Costs

Under the provisions of this contract the Operator was to perform all of the supervisory and technical services required for the exploratory operations. The Government's participation was limited to certain exploration costs based on fixed unit and job costs. At the time the mine operations were closed down, the Operator had completed construction of a 123-foot mine shaft and hoist, accomplished 511½ feet of drifting and crosscutting including the necessary timbering, and other related activities. The allowable costs are listed below.

Fixed Unit Costs

123 feet of shaft, plus hoist, etc. @ $115/ft.		$14,145.00
17½ lineal feet of station @ $60/ft.		1,050.00
4 station sets @ $50 each		200.00
Loading pocket, completed job		350.00
511½ feet of drifting & crosscutting @ $55/ft.		28,132.50
400 feet of timbering in drifts & crosscutting @ $10/ft.		4,000.00
Total		$47,877.50
Government Contribution @ 50%		$23,938.75
Less: Previous payments to Operator	$23,628.75	
Amount retained pending receipt of Operator's final report	200.00	23,828.75
Amount Payable to Operator at this time		$110.00

The Operator submitted seven vouchers for reimbursement from November 1964 to October 1965, totaling $47,877.50 of fixed unit costs at so much per foot or unit of work. These claimed costs were properly supported and paid or are payable at this time.

Contract Repayments

During the period of the exploratory operations, 4,858.551 ounces of fine gold and 1,107.06 ounces of fine silver were mined and deposited in the United States Assay Office at San Francisco, California. The net value of these metals was $170,358.95, after deductions had been taken for the assay office's charges for melting, refining and handling services. Keystone Mines, Inc. had made royalty repayments of $8.520.45 for monies contributed by the Government to the exploratory operations. This amount is $2.50 greater than the 5% royalties required by the contract and may be added to the reimbursements due the Operator.

Government's Copy

EXPLORATION CONTRACT
KEYSTONE MINES, INC.
OME-6304

AMENDMENT NO. 7

It is agreed this 26th day of August, 1965, between the United States of America, acting through the Department of the Interior, U. S. Geological Survey, hereinafter called the "Government," and Keystone Mines, Inc., hereinafter called the "Operator," that Exploration Contract 2173 (OME-6304), dated August 29, 1963, as amended, is further amended effective August 10, 1965, as follows:

The time fixed in Item 2 of Amendment No. 4 for the completion of the work is extended from 24 to 31 months from the date of the contract or until March 29, 1966.

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

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By Francis E. Johnson
Chief, Office of Minerals Exploration, U. S. Geological Survey

Long
App'd. Col. Off.
F. Johnson

KEYSTONE MINES, INC.

By Arnold M. Nordale

Title President

RECEIVED
AUG 16 1965
OME
SPOKANE, WASHINGTON

Government's Copy

EXPLORATION CONTRACT
KEYSTONE MINES, INC.
OME-6304

AMENDMENT NO. 6

It is agreed this 27th day of July, 1965, between the United States of America, acting through the Department of the Interior, U. S. Geological Survey, hereinafter called the "Government," and Keystone Mines, Inc., hereinafter called the "Operator," that Exploration Contract 2173 (OME-6304), dated August 29, 1963, as amended, is further amended effective the date of the contract as follows:

In Exhibit A of the contract:

1. Under the heading Description of the Work, the last sentence in Item 2 of Amendment No. 3 is deleted and replaced as follows:

With prior Government approval, crosscuts may be driven into the footwall and/or hanging wall of the vein, but the aggregate length of such crosscuts shall not exceed 100 feet nor shall all of the drifting and/or crosscutting exceed an aggregate of 900 feet.

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

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By Frank E. Johnson
Chief, Office of Minerals Exploration
U. S. Geological Survey

KEYSTONE MINES, INC.

By Conrad M. Nordaas

Title President

Long
Appr. Sol. Off.
Selfridge
Johnson
Weeks for TAK
Pecora

Government's copy

EXPLORATION CONTRACT
KEYSTONE MINES, INC.
OME-6304

AMENDMENT NO. 5

It is agreed this 20th day of April, 1965, between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, hereinafter called the "Government," and Keystone Mines, Inc., hereinafter called the "Operator," that Exploration Contract 2173 (OME-6304), dated August 29, 1963, as amended, is further amended as follows:

The time fixed in Item 1. (a) of Amendment No. 4 for the end of the work suspension period is extended from May 1, 1965, to July 1, 1965.

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

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By George Turnick
Acting Director, Office of
Minerals Exploration

Long
Appd. Sol. Office
Murphy
Selfridge
Johnson

KEYSTONE MINES, INC.

By Arnold M. Nordale

Title President

Government's Copy

EXPLORATION CONTRACT
KEYSTONE MINES, INC.
OME-6304

AMENDMENT NO. 4

It is agreed this 29th day of January, 1965, between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, hereinafter referred to as the "Government," and Keystone Mines, Inc., hereinafter referred to as the "Operator," that Exploration Contract 2173 (OME-6304), dated August 29, 1963, as amended, is further amended as follows:

1. (a) Work under the contract shall be suspended during the period beginning January 11, 1965, and ending not later than May 1, 1965.

(b) No costs incurred by the Operator during the suspension shall be allowable for contribution by the Government.

(c) The Government will not contribute to any cost of rehabilitation or repair which in its opinion would not have occurred if there had been no suspension of the work.

(d) The Operator at its own cost and expense, without contribution by the Government, during the period of suspension shall preserve and protect the project work.

2. The time fixed by the contract for the completion of the work is extended from 18 months to 24 months, or until August 29, 1965.

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

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

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By George Turnbull
Acting Director, Office of Minerals Exploration

KEYSTONE MINES, INC.
By Conrad M. Nordhee
Title President

Long
App'd. Sol. Off.
Murphy
Savage
Mach.

Government's Copy

EXPLORATION CONTRACT
KEYSTONE MINES, INC.
OME-6304

AMENDMENT NO. 3

It is agreed this 15th day of December, 19 64, between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, hereinafter referred to as the "Government," and Keystone Mines, Inc., hereinafter referred to as the "Operator" that Exploration Contract 2173 (OME-6304), dated August 29, 1963, as amended, is further amended effective the date of the contract as follows:

In Exhibit A of the contract:

1. Under the heading General Provisions, the third paragraph is deleted and replaced as follows:

> The Government will not participate in the cost of work performed at locations which are within 100 feet of any land not subject to this contract, with the exception that work performed immediately east of the shaft may approach the south side line of the Kawalita claim but not pass beyond the vertical projection thereof.

2. Under the heading Description of the Work, the fifth paragraph as amended in Amendment No. 2 is deleted and replaced as follows:

> From the shaft station drive a crosscut in a southerly direction to intersect the vein, from where a drift shall be driven easterly along the vein. From this drift at a point not more than 50 feet from the shaft station crosscut, drive a "bypass" drift westerly in the hanging wall of the vein in such a manner that it may leave a 30-foot pillar and then will intersect the vein at a point approximately 90 feet west of the shaft station crosscut from which point drifting will be continued westerly on the vein. With prior Government approval, crosscuts may be driven into the footwall and/or hanging wall of the vein, but the aggregate length of such crosscuts shall not exceed 100 feet nor shall all of the drifting and/or crosscutting exceed an aggregate of 800 feet.

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

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By _____
Acting Director, Office of Minerals Exploration

KEYSTONE MINES, INC.

By Conrad M. Nordale

Title President

Long
Appr. Sol. Office
Murphy
Fosler
Selfridge
Johnson

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code

December 2, 1964

Memorandum

To: The File

From: F. M. Murphy, Mining Engineer
Division of Exploration Operations

Subject: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska
Contract 2173

Justification for Amendment No. 3

Under General Provisions, the contract provides that no work may be done closer than 100 feet to the outer boundary of the property.

The vein is sinuous along the strike and down dip and in places is offset by minor transverse faults. It is possible that the vein east of the shaft will be offset sufficiently ~~northward~~ south by these faults/so that it will be very close to the vertical projection of the outer boundary of the property. Exact data on faulting to the ~~west~~ east of the shaft are not known. This amendment allows the drifts east and west along the vein structure to be driven on trends as far ~~north~~ south as the boundary line. Since the vein outcrops in part well within the property, the Government's right to royalty is assured by applicable extralateral rights.

Under Description of the Work, the contract provides that 800 feet of drifting east and west along the vein structure from the shaft station may be performed.

The east drift was driven along the vein structure without any trouble. However, when drifting was started on the vein structure west of the shaft station, excessive caving started superimposing a heavy load on the station and shaft timber. This amendment allows the Operator to start the work on the vein to the west from a bypass crosscut to be driven in the hanging wall leaving a 30-foot pillar between it and the caved ground west of the shaft station.

23263

The Operator requested these amendments in a letter dated November 9, 1964, to MacLaren. In letters dated November 2 and 9, 1964, to Mr. J. A. Herdlick, Area Director, Bruce I. Thomas, who had visited the project area, recommended that the Operator's request be granted. In a memorandum dated November 20, 1964, to Washington, MacLaren also recommended the amendments be approved.

The writer concurs with these recommendations.

F. M. Murphy

F. M. Murphy

FMMurphy/mm
cc: Director's Reading File
Docket

Government's Copy

EXPLORATION CONTRACT
KEYSTONE MINES, INC.

OME-6304

AMENDMENT NO. 2

It is agreed this 27th day of April, 1964, between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, hereinafter referred to as the "Government," and Keystone Mines, Inc., hereinafter referred to as the "Operator" that Exploration Contract No. 2173 (OME-6304), dated August 29, 1963, as amended, is further amended effective the date of the contract as follows:

1. Amendment No. 1, dated January 29, 1964, is rescinded.

2. In Article 1(b) of the contract the figures $79,900.00 and $39,950.00 are replaced by the figures $70,190.00 and $35,095.00, respectively.

3. In Exhibit A

(a) Under the heading Description of the Work, the first two paragraphs are deleted and replaced as follows:

A timber headframe, hoist, cable, and skip meeting the regulations of the Alaska Department of Mines and Minerals shall be placed in operating service at the incline shaft site on the Kawilita claim. From the bottom of the shaft estimated to be 53 feet below the collar of the shaft, sink the shaft approximately 126 additional feet following as nearly as possible the general dip of the "Large Vein" shown on Fig. 1.

(b) The fifth paragraph is deleted and replaced as follows:

From the shaft station a crosscut shall be driven into the hanging wall to intersect the vein. From this crosscut drifts shall be driven in a general east and west direction along the vein structure. The drifting and crosscutting shall not exceed an aggregate of 800 feet. With prior Government approval crosscuts may be driven into the footwall and/or hanging wall of the vein structure. The aggregate length of such crosscuts shall not exceed 100 feet.

(c) Under the heading Estimated Cost of Project, all words and figures are deleted and replaced as follows:

Fixed Unit Costs

126 feet of shaft, plus hoist, etc. @ $115.00/ft.	$14,490.00
17½ lineal feet of station @ $60.00/ft.	1,050.00
4 station sets @ $50.00 each	200.00
Loading pocket 1/	350.00
900 feet of drifting and crosscutting @ $55.00/ft.	49,500.00
400 feet timbering in drifts and crosscuts @ $10.00/ft.	4,000.00
300 samples assayed for gold and silver @ $2.00/sample	600.00
Total Estimated Cost	$70,190.00
Government Participation @ 50%	$35,095.00

1/ The completed job is the unit of work.

This amendment reduces the original shaft footage and unit cost and increases the unit cost for drifting and crosscutting with a corresponding decrease in the estimated total cost of the contract and the aggregate amount which the Government may be required to contribute.

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By George Turnich

Acting Director, Office of Minerals Exploration

KEYSTONE MINES, INC.

By Conrad M. Nordale

Title President

Long
Appr. Sol. Offc.
Murphy
Sec. Wed
Talbutt
Selfridge
Johnson

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code

April 21, 1964

Memorandum

To: The File

From: F. M. Murphy, Mining Engineer
Division of Minerals

Subject: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska
Contract 2173

Justification for Amendment No. 2

In a letter dated April 10, 1964, to Mr. MacLaren, the Operator requested an amendment to allow the shaft station and drifting to be performed at the 150-foot level instead of the 200-foot level stipulated in the contract.

Mr. MacLaren in his memorandum of April 17, 1964, to Washington, recommended that the Operator's request be granted and submitted a cross section of the shaft and vein in relation to the south side line of the Kawilita claim.

The vein apparently is being offset into the hanging wall by a series of faults and according to MacLaren's sketch would be about 160 feet from the south side line of the Kawilita claim at the 150-foot level. If this series of faults continue offsetting the vein, it could possibly move it to a point inside the 100-foot limit to the exterior boundary of the claim at the 200-foot level.

In view of this, it appears that it would be to the Government's interest to drift along the vein at the 150 level. Therefore, the writer concurs with Mr. MacLaren in his recommendation.

This amendment will permit the work to be performed within the 100-foot limit stipulated by the contract. The Government will not participate in the cost of work closer than 100 feet to the side line of the claim; however, since Alaskan laws grant extralateral rights, any ore mined to the south of the south side line of the Kawilita claim will be subject to the Government's percentage royalty.

F. M. Murphy

cc: Director's Reading File
FMMurphy/mm

4368

Government's Copy

EXPLORATION CONTRACT
KEYSTONE MINES, INC.
OME-6304

AMENDMENT NO. 1

It is agreed this 29th day of January, 1964, between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, hereinafter referred to as the "Government" and Keystone Mines, Inc., hereinafter referred to as the "Operator" that Exploration Contract No. 2173 (OME-6304), dated August 29, 1963, is amended effective the date of the contract as follows:

1. In Article 1(b) of the contract the figures $79,900.00 and $39,950.00 are replaced by the figures $72,950.00 and $36,475.00, respectively.

2. In Exhibit A

(a) Under the heading Description of the Work, the first two paragraphs are deleted and replaced as follows:

"A timber headframe, hoist, cable, and skip meeting the regulations of the Alaska Department of Mines and Minerals shall be placed in operating service at the incline shaft site on the Kawilita claim. From the bottom of the shaft estimated to be 53 feet below the collar of the shaft, sink the shaft approximately 150 additional feet, following as nearly as possible the general dip of the 'Large Vein' shown on Fig. I."

(b) Under the heading Estimated Cost of Project, all words and figures are deleted and replaced as follows:

"Fixed Unit Costs

150 feet of shaft, plus hoist, etc. @ $115.00/ft.	$17,250.00
17½ lineal feet of station @ $60.00/ft.	1,050.00
4 stations sets @ $50.00 each	200.00

Loading pocket 1/	$ 350.00
900 feet of drifting and crosscutting @ $55.00/ft.	49,500.00
400 feet timbering in drifts and crosscuts @ $10.00/ft.	4,000.00
300 samples assayed for gold and silver @ $2.00/sample	600.00
Total Estimated Cost	$72,950.00
Government Participation @50%	$36,475.00

1/ The completed job is the unit of work."

This amendment reduces the original shaft footage and unit cost and increases the unit cost for drifting and crosscutting with a corresponding decrease in the estimated total cost of the contract and the aggregate amount which the Government may be required to contribute.

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By George Turnock
Acting Director, Office of
Minerals Exploration

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Appr. Sol. Off.
Murphy
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Selfridge
Johnson

KEYSTONE MINES, INC.

By Arnold M. Nordaas

Title President

MME Form 51
June 1963

RECEIVED
SEP 3 1963
U. S. G. S.
SPOKANE, WASH.

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

Government's Copy

EXPLORATION CONTRACT
(Short Form)

Docket No.	Commodity	Contract No.	County	State
OME-6304	Gold-Silver	14-23-090- 2173	Fairbanks District	Alaska

It is agreed AUG 29 1963 (Date), between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, hereinafter called the "Government," and

Keystone Mines, Inc., an Alaskan Corporation

whose mailing address is P.O. Box 630 Fairbanks, Alaska, hereinafter called the "Operator," as follows:

ARTICLE 1. Authority and scope.--(a) This contract, entered into under the authority of Public Law 701, 85th Cong., 2d sess. (72 Stat. 700; 30 U.S.C. § 641 - 646), consists of this form, the attached Annex I (land description), Exhibit A (work and costs), and the maps and documents listed. The work is a search for new or unexplored deposits of the commodity designated above. The Operator shall begin the work on or before October 1, 1963 (Date), and, subject to the provisions of Article 7 and Exhibit A, shall complete the work within 18 months from the date of the contract.

(b) The description of the work and the fixed cost for each unit of work to be performed (per foot of drilling, per foot of drifting, per hour of operations, etc.) are hereby agreed upon as specified in Exhibit A. The estimated total cost of the work is $ 79,900.00. The Government will contribute 50 percent of the total fixed unit costs of the work performed, not in excess of $ 39,950.00 in accordance with the provisions of Articles 4 and 5.

(c) Interest computation.-- Simple interest at the rate of 6 1/4 percent shall accrue from the dates Federal funds are made available until the period specified for payment of royalty expires, or until the amount of Federal funds contributed is fully repaid with interest.

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

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

None

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

~~None~~ See Annex I

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

The term "Director, Office of Minerals Exploration," as used herein includes his duly authorized representative.

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

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

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

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

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

ARTICLE 14. Changes and added provisions.--

Executed in quintuplicate the day and year first above written.

KEYSTONE MINES, INC.
(Operator)

By Arnold M. Nordale

Title President

THE UNITED STATES OF AMERICA

By George Turnickl
Director, Office of Minerals Exploration

Long
App'd. Sol. Off.

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

Eugene T. Schreiber

[CORPORATE SEAL]

INT.-DUP. SEC., WASH., D.C. 31011

EXPLORATION CONTRACT
KEYSTONE MINES, INC.
OME-6304

ANNEX I

The land referred to in Article 2 of the contract consists of nine (9) patented and fourteen (14) unpatented lode mining claims, including all rights pertaining thereto, lying within secs. 20, 21, 22, 27, 28, and 29, T. 3 N., R. 2 E., Fairbanks Mining and Recording Precinct, Fourth District, Alaska. The patent and recording data of the claims are as follows:

Patented Claims

Name of Claim	Survey No.	U. S. Patent No.
Willie	2198	1230877
Marigold	"	"
Pioneer	"	"
Henry Ford	"	"
Henry Clay	"	"
Hope		1062411
Fairbanks		"
Keystone		"
Kawilita		"

Unpatented Claims

Recorded in the Office of the Recorder, Fairbanks Recording District, Alaska:

Name	Book	Page
Wolf	23	192
Ruth Fraction	23	135
Minniehaha	23	135
Free Gold	23	135
Pennsylvania	23	135
Henry Ford No. 2	23	135
Henry Ford No. 3	23	135
Henry Ford No. 4	23	135
Laughing Waters	23	135
Fern	23	135
Buttonweezer	23	135
Caribou Fraction	23	135
Caribou No. 1	23	135
Caribou No. 2	23	135

The Operator has rights to the claims under the terms of an Option Agreement, dated August 19, 1963, by and between Nordale Hotel Corporation, an Alaskan corporation; Algo Company, a Minnesota corporation and Eugene F. Schreiber, an individual residing in Fairbanks, Alaska.

The locations of the claims are shown on the map entitled, "Fig. 1, Keystone Mines, Inc., Lode Claims . . .," attached hereto and made part hereof. The outer boundary of the property under this contract is shown in green on map Fig. 1.

Lien and Subordination Agreements executed by the Optionors of the claims are attached hereto and made part hereof.

Special Agreement

In the event the Operator or any subsidiary thereof at any time during 10 years from the date of this contract acquires any interest, title, or equity in any land situated within 1500 feet of the Kawilita claim, listed in this Annex I, it is agreed that such land shall thereupon automatically be included as land subject to all of the provisions of this contract.

Description of the Work

At a location not closer than 500 feet to the west end line of the Kawilita claim an inclined shaft shall be sunk approximately 200 feet on the dip of the "Large Vein" shown on Fig. 1. A collar set shall be placed at the shaft site selected and a timber headframe approximately 30 feet in height shall be placed in position on timber sills resting on solid bedrock.

A hoist, cable, and skip meeting the regulations of the Alaska Department of Mines and Minerals shall be placed in operating service at the shaft site.

The shaft shall have two compartments, using standard 8" x 8" timber sets on 6-foot centers. The hoisting compartment shall be not less than 4' x 4' and the manway 4' x 3' in cross section in the clear of timber and shall comply with the regulations of the Alaska Department of Mines and Minerals. At a point above the bottom of the shaft a station shall be cut into the hanging wall and with prior Government approval a ship loading pocket shall be established.

The shaft station shall be not more than 17½ feet in length and not less than 7½ feet high and 8 feet wide and shall be timbered as necessary using not less than standard 8" x 8" sets or equivalent round timber. The loading pocket shall have a storage capacity of not less than 350 cubic feet of broken ore or waste.

From the shaft station drifts shall be driven in a general east and west direction along the vein structure for not more than an aggregate of 800 feet. With prior Government approval crosscuts may be driven into the footwall and/or hanging wall of the vein structure. The aggregate length of such crosscuts shall not exceed 100 feet.

The drifts and crosscuts shall be not less than 5' x 7' in cross section in the clear of timber and shall be timbered as necessary using standard 8" x 8" sets or equivalent round timber.

EXPLORATION CONTRACT
KEYSTONE MINES, INC.
OME-6304

EXHIBIT A

The purpose of this project is to explore for gold and silver-bearing ore bodies by means of sinking a shaft, crosscutting, and drifting on a vein traversing Precambrian Birch Creek schist country rock.

General Provisions

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

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

The Government will not participate in the cost of work performed at locations which are within 100 feet of any land not subject to this contract.

All significantly mineralized areas traversed in the shaft, drifts, and crosscuts shall be sampled by cutting channels normal to the trend of mineralization at intervals of not more than 10 feet and in addition a representative bulk sample shall be taken of each round broken in such areas.

Each sample shall be split as necessary and then assayed for gold and silver. The Operator shall store one split in a suitable container properly identified as to the location where it was obtained. The stored samples shall be made available for Government inspection and possible use. With prior Government approval, the Operator may dispose of the stored samples.

True copies of assay certificates for all samples shall be submitted with the Operator's monthly progress report which shall also include a map or sketch showing the work completed during the reporting period. The map or sketch should show the general geologic conditions of the area traversed and the location and assay values of the samples.

Mine rails in the drifts and crosscuts shall not be less than 12-pound size, air lines not less than 2 inches in diameter, and water lines not less than 1 inch in diameter. The shaft and drifts shall be ventilated, using not less than 12-inch diameter ventilation tubing.

Estimated Cost of Project

Fixed Unit Costs

200 feet of shaft, plus hoist, etc. @ $130.00/ft.	$26,000.00
17½ lineal feet of station @ $60.00/ft.	1,050.00
4 station sets @ $50.00 each	200.00
Loading pocket 1/	350.00
900 feet of drifting and crosscutting @ $53.00/ft.	47,700.00
400 feet timbering in drifts and crosscuts @ $10.00/ft.	4,000.00
300 assays for gold and silver @ $2.00/assay	600.00
Total Estimated Cost	$79,900.00
Government Participation @ 50%	$39,950.00

1/ The completed job is the unit of work.

EXHIBIT B

NONDISCRIMINATION IN EMPLOYMENT

(Section 301, Executive Order 10925, March 6, 1961, as amended)

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

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

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

'(3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided by the agency contracting officer, advising the said labor union or workers' representative of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

'(4) The contractor will comply with all provisions of Executive Order No. 10925 of March 6, 1961, as amended, and of the rules, regulations, and relevant orders of the President's Committee on Equal Employment Opportunity created thereby.

'(5) The contractor will furnish all information and reports required by Executive Order No. 10925 of March 6, 1961, as amended, and by the rules, regulations, and orders of the said Committee, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Committee for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

'(6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be cancelled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 10925 of March 6, 1961, as amended, and such other sanctions may be imposed and remedies invoked as provided in the said Executive Order or by rule, regulation, or order of the President's Committee on Equal Employment Opportunity, or as otherwise provided by law.

'(7) The contractor will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the President's Committee on Equal Employment Opportunity issued pursuant to section 303 of Executive Order No. 10925 of March 6, 1961, as amended, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the contracting agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.'"

MME Form 52
Jan. 1959

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

GOVERNMENT USE ONLY
Operator
Docket No. OME –
Contract No. 14-23-090 –
Contract Date

LIEN AND SUBORDINATION AGREEMENTS[1]

To the United States of America:

That certain land in the ~~County of~~ Fourth District, State of Alaska;

described as follows:[2] in an Option Agreement, dated August 19, 1963, between the Nordale Corporation, The Algo Company, a Minnesota corporation, and Eugene F. Schreiber, as Optionors: and Keystone Mines, Inc., as Optionee.

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

Keystone Mines, Inc.,[3]

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

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

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

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

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

None

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

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

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

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

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

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

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

Dated this 28th day of August, 1963.

Arnold M. Nordale	(Seal)	517 - 2nd Ave.	(Street)
		Fairbanks, Alaska	(City & State)
Nordale Corporation			
			(Street)
	(Seal)		(City & State)
		1001 - 3rd Ave	(Street)
Eugene F. Schreiber	(Seal)	Fairbanks Alaska	(City & State)
Eugene F. Schreiber (an individual)			(Street)
	(Seal)		(City & State)
			(Street)
	(Seal)		(City & State)
			(Street)
	(Seal)		(City & State)

I, LaDessa Nordale (Name), certify that I am the Secretary Nordale Hotel Corp. (Title—Secretary, etc.) of the corporation named herein; that Arnold M. Nordale (Name), who signed this agreement was then President (Title—Pres., Vice-Pres., etc.) of said corporation; that said agreement was duly signed for and in behalf of said corporation by authority of its governing body, and was within the scope of its corporate powers.

(Corporate Seal)

MME Form 52
Jan. 1959

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

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

LIEN AND SUBORDINATION AGREEMENTS[1]

To the United States of America:

That certain land in the ~~County of~~ Fourth District, State of Alaska,

described as follows:[2] in an Option Agreement, dated August 19, 1963, between the Nordale Hotel Corporation, The Algo Company, a Minnesota corporation, and Eugene F. Schreiber, as Optionors; and Keystone Mines, Inc., as Optionee.

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

Keystone Mines, Inc.[3]

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

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

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

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

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

None

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

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

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

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

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

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

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

Dated this 28th day of August, 19 63.

		(Street)
		(City & State)
(Seal)		
The Algo Company	Box 1537	(Street)
William L Basham President	(Seal) Fairbanks Alaska	(City & State)
		(Street)
		(City & State)
(Seal)		
		(Street)
		(City & State)
(Seal)		
		(Street)
		(City & State)
(Seal)		
		(Street)
		(City & State)
(Seal)		

I, Matilda Legard (Name), certify that I am the Secretary (Title—Secretary, etc.) of the corporation named herein; that **William L. Basham** (Name), who signed this agreement was then **President** (Title—Pres., Vice-Pres., etc.) of said corporation; that said agreement was duly signed for and in behalf of said corporation by authority of its governing body, and was within the scope of its corporate powers.

(Corporate Seal)

INT.-DUP. SEC., WASH., D.C. 21103

MME Form 40
July 1962

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

Budget Bureau No. 42-R1305
Approval expires Dec. 31, 1963

MAY 6 1963 O.M.E.

APPLICATION FOR FINANCIAL ASSISTANCE IN MINERALS EXPLORATION

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

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

Keystone Mines, Inc.
Box 630
Fairbanks, Alaska

APPLICANT DO NOT USE THIS BLOCK

DOCKET NUMBER: 6304

DATE RECEIVED: 5-6-63

REGION: I

DIVISION CODE: 500

BUSINESS ORGANIZATION *(Check one)*

INDIVIDUAL	
CORPORATION	X
PARTNERSHIP	
OTHER *(Specify)*	

STATE IN WHICH FIRM IS ORGANIZED: Alaska

LIST CORPORATE OFFICERS OR PARTNERS HERE, IF APPLICABLE

NAME	ADDRESS	TITLE
Arnold M. Nordale	Box 630, Fairbanks, Alaska	President
Wm. L. Basham	Box 1537, Fairbanks, Alaska	Vice President
Eugene F. Schreiber	108 Ina St., Fairbanks, Alaska	Sec-Treas.

MINERAL(S) FOR WHICH YOU WISH TO EXPLORE: Gold and Silver

ESTIMATED COST OF PROJECT: $ 60,000

PROPERTY NAME	LOCATION COUNTY	STATE
Keystone Mines	Fairbanks	Alaska

GENERAL INSTRUCTIONS

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

CERTIFICATION

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

April 29, 1963
DATED

RECEIVED
Air mail
MAY 2 1963

Arnold M. Nordale
BY *(Signature)*

President
TITLE

U.S.G.S.
SPOKANE, WASH.

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

INFORMATION REQUIRED WITH THIS APPLICATION

1. Financial Eligibility:

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

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

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

2. Applicant's Rights in Land:

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

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

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

3. Physical Description:

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

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

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

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

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

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

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

4. Accessibility of Property:

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

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

5. Exploration Work:

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

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

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

6. Experience:

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

7. Estimate of Costs:

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

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

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

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

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

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

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

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

INT.-DUP. SEC., WASH., D.C.11879

KEYSTONE MINES, INC.
P. O. Box 630
Fairbanks, Alaska

May 16, 1963

OFFICIAL FILE COPY
O. M. E
RECEIVED MAY 20 1963
DATE | INITIALS | CODE
Grawred | 500
Murphy | 500

Mr. W. R. Griswold, Chief
Division of Minerals
U. S. Department of the Interior
Office of Minerals Exploration
Washington 25, D. C.

OME-~~6304~~

Dear Sir:

In reply to your letter of May 8, 1963, I am furnishing the information requested in it as follows:

1. The estimated cost for each item of work under the Mine Construction Contract is predicated on the assumption that the shaft shall be timbered its full depth, the drifts timbered 1/4 their total lengths, the tunnel timbered 1/5 of its advance, and the rehabilitation of the portal and timbering immediately inside shall not exceed 50 feet. The cost therefore would be:

Shaft - 200 feet @ $100 per foot			$20,000
Upper Drifts - 300 feet @ $55 =	$16,500		
100 feet @ $65 =	6,500		$23,000
Tunnel - 560 feet @ $50 =	$28,000		
140 feet @ $60 =	8,400		$36,400
Lower Drifts - 300 feet @ $50 =	$15,000		
100 feet @ $60 =	6,000		$21,000
Rehabilitation of tunnel entrance 50 feet @ $70			$3,500 ?
Total estimated cost of exploration under Mine Construction Contract			$103,900

These costs will vary, of course, according to amount of timbering required, but in total should fairly closely approximate the actual.

2. The accompanying map and cross section was compiled and drawn by Mr. W. H. Race, an engineer with the Alaska Department of Mines and Minerals from information in its files. As there was no precise tie between the trench and the claim lines on Mr. Saunders map, made in 1960, the figures shown are scaled. No systematic or proper sampling of the vein was done, but many assays of selected specimens were made , mostly to satisfy curiosity. Their locations are unknown and the results meaningless.

3. The cross-section showing the location of the adit at the head of Wolf Creek, and the tunnel extending from it with relation to the large vein, is embodied in the map referred to above.

4. (a) A list of claims showing their respective patent numbers or their recording book and page references is enclosed.
(b) Your assumption that the vein extends westwardly into adversely owned property is correct. The owners of the adjoining claims are presently having personal difficulties which, no doubt, will be eventually settled by court action. Under the circumstances no effort has been made on our part to obtain control. However, we plan to make some arrangement for the property once their differences are resolved.
(c) Due to the delay in finalizing the "Subscription Contract," the Keystone Mines, Inc. was incorporated prior to the contract, as shown by the enclosed copy of the Incorporation Certificate.
(d) To show the present financial position of Keystone Mines, Inc., a bank statement is enclosed.

Very truly yours,
KEYSTONE MINES, INC.

Arnold M. Nordale

ARNOLD M. NORDALE
President

AMN/emm

State of Alaska

Department of Commerce

Juneau

CERTIFICATE OF INCORPORATION

The undersigned, as Commissioner of Commerce of the State of Alaska, hereby certifies that duplicate originals of the Articles of Incorporation of KEYSTONE MINES, INC.

signed and verified pursuant to the provisions of the Alaska Business Corporation Act, have been received in this office and are found to conform to law.

ACCORDINGLY the undersigned, as such Commissioner of Commerce, and by virtue of the authority vested in him by law hereby issues this Certificate of Incorporation of

KEYSTONE MINES, INC.

and attaches hereto a duplicate original of the Articles of Incorporation.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal, at Juneau, the Capital, this 9th day of April A.D. 19 63

A. E. ROMICK
COMMISSIONER OF COMMERCE

DEPARTMENT OF COMMERCE STATE OF ALASKA

KEYSTONE MINES, INC.
108 INA ST
FAIRBANKS ALASKA

1-254-5

1 SIG
EUGENE F SCHREIBER

CHECKS	DEPOSITS	DATE	NO. OF CHECKS PAID	BALANCE
		APR 30'63		3,032.93*
BALANCE BROUGHT FORWARD →	4,000.00	MAY 10'63		7,032.93*

BURROUGHS CORPORATION
TODD COMPANY DIV. - R

LAST AMOUNT IN THIS COLUMN IS YOUR BALANCE

PLEASE EXAMINE STATEMENT AND CANCELLED VOUCHERS PROMPTLY. IF NO EXCEPTION IS REPORTED WITHIN 10 DAYS THE ACCOUNT WILL BE CONSIDERED CORRECT. SERVICE CHARGES APPEARING ON THIS STATEMENT ARE BASED ON THE ACTIVITY OF THE ACCOUNT DURING THE PREVIOUS STATEMENT PERIOD.

FOR YOUR CONVENIENCE A RECONCILEMENT FORM IS ON REVERSE SIDE.

CODE	
SC - SERVICE CHARGES	MS - MISCELLANEOUS CHARGE
EC - ERROR CORRECTION	LS - TOTAL OF SEVERAL CHECKS
DC - DEPOSIT CORRECTION	RT - RETURN ITEM

First National Bank of Fairbanks

BALANCE YOUR ACCOUNT MONTHLY

BY FOLLOWING THESE FOUR EASY STEPS

CHECKS OUTSTANDING

NUMBER	AMOUNT
TOT. CHECKS OUTSTANDING	
BALANCE AS PER CHECK BOOK	
TOTAL	

1. COMPARE THE CHECKS RETURNED WITH THE ITEMS ON THE STATEMENT, THEN SORT THE CHECKS NUMERICALLY OR BY DATE.
2. MARK OFF THE CORRESPONDING STUBS IN YOUR CHECK BOOK, AND LIST THE NUMBERS AND AMOUNTS OF THOSE STILL OUTSTANDING IN THE SPACE PROVIDED AT THE LEFT, AND TO THIS TOTAL ADD THE BALANCE AS SHOWN IN YOUR CHECK BOOK.
3. LIST ANY DEPOSITS MADE WHICH DO NOT APPEAR ON THE STATEMENT, ALSO BANK CHARGES TO BE DEDUCTED FROM YOUR CHECK BOOK BALANCE AND ADD TO THIS TOTAL THE BALANCE AS SHOWN ON THE STATEMENT.
4. THE TWO TOTALS SHOULD AGREE, AND IF SO THE STATEMENT IS CORRECT.

DEPOSITS NOT CREDITED		
OTHER CHARGES TO BE DEDUCTED FROM CHECK BOOK		
BALANCE AS PER STATEMENT		
TOTAL		

PLEASE REPORT ANY DISCREPANCY WITHIN TEN DAYS

A FEW OF THE MANY SERVICES OFFERED BY 1ST NATIONAL

TRUST DEPARTMENT

SAFE DEPOSIT BOXES

BANK DRAFTS

ESCROW DEPARTMENT

F. H. A. HOME IMPROVEMENT LOANS

First National Bank of Fairbanks

FAIRBANKS
Serial No. 62-7816
1 claim

BOOK 23 PAGE 192
Fairbanks Recording District

Affidavit of Annual Labor

UNITED STATES OF AMERICA)
) ss
STATE OF ALASKA)

WILLIAM L. BASHAM, being first duly sworn, on oath, deposes and says: That he has personal knowledge of the mining claim hereinafter described, and of the facts hereinafter set forth; that the sum of ONE HUNDRED DOLLARS ($100.00) worth of labor in repairing roads have been made upon the following described mining claim situated on Wolf Creek, - the Property of the Nordale Trust, in the Fairbanks Mining and Recording Precinct, Fourth District, State of Alaska, during the year ending ~~June 30, 1962~~ September 1st, 1962.

WOLF MINING CLAIM, situated on Wolf Creek
(QUARTZ) Fbks. Mining & Recording Precinct
Fourth District, State of Alaska
Property of Nordale Trust

That is to say, that I myself worked, repairing and maintaining roads to the extent of $100.00 worth of labor.

Wm L Basham

SUBSCRIBED AND SWORN TO before me this 15th day of Oct. 1962

Marie K. Sellar
Notary Public in and for the State of Alaska. My commission expires: 2-11-63

MARIE K. SELLAR NOTARY PUBLIC STATE OF ALASKA

endorsed
RECORDED ☐ FILED ☐
FAIRBANKS RECORDING DISTRICT
Date OCT 15 1962 Time 1:45 P.M.
Requested by Wm. L. Basham
Address Box 1557
City

BOOK 23 PAGE 135
Fairbanks Recording District

AFFIDAVIT OF ANNUAL LABOR FOR YEAR 1961 - 1962

FAIRBANKS
Serial No. 62-6831

UNITED STATES OF AMERICA)
) SS
STATE OF ALASKA)

EUGENE F. SCHREIBER, being duly sworn, desposes and says:

That between the first day of September 1961, and the first day of September 1962, on the hereinafter described lode claims, in the Fairbanks Recording Precinct, State of Alaska, at the instance of the Owner of said claims, there was preformed more than One Hundred Dollars ($100.00) worth of work on each claim which required at least the equivalent of the work of one man for 7 days of 8 hours each.

The names of said claims and where situated are as follows:

At the head of Fairbanks Creek, a tributary of the Chena River, in the Fairbanks Recording Precinct, State of Alaska:

Little Jim	Caribou No. 1	20 claims
Laughing Water	Caribou No. 2	
Minnie Ha-Ha-	Henry Ford No. 2	
Caribou Fraction	Henry Ford No. 4	
Marigold	Henry Ford No. 1	
Henry Ford No. 3	Free Gold	
The Pioneer	The Pennsylvania	
Henry Ford	The Henry Clay	
The Willy	Buttonweezer	
Fern	Ruth Fraction	

Claims are contiguous and of same owership. Work done by trenching with bulldozer and prospecting mineral veins on The Willie, Marigold, Pioneer, Henry Clay and Pennsylvania.

The amount of work done was over Two Thousand Dollars ($2,000.00).

The name of the owner of said claims is Eugene F. Schreiber

That all of the above mentioned matters are within the personal knowledge of affiant, who makes this affidavit as Owner.

Eugene F. Schreiber
Eugene F. Schreiber

JOHN L. REED NOTARY PUBLIC TERRITORY OF ALASKA

Subscribed and sworn to before me this 11th day of Sept. 1962.

John L. Reed
Notary Public in and for the Territory of Alaska
My commission expires Apr. 27, 1965

RECORDED ☒ FILED ☐
FAIRBANKS RECORDING DISTRICT
Date SEP 14 1962 Time 7:50 A.M.
Requested by Eugene F. Schreiber
Address 504 Monroe
Fairbanks Alaska

Form 4—1081
(July 1954)

Fairbanks 025053

BOOK 152 PAGE 290
Fairbanks Recording District

FAIRBANKS
Serial No. 63-2744

The United States of America

To all to whom these presents shall come, Greeting:

WHEREAS, In pursuance of the provisions of the Revised Statutes of the United States, Chapter Six, Title Thirty-two, and legislation supplemental thereto, there are now deposited in the Bureau of Land Management of the United States the Plat and Field Notes of Survey and a Certificate of the Land Office at Fairbanks, Alaska,

accompanied by other evidence whereby it appears that

Eugene F. Schreiber

has entered and paid for the Willie, Marigold Mineral, Pioneer Mineral, Henry Ford Mineral and Henry Clay lode mining claims,

designated as Survey No. 2198, embracing a portion of approximately Sections 21, 22 and 28 in unsurveyed Township 3 north of Range 2 east of the Fairbanks Meridian, in the Fairbanks Mining District, Fairbanks Land District, Alaska, the said claims being more particularly described in the official field notes and depicted on the official plat, which are expressly made a part of this patent and copies of which are attached hereto; but excluding and excepting from these claims all of that portion of ground within the boundaries of the Pennsylvania, Henry Ford Nos. 1, 2 and 3, Laughing Water, Caribou Fraction, Fern and Buttonweezer lode claims, said Survey No. 2198; and within the S½S½ said Sec. 21, N½N½ said Sec. 28, and SW¼SW¼ said Sec. 22; and further excluding and excepting all veins, lodes and ledges, throughout their entire depth, the tops or apexes of which lie inside of the said excluded ground.

The premises herein granted contain 87.881 acres.

Patent Number 1230877

U. S. GOVERNMENT PRINTING OFFICE 16—59679-2

BOOK 152 PAGE 291
Fairbanks Recording District

Form 4-1082
(July 1955)

Fairbanks 025053

NOW KNOW YE, That there is therefore, pursuant to the laws aforesaid, hereby granted by the United States unto the said

Eugene F. Schreiber

the said mining premises hereinbefore described, and not expressly excepted from these presents, and all that portion of the said veins , lode s , or ledge s , and of all other veins, lodes, and ledges throughout their entire depth, the tops or apexes of which lie inside of the surface boundary lines of said granted premises in said survey extended downward vertically, although such veins, lodes, or ledges in their downward course may so far depart from a perpendicular as to extend outside the vertical side lines of said premises: *Provided*, That the right of possession to such outside parts of said veins, lodes, or ledges shall be confined to such portions thereof as lie between vertical planes drawn downward through the end lines of said survey so continued in their own direction that such planes will intersect such exterior parts of said veins, lodes, or ledges; *And provided further*, That nothing herein contained shall authorize the grantee herein to enter upon the surface of a claim owned or possessed by another.

TO HAVE AND TO HOLD said mining premises, together with all the rights, privileges, immunities, and appurtenances of whatsoever nature thereunto belonging, unto the said grantee above named and to his heirs and assigns forever; subject, nevertheless, to the above-mentioned and to the following conditions and stipulations:

FIRST. That the premises hereby granted shall be held subject to any vested and accrued water rights for mining, agricultural, manufacturing, or other purposes, and rights to ditches and reservoirs used in connection with such water rights, as may be recognized and acknowledged by the local laws, customs, and decisions of the courts. And there is reserved from the lands hereby granted a right-of-way thereon for ditches or canals constructed by the authority of the United States.

SECOND. That in the absence of necessary legislation by Congress, the Legislature of Alaska may provide rules for working the mining claim or premises hereby granted, involving easements, drainage, and other necessary means to its complete development.

RECORDED ☑ FILED ☐
FAIRBANKS RECORDING DISTRICT
Date MAY 7 1963 Time 11:25 A.M.
Requested by Eugene F. Schreiber
Address 108 Ina
Fairbanks, Alaska.

IN TESTIMONY WHEREOF, the undersigned authorized officer of the Bureau of Land Management, in accordance with the provisions of the Act of June 17, 1948 (62 Stat., 476), has, in the name of the United States, caused these letters to be made Patent, and the Seal of the Bureau to be hereunto affixed.

GIVEN under my hand, in the District of Columbia, the FOURTEENTH day of FEBRUARY in the year of our Lord one thousand nine hundred and SIXTY-THREE and of the Independence of the United States the one hundred and EIGHTY-SEVENTH.

[SEAL]

For the Director, Bureau of Land Management.

BOOK 23 PAGE 193
Fairbanks Recording District

FAIRBANKS
Serial No. 62-7817
36 claims

Affidavit of Annual Labor

UNITED STATES OF AMERICA)
) ss
STATE OF ALASKA)

WILLIAM L. BASHAM, being first duly sworn, on oath, deposes and says: That he has personal knowledge of the quartz lode and placer mining claims hereinafter described, and of the facts hereinafter set forth; that the sum of more than THREE THOUSAND SIX HUNDRED DOLLARS ($3,600.00) worth of labor and improvements have been made upon the following described mining claims situate on Moose Creek, a tributary of Fairbanks Creek, in the Fairbanks Mining and Recording Precinct, Fourth Division, State of Alaska, during the year ending ~~June 30, 1962~~ Sept. 1st, 1962, to-wit:

Lilian Quartz Mining Claim
Helen S. Quartz Mining Claim
Insurgent #1 Quartz
O'Farrell Fraction Quartz Mining Claim

Mame Lode Claim
Homestake Quartz
Insurgent #2 Quartz
Hi Yu Quartz Mining Claim
Insurgent Lode Claim
Flying Joe Lode Claim, Situate between Moose Creek and Too Much Gold Creek, Tributaries of Fairbanks Creek
Bonus Lode Claim
Julia Lode Claim
Jumbo Lode
NRA Lode Claim
Roy Lode Claim, situate on Too Much Gold Creek, tributary of Fairbanks Creek

Rand Quartz Mining Claim
Long Thin Quartz Fraction
Santa Clara Fraction Mining Claim
Summit Quartz Mining Claim
Durando Quartz Mining Claim
Yankee Doodle Quartz Mining Claim
Teddy R. Quartz Mining Claim
Sunnyside Quartz
Mars Quartz Mining Claim
Don Lode Claim
Gold Point Lode Claim
Inez Lode Claim
Royalty Lode Claim
Red Top Lode Claim
Edythe Lode Claim
Rob Lode Claim
Laura Lode Claim
Mohawk Lode Claim
Ohio Lode Claim, situate on Fairbanks Creek
#1 Placer Claim
#2 Placer Claim, situate on Moose Creek, tributary of Fairbanks Creek.

Together with the machinery and equipment used in connection with said property, and all buildings situate thereon.

That is to say, the sum of One Hundred Dollars ($100.00) worth of labor and improvements have been performed and made upon each of said mining claims, which actually tends to the benefit of the development of said group of claims, which are contiguous and in one group; that one Caterpillar tractor and myself worked more than thirty days plowing out roads, maintaining roads and stripping, and building Ore Storage Bin, repairing building, machinery and milling ore, as well as building Haul Road; I was also caretaker and watchman over the property from July 1961, through June 30, 1962. That said work was done at the instance of the ALGO COMPANY, INC., the owner of said mining claims.

Wm L Basham

SUBSCRIBED AND SWORN TO before me this 15th day of October

Marie K. Sellar
Notary Public in and for the State of Alaska. My commission expires: 2-1-63

MARIE K. SELLAR NOTARY PUBLIC STATE OF ALASKA

RECORDED ☑ FILED ☐
FAIRBANKS RECORDING DISTRICT
Date OCT 15 1962 Time 1:46 P.M.
Requested by Wm. L. Basham
Address Box 1537
City

MME FORM 6 REFERENCE SLIP

REV. 2-59 OFFICE OF MINERALS EXPLORATION

TO:	DATE	INITIALS
1. Chief, Divn. of Field Operations	5/2/63	
2.		
3.		
4.		
5. DRMacLaren		
FROM: D. R. MacLaren, Act. Fld. Offr.		

Region I

FOR: Check items for action desired

X Action ____ Reply for signature of ____

____ Approval ____ Investigate ____ Surname

____ Comment ____ Recommendations ____ Signature

____ Conference ____ Rewrite ____ File

____ Instructions ____ Your information

REMARKS: Application--Keystone Mines, Inc., Fairbanks District, Alaska

Only hastily reviewed. May have merit, but large vein on Kawilita claim possibly too close to property line at X-cut tunnel level. Need cross-sections, map showing trenches, sample locations, and assay data.

Copy of telegram from Arnold Nordale, President, forwarded to you April 23 re application.

KEYSTONE MINES, INC.
P.O. Box 630
Fairbanks, Alaska

MAY 6 1963
O.M.E.

April 30, 1963

Mr. D. R. MacLaren
Office of Mineral Exploration
South 157 Howard Street
Spokane 4, Washington

Dear Sir:

The Keystone Mines, Inc. herewith submits an Application for Financial Assistance in Minerals Exploration. Attached is the substantiative information required with the application.

If further information is needed, please write me in Juneau, Alaska, where I will be until June 1st, after which date I will be in Fairbanks.

Very truly yours,
Keystone Mines, Inc.

Arnold M. Nordale

ARNOLD M. NORDALE
President

Box 2415
Juneau, Alaska

AMN/emm

Application sent from:
A. M. Nordale
Box 2415
Juneau, Alaska

RECEIVED
Air mail
MAY 2 1963
U S G.S.
SPOKANE, WASH.

STATEMENT TO ACCOMPANY APPLICATION

The Keystone Mines, Inc. of Fairbanks, Alaska, herewith submits the following statement to substantiate its application to the Office of Minerals Exploration for financial assistance to explore and determine the economic worth of its gold lode properties near Fairbanks, Alaska.

1. Financial Eligibility
   (a) The Keystone Mines, Inc. has unsuccessfully endeavored to obtain financial assistance through commercial sources as shown by the attached correspondence.
   (b) The applicant, Keystone Mines, Inc., is presently owned and controlled by:
      Eugene F. Schreiber, an individual, of Fairbanks, Alaska,
      Nordale Corporation, a private corporation, of Fairbanks, Alaska, and
      Algo Company, Inc., a Minnesota corporation, of Minneapolis, Minnesota.

The attached Subscription Contract provides detail of agreement entered into by the above parties to conform to the regulations of OME, and indicates the financial inability of Keystone Mines, Inc. to undertake the proposed exploration program without assistance.

   (c) The Keystone Mines, Inc. proposes to finance its share of the exploration cost:
      (1) by direct disbursement of funds from its treasury;
      (2) by rental of equipment to the independent contractor;
      (3) by production of gold from ore obtained in the sinking of the shaft and drifting on the vein; and
      (4) by further surface mining alongthe outcrop of the vein.

2. Applicants Rights in hand
   (a) The applicant, Keystone Mines, Inc., controls the property under the Subscription Contract dated April 18, 1963, a copy of which is herewith attached. The individual properties included in the agreement are free from liens, mortgages or any other encumbrance.
   (b) The property is not within legally subdivided land. It consists of 62 contiguous claims and fractions of which 4 are patented under Patent No. 1062411, and 5 under Patent No. 1230877. Twenty-five other claims have been surveyed for but as yet have not been brought to patent. The 53 unpatented claims are recorded at the Recording Office at Fairbanks, Alaska, and the book and page references will be furnished if they are required. No part of this land is exempt from government royalty or lien. The names of the claims are indicated on the accompanying map.

3. Physical Description
   (a) The mining property herein described and presented for your consideration for an Exploration contract, is situate on the ridge or height of land which forms the divide between Cleary and Fairbanks Creek watersheds, two of the principal placer

gold producing creeks in the Fairbanks district. The longitudinal axis of the area covered is in a general east-west direction, and is approximately 3 miles in length. The average width is about ½ mile, with an extreme width of over 4000 feet. The maximum differential in elevation is about 800 feet, the low points being at the east and west ends, while the high is at the north center.

All three properties which have been optioned to, and whose owners comprise the Keystone Mines, Inc., were originally staked in the early days of the Fairbanks District. They have been extensively reported on by the U. S. Geological Survey, particularly during the years 1910 to 1920. However, at the time they were known by other names. They were:

The McCarty Mine, which is now owned soley by Eugene F. Schreiber
The HiYu Mine, which is now owned by the Algo Company, Inc., of which Wm. Basham, H. I. Risvold and Mathilda Legard are now its principal shareholders.
The Homestake and the Rexall Mines, which are now known as the Nordale Mine, and owned by the Nordale Corporation.

There have been some private reports made on the McCarty and HiYu properties, but are not presently available. They, no doubt could be obtained if wanted, but as the proposed exploration is confined to the Nordale property, they probably would not be particularly relevant.

A brief history and description of the three properties, and an outline of the past mining activities, based on the personal knowledge and memoranda of the owners, may give a general picture of their present economic potentiality.

HiYu Mine--Various government and private reports indicate that the past production of the HiYu Mine was slightly in excess of $1,000,000. The average value of the ore was about $50 per ton with gold at its present price. There are four distinct and separate veins on the property, only one of which has been mined to any extent. All show fair to good values, and may be workable under favorable conditions. The vein on which most of the mining was done varied in thickness from a few inches to 2 feet, the average being about 12 inches. It was mined by drifting and stoping at three different levels with adits on the Moose Creek slope. No sinking was done as the lower drift was at Moose Creek water level. Most of the veins have a general east-west strike with a dip almost vertical, but slightly toward the south. The mine was closed down by government directive L-208, and was not reopened because of the deaths of the principal stockholders, lack of interest on the part of others, and financial shortage.

McCarty Mine--There are seven gold quartz veins on the McCarty claims from which ore has been mined. Besides there, there are 3 well-defined antimony veins, and one jamesonite vein which has been exposed for a distance of over 700 feet by intermittant surface trenching. The average width of the jamesonite vein appears to be about 15 inches. The mining done prior to 1938 was desultory, and on an extremely small scale with

a total production probably around $200,000. The main output period was between 1938 and 1942, when the United States Smelting, Refining and Mining Company carried on an exploratory-mining program. During that time the mine produced $750,500 from 13,200 tons of ore, having a value of $56.72 per ton. The tail assays showed a value of $5.93 a ton.

The U.S.S.R. & M. Co. mined on only one vein, known as the American Eagle, located on the Henry Ford claim. They drifted along it on 4 levels for a distance of approximately 1200 feet. The adits were on the Fairbanks Creek slope, and the general strike of the vein was northwesterly with a dip of 60 to 65 degrees southerly. It is described as a true fissure vein, with the ore occuring on the foot wall as quartz associated with arsenopyrite, jamesonite, stibnite and free gold. The thickness of the vein was from a few inches to 3 feet, with an average of about 16 inches. The workings made water at a rate of 40 gallons per minute, which provided ample water for the mill, but made sinking difficult. However a winze was sunk approximately 300 feet, at which some drifting was done, and considerable ore produced.

The mine was closed down by government order L-208 in 1942, but the U.S.S.R. & M. Co. continued its option, and did the assessment work until 1958 when it decided to discontinue all mining operations in Alaska.

Homestake Mine--Now Nordale Mine--The principal assets of the Nordale property are the large promising quartz vein on which the proposed exploration work is to be done, and the 750 foot cross-cut tunnel entering the hillside from the head of Wolf Creek, and which if advanced, would intersect the vein at a vertical depth of at least 400 feet. There are several other smaller but rich veins on the property that may have mining possibilities.

The main vein has been uncovered by bulldozer for a distance of 1100 feet, with both ends open, and approximately 600 feet has been mined with a backhoe. Spaced surface trenching has exposed it for more than ½ mile. The accompanying pictures show in a general what has been done. However, the pictures were taken in 1960 and since then the surface workings have been extended westward over 300 feet, and the excavation on the vein deepened considerably. The strike of the vein is almost due east-west, but it seems to be quite tortuous. It dips toward the south at an angle estimated at 50 degrees, but it may be steeper at depth. The width varies from one to 6 feet, the average probably being between 2 and 2½ feet.

Although the gold content varies considerably along the strike, few if any low grade or barren spots were found. During the four summers that the prospecting and mining was done, roughly 1225 tons of ore was milled, from which $84,024 was recovered. This gave a recovered value of $68.59 per ton. No assays were made to ascertain tail loss, but the mill equipment and milling methods used would lead one to suspect it was fairly substantial, probably 10 per cent or more, which would be about $7 a ton. There is a large amount of stibnite and galena in the ore, which would cause or contribute toward a heavy gold loss.

The use of a backhoe to dig the vein material made the inclusion of a large amount of wall rock and waste unavoidable. This too would have a tendency to dilute the unit value, and those who did the work stated that in their opinion $90 would be a closer actual figure than the $70 indicated by recovery. It must be borne in mind that as the work was done under lease, the mining was concentrated on the richer portions of the vein, and a figure between $50 and $60 would probably be a more over-all realistic one.

The crosscut tunnel, which is located at the base of the steep hillside at the head of Wolf Creek, was started in October 1908. The original plan was to intersect or strike the above described vein, or one equally promising at a low level, but due to many divergent causes, the tunnel never reached its objective. It was driven a total of 750 feet, and several minor veins were crossed, two of which were rich, but narrow. They proved, however, to be of more interest than the advancement of the tunnel, and were mined by drifts and stopes. The veins were only 6 inches to a foot in thickness and often pinched to seams. Many pieces of ore taken from them were used as specimens, and in the jewelry trade. The total drifting done was less than 500 feet, and the height of the stopes was no more than 60 or 70 feet, yet the veins produced well over $100,000. No sinking was done as the water inflow was substantial and the cost of pumping prohibitive. The last mining on these veins was done in 1918.

The tunnel and the property generally has been maintained in fair condition by assessment work. Ownership problems, which were later settled, and inadequate finances were the main reasons for th e suspension of active mining. The tunnel is timbered for about 50 feet in from the portal. Otherwise it is in solid rock except at the vein intersections, and at a fault where a small amount of timbering was needed. Due to the flow of water, the tunnel is usually filled with ice for 30 or 40 feet back from the mouth, but the ice can be easily removed with pick and shovel. The portal and interior timbering is in bad repair, and much of it will have to be replaced.

There are many buildings on the properties, and sufficient mining equipment to carry on an extensive exploration program. The principal assets at the HiYu Mine aside from the claims are:

Mill--10 stamps capable of milling 40 tons per day with a complete floation plant.
Power Plant--165 H.P diesel with a 125 K.V.A. generator.
Buildings--Mess and bunk houses, office, assay office, residence, and several small special purpose buildings, all of which are in usable condition.
Mining Equipment--2 compressors (one portable), jack hammers, drills, cars, rails, steel, blacksmith tools, trammer and various other equipment, small tools and supplies.

There are several usable buildings at the McCarty Mine, namely: a mess house, bunk house, private dwelling, assay office, etc. The mill is in complete disrepair and of no use. There is also some equipment such as rails, cars, etc.

At the Nordale Mine, near the mouth of the tunnel, are a mess house, bunk house, and an old mill building from which some usable lumber could be salvaged.

(b) The Keystone Mines, Inc. has had no part or interest in the above described operations, but its shareholders have had indirectly, by being lessors and stockholders, or employees of the predecessor companys.

(c) The statements of tonnage and production, as set forth in 3 (a), were obtained from geological reports, company reports, and computed from amounts of royalty paid. There are no settlement sheets, mine records, mint returns or published data available.

(d) There are no proven ore reserves as such; however, surface exposures and geologic evidence indicates that possible reserves are significant.

(e) The three properties now held by Keystone Mines, Inc. have been described in various government reports, not at hand, but which are probably available in Washington D.C. The Department of Mines and Minerals of the State of Alaska has investigated the property on several occasions, but to our knowledge no formal report has been published.

(f) The reasons why the Keystone Mines, Inc. expects to find ore, and is encouraged to undertake this exploration program, is because the surface work which was recently done on the large vein at the Nordale Mine has indicated the presence of ore of economic grade, and in sufficient quantity to warrent further and more conclusive exploration.

4. Accessibility of Property

(a) Whenever a representative of the O.M.E. desires to visit or examine the property, he can notify Mr. Schreiber by phone, or he can visit it at his own pleasure at any time. The property is located about 20 miles from Fairbanks, and the main road which services Fairbanks Creek passes through it. This road is government maintained in summer, but is generally closed in winter due to lack of traffic. There is also a branch road up Wolf Creek from Steese Highway that was privately built on placer mining tailings, which enters the property from the Cleary Creek side, and which would be usable with a small amount of repair.

Another definite asset is the U.S.S.R. & M. Co. power line , which serviced their Fairbanks Creek dredging operation, and crosses the property. It is publically understood that at the conclusion of their dredging operation there last year, the Golden Valley Electric Authority, which supplies rural electricity, has taken over the power line for general power distribution. An unconfirmed estimated price for quantity power is $3\frac{1}{2}$ cents per kilowatt.

(b) There shall be no shipping of ore or concentrates; such values as may be recovered will be in metallic gold as the ore is free milling.

5. Exploration Work

(a) The exploration work proposed by the Keystone Mines, Inc. is confined to the large quartz vein on the Nordale property, and is divided into two separate projects, the second dependent on the results of the first, but both jointly under this one application.

Project No. 1

An incline shaft shall be sunk on the vein at a location selected as the most favorable from the operational, economic, and geological conditions involved. The extreme size of opening shall be 5 feet by 8 feet to conform with Alaska Department of Mines and Minerals regulations, which require a two compartment shaft with staggered ladders in the manway, and to allow sufficient room for air, pump discharge and ventilating pipe lines. It is presumed that timbering will be required. The total depth shall be 200 feet.

At the 200 foot level, drifts on the vein shall be driven in either one or both directions for distances totaling 400 feet. The size of openings shall be 4 x 6 feet, unless the vein width exceeds 4 feet, at which places the tunnel shall be expanded to include all vein material. It is presumed that some timbering will be necessary.

Project No. 2

If the shaft and drifts disclose the presence of a vein of sufficient size and ore of economic value at the present cost level, project 2 shall be undertaken, otherwise it may be abandoned.

The timbers at the portal of the tunnel shall be completely renewed and the interior timbering replaced wherever necessary.

The tunnel shall be extended approximately 700 feet or whatever distnace is required to intersect the large vein. The size of the tunnel shall be 5 x 6½ feet, except where support is necessary. There it will be expanded to accomodate timber. The existing tunnel indicates that little if any timbering will be required.

When the vein is reached, drifts shall be extended along it for 200 feet in both directions. The drifts shall be 4 x 6 feet.

(b) No road construction will be necessary as the government road crosses the property, and privately built roads lead to the sites of operation.

(c) If an O.M.E. contract is granted, the work can be started within 30 days thereafter, and finished within 18 months from the date of execution of contract.

The anticipated rate of progress is:

Type	Daily (feet)	Monthly (feet)	Total Elapsed Days
Shaft	3	90	70
Upper drifting	4	120	100
Tunnel timber Rehabilitation	5		10

Type	Daily (feet)	Monthly (feet)	Total Elapsed Days
Tunnel advance	5	150	150
Lower drifting	5	150	80
		Total	410

6. Experience

The names and experience of the persons forming the directorate of Keystone Mines, Inc., and who will be responsible for the fulfilment of the contract are:

Eugene F. Schreiber has been an employee of the U.S.S.R. & M. Co. for over 25 years and has mined independently on his own property.

William L. Basham was employed as miner and millman at the HiYu and Cleary Hill Mines for several years, and had previous mining experience in Montana and Idaho.

Arnold M. Nordale is a trained engineer with over 40 years experience in mining with Hammond Engineering Co., the U.S.S.R. & M. Co., and the Yukon Consolidated Gold Corporation Ltd. of Dawson, Yukon, having held positions of exploration engineer, mining superintendent, and manager until retirement in 1959.

7. Estimate of Cost

(a) The exploration work outlined in 5 (a) shall be done by an independent contract and at a fixed unit cost. A copy of the contract is attached.

(b) There shall be no charge to the O.M.E. contract for personal services, such as supervision, engineering, assaying etc., performed by the applicant, and that required from outside consultants should not exceed $2000.

(c) All materials and supplies required in the operation will be furnished by the contractor.

(d) All equipment shall be provided to the independent contractor by the Keystone Mines, Inc. for which he shall pay rent at an agreed to price.

(e) Rehabilitation, other than the retimbering of the entrance to the tunnel, will be done by the applicant or independent contractor.

(f) No new buildings, other than small houses or sheds at the shaft site, will be needed, and these will be provided by applicant or independent contractor.

(g) These items do not apply.

KEYSTONE MINES, INC.
P.O.BOX 603
FAIRBANKS, ALASKA

April 26, 1963

First National Bank of Fairbanks
110 Cushman Street
Fairbanks, Alaska

COPY

Gentlemen:

The Keystone Mines, Inc., plans an exploration program on its gold lode properties situate on the divide between Cleary and Fairbanks Creeks.

The estimated cost of the program is $100,000.00, of which this company expects to finance to the extent of $50,000.00.

We herewith apply for a loan in the amount of $50,000.00, with interest to commence as money is needed. The security offered is a first mortgage on the mining claims, buildings and equipment.

Sincerely yours,

KEYSTONE MINES, INC.

BY: Arnold M. Nordale
Arnold M. Nordale, President

AMN:dl

FIRST NATIONAL BANK
OF FAIRBANKS

FAIRBANKS, ALASKA

April 26, 1963

Arnold M. Nordale, President
Keystone Mines, Inc.
P.O. Box 603
Fairbanks, Alaska

Dear Mr. Nordale:

We have received your request for a loan in the amount of $50,000. for the purpose of exploration on your gold production property, Fairbanks vicinity.

We regret to inform you that we are unable to grant the request at this time.

Very truly yours,

W. G. Stroecker
Executive Vice President

WGS:cbw

THE B. M. BEHRENDS BANK

OLDEST BANK IN ALASKA

JUNEAU · ALASKA

April 30, 1963

Arnold M. Nordale, President
Keystone Mines, Inc.
P. O. Box 603
Fairbanks, Alaska

Dear Mr. Nordale:

This is in reply to your letter requesting a loan in the amount of $50,000.00 for exploration purposes on your property in the Fairbanks mining district.

We regret to inform you that we are unable to grant the request at this time.

Yours very truly,

J. B. Durney
Vice President

JBD:bw

MINE CONSTRUCTION CONTRACT

This agreement made and entered into this 26th day of April, 1963, by and between:

KEYSTONE MINES, INC., an Alaska Corporation, Party of the First Part, hereinafter called "Company"

and

EDWIN W. EBBERT, of Fairbanks, Alaska, Party of the Second Part, hereinafter called "Contractor"

WITNESSETH:

WHEREAS, Company owns lode mining claims containing gold and other precious minerals situate on Cleary Summit, near Fairbanks, Alaska, and is applying to the Office of Mineral Explorations for a developmental loan on said property; and

WHEREAS, Contractor is familiar generally with the property, and with the work proposed to be done as a result of a loan from the Office of Mineral Explorations; and

WHEREAS, it is the desire of the parties to arrange a firm contract covering the development work for which loan is being sought, NOW THEREFORE:

Company desires to sink a shaft of an approximate depth of 200 feet on its property to intersect an ore-bearing vein, then drift 200 feet in each direction therefrom along said vein; and if such work is successful to rehabilitate the portal of an old crosscut tunnel at the head of Wolf Creek for about 50 feet, extend that tunnel 700 feet more or less to intersect the vein, and drift approximately 200 feet in each direction from such intersection in the vein, and it is the desire of the parties hereto to contract with relation to said work, NOW THEREFORE:

COLLINS AND CLASBY
ATTORNEYS AT LAW
FIRST NATIONAL BANK BUILDING
P. O. Box 1368
FAIRBANKS, ALASKA
GLOBE 2-2153

Company agrees with respect thereto as follows:

1. To supply to Contractor all of the machinery and equipment needed by Contractor to prosecute the work hereafter more in detail expressed, and to supply to Contractor existing buildings for bunkhouse, messhouse, and other needed facilities, all at a rental charge of $15.00 per lineal foot for construction of the shaft, and the drifts from the shaft along the vein; and at the rate of $10.00 per lineal foot for construction of the additional tunnel, and drifts from the tunnel along the vein.

2. To permit Contractor free access to the property for the purpose of prosecuting the work.

3. To pay for the work accomplished by Contractor each month, before the 10th day of the month, for the work accomplished during the prior calendar month, per lineal foot measurement, in accordance with the prices hereinafter set forth.

Contractor agrees with Company as follows:

1. To sink a shaft on Company's property to the approximate depth of 200 feet, constructed in accordance with the Alaska Department of Mines and Minerals regulations, having a size of 5 x 8 feet outside of timbers, containing timbering, man-ways, man-way platforms at intervals no greater than 20 feet, staggered ladders, and room for air, pump discharge, and ventilating pipe, all in the manner required by such regulations and in conformity with any detailed plans and specifications in accordance with the Office of Minerals and Explorations requirements, sets and posts to be of 6 x 6 rough lumber, two-inch planks for lagging on the hanging wall, and two-inch material in the manway platforms, for a cost per lineal

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GLOBE 2-2153

of $85.00 without timber, and $100.00 with timbers, platforms, etc.

2. To drift, including excavation and removal of material to the surface, along the vein, from said shaft, distances in each direction along said vein, totaling approximately 400 feet, with construction 4 feet wide and 6 feet high in the clear of all timber and other supports, together with such timbering, planking and supports which may be necessary. Such timbering shall be installed in the manner and of the size and grade of material as is required by any applicable regulations, and adequate to provide ground support for safety and convenience. The cost of drifting such shaft shall be $55.00 per lineal foot without timbering, and $65.00 per lineal foot with timbering.

3. To re-open the old portal and rehabilitate the first 50 feet thereof, to a size of 5 x 6 1/2 feet clear of timbering, with 8 x 8 posts and caps and 4" planks for roof and side lagging, in conformity with Alaska Department of Mines and Minerals regulations, and any detailed specifications of the Office of Mineral Explorations, for a cost per lineal foot without timber of $55.00, and with timbering, $70.00.

4. To extend the existing tunnel approximately 700 feet to intersect the vein constructed with 5 foot width and 6 1/2 foot height clear of timbering, together with the placing of timbers where required under the Alaska Department of Mines and Minerals regulations, or in order to provide adequate ground support for safety and convenience, which timbering shall be 6 x 6 posts and cap sets with 2" planks for lagging, at a cost of $50.00 per lineal foot without timbering, and $60.00 per lineal foot with timbering.

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ATTORNEYS AT LAW
FIRST NATIONAL BANK BUILDING
P. O. Box 1368
FAIRBANKS, ALASKA
GLOBE 2-2153

5. To construct drifts from the tunnel last mentioned above along the vein in each direction from the tunnel intersection approximately 400 feet, of the size of 4 foot width by 6 foot height clear of all timbering, together with such timbering as may be required by the regulations of the Alaska Department of Mines and Minerals or to provide ground support for safety and convenience of 6 x 6 posts and cap sets and a 2" planks for lagging, for a cost of $50.00 per lineal foot without timber, and $60.00 per lineal foot with timbers.

6. Contractor will furnish all labor and all supplies, particularly including but not limited to powder, fuse, caps, timber, oil, gas and commissary, as may be needed both underground and aboveground to accomplish the above-noted work.

7. Contractor will cover his employees with Workmen's Compenastion coverage in a Workmen's Compensation Insurance Carrier acceptable to Company; and pay his employees promptly and in the manner required by law, giving Company evidence thereof on demand; will carry a general libbility policy covering his use and occupancy of and work upon the property with a Liability Insurance Company acceptable to Company, and in not less than $100,000.00 for each injury and an aggregate of $500,000.00 for each accident or occasion. Such insurance coverage shall continue during the life of this contract.

8. Contractor shall refrain from doing any act, or shall so accomplish that which he does, as to not subject the property to any claim of lien; and shall remove any claim of lien within five days after the request by Company, and shall save Company harmless from any loss or cost by reason of a lien on its property arising

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ATTORNEYS AT LAW
FIRST NATIONAL BANK BUILDING
P. O. Box 1368
FAIRBANKS, ALASKA
GLOBE 2-2153

from any acts or omissions of Contractor.

9. Contractor agrees to move into place, install, maintain, repair, operate, and return to proper storage, all items of equipment leased by Company to Contractor for use in accomplishing the work provided for in this agreement, all at his own expense.

10. To pay all bills for materials and supplies, as well as labor, incurred in the prosecution of the work herein defined.

It is mutually agreed between the parties hereto as follows:

1. Contractor will not proceed with any of the work outlined in this agreement until he has been given directions in writing so to do. It is understood that such directions will not be forthcoming until such time as Company's loan application to the Office of Mineral Exploration has been approved, and sufficient monies committed to the project to assure its reasonable completion. If notice to proceed is not given within six months from the date of this contract, Contractor shall have the option to rescind and withdraw therefrom.

2. It is agreed between the parties that the work outlined in this contract is exploratory only, and may be terminated by Company at any time upon 48 hours written notice. It is understood between parties that the Office of Mineral Exporation will be reviewing the results of this exploration and may terminate Company's right to draw further loan funds beyond that then disbursed, thus prevent the continuance of the project.

3. It is understood between parties that the lineal measurments of the work herein outlined are only approximations,

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ATTORNEYS AT LAW
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that the work first undertaken will be the sinking of the shaft, then following that the drifting therefrom along the vein sufficiently to establish either the content thereof or the desirability of abandoning further exploration; and that only upon such exploration evidencing the presence of economic mining possibilities, will the rehabilitation of the tunnel and the extension of the tunnel be undertaken. Drifting from this tunnel will be only undertaken if it appears economically advisable.

4. It is understood that all material from the shaft, drifts from the shaft, tunnelling, drifts from the tunnel, will be brought to the surface and properly stock-piled or prepared for transportation, as Company may direct, and be taken by the Company for milling at its own expense with Company to retain title thereto and all proceeds therefrom. Should it become desirable in connection with the milling process, to require double mining in any shaft, tunnel, or drift, Company will make appropriate arrangements therefor with Contractor, but even in that event, all extracted material, whether vein or waste, will be delivered to Company for the milling thereof at its own expense and for its own retention of values therefrom.

5. Once notice to proceed has been given under this contract, Contractor shall immediately commence the work hereunder, and shall proceed with those requirements continuously with an adequate crew, except as may be otherwise agreed to between Company and Contractor.

6. If Contractor shall fail in the performance of this contract, in any manner, in the judgment of the Company, or the

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ATTORNEYS AT LAW
FIRST NATIONAL BANK BUILDING
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Office of Mineral Exploration, Company shall have the right to cancel this contract.

In witness whereof, the parties hereto have affixed their hands and seals on the day and year hereinabove written.

KEYSTONE MINES, INC.

BY: Arnold M. Nordale
Arnold M. Nordale, President

ATTEST:

BY: Eugene F. Schreiber
Eugene F. Schreiber, Secretary

Company

(CORPORATE SEAL)

Edwin W. Ebbert
Edwin W. Ebbert

Contractor

COLLINS AND CLASBY
ATTORNEYS AT LAW
FIRST NATIONAL BANK BUILDING
P. O. Box 1368
FAIRBANKS, ALASKA
GLOBE 2-2153

SUBSCRIPTION CONTRACT

THIS AGREEMENT Made and entered into this 18th day of April, 1963, by and between:

NORDALE HOTEL CORPORATION, an Alaska Corporation, herein called Party of the First Part;

THE ALGO COMPANY, a Minnesota corporation, herein called Party of the Second Part;

and

EUGENE F. SCHREIBER, of Fairbanks, Alaska, herein called Party of the Third Part;

W I T N E S S E T H:

WHEREAS the Nordale Trust (Arnold M. Nordale, Trustee) owns five (5) adjoining lode claims on Cleary Summit, and all of the shares outstanding in Nordale Hotel Corporation; and plans the transfer of said lode claims to said corporation, and the change of the name of that corporation to Nordale Corporation; and

WHEREAS the Algo Company owns all of the shares (or properties) of the HI-YU Mine, consisting of 36 lode claims improved with a mill, mining machinery, equipment and buildings, commonly known as the HI-YU property; and

WHEREAS Eugene F. Schreiber owns 21 lode mining claims on Cleary Summit, that are adjacent to and contain the same vein structures as the Nordale claims; and

WHEREAS all of said properties are contiguous, and form a desirable unit and the parties desire to form a corporation known as Keystone Mines, Inc., to which said properties shall be transferred for shares, and into which there shall be injected $6,000.00 in capital, which corporation will then seek an Office of Mineral Exploration loan for the exploration of veins on the Nordale

COLLINS AND CLASBY
ATTORNEYS AT LAW
FIRST NATIONAL BANK BUILDING
P. O. Box 1368
FAIRBANKS, ALASKA
GLOBE 2-2153

property, NOW THEREFORE

It is agreed by and between the parties hereto, each with the other in consideration of the undertaking by the other, as follows:

1. The parties shall cause to be formed an Alaska corporation known as Keystone Mines, Inc., capitalized with 500,000 non par value shares authorized to engage in mining ventures, and to commence business upon the sale of 6,000 of its shares for $1.00 each in cash.

2. Each party does hereby subscribe to 2,000 shares of the capital of said corporation at $1.00 per share, and agrees to purchase said shares for cash immediately upon completion of the formation of said corporation.

3. It is agreed between the parties that the Hi-Yu properties, although substantially mined and not being operated, constitute a valuable milling and machinery unit; that the Schreiber properties although substantially mined and not being operated, constitute a valuable extension of mineral veins located in the Nordale property; and that the Nordale property embraces a partly developed, slightly mined, promising lode deposit; and that each of these three properties are agreed to be the same in value to the corporation to be formed. Each of the parties undertakes and agrees to grant to the corporation to be formed, an option to purchase each property for a price to be fixed by the Board of Directors of the corporation to be formed. The price shall represent the value of said properties, considering each to be one-third (1/3) of the total value of the joint properties. The payment of the pur-

COLLINS AND CLASBY
ATTORNEYS AT LAW
FIRST NATIONAL BANK BUILDING
P. O. BOX 1368
FAIRBANKS, ALASKA
GLOBE 2-2153

chase price shall be made in shares of the corporation to be formed at such valuation per share as shall be fixed by the Board of Directors of the corporation to be formed.

This option instrument shall take such form as shall be satisfactory to counsel for the Office of Mineral Exploration, a United States Government Agency, in order to vest in the corporation to be formed the required property interests to justify the government exploration loan.

4. Each of the parties hereto pledge their best efforts to promptly effectuate said corporation as an operating entity, securing the capital to undertake the planned exploration, and thereafter exploiting the property to the best advantage of said corporation.

IN WITNESS WHEREOF, the parties hereto have hereunto set their hands and seals on the day and year hereinabove written.

La Dessa Nordale
Secretary

NORDALE HOTEL CORPORATION

BY: Conrad M. Nordale
President

ATTEST:

BY: Mathilda Lynard
The Algo Co Secretary

(CORPORATE SEAL)

THE ALGO COMPANY, a Minnesota Corporation

BY: William L. Basham
President

ATTEST:

BY: _____
Secretary

(CORPORATE SEAL)

Eugene F. Schreiber
Eugene F. Schreiber

NS AND CLASBY
NEYS AT LAW
NAL BANK BUILDING
BOX 1368
S, ALASKA
-2153

U. S. Government Messenger Envelope

andard Form No. 65 Rev. (1957)
romulgated by Bureau of the Budget Circular A-33 (Rev.)

65-104

NAME (OR TITLE) OF ADDRESSEE, AGENCY, ORGANIZATIONAL UNIT, ADDRESS, AND ROOM		NAME (OR TITLE) OF ADDRESSEE, AGENCY, ORGANIZATIONAL UNIT, ADDRESS, AND ROOM	
Mr. Selfridge OME - Room 4459	STOP		STOP
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Use other side

Use STOP only when messenger service between Government buildings in Washington, D. C., is required or wherever a STOP system is used. Your mail room has STOP information.

NAME (OR TITLE) OF ADDRESSEE, AGENCY, ORGANIZATIONAL UNIT, ADDRESS, AND ROOM		NAME (OR TITLE) OF ADDRESSEE, AGENCY, ORGANIZATIONAL UNIT, ADDRESS, AND ROOM	
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Use other side first

December 11, 1974

Mr. Eugene F. Schreiber
224 3rd Avenue
Fairbanks, Alaska 99701

Re: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2173

Dear Mr. Schreiber:

Enclosed is a copy of a self-explanatory letter concerning the subject OME contract for which you signed a Lien and Subordination Agreements document on August 28, 1968.

Sincerely yours,

Harold Kirkemo, Chief
Office of Minerals Exploration

Enclosure

cc:
DRF
MR Rdg.
OME Rdg.
OME Files
Mr. Kirkemo
Region II

Identical letter to:
Mr. William L. Basham
President
The Algo Company
Box ~~1537~~ 630
Fairbanks, Alaska 99701

December 11, 1974

Mr. Arnold M. Nordale, President
Keystone Mines, Inc.
6720 East Green Lake Way N.
Seattle, Washington 98103

Re: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Fairbanks District, Alaska
Contract 2173

Dear Mr. Nordale:

As the period of obligation for payment of royalties on production under OME Contract 2173 has terminated, the Government is closing its books and records on this account, and retains no claim or lien for royalty pursuant to terms of the contract.

Sincerely yours,

Harold Kirkemo, Chief
Office of Minerals Exploration

cc:
DRF
MR Rdg.
OME Rdg.
OME Rdg.
Mr. Kirkemo
Region's I and II

HKirkemo/gpw

December 11, 1974

Memorandum

To: Branch of Financial Reports,
Geological Survey

From: Chief, Office of Minerals Exploration

Write-off of realized loss under the OME contract listed is hereby authorized:

Contract	Docket	Operator	Write-off
2173	6304	Keystone Mines, Inc.	$15,776.79

Harold Kirkemo

cc:
DRF
MRRdg.
OME Rdg.
OME Files
Mr. Kirkmeo
H
HKirkemo/gpw

OFFICE OF MINERALS EXPLORATION
U.S. GEOLOGICAL SURVEY

TO: U. S. GEOLOGICAL SURVEY

FROM: OFFICE OF MINERALS EXPLORATION

- ABSTRACT OF REMITTANCES -

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpose
9-7-71	$54.75	1st. Natl Bank of Fairbanks, Alaska	Keystone Mines, Inc.	OME-6304 E-2173	Royalty

REMARKS: (List smelter or mill lot numbers covered by royalties)

9/13/71
Date Prepared

Catherine A. Curtin
Person Preparing Abstract

Date Received

Person Receiving Remittance

6720 E. Green Lake Way N.
Seattle, Wash. 98103
September 9, 1971.

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

OME. 6304
Keystone Mines, Inc.
Fairbanks, Alaska
Contract 2173

Dear Mr. Kirkemo:

In reply to your letter of August 26, 1971 I am enclosing a check in the amount of $54.75.

Please accept my apology for an inexcusable error in accounting.

Sincerely
Arnold M. Nordale

cy To R-II

OFFICIAL COPY
O. M. E.
RECEIVED
SEP 13 1971
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MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
8/26/71		120
		220

AIRMAIL

AUG 26 1971

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
P. O. Box 630
Fairbanks, Alaska 99701

Re: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2173

Dear Mr. Nordale:

This is with reference to the settlement sheet and royalty payment of $156.55 received and acknowledged by us on August 19, 1971. With respect to the total royalty due the Government on this shipment, the following data were derived from the settlement sheet:

Total value of shipment	$8,606.25
Total charges	4,380.18
Gross proceeds	$4,226.07
Government royalty at 5%	$ 211.30
Royalty received August 19, 1971	156.55
Balance royalty due	$ 54.75

We would appreciate receiving the balance of royalty due on this shipment.

Sincerely yours,

Harold Kirkemo
gla

Harold Kirkemo
Chief, Office of
Minerals Exploration

cc: Director's Reading File
Mineral Resources
OME docket
OME Reading File
OME Region II
Mr. Kirkemo
130

HKirkemo/gla 8-26-71

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
8/19/71		120
		220

AIRMAIL

AUG 19 1971

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
P. O. Box 630
Fairbanks, Alaska 99701

Re: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2173

Dear Mr. Nordale:

This is to acknowledge receipt of your letter dated August 13, 1971, enclosing check No. 82, dated August 16, 1971, in the amount of $156.55 from Keystone Mines, Inc., and a copy of an ore sale settlement sheet dated December 15, 1970, Invoice 1000, from Cantu Mineral Association.

Thank you for this material.

Sincerely yours,

Harold Kirkemo

Harold Kirkemo
Chief, Office of
Minerals Exploration

cc: Director's Reading File
Mineral Resources
OME docket
OME Reading File
OME Region II w/enclosures letr. 8/13/71 and settlement sheet 12/15/70
Mr. Kirkemo
130

HKirkemo/gla 8-19-71

P.O. Box 630
Fairbanks, Alaska 99701
August 13, 1971

OFFICIAL COPY
O. M. E.
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AUG 18 1971

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

OME 6304
Keystone Mines, Inc.
Fairbanks, Alaska
Contract 2173

Dear Mr. Kirkemo:

Further to my letter of July 15, 1971, enclosed is a copy of a statement sent to Edwin W Ebbert by Canter Mineral Association in regard to the sale of antimony ore which he had mined on Keystone property which is subject to OME royalty.

Ebbert received payment of $2504.82 but failed to report it or make payment of royalty to Keystone. He claims he has not received the remaining 20% but it is presumed he has or will and the enclosed check is for 5% of $3131.03 or $156.55.

Ebbert has refused to vacate the house he was allowed to live in under his lease and in many ways has proved to be an unreliable and difficult person. Keystone is preparing to take eviction action.

Sincerely
Arnold M. Nordale

Copy with settlement sheet to OME Region II

COPY

Canty Mineral Association
14633 Ambaum Blvd. S.W.
Seattle, Washington 98166
(206) 248-1330

December 15, 1970

INVOICE: 1000

VESSEL: BEISHU MARU
DESTINATION: NAGOYA, JAPAN
BUYER: OHGITANI KOGYO COI, LTD.
RE: ANTIMONY ORE (CRUSHED & BAGGED) 42% Sb

60,000# ANTIMONY ORE, 10% MOISTURE LOSS----------54,000# NET

54,000 @42%Sb----------	1012.5 LTU
$8.50 PER LTU----------	$8606.25
80% PROVISIONAL PAYMENT ---------- AS PER L/C	6885.00

LESS THE FOLLOWING CHARGES:

ARCTIC CONTAINER @$1.22 FOR 60,000#----------	732.00
ARCTIC CONTAINER @$.14 FOR 54,000#----------	75.60
SEAPORT SHIPPING @$39.00 PER TON----------	1053.00
ASSAY CHARGES----------	102.00
MILLING & CRUSHING @$48.565 PER TON----------	1456.95
DOCUMENTATION AND INSURANCE----------	100.00
10% HANDLING CHARGE----------	860.63
TOTAL CHARGES----------	$4380.18
80% PROVISIONAL AS PER L/C----------	$6885.00
LESS TOTAL CHARGES----------	-4380.18
BALANCE DUE ----------	$2,504.82

THE REMAINING 20% PAYMENT TO BE PAID UPON FINAL CUTTURNS FROM OHGITANI KOGYO CO., LTD. NO LATER THAN MARCH 31, 1971.

WE ARE ENCLOSING OUR CHECK IN THE AMOUNT OF $2,504.82.

Total Value 8 6 0 6 2 5
charges - 4 3 8 0 1 8 -
Gross Proceeds 4,2 2 6,0 7 *
@ 5% = *
211.30
156.55
54.75

OFFICE OF MINERALS EXPLORATION
U.S. GEOLOGICAL SURVEY

TO:

Budget and Finance
USGS

FROM:

OFFICE OF MINERALS EXPLORATION

- ABSTRACT OF REMITTANCES -

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpose
8/16/71	$156 55	First Natl Bank Fairbanks, Alaska	Keystone Mines, Inc.	DMEA 6304 E2173	Royalty Payment

REMARKS: (List smelter or mill lot numbers covered by royalties)

8/19/71
Date Prepared

Person Preparing Abstract

Date Received

Person Receiving Remittance

COPY
JUL 19
INITIALS | CODE
ofa | 320
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220

6720 E. Greenlake Way N.
Seattle, Wash 98103
July 15, 1971

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

OME 6304
Keystone Mines, Inc
Fairbanks, Alaska
Contract 2173

Dear Mr. Kirkemo:

This is in reply to your letter of July 6, 1971, concerning the disposition of the antimony ore stockpiled by E.W. Ebbert.

To my knowledge he has not sold or removed the antimony from Keystone property. He is also still living there which is contrary to his lease agreement.

Through its attorney, Mr. Charles J. Clasby, Keystone has given him notice to vacate the premises but he has not done so. I will be going to Fairbanks July 26th to start eviction proceedings and to take possession of whatever antimony is there.

When this is accomplished I will advise you as to the disposal of the antimony.

Sincerely
Arnold M. Nordale

cy to R-II

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
7/1/71		120
		220

AIRMAIL

JUL 1 1971

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
6720 East Green Lake Way N.
Seattle, Washington 98103

Re: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2173

Dear Mr. Nordale:

Reference is made to our letter to you of February 16, 1971, inquiring about the sale of 40 tons of antimony ore stockpiled at the mine by Mr. E. W. Ebbert, and to your reply dated February 20, 1971, enclosing a letter from Mr. Ebbert.

Will you kindly advise us whether or not negotiations for the sale of the reprocessed ore Mr. Ebbert mentioned have been completed and settlement therefor determined. Any OME royalty which possibly may be due should be forwarded with two copies of the settlement sheets to Mr. Harold K. Stager, Field Officer, Region II, Office of Minerals Exploration, U. S. Geological Survey, 345 Middlefield Road, Menlo Park, California 94025.

Sincerely yours,

Harold Kirkemo
gla

Harold Kirkemo
Chief, Office of
Minerals Exploration

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

GLAult/a 7-1-71

6720 E. Green Lake Way N.
Seattle, Wash 98103
February 20, 1971

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

OME. 6304
Keystone Mines, Inc
Fairbanks, Alaska
Contract 2173.

Dear Mr. Kirkemo:

In reply to your letter of February 16, 1971, I am enclosing a copy of a letter recently received from Mr. E. W. Ebbert which will provide the information you desire.

While in San Francisco this week I had the pleasure of visiting your office in Menlo Park and to meet Mr. Stager.

We had an interesting discussion concerning the status of Keystone and ~~the~~ efforts to interest mining companies in it. He, no doubt, will convey to you the details of our conversation and the objective of my seeing him.

Sincerely
Arnold M. Nordale

copy + enclosure to R-II

February 5, 1971

Dear Sir:

In regard to my expired lease on certain claims and buildings on Keystone property I am informing you that I will have things put away and stored in their proper places by about June 1971 if weather permits. We have some rolling stock that is frozen to the ground and buried in six to eight feet of packed snow. I will secure those buildings still standing and capable of being used for the storing of Keystone equipment as soon as possible. The snow is deep and it is almost impossible to travel to or from any of the properties.

It would perhaps be advisable to have me act as watchman here at Cleary Hill. I will be living here working on the DeMaulenaer claim which adjoins the Cleary Hill workings.

The last ore we mined had to be reprocessed to upgrade its quality to make it acceptable to any market. It will be some time before the final results and settlements are received as this is being done in Japan. We had to agree on a settlement basis of from $8 to $10 per LTU depending on its grade. There will be very little settlement after deducting the cost of freight and the reprocessing previously mentioned. I will let you know as soon as I hear from Japan.

We will probably have our final book put in order someime before tax time and we can come to some settlement agreement at that time in regard to past businesses with Keystone.

I hope this letter finds all of you in good health and I am looking forward to many years of successful association.

Yours truly,

EWE:ad.
CC: H. I. Risvold
E. F. Schreiber

1. Option Agreement on unpatented claims, dated 19 August 1963 expired one yr from above date unless extended by Optionors.
How many times was it extended? Is it valid today?

2. Lien & Subordination Agreements may need updating in line with Solicitor's recent request for updating on other applications.

3. Bank letters would need to be updated.

4. OMC would not be interested in the rehabilitation or tunnel enlargement.

5. Might be interested in some of the tunnel extension & drifting.

6. The proposed $180,000 OMC participation is out of our world.

OFFICIAL FILE COPY

2/23/71 120

AIRMAIL

FEB 16 1971

Mr. Arnold M. Nordale
President
Keystone Mines, Inc. 220
6720 East Green Lake Way N.
Seattle, Washington 98103

130

Re: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2173

Dear Mr. Nordale:

Reference is made to your letter of August 31, 1970, accompanying two copies of our request for information (MME Form 63), advising that there had been no production from the subject property since October 24, 1969. However, under item 2.B. of the form letter, you reported that Mr. E. W. Ebbert had stockpiled about 40 tons of antimony ore from spoil piles produced by surface trenching, that Mr. Ebbert's lease was to expire on January 1, 1971, and that he would probably sell the ore before that time.

Please advise us whether the lease with Mr. Ebbert expired or was extended. If the lease was extended, we should be furnished two true copies of the lease as provided in Article 2(c) of the subject contract. Also, please advise the disposition of the ore stockpiled by Mr. Ebbert. If sold, two copies of the settlement sheets should be furnished.

Your prompt reply will be appreciated.

Sincerely yours,

Harold Kirkemo (bsl)

Harold Kirkemo
Chief, Office of
Minerals Exploration

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

HKirkemo/bsl 2/23/71

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

October 7, 1970

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
6720 East Green Lake Way N.
Seattle, Washington 98103

OFFICIAL COPY
O. M. E.
RECEIVED
OCT 16 1970

INITIALS	CODE
[illegible]	130
CHK	120
	220

Re: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2173

Dear Mr. Nordale:

All of the Government's files on the OME contract referenced above have been transferred from Spokane to the OME Field Office in Menlo Park, California. The transfer was made because of a revision in the areas served by the Field Offices. I am enclosing a copy of the current regulations (Title 30) that shows the regional responsibilities of the four Field Offices.

Future OME royalty payments under this contract should be made to the U. S. Geological Survey and mailed to:

Harold K. Stager
Field Officer, Region II
Office of Minerals Exploration
U. S. Geological Survey
345 Middlefield Road
Menlo Park, California 94025

Sincerely yours,

H. K. Stager
Field Officer
OME, Region II

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

RMSmith:mkh

Enclosure

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
9/3/70	Emerick	120
		120
9/4	Cole	220
		120M

AIRMAIL

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
6720 East Green Lake Way N.
Seattle, Washington 98103

SEP 4 1970

Re: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2173

Dear Mr. Nordale:

This is in reply to your letter of August 24, 1970 inquiring whether OME would consider favorably an application for financial assistance to rehabilitate and enlarge the Nordale tunnel, extend the tunnel for 1,000 feet to intersect several veins containing gold and base metals, and to drift about 800 feet along the veins.

All applications received on the OME program are reviewed impartially, and those offering the best opportunities for making significant discoveries are considered for contracts to the extent that our limited funds will permit.

The estimated cost to the Government of the program you have outlined would require nearly half of the funds available to OME this fiscal year. We would suggest that you consider a more modest program of exploration, or offer to bear a larger share of the estimated cost to rehabilitate and enlarge the old Nordale tunnel. Such work, though necessary before exploration can procede, is more preparatory work than exploration work. We favor applying as much as possible of our available funds to exploratory work. For example, one contract now in force provides for reimbursement of costs for sinking a shaft on the basis of 75 percent Operator's share and 25 percent Government share, and reimbursement for the exploration work upon completion of the shaft on the basis of 75 percent Government share and 25 percent Operator's share. This arrangement allows the Government to assist an operator on a much larger project than would otherwise be possible with the funds available.

It will be necessary for you to submit a new application because OME-6304, Contract No. 2173, was terminated on April 28, 1966. Copies of Application Form MME-40 are enclosed for your use in the event you decide to submit a new application. New letters to and from the banks will be necessary, your rights in the land should be updated if necessary, and new cost estimates should be furnished with the application. If any of the technical information or data in the OME-6304 docket is applicable to the new application simply state, "See Docket No. OME-6304," as Mr. McLaren suggested in his letter of April 27, 1966.

Sincerely yours,

Harold Kirkemo (bsl)

Harold Kirkemo
Chief, Office of
Minerals Exploration

Enclosures

cc: Director's Reading File
Mineral Resources File
OME Docket
OME Reading File
OME Region II -w/cy of MME 63
Mr. Emerick

WLEmerick/bsl 9/3/70

UNITED STATES
DEPARTMENT OF THE INTERIOR

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

August 27, 1970

OFFICIAL COPY
U. S. G. S.
AUG 28 1970
WRITER CODE
Ga 130
120
120E
R22

Memorandum

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

From: Field Officer
Region II

Subject: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Fairbanks District, Alaska
Contract 2173

The enclosed letter from the Operator of the subject property, dated August 24, was received in the Field Office on August 26, 1970.

The docket file for this certified project is still in the Region I Field Office in Spokane, and we have no knowledge of the project in this office. Will you please reply to Keystone Mines and answer their questions as to the submission of a new application, etc.

H. K. Stager

Enclosure

cc: Region I (w/copy of enclosure)

RECEIVED
AUG 26 1970
OFFICE OF MINERALS EXPLORATION
U.S. GEOLOGICAL SURVEY
MENLO PARK, CALIF.

6720 E. Greenlake Way N.
Seattle, Wash. 98103
August 24, 1970

Mr. Harold K. Stager
Field Officer
Office of Minerals Exploration
3457 Middlefield Road
Menlo Park, California 94025

OME. 6304
Keystone Mines, Inc.
P.O. Box 630
Fairbanks, Alaska 99701
Contract 2173

Dear Mr. Stager:

Keystone Mines, Inc. on April 30, 1963 submitted an Application for Financial Assistance to the Office of Minerals Exploration which included two principal projects, namely:

Project No. 1, To sink a shaft on a vein 200 feet along the dip and then to drift on the vein a total of 400 feet;

Project No. 2, If the shaft and drifts disclosed the presence of a vein of sufficient size and ore of economic value at present cost level, to extend and enlarge the old low level tunnel at the head of Wolf Creek to intersect the vein at depth.

OME. Contract No. 2173 was granted on August 29, 1963 for Project No. 1 with the total feet of drifting increased to 800 feet. Project No. 2

was held in suspense pending the outcome of Project No. 1. It was to be activated by either an amendment to Contract No. 2173 or through a new application.

Contract No. 2173 was terminated October 31, 1966 due to water and ground conditions which made the completion of the contract too difficult and too costly.

On April 28, 1966, Office of Minerals Exploration certified that mineral or metal production may be possible as a result of the exploration and stated that royalties were to be paid to the Government as provided for in Contract No. 2173.

After the termination of the contract, Mr. E. W. Ebert has carried on small scale surface mining of two veins - gold and antimony which has revealed economic values and persistent surface continuity. Royalty has been paid to OME for the production made by his operation.

In 1967 the Bureau of Mines drilled two diamond drill holes to determine if the antimony vein and the one on which the shaft was sunk continued downward to the level of the old Nordhee tunnel. The holes intersected definite mineralization at depths respective to each

vein at that level.

During 1969, International Minerals and Chemical Corporation of Skokie, Illinois under an option agreement ~~agreement~~ with Keystone Mines, undertook an extensive exploration program to determine if a large scale open-pit mining operation were feasible. The program consisted of detail mapping, examination of old prospects, geochemistry, 9916 feet of bulldozer trenching and 2640 feet of drilling. The results of the work indicated that the wide spacing of the veins diluted the values below the economic level for that method of mining. Their interest was primarily in gold and silver and no consideration was given to base metal content. The option agreement was dropped.

The purpose for my writing you is to find out if the Office of Mineral Exploration would favorably consider an application for a contract to rehabilitate and enlarge the old Nordale tunnel, to extend it a distance of 1000 feet to intersect the gold and base metal veins shown on the patch copy from the IMC map and to drift along the veins a total of 800 feet.

The cost of the project will approximate

$240,000 of which Keystone will be responsible for $60,000 and ONE $180,000, the figures being contingent on the price obtained from an independent contractor.

With regard to whether Keystone should submit a new application or should apply for an amendment to Contract No. 2173, Dam enclosing a copy of Mr. McLaren's letter of April 27, 1966 with particular reference to the next to last paragraph on page 2. Keystone prefers to have the present contract amended as it would be much faster to process and would avoid considerable redundancy.

Sincerely yours
Keystone Mines, Inc.
Arnold M. Nordale
President

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane, Washington 99204
April 27, 1966

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
6720 E. Green Lake Way N.
Seattle, Washington 98103

Re: OME-6304 (Gold-Silver)
Keystone Mines
Fairbanks District, Alaska
Contract 2173

Dear Mr. Nordale:

Thank you for your letter of April 20, 1966, and the accompanying royalty check in the amount of $265.01.

I have been advised by our Washington, D. C. office that a Termination Agreement will be prepared as requested in your letter of November 10, 1965, but that, before it could be prepared, certain data from this office was required. That data has now been furnished and I may receive the Agreement any day. Therefore, in my opinion, it would probably be better for you to consider the present contract as terminated and that, should Keystone decide to request additional OME aid, it would be better to make a new application. For this purpose I am enclosing four copies of the Application Form MME 40. Three complete copies of the application should be submitted, the fourth copy being for your files.

New letters to and from banks as requested in Item 1, Financial Eligibility, and probably the information requested in 1(b) and 1(c) would be required. Under Item 2, Applicant's Rights in Land, if there has been no change in the property rights of Keystone Mines, Inc., you could state under Items 2(a) and (b): "See Docket No. OME-6304."

After our legal section has reviewed the documents now on file, they will be more able than I am to decide if any of them require updating and if new Lien and Subordination Agreements will be required.

From what information we have in our files it appears that on the 147 level the OME vein will cross the Kawilita claim south side line before intersecting the southerly extension of the old low level

crosscut tunnel, in which case the Fraction No. 1 claim would probably have to be added to the land. Certainly, we would want a composite map at a scale of 1" = 100' showing the location of the OME shaft and workings, the low level crosscut tunnel, the probable projection southeasterly of the OME vein at the surface and the 147 level, and at least the south side line and east end line of the Kawilita claim. Possibly, the map drawn May 14, 1963, by W. H. Race which accompanied your former application would serve as a base to which you could add the OME and proposed work. However, it should be checked because when I transferred to it the location of the winze collar, as shown on the map which accompanied your October 1963 Narrative Report, the collar is south or in the hanging wall of the vein, whereas the shaft was actually sunk in the footwall.

In your letter of November 10, 1965, you say that Frank Birch terminated his contract because "the ground conditions in the east drift became progressively worse and that he could not continue without sustaining a substantial loss." This raises three questions that should be discussed under Item 3(g). First, can the heavy and badly shattered ground be stoped at reasonable cost? Second, since the old level crosscut will intersect the vein about 400 feet lower than the 147 level and some 400 feet easterly of the east end of the 147 level, what are the chances that the ground will be even heavier and more costly to stope from the lower level? Third, is there any evidence that Wolf Creek, where it crosses the claims, might be along a fault and, if so, is there any evidence of the direction and amount of movement of one side with respect to the other? For most of the remaining subheadings under Item 3, it would probably be sufficient to refer to Docket No. OME-6304. Ore reserves resulting from the OME work and a section in the plane of the vein showing ore blocks should be part of your final report which will become part of the docket. Items 5, Exploration Work, and 7, Estimate of Costs, should, of course, be covered completely, the costs in detail, as if there had been no prior contract.

With the data already in the files, that to be included in your final report, and such new data in justification of your proposal and costs, OME could then decide whether additional work should or should not be approved, and if it should be approved, could decide whether to amend the present contract or draw up a new one.

As no final decisions of this sort are made in this office, I must emphasize that neither the above suggestions nor anything else in this letter should be construed as assurance that a request for further work will be approved.

Sincerely yours,

D. R. MacLaren

D. R. MacLaren
Field Officer, OME
Region I

Enclosures

United States Department of the Interior

GEOLOGICAL SURVEY
WASHINGTON, D.C. 20242

IN REPLY REFER TO: Office of Minerals Exploration

August 28, 1970

AIRMAIL

Re: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2173

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
6720 East Green Lake Way N.
Seattle, Washington 98103

Dear Mr. Nordale:

After the completion of the approved exploration work under the contract identified above, we asked to be informed about changes in the status of the property and production from it during the period of royalty obligation.

To assist you to furnish this information and to assure the accuracy of our records, please answer the questions on the back of this letter and return two copies to this office with copies of any pertinent documents.

Referring to your letter of October 24, 1969, to our Spokane, Washington, office, enclosing a check in the amount of $397.00 and settlement sheets covering antimony ore bought by Fred H. Lenway from the BECS Corporation, and advising that the agreement with the International Minerals and Chemical Corporation had not been completed, please advise the present status of negotiations on the agreement.

Sincerely yours,

Harold Kirkemo

Harold Kirkemo
Chief, Office of
Minerals Exploration

Copy R-II

Form MME 63
(May 1970)

REQUEST FOR INFORMATION ON CERTIFIED PROJECT OR PROJECT UNDER ROYALTY AGREEMENT

1. Since September 22, 1969, has there been a change in ownership, lease, or sublease? *If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before.* Yes ☐ No ☑

Has any interest been acquired in any land situated within 1500 feet of the Kawilite claim since September 22, 1969? (See "Special Agreement" on page 2 of Annex I of the contract. Yes ☐ No ☑

2. Since September 22, 1969, has there been any production from the land subject to the contract? Yes ☐ No ☑

A. If so and it was shipped, give quantity, value, and name and address of purchaser.

Purchaser (*name and address*)	Quantity	Value

B. If stockpiled awaiting sale, state quantity, grade, and location.

Type	Quantity (*tons*)	Estimated Grade	Location
Ore	See accompanying letter		
Concentrates			
Other			

3. Since workings (*see* , has any production been transported through *of contract*)? Yes ☐ No ☐

If so, state quantity, value, and disposition of material.

Disposition of Material	Quantity	Value

Submitted by: Keystone Mines, Inc

Name	*Title*
Arnold M. Nordness	President
Address	*Date*
6720 E. Greenlake Way N Seattle, Wash 98103	August 31, 1970

OFFICIAL COPY
O. M. E.
RECEIVED
SEP 2 1970
INITIAL CODE
1120
~~1120 M~~
1120

6720 E. Greenlake Way N.
Seattle, Wash 98103
August 31, 1970

Mr. Harold Kirkemo
Chief, Office of Mineral Exploration
Geological Survey
U.S. Department of the Interior
Washington, D.C. 20242

OME-6304
Keystone Mines, Inc.
Fairbanks, Alaska
Contract 2173

Dear Mr. Kirkemo:

Enclosed are the two copies of your letter of August 28, 1970 with the information requested on the back.

No production has been made since that reported in my letter of October 24, 1969. However Mr. E. M. Ebbert has gathered about 40 tons of antimony ore from spoil piles produced by surface trenching. The ore is presently stockpiled at site waiting sale. The ore has been visibly graded to meet market tenor. Mr. Ebbert's lease expires on January 1, 1971, so it is likely he will sell it before that time.

During 1969, Keystone was negotiating an option agreement with International Minerals and Chemical Corporation while they were carrying on an extensive exploration program. Their objective was a large scale open-pit mine, but the results of

a program consisting of geochemistry, 9916 feet of bulldozer trenching and 2640 feet of drilling indicated that the wide space between veins diluted the overall value below economic grade.

I.M.C. was interested only in gold and silver and did not consider the base metals. The arrangement was dropped before a formal agreement was concluded.

Sincerely
Arnold M. Nordale

OFFICE OF MINERALS EXPLORATION
U. S. GEOLOGICAL SURVEY

TO: Chief, Branch of Budget and Finance

FROM: Willard P. Puffett
Field Officer, Region I

- ABSTRACT OF REMITTANCES

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpose
10/17/69	$397.00	Main Office First National Bank Fairbanks, Alaska	Keystone Mines, Inc.	OME-6304 2173	Royalty

OFFICIAL COPY
O. M. E.
RECEIVED
NOV 3 1969

INITIALS	CODE
gla	320
	~~120~~
HK	~~120~~
	720

REMARKS: (List smelter or mill lot numbers covered by royalties)

Settlement sheets from Fred H. Lenway and Company, Inc., buyer of 73 drums of Antimony ore from BECS Corporation.
Royalty was computed on net proceeds before deduction for freight.

~~10/28/169xx1969~~
Date Prepared

~~Willard P. Puffett~~
Person Preparing Abstract

10/30/69
Date Received

Lorraine C. Eckstein
Person Receiving Remittance

RECEIVED
OCT 28 1969
O. N.
SPOKANE, WASH.

6720 E. Greenlake Way N.
Seattle Wash 98103
Oct. 24, 1969

Mr. D.R. MacLaren
Field Officer OMC
Geological Survey
U.S. Court House, Room 656
W. 920 Riverside Drive
Spokane, Wash 99201

Contract 2173
Keystone Mines, Inc.
Fairbanks, Alaska

Dear Mr. MacLaren:

I recently received a letter from Mr. E. J. Schreiber, Sec-Treas. of Keystone in which he advised that Ed Ebbert made a shipment of approximately 30 tons of antimony ore. Mr Schreiber enclosed the two settlement statements and a check in the amount of $397.00 for payment to OMC. He did not state what Mr. Ebbert was doing toward further ore shipments.

International Minerals and Chemical Corporation has carried on an extensive exploration program since last May and will continue diamond drilling until winter weather forces a shut down.

A few minor details remain to be adjusted and agreement with IMC will be concluded.

Sincerely

ARNOLD H. NORDALE

CABLE ADDRESS:
LENWAY, SAN FRANCISCO

TELEPHONE 362-8560

FRED H. LENWAY AND COMPANY, INC.

100 CALIFORNIA STREET
SAN FRANCISCO, CALIFORNIA 94111

RECEIVED
OCT 28 1969
O. M. E.
SPOKANE, WASH.

BOUGHT FROM

SOLD TO: B.E.C.S. CORPORATION
229 Slater Drive
Fairbanks, Alaska

OUR INVOICE No. 7315

YOUR ORDER No.

CONTRACT No.

DATE: September 17, 1969

TERMS:

SHIPPED TO

SHIPPED VIA

F. O. B.

MARKS:

73 DRUMS ANTIMONY ORE

Gross Wt.	61,780	lbs.
Tare	3,876	lbs.
Net Wt.	57,904	lbs.
H20(1.93%)	1,118	lbs.
Net Dry Wt.	56,786	lbs.

56,786 lbs. net dry Wt. @ 52.20% Sb =

29,642 lbs. Sb = 1,323.3035 LTU's

1,323.3035 LTU @ $6.00 per LTU

delivered $ 7,939.82

Less: Advanced Freight . . . $ 2,239.28

$ 5,700.54

BECS CORPORATION

P. O. BOX 533
FAIRBANKS, ALASKA
October 1, 1969

RECEIVED
OCT 28 1969
O. M. E.
SPOKANE, WASH

SETTLEMENT STATEMENT ON ORE
SHIPPED TO FRED H. LENWAY

Shipper: BECS Corporation

Buyer: Fred H. Lenway and Company, Inc.

		DEBIT	CREDIT
Value of ore in drums			7,939.82
Freight charges to Fairbanks		500.00	
Freight charges to Texas		2,239.28	-2,739.28
	Total	2,739.28	5,200.54
Net proceeds due shipper			5,200.54
20% Royalty to Keystone Mines Inc., BECS Corp. check #261		1,040.11	-1,040.11
	Total		4,160.43

Edwin Eckert
General Manager

BECS Corporation

EWE:amd

6720 E. Green Lake Way N.
Seattle, Wash 98103
Sept. 22, 1969

Mr. Harold Kirkemo
Chief of Office of Mineral Exploration
U.S. Geological Survey
Department of Interior
Washington, D.C. 20242

OME 6304
Keystone Mines, Inc.
Fairbanks, Alaska
Contract 2173

Dear Mr. Kirkemo:

Pursuant to your letter I am returning 2 copies of your letter of Aug 4, 1969 with the requested information.

The agreement with the International Minerals and Chemical Corporation has not been completed but as soon as it is a copy will be sent you. IMC has had a crew of men on the property doing geochemical and geophysical exploration since June 1st and were scheduled to begin diamond drilling on Sept. 1st.

Sincerely yours
Arnold M. Nordale

IN REPLY REFER TO:
Office of Minerals Exploration

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON, D.C. 20242

AIRMAIL

AUG 4 1969

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
6720 East Green Lake Way N.
Seattle, Washington 98103

Re: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2173

OFFICIAL COPY
O. M. E.
RECEIVED
SEP 25 1969

INITIALS	CODE
Ga	130
HK	120

Dear Mr. Nordale:

After the completion of the approved exploration work under the contract identified above, we asked to be informed about changes in the status of the property and production from it during the period of royalty obligation.

To assist you to furnish this information and to assure the accuracy of our records, please answer the questions on the back of this letter and return two copies to this office with copies of any pertinent documents.

Referring to your letter of March 20, 1969, to the Field Officer, OME Region I, Spokane, Washington, has an agreement been consummated with the International Minerals and Chemical Corporation to form a joint corporation to explore, develop and mine the subject property? If so, please furnish two copies of the agreement for our records.

Sincerely yours,

Harold Kirkemo
Chief, Office of
Minerals Exploration

MME Form 63
Revised 7-65

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since October 1968, has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes ☐ No ☑
   Has any interest been acquired in any land situated within 1500 feet of the Kawilita claim since August 29, 1963? (See "Special Agreement" on page 2 of Annex I of the contract.) Yes ☐ No ☑

2. Since October 1968, has there been any production from the land subject to the contract? Yes ☐ No ☑

   A. If so and it was shipped, give quantity, value, and name and address of purchaser.

	Quantity	Value

   B. If stockpiled awaiting sale, state quantity, grade, and location.

Type	Quantity		Estimated Grade	Location
Ore		Tons		
Concentrates		Tons		
Other		Tons		

3. Since , has any production been transported through workings (see of contract)? Yes ☐ No ☐

   If so, state quantity, value, and disposition of material.

Disposition of Material	Quantity	Value

Submitted by: Keystone Mines Inc
Name Arnold M. Nordaas Title President
Address Date Sept. 22, 1969

OME
IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR

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

July 31, 1969
(Dispatched)

OFFICIAL COPY
O. M. E.
RECEIVED
AUG 4 1969

INITIALS	CODE
[illegible]	120
[illegible]	120
	120
	220

Memorandum

To: Chief, Office of Minerals Exploration

From: Field Officer, OME, Region I

Subject: Summary Final Field Report
OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2173

INTRODUCTION

This report summarizes an OME project to explore for gold-silver ore on the Kawilita claim at the Keystone mine by sinking a shaft and drifting on the vein from near the bottom of the shaft. The contract was dated August 29, 1963; total estimated costs were $79,900.00, of which the Government's share was 50 percent or $39,950.00. The shaft was sunk from 53 feet to a total depth of 176 feet. Near the bottom of the shaft there was 6-1/2 feet of crosscut and 505 feet of drift. Work stopped October 9, 1965, and the contract was terminated October 31, 1965. Total cost of the completed work was $47,878.00, of which the Government's share was $23,939.00. A Certification of Possible Production was issued on April 28, 1966, with provisions for payment of royalty through August 29, 1974. Calculated reserves resulting from the OME work are 5,344 tons containing a total of 3,782 ounces gold and 13,918 ounces silver. Total production through October 1968 has been $210,463, from which the Government has received $10,525.75 in royalties.

OPERATOR

Keystone Mines, Inc.
P. O. Box 630
Fairbanks, Alaska 99701

PROPERTY

The property consists of 9 patented and 14 unpatented claims, lying within secs. 20, 21, 22, 27, 28, and 29, T. 3 N., R. 2 E., Fairbanks Mining and Recording Precinct, Fourth District, Alaska (fig. 1). The patent and recording data of the claims are as follows:

FIELD FINAL REPORT

Patented Claims

Name of Claim	Survey No.	U. S. Patent No.
Willie	2198	1230877
Marigold	"	"
Pioneer	"	"
Henry Ford	"	"
Henry Clay	"	"
Hope	1607	1062411
Fairbanks	"	"
Keystone	"	"
Kawilita	"	"

Unpatented Claims

Recorded in the Office of the Recorder, Fairbanks Recording District, Alaska:

Claim Name	Book	Page
Wolf	23	192
Ruth Fraction	23	135
Minniehaha	23	135
Free Gold	23	135
Pennsylvania	23	135
Henry Ford No. 2	23	135
Henry Ford No. 3	23	135
Henry Ford No. 4	23	135
Laughing Waters	23	135
Fern	23	135
Buttonweeser	23	135
Caribou Fraction	23	135
Caribou No. 2	23	135

Keystone Mines, Inc., has rights to the claims under the terms of an Option Agreement, dated August 19, 1963, by and between Nordale Hotel Corporation, an Alaskan Corporation; Algo Company, a Minnesota corporation; and Eugene F. Schreiber, an individual residing in Fairbanks, Alaska.

The addresses of all signers of the Lien and Subordination Agreements are as follows:

Nordale Hotel Corporation, Nordale Hotel
Fairbanks, Alaska 99701

Arnold M. Nordale, 6720 E. Green Lake Way N.
Seattle, Washington 98103

Eugene F. Schreiber, 224 - 3rd Avenue
Fairbanks, Alaska 99701

The Algo Company (William L. Basham, President)
P. O. Box 1537, Fairbanks, Alaska 99701

The claims are on a topographic divide between Wolf Creek on the northwest and Fairbanks Creek on the southeast. Altitudes range from 1,400 to 2,200 feet. Fairbanks is about 23 miles southwest of the property and can be reached by a fair all-weather road (fig. 1). All of the work done under the contract was on the Kawilita claim.

PURPOSE OF PROJECT

The purpose of the project was to explore for gold and silver-bearing ore bodies by means of sinking a shaft, crosscutting, and drifting on a vein traversing Precambrian Birch Creek schist country rock.

GEOLOGIC JUSTIFICATION

The gold lode deposits of the Fairbanks district have been described by Smith (1913), Brooks (1914), and Hill (1933). In these reports the ore bodies of Keystone Mines, Inc., are described as part of the Homestake or Nordale groups of claims (Smith, 1913, p. 168; Brooks, 1914, p. 331-334; Hill, 1933, p. 101-102). The country rock is Birch Creek schist, a series of highly metamorphosed sediments consisting of massive quartzite, quartzite schists, quartz-mica schists,* crystalline limestone, and andalusite hornfels. The gold-bearing lodes are quartz-filled fissures that cross the foliation of the enclosing rock. The principal vein material is quartz, but there are small amounts of albite, orthoclase, and associated kaolin. Calcite is rare. Native gold is widespread. Silver is found in association with lead and antimony sulfides.

*carbonaceous schists,

There are several easterly trending veins that dip 45°-55° S. on the Keystone property. Foliation in the enclosing mica schist is nearly horizontal.

The main vein had been uncovered on the Kawilita claim by a bulldozer trench about 1,100 feet long (fig. 2). Approximately 600 feet of the vein had been mined with a backhoe. The vein is 1-10 feet thick and averages 2-2-1/2 feet. The surface work produced 1,225 tons of ore that, after milling, yielded $84,024.00 in gold and silver. Considerable stibnite and galena are in the vein. The proposed work was to explore this vein by sinking a shaft for 200 feet and drifting for about 900 feet from the bottom of the shaft.

CONTRACT

The contract, No. 2173, was dated August 29, 1963. Original terms were as follows:

Fixed Unit Costs

200 feet of shaft, plus hoist, etc. @ $130.00/ft	$26,000.00
17-1/2 lineal feet of station @ @ $60.00/ft	1,050.00
4 station sets @ $50.00 each	200.00
Loading pocket	350.00
900 feet of drifting and crosscutting @ $53.00/ft	47,700.00
400 feet timbering in drifts and crosscuts at $10.00/ft	4,000.00
300 assays for gold and silver @ $2.00/assay	600.00
Total Estimated Cost	$79,900.00
Government Participation @ 50%	$39,950.00

The contract was amended seven times as follows:

Amendment No. 1, dated January 29, 1964.--The total cost was reduced from $79,900.00 to $72,950.00, and Government participation was reduced from $39,950.00 to $36,750.00. Also specified was that the shaft sinking was to start 53 feet below the collar of the shaft, and only an additional 150 feet of shaft sinking was allowed. A timber headframe, hoist, cable, and skip, meeting the regulations of the Alaska Department of Mines and Minerals, shall be placed in operating service at the incline shaft site on the Kawilita claim. Under Estimated Cost of Project, all words and figures are deleted and replaced as follows:

Fixed Unit Costs

150 feet of shaft, plus hoist, etc. at $115.00/ft	$17,250.00
17-1/2 lineal feet of station at $60.00/ft	1,050.00
4 station sets @ $50.00 each	200.00
Loading pocket	350.00
900 feet of drifting and crosscutting @ $55.00/ft	49,500.00
400 feet timbering in drifts and crosscuts @ $10.00/ft	4,000.00
300 samples assayed for gold and silver @ $2.00/sample	600.00
Total Estimated Cost	$72,950.00
Government Participation @ 50%	$36,475.00

Amendment No. 2, dated April 27, 1964.--The total cost of the project was reduced to $70,190.00 and the Government participation to $35,095.00. Shaft sinking was reduced to extending the shaft 126 feet from the bottom which was 53 feet below the collar. From the shaft station a crosscut shall be driven into the hanging wall to intersect the vein. From this crosscut drifts shall be driven in a general east and west direction along the vein structure. The drifting and crosscutting shall not exceed an aggregate of 800 feet. With prior Government approval, crosscuts may be driven into the footwall and/or hanging wall of the vein structure. The aggregate length of such crosscuts shall not exceed 100 feet. Under the heading Estimated Cost of Project, all words and figures are deleted and replaced as follows:

Fixed Unit Costs

126 feet of shaft, plus hoist, etc. @ $115.00/ft	$14,490.00
17-1/2 lineal feet of station @ $60.00/ft	1,050.00
4 station sets @ $50.00 each	200.00
Loading pocket	350.00
900 feet of drifting and crosscutting @ $55.00/ft	49,500.00
400 feet timbering in drifts and crosscuts @ $10.00/ft	4,000.00
300 samples assayed for gold and silver @ $2.00/sample	600.00
Total Estimated Cost	$70,190.00
Government Participation @ 50%	$35,095.00

Amendment No. 3, dated December 15, 1964.--(1) The third paragraph of General Provisions is deleted and replaced as follows:

> The Government will not participate in the cost of work performed at locations which are within 100 feet of any land not subject to this contract, with the exception that work performed immediately east of the shaft may approach the south side line of the Kawalita claim but not pass beyond the vertical projection thereof.

(2) Under the heading Description of the Work, the fifth paragraph as amended in Amendment No. 2 is deleted and replaced as follows:

> From the shaft station drive a crosscut in a southerly direction to intersect the vein, from where a drift shall be driven easterly along the vein. From this drift at a point not more than 50 feet from the shaft station crosscut, drive a "bypass" drift westerly in the hanging wall of the vein in such a manner that it may leave a 30-foot pillar and then will intersect the vein at a point approximately 90 feet west of the shaft station crosscut from which point drifting will be continued westerly on the vein. With prior Government approval, crosscuts may be driven into the footwall and/or

hanging wall of the vein but the aggregate length of such crosscuts shall not exceed 100 feet nor shall all of the drifting and/or crosscutting exceed an aggregate of 800 feet.

Amendment No. 4, dated January 29, 1965.--Work under the contract shall be suspended during the period beginning January 11, 1965, and ending not later than May 1, 1965. The time fixed by the contract for the completion of the work is extended from 18 to 24 months, or until August 29, 1965. The maximum period for royalty payments and for the lien to secure payments thereof provided for in the contract is extended from 10 to 11 years from the date of the contract.

Amendment No. 5, dated April 20, 1965.--The time fixed in Amendment No. 4 for the end of the work suspension period is extended from May 1, 1965, to July 1, 1965.

Amendment No. 6, dated July 27, 1965.--Under the heading Description of the Work, the last sentence in Item 2 of Amendment No. 3 is deleted and replaced as follows:

> With prior Government approval, crosscuts may be driven into the footwall and/or hanging wall of the vein, but the aggregate length of such crosscuts shall not exceed 100 feet nor shall all of the drifting and/or crosscutting exceed an aggregate of 900 feet.

Amendment No. 7, dated August 26, 1965.--The time fixed in Item 2 of Amendment No. 4 for the completion of the work is extended from 24 to 31 months from the date of the contract or until March 29, 1966.

PROJECT WORK

Work under the contract began in November 1963. Prior to the beginning of this work, the surface plant had been installed; a two-compartment shaft had been sunk to the 50-foot level on an incline of 45°, and a drift on the 50-foot level was advanced about 130 feet. As a consequence of this work, Amendment No. 1 was prepared that provided for a reduced total footage of shaft sinking at a lower cost per foot. The vein to be followed in the shaft was offset along a fault about 30 feet below the shaft collar and was not exposed again in the shaft; however, it was intersected in a 12-foot crosscut on the 50-foot level.

Shaft sinking continued through March 1964 to a total depth of 147 feet, of which 94 feet was done as part of the OME contract. At the 147-foot level, a crosscut was driven into the hanging wall to search for the vein. Bruce I. Thomas, USBM, reported on the conditions in the shaft as follows:

> "* * * Heavy ground, water, and freezing problems retards the work. The heavy ground is a fractured crinkled talcy chlorite schist interbedded with thin layers of quartzite schist, and in places is severely contorted and crumpled by drag folding. The foliation of the schist strikes E-W and dips 15° N., and the shaft is inclined 45° south. The back of the shaft caves along talcy parting planes parallel to foliation; the parting planes are lubricated with water and the back will chamber if lagging is not driven ahead before mucking below the bottom set. It has been necessary to reduce set spacings from 6-to 4-foot centers between levels 83 to 123. The shaft makes about 200 gallons of water per hour and frequent freezing of water lines and the air motor on the sump pump causes many delays."

Earl Beistline, Dean of the College of Earth Sciences and Mineral Industry, University of Alaska, prepared the monthly reports for the Operator.

The inclined shaft is 4 x 4 feet in the clear and the manway is 4 x 3 feet in the clear. Some mica-graphite-schist is in the wall rock. Several gouge seams, 1/4-1/2 inch thick, were intersected; these contain broken quartz and pyrite, but free gold is not present.

On March 15, 1964, the bunkhouse occupied by the miners was destroyed by fire. One man was burned slightly and another moderately. Subsequently, three trailers were moved into the general vicinity of the shaft for use by the miners. No earthquake damage occurred underground on March 27, 1964, although the quake that severely damaged other parts of Alaska was felt on the surface.

The vein was intersected in a crosscut from the shaft on the 147-foot level. The vein, about 30 feet from the footwall of the shaft, is 24 inches thick and contains free gold. Assay data indicate 0.30 ounces gold per ton and 0.70 ounces silver per ton. The vein strikes N. 55° W. and dips 37° S.

The drift on the 50-foot level was extended 31 feet in April. The work on this level was not participated in by OME. This drift was further extended 83 feet in May, 38 feet in June, 40-1/2 feet in July, and 51 feet in August. A raise from the level to the surface was completed in August. Ore was generally continuous throughout the length of the drift on the 50-foot level.

The shaft was completed in October 1964. In June, July, and August work included making a loading pocket, and timbering the shaft below the 147-foot level. Total length of the shaft is 176 feet, of which 123 was done under the OME contract.

The following was reported by Bruce I. Thomas, USBM, after a visit to the mine on October 31, 1964:

> "Keystone's contractor appears to be discouraged, almost to the point of despair, from on the job problems and from personal ones as well. The contractor situation is in the process of being resolved by Keystone; this in itself contributes much toward confusing and upsetting Mr. Ebbert, the present contractor. According to plan Ebbert is to continue to stope from the upper level and drifting on the 147 level (under OME) will be undertaken by Mr. Birch. Mr. Birch is the same man that worked at the Little Squaw in the Chandalar * * *."

Mr. Thomas also reported that ore stoped from the 50-foot level was being milled at Cleary Hill. He also reported on the definite limits to the length of drifting eastward from the shaft on the 147-foot level for it would soon reach the limiting distance of 100 feet from the property boundary.

Thomas's report on November 9, 1964, discussed the conference he had with Messrs. Birch and Nordale in which it was decided to construct a "bypass" drift in the hanging wall on the 147-foot level to leave at least 30 feet of pillar around the shaft station and loading pocket. This was the change permitted by Amendment No. 3 to the contract.

The new contract mining group, under the supervision of Frank Birch, started drifting on the 147-foot level about the first of November. By the end of the calendar year about 60 feet of drift had been completed. The ground at times was heavy and required timbering immediately. Posts were battered so that the average opening in the clear was 5 x 8 feet. Tight lagging was necessary. The country rock is flat-lying schist.

Mr. Nordale, president of Keystone Mines, Inc., was advised on January 7, 1965, that, because of the extremely cold weather, Frank Birch had found it too difficult to carry on the exploration work and had requested a suspension until about May 1. Accordingly, Amendments Nos. 4 and 5 permitted the contract work to be recessed until not later than July 1, 1965.

The contract work was resumed about June 1, 1965. The shaft was dewatered, and the drift extended 80 feet during the month. Drifting continued through October 9, 1965, after which Frank Birch terminated his contract with Keystone Mines, Inc. The reason for the termination was that the ground conditions were such that it would be impossible to complete the contract without a substantial financial loss.

Robert M. Chapman, USGS, examined the mine on October 29, 1965, with Earl Beistline. At that time the water level in the shaft was 67 feet below the collar, and thus it was impossible for Chapman to examine the OME drift. He learned that Mr. Ebbert and two other men were continuing to work on another part of the vein (above the 50-foot level?) and planned to continue through the winter.

Mr. Nordale, president of Keystone Mines, Inc., reviewed the situation in a letter dated November 10, 1965, and requested that the contract be terminated.

A Termination Agreement was prepared and was signed on April 28, 1966. This agreement made the termination effective on October 31, 1965. The work completed under terms of the contract and approved by the Government is as follows:

Fixed Unit Costs

123 feet of shaft, plus hoist, etc. @ $115.00/ft	$14,145.00
17-1/2 lineal feet of station @ $60.00/ft	1,050.00
4 station sets @ $50.00 each	200.00
Loading pocket, completed job	350.00
511-1/2 feet of drifting and crosscutting @ $55.00/ft	28,132.50
400 feet of timbering in drifts and crosscuts @ $10.00/ft	4,000.00
Total	$47,877.50
Government Participation @ 50%	$23,938.75

The Government retains no equity in any equipment at the property for the contract was of a unit-cost type. The project was successful in proving that the vein contained gold ore at depth; heavy ground hampered the work. Further exploration of the vein might be done by extending a crosscut from the Nordale adit (fig. 1) as suggested in the letter from Robert Chapman, USGS, on November 26, 1965.

REPORTS

The Operator's final report was submitted on June 3, 1966, and accepted by the Government.

The Report of Review was requested on February 1, 1966, and was issued in March 1966. This showed that there had been an underpayment of $310.00 to the Operator, $200.00 of which was being held pending receipt of the Operator's final report.

A Report of Royalty Review was prepared in January 1969.

PROJECT RESULTS

The project was successful in finding that the vein on the Kawilita claim contained gold ore on the 147-foot level. Assay data of this part of the vein are shown on figure 2.

Ore reserves computed only for work done under the OME contract are shown as four reserve blocks on figure 2. No information is available to determine if the ore shoots in the vein plunge or rake; hence, the ore blocks are projected up and downdip at right angles to the strike of the vein. They include an upward projection to the 50-foot level, an average dip length of 90 feet, and a downdip projection of 45 feet on the vein. The tabulation of the data used in computing the reserves is as follows:

Ore block	Thickness (feet)	Length (feet)	Height (feet)	Tons 12 ft^3/T	Au oz/T	Ag oz/T	Total Au(oz)	Total Ag(oz)
1	2.1	70	135	1,653	1.41	2.86	2,331	4,829
2	1.5	40	135	675	0.66	0.59	446	398
3	3.0	57	135	1,923	0.46	1.94	885	3,731
4	2.3	42	135	1,093	0.11	4.63	120	5,061
	Total			5,344			3,782	13,918

All the above tonnage can best be classed as indicated ore for none of the ore blocks have been exposed on more than two sides.

There is a compilation of indicated, inferred, and other ore reserves in the Operator's final report. These data include the ore from 50 feet below the 147-foot level upward to the surface and show a total of 13,360 tons. The indicated and inferred ore reserves contain 6,114 ounces gold and 31,538 ounces silver. The ore classed as "other" is 1,810 tons with a gold and silver value of $34.48 (the content per ton of silver and gold in ounces is not given; neither are the dollar values of unit costs for silver and gold given whereby the per ton value of $34.48 is obtained).

A Certification of Possible Production was issued on April 28, 1966. The expiration date of the Government's lien on production is August 29, 1974, or until the amount contributed by the Government is fully repaid with interest at the rate of 6-1/4 percent per annum, whichever occurs first.

PRODUCTION AND ROYALTIES

The Operator's final report lists 4,581 tons mined and milled between August 29, 1963, and December 31, 1965. The average value per ton

was $38.19, and the total value was $174,946.11. Production has continued through part of 1968.

The total royalties paid to the Government from production at the mine through October 1968 is $10,525.00, from a total sales of $210,463.00. According to a letter to Keystone Mines, Inc., from Frank E. Johnson, Chief, Office of Minerals Administration, dated October 31, 1968, the total royalties received have been applied to the principal and interest as follows:

Royalty applied to principal	$8,161.96
Royalty applied to interest	2,064.43
	$10,226.39

This leaves a total to be repaid the Government of $17,598.51. The Operator submitted a royalty check in the amount of $299.27 on October 31, 1968; this added to the amount listed in Mr. Johnson's letter will give a total of $10,525.00. Hence, depending on how the interest is calculated, the total amount due the Government on future production is about $17,300.00.

Plans for future production from the mine are not certain. Mr. Nordale, president of Keystone Mines, Inc., wrote on March 20, 1969, that the company was negotiating an agreement with International Minerals and Chemical Corporation to form a joint corporation to explore, develop, and mine the Keystone property.

Willard P. Puffett

Willard P. Puffett

Enclosures
Distribution:
✓OME USGS(SRO)
Docket Puffett

References Cited

Brooks, A. H., 1914, Mineral resources of Alaska: U.S. Geol. Survey Bull. 592, 413 p.

Hill, J. H., 1933, Lode deposits of the Fairbanks district, Alaska: U.S. Geol. Survey Bull 849-B, 163 p.

Smith, P. S., 1913, Account of lode mining near Fairbanks in Prindle, L. M., A geologic reconnaissance of the Fairbanks quadrangle, Alaska: U.S. Geol. Survey Bull. 220 p.

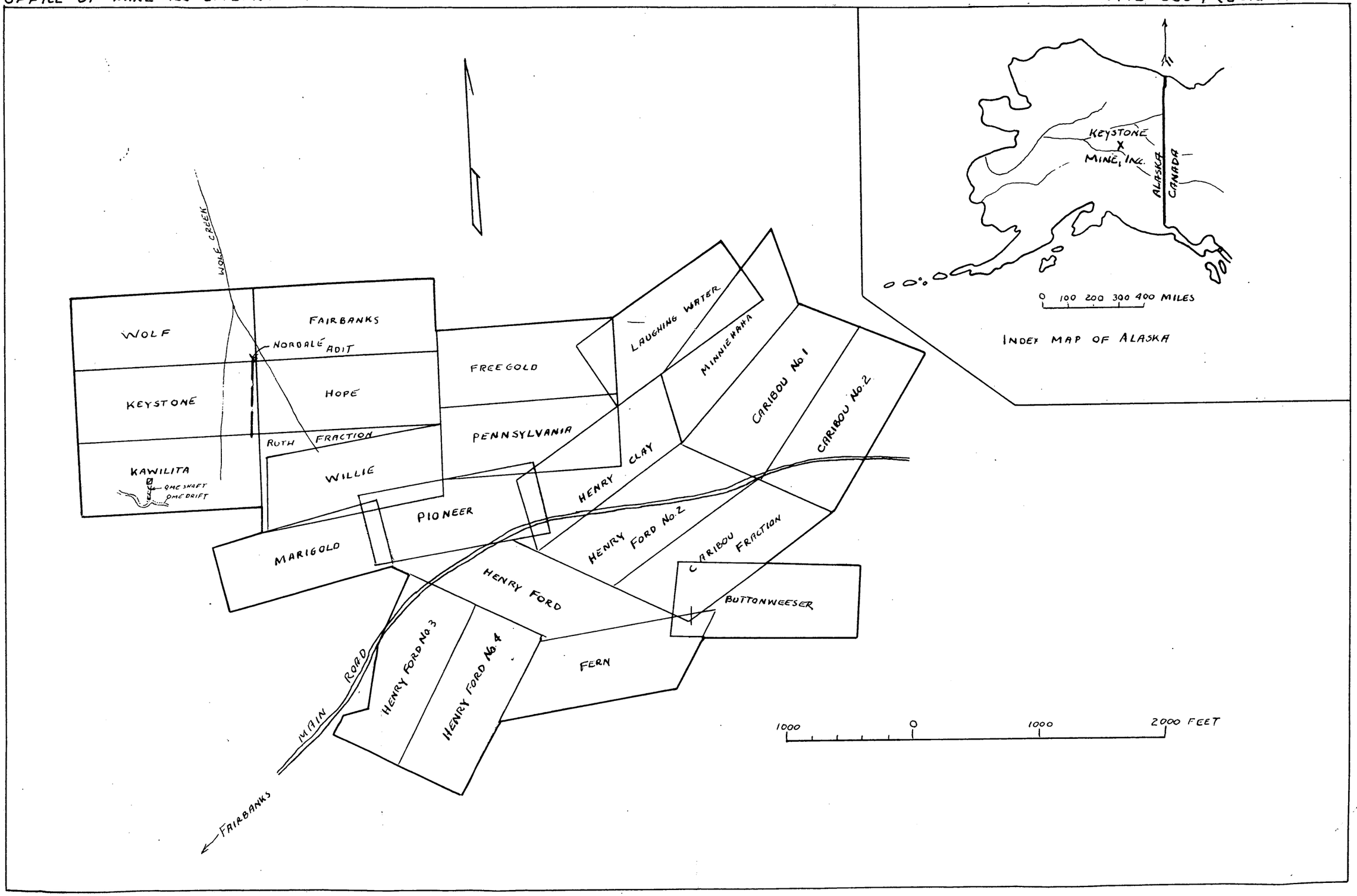

FIGURE 1 CLAIM MAP OF KEYSTONE MINES, INC., FAIRBANKS DISTRICT, ALASKA

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
3/13/69		120
		220

APR 1 1969

Memorandum

To: Chief, Branch of Budget and Finance

From: Acting Chief, Office of Minerals Exploration

Subject: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2173

Enclosed is a copy of the Field Officer's letter dated March 11, 1969, forwarding a copy of the Report of Royalty Review issued in January 1969 to the subject Operator. Also enclosed is a copy of the report for your files.

Harold Kirkemo (gla)

Harold Kirkemo

Enclosures

cc: Director's Reading File
Economic Geology File
OME docket
OME Reading File
OME Region I
Mr. Kirkemo

GLAult/a 3-13-69

MME FORM 6 REFEREN[redacted]

REV. 2-59 OFFICE OF MINERALS E[redacted]ORATION

TO: Ass't. Chief, OME	DATE	INITIALS
1.	3/21/69	
Re: OME-6304 (Gold-Silver)		
2. Keystone Mines, Inc.		
Keystone Mine		
3. Fairbanks District, Alaska		
Contract 2173		
4.		
D R MacLaren		
5. D. R. MacLaren		
FROM: Fld. Officer, Reg. I		

FOR: Check items for action desired

X Action ____ Reply for signature of ____

____ Approval ____ Investigate ____ Surname

____ Comment ____ Recommendations ____ Signature

____ Conference ____ Rewrite ____ File

Instructions ____ Your information

REMARKS: Refer to your memo dated March 6, 1969, and my letter of March 11, 1969, to Operator.

OFFICIAL COPY

O. M. E.

RECEIVED

MAR 24 1969

INITIALS	CODE
bsf	120
HR	120
gla	130
	220

6729 E. Green Lake Way N.
Seattle, Wash. 98103
March 20, 1969

Mr. W. P. MacLaren
Field Officer O.M.E.
Geological Survey
U.S. Court House Rm 656
W. 920 Riverside Avenue
Spokane, Wash. 99201

Contract 2173
Keystone Mines, Inc.
Fairbanks, Alaska

Dear Mr. MacLaren:

This will acknowledge the receipt of your letter of March 11, 1969 with the Royalty Review of Contract 2173.

At the present time Keystone Mines, Inc. is negotiating an agreement with International Minerals and Chemical Corporation to form a joint venture corporation to explore, develop and mine the Keystone property. If and when an agreement is accomplished, you will be advised accordingly and proper steps will be taken to conform with Article 2(c) of the Contract.

RECEIVED
MAR 21 1969
O.M.E.
SPOKANE, WASH.

Mr. Johnson's letter of Oct. 31, 1968 came at the time of my letter to you, Nov. 4, 1968 which included the smelter returns and a check for $299.67. I thought that a sufficient and obvious answer to his inquiry and did not answer directly.

Sincerely,
Arnold M. Nordale

XERO COPY XERO COPY XERO COPY XERO COPY

OME(2)

ORIGINAL
COPY
O. M. E.
RECEIVED
MAR 13
INITIALS | CO

U.S. Court House, Rm. 656
West 920 Riverside Avenue
Spokane, Washington 99201
March 11, 1969

AIR MAIL

Keystone Mines, Inc.
P. O. Box 630
Fairbanks, Alaska 99701

copy to "63" file
gja

Re: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2173

Gentlemen:

Enclosed is the Operator's copy of a Report of Royalty Review issued in January 1969 on the subject contract.

You will note that the Report of Royalty Review includes the production accounted for by the settlement sheets from AS&R Selby Smelter, Selby, California, Lot Nos. 2622 and 2623, dated October 10, 1968, for the account of B.R.C.S. Corporation. This raises two questions which require clarification.

1. Has the "deal" referred to in your letter of October 19, 1968, been consummated? If so, kindly furnish us with two copies of the appropriate documents as required by Article 2(c) of the contract.

2. We have received no reply to Mr. Johnson's letter dated October 31, 1968, addressed to Mr. Nordale. Please advise us whether or not the settlement sheets mentioned above represent* only production from the property since December 1966.

*the

Sincerely,

D. R. MacLaren
Field Officer, OME
Region I

Enclosure

DRMacLaren:mlo
cc: OME(2)
CPF
Director's Reading File

MME Form 7
(2/63)

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3/6/69	Emerick	120
		220

MAR 6 1969

Memorandum

To: Field Officer, Region I

From: Acting Chief, Office of Minerals Exploration

Subject: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2173

Enclosed are two copies of a Report of Royalty Review issued in January 1969 on the subject contract.

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

It appears that a follow-up letter to the Operator regarding any production from the property since December 1966 should be made, as requested in Mr. Frank E. Johnson's October 31, 1968, letter to Mr. Arnold M. Nordale, President, Keystone Mines, Inc., to which no reply has been received. Your recommendations in this regard will be appreciated.

William L. Emerick (glc)

W. L. Emerick
For: Harold Kirkemo

Enclosures

cc: Director's Reading File
Economic Geology File
OME docket
OME Reading File
Mr. Kirkemo
130 (2)

GLAult/a 3-6-69

MME Form 7
(2/63)

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Date	Surname	Code
10/31/68		110
		220

AIRMAIL

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
P. O. Box 630
Fairbanks, Alaska 99701

Re: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2173

Dear Mr. Nordale:

Please advise if there has been any production from the property under the subject contract since December 1966, the date of the last reported production on which the Government royalty has been paid.

Sincerely yours,

FRANK E. JOHNSON (gla)

Frank E. Johnson
Chief, Office of
Minerals Exploration

cc: Director's Reading File
Economic Geology File
OME docket
OME Reading File
130
OME Region I
FEJohnson/gla 10-31-68

MME FORM 6 REFERENCE SLIP

REV. 2-59 OFFICE OF MINERALS EXPLORATION

TO:		DATE	INITIALS
1.	Chief, OME	10/28/68	
2.	Re: OME-6304 (Gold-Silver) Keystone Mines, Inc.		
3.	Keystone Mine Fairbanks District, Alaska Contract 2173		
4.			
5.	D. R. MacLaren		
FROM:	Fld. Officer, Reg. I		

OFFICIAL COPY
O. M. E.
RECEIVED
OCT 30 1968
INITIALS CODE

FOR: Check items for action desired

____	Action	____	Reply for signature of		
____	Approval	____	Investigate	Surname	
____	Comment	____	Recommendations	Signature	
____	Conference	____	Rewrite	File	220
____	Instructions	X	Your information		

REMARKS:

In reply to our letter of 10/21/68.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

P. O. Box 550
Juneau, Alaska 99801

October 24, 1968

Mr. D. R. MacLaren, Field Officer
OME, Region I
Geological Survey
U.S. Court House, Rm. 656
W. 920 Riverside Avenue
Spokane, Washington 99201

Re: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2173

Dear Don:

Bob Warfield, Mining Research Engineer, who supervised our drill exploration on the Keystone and adjacent properties during the 1967 field season and has been supervising research work in an area nearby during the 1968 season, says that a stockpile of ore from the Jamesonite vein was milled and a carload of concentrate was shipped this spring. You will note from the copy of our record enclosed that we do not have a record of this shipment. When he provided this record, Kevin Malone suggested that the shipment probably was sent to the Bunker Hill smelter and that you can probably obtain the information from them.

Bruce Thomas, Mining Research Engineer, informed us that only assessment work has been done this summer and the leasor, Edwin W. Ebbert, is now employed by the government on the Heavy Metal Mining Research work at CRREL.

Sincerely yours,

Bob

Robert L. Thorne
Chief
Alaska Office of Mineral Resources

Enclosure

CONFIDENTIAL

KEYSTONE MINES, INC.

	GOLD Fine ounces	Value	SILVER Fine ounces	Value	LEAD Pounds	Value	Consent to Publish		
1963	1,008	$ 35,280	234	$ 299	---	---	---	35,579	
1964	2,035	71,225	451	583	---	---	---	71,808	3,590.40
1965	2,975	104,125	1,704	2,203	---	---	No	106,828	5,341.40
1966	390	13,650	2,169	2,805	28,700	$ 4,338	---	20,793	1,039.65
1967 1/	---	---	---	---	---	---	---		
1968 2/							---		
								235,008	9,971.43

1/ Reported assessment work only.
2/ B.E.C.S. Corp. (reported as a lessee in 1966) had shipments to AS&R (Selby Plant) during the month of July, 32 ounces of gold valued at $1,120; 2 ounces of silver valued at $3; and 21 pounds of lead valued at $3.

Source: U.S. Bureau of Mines
P. O. Box 550
Juneau, Alaska 99801

CONFIDENTIAL

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
10/24/68		110
		220

AIRMAIL

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
P. O. Box 630
Fairbanks, Alaska 99701

OCT 31 1968

Re: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2173

Dear Mr. Nordale:

Your request of October 19, 1968, to Mr. D. R. MacLaren, Field Officer, OME Region I, Spokane, Washington, for information on the amount remaining unpaid as of November 1, 1968, in the account under the subject contract, has been referred to this office.

Our records indicate the status of your account as of October 31, 1968, is as follows:

Government Participation		$23,938.75
Accrued interest as of October 31, 1968		3,886.05
Total Government Participation, plus interest as of October 31, 1968		$27,824.80
Royalty applied to principal	$8,161.96	
Royalty applied to interest	2,064.43	
Total royalty received	$10,226.39	-10,226.39
Amount payable as of October 31, 1968		$17,598.51

In accordance with your request, a copy of this letter has been sent to Mr. Earl H. Beistline, P. O. Box 148, College, Alaska 99735.

cc: Director's Reading File
Economic Geology File
OME docket
OME Reading File
OME Region I

FEJohnson/gla 10-24-68

Sincerely yours,

FRANK E. JOHNSON (gla)

Frank E. Johnson
Chief, Office of
Minerals Exploration

Copy (Airmail) to:
Mr. Earl H. Beistline
P. O. Box 148
College, Alaska 99735

OME

GEOLOGICAL SURVEY
U. S. Court House, Rm. 656
W. 920 Riverside Avenue
Spokane, Washington 99201
October 21, 1968

AIR MAIL

Mr. Arnold M. Nordale, President
Keystone Mines, Inc.
P. O. Box 630
Fairbanks, Alaska 99701

gla 130
110
220

Re: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2173

Dear Mr. Nordale:

In a letter dated April 11, 1967, you enclosed a check in the sum of $150.83 for royalty due on AF&R Co. (Selby, California) Settlement Sheets Nos. 1620 and 1621 both dated December 29, 1966. The net proceeds shown on settlement sheet 1620 is $4,037.51; those on sheet 1621 are $1,481.74; the total on which royalty at 5 percent is due is $5,519.25. Thus, it appears that the royalty on these two settlements should have been $275.96, leaving a balance due of $151.13. There may be a valid reason for this apparent discrepancy of which I am not aware. In any case, your letter of October 19, 1968, will have to be forwarded for reply to our office in Washington, D.C., where our official records are kept.

In your letter of April 11, 1967, you state there were stockpiled at the mill 400 tons of silver-lead ore and that the mill should be in operation "in about 2 weeks." Before our Washington office can answer your letter of October 19, 1968, they will need to know:

1. Has the above-mentioned 400 tons been concentrated and sold? If so, when may we expect to receive the royalty due thereon? If not, what is the gradeof the stockpiled ore? (Refer to contract Article 6(d)).

2. Has there been any production from the property since that accounted for by Bullion Deposit Memo Report 195 dated July 28, 1966, or that accounted for by AF&R Co. Settlement Sheet 1621 dated December 29, 1966. If so, what were any settlements and when may we expect to receive the royalty due?

As soon as these points have been clarified, we will be able to determine the balance of royalty due on this contract.

Sincerely,

D. R. MacLaren
Field Officer, OME
Region I

cc: Mr. Earl H. Beistline
P. O. Box 148
College, Alaska 99735
OME(2) w/cpys incoming
CPF

Director's Reading File

DRMacLaren/mls

Nordale Hotel
Fairbanks, Alaska

P.O. Box 630
Fairbanks Alaska 99701
Oct. 19, 1968

Mr. R. R. MacLaren
Field Officer
Office of Minerals Exploration
South 157 Howard Street
Spokane Wash - 99204

Contract 2173
Keystone Mines Inc.
Fairbanks, Alaska

Dear Mr. MacLaren:

Keystone Mines, Inc. is presently negotiating a deal for its property on which exploration was conducted under OME Contract No. 2178. As the unpaid balance owing OME will be a consideration would you please advise me of the amount still owing the OME by Keystone as of Nov 1. 1968.

Would you please also send a copy of the statement to:

Mr. Earl H. Beistline
P.O. Box 148
College, Alaska 99735

RECEIVED
OCT 21 1968
Mail
O.M.E.
SPOKANE, WASH.

Yours sincerely
Arnold M. Nordale

XERO COPY XERO COPY XERO COPY XERO COPY

GEOLOGICAL SURVEY
U. S. Court House, Rm. 656
W. 920 Riverside Avenue
Spokane, Washington 99201
October 21, 1968

OFFICIAL COPY
O. M. E.
RECEIVED
OCT 23 1968
INITIALS CODE
220

AIR MAIL

Mr. Robert L. Thorne, Acting Chief
Alaska Office of Mineral Resources
U. S. Bureau of Mines
P. O. Box 550
Juneau, Alaska 99801

Re: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2173

Dear Bob:

The last royalty on production from the cited mine was received April 13, 1967. In a letter accompanying that payment Mr. Arnold M. Nordale stated that the Cleary Hill Mill was changed from stamps to ball mill and flotation and the capacity was increased from 20 to 50 tons per day. He also stated that 400 tons of silver-lead ore from the Jamesonite vein was stockpiled at the mill which he expected to have in operation "in about 2 weeks."

Have you any data as to the production from this property since August 1963. This is the start of the royalty period and I am asking for a check from that date because Nordale has been somewhat slow in his royalty payments and could have unintentionally overlooked a shipment.

Sincerely,

D. R. MacLaren
Field Officer, OME
Region I

DRMacLaren/mls

cc: OME(2)
CPF

Director's Reading File

OFFICE OF MINERALS EXPLORATION
U. S. GEOLOGICAL SURVEY

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

INITIALS	CODE
ga	130
~~JJ~~	~~110~~
	220

TO: Chief, Branch of Budget and Finance

FROM: D. R. MacLaren
Field Officer, Region I

- ABSTRACT OF REMITTANCES -

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpose
10/31/68	$299.27	Main Office First National Bank of Fairbanks Fairbanks, Alaska	Keystone Mines, Inc.	OME-6309 4 2173	Royalty

REMARKS: (List smelter or mill lot numbers covered by royalties)

AS&RCO Settlement Sheets - Nos. 2622 (10/10/68)
2623 (10/10/68)

Royalty was computed on net proceeds before deduction for freight. All freight charges are deducted from net proceeds of Lot No. 2623 which is not subject to OME royalty but which was shipped to the smelter at the same time as Lot No. 2622. See letter 11/ 4/68 attached.

11/ 6/68
Date Prepared

M. L. Smelser
Person Preparing Abstract

11/18/68
Date Received

Lorraine E. Edwards
Person Receiving Remittance

6720 S. Vacuna Cabin Way N.
Seattle, Wash 98103
Nov. 4, 1968

Mr. D. R. Macharen
Field Office, OME.
Geological Survey
U.S. Court House Rm. 656
W. 920 Riverside Avenue
Spokane, Wash. 99201

Contract 2173
Keystone Mines, Inc.
Fairbanks, Alaska.

Dear Mr. Macharen:

In paragraph 1 of your letter of October 21st you noted what appeared to be a discrepancy in the payment made to OME for royalty due on A.S.&R Co. Settlement Sheets Nos. 1620 and 1621.

When Mr. Ebbert made the shipment accounted for by these Settlement sheets in order to obtain the best freight rate, he included concentrates which were not from ground subject to OME. royalty under Contract 2173. My files are in Fairbanks and I am unable to give you a more precise and detailed explanation. However, should you require it I will provide the information and the calculation by which the royalty payment was determined.

The stockpiled ore reffered to in your second paragraph had been mostly

milled and is accounted for by A&R Co Settlement Statement No. 2622.

The shipment of concentrates was made by Mr. Ebbert in June but owing to the heavy backlog following the strike A&R Co. was unable to process them until October. Here again was a split shipment. Settlement Statement No. 2622 is for ore mined on ground subject to OME royalty while Sheet No. 2623 is for concentrates which were stored at the Cleary Hill Mine many years prior to the Keystone Mines purchase of it and are not subject to OME royalty.

Mr. Schreiber, Sec-Treas of Keystone Mines Inc, has forwarded me a check payable to OME for in the amount of $29.27 which I am enclosing.

I believe this clarifies the various points brought up in your letter. I will add however, Mr. Ebbert is not mining on the ground at present and will not be during the winter so the date of further production is uncertain.

Sincerely
Armed M. Nordale

RECEIVED
Ans
NOV 5 1968
Mail
O.M.E.
SUDBURY, ONT.

XERO COPY XERO COPY XERO COPY XERO CO

6720 E. Greenlake Way N.
Seattle, Wash 98103
Nov. 4, 1968

Mr. D. R. Macharen
Field Officer, OME.
Geological Survey
U.S. Court House Rm. 656
W. 920 Riverside Avenue
Spokane, Wash. 99201

Contract 2173
Keystone Mines, Inc.
Fairbanks, Alaska.

Dear Mr. Macharen:

In paragraph 1 of your letter of October 21st you noted what appeared to be a discrepancy in the payment made to OME for royalty due on A&R Co. Settlement Sheet No. 16200 and 61621.

When Mr. Ebbert made the shipment accounted for by these Settlement sheets in order to obtain the best freight rate, he included concentrates which were not from ground subject to OME. royalty under Contract 2173. My files are in Fairbanks and I am unable to give you a more precise and detailed explanation. However, should you require it I will provide the information and the calculation by which the royalty payment was determined.

The stockpiled ore reffered to in your second paragraph has been mostly

milled and is accounted for by A.S.&R. Co. Settlement Statement No. 2622.

The shipment of concentrates was made by Mr. Ebbert in June but owing to the heavy backlog following the strike A.S.&R. Co. was unable to process them until October. Here again was a split shipment. Settlement Statement No. 2622 is for ore mined on ground subject to OME. royalty while Sheet No. 2623 is for concentrates which were stored at the Cleary Hill Mine many years prior to the Keystone Mines purchase of it and are not subject to OME. royalty.

Mr. Schreiber, Sec-Treas of Keystone Mines Inc, has forwarded me a check payable to OME. ~~for~~ in the amount of $299.27 which I am enclosing.

I believe this clarifies the various points brought up in your letter. I will add however, Mr. Ebbert is not mining on the ground at present and will not be during the winter so the date of further production is uncertain.

Sincerely
Arnold M. Nordale

RECEIVED
Ans
NOV 5 1968
Mail
O.M.E.
SUDBURY

XERO COPY XERO COPY XERO COPY XERO COPY

AMERICAN SMELTING AND REFINING COMPANY

ASARCO

SETTLEMENT STATEMENT

SELBY SMELTER
SELBY, CALIFORNIA

C-561 ORE SETTLEMENT STATEMENT

DATE SETTLED: OCT 10 1968

SELBY LOT NO. 2622

IMPORTANT: If not advised to the contrary within ten days from date settled, we shall assume that returns are satisfactory and the product covered by this settlement will be placed in process. American Smelting and Refining Company

SHIPPER B.E.C.S. CORPORATION
P.O. BOX 533
FAIRBANKS, ALASKA

MATERIAL ORE
SHIPPER'S NO.
DATE RECEIVED 7-2-68
SHIPPING POINT Seattle Wash.
MINE NAME
CARRIER UP 159214
FREIGHT CHARGES COLLECT
T. G. LICENSE NO.

GROSS WEIGHT (LBS.)
TARE
NET (WET) 49610
MOISTURE 4.13 % 2049
SAMPLES TO SHIPPER
NET DRY WEIGHT (LBS.) 47561

ASSAYS & ANALYSIS			PERCENTAGES & PRICES	$-DEBITS		$-CREDITS	
GOLD	.60	OZS.P.T.	LESS 2.86 % @ $ 39.83 PER OZ.			21	78
SILVER	98.27	OZS.P.T.	LESS 5 % LESS OZ. @ 233.5 ¢ LESS 3 ¢ PER OZ.			215	19
LEAD	22.9	%	LESS 1.5 UNITS LESS 10 % @ 13 ¢ LESS 2 ¢ PER LB.			42	37
COPPER	1	%	LESS UNITS @ ¢ LESS ¢ PER LB.				
ARSENIC	.22	%					
ANTIMONY	9.1	%	10.3 UNITS @ 50¢	5	15		
TIN		%					
BISMUTH		%					
INSOLUBLE		%					
IRON		%					
LIME		%					
ZINC		%					
SULPHUR	7.9	%					
		%					
			HANDLING CONTAINERS				
			EXCESS MOISTURE UNITS @ ¢ PER UNIT				
			LEAD UNITS @ $ PER UNIT				
			EXCESS VALUE OVER $ @ %				
			BASE CHARGE	22	50		
			TOTALS	27	65	279	34
			23.7805 VALUE PER TON			251	69
			VALUE OF 47561 LBS. @ $ 251.69 PER TON			5985	31
			SAMPLING & ASSAYING				
			Freight per letter J. Brown 7-17-68	1772	10		
			FREIGHT 80000 LBS. @ 1.8875	1510	00		
			HAULING LBS. @				

SETTLEMENT PAYABLE TO:

SOUTHERN PACIFIC COMPANY
65 MARKET ST.
SAN FRANCISCO,
CALIFORNIA 94105

275 2622/23

TOTALS	3287	10	5985	31
DUE AMERICAN SMELTING AND REFINING COMPANY				
NET PROCEEDS DUE SHIPPER			2703	21
ROYALTY				
NET				

VOUCHER NO. 10410

AMERICAN SMELTING AND REFINING COMPANY

ASARCO

SETTLEMENT STATEMENT

SELBY SMELTER
SELBY, CALIFORNIA

0-561 ORE SETTLEMENT STATEMENT

DATE SETTLED: OCT 10 1968

SELBY LOT NO. 2623

IMPORTANT: If not advised to the contrary within ten days from date settled, we shall assume that returns are satisfactory and the product covered by this settlement will be placed in process. American Smelting and Refining Company

SHIPPER P.E.C.S. Corporation
P.O. Box 1533
Fairbanks, Alaska

MATERIAL 27 Drums Concs
SHIPPER'S NO.
DATE RECEIVED 7-2-68
SHIPPING POINT Seattle, Wash.
MINE NAME
CARRIER UP 159214
FREIGHT CHARGES Collect
T. G. LICENSE NO.

GROSS WEIGHT (LBS.)	25440	
TARE	1400	
NET (WET)		24040
MOISTURE 7.58 %		1822
SAMPLES TO SHIPPER		
NET DRY WEIGHT (LBS.)		22218

ASSAYS & ANALYSIS

GOLD	3	98	OZS.P.T.
SILVER	7	1	OZS.P.T.
LEAD	1	4	%
COPPER			%
ARSENIC	13	4	%
ANTIMONY		4	%
TIN			%
BISMUTH			%
INSOLUBLE			%
IRON			%
LIME			%
ZINC			%
SULPHUR			%
			%

SETTLEMENT PAYABLE TO:

PERCENTAGES & PRICES

Description	$-DEBITS	$-CREDITS
LESS 8.86 % @ $ 39.83 PER OZ.		144 48
LESS % LESS 1 OZ. @ 233.5 ¢ LESS 3 ¢ PER OZ.		14 06
LESS 1.5 UNITS LESS % @ ¢ LESS ¢ PER LB.		—
LESS UNITS @ ¢ LESS ¢ PER LB.		
12.8 UNITS @ 50¢	6 40	
HANDLING CONTAINERS		
EXCESS MOISTURE UNITS @ ¢ PER UNIT		
LEAD UNITS @ ¢ PER UNIT		
EXCESS VALUE OVER $ 30 @ 10 %	7 50	
BASE CHARGE	15 00	
TOTALS	28 90	158 54
11.109 VALUE PER TON		129 64
VALUE OF 22218 LBS. @ $ 129.64 PER TON		1440 17
SAMPLING & ASSAYING	22 50	
FREIGHT SEE LOT 2622 LBS. @		
HAULING LBS. @		
TOTALS	22 50	1440 17
DUE AMERICAN SMELTING AND REFINING COMPANY		
NET PROCEEDS DUE SHIPPER		1417 67
ROYALTY		
NET		

VOUCHER NO. 10410

OFFICE OF MINERAL EXPLORATION
U.S. GEOLOGICAL SURVEY

OFFICIAL COPY
O. M. E.
RECEIVED
APR 18 1967

INITIALS	CODE
Cae	270 P
	~~120~~
	110
HK	~~120~~ K
	25

TO: Chief, Branch of Budget and Finance

FROM: D. R. MacLaren
Field Officer, Region I

- ABSTRACT OF REMITTANCES -

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpose
4/12/67	$150.83	Main Office First National Bank of Fairbanks Fairbanks, Alaska	Keystone Mines, Inc.	OME-6309 2175	Royalty

REMARKS: (List smelter or mill lot numbers covered by royalties)

AS&RCO Settlement Sheets - Nos. 1620 (12/29/66)
1621 (12/29/66)

100.40
50.42
$150.83

4/13/67
Date Prepared

M. L. Smelser
Person Preparing Abstract

4/18/67
Date Received

Lorraine E. Edleston
Person Receiving Remittance

AMERICAN SMELTING AND REFINING COMPANY

ASARCO

SELBY SMELTER
SELBY, CALIFORNIA

SETTLEMENT STATEMENT

SELBY LOT NO. 1660

0-561 ORE SETTLEMENT STATEMENT

DATE SETTLED: DEC 29 1966

IMPORTANT: If not advised to the contrary within ten days from date settled, we shall assume that returns are satisfactory and the product covered by this settlement will be placed in process. American Smelting and Refining Company

SHIPPER B E C S CORPORATION
P. O. Box 533
FAIRBANKS, ALASKA 99701

MATERIAL BULK ORE
SHIPPER'S NO.
DATE RECEIVED 11-21-66
SHIPPING POINT FAIRBANKS ALASKA
MINE NAME CLIMAX WILL AREA
CARRIER ATSF 76407
FREIGHT CHARGES PREPAID
T. G. LICENSE NO.

GROSS WEIGHT (LBS.)
TARE
NET (WET) 99080
MOISTURE 12.08 % 11969
SAMPLES TO SHIPPER
NET DRY WEIGHT (LBS.) 87111

ASSAYS & ANALYSIS				PERCENTAGES & PRICES	S-DEBITS		S-CREDITS	
GOLD		0.1	OZS.P.T.	LESS — % @ 31.81925 PER OZ.			12	23
SILVER	38	07	OZS.P.T.	LESS 5 % LESS OZ. @ 128.9 ¢ LESS 1.5 ¢ PER OZ.			46	08
LEAD	31	15	%	LESS 1.5 UNITS LESS 90 % @ 14.0 ¢ LESS 2 ¢ PER LB.			64	04
COPPER	T	R	%	LESS UNITS @ ¢ LESS ¢ PER LB.				
ARSENIC	3	6	%					
ANTIMONY	15	2	%					
TIN			%					
BISMUTH			%					
INSOLUBLE	20	8	%					
IRON	5	3	%					
LIME			%					
ZINC			%					
SULPHUR	8	3	%					
			%	HANDLING CONTAINERS				
				EXCESS MOISTURE 2.08 UNITS @ 10 ¢ PER UNIT		21		
				LEAD .35 UNITS @ 10 ¢ PER UNIT		04		
				ARSENIC - ANTIMONY	6	40		
				EXCESS VALUE OVER $ @ %				
				BASE CHARGE	13	00		
				TOTALS	19	65	112	35
				VALUE PER TON			92	70
				VALUE OF 87111 LBS. @ $ 92.70 PER TON			4037	59
				SAMPLING & ASSAYING				
				FREIGHT LBS. @				
				HAULING LBS. @				

SETTLEMENT PAYABLE TO:

ROYALTY:
KEYSTONE MINES INC.
523 5TH AVE
FAIRBANKS
ALASKA 99701

NET 4037.59
FREIGHT — 2029.54
2008.05 @ 5% — 100.4025
20% = 401.61

TOTALS	4037	59
DUE AMERICAN SMELTING AND REFINING COMPANY		
NET PROCEEDS DUE SHIPPER	4037	59
ROYALTY 20%	401	61
NET	3635	98

RECEIVED
APR 13 1967

VOUCHER NO. 12209

O.M.E.
SPOKANE, WASH.

AMERICAN SMELTING AND REFINING COMPANY

ASARCO

SELBY SMELTER
SELBY, CALIFORNIA

SETTLEMENT STATEMENT

0-561 ORE SETTLEMENT STATEMENT — DATE SETTLED: DEC 29 1966 — SELBY LOT NO. 1621

IMPORTANT: If not advised to the contrary within ten days from date settled, we shall assume that returns are satisfactory and the product covered by this settlement will be placed in process. American Smelting and Refining Company

SHIPPER: B.E.C.S. CORPORATION
P.O. Box 533
FAIRBANKS, ALASKA 99701

MATERIAL: 25 DRUMS CONCS
SHIPPER'S NO.:
DATE RECEIVED: 11-21-66
SHIPPING POINT: FAIRBANKS ALASKA
MINE NAME: CLEARY HILL AREA
CARRIER: ATSF 964071
FREIGHT CHARGES: PRE PAID
T. G. LICENSE NO.:

GROSS WEIGHT (LBS.): 21970
TARE (25 Drums): 1490
NET (WET): 20480
MOISTURE 14.1%: 2892
SAMPLES TO SHIPPER:
NET DRY WEIGHT (LBS.): 17588

ASSAYS & ANALYSIS				PERCENTAGES & PRICES	$-DEBITS		$-CREDITS	
GOLD	3	32	OZS.P.T.	LESS ___ % @ $ 31.8929 PER OZ.			105	64
SILVER	48	45	OZS.P.T.	LESS 5 % LESS ___ OZ. @ 128.9 ¢ LESS 1.5 ¢ PER OZ.			58	64
LEAD	13	75	%	LESS 1.5 UNITS LESS 90 % @ 14.0 ¢ LESS 2 ¢ PER LB.			26	46
COPPER	—		%	LESS ___ UNITS @ ___ ¢ LESS ___ ¢ PER LB.				
ARSENIC	4	1	%					
ANTIMONY	7	6	%					
TIN			%					
BISMUTH			%					
INSOLUBLE	29	2	%					
IRON	17	7	%					
LIME			%					
ZINC			%					
SULPHUR	16	5	%					
			%	HANDLING CONTAINERS	2	50		
				EXCESS MOISTURE 4.1 UNITS @ 10 ¢ PER UNIT		41		
				LEAD 27.7 UNITS @ 10 ¢ PER UNIT	1	78		
				5.7 % Antimony @ 50 ¢	2	85		
				EXCESS VALUE OVER $ ___ @ ___ %				
				BASE CHARGE	13	00		
				TOTALS	20	54	190	74
				VALUE PER TON			170	20
				VALUE OF 17588 LBS. @ $ 170.20 PER TON			1496	74
				SAMPLING & ASSAYING	15	00		
				FREIGHT ___ LBS. ___ @				
				HAULING ___ LBS. ___ @				
				TOTALS	15	00	1496	74
				DUE AMERICAN SMELTING AND REFINING COMPANY				
				NET PROCEEDS DUE SHIPPER			1481	74
				ROYALTY 20%			201	69
				NET			1280	05

SETTLEMENT PAYABLE TO:
Royalty = 20%
To
Keystone Mining Inc.
523 5th Ave
Fairbanks, Alaska 99701

Settlement .. 1481.74
less Freight 178.20
100% 1659.94
Royalty 20% 201.69

RECEIVED
APR 13 1967
O.M.E.
SPOKANE, WASH.

VOUCHER NO. 22069

One (2)

P.O. Box 630
Fairbanks, Alaska 99701
April 11, 1967

Mr. W. R. MacLaren
Field Officer
Office of Mineral Exploration
South 157 Howard Street
Spokane, Wash. - 99204

Re: M & E 6304
Contract 2173
Keystone Mines, Inc.
Fairbanks, Alaska

Dear Mr. MacLaren:

Enclosed is a check for $150.83 in payment of royalty on production as shown by the attached Smelter Returns.

Lot 1620 was a test shipment of raw ore taken from the jamesonite vein on the Willie Claim. The shipment was made to check assays of samples taken last July. The smelter gross value of $117.35 per ton compared closely with the sampling and as a result the Cleary Hill mill was changed from stamps to ball mill and floatation. The mill capacity was also increased from 20 to 50 tons per day. The mill should be in operation in about 2 weeks. Approximately 500 tons of silver-lead ore are stockpiled at the mill. Additional ore will

be mined when snow conditions permit.

Lot 1621 was a shipment of concentrates from the mining done on the Kawlita vein.

You will note the high freight cost from Fairbanks to Selby - over $40 per ton. And it does not include the cost of hauling from the mill to the Fairbanks freight depot.

It is presumed that by concentrating the value can be upgraded to about $200 per ton which might possibly make a mining operation economic.

The jamesonite vein has been traced on the surface for about 700 feet and has a width from 1 to 6 feet with many veinlets in the walls. The mining is being done by surface excavation and no knowledge is had as to depth. By extending the low level tunnel approximately 900 feet the vein would be intersected at a vertical depth of 500 feet and a back of over 700.

With kindest personal regards

Sincerely yours
Arnold M. Nordaas

RECEIVED
APR 13 1967
O. M. E.
SPOKANE, WASH.

P.O. Box 630
Fairbanks, Alaska 99701
April 11, 1967

Mr. W. R. MacLaren
Field Officer
Office of Mineral Exploration
South 157 Howard Street
Spokane, Wash. - 99204

Contract 2173
Keystone Mines, Inc.
Fairbanks, Alaska

Dear Mr. MacLaren:

Enclosed is a check for $150.83 in payment of royalty on production as shown by the attached Smelter Returns.

Lot 1620 was a test shipment of raw ore taken from the jamesonite vein on the Willie Claim. The shipment was made to check assays of samples taken last July. The smelter gross value of $112.35 per ton compared closely with the sampling and as a result the Cleary Hill mill was changed from stamps to ball mill and floatation. The mill capacity was also increased from 20 to 50 tons per day. The mill should be in operation in about 2 weeks. Approximately 400 tons of silver-lead ore are stockpiled at the mill. Additional ore will

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It is presumed that by concentrating the value can be upgraded to about $200 per ton which might possibly make a mining operation economic.

The pomeroite vein has been traced on the surface for about 700 feet and has a width from 1 to 6 feet with many veinlets in the walls. The mining is being done by surface excavation and no knowledge is had as to depth. By extending the low level tunnel approximately 900 feet the vein would be intersected at a vertical depth of 500 feet and a back of over 700.

With kindest personal regards

Sincerely yours
Arnold M. Nordaas

RECEIVED
Via
APR 1 3 1967
Air Mail
O. M. E.
SPOKANE, WASH.

Chief, Branch of Budget and Finance

D. R. Maclaren
Field Officer, Region I

OFFICIAL COPY
O. M. E.
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OCT 27 1966

INITIALS	CODE
	120
	110
	120
	220

Date	Amount	Bank and Branch	Name of Lessee	Lease Serial No.	Type
10/21/66	$1,290.10	Main Office First National Bank of Fairbanks Fairbanks, Alaska	Keystone Mines, Inc.	OME-6309 2173	Royalty

REMARKS: (Note caution on still lot numbers covered by royalties)

Bullion Deposit Memo Reports - Nos. 1294 (1/28/66)
1478 (2/26/66)
2109 (6/13/66)
195 (7/28/66)

ASARCO Settlement Sheet (2/18/66 - Selby Lot No. 8303 - Ebbert)

10/25/66
Date Prepared

N. L. Smolser
Accounting Technician

10/26/66
Date Received

Lorraine E. Edelston
Accounting Technician

P.O. Box 630
Fairbanks, Alaska 99701
Oct. 21, 1966.

Mr. R.R. MacLaren
Field Office
Office of Mineral Exploration
South 157 Howard Street
Spokane, Wash. 99204

Contract 2173
Keystone Mines, Inc.
Fairbanks, Alaska.

Dear Mr. MacLaren:

Enclosed is a check for $1290.10 in payment of royalty on production as shown as follows:

Bullion Deposit Memo Reports:

1/28/66	$13464.87	
2/28/66	5300.16	
6/13/66	4180.23	
7/28/66	2516.47	$25461.73
Smelter Settlement Statement		340.26
		$25,801.99
		.05
		$1290.0995

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Mr. Ed. W. Ebert is now prospecting and mining the Jamesonite vein on the Willie Claim and will be shipping ore and concentrates to Selby Smelter this winter on which OME will receive further royalty. I will return to Seattle on Oct. 26th so please direct my mail there. Sincerely yours,

Kenneth Nordale

UNITED STATES ASSAY OFFICE
AT SAN FRANCISCO CALIF.

BULLION DEPOSIT - MEMO REPORT

Mint Form 426
(Revised)
SOURCE DATA

Deposit No. 195
Depositor ;06

Date 7/28/66

Memos Required by Depositor 5
Other Date

Silver Price or Class 1.29

State ALASKA
County FAIRBANKS
Mine EBBERT
~~KEYSTONE~~

NORTHERN COMMERCIAL CO.
419 Colman Bldg., Seattle, Wash. 98104

Description of Deposit	Assay Number	Weights Before Melt Ounces Dec	Weights After Melt Ounces Dec	Assay Certificate Fineness Gold	Silver	Base	Refin. Cts. Per Oz.	GOLD—FINE OZ.	SILVER—FINE OZ.
retort sponge	201	98.35	91.90	782	190	028	12	71.865	17.46

PAYABLE BY CHECK EXCEPT AS NOTED

Weigh Clerks Asst. Assayer Assayer

Melting		VALUES, $	2,515.27 22.52
Refining	4.00	NET VALUE	2 516.47 21.32
Handling	11.03	Bars	
Other Chg.	6.29	Cash	1.20 1.20
TOTAL CHRGS.	21.32	Check	

Calculator

GPO 903-742

UNITED STATES ASSAY OFFICE
AT SAN FRANCISCO CALIF.

BULLION DEPOSIT - MEMO REPORT

Mint Form 42k
(Revised)
SOURCE DATA

Deposit No. 2109 Date 6/13/66 Memos Required by Depositor 5 Silver Price or Class 1.29 State ALASKA

Depositor WESTERN COMMERCIAL CO., Other Data County FAIRBANKS

Mine EBBERT KENNECOTT

[illegible]MAN BLDG., SEATTLE, WASH. 98104

Description of Deposit	Assay Number	Weights Before Melt Ounces Dec	Weights After Melt Ounces Dec	Assay Certificate Fineness Gold	Silver	Base	Refin. Cts. Per Oz.	GOLD—FINE OZ.	SILVER—FINE OZ.
Ebbert sponge	2173	177.40	160.25	745	179	076	13	119.386	28.68

PAYABLE BY CHECK EXCEPT AS NOTED

Weigh Clerk [illegible] Asst. Assayer [illegible] Assayer

Melting	4.00	VALUES, $	4,178.51
Refining	20.83	NET VALUE	4,180.23
Handling	10.45	Bars	
Other Chg.		Cash	
TOTAL CHGS.	35.28	Check	

37.00

Calculator

GPO 939881

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Air Mail
OSO

UNITED STATES ASSAY OFFICE
AT SAN FRANCISCO CALIF.

Mint Form 42E
(Revised)
SOURCE DATA

BULLION DEPOSIT - MEMO REPORT

Deposit No. 1478 Date 2/28/66 Memos Required by Depositor Other Date Silver Price or Class $1.29 State Alaska County Fairbanks Mine Robert Keystone

Depositor Northern Commercial Co. Seattle, Washington 98104

Colony [illegible]

Description of Deposit	Assay Number	Weights Before Melt Ounces Dec	Weights After Melt Ounces Dec	Assay Certificate Fineness Gold	Silver	Base	Refin. Cts. Per Oz.	GOLD—FINE OZ.	SILVER—FINE OZ.
Amalgam	1518	205.01	191.12	791	182	027	10	151.175	34.78

PAYABLE BY CHECK EXCEPT AS NOTED

Weigh Clerk [illegible] Asst. Assayer [illegible] Assayer

Melting	[illegible].50	VALUES, $	5,291.13	44.87
Refining	19.11	NET VALUE	5,300.16	[illegible]
Handling	15.23	Bars	9.63	9.03
Other Chg.		Cash		
TOTAL CHGS.	35.84	Check		Calculate

GPO 830881

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Via
OCT 24 1966
air mail

UNITED STATES ASSAY OFFICE
AT SAN FRANCISCO CALIF.

BULLION DEPOSIT - MEMO REPORT

Mint Form 428
(Revised)
SOURCE DATA

Deposit No. 1294 Date 1/28/66 Memos Required by Depositor Silver Price or Class 1.29 State
Depositor Northern Commercial Co Other Data County
Mine

Description of Deposit	Assay Number	Weights Before Melt Ounces Dec.	Weights After Melt Ounces Dec	Assay Certificate Fineness Gold	Silver	Base	Refin. Cts. Per Oz.	GOLD—FINE OZ.	SILVER—FINE OZ.
amalgam cakes	2338	525.70	487.04	768	186	024	70	383.787	93.56

PAYABLE BY CHECK EXCEPT AS NOTED

Weigh Clerks Asst. Assayer Assayer

Melting	3.50	VALUES, $	13,432.54	118.22
Refining	48.70	NET VALUE	13,464.87	85.78
Handling	33.58	Date	3733	2109
Other Chg.		Cash		
TOTAL CHGS.	85.78	Check		

Calculator

GPO 930001

RECEIVED
Via
OCT 24 1966
air Mail

Gene: there is a $156.00 bill for trucking the concentrates to the railroad outstanding. So the concentrates were a bust. Just made the railroad a little richer. Alex

AIR MAIL

AMERICAN SMELTING AND REFINING COMPANY

ASARCO

SELBY SMELTER
SELBY, CALIFORNIA

SETTLEMENT STATEMENT

0-561 ORE SETTLEMENT STATEMENT — DATE SETTLED: FEB 18 1966 — SELBY LOT NO. 8308 (Cont.)

IMPORTANT: If not advised to the contrary within ten days from date settled, we shall assume that returns are satisfactory and the product covered by this settlement will be placed in process. American Smelting and Refining Company

		Freight
Total Car	111643	2017.11
Lot 8306 (Anderson)	37415	676.02
" 8309 (Wackenhut)	3446	62.26
" 8310 (Wackenhut)	22369	404.16

SHIPPER: Gilbert Exploration & Development Co, Chatanika, Alaska

MATERIAL: Quartz Lead Ore
SHIPPER'S NO.: —
DATE RECEIVED: 12-21-1965
SHIPPING POINT: Fairbanks, Alaska
MINE NAME: Kawalita Chain
CARRIER: RR. 13413
FREIGHT CHARGES: Collect
T. G. LICENSE NO.:

GROSS WEIGHT (LBS.)	
TARE	
NET (WET)	48410
MOISTURE 10.40 %	5035
SAMPLES TO SHIPPER	
NET DRY WEIGHT (LBS.)	43375

ASSAYS & ANALYSIS			PERCENTAGES & PRICES	$-DEBITS		$-CREDITS	
GOLD	2 25	OZS.P.T.	LESS — % @ $ 31.8925 PER OZ.			71	79
SILVER	10 87	OZS.P.T.	LESS — % LESS 1 OZ. @ 148.903 ¢ LESS 1½ ¢ PER OZ.			12	57
LEAD	1 65	%	LESS ___ UNITS LESS ___ % @ No Pay ¢ LESS ___ ¢ PER LB.			—	
COPPER	0	%	LESS ___ UNITS @ ___ ¢ LESS ___ ¢ PER LB.				
ARSENIC	10 7	%	Excess Arsenic 9.7% @ 5¢ P/unit	4	85		
ANTIMONY	7.5	%	" Antimony 15.7% " "		75		
TIN		%					
BISMUTH		%					
INSOLUBLE	3 2	%					
IRON	20 9	%					
LIME	0	%					
ZINC	0	%					
SULPHUR	18 5	%					
		%	HANDLING CONTAINERS				
			EXCESS MOISTURE 10.40 UNITS @ .10 ¢ PER UNIT		04		
			LEAD No Pay UNITS @ ___ ¢ PER UNIT				
			EXCESS VALUE OVER $ ___ @ ___ %				
			BASE CHARGE	22	50		
			TOTALS	28	14	84	16
			VALUE PER TON			56	02
			VALUE OF 43375 LBS. @ $ 56.02 PER TON			1214	93
			SAMPLING & ASSAYING				
			FREIGHT A/L 48410 LBS. @ Ore-Rates	874	67		
			HAULING LBS. @				
			TOTALS	874	67	1214	93
			DUE AMERICAN SMELTING AND REFINING COMPANY				
			NET PROCEEDS DUE SHIPPER			340	26
			ROYALTY 40%			136	10
			NET			204	16

SETTLEMENT PAYABLE TO: (ABOVE)

Pay Royalty
Net 340.26
40% 136.10

To Keystone Mines, Inc.
523 - 5th Ave
Fairbanks, Alaska

Keystone
El West

VOUCHER NO. 2235

RECEIVED
OCT 24 1986
OSTI

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
		110
6/15/66	Kitkemo	120
6/15	Cac	220
		120

JUN 15 1966

Memorandum

To: Chief, Branch of Budget and Finance

From: Chief, Office of Minerals Exploration

Subject: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2173

Enclosed is a copy of the Field Officer's memorandum of June 9, 1966, transmitting an acceptable Operator's Final Report on the subject contract.

The $200.00 being withheld pending receipt of the Operator's Final Report may now be paid to the Operator.

FRANK E. JOHNSON

Frank E. Johnson

Enclosure

cc: Director's reading file
Division file
Economic Geology file
OME File
OME reading file
OME Region I
130
120

FEJohnson/bih 6/14/66

23263

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane, Washington 99204
June 9, 1966

OFFICIAL COPY
O. M. E.
RECEIVED
JUN 13 1966

INITIALS	CODE
gla	130
	110
HK	120

Memorandum

To: Chief, Office of Minerals Exploration

From: Field Officer, Region I

Subject: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2173

Enclosed are two copies of an acceptable Operator's Final Report on the subject OME contract.

This fulfills the Operator's contract obligations and the $200.00 being withheld pending receipt of the report may be released.

On page 3 the report indicates that the total tons mined and milled between the contract date and December 31, 1965, had a value of $174,946.11. At 5 percent the royalty due the Government would be $8,747.30. According to our records, royalty paid on settlements through February 28, 1966, is $8,785.55, an apparent overpayment of $38.25. However, a shipment of approximately 20 tons of concentrates has not yet been settled so it is recommended that no refund be made at this time.

D. R. MacLaren

D. R. MacLaren

Enclosures

OME(2)

KEYSTONE MINES, INC.
Box 630
Fairbanks, Alaska

June 3, 1986

Mr. D. R. MacLaren
Field Officer, Region I
OFFICE OF MINERALS EXPLORATION
U. S. Geological Survey
So. 157 Howard Street
Spokane, Washington 99204

Re: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks, District, Alaska
Contract 2173 as amended

Dear Mr. MacLaren,

In accordance with the specifications of our OME contract I am forwarding you one original and three copies of the final report which consists of:

Narrative-

Summary of work performed related to costs
Assay data
Estimate of ore reserves
Record of production
Geology and mining evaluation

Maps-

General- showing location of OME with reference to claim lines
Assay data map
#22- location of shaft with reference to vein (vertical projection)
#23- ore reserve sketch

I very much appreciate your cooperation in this contract. Please let me know if you desire any additional information.

Very truly yours,

Arnold M. Nordale
President

AMN:EHB:jt
Enclosures

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JUN 7 1986

FINAL REPORT
OME-6304 (GOLD-SILVER)
KEYSTONE MINES
FAIRBANKS DISTRICT, ALASKA
CONTRACT 2173 AS AMENDED

Work completed

Contract 2173, as amended, was in existence from August 29, 1963 to October 31, 1965. Work accomplished during this period and costs involved are:

Drifting	505 feet	$27,775.00
Crosscutting	6½ "	357.50
Shafts	123 "	14,145.00
Station	17½ "	1,050.00
Loading pocket	1 each	350.00
Station sets	4 each	200.00
Timbering-drifts and crosscuts	400 feet	4,000.00
		$47,877.50

This work allowed a shaft on the Kawilta claim to be extended from a point 53 feet below the collar to 176 feet; a station and ore pocket to be constructed at the 147 foot level, 6½ feet of crosscut and 505 feet of drift to be driven on the 147 foot level. The location of the OME work with reference to the claim lines and other workings are shown on the accompanying map- Kawilta claim, Fairbanks District.

Assay data

All assay data from OME financed openings has been consolidated on the accompanying assay map which shows the relative location of samples. In addition, bulk samples results are shown on one side of the 147' drift and channel and grab samples on the other side. All samples were assayed at the State Division of Mines and Minerals assay office in Fairbanks, Alaska.

Ore reserves

Ore reserves are presented on the basis of the following classification as used by Federal Government agencies.

Measured ore
Indicated ore
Inferred ore

In addition, other thoughts are expressed under "other."

OPERATIONS
FINAL REPT

The following conditions were used in estimating the ore reserves.

(1) Bulk sample and grab sample results were not used in obtaining an assay average.

(2) Channel sample results have been combined to give an average for the respective blocks. Each assay was weighted by the width of the sample and half the distances to samples on both sides.

(3) Blocks have been designated as indicated on sketch 23 with no attempt made to isolate and valuate ore shoots on an individual basis. Mining practice in the area is to mine the ore shoots and to leave low grade ore in place, thus increasing the unit value but lowering the tonnage available for mining.

(4) Ore reserves were not estimated beyond the ends of the drifts.

(5) A distance of 50' below the level, along the drift, was used as a conservative projection of ore in depth.

Measured ore

No ore has been placed in the category of measured ore because only one face was opened on the ore by the OME drift and hence complete measuring and assaying of ore blocks was not possible.

Indicated ore

Block 1 has been presented as indicated ore because of the sampling done in the west drift and the good values obtained immediately above the block in recent mining (see Record of Production).

Inferred ore

Blocks 2, 4 and 5 have been presented as inferred ore. Blocks 2 and 5 are below the drift and have only the one face opened. Block 4 has only the one face opened on the 147' level and which in turn was not completely sampled as shown by the assay map.

"Other"

Block A- Mining in Block A and to the west has continued over the past several years. Ore mined from August 29, 1963 to December 31, 1965 has resulted in the production of 4,581 tons

with an average recovery per ton of $38.19.

Although some ore exists above the 50 foot level where mining has most recently taken place no reserves are indicated in this report.

Block 3- Probably an unorthodox method has been used to obtain averages for block 3 because of its distance from the east drift and because of other information closer to the block. Tonnage in block 3 has been calculated using the length of 210 feet, a width of 2.3 feet and an estimated height of 45. The average value has been estimated by weighing samples in the east drift, some shaft samples taken on the west side of the block and the unit average value of block A production.

SUMMARY OF ORE RESERVES

	Block #	Av. width	Tons	oz Au	Aver. assays troy ozs/ton Au	Ag	oz Ag
Indicated	1	1.7	3,470	2776	0.80	1.38	4789
Inferred	2	1.7	1,700	1360	0.80	1.38	2346
	4	2.3	4,370	1355	0.31	3.76	16,431
	5	2.3	2,010	623	0.31	3.76	7,558
Other	3	2.3	1,810	Au & Ag value $/Ton-----34.48			

11,550 11,550 9870 0.53 2.69 31,124 #20.67

6114 / 11550 = 0.529 31,124 / 11,550 = 2.69

RECORD OF PRODUCTION

Period	Tons mined* and milled	Total** value $	Unit valuation
8/29/63-12/31/63	260	10,597.27	40.76
1/1/64-12/31/64	1,597	55,906.43	35.01
1/1/65-12/31/65	2,724	108,442.41	41.65
	4,581	$174,946.11	$38.19

Remand

*Waste tonnage records were not kept.
**Final results on a small shipment of concentrates (approximately 20 tons) are not yet available.

Geology and mining

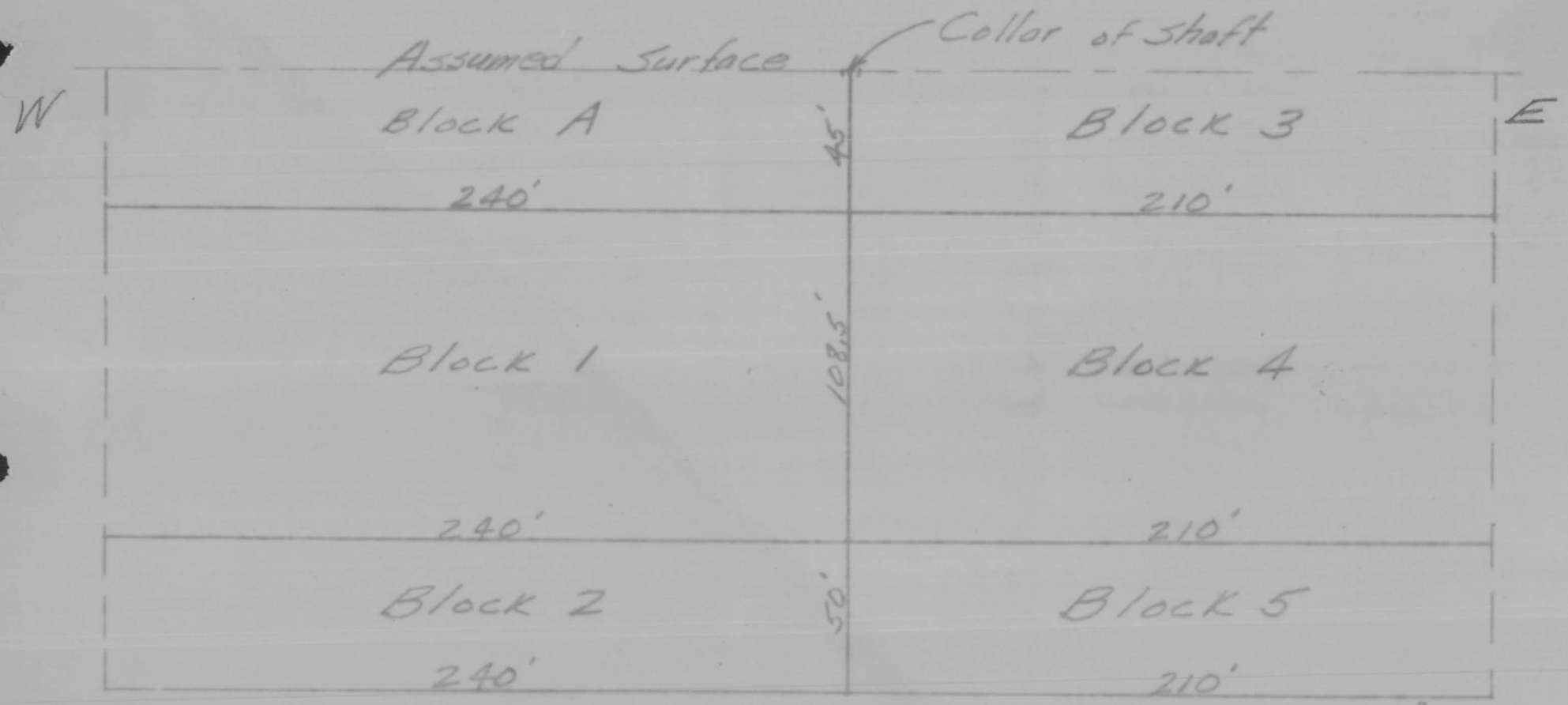
Generally, the country rock is a flat lying birch creek schist (micaceous, quartzitic) that is often faulted and reoriented near the vein. The vein structure is strong as indicated by the strike length of the vein on the surface and on the 147 foot level and the vein widths which have held on the 147 foot level.

Gold and silver occur in ore shoots in the vein in a manner quite characteristic of the district.

Openings within the vein structure are sometimes difficult to hold. Mining of the ore will necessitate a system that will consider this factor and might well involve development workings in the footwall rock. Winter mining with freezing for support might be another possibility.

RECEIVED
JUN 7 1966
OMB

Keystone Mines, Inc.
Sketch
Showing Ore Reserves
Plain of Vein



OME

Juneau, Alaska
May 13, 1966

Mr. W. L. MacLaren
District Officer
Office of Mineral Exploration
Geological Survey
South 157 Howard Street
Spokane, Wash. 99204

Dear Mr. MacLaren:

Your letter of May 2 with the enclosures was forwarded to me at Juneau where I am closing an estate of which I am executor. I will be returning to Seattle within the next few days.

A copy of your letter has been sent to Mr. Beetline and I presume he will have the final report completed soon. When he was in Seattle about 3 weeks ago he left copies of maps which will be forwarded to you with the report.

The termination agreement is quite acceptable and I am enclosing the signed copies as requested.

Sincerely yours
Elmer M. Nordale

RECEIVED
MAY 16 1966
OME

GEOLOGICAL SURVEY
Fo 157 Howard Street
Spokane, Washington 99204
May 2, 1966

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O. M. E.
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MAY 4 1966
LETTER CODE
120
110
HR 120

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
6720 N. Green Lake Way N.
Seattle, Washington 98103

Re: OME-6304 (Gold-Silver)
Keystone Mines
Fairbanks District, Alaska
Contract 2173

Dear Mr. Nordale:

Enclosed are the original and three copies of a proposed Termination Agreement (1 page) to the subject contract signed for the Government, which I mentioned to you in my letter of April 27, 1966.

If the proposed agreement is satisfactory, please sign all four copies, retain the Operator's copy for your records, and return the original and two remaining copies to this office.

If the agreement is not satisfactory to you, please return all copies to this office unsigned with your statement of proposed changes for consideration.

In my letter of April 5, 1966, regarding your final report, I neglected to mention that the report should also include a complete record of production from the mine from August 29, 1963, to the present, broken down into tons mined, tons milled, and disposition of concentrates showing tonnages and grades sold and on hand.

Sincerely yours,

D. R. MacLaren
Field Officer, OME
Region I

Enclosures

cc: Robert M. Chapman, Alaskan Geology Branch
DRMacLaren/mls
cc: OME
MacLaren
Director's Reading File

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3)

OFFICIAL FILE COPY

Date	Surname	Code
4/20/66	Kirkham	120 K
4/20	Johnson	110
		220
		~~120 JM~~
4/26	Kilgard	
4/27	Twet	
4/27	Kepp	

AIRMAIL

APR 2 3 1966

Memorandum

To: Field Officer, Region I

From: Chief, Office of Minerals Exploration

Subject: GME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2173

Enclosed are the original and three copies of a proposed Termination Agreement (1 page) to the subject contract signed for the Government. An extra copy of the agreement is enclosed for field use.

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

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

FRANK E. JOHNSON

Frank E. Johnson

Enclosures

cc: Director's Reading File
Division File
Economic Geology File
OME Docket
OME Reading File
120

MMerrithew/mm (4/19/66)

23263

OMGE

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APR 29 1966
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120K

GEOLOGICAL SURVEY
No. 157 Howard Street
Spokane, Washington 99204
April 27, 1966

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
6720 E. Green Lake Way N.
Seattle, Washington 98103

Re: OME-6304 (Gold-Silver)
Keystone Mines
Fairbanks District, Alaska
Contract 2173

Dear Mr. Nordale:

Thank you for your letter of April 20, 1966, and the accompanying royalty check in the amount of $265.01.

I have been advised by our Washington, D. C. office that a Termination Agreement will be prepared as requested in your letter of November 10, 1963, but that, before it could be prepared, certain data from this office was required. That data has now been furnished and I may receive the Agreement any day. Therefore, in my opinion, it would probably be better for you to consider the present contract as terminated and that, should Keystone decide to request additional OME aid, it would be better to make a new application. For this purpose I am enclosing four copies of the Application Form MME 40. Three complete copies of the application should be submitted, the fourth copy being for your files.

New letters to and from banks as requested in Item 1, Financial Eligibility, and probably the information requested in 1(b) and 1(c) would be required. Under Item 2, Applicant's Rights in land, if there has been no change in the property rights of Keystone Mines, Inc., you could state under Items 2(a) and (b): "See Docket No. OME-6304."

After our legal section has reviewed the documents now on file, they will be more able than I am to decide if any of them require updating and if new Lien and Subordination Agreements will be required.

From what information we have in our files it appears that on the 147 level the OME vein will cross the Kawilita claim south side line before intersecting the southerly extension of the old low level

4/29/66 Discussed with Mr. Nordale. Will proceed on old Texas Agreement

crosscut tunnel, in which case the Fraction No. 1 claim would probably have to be added to the land. Certainly, we would want a composite map at a scale of 1" = 100' showing the location of the OME shaft and workings, the low level crosscut tunnel, the probable projection southeasterly of the OME vein at the surface and the 147 level, and at least the south side line and east end line of the Kawilita claim. Possibly, the map drawn May 14, 1963, by W. H. Race which accompanied your former application would serve as a base to which you could add the OME and proposed work. However, it should be checked because when I transferred to it the location of the winze collar, as shown on the map which accompanied your October 1963 Narrative Report, the collar is south or in the hanging wall of the vein, whereas the shaft was actually sunk in the footwall.

In your letter of November 10, 1965, you say that Frank Birch terminated his contract because "the ground conditions in the east drift became progressively worse and that he could not continue without sustaining a substantial loss." This raises three questions that should be discussed under Item 3(g). First, can the heavy and badly shattered ground be stoped at reasonable cost? Second, since the old level crosscut will intersect the vein about 400 feet lower than the 147 level and some 400 feet easterly of the east end of the 147 level, what are the chances that the ground will be even heavier and more costly to stope from the lower level? Third, is there any evidence that Wolf Creek, where it crosses the claims, might be along a fault and, if so, is there any evidence of the direction and amount of movement of one side with respect to the other? For most of the remaining subheadings under Item 3, it would probably be sufficient to refer to Docket No. OME-6304. Ore reserves resulting from the OME work and a section in the plane of the vein showing ore blocks should be part of your final report which will become part of the docket. Items 5, Exploration Work, and 7, Estimate of Costs, should, of course, be covered completely, the costs in detail, as if there had been no prior contract.

With the data already in the files, that to be included in your final report, and such new data in justification of your proposal and costs, OME could then decide whether additional work should or should not be approved, and if it should be approved, could decide whether to amend the present contract or draw up a new one.

As no final decisions of this sort are made in this office, I must emphasize that neither the above suggestions nor anything else in this letter should be construed as assurance that a request for further work will be approved.

Sincerely yours,

D. R. MacLaren
Field Officer, OME
Region I

Enclosures

DRMacLaren/mls
cc: OME w/cy incoming
CPP
MacLaren
Director's Reading File

Ome

C O P Y C O P Y

6720 E. Green Lake Way N.
Seattle, Wash. 98103
April 20, 1966

Mr. D. R. MacLaren
Field Officer
Office of Minerals Exploration
South 157 Howard Street
Spokane, Wash. 99204

OME-6304
Contract 2173
Keystone Mines, Inc.
Fairbanks, Alaska

Dear Mr. MacLaren:

Thank you very much for your letter of April 5th and the accompanying Report of Review of Contract No. 2173.

Mr. Earl H. Beistline is preparing a map and compiling the information needed to prepare the final report. These should be completed shortly and be forwarded to you. He was not sure as to what was required in making the final report so I am sending him a copy of your letter.

Keystone Mines, Inc. is considering the extension of the old low level crosscut tunnel to intersect the vein on which the exploration work under Contract 2173 has been done. The plan is to extend the tunnel approximately 800 feet and drift along the vein either in one direction or both a total of 400 feet.

Keystone is interested in knowing if the Office of Minerals Exploration would entertain an application to amend Contract 2173 to include this or if an application for a new contract is necessary and in order. If OME would look favorably on either I would be pleased to come to Spokane to discuss the matter with you.

Enclosed is a check for $265 which is in payment of royalty on production shown on the attached Mint Return dated 2/28/66. All work on the property was suspended from Jan. 15th to April 10th due to adverse weather conditions but has now been resumed and further production should soon be forthcoming.

I now make my home in Seattle at the above noted address and a reply to this letter would reach me here.

Sincerely yours,

/s/ ARNOLD M. NORDALE

OFFICE OF MINERALS EXPLORATION
U.S. GEOLOGICAL SURVEY

OFFICIAL COPY
O. M. E.
RECEIVED
APR 26 1966

INITIALS	CODE
Cur	210
	~~120~~
FEO	110
HIO	120

TO: Chief, Branch of Budget and Finance

FROM: D. R. MacLaren
Field Officer, Region I

- ABSTRACT OF REMITTANCES -

Date	Amount	Bank, City and State	Name of Remitter	Docket or Contract Numbers	Purpose
4/1/66	~~$265.10~~	First National Bank of Fairbanks, Fairbanks, Alaska	Keystone Mines, Inc.	OME-630~~9~~4 2173	Royalty
	$265.01	Rec'd			

REMARKS: (List smelter or mill lot numbers covered by royalties)

April 21, 1966
Date Prepared

D R MacLaren
Person Preparing Abstract

4/25/66
Date Received

Lorraine E. Eckstein
Person Receiving Remittance

UNITED STATES ASSAY OFFICE
AT SAN FRANCISCO CALIF.

BULLION DEPOSIT - MEMO REPORT

Mint Form 47
(Revised)
SOURCE DATA

Deposit No. 1472 Date 2/28/68 Memos Required by Depositor 5 Silver Price or Class $1.29 State Alaska

Depositor Northern Commercial Co. Other Data County Fairbanks Dist.

419 Colman Building Seattle, Washington 98104 Mine Ebbert Keystone

Description of Deposit	Assay Number	Weights Before Melt Ounces Dec	Weights After Melt Ounces Dec	ASSAY CERTIFICATE FINENESS Gold	Silver	Base	Refin. Cts. Per Oz.	GOLD—FINE OZ.	SILVER—FINE OZ.
amalgam	1518	205.01	191.12	791	182	027	10	151.175	34.78

PAYABLE BY CHECK EXCEPT AS NOTED

Weigh Clerks Asst. Assayer Assayer

Melting	3.50	VALUES, $	5,291.13
Refining	19.11	NET VALUE	5,300.16
Handling	13.23	Bars	
Other Chg.		Cash	
TOTAL CHRGS.	35.84	Check	

44.87

Calculator

0 939881

ME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
4/8/66	Kirkemo	120
		110
4/11	Cole	220
		120

APR 1 1 1966

Memorandum

To: Branch of Budget and Finance

From: Chief, Office of Minerals Exploration

Subject: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2175

Enclosed are three copies of the subject Operator's October 1965 voucher, a copy of the Field Officer's letter of April 5, 1966, forwarding a copy of the Report of Review to the subject Operator, and a copy of said Report of Review. If you concur therein, the Operator's October voucher may be paid in accordance with the Report of Review.

You should continue to withhold $200.00 pending receipt of an acceptable final report from the Operator.

FRANK E. JOHNSON

Frank E. Johnson

Enclosures

MMerrithew/mm (4/8/66)
cc: Director's Reading File
Division File
Economic Geology File
OME Docket
OME Reading File
Region I

23263

Ome(2)

GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane, Washington 99204
April 5, 1966

OFFICIAL COPY
O. M. E.
RECEIVED
APR 7 1966

mm 120 m
110

Air Mail

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
P. O. Box 630
Fairbanks, Alaska

Re: OME-6304 (Gold-Silver)
Keystone Mines
Fairbanks District, Alaska
Contract 2173

Dear Mr. Nordale:

There is enclosed one copy of a Report of Review of the above-cited contract which was prepared on March 2-3, 1966.

Article 5(c) of the subject contract requires the Operator to furnish three copies of a final report in addition to the final monthly report. This final report shall include a geological and engineering evaluation of the results of the work performed under the contract with an estimate of the ore reserves resulting from such work, complete assay data, adequate geological and engineering maps or sketches, and a summary of the work performed and the unit costs thereof.

We would have requested this report sooner had we not been advised that Mr. Beistline had already written to you regarding this matter.

The audit findings indicate that the amount of $200.00 has been retained pending receipt of your final report, leaving the sum of $110.00 payable to you at this time. This sum plus a refund of $2.50 for overpayment of royalty will be made by our Washington office and should be received shortly.

Upon receipt of an acceptable final report the $200.00 presently being held will be released.

Sincerely yours,

D. R. MacLaren
Field Officer, OME
Region I

Enclosure

DRMacLaren/mls
cc: OME(2) w/orig.&2 copies MME Forms 6 and 61 for October 1965
Voucher File
Director's Reading File

MMB Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
4/1		110
	Richmond	120K
		110
4/1	Cal	220
		120M

APR 1 1966

Memorandum

To: Field Officer, Region I

From: Chief, Office of Minerals Exploration

Subject: MME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2173

As requested in your memorandum of February 1, 1966, a Report of Review covering the subject contract has been prepared. This Report of Review includes both costs and repayments. Two copies of the report are enclosed, one for your files and the other for the Operator. Also enclosed is the original and final (October 1965) MME-60 and MME-61, with supporting documents forwarded with your memorandum of February 1, 1966, returned to you for processing.

If you concur in the facts as stated in the Report of Review, the Operator should be sent its copy of the report with any comment you may wish to make. As evidence of your concurrence in the report, two copies of your letter of transmittal to the Operator should be furnished this office. If for any reason you do not concur, the two copies of the report should be returned with your comments.

When we receive the copies of your letter transmitting the Operator's copy of the Report of Review, we shall transmit one of the copies of your letter to the Operator with a copy of the report to the Budget and Finance Branch along with the last unpaid voucher.

You also should request the Operator to promptly furnish a final report on this project in accordance with Article 5(e) under the exploration contract.

FRANK E. JOHNSON

Frank E. Johnson

cc: Director's Reading File
Division File
Economic Geology File
Budget and Finance
OME File

Enclosures

OME Reading File
120

FEJohnson/bih/gla 4-1-66

23263

IN REPLY REFER TO:

R. Klepper
R. Roberts
~~Jacobs~~
Johnson

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON, D.C. 20242

OFFICE OF THE DIRECTOR

MAR 25 1966

OFFICIAL COPY
O. M. E.
RECEIVED
MAR 30 1966

INITIATE	CODE
	110
	120

Memorandum

To: Chief Geologist
Through: Assistant Director

From: Chief Auditor

Subject: Internal Audit of Contract 2173
Docket No. OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Fairbanks District, Alaska

Enclosed are four copies of the report of our cost and repayment review of the subject contract. This review was made at the request of the Chief, Office of Minerals Exploration.

William T. McClelland
William T. McClelland

Enclosure

NOTED

MAR 28 1966

M. R. Klepper
Assoc. Chief Geologist

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
2/8	Selfridge	120
		110
		220
		120M

FEB 8 1966

Memorandum

To: Chief Auditor

From: Chief, Office of Minerals Exploration

Subject: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2173

Enclosed is a copy of a memorandum, dated February 1, 1966, from the Field Officer of Region I and the original of the October 1965 voucher of the subject Operator. Will you please prepare a Report of Review as requested by the Field Officer. $200.00 should still be withheld pending receipt of an acceptable Operator's final report.

Please return all of the enclosed material to us when it has served its purpose.

(signed) FRANK E. JOHNSON

Frank E. Johnson

Enclosures

cc to: Director's Reading File
Division File
Economic Geology File
Budget & Finance, Miss Gabor
OME File
OME Region I
OME Reading File
Mr. Selfridge
CA&A

GCSelfridge/gla 2-8-66

23263

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane, Washington 99204
February 1, 1966

OFFICIAL COPY
C. E. I.
RECEIVED
FEB 3 1966
INITIALS | CODE
120 m
120

Memorandum

To: Chief, Office of Minerals Exploration

From: Field Officer, Region I

Subject: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2173

Work under the subject contract was terminated effective October 9, 1965, due to the ground conditions becoming increasingly bad resulting in a prohibitive cost to the Operator. An agreement to terminate the contract by mutual consent will be prepared in accordance with your memorandum of November 18, 1965.

The requirement that cut samples be taken in significantly mineralized zones at intervals not exceeding 10 feet has, in a few instance, not been complied with, as described in my memorandum of January 19, 1966. It is believed that these few exceptions were necessitated by bad ground that had to be timbered immediately so that back samples could not be cut and the caving ground continued into the face lengthening the actual distance between successive faces from which samples could be cut rather than to any dereliction on the Operator's part. An amendment to cover the difference in spacing of cut samples has been recommended if you deem it necessary.

The number of units of work completed by the Operator and accepted by the Field Officer, Region I, as conforming to contract specifications were:

Shaft sinking plus hoist	123.0	feet
Shaft station	17.5	"
Shaft station sets	4	each
Loading pocket	1	unit
Drifting and crosscutting	511.5	feet
Timbering in drifts and crosscuts	400.0	"
Samples assayed for gold and silver	73	each

Note: Assay reports for 74 samples have been received but samples numbered 44 and 47 were taken from the same muck pile and therefore one is not accepted. No reimbursement has been claimed for any assays.

No Operator's final report has been received and it is recommended that $200.00 be withheld pending receipt of an acceptable Operator's final report.

A Report of Review, in lieu of a final audit, is in order and requested. For this purpose, the original of the final (October 1965) MME-60 and MME-61, together with supporting documentation, is attached, including a copy of a letter dated January 24, 1966, from Bruce Thomas, Bureau of Mines Engineer, to J. A. Herdlick.

D. R. MacLaren

D. R. MacLaren

Attachments

GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane, Washington 99204
January 31, 1966

OFFICIAL COPY
FEB 8 1966

Air Mail

Mr. Robert M. Chapman
Geologist-in-Charge
College Office
Alaskan Geology Branch
U. S. Geological Survey
P. O. Box 580
College, Alaska 99735

Re: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2173

Dear Bob:

I am enclosing a copy each of the Standard Short Form (MME Form 51) and Standard Long Form (MME-Form 50) contracts. Unfortunately, the only copies I have were revised in February 1959. The Keystone contract is on the short form which was revised in June 1963. We have inked in changes, deletions, and additions, which brings the terms and conditions of the contract up-to-date.

The main requirements for an acceptable Operator's Final Report are given on both contract forms in Article 5(c). You might point out to Mr. Beistline that the final report is in addition to the final monthly report, and involves assembling the monthly piece-meal maps or sketches into one complete map.

Mr. Nordale has not shown up as yet, but when he does I will go over the matter of his final report and royalty obligations with him.

Sincerely yours,

D. R. MacLaren
Field Officer, OME
Region I

Enclosures

DRMacLaren/mls
cc: ~~OME w/cy incoming let.~~
1/26/66 from Robt. Chapman
Voucher File

Director's Reading File

OMe

IN REPLY REFER TO:

G-ALAS-RMC

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

ALASKAN GEOLOGY BRANCH
BOX 580
COLLEGE, ALASKA 99735

January 26, 1966

Mr. D. R. MacLaren
Field Officer, OME
U. S. Geological Survey
S. 157 Howard St.
Spokane, Washington

Dear Don:

I have talked with Earl Beistline about a more complete map of the entire O.M.E. portion of the Keystone mine, and I have the feeling that essentially all of the data that he has is already given on the monthly report maps. He generally visited the property only once a month, so it is likely that some of the gaps you have noticed are also gaps in his information, rather than omissions in plotting. No doubt the thoroughness of his monthly geological observations depended upon time available for each visit, and Earl is not a geologist.

Your thought on seeing Beistline directly about this rather than going first to Arnold Nordale is good. If Earl doesn't do this map for the company, no one else will have the information to compile it. Earl does not especially welcome the job as he is quite busy with a number of other things now, but this is a problem for him and Nordale to settle. Neither Beistline nor I have a copy of the complete contract including Article 5(c) regarding the final report. It might be handy if you would jot down a brief outline of what else should be covered in the final report in addition to the map.

I suppose that by now you have seen Mr. Nordale, or soon will. I understand he planned to be in Spokane in the latter part of January to discuss further work.

As I mentioned previously, I do not have the information necessary to comment specifically on mining difficulties and costs that might be encountered on the 147 level. Earl Beistline did not care to make any off-hand comments, but he may, after giving the matter some thought, have some comments eventually. Bruce Thomas had the thought of freezing the ground to stabilize it, but he also said that Bob Saunders, mining engineer with the State Dept. of Mines, was doubtful about how well this procedure would work.

Will keep you informed of developments on the map and report now in Beistline's hands.

Sincerely,

/S/ Bob

Robert M. Chapman
Geologist-in-charge
College Office

XXXXXXXX
Area VIII

January 27, 1966

OFFICIAL COPY
O. M. E.
RECEIVED
FEB 3 1966
INITIALS CODE

OME 6304

Mr. D. R. MacLaren
Acting Field Officer
OME Region I
South 157 Howard Street
Spokane 4, Washington 99204

Dear Mac:

The attached copy of a letter from Bruce Thomas gives information on measurements on the 147 level of the Keystone mine in addition to that previously reported in his letter of November 26, 1965, a copy of which was forwarded to you with my letter of transmittal dated December 2, 1965.

Best regards,

J. A. Herdlick
Area Director, Area VIII
Mineral Resource Office

Attachment

RECEIVED
JAN 31 1966
OME

Mac Lacey

Fairbanks, Alaska
January 24, 1966

Mr. J.A. Herdlick
Director, Area VIII, Mineral Resource Office
Bureau of Mines
P.O. Box 2688
Juneau, Alaska

Dear Jerry:

In my letter of November 26, 1965, concerning my unofficial visit to Keystone Mines on October 10, 1965, I report a "total of 501 feet of 5 x 7 drift, on vein and vein structure —". This total does not include an advance of 4 feet that was made during October 1 to 10 therefore the total is 505 feet of completed drift. Bean Reistline did not require assistance to measure the last 4 feet of advance, but I was at the face of the east drift when it was measured.

Inasmuch as my visit to the Keystone was not official I could not presume the right to make precise measurements for OME. However, I did satisfy myself, by pacing and counting sets, that over 500 feet of drift is complete on the 147 level.

Sincerely yours,

Bryce T. Thomas
Mine Examination & Exploration
Engineer

RECEIVED
JAN 31 1966
OME

MME FORM 6 REFERENCE SLIP

REV. 2-59 OFFICE OF MINERALS EXPLORATION

TO:	DATE	INITIALS
1. Chief, OME	1/26/66	
2. Re: OME-6304 (Gold-Silver) Keystone Mines, Inc. Keystone Mine Fairbanks District, Alaska		
3. Contract 2173		
4.		
5. D. R. MacLaren		
FROM: Field Officer, Reg. I		

OFFICIAL COPY
O. M. E.
RECEIVED
JAN 28 1966
INITIALS CODE

FOR: Check items for action desired

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

REMARKS:

Reply to our letter to Robert M. Chapman dated 1/17/66.

Orig

IN REPLY REFER TO:

G-ALAS-RMC

UNITED STATES
DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY
ALASKAN GEOLOGY BRANCH
BOX 580
COLLEGE, ALASKA 99735

January 21, 1966

Mr. D. R. MacLaren
Field Officer, O.M.E.
U.S. Geological Survey
Spokane, Washington

Dear Don:

I will send along a partial answer to your letter of the 17th regarding the Keystone Mines, Inc. O.M.E. contract.

I talked with Bruce Thomas and he will send on a letter, via Jerry Nerdlick I presume, attesting to the 4 feet of drifting that was done in October. He did help Beistline measure the additional 4 feet, but, inasmuch as he was not there for the purpose of making an official or precise examination and the overall length of the drift was not an issue, he only paced off the total distance which seemed to be about 500 feet. There seems to be no question that the 4 feet of drift was made subsequent to the September monthly report.

Earl Beistline is busy with semester-end duties and second semester registration at present, but I'll get together with him within a few days.

I would not be able to give a valid personal opinion on Birch's comments about the ravelly ground, as I have not seen the drift. I asked Bruce about it, and he thinks that quite possibly the ground could be held by freezing it during the cold weather with cold outside air and mining it a slice at a time. When the water was kept down and the shaft left open, ice formed down to the 147 level in the inclined shaft. Some timbering would, of course, also be required.

The inclusion of the 50-foot level on the map that I sent down was chiefly my doing just for our information. Beistline had it plotted on his personal rough compilation, and I thought we might as well get the whole picture when it was available.

Will advise as soon as I can get the rest of the needed information.

Sincerely,

Robert M. Chapman
Geologist-in-charge
College office

REC'D
Via
JAN 1
Ans Req
OME

Ome

GEOLOGICAL SURVEY
No. 157 Howard Street
Spokane, Washington 99204
January 26, 1966

OFFICIAL COPY
O. M. E.
RECEIVED
JAN 28 1966
CODE
120 m
120

AIR MAIL - CERTIFIED
RETURN RECEIPT REQUESTED

Mr. Robert M. Chapman
Geologist-in-Charge
College Office
Alaskan Geology Branch
U. S. Geological Survey
P. O. Box 580
College, Alaska 99735

Re: OMX-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2175

and

OMX-6447 (Silver)
Purkeypile Company
Grandview Property
Mt. McKinley Recording District
Alaska

Dear Bob:

Many thanks for your efforts relative to winding up the Keystone contract. On rereading my letter of January 17, 1966, I was perhaps too brief in my reference to the 50 level on the map you sent me. Its location is certainly desirable and if Beistline includes it along with the geology and assays and a long section showing both levels and the areas stoped from the 50 level, we would surely be the richer and most grateful. I only meant we could not "require" that data as a part of his final report.

I have just received a memorandum from Ed MacKevett regarding Purkey's recently denied application. In order that you may have the background should Dave Purkey visit you in this connection, I am enclosing the docket. As you doubtless will remember, it would not be "cricket" to show Purkey any of the correspondence between DC and the field, but a knowledge of its contents should be helpful to you in talking with him. At least you will be able to point out to him the lack of information in his application and the lack of any strong recommendation in Chadwick's report. Copy any of the

docket material you wish to, and send the docket back. If we get another application and should have to call on you for help, I will send this docket along with the new application if you wish.

Incidentally, you may be asked the $64 question: "What are the criteria for determining whether a silver- and/or gold-bearing mixed sulfide assemblage will qualify for OME assistance?" Usually, the total silver and/or gold value in dollars must make up at least half the dollar value of the probable ore. Only if there is a probability that the possible discovery will contain a very large amount of silver or gold, their value could possibly make up a little less than half the total value of the ore and still be eligible for OME aid.

Sincerely yours,

D. R. MacLaren
Field Officer, OME
Region I

Enclosure

DRMacLaren/mls

cc: OME

Director's Reading File

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
	Selfridge	120
1/18	Johnson	110
1/21	CAC	220
		120 m

JAN 21 1966

Memorandum

To: Chief, Branch of Budget and Finance

From: Chief, Office of Minerals Exploration

Subject: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska
Contract 2173

Submittal for payment of the September 1965 voucher of the subject Operator was held in abeyance when we learned that the mine was being closed and we were not sure whether a Government engineer had been able to measure the total drift advance. Later this was measured and found to be 501 feet in keeping with the voucher as indicated in the copy of the November 26, 1965, letter of Bruce I. Thomas to Mr. J. A. Herdlick of the Bureau of Mines in Juneau, Alaska. The voucher can now be paid. However, please withhold the $200.00 as was requested in my memorandum of October 27, 1965, which is enclosed.

(Signed) FRANK E. JOHNSON

Frank E. Johnson

Enclosure

cc: Director's Reading File
Division File
Economic Geology Reading
OME File
OME Reading File
Region I (2)
Mr. Selfridge

GCSelfridge/mm (1/18/66)

232.63

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane, Washington 99204
January 19, 1966

OFFICIAL COPY
O. M. E.
RECEIVED
JAN 21 1966
INITIALS | CODE
120
120
110

Memorandum

To: Chief, Office of Minerals Exploration

From: Field Officer, Region I

Subject: Certification recommendation
OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska
Contract 2173

This is in reference to certification of a discovery at the Keystone mine, as requested in your memorandum of November 18, 1965. I wrote to Bob Chapman on January 17, 1966, regarding the final measurement, and when this matter is settled, I will request a Report of Review.

I have discussed the ground conditions with Frank E. Birch of Spokane who had the drift contract for this past season's work. The entire 147-foot level required close timbering. Strike faulting, cross faulting, and bending stresses have so loosened the wall rock that caving on both sides of the vein, and particularly along the footwall, would start after nearly every round was blasted. Most of the time it was necessary to spile ahead in order to muck. This ground condition, in Birch's opinion, precludes any possibility of mining from the 147 level. As this is the opinion of only one man, it will be given no weight in the conclusion regarding certification.

A more important effect of the nature of the ground may be a need to amend the contract relative to the spacing of cut samples. In the East drift the 10-foot maximum specified distance between cut samples is exceeded in the following instances (see accompanying sketch):

From	To	Distance (feet)	Muck samples from interval	Probable reason
#9	#61	20	0	Drift in HW
#63	#66	15	2	Bad or running back or walls
#66	#67	14	0	Do.
#71	#72	42	0	Drift in FW
#72	#73	19	0	Bad or running back or walls

In the West drift the 10-foot maximum specified distance between cut samples is exceeded in the following instances:

From	To	Distance (feet)	Muck samples from interval	Probable reason
#13	#14	30	0	Drift in FW; possible offsetting fault
#14	#18	16	3	Bad ground and/or possible offsetting fault
#22	#28	15	3	Bad or running ground
#28	#31	12	2	Do.
#33	#36	15	2	Do.
#37	#42	14	3	Do.

There are three instances in the East drift in which the spacing between cut samples was increased to 15, 14, and 19 feet, respectively, and in the West drift there are five cases in which the spacing was increased to 16, 15, 12, 15 and 14 feet, respectively. In each case this could be the fault of bad ground rather than dereliction on the part of the Operator. Also, in the West drift muck samples were taken of each round blasted in significantly mineralized areas. In the East drift no muck samples have been reported east of #69. As assay reports frequently come in late, I have approved for payment the entire East drift, but payment is being withheld for 65.5 feet vouchered for September 1965; an additional 4 feet vouchered for October has not yet been processed here, pending confirmation of the final measurement. Should all work in the East drift east of sample #69 be disallowed when a Report of Review is requested--unless assays of muck samples for this drifting should be forthcoming?

The available geologic and assay data have been plotted on the accompanying sketch furnished by the Operator's consultant. In the East drift between points A and B is a zone 35 feet long in which five cut samples indicate an average value of $14.93 per ton over an average width of 38.4 inches, say 3 feet. The average value of six muck samples representing 190 tons is $23.48 per ton. A 22-foot long segment, which includes samples #67, #68, and #69, has an average value of $14.44 per ton over an average width of 66 inches, say 5.5 feet. Near point E-9, samples #73, #74, and #75 indicate values, respectively, of $85.23, $601.44, and $303.29 per ton. No width is given for #74, but #73 is 24 inches and #75 is 8 inches. Unless this drift is entering an ore zone that will average at least $20.00 per ton, there is little likelihood that mining from the East drift could be economic.

In the West drift there is a zone about 95 feet long, extending from samples #12 to #55, from which 12 cut samples indicate an average value of $40.97 per ton over an average width of 28.5 inches, say

2.5 feet, and 21 muck samples representing 512 tons indicate an average value of $8.81 per ton. Muck samples #34, #35, #40, #51, #53, and #55 are reported in terms of linear feet mucked. Based on 10 cubic feet per ton, 3.5 tons per linear foot has been used to weight these with the other muck samples in this drift segment. The muck samples are unquestionably diluted by running ground, some more than others, and there seems to be no reliable means of correcting the value for the dilution. The arithmetical average of the cut samples and muck samples is $24.89 per ton. If a system of ground-controlling mining could be worked out, the minable value of this vein segment would possibly be $30.00 or more per ton. On this basis it is recommended that a discovery be certified.

D. R. MacLaren

D. R. MacLaren

Enclosure

Ome (1)

GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane, Washington 99204
January 17, 1966

OFFICIAL COPY
O. F. E.
RECEIVED
JAN 19 1966
REVENUES CODE
Cae 800 P
~~120 M~~
120
620

Memorandum

To: Chief, Office of Minerals Exploration

From: Field Officer, Region I

Subject: Collections--Transmittal of Royalty Check
Contract No. 2173
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska
OME-6304 (Gold-Silver)

Appropriation Symbol: OME-142039

Check No.: 6

Date: 1/12/66

Amount: $2,117.80

From: Arnold M. Nordale (La Dessa Nordale, Sec'y.-Treas.)
Keystone Mines, Inc. (Main Office, First Nat'l. Bank of Fairbanks, Fairbanks, Alaska)

Period: 5/5/65 - 12/ 1/65

Lots No.: Mint Return Memos (1804 - 5/5/65; 956 - 12/1/65)

D. R. MacLaren

Attachment
Distribution:
Operator
OME(1) w/cys of Mint Return Memos as shown above
and let. 1/14/65 from Arnold M. Nordale
CPF
Chrono

UNITED STATES ASSAY OFFICE
AT SAN FRANCISCO CALIF.

BULLION DEPOSIT - MEMO REPORT

Mint Form 42R
(Revised)
SOURCE DATA

Deposit No. 1804 Date 5/5/65

Memos Required by Depositor 5

Other Data

Silver Price or Class $1.29

State Alaska
County Fairbank Dist.
Mine Ebert Keystone

Depositor Northern Commercial Co.
419 Colman Bldg - Seattle, Wn. 98104

Description of Deposit	Assay Number	Weights Before Melt Ounces Dec	Weights After Melt Ounces Dec	ASSAY CERTIFICATE FINENESS Gold	Silver	Base	Refin. Cts. Per Oz.	GOLD—FINE OZ.	SILVER—FINE OZ.
2m2192m cakes	1907	631.75	593.39	779¾	187	0384	10	462.695	107.99

PAYABLE BY CHECK EXCEPT AS NOTED

Weigh Clerks Asst. Assayer Assayer

Melting	3.50	VALUES, $	16,194.33	139.37
Refining	59.34	NET VALUE	16,230.37	
Handling	40.49	Bars		
Other Chg.	103.33	Cash		
TOTAL CHRGS.		Check		

Calculator

GPO 939881

RECEIVED
JAN 17 1966
O M E
SPOKANE, WASHINGTON

UNITED STATES MINT
AT SAN FRANCISCO CALIF.

BULLION DEPOSIT - MEMO REPORT

SOURCE DATA

Deposit No. 956 12/1/65
Depositor Northern Commercial Co.
Seattle, Washington 98104

Memos Required by Depositor $
Other Data

Silver Price or Class 61.29

State Alaska
County Fairbanks Dist.
Mine Ebbert Keystone

Description of Deposit	Assay Number	Weights Before Melt Ounces	Weights Before Melt Dec	Weights After Melt Ounces	Weights After Melt Dec	Assay Certificate Fineness Gold	Assay Certificate Fineness Silver	Assay Certificate Fineness Base	Refin. Cts. Per Oz.	Gold—FINE OZ.	SILVER—FINE OZ.
Amalgam	989	1,028.08		943.20		789½	185½	025	10	744.656	174.96

PAYABLE BY CHECK EXCEPT AS NOTED

Weigh Clerks Asst. Assayer Assayer

Melting	3.90	VALUES, $	26,062.96	255.70
Refining	94.32	NET VALUE	26,225.68	225.70
Handling	65.16	Bars		
Other Chg.		Cash		
TOTAL CHRGS.	162.98	Check	26,125.68	

RECEIVED
JAN 17 1995
OMB
FOREST DARKROOM

C O P Y C O P Y

5233-15th Ave. N.E.
Seattle, Wash.-98105
Jan. 14, 1965

Mr. D. R. MacLaren
Acting Field Officer
Office of Minerals Exploration
South 157 Howard Street
Spokane, Wash. - 99204

Dear Mr. MacLaren:

Enclosed is a check in the amount of $2117.80 in payment of royalty on production of $42,355.99 as shown by Bullion Deposit Memo Reports dated May 5, 1965 and December 1, 1965.

The royalty due on the Mint Report of May 5th should have been included in our payment of November. Our failure to do so was the result of an oversight by the N.C. Co. Production is continuing and further payments will be made accordingly.

Presently I am in Seattle and plan to visit Spokane in the near future at which time I will see you with regard to OME assistance in the extension of the low level tunnel.

Very truly yours,

KEYSTONE MINES, INC.

/s/ ARNOLD M. NORDALE, PRES.

OME

GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane, Washington 99204
January 17, 1966

OFFICIAL

19

120 NC
120

Air Mail

Mr. Robert M. Chapman
Geologist-in-Charge
College Office
Alaskan Geology Branch
U. S. Geological Survey
P. O. Box 580
College, Alaska 99735

Re: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska
Contract 2175

Dear Bob:

I was finally able to get some annual leave December 17 through January 4. Then on the 5th took off for D.C. and 2 days of very worthwhile conferences about the administration of the OME project, budget and accounting problems, etc. Upon my return to the office your letter of December 20, 1965, and the maps were on my desk. Much of our recent correspondence relative to the Keystone contract has crossed in the mail; also, since my letter of November 9, we have received the Operator's Progress Report and Voucher for October. I shall try to bring you up-to-date and will discuss briefly a few items that need clarification.

One of the subjects emphasized during the D.C. conference dealt with documentary support required of the Operator for his vouchers, and supplementary documentary support required from the field. Beistline's map is fine, so far as it goes, but he should add to it the geology indicating at least the location and dips of the vein or veins and cross faults, and the locations from which cut samples were taken and their assays. Of course, I am not strictly correct in saying Beistline should do this as that is the prerogative of the Operator to say. Under Article 5(c) of the contract the Operator agrees and is obligated to submit, in addition to his monthly reports, a final report which will include ". . . complete assay data, adequate geological and engineering maps or sketches . . ." I am returning herewith one of the copies of Beistline's map on which I have put as much of the geology as I can from the piecemeal maps, scale 1" = 10', and the narrative reports which accompanied the monthly

*~~narrative reports~~. Many of the red dots are not shown on the maps--their general location, sample width, and in some cases dips are indicated by side notes on the maps--others have been located from tabulated sample station descriptions that accompanied the voucher. In the latter case there is no way of determining whether the vein is in the center or along one of the drift walls. Also, there are gaps in some of the monthly maps. For example, in the east drift what happens to the vein between stations B and C and between sample no. 66 and station E-6. In the bypass drift west what happens between sample no. 11-A and sample no. 2 in the east drift. In the west drift near station W-1, the only indication of a cross fault is the apparent offset of the vein. I have indicated possible means of getting the required assay data on a geologic map by inserting the numbers, widths, and grades of a few samples in the west drift. Car or other bulk samples could be similarly recorded on the other side of the drift. I had to start with an approximate location for station A and work backwards to locate the level station, and from A on one or two stations plotted at the azimuth or bearing and distance on the monthly maps fall outside the drift; they were arbitrarily jiggled in to fit Beistline's plan. The preparation of this map is up to the Operator--not to you or me--and presumably he will ask Beistline to do it. In any case, you might discuss this with Beistline. The composite showing the outline of the 50 level is interesting, but the Operator's obligation is limited to furnishing this data for the winze and the 147 level. Incidentally, the maps with the Operator's final report should be legible.

I realize that your approach to Beistline may be difficult since he is doing this work for the Operator gratis; my only thought in suggesting it is that time might be saved. If for any reason--or no reason at all for that matter--you think it would be better to follow the usual procedure, I will write to Nordale for this required data. We certainly do not want to disrupt amicable relations between the Survey and the Alaska Bureau of Mines personnel.

There is another discrepancy that should be cleared up before we terminate this contract. In his September voucher the Operator claimed a "total to date drifting" of 501 feet. For October he claimed an additional 4 feet for a total of 505 feet. However, in a letter dated November 26, 1965, to Jerry Herdlick, a copy of which we sent you, Bruce Thomas describes his visit to the mine on October 10, 1965, during which he accompanied and presumably helped Beistline with his final measurement. Bruce says: "A total of 501 feet of 5 x 7 drift . . . were completed." I wonder whether that could be a typographical error or a "mental throwback" to the September measurement. If it is either one, and he knows that the final measurement was 505 feet, could we ask Bruce to drop Jerry a note with a copy for us making the correction to clarify our files?

*Operator's Progress Reports

With the October voucher now at hand, and if Bruce can confirm that he helped measure a total of 505 feet of drift, the status of the contract is:

Drifting	505.0 feet
Crosscutting	6.5 "
Total	511.6 feet of drift and/or crosscutting

Authorized by Amendment No. 6 (correcting a typographical error in Amendment No. 3) is drifting and/or crosscutting 900 feet. The funds remaining are largley an academic question as it would be better to terminate this contract and start from scratch if the company wishes to present a new proposal. Whether a new proposal will be approved will largely depend upon the geologic justification, interpretation as to the work being exploration or development of known ore preparatory to mining, feasibility of stoping in this heavy ground, etc.

I have talked with Frank Birch regarding the possibility of production from the 147 level. He is of the opinion that it will be very difficult, if not impossible, to open any stopes due to the ravelly nature of the ground, and that costs for timbering, even if the ground could be kept open a floor at a time, would be so high that any attempt to mine could only result in a financial loss. Can you comment on this?

As soon as the 4-foot difference in total drift footage is reconciled, I will start the windup operations.

Sincerely yours,

D. R. MacLaren
Field Officer, OME
Region I

Enclosure

DRMacLaren/mls

cc: OME
Voucher File

Director's Reading File

Mr. Johnson:

This is the voucher which you asked some time ago that I hold until you had a chance to talk with Don MacLaren about it. It is being forwarded to you now for proper disposition.

Lois

Not filed pending receipt. Dept. voucher

Voucher held by Lois Williams pending release from Mrs Jones of her check on postage. Dud Brown Thomas check issued month ? 1/1

1/12/65

Held for Mrs Jones check with Bruce Thomas in charge of postage

1/13/66

OME (2)

KEYSTONE MINES, INC.
P. O. Box 630
Fairbanks, Alaska

Sept. 30, 1965

ORIGINAL
COPY
O. M. E.
RECEIVED
OCT 25 1965
120 m
120

Mr. D. R. MacLaren
Acting Field Officer, OME
Region I
U. S. Dept. of the Interior
OFFICE OF MINERAL EXPLORATION
South 157 Howard Street
Spokane, Washington 99204

Re: OME (Gold-Silver)
Contract 2173 as amended
Keystone Mines, Inc.
Fairbanks District,
Alaska

Dear Mr. MacLaren:

In accordance with the specifications of our OME Contract, as amended, I am sending you herewith the original and three copies of:

Operator's monthly voucher (OME Form 60), Sept. 1965
Operator's progress report (OME Form 61), Sept. 1965
Narrative
Sketch maps (#20) showing work accomplished during Sept. 1965
Assay reports

Reimbursement is requested for August 1965 for the completion of 67.5 feet of drift.

Very truly yours,

Arnold M. Nordale

Arnold M. Nordale
President
KEYSTONE MINES, INC.
P. O. Box 630
Fairbanks, Alaska

AMN:EHB:jr
Enclosures

RECEIVED
Via
OCT 11 1965
air mail
OME
SPOKANE, WASHINGTON

KEYSTONE MINES, INC.
P. O. Box 630
Fairbanks, Alaska

Sept. 30, 1965

Mr. D. R. MacLaren
Acting Field Officer, OME
Region I
U. S. Dept. of the Interior
OFFICE OF MINERAL EXPLORATION
South 157 Howard Street
Spokane, Washington 99204

Re: OME (Gold-Silver)
Contract 2173 as amended
Keystone Mines, Inc.
Fairbanks District,
Alaska

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Narrative
Sketch maps (#20) showing work accomplished during Sept. 1965
Assay reports

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Very truly yours,

Arnold M. Nordale

Arnold M. Nordale
President
KEYSTONE MINES, INC.
P. O. Box 630
Fairbanks, Alaska

RECEIVED
Via
OCT 11 1965
OME
SPOKANE, WASHINGTON

AMN:EHB:jr
Enclosures

MME FORM 6 REFERENCE SL

REV. 2-59 OFFICE OF MINERALS EXPLORATION

TO: Chief, OME

	DATE	INITIALS
1.	12/9/65	
2.		
3.		
4.		
5.		

Re: OME-6304 (Gold-Silver)
Keystone Mines, Inc.

Keystone Mines
Fairbanks District, Alaska

Contract 2173

D. R. MacLaren

FROM: Field Officer, Region I

OFFICIAL COPY
O. M. E.
RECEIVED
DEC 14 1965

INITIALS CODE

120 M
120

FOR: Check items for action desired

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

REMARKS: For your files. We will work up data necessary for reply to your memo of 11/18/65 as soon as possible.

One (2)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

REGION 4
Area VIII

ALASKA OFFICE OF
MINERAL RESOURCES

P. O. BOX 2000
JUNEAU, ALASKA

December 2, 1965

Mr. D. R. MacLaren
Acting Field Officer
OMS Region I
South 197 Howard Street
Spokane, Washington 99204

Dear Mac:

Enclosed is a copy of an informal report from Bruce Thomas which is self-explanatory. Although Bruce's visit to the Keystone mine was technically unofficial, his comments regarding the contractor's work may be of interest to you.

If the Keystone contract has been terminated, we would appreciate a copy of the operator's final report for our confidential file.

Best regards.

Sincerely yours,

J. A. Nordlick
Area Director, Area VIII

Enclosure

RECEIVED
DEC 1965
OMB

Fairbanks, Alaska
November 26, 1965

Mr. J.A. Herdlick
Director, Area VIII, Mineral Resource Office
Bureau of Mines
P.O. Box 2688
Juneau, Alaska

Dear Jerry:

Keystone Mines Inc. has suspended exploration under the OME exploration program. Work on the 147 level in the shaft on the Kanilita Claim came to a close during early October. Poor advance caused by exceptionally short or crumbly ground with resultant higher costs to the contractor appears to be the primary cause for a sudden cessation of work.

The Keystone was visited, unofficially, on Sunday October 10th. at the express invitation of Dean Earl H. Beistline of the College of Earth Science and Mineral Industry of the University of Alaska. During the time we were at the property Keystone's contractor was removing contractor owned equipment, including pumps, from the 147 level. I accompanied Dean Beistline underground while he was taking measurements to record the last advance in the east drift. While underground I observed the good quality of the work that has been done in both the east and west drifts since my official visit about one year ago. A total of 501 feet of 5x7 drift, on vein and vein structure, were completed with all muck removed and both east and west faces breast boarded. Despite obvious adversities I think the contractor did a commendable job.

At the present time the lower workings in the Kanilita shaft are flooded I understand that within 4 or 5 days after the pumps were pulled the 147 drifts became inaccessible.

Mining for Keystone continues on the Kanilita vein by a different contractor. Ore is being extracted by underhand stoping methods at and near the surface. Milling is being done at the Cleary Mill.

REC
DEC
65

Sincerely yours,

Bruce I. Thomas

OME(2)

IN REPLY REFER TO

1-ALAS-RMC

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
ALASKAN GEOLOGY BRANCH
BOX 55[illegible]
COLLEGE, ALASKA 99735

November [illegible], 1965

Mr. D. R. MacLaren
Field Officer, O.M.E.
U.S. Geological Survey
S. 157 Howard St.
Spokane, Washington 99204

Dear Don:

I was not able to get in touch with Earl Beistline until early this week to discuss the points in your letter of November [illegible] regarding Keystone Mines, Inc. He showed me a copy of a letter that Arnold Nordale wrote to you dated November 10, and this letter seems to answer most [illegible] your questions and to outline Mr. Nordale's thinking on future exploration. As you will note from the address on that letter, Mr. Nordale is in [illegible] his present residence. He left Fairbanks a couple of days after I talked with him on October 30, so I have not been able to contact him personally about the items in your letter.

The work done at the mine by the contractor, Frank Birch, was terminated on October 9, and pumping of water ceased on October [illegible]. Bruce Thomas and Earl Beistline visited the mine on the afternoon of October [illegible] and Mr. Nordale is inadvertently in error when he gives the date of their visit as the 11th.

I presume that you have, or soon will have, contacted Mr. Nordale regarding a recess or termination. I believe that he would prefer to terminate the work on the 147-foot level, owing to the difficulties encountered and the extra expense involved. I understand that O.M.E. funds for timbering were exhausted, and that the operator had been bearing the added cost of necessary timbering in the most recent work. It appears to me, and Beistline and Nordale certainly seem to share this view, that continuing to drift on the vein in the 147-foot level will not yield enough additional information to be worth the cost and difficulties. I think your comment on Mr. Nordale's honesty is quite correct. To the best of my knowledge he is a very reputable and honest person, and in my discussions with him and Beistline it was quite apparent that his intentions are the best and that his program was conceived to try to make the most economical use of both O.M.E. and private monies. He is also quite concerned about repaying all money as soon as possible, and to this end he has leased a portion of the ground on the Kawilita claim to Ed Ebbert in order to have some return and help the whole project to be self-sustaining.

Nordale's letter of the 10th I believe indicated some uncertainty about whether he would ask for O.M.E. participation in the tentative plan to extend the old Nordale adit. He also mentioned this in the talks I had with

him, and again his thinking was to finance as much of the operation as possible without resorting to O.M.E. funds. I understood that he intended to visit you sometime after the first of the year to discuss future work and the present contract, and I suspect that he is now attempting to make a careful evaluation of their financial position and arrange new financing in order to decide what, if anything, he may have to ask for.

There is a discrepancy between the calculated 40[illegible] feet of crosscut and drift that you mention, and the amount of 288.5 feet that Beistline thinks remains (total of 800 feet under amendment 3). He says that 505 feet of drifting and 6.5 feet of crosscut have been done under O.M.E., and that a total of 800 feet was authorized. His figures also show $22,[illegible]2.50 remaining instead of $22,532.50. He pointed out too that actual drifting costs had exceeded $55 per foot, the excess being absorbed by Keystone.

I have talked to Bruce Thomas, and he is sending a statement about the October 10 footage measurement to you through Jerry Herdlick.

Projections of the Kawilita vein and Nordale adit, based on available map data, show that the minimum adit extension would be about 500 feet (vein dip of 60°), and that more likely about 700 feet (vein dip of 45°) would be needed to intersect the vein. Therefore, no matter how the remaining contract money and footage are figured, even with an adit smaller than 5x7 feet, which would conserve money and reduce cave-in problems, it is unlikely that the Kawilita vein can be reached from the Nordale adit within the limitations of the present contract.

The overall dip-trend of the vein in the Kawilita claim workings is about 45°, and apparently in places the dip is even less. Thus a 60° dip projection seems unrealistic. The sinuosity of the vein and a series of minor cross-faults have been mentioned by Bruce Thomas, and are unknown quantities eastward from the present drift, and the vein at adit level may be displaced even farther southward. Thus, one should anticipate possibly more than 700 feet of adit, and also crossing the south boundary of the Kawilita claim unless the adit is curved westward. If the vein is present due south from the Nordale adit, it could be expected to carry still farther eastward, which would place it on the Willie or Marigold claims that are owned by Keystone.

Neither Beistline nor I have knowledge of any surface evidence of the Kawilita vein in line with the Nordale adit; however Mr. Nordale may have some information on this. I think the slope is probably too steep to attempt bulldozer trenching in that area in order to check for the vein. The Jamesonite and Blue veins are not far out of line though, and several veins were mined from the Nordale adit, so at least a generally favorable zone of mineralization is present in the vicinity of the east boundary of the Kawilita claim. According to Beistline the Kawilita vein extends westward beyond the Kawilita claim as prominent and mineralized vein and some mining was done on it by others this season. Thus, there are several good indications that the Kawilita vein is a strong, persistent feature.

The critical point to consider before deciding to extend the Nordale adit, is whether mining and sampling results from the present workings on the

Kawilita claim indicate a potentially economic deposit. Some samples are quite rich, others are certainly sub-economic, and the fact that people are now mining and milling ore from the vein, and have done so in the past, is a good indication, but not definite proof, of its economic grade near the surface. There is no reason to think that the tenor will increase either laterally or with depth, but with our knowledge of the vein and immediate area it seems prudent to project the same ore grade as is determined for the workings for a reasonable distance. Residual enrichment in perhaps the top 20 feet of gold-quartz veins is common in the Fairbanks district (see Bull. 849-B, p. 70) and, I have been told, was found in the Vetter brothers workings nearby. However, specific information on consistent changes, if any, in gold values with depth is lacking (Bull. 849-B, p.70). The questions then are (1) is the vein ore grade, and (2) are the proposed 600 feet laterally and 300 feet vertically reasonable projection distances.

Beistline has not made any calculations of overall grade for the vein that has been mined and sampled, and I think something along this line should be done. The vein mineralization is spotty, a characteristic of the Fairbanks district lodes, and selective mining would be necessary. Not having seen the vein underground and not having taken the samples, I do not feel qualified to calculate a reliable figure for value or tonnage.

You have pin-pointed my guarded optimism about the merit of extending the Mordale adit, along with your request for my comments and appraisal. My initial reaction was that, in view of spotty mineralization and complex structure, the combined lateral and vertical jump was too great. I was thinking of 2 or 3 diamond drill holes first to test for the vein extension eastward, but a concensus does not favor this - it is apt to be disproportionately costly for the information obtained. In considering the extension of the adit the following points seem pertinent: favorable (1) blocking out a large vein deposit if minable ore is found at the adit-vein intersection, (2) establishing a useful haulage- and drainage-way, (3) exploration of the block of ground between the present adit face and the Kawilita vein, (4) reopening mineralized zones along the old adit that may still contain some minable ore, (5) giving closer access at depth to the McCarty, Henry Ford, American Eagle, Blue, and Jamesonite veins; unfavorable (1) projecting possible ore grade and vein too far, (2) uncertainty about total distance to the vein and relationship of intersection point to the claim line, (3) encountering excessive water and/or caving ground in the adit extension, (4) uncertain condition of the old adit which was last open about 1940.

Looking only at the Kawilita vein and claim, if the calculated grade and projected theoretical ore tonnage justify expending $44,000 (800 feet of adit at $55 per foot), I would favor the adit extension in hopes of blocking out a relatively large ore body. Taking a broader look at the entire Keystone block of ground, the adit might be quite useful, but explorationwise it would seem to be putting the cart before the horse. I think that we should consider, too, that the real hope for developing this property or any other mine that will make a significant contribution to the economy of Interior Alaska lies in finding deposits of moderate to large size. The sooner that the extent of this type of deposit can be established, the

better it will be for all concerned.

I am returning via registered airmail the file material that you sent to me. I have made copies of the maps and a few other pertinent items.

Beistline has a map, scale 40 feet to the inch, of the workings but none of the subsurface geology is plotted on it. I am making a copy of this map in order to get a better original for reproduction. I will send along copies for your use as soon as possible.

Sincerely,

Robert M. Chapman
Geologist-in-charge
College office

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code

November 24, 1965

Memorandum

To: The File

From: Harold Kirkemo, Geologist

Subject: Report on conversation with D. R. MacLaren, Field Officer, Region I

I called MacLaren today for information regarding an appropriate starting date for a contract with Continental Quicksilver, Inc., OMM-6455. MacLaren reported that C. H. Reynolds, Manager, had suggested June 15, 1966.

MacLaren said he had a backlog of six reports to write and that presently he was writing a report on the Sydney Mining Co.'s Cook claims property, OMM-6481.

He advised me that his files on Keystone Mines, Inc., OMM-6384, had been sent to Bob Chapman and that until they were returned together with additional information he had requested, he could not respond to our request on November 18 for a recommendation regarding certification.

Harold Kirkemo

Harold Kirkemo

HKirkemo/mm
cc: Director's Reading File
Division File
Economic Geology File
OMM Docket 6455
" " 6481
" " 6384
OMM Reading File
Kirkemo

23263

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
	Selfridge	130
11/18	Johnson	110
11/18	Cole	220
		120 m

NOV 18 1965

Memorandum

To: Field Officer, Region I

From: Chief, Office of Minerals Exploration

Subject: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska
Contract 2173

As requested in Mr. Nordale's letter of November 10, 1965, to you, we shall prepare a Termination Agreement. However, before doing so, we would appreciate receiving your recommendations regarding certification.

Seemingly, Mr. Bruce Thomas can furnish you measurements of the work done in October.

(Signed) FRANK E. JOHNSON

Frank E. Johnson

(FEJ)

GCSelfridge/mm
11/18/65
cc: Director's Reading File
Division File
Economic Geology File
OME Reading File
Mr. Selfridge (2)

23263

Ome (2)

OFFICIAL COPY
O. M. E.
RECEIVED
NOV 17 1965

INITIALS	CODE
	~~1207~~
	120

GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane, Washington 99204
November 15, 1965

Air Mail

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
P. O. Box 630
Fairbanks, Alaska

Re: OME-6304 (Gold-Silver)
Keystone Mines
Fairbanks District, Alaska
Contract 2173

Dear Mr. Nordale:

Because certain entries are too illegible for our use the following documentary support for your last royalty payment are, of necessity, returned herewith for more legible copies:

Date	Document	Copies
3/19/65	Bullion Deposit-Memo Report	2
6/28/65	Do.	1
8/28/65	Do.	2
10/ 6/65	Do.	2

For your convenience, I have circled each of the entries that are too indistinct for our use.

Your request for a termination of the present contract is being forwarded to our Washington, D. C. office for consideration.

Sincerely yours,

D. R. MacLaren
Field Officer, OME
Region I

Enclosures

cc: OME(2)
CPF

Director's Reading File

GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane, Washington 99204
November 15, 1965

Air Mail

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
P. O. Box 630
Fairbanks, Alaska

Re: OME-6304 (Gold-Silver)
Keystone Mines
Fairbanks District, Alaska
Contract 2175

Dear Mr. Nordale:

Because certain entries are too illegible for our use the following documentary support for your last royalty payment are, of necessity, returned herewith for more legible copies:

Date	Document	Copies
3/19/65	Bullion Deposit-Memo Report	2
6/28/65	Do.	1
8/28/65	Do.	2
10/ 6/65	Do.	2

For your convenience, I have circled each of the entries that are too indistinct for our use.

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Sincerely yours,

D. R. MacLaren
Field Officer, OME
Region I

Enclosures

cc: OME(2)
CPF

Director's Reading File

GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane, Washington 99204
November 12, 1965

OFFICIAL COPY
O. M. E.
RECEIVED
NOV 15 1965

INITIALS	CODE
Cae	210
	~~120~~
	120

Memorandum

To: Administrative Officer, Office of Economic Geology
Geological Survey, Department of the Interior
Washington, D. C.

From: Field Officer, Region I

Subject: Collections--Transmittal of Royalty Check
Contract No. 2173
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska
OME-6304 (Gold-Silver)

Appropriation Symbol: OME-142039

Check No.: 68

Date: 11/ 4/65

Amount: $3,077.46

From: Arnold M. Nordale (La Dessa Nordale, Sec'y.-Treas.)
Keystone Mines, Inc (Main Office, First Nat'l.
Bank of Fairbanks, Fairbanks, Alaska)

Period: 1/1 - 10/31/65

Lots No. Mint Return Memos (2/2, 3/19, 6/28, 8/28, 10/6/65)

Mary L. Smelser for
D. R. MacLaren

Attachment
Distribution:
Operator
OME(1) wo/cys Mint Return Memos as some are illegible and Oper. being asked to resubmit.
CPF
Chrono

One

P. O. Box 2415
Juneau, Alaska
November 10, 1965

Mr. D. R. MacLaren
Acting Field Officer
Office of Minerals Exploration
South 157 Howard Street
Spokane, Washington

Dear Mr. MacLaren:

As stated in my letter of October 22, 1965, Mr. Frank Birch, the Independent Contractor, terminated his contract with Keystone Mines, Inc. on October 9, 1965. His reasons for doing so were that the ground conditions in the east drift became progressively worse, and that he could not continue without sustaining a substantial financial loss. He also stated that the same ground conditions would prevail in the west drift, and that he would not do further work there.

On October 11th, Mr. Beistline and Mr. Bruce Thomas measured and inspected the work which had been done in October. It appeared that the drift had been satisfactorily safeguarded against damage which might occur through flooding. The rails and pipe lines were left in place. On that date the pumping was stopped and the drifts and shaft subsequently filled to the 67 foot level.

The remaining work to be done to complete Contract 2173 is essentially 295 feet of drifting at the 147 foot level. Keystone Mines, Inc. requests that the completion of this unfinished portion of the contract be waived, and that work under Contract No. 2173 be terminated for the following reasons:

1. That the eastward trend of the vein indicates that it will reach the southerly side line of the Kawilita Claim at approximately 150 more feet.
2. That the drift in that direction thus far indicates that the vein, though badly sheared and broken, is consistent in size and general characteristics, and contains values of probable mineable tenor.
3. That the drift westward at the 147 foot level shows vein conditions to be similar to those found in the drift at the 50 foot level.
4. That the features and values of the vein westward from the shaft have been adequately determined by surface mining and drifting at the 50 foot level.
5. That the increase in cost of further work at the 147 foot level would be considerable, and the expense of additional work unwarranted, considering the little extra new information that would be gained.

Being given thought presently, but not yet in the planning stage, is the extension of the low level crosscut tunnel to intersect the vein at greater depth, and thus avoid water problems and pumping costs. Should this project be decided on, we trust the curtailment of Contract 2173 will not prejudice consideration of an application by Keystone Mines, Inc. for another Office of Minerals Exploration contract.

The production of Keystone Mines, Inc. for the period January 1 to October 6, 1965 is as follows:

Mint Return 2/2/65	$20,730.31
Mint Return 3/19/65	$18,775.94
Mint Return 6/28/65	$14,468.26
Mint Return 8/28/65	$9,245.13
Mint Return 10/6/65	$3,414.62
	$66,634.26
Less amount advanced by N. C. Co. on cleanups made in 1964 and reported in 1964 production	$5,085.00
	$61,549.26
Royalty to OME at 5%	$3,077.46

Enclosed herewith are two certified copies each of the above Mint Returns and a check in the amount of $3077.46.

Very truly yours,
KEYSTONE MINES, INC.

Arnold M. Nordale

ARNOLD M. NORDALE
President

Enclosures

AMN/emm

RECEIVED
Via
NOV 12 1965
Ann Marie
OME
SPOKANE, WASHINGTON

MME FORM 6 REFERENCE SLIP

REV. 2-59 OFFICE OF MINERALS EXPLORATION

TO: Chief, OME

DATE 12/13/65 INITIALS

1.

Re: OME-6304 (Gold-Silver)

2. Keystone Mines, Inc.

Keystone Mines

3. Fairbanks District, Alaska

Contract 2173

4.

D. R. MacLaren

5. D. R. MacLaren

FROM: Field Officer, Region I

OFFICIAL COPY O. M. E. RECEIVED DEC 15 1965

INITIALS CODE

FOR: Check items for action desired

____ Action ____ Reply for signature of

____ Approval ____ Investigate ____ Surname

____ Comment ____ Recommendations ____ Signature

____ Conference ____ Rewrite ____ File

Instructions X Your information

REMARKS:

To accompany your copy of our memo of 11/12/65 to the Admin. Officer, Off. of Economic Geology, Geological Survey.

NC CO.

Dealers in Fine
Alaskan Furs

NORTHERN COMMERCIAL COMPANY

ALASKA'S PIONEER MERCHANTS

Executive Offices-Colman Building

Seattle 4, Washington

Branch Fairbanks
Address all correspondence to this branch

Alaska & Yukon
Mercantile Branches

OFFICIAL
COPY
O. M. E.
RECEIVED
DEC 15 1965
INITIALS CODE
120
120 M

December 10, 1965

D. R. MacLaren
U. S. Department of Interior
Office of Minerals Exploration
So. 157 Howard Street
Spokane, Washington 99204

Re: OMS-6304 (Gold-Silver)
Keystone Mines
Fairbanks District, Alaska
Contract 2173

Dear Mr. MacLaren

Enclosed please find copies of mint report as requested. These are originals and you may make as many copies as you desire and retain the originals also since I have copies.

Sincerely yours,

NORTHERN COMMERCIAL COMPANY

/s/ Paul J. Wagner

Paul J. Wagner
Credit Sales Manager

PJW/pc

Enc.

RECEIVED
Air
1965

NC CO.

Dealers in Fine
Alaskan Furs

NORTHERN COMMERCIAL COMPANY

ALASKA'S PIONEER MERCHANTS

Executive Offices-Colman Building

Seattle 4, Washington

Branch Fairbanks
Address all correspondence to this branch

Alaska & Yukon
Mercantile Branches

December 10, 1965

D. R. MacLaren
U. S. Department of Interior
Office of Minerals Exploration
So. 157 Howard Street
Spokane, Washington 99204

Re: OMF-6304 (Gold-Silver)
Keystone Mines
Fairbanks District, Alaska
Contract 2173

Dear Mr. MacLaren

Enclosed please find copies of mint report as requested. These are originals and you may make as many copies as you desire and retain the originals also since I have copies.

Sincerely yours,

NORTHERN COMMERCIAL COMPANY

/s/ Paul J. Wagner

Paul J. Wagner
Credit Sales Manager

PJW/pe

Enc.

RECEIVED
Air
DEC 13 1965
OME
SPOKANE, WASHINGTON

FORM 221 L

..D STATES ASSAY OFFICE
..T SAN FRANCISCO CALIF.

BULLION DEPOSIT - MEMO REPORT

Mint Form 42K
(Revised)
SOURCE DATA

Deposit No. [illegible] Date 2/2/65 Memos Required by Depositor 5 Silver Price or Class $1.29 State

Depositor [illegible] Other Data County

[illegible] Colman Building, Seattle, Wash. 98104 Mine

Description of Deposit	Assay Number	Weights Before Melt Ounces Dec	Weights After Melt Ounces Dec	ASSAY CERTIFICATE FINENESS Gold	Silver	Base	Refin. Cts. Per Oz.	GOLD—FINE OZ.	SILVER—FINE OZ.
amalgam	1442	822.37	770.96	765½	201	033½	10	590.2[illegible]	154.96

PAYABLE BY CHECK EXCEPT AS NOTED

Weigh Clerks [illegible] Asst. Assayer Assayer

Melting	3.50	VALUES, $	20,662.67
Refining	77.10	NET VALUE	20,730.83
Handling	51.66	Bars	
Other Chg.	132.26	Cash	
TOTAL CHRGS.		Check	

GPO 939881

MEM

Calculator

3. Ebbert Keystone

144.25 oz. retort, mined at Wolf Creek - Fairbanks Dist. 12/14/64 to 12/18/64	4500	00
106.17 oz. retort, mined at Wolf Creek - Fairbanks Dist. 12/18/64 to 12/26/64	3200	00
109.40 oz. retort, mined at Wolf Creek - Fairbanks Dist. 12/27/64 to 1/16/65	3400	00
238.60 oz. retort, mined at Wolf Creek - Fairbanks Dist. 1/3/65 to 1/22/65	7300	00
223.80 oz. retort, mined at Wolf Creek - Fairbanks Dist. 1/23/65 to 1/28/65	7200	00
TOTAL	29000	00

RECEIVED
NOV 12 1965
OMB
SPOKANE, WASHINGTON

Certified True Copy of Mint Report & Settlement:

PAUL J. WAGNER
Controller

11/29/65

Date 21 [illegible] 65

Name Ebbert-Keystone

Creek Wolf Cr. District FGX

20 730.31

Gross Returns:

Plus Sale _____ ozs. prior to shipment _____

Gross Proceeds

Less: Notary, etc. 1.50

Freight 207.30

Advanced 16 985.00

Royalty

17193.80

Balance: (Dr) (Cr.) $ 3536.51

109.40 oz. retort, mined at Wolf Creek - Fairbanks Dist. 12/27/64 to 1/16/65	3400	00
238.60 oz. retort, mined at Wolf Creek - Fairbanks Dist. 1/3/65 to 1/22/65	7300	00
223.80 oz. retort, mined at Wolf Creek - Fairbanks Dist. 1/23/65 to 1/28/65	7200	00
TOTAL	29000	00

Certified True Report of Mint Report & Settlement:

NORTHERN COMMERCIAL CO.

Paul J. Wagner

PAUL J. WAGNER
Controller

RECEIVED
NOV 12 1965
OME
SPOKANE, WASHINGTON

UNITED STATES ASSAY OFFICE
AT SAN FRANCISCO CALIF.

BULLION DEPOSIT - MEMO REPORT

Mint Form 42K
(Revised)
SOURCE DATA

Deposit No. 1590 Date 3/19/65 Memos Required by Depositor 5 Silver Price or Class $1.29 State Alaska

Depositor Northern Commercial Co. Other Data County Fairbanks

419 Colman Bldg., Seattle, Wn. 98104 Mine Ebbert Keystone

Description of Deposit	Assay Number	Weights Before Melt Ounces	Weights Before Melt Dec	Weights After Melt Ounces	Weights After Melt Dec	Assay Certificate Fineness Gold	Assay Certificate Fineness Silver	Assay Certificate Fineness Base	Refin. Cts. Per Oz.	GOLD—FINE OZ.	SILVER—FINE OZ.
amalgam	1680	737.80		696.68		767 3/4	195	037 1/4	10	534.876	135.85

PAYABLE BY CHECK EXCEPT AS NOTED

Weigh Clerks [illegible] Asst. Assayer [illegible] Assayer

Melting	3.50	VALUES, $	18,720.66	175.25
Refining	69.67	NET VALUE	18,775.94	
Handling	46.[illegible]	Bars		
Other Chg.	132.97	Cash		
TOTAL CHRGS.		Check		

M.E.H.

Calculator

GPO 939881

RECEIVED
DEC 13 1965
OME
SPOKANE, WASHINGTON

3/12/65

Date 4/1/65

Name Ebbert Keystone

Creek Wolf District FGR

Gross Returns: 18775.94

Plus Sale _____ ozs. prior to shipment _____

Gross Proceeds

Less: Notary, etc. 1.50

Freight 270.00

Advanced 14800.00

Royalty

15071.50

Balance: (Dr) (Cr.) $ 3704.44

Certified True Copy of Mint Report & Settlement:

NORTHERN COMMERCIAL CO.

Paul J. Wagner

PAUL J. WAGNER
~~Controller~~
Credit Manager

RECEIVED
NOV 12 1965
OME
SPOKANE, WASHINGTON

ED STATES ASSAY OFFICE
T SAN FRANCISCO CALIF.

BULLION DEPOSIT - MEMO REPO

Mint Form 42R
(Revised)
SOURCE DATA

Deposit No. 42
Date 6/28/65
Depositor NORTHERN COMMERCIAL CO.
419 COLMAN BUILDING - SEATTLE, WASHINGTON 98104

Memos Required by Depositor 5
Other Date

Silver Price or Class $1.29

State ALASKA
County FAIRBANKS
Mine EBBERT

Description of Deposit	Assay Number	Weights Before Melt Ounces	Weights Before Melt Dec	Weights After Melt Ounces	Weights After Melt Dec	ASSAY CERTIFICATE FINENESS Gold	Silver	Base	Refin. Cts. Per Oz.	GOLD—FINE OZ.	SILVER—FINE OZ.
Amal.	45	531.71		520.79		792½	170½	037	10	412.726	88.79

PAYABLE BY CHECK EXCEPT AS NOTED

Weigh Clerks Asst. Assayer Assayer

Melting	3.50	VALUES, $	14,445.41	114.54
Refining	52.08	NET VALUE	14,468.26	
Handling	36.11	Bars		
Other Chg.	91.69	Cash		
TOTAL CHRGS.		Check		

Calculator

GPO 939881

RECEIVED
DEC 13 1965
OME
SPOKANE, WASHINGTON

Date 7/30/65

Name Ebbert Keystone Mining

Creek [illegible] District Esk

Gross Returns: 14418.26

Plus Sale oz. prior to shipment

Gross Proceeds

Less: Notary, etc. 6.00

Freight 1446.8

Advanced 10550.00

Royalty

10700.18

Balance: (Dr) (Cr) $ 3767.51

Certified True Copy of Mint Report & Settlement:

NORTHERN COMMERCIAL CO.

PAUL J. WAGNER

~~Controller~~

Credit Manager

RECEIVED

NOV 12 1965

OME

SPOKANE, WASHINGTON

UNITED STATES ASSAY OFFICE
AT SAN FRANCISCO CALIF.

BULLION DEPOSIT - MEMO REPORT

Mint Form 42R
(Revised)
SOURCE DATA

Deposit No. 363 Date 8/25/65 Memos Required by Depositor 5 Silver Price or Class $1.29 State Alaska

Depositor NORTHERN COMMERCIAL COMPANY Other Data County

419 Colman Bldg., Seattle, Washington 98104 Mine Fairbanks Ebbert Reystone

Description of Deposit	Assay Number	Weights Before Melt Ounces	Weights Before Melt Dec	Weights After Melt Ounces	Weights After Melt Dec	ASSAY CERTIFICATE FINENESS Gold	Silver	Base	Refin. Cts. Per Oz.	GOLD—FINE OZ.	SILVER—FINE OZ.
ANAL. (IRON)	378	357.60		34[illegible].29		766¼	171½	062½	11	263.812	59.04

PAYABLE BY CHECK EXCEPT AS NOTED Weigh Clerks Asst. Assayer Assayer

Melting	3.50	VALUES, $	9,233.42
Refining	37.87	NET VALUE	9,245.13
Handling	23.08	Bars	
Other Chg.		Cash	
TOTAL CHRGS:	64.45	Check	

GPO 939881

Calculator

RECEIVED
DEC 13 1965
O M E
SPOKANE, WASHINGTON

Date 9/10/65

Mine: Ebbert Keystone

Creek: Wolf District: EBX

Gross Returns: 9245.13

Fine Sale _____ ozs. prior to shipment _____

Gross Proceeds

Less: Notary, etc. 1.50

Freight 138.69

Advanced 7710.00

Royalty

7850.19

Balance: (Cr.) (Dr.) $ 1394.94

Old. Keystone 557.98

Ebbert 836.96

1394.94

18.43

166.82 Comm.

135.25

Personal 98.20

462

102.82

135.25

25.00

160.25

Certified True Copy of Mint Report & Settlement:

NORTHERN COMMERCIAL CO.

Paul Wagner

PAUL J. WAGNER

~~Controller~~

Credit Manager

RECEIVED

NOV 12 1965

OME

SPOKANE, WASHINGTON

UNITED STATES ASSAY OFFICE
AT SAN FRANCISCO CALIF.

BULLION DEPOSIT - MEMO REPORT

Mint Form 42R
(Revised)
SOURCE DATA

Deposit No. [illegible] Date [illegible]/6/65 Memos Required by Depositor Silver Price or Class State [illegible]

Depositor Northern Commercial Co. Other Data County Fairbanks [illegible]

Seattle, Wn. Mine Ebert Keystone

Description of Deposit	Assay Number	Weights Before Melt Ounces	Weights Before Melt Dec	Weights After Melt Ounces	Weights After Melt Dec	ASSAY CERTIFICATE FINENESS Gold	Silver	Base	Refin. Cts. Per Oz.	GOLD—FINE OZ.	SILVER—FINE OZ.
Amal. (Brick)	641	143.20	[illegible]	[illegible]		800	168	032	20	97.440	22.04

PAYABLE BY CHECK EXCEPT AS NOTED

Weigh Clerks [illegible] Asst. Assayer [illegible] Assayer

Melting	3.50	VALUES, $	3,410.40	28.43
Refining	12.18	NET VALUE	3,414.62	
Handling	8.53	Bars		
Other Chg.		Cash		
TOTAL CHRGS.	24.21	Check		

GPO 939881

Calculator

RECEIVED
DEC 13 1965
O M B
SPOKANE, WASHINGTON

Certified True Copy of Mint Report

NORTHERN COMMERCIAL COMPANY

Paul J. Wagner
Credit Manager

RECEIVED
NOV 12 1965
OME
NOME, WASHINGTON

Ome (2)

GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane, Washington 99204
November 9, 1965

NOV

~~420-OME~~
420

Air Mail

Mr. Robert M. Chapman
Geologist-in-Charge
College Office
Alaskan Geology Branch
U. S. Geological Survey
P. O. Box 580
College, Alaska 99735

Re: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska
Contract 2173

Dear Bob:

Your letter of November 5, 1965, pretty well answers most of the questions regarding the Keystone situation, but there are a few points I would appreciate your following up and, if possible, clarifying.

The Operator's voucher for September was received October 19 and was forwarded to the Administrative Officer for payment on the 21st. Then, on the 25th Mr. Nordale's letter of the 22d, a copy of which is enclosed for your file, was received. Because of the implied cessation of work I telephoned Frank Johnson, Chief, OME, advising him to withhold $200.00 from any funds due the Operator, pending resumption of work. This is customary procedure for all contracts whenever work stops whether a request for a recess or possibly a termination may be expected. Mr. Nordale's letter is not very clear in this respect, except that work was stopped.

A request for a recess should include the date the last work was done, the reason for the recess, and the date on or before which work will be resumed. Nordale's final paragraph suggests that he may be requesting a termination. This is more strongly suggested in the first part of the third paragraph of your letter. A request for termination should include the date the last work was done and a brief statement justifying the termination. If the Government agrees that a termination is warranted and beneficial to both parties to the contract, the Termination Agreement will probably be "by mutual consent."

In the event that the Government does not consider the termination justified or to the advantage of the Government as well as to the Operator, a pseudo-certification is usually incorporated in the Termination Agreement. If possible, will you discuss these two possibilities with Mr. Nordale and ask him to request either a recess or a termination as he wishes.

Possibly, Mr. Nordale intends to request that the unused balance of funds be transferred by amendment to the cost of driving the old Nordale crosscut. As my field file does not contain a copy of the original application or a copy of Bruce Thomas' application examination report, I cannot offer much in the way of comment on this. However, I do find this note on a copy of a buck slip forwarding the application to D.C.: ". . . large vein on Kawilita claim possibly too close to property line at X-cut tunnel level . . ." I also seem to recall some discussion as to the advisability of exploring the vein at a depth of 200 feet before coming in at the X-cut level which is considerably deeper and a considerable distance to the east of the better shallow showings below which the present work is being done. If this should be his intention, your comments and appraisal will be appreciated. I get the impression that you are not one of the optimists referred to in the second paragraph on page 2 of your letter.

The contract provides for a total cost of $70,190.00, of which $47,657.50 has been claimed. At the contract price of $55 per foot for drifting, and assuming that no allowance for assaying, timbering or rehabilitation will be requested, the remaining $22,532.50 would provide for only 409.7 feet of crosscut and drift. How far will this go towards actual exploring along the vein or veins?

I have been advised that before the September voucher can be paid there must be a check measurement made by a Government representative. As Bruce Thomas got to the property after the last work was done and before the workings were flooded, you can probably get such a check measurement from him. This, too, is a routine requirement and is in no sense a reflection upon the integrity of any one concerned. I might say that when Mr. Nordale asked that the costs allowed under the original contract be lowered because they were higher than he would actually have to pay his first subcontractor, he displayed a natural honesty above any operator I have dealt with. If Bruce can give you his final measurement, I believe the funds due will be released except of course the $200.00 which will be withheld pending either resumption of OME work or a Termination Agreement followed by receipt of an acceptable Operator's final report and a report of review in lieu of a final audit.

Finally, if you can get from Mr. Beistline two prints of a complete map of the 147-foot level on one sheet showing the geology, or at

least the vein-drift spatial relationship, vein dips, and vein widths (these maps have come in piecemeal on separate sheets with each voucher), it will be helpful. Incidentally, this map should show the south side line of the Kawilita claim, the shaft collar and the projection of the shaft. I have a section through the shaft.

The last and only royalty payment that passed through this office was for shipments made up to December 28, 1964. The documents supporting this payment consisted of various "Bullion Deposit-Memo Reports" certified by Northern Commercial Company, each one apparently accounting for advance and final payments, and a letter dated July 10, 1965, from the same company certifying to 4 advance payments, 2 on December 24, 1964, and 2 on December 28, 1964. There is no documentation to show that final settlement and payment of royalty has ever been made on these four shipments. Will you please check on this with Mr. Nordale and ask him if no shipment or settlements have been made since December 28, 1964.

Please extend my very sincere thanks to Bruce Thomas for the fine jobs he has done for us in the past.

Sincerely yours,

D. R. MacLaren
Field Officer, OME
Region I

Enclosure

DRMacLaren/mls

cc: OME(2) w/cys incoming let.
10/22/65
Voucher File

Director's Reading File

C O P Y C O P Y

NORDALE HOTEL

FAIRBANKS, ALASKA

October 22, 1965

Mr. D. R. MacLaren
Acting Field Officer
Office of Minerals Exploration
South 157 Howard Street
Spokane, Washington 99204

Dear Mr. MacLaren:

This is to advise that Mr. Frank Birch has terminated his contract with Keystone. His reasons were that ground conditions were such that it was impossible to complete the contract without a substantial financial loss.

A complete report covering the work completed and exploration results will be forthcoming shortly.

Very truly yours,

KEYSTONE MINES, INC.

/s/ ARNOLD M. NORDALE
President

~~To Bob Weeks~~

Bob - thought you might like to see this.
Earl Brabb

G-ALAS-RMC

ALASKAN GEOLOGY BRANCH
BOX 580
COLLEGE, ALASKA 99735

Re: Kemp Tow Mnls Inc
+10
12

November 5, 1965

Mr. D. R. MacLaren
Field Officer, O. M. E.
U. S. Geological Survey
S. 157 Howard St.
Spokane, Washington

Dear Don:

Last Friday I visited the Keystone Mines property with Earl Beistline. After looking over the maps and docket material that you sent and then seeing the workings, I have a much better conception of the project, and was glad to have the opportunity to get acquainted with it. On Saturday I talked with Arnold Nordale and he reviewed their progress and problems to date and mentioned his ideas for future work in the present site and in adjacent areas.

As you probably know by now, Frank Birch quit mining and pulled his pumps out on October 9 or 10, and the lower workings and shaft have filled with water quite rapidly. Last Friday, the 29th, when Beistline and I measured the shaft the water level stood 67 feet (on the incline) below the head-frame, which puts it just below the upper crosscut level. Perhaps as much as 10-12 inches of water was standing in parts of the upper crosscut. I suspect this is the result of damming by some small muck falls from stopes and by the 6+ inches of wet mud that covers the sill and rails. From what Ed Ebbert told us the water level in the shaft stabilized at about the 67-foot level last year. Thus, an examination of any part of the O. M. E. workings is impossible. Earl Beistline and Bruce Thomas got word of the shutdown on the 9th and made a quick trip out to examine the face in the east drift before flooding began, so they have the last word on it for now. Is true?

Mr. Nordale does not plan more work on the property until spring, and he is of the opinion that further drifting in either direction on this vein at the 147-foot level will not yield information commensurate with the costs and difficulties involved in continuing a 5x7 foot drift in such ground as has been encountered. Ed Ebbert and 2 other men, leasing from Nordale, are working on another part of this vein just to the west, and they plan to mine through the winter. They are working underground beneath the old open-cut, so will not have too much exposure to intense cold. Their ore is trucked twice a day to the Cleary Hill mill, about a 2 1/2 mile haul.

For future exploration Mr. Nordale is tentatively thinking of reopening the old Nordale adit and extending it south or south-southeast to intersect the Kawalita vein. This would entail reestablishing the caved portal and ex-

tending the adit 500-700 feet. Presumably the adit, although some 55 years old, is still in good shape and mostly untimbered. It was open and in use as late as about 1939. I doubt that it is as large as 5x7 feet throughout much of its length, based on information from Nordale and others. This plan is essentially what is outlined on the map of Wolf Creek Divide prepared by Bob Saunders in 1960.

I suggested the possibility of drilling to determine the position and nature of the vein at the Nordale adit level. Arnold does not feel that a drill hole or drilling program is justified. Drilling is proportionally quite costly and core recovery in the rock in the Fairbanks district is notoriously poor. I guess if one is optimistic enough to presume that the vein with a minable gold content can be projected this far laterally and vertically, then an extension of the adit probably is the method that will yield the most information on this and other possible ore zones and also provide a working adit for production.

I would assume that the information and samples supplied by Beistline and Thomas are reliable. They are both honest, conscientious, and experienced men, and would have no reason to report anything erroneously. Beistline apparently is doing the occasional work for Nordale's O. M. E. reports without any salary, just to help the mining development along. If you have any problems or specific questions regarding samples, etc., let me know and I will try to pick some answers out of their notes or memories.

Mr. Nordale stated that all ore shipments have been reported and nothing more remains to be milled. His explanation of the problem in reporting and paying royalties to O. M. E. is reasonable and as stated in his correspondence. I know Bruce Thomas feels that it is the most practical means of handling the payment to avoid a great deal of paper work and balancing of payments after the mint returns are in.

Inasmuch as no work is in progress or contemplated and Frank Birch is now Outside, the Equal Employment Opportunity report does not seem applicable at the moment. It seems apparent that these rules have been complied with. If you need this form completed, I will have considerable difficulty in trying to secure first-hand, reliable information for it.

Let me know what, if anything, more I can do for you at present. I will get the pertinent material reproduced from the files that you sent me, and return them as soon as possible. I am at a loss to explain the excessive mail time it took for the file material to reach me. It arrived about a week after the separately mailed covering letter.

Sincerely,

Robert M. Chapman
Geologist-in-charge
College office

cc:
Director's RF
Division
~~Grye~~
RMC/eph
Chron

Mre (12)

IN REPLY REFER TO:

G-ALAS-RMC

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
ALASKA GEOLOGY BRANCH
BOX 500
COLLEGE, ALASKA 99735

November 5, 1965

Mr. D. R. Maclaren
Field Officer, O. M. E.
U. S. Geological Survey
S. 157 Howard St.
Spokane, Washington

Dear Ron:

Last Friday I visited the Keystone Mines property with Earl Beistline. After looking over the maps and docket material that you sent and then seeing the workings, I have a much better conception of the project, and was glad to have the opportunity to get acquainted with it. On Saturday I talked with Arnold Herdale and he reviewed their progress and problems to date and mentioned his ideas for future work in the present site and in adjacent areas.

As you probably know by now, Frank Birch quit mining and pulled his pumps out on October 9 or 10, and the lower workings and shaft have filled with water quite rapidly. Last Friday, the 29th, when Beistline and I measured the shaft the water level stood 67 feet (on the incline) below the head-frame, which puts it just below the upper crosscut level. Perhaps as much as 10-12 inches of water was standing in parts of the upper crosscut. I suspect this is the result of damming by some small muck falls from stopes and by the 6+ inches of wet mud that covers the sill and rails. From what Ed Hubert told us the water level in the shaft stabilized at about the 67-foot level last year. Thus, an examination of any part of the O. M. E. workings is impossible. Earl Beistline and Bruce Thomas got word of the shutdown on the 9th and made a quick trip out to examine the face in the east drift before flooding began, so they have the last word on it for now.

Mr. Herdale does not plan more work on the property until spring, and he is of the opinion that further drifting in either direction on this vein at the 147-foot level will not yield information commensurate with the costs and difficulties involved in continuing a 5x7 foot drift in such ground as has been encountered. Ed Hubert and 2 other men, leasing from Herdale, are working on another part of this vein just to the west, and they plan to mine through the winter. They are working underground beneath the old open-cut, so will not have too much exposure to intense cold. Their ore is trucked twice a day to the Cleary Hill mill, about a 2 1/2 mile haul.

For future exploration Mr. Herdale is tentatively thinking of reopening the old Herdale adit and extending it south or south-southeast to intersect the Hercalite vein. This would entail reestablishing the caved portal and ex-

tending the adit 500-700 feet. Presumably the adit, although some 55 years old, is still in good shape and mostly untimbered. It was open and in use as late as about 1939. I doubt that it is as large as 5x7 feet throughout much of its length, based on information from Nordale and others. This plan is essentially what is outlined on the map of Wolf Creek Divide prepared by Bob Saunders in 1960.

I suggested the possibility of drilling to determine the position and nature of the vein at the Nordale adit level. Arnold does not feel that a drill hole or drilling program is justified. Drilling is proportionally quite costly and core recovery in the rock in the Fairbanks district is notoriously poor. I guess if one is optimistic enough to presume that the vein with a sizable gold content can be projected this far laterally and vertically, then an extension of the adit probably is the method that will yield the most information on this and other possible ore zones and also provide a working adit for production.

I would assume that the information and samples supplied by Beistline and Thomas are reliable. They are both honest, conscientious, and experienced men, and would have no reason to report anything erroneously. Beistline apparently is doing the occasional work for Nordale's O. M. R. reports without any salary, just to help the mining development along. If you have any problems or specific questions regarding samples, etc., let me know and I will try to pick some answers out of their notes or memories.

Mr. Nordale stated that all ore shipments have been reported and nothing more remains to be milled. His explanation of the problem in reporting and paying royalties to O. M. R. is reasonable and as stated in his correspondence. I know Bruce Thomas feels that it is the most practical means of handling the payment to avoid a great deal of paper work and balancing of payments after the mint returns are in.

Inasmuch as no work is in progress or contemplated and Frank Birch is now Outside, the Equal Employment Opportunity report does not seem applicable at the moment. It seems apparent that those rules have been complied with. If you need this form completed, I will have considerable difficulty in trying to secure first-hand, reliable information for it.

Let me know what, if anything, more I can do for you at present. I will get the pertinent material reproduced from the files that you sent me, and return them as soon as possible. I am at a loss to explain the excessive mail time it took for the file material to reach me. It arrived about a week after the separately mailed covering letter.

Sincerely,

/S/ Bob

Robert M. Chapman
Geologist-in-charge
College office

RECEIVED
NOV 8 1965
O M R

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
10/27	Johnson	110
	Selbridge	120
10/27	Clac	220
		120M

OCT 27 1965

Memorandum

To: Chief, Branch of Budget and Finance
Through: Administrative Officer, Economic Geology

From: Chief, Office of Minerals Exploration

Subject: GMK-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska
Contract 2173

On October 25, 1965, Mr. B. R. MacLaren, Field Officer, GMK Region I, telephoned that operations under the subject contract may be terminated, and recommended that $200.00 be withheld from payment due on the enclosed voucher for the month of September 1965 pending receipt of the Operator's final report.

Accordingly, please withhold payment of $200.00 of the amount authorized for payment.

(signed) FRANK E. JOHNSON (gla)

Frank E. Johnson

Enclosures
FEJohnson/gla (10-27-65)
cc to: Director's Reading File
Division File
Economic Geology File
Miss Lois P. Williams, Administrative Officer
OME File
OME Reading File
OME Region I

23263

Bob Weeks

IN REPLY REFER TO:

G-ALAS-RMC

Kenneth Johnson

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

ALASKAN GEOLOGY BRANCH
BOX 580
COLLEGE, ALASKA 99735

120 M

October 19, 1965

Mr. George Gryc
Chief, Alaskan Geology Branch
U. S. Geological Survey
345 Middlefield Road
Menlo Park, California

OCT 21 1965

ASKAN GEOL.

Dear George:

I have recently received some correspondence and a phone call from Don MacLaren in regard to an examination of the Keystone Mine for O. M. E. The maps, contract, and other pertinent information that Don is sending have not arrived yet, and, as he indicated that there is no great urgency, I am not planning to go out until I have had a chance to familiarize myself with the geology and operations.

I learned today from Earl Beistline, who has been doing some of the monthly report work for Keystone, that things may be shut down, and, what is more discouraging, that the mining contractor reportedly has quit and pulled out his pumps last week. Earl thinks it is very likely that by now there is so much water in the O. M. E. working level that it would be impossible to get into it.

As soon as I get the maps, etc., I will go over the material with Earl and Bruce Thomas, and then visit the mine and also see Arnold Nordale to determine where things stand and what, if anything, can be done underground. When I can get more exact information, I will advise Don MacLaren, but thought I would let you know now how things appear to be shaping up.

Sincerely,

Bob

Robert M. Chapman
Geologist-in-charge
College office

NOTED

OCT 20 1965

GR

10/29 - Discussed with Mary Jane to see if Johnson found Chapman's bill and sent in payment. Voucher RJ

One

KEYSTONE MINES, INC.
P. O. Box 630
Fairbanks, Alaska

October 18, 1981

120 m
~~120~~

Mr. D. R. MacLaren
Field Officer, OME
Region I
Office of Minerals Exploration
Geological Survey
So. 157 Howard Street
Spokane, Washington 99204

Re: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Fairbanks District, Alaska
Contract 2173 as amended

Dear Mr. MacLaren,

We are sorry to have inconvenienced your office by xeroxing several of the Forms 60 and 61. This was done for more legible copies but without thought for the certification on the backs. Herewith enclosed are one original and three carbon copies of each of the Forms 60 and 61.

Thank you for the extra forms and again, our apologies for causing this delay.

Sincerely,

Arnold M. Nordale
President

[redacted]

RECEIVED
OCT 1981
OME

GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane, Washington 99204
October 12, 1965

1335
120 m
120

Air Mail

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
P. O. Box 630
Fairbanks, Alaska 99701

Re: OME-6304 (Gold-Silver)
Keystone Mines
Fairbanks District, Alaska
Contract 2173

Dear Mr. Nordale:

Returned herewith are the original and three copies of MME Forms 60 and 61. This is necessary because two of the copies of MME Form 60 are photostats and do not provide for the necessary Certification on the back of the form. The photostatic copies of the MME Form 61 might be acceptable, but as long as it will be necessary to hold up the voucher for the MME Form 60, they better be put on the proper form. A set of forms for this purpose is enclosed.

Also enclosed is a three-month supply of the two forms. If you will notify us when the supply is exhausted, we will send you more.

Sincerely yours,

D. R. MacLaren
Field Officer, OME
Region I

Enclosures

DRMacLaren/mls

cc: OME
Voucher File
MacLaren

Director's Reading File

OME

GEOLOGICAL SURVEY
No. 157 Howard Street
Spokane, Washington 99204
October 12, 1965

OCT 1 1965

120 m
~~120~~

Air Mail

Mr. Robert M. Chapman, USGS
P. O. Box 580
Brooks Memorial Building
College, Alaska 99735

Re: OME-6504 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska
Contract 2173

Dear Bob:

In accordance with our telephone conversation of October 11, 1965, I am sending you under separate cover the entire Keystone docket. As I was about to strip it of such major items as the contract, amendments, and past inspection reports, it occurred to me that you might also find of interest some of the background material in the application and that leading up to one or two of the amendments. With a complete history of the contractor hand you can copy such documents as may be helpful in future inspections. We will also start sending you copies of future amendments and correspondence.

The sketches accompanying the more recent vouchers have been at a scale of 10 feet to the inch and were becoming rather large to handle collectively. I have started to get them on one sheet at a scale of 50 feet to the inch but have not got beyond the "pencil on tracing-paper" stage and most of the assays and side notes are lacking. However, for such use as it may be, I have put a print in the map folder.

Bruce Thomas has checked the shaft, and I believe part of the crosscut, but to be safe you better check the entire advance from the start of the crosscut. As timbering is a separate item for costs, it should be measured separately unless the entire level is timbered. Also, try to determine just how representative the Operator's samples are relative to the full width of the vein.

Clipped to the Fair Employment Report Sheet is the last one Bruce made. Get the information from the Operator or Frank Birch, the contractor. Also check to see that the Fair Employment Notices are

posted in a conspicuous place--replacement notices are also enclosed in case they have blown down.

Finally, try to get a check on what shipments of ore or cons. have been made and the amount and grade of any stockpiled material. You might call the Operator's attention to the provisions of Contract Article 6 relative to royalty. He was pretty lax on that score at one time.

It was good talking with you and hope we'll see you down this way in the not too distant future.

Regards,

D. R. MacLaren
Field Officer, OME
Region I

cc: Separate cover

OME
MacLaren

DRMacLaren/mls

Director's Reading File

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
9/30	Selfridge	130
10/4	Johnson	110
		220
		120M

OCT 4 1965

Memorandum

To: Field Officer, Region I

From: Chief, Office of Minerals Exploration

Subject: OME-6148 (Gold)
Little Squaw Mining Company
Mikado, et al., Claims
Chandalar Mining District
Fairbanks Precinct, Alaska
Amended Contract 2140
and
OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska
Contract 2173

Will you please ascertain whether or not the Little Squaw Mining Company did any work under its contract this year.

Will you please contact Robert Chapman of the U. S. Geological Survey, in Fairbanks, Alaska, and arrange for an on-site inspection of the Keystone Mine before the end of the current season. At least all new work should be measured. It would also be well to have an annual Equal Employment Opportunity report on the property.

In the August 1965 report of the Operator mention is made that the east drift is being advanced in the footwall of the vein with the vein being exposed sufficiently to observe. It would be well to determine just how representative the samples are compared to the full width of the vein for certification purposes.

(signed) FRANK E. JOHNSON

Frank E. Johnson

GCSelfridge/gla (9-30-65)
cc to: Director's Reading File
Division File
Economic Geology File
THKiilsgaard (Robert Weeks), Rm. 4240 GS Bldg.
OME Docket 6148
OME Docket 6304
Mr. Selfridge (2)
OME Reading File

23263

OMe

GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane, Washington 99204
September 7, 1965

OFFICIAL COPY
O. M. E.
RECEIVED
SEP 9 1965

INITIALS	CODE
	120 M
	120

Air Mail

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
P. O. Box 630
Fairbanks, Alaska

Re: OME-6304 (Gold-Silver)
Keystone Mine
Fairbanks District, Alaska
Contract 2173

Dear Mr. Nordale:

In accordance with your request of August 19, 1965, enclosed are the original and four copies of Amendment No. 7, signed by the Chief, Office of Minerals Exploration, for the Government.

If the proposed amendment is satisfactory to you, please sign all five copies, retain the Operator's copy, and return the other copies to this office.

If the amendment is not satisfactory, please return all copies unsigned to this office with a statement of your proposed changes for consideration.

Sincerely yours,

D. R. MacLaren
Acting Field Officer, OME
Region I

Enclosures

MLSmelser/mls

cc: J. A. Herdlick

OME
MacLaren

Director's Reading File

ME Form 7
2/63)

OFFICIAL FILE COPY

Date	Surname	Code
8/24	Johnson	110
		220
8/25	McKelvey	
8/26	Clapp	
		110
8/26	Coe	220
		120 m

AUG 26 1965

Memorandum

To: Acting Field Officer, Region I

From: Chief, Office of Minerals Exploration

Subject: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska
Contract 2173

In reference to the Operator's letter of August 10 and your memorandum of August 13, 1965, enclosed are the original and four copies of proposed Amendment No. 7 signed for the Government. Also enclosed is an extra copy for field use.

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

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

(Signed) FRANK E. JOHNSON

Frank E. Johnson

Enclosures

MMerrithew/mm (8/24/65)
cc: Director's Reading File
Division File
Economic Geology File
OME File
OME Reading File
Mr. Selfridge

23263

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
So. 157 Howard Street
Spokane, Washington 99204
August 13, 1965

OFFICIAL COPY
O. M. E.
RECEIVED
AUG 17 1965

INITIALS	CODE
	120
	120

Memorandum

To: Chief, Office of Minerals Exploration

From: Acting Field Officer, Region I

Subject: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2173

Enclosed is a copy of a letter dated August 10, 1965, in which the operator requests that the completion date of the subject contract be extended 7 months from August 29, 1965, to March 31, 1966.

The present contractor, Frank Birch, took over the underground drifting in December 1964, during which month the advance reported was 50 feet. By January 11, 1965, severe winter conditions necessitated a recess which ended about June 1. The advance reported for June was 80 feet and for July was 142 feet. The date Birch took over is not known but for the two months of June and July the average rate of advance has been 111 feet per month.

There remain as of the end of July, 604 feet of drifting to complete the project, which would place the termination about the end of January, if a rate of advance can be maintained at 100 feet per month. The heavy nature of the ground suggests that this rate may be difficult to maintain. However, if winter conditions make another recess necessary, extending the completion date to March would not be sufficient, and a second extension will become necessary. This situation would require an amendment to authorize a recess and a second extension could be accomplished at that time.

It is therefore recommended that the Operator's request be approved.

D. R. MacLaren

D. R. MacLaren

Enclosure

OME
SPOKANE, WASHINGTON

P.O. Box 2415
Juneau, Alaska
Aug. 10, 1965

Mr. D. R. MacLaren
Acting Field Officer
Office of Minerals Exploration
South 157 Howard Street
Spokane, Washington 99202

OME 6304
Contract 2173
Keystone Mines, Inc
Fairbanks, Alaska

Dear Mr. MacLaren

Mr. Frank Buck, the independent contractor on OME Contract 2173 has requested that Keystone Mines, Inc apply for an extension of time for the completion of the contract. He asks that the terminal date be set for March 31, 1966.

His reasons for asking it are that the work has progressed more slowly than he had anticipated and with the advent of cold weather it will be further retarded.

We believe his request is warranted and herewith ask your approval.

Very truly yours
Keystone Mines, Inc
Arnold M. Nordale, Pres.

So. 157 Howard Street
Spokane, Washington 99204
August 9, 1965

Air Mail

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
P. O. Box 630
Fairbanks, Alaska

Re: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2173

Dear Mr. Nordale:

Under the terms of Amendment No. 4, the date for completion of your OME contract is August 29, 1965. As of your July 1965 voucher there remain 604 feet of drift and/or crosscut to be completed.

If you have not done so, you should request by letter in duplicate that the contract be amended to extend the completion date. The request should include a brief statement as to why the work could not be completed within the time agreed upon and should give the date on or before which you believe the work can be completed.

Sincerely yours,

D. R. MacLaren
Acting Field Officer, OME
Region I

cc: OME
Docket
DRF

DRMacLaren:et

6304

So. 157 Howard Street
Spokane, Washington 99204
August 9, 1965

OFFICIAL
COPY
O. M. E.
RECEIVED
AUG 12 1965
INITIALS | CODE
120 m
120

Air Mail

Mr. Frank Birch
Box 1332
Fairbanks, Alaska

Dear Frank:

It is good to hear from you, but not about the tough sledding.

I am writing Mr. Nordale regarding the necessity for him to request an amendment to extend the contract. Thanks for your calling it to my attention.

Regards,

D. R. MacLaren
Acting Field Officer, OME
Region I

cc: OME w/cpy incoming
Docket
DRF

DRMacLaren:et

RECEIVED

1965

Frank Birch
Box 1332
Fairbanks, Alaska

Mr. Don MacLaren
Office of Minerals Exploration
U. S. Geological Survey Bldg.
Spokane, Washington

8/4/65

Dear Don:

I've asked Mr. Nordale to write you for a six month extension on the Keystone Mines drift contract, and would like to emphasize that we have been doing this work since June on a 24 hour basis, working two ten hour shifts with a two hour interval for pump and smoke time. Its tough slow going, and will get slower in the winter months, but an additional six months should give me time to finish the contract.

Yours,

Frank Birch

cc. A. Nordale

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
8/6	Selfridge	130
"	Johnson	110
8/9	cac	220
		120M

AUG 9 1965

Memorandum

To: Acting Field Officer, Region I

From: Chief, Office of Minerals Exploration

Subject: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska
Contract 2173

On your reference slip of July 14, 1965, transmitting certain royalty documents, you mentioned that the figures did not seem to check with previous information. For your information only, a tentative audit shows royalties have been paid on $50.00 of nonexistent production. An adjustment of this item will be made when an official audit review of the docket is issued.

(signed) FRANK E. JOHNSON

Frank E. Johnson

GCSelfridge/gla (8-6-65)
cc to: Director's Reading File
Division File
Economic Geology File
OME File
OME Reading File
Mr. Selfridge(2)

23263

1

Geological Survey
Review of OME Contract
Fiscal Year 1965

HF
8-5-65

Contract Number 14-23-090-2173
dated August 29, 1963 (Docket #OME-6304)

Contract is with the Keystone Mines Inc., Fairbanks, Alaska

Total cost estimate: $79,900
Max. reimb. by U.S. Gov't: $39,950 (50%)

Reimbursements are repayable @ 5% of gross proceeds of minerals sold plus 6 1/4% simple interest on amts. repayable.

Work was to begin 10/1/63 & be completed in 18 months ... six month extension granted later on due to weather conditions.

There have been six amendments to contract (latest 7/27/65).

U.S. Gov't. disbursed $10,177.50 (2/24/64 - 1/27/65) as shown in the contract file.

Production (proceeds) to the company from 8/29/63 to 12/29/64, totalled $66,503.70 per Company statements and at 5% the amount repaid was $3,325.19 CK #58 5/11/65.

Article 5d of the contract requires supporting production - documentary evidence covering production sold -- e.g., smelter settlement sheets, etc. ... These were sent in 4/12/65, but do not agree exactly to reported sales ($66,503.70 above) as follows:

Gold deposits	11/18/64 - 12/8/63	$5,085.00	These two appear to check out
" "	8/29/63 - 12/31/63	10,597.27	
" "	Cal. Yr 1964 thru 11/18/64 ---	50,771.43 1/	See tape attached
Totals per Bollin Deposit-Memo Reports		$66,453.70	
Totals per Company letter & check		66,503.70	
difference		$50.00 2/	

1/ 10¢ error loss to company on one report; U.S. Gov't not effected
2/ The $50.00 difference is in favor of U.S. Gov't as far as 5% sales loan repayments are concerned. U.S.G. is ok

9-1460
(961)

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

TO:	DATE	INITIALS
~~CHIEF, DIVISION OF EXPLORATION OPERATIONS~~		
OFFICE OF MINERALS EXPLORATION	JUL 14 1965	
U. S. DEPARTMENT OF THE INTERIOR		
WASHINGTON, D. C. 20240		
4.		
5.		

FROM: Acting Field Officer, Reg I

OFFICIAL COPY
O. M. E.
RECEIVED
JUL 19 1965

FOR: Check items for action desired

				INITIALS	CODE
___ Action	___ Reply for signature of				
___ Approval	___ Investigate				
___ Comment	___ Recommendations				
___ Conference	___ Rewrite				
___ Instructions	04 * Your information				120
					120

REMARKS: OME-63 (Gold Silver
Keystone Mines Inc
Keystone Mine
Fairbanks District, Alaska
Contract 2173

To support payment of $3,325.19 royalty by check No 28, dated May 11, 1965. See Director's letter 5/27/65 to Nordale. Enclosed statements do not seem to check the payment

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

Cal. Yr. 1964

7 settlements

		9	1	3	0	4 0
	1	0	8	4	5	8 4
		2	7	3	5	1 3
		7	7	2	5	0 6
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		6	7	9	4	8 1
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				5	0	0 0
				3	0	0 0

RECEIVED
JUL 14 1965
OME
SPOKANE, WASHINGTON

P.O. Box 630
Fairbanks, Alaska
July 13, 1965

Mr. D. R. MacLaren
Acting Field Officer
Office of Minerals Exploration
Dept. 157 Howard Street
Spokane, Washington 99204

OME 6304
Contract 2173
Keystone Mines Inc.
Fairbanks, Alaska

Dear Mr. MacLaren:

Enclosed are certified copies of the production of Keystone Mines, Inc. for the period from August 29, 1963 to December 31, 1964 furnished by the Northern Commercial Company.

Some of this production was obtained from claims not subject to OME Contract No. 2173. However, as Keystone Mines, Inc. plans to repay OME in full as quickly as possible, to separate the production would be needless and only cause difficulty and confusion.

I trust this meets with your approval.

Very truly yours,
Arnold M. Nordale

NCCo
DEALERS IN FINE ALASKAN FURS

NORTHERN COMMERCIAL COMPANY

ALASKA'S PIONEER MERCHANTS

EXECUTIVE OFFICES - COLMAN BUILDING

SEATTLE 4, WASHINGTON

ALASKA & YUKON MERCANTILE BRANCHES

ANCHORAGE
ANIAK
BETHEL
BLACK RIVER
EAGLE
FAIRBANKS
FORT YUKON
HAMILTON
JUNEAU
KOTLIK
KWIGUK
McGRATH
MISSION
NOME
ST. MICHAEL
TANANA
DAWSON, Y.T.
MAYO, Y.T.
WHITEHORSE, Y.T.

BRANCH Fairbanks, Alaska

ADDRESS ALL CORRESPONDENCE TO THIS BRANCH

July 10, 1965

Mr. Arnold Nordale
Keystone Mines, Inc.
Fairbanks, Alaska

Dear Mr. Nordale:

This is to certify that the following amounts were advanced you on Gold Deposits in the period November 18, 1965, to December 31, 1965.

Date	Gold Deposit	Check No.	Amt.Advanced
12/19/64	144.25 oz.	F10677	$ 1,154.00
12/19/64		F10678	1,731.00
12/28/64	106.17 oz.	F10693	1,320.00
12/28/64		F10694	880.00
			$ 5,085.00

Yours very truly,

NORTHERN COMMERCIAL COMPANY

C. J. Rogers, Jr.
Controller

CJR:ih

RECEIVED
JUL 14 1965
OME
SPOKANE, WASHINGTON

UNITED STATES ASSAY OFFICE
AT SAN FRANCISCO CALIF.

BULLION DEPOSIT - MEMO REPORT

Mint Form 42k
(Revised)
SOURCE DATA

Deposit No. [illegible] Date [illegible]
Depositor Northern Commercial Co.
140 Colman Bldg., Seattle, Wn. (98104)

Memos Required by Depositor
Other Data

Silver Price or Class [illegible]

State Alaska
County Fairbanks
Mine Keystone

Description of Deposit	Assay Number	Weights Before Melt Ounces Dec	Weights After Melt Ounces Dec	ASSAY CERTIFICATE FINENESS Gold	Silver	Base	Refin. Cts. Per Oz.	GOLD—FINE OZ.	SILVER—FINE OZ.
Amalgam	[illegible]250	393.03	376.04	802	179	029	10	302.235	67.45

PAYABLE BY CHECK EXCEPT AS NOTED

Weigh Clerks [illegible] Asst. Assayer [illegible] Assayer

GPO 939881

Melting	3.00	VALUES, $	30,572.00	87.02
Refining	27.66	NET VALUE	30,504.37	
Handling	26.44	Bars		
Other Chg.		Cash		
TOTAL CHRGS.	67.02	Check		

Calculator

Date 11/10/64

Date 2/3/64

Keystone Mines Inc

F6x Assayed F6.X

Gross Proceeds 10597.27

Plus Gold ____ ozs. prior to shipment

Gross Proceeds

Less: Notary, etc. 1.50

Freight 51.00

Advanced 9500.00

Royalty

9552.50

Balance: (Dr.) (Cr.) Pd. $ 1044.77

10,597.27

Certified True Copy of Mint Report & Settlement:

NORTHERN COMMERCIAL COMPANY

C. J. Rogers, Jr.,
Controller

RECEIVED
JUL 14 1965
OME
SPOKANE, WASHINGTON

UNITED STATES ASSAY OFFICE
AT SAN FRANCISCO CALIF.

July 29, 1964 Shipment

Mint Form 4
(Revised)
SOURCE DATA

BULLION DEPOSIT - MEMO REPORT

Deposit No. 289 Date 8/5/64

Memos Required by Depositor 5

Other Data

Silver Price or Class 1.29

State Alaska
County Fairbanks, Dist.
Mine Keystone, Mines, Inc.

Depositor Northern Commercial Co.
419 Colman Bldg. Seattle, Washington

Description of Deposit	Assay Number	Weights Before Melt Ounces Dec	Weights After Melt Ounces Dec	Assay Certificate Fineness Gold	Silver	Base	Refin. Cts. Per Oz.	GOLD—FINE OZ.	SILVER—FINE OZ.
Amal. cakes	300	325.89	317.50	821	159	020	10	260.667	50.48

PAYABLE BY CHECK EXCEPT AS NOTED

Weigh Clerks Asst. Assayer Assayer

Melting	3.50	VALUES, $	9,123.34	65.12
Refining	31.75	NET VALUE	9,130.40	
Handling	22.81	Bars		
Other Chg.		Cash		
TOTAL CHGS:	58.06	Check		

GPO 939881

Calculator

7/29/64

Date 9/16/64

Name Keystone Mining

Creek District FBK

Gross Returns: 9130.40

Plus Sale ozs. prior to shipment

Gross Proceeds

Less: Notary, etc. 1.50

Freight 45.65

Advanced 7200.00

Royalty

7247.15

Balance: (Dr.) (Cr.) 1883.25

9130.40

Certified true copy of Mint Reports and Settlements.

NORTHERN COMMERCIAL COMPANY

C. J. Rogers, Jr.
Controller

RECEIVED
JUL 14 1965
OME
SPOKANE, WASHINGTON

UNITED STATES ASSAY OFFICE
AT SAN FRANCISCO CALIF.

Mint Form 42K
(Revised)
SOURCE DATA

BULLION DEPOSIT - MEMO REPORT

Deposit No. 429 Date 8/25/64 Memos Required by Depositor 5 Silver Price or Class $1.29 State Alaska
Depositor Northern Commercial Co. Other Data County Fairbanks Dist.
419 Colman Bldg., Seattle, Wn. 98104 Mine Ebbert-Keystone, Mng.

Description of Deposit	Assay Number	Weights Before Melt Ounces Dec	Weights After Melt Ounces Dec	Assay Certificate Fineness Gold	Silver	Base	Refin. Cts. Per Oz.	GOLD—FINE OZ.	SILVER—FINE OZ.
Amal	446	425.62	389.87	793½	174½	032	10	309.361	68.03

PAYABLE BY CHECK EXCEPT AS NOTED — Weigh Clerks — Asst. Assayer — Assayer

Melting	3.50	VALUES, $	10,827.64 87.76
Refining	38.99	NET VALUE	10,845.84
Handling	27.07	Bars	
Other Chg.		Cash	
TOTAL CHRGS.	69.56	Check	

GPO 939861 Calculator

8/20/64

Date 9/16/64

Ebbert Keystone

Distributor FSX

Net Proceeds 10845.84

Plus Gold _____ oz. prior to assignment _____

Gross Proceeds

Less: Notary, etc. 1.50

Freight 54.23

Advanced 9500.00

Royalty

9555.73

Balance (Dr. (Cr.)) $ 1290.11

10845.84

Certified true copy of Mint Reports and Settlements.

NORTHERN COMMERCIAL COMPANY

C. J. Rogers, Jr.
Controller

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11 14 1965
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NE, WASHINGTON

UNITED STATES ASSAY OFFICE
AT SAN FRANCISCO CALIF.

8/20/64 shipment

Mint Form 42
(Revised)
SOURCE DATA

BULLION DEPOSIT - MEMO REPORT

No. 430 Date 8/25/64 Memos Required by Depositor 5 Silver Price or Class 31.29 State Alaska

Depositor Northern Commercial Co. Other Data County Fairbanks Dist.

Seattle, Wash. Mine Keystone

Description of Deposit	Assay Number	Weights Before Melt Ounces Dec	Weights After Melt Ounces Dec	ASSAY CERTIFICATE FINENESS Gold	Silver	Base	Refin. Cts. Per Oz.	GOLD—FINE OZ.	SILVER—FINE OZ.
Amal	447	98.04	96.2 3	811¼	170	018¼	10	78.114	16.35

PAYABLE BY CHECK EXCEPT AS NOTED — Weigh Clerks — Asst. Assayer — Assayer

Melting	3.50	VALUES, $	2,733.99	21.09
Refining	9.62	NET VALUE	2,735.13	
Handling	6.83	Bars		
Other Chg.		Cash		
TOTAL CHRGS.	19.95	Check		Calculator

GPO 939861

Date 9/16/64

Name Keystone

Creek District EL A

Gross Returns: 2735.13

Plus Sale ozs. prior to shipment

Gross Proceeds

Less: Notary, etc. 1.50

Freight 13.68

Advanced 2500.00

Royalty

2515.18

Balance: (Dr.) (Cr.) $ 219.95

2735.13

Certified true copy of Mint Reports and Settlements.

NORTHERN COMMERCIAL COMPANY

C. J. Rogers, Jr.
Controller

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JUL 14 1965
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SPOKANE, WASHINGTON

UNITED STATES ASSAY OFFICE
AT SAN FRANCISCO CALIF.

BULLION DEPOSIT - MEMO REPORT

Mint Form 42k
(Revised)
SOURCE DATA

Deposit No. 548 Date 9/25/64 Memos Required by Depositor 5 Silver Price or Class $1.29 State Alaska
Depositor Northern Commercial Co. Other Data County Fairbanks Dist.
Seattle, Wa. Mine Keystone-Ebert

Description of Deposit	Assay Number	Weights Before Melt Ounces Dec	Weights After Melt Ounces Dec	ASSAY CERTIFICATE FINENESS Gold	Silver	Base	Refin. Cts. Per Oz.	GOLD—FINE OZ.	SILVER—FINE OZ.
[illegible]	569	300.32	270.73	816	168	022	20	220.809 220 569	44.36

PAYABLE BY CHECK EXCEPT AS NOTED — Weigh Clerks [illegible] Asst. Assayer [illegible] Assayer

Melting	8.50	VALUES, $	7,717.82
Refining	27.07	NET VALUE	7,725.06
Handling	19.29	Bars	
Other Chg.		Cash	
TOTAL CHGS.	49.86	Check	

57.10

Calculator

GPO 939881

101.0/14

Date 9/30/64

Name Ebbert - Keystone

Lock crof District EBX

Gross Returns: 7725.06

Plus Sale oze. prior to shipment

Gross Proceeds

Less: Notary, etc. 1.50

Freight 39.00

Advanced 7000.00

Royalty

7040.50

Balance: (Dr.) (Cr.) $ 684.46

10¢ ??

7725.06

Certified true copy of Mint Reports and Settlements.

NORTHERN COMMERCIAL COMPANY

C. J. Rogers, Jr.
Controller

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JUL 14 1965
SPOKANE, WASHINGTON

UNITED STATES ASSAY OFFICE
AT SAN FRANCISCO CALIF.

BULLION DEPOSIT - MEMO REPORT

Mint Form 42R
(Revised)
SOURCE DATA

Deposit No. 549 Date 9/15/64 Memos Required by Depositor 5 Silver Price or Class 81.29 State Alaska
Depositor Northern Commercial Co. Other Data County Fairbanks Dist.
Seattle, Wn. Mine Keystone

Description of Deposit	Assay Number	Weights Before Melt Ounces Dec	Weights After Melt Ounces Dec	ASSAY CERTIFICATE FINENESS Gold	Silver	Base	Refin. Cts. Per Oz.	GOLD—FINE OZ.	SILVER—FINE OZ.
Amalg.	570	161.00	158.40	999	176	017	12	123.956	27.79

PAYABLE BY CHECK EXCEPT AS NOTED

Weigh Clerks Asst. Assayer Assayer

Melting	3.50	VALUES, $	4,532.39	35.77
Refining	25.94	NET VALUE	4,518.44	
Handling	11.28	Bars		
Other Chg.		Cash		
TOTAL CHRGS.	40.72	Check		

GPO 939881

C.F.
Calculator

Date 9/30/64

Name Keystone Mine

Creek Unity District FJX

Gross Returns:

Plus Sale _____ ozs. prior to shipment _____

Gross Proceeds 4518.44

Less: Notary, etc. 1.50

Freight 23.00

Advanced 3600.00

Royalty

3624.50

Balance: (Dr.) (Cr.) $ 893.94
4518.44

Certified true copy of Mint Reports and Settlements.

NORTHERN COMMERCIAL COMPANY

C. J. Rogers, Jr.
Controller

UNITED STATES ASSAY OFFICE
AT SAN FRANCISCO CALIF.

BULLION DEPOSIT - MEMO REPORT

Mint Form 42R
(Revised)
SOURCE DATA

Deposit No. [illegible] Date [illegible]
Depositor [illegible]

Memos Required by Depositor [illegible]
Other Data

Silver Price or Class [illegible]

State [illegible]
County [illegible]
Mine [illegible]

Description of Deposit	Assay Number	Weights Before Melt Ounces	Weights Before Melt Dec	Weights After Melt Ounces	Weights After Melt Dec	Assay Certificate Fineness Gold	Assay Certificate Fineness Silver	Assay Certificate Fineness Base	Refin. Cts. Per Oz.	GOLD—FINE OZ.	SILVER—FINE OZ.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	258.316	[illegible]

PAYABLE BY CHECK EXCEPT AS NOTED

Weigh Clerks [illegible] Asst. Assayer [illegible] Assayer [illegible]

Melting	[illegible]	VALUES, $	[illegible]
Refining	[illegible]	NET VALUE	[illegible]
Handling	[illegible]	Bars	
Other Chg.		Cash	
TOTAL CHRGS:	[illegible]	Check	

GPO 939881

Calculator

10/8/64

Date 11/1/64

Name Ebbert Keystone

Address [illegible] FGX

Gross Returns:

Plus Sale _____ ozs. prior to shipment

Gross Proceeds 9021.75

Less: Notary, etc. 1.50

Freight 45.10

Advanced 10300.00

Royalty

10346.60

Balance: (Dr.) (Cr.) $ -1324.85

9021.75

Certified true copy of Mint Reports and Settlements.

NORTHERN COMMERCIAL COMPANY

C. J. Rogers, Jr.
Controller

RECEIVED
JUL 14 1965
OMB
SPOKANE, WASHINGTON

UNITED STATES ASSAY OFFICE
AT SAN FRANCISCO CALIF.

Mint Form 42R
(Revised)
SOURCE DATA

BULLION DEPOSIT - MEMO REPORT

Deposit No. [illegible] Date [illegible] Memos Required by Depositor [illegible] Silver Price or Class [illegible] State [illegible]
Depositor [illegible] Other Data [illegible] County [illegible]
Mine [illegible]

Description of Deposit	Assay Number	Weights Before Melt Ounces	Weights Before Melt Dec	Weights After Melt Ounces	Weights After Melt Dec	Assay Certificate Fineness Gold	Assay Certificate Fineness Silver	Assay Certificate Fineness Base	Refin. Cts. Per Oz.	GOLD—FINE OZ.	SILVER—FINE OZ.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	193.838 [illegible]	42.07

PAYABLE BY CHECK EXCEPT AS NOTED

Weigh Clerks [illegible] Asst. Assayer [illegible] Assayer

Melting	2.50	VALUES, $	84.33 [illegible]	55.6[illegible]
Refining	24.49	NET VALUE	6,794.32	
Handling	15.96	Bars		
Other Chg.	44.95	Cash		
TOTAL CHRGS:		Check		

GPO 939881

Calculator

11/12/64

Date 12/9/64

Ebbert Keystone

Wyo.

Dis. Crash 5X

Gross Returns:

Fine Sale _____ ozs. prior to shipment _____

Gross Proceeds 6794.81

Less: Notary, etc. 1.50

Freight 39.00

Advanced 2300.00

Royalty

2340.47

Balance: (Dr.) (Cr.) $ 4454.34

6794.81

Certified true Copy Mint Reports and Settlements.

NORTHERN COMMERCIAL COMPANY

C. J. Rogers, Jr.
Controller

OFFICIAL
COPY
O. M. E.
RECEIVED
AUG 4 1965
INTERNATIONAL
120 m
120

So 157 Howard Street
Spokane, Washington 99204
August 2, 1965

Air Mail

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
P. O. Box 630
Fairbanks, Alaska

Re: OME-6304 (Gold-Silver)
Keystone Mines
Fairbanks District, Alaska
Contract 2173

Dear Mr. Nordale:

In order to clarify the question raised in the final paragraph of your letter of June 30, 1964, there are enclosed the original and four copies of Amendment No. 6 signed by the Chief, Office of Minerals Exploration, U. S. Geological Survey, for the Government.

If the proposed amendment is satisfactory to you, please sign all five copies, retain the Operator's copy, and return the other copies to this office.

If the amendment is not satisfactory, return all copies unsigned to this office with a statement of your proposed changes for consideration.

Sincerely yours,

D. R. MacLaren
Acting Field Officer, OME
Region I

Enclosures

cc: J. A. Hordlick

OME
MacLaren
Voucher File
Director's Reading File

DRMacLaren/et

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
	Selfridge	120
7/22	Johnson	110
7-23	Weeks for THK	220
7/23	Pecora	
		140
7/27	cal	220
		120 m

Memorandum

To: Acting Field Officer, Region I

From: Chief, Office of Minerals Exploration

Subject: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska
Contract 2173

In reference to your memorandum of July 14, 1965, enclosed are the original and four copies of proposed Amendment No. 6 signed for the Government. Also enclosed is an extra copy for field use.

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

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

(signed) FRANK E. JOHNSON

Frank E. Johnson

Enclosures

MMerrithew/mm (7/22/65)
cc: Director's Reading File
Division File
Economic Geology File
OME File
OME Reading File
Mr. Selfridge

23263

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

U. S. GEOLOGICAL SURVEY
SOUTH 157 HOWARD ST.
SPOKANE, WASH. 99204

July 14, 1965

OFFICIAL COPY
O. M. E.
RECEIVED
JUL 16 1965
INITIALS | CODE
120 m
120

Memorandum

To: Chief, Division of Field Operations

From: Acting Field Officer, Region I

Subject: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska
Contract 2173

Enclosed is a copy of a letter dated June 30, 1965, from the ~~subject~~ operator, regarding the total footage authorized by his contract as amended.

In Exhibit A, Description of the Work, paragraph 5 provided for 800 feet of drifting and, with prior Government approval, 100 feet of crosscutting into the footwall and/or hanging wall. Because the vein was offset by faulting, Amendment No. 2 provided for crosscutting from the shaft to the vein and drifting along the vein, the total of these two items not to exceed an aggregate of 800 feet; 100 feet of crosscutting into the footwall and/or hanging wall was retained. Bad ground was encountered during the attempt to drift west, and Amendment No. 3 was prepared to permit a "by-pass" drift westerly. However, in this amendment the final sentence of item 2 retains the limit of 100 feet for crosscutting into the walls but apparently reduces the total of crosscutting from the shaft to the vein, drifting on the vein, and the "by-pass" drift to 700 feet, as the final stipulation is: ". . . nor shall all the drifting and/or crosscutting exceed an aggregate of 800 feet." Under costs the contract and Amendment No. 2 provide for 900 feet of drifting and/or crosscutting. As this provision has not been changed in Amendment No. 3, it appears that the 800 feet quoted above is a typographical error and should be 900 feet. ✓

Will a new Amendment No. 3 to correct this apparent error be required, or can the operator be advised by letter that the "800 feet" should have been "900 feet"?

D R MacLaren
D. R. MacLaren

Enclosure

cc: J. A. Herdlick w/cy incoming

Director's reading file
Resources Research Branch Chief

DRMacLaren:my

KEYSTONE MINES, INC
P.O. Box 630
Fairbanks, Alaska

June 30, 1965

Mr. D.R. MacLaren
Acting Field Officer, OME
Region I
U.S. Dept. of the Interior
OFFICE OF MINERAL EXPLORATION
South 157 Howard Street
Spokane, Washington 99204

Re: OME 6304 (Gold-Silver)
Contract 2173 as amended
Keystone Mines, Inc.
Fairbanks District, Alaska

Dear Mr. MacLaren:

In accordance with the specifications of our OME contract, as amended, I am forwarding you herewith the original and three copies of:

Operator's Monthly Voucher (MME form 60), June 1965
Operator's Progress Report (MME form 61), June 1965
Narrative
Sketch map # 17 showing work accomplished during June, 1965

A point has arisen which I believe is a typographical error but which I believe should be clarified. The basic contract and amendments #1 and #2,3c state that an aggregate of 100 feet of crosscut and 800 feet of drifting is allowed. Amendment #2, 3b and #3,2 indicate that the aggregate of drifting and crosscutting should not exceed 800 feet. My interpretation is that the total of drifting and crosscutting is not to exceed 900 feet as indicated in the basic bid, amendment #1,2b, and amendment #2,3c. This months "by pass" drifting is included in the category of drifting. I would appreciate receiving your thoughts on my interpretation.

Very truly yours,

Arnold M. Nordale

Arnold M. Nordale
President
KEYSTONE MINES, INC.
P.O. Box 630
Fairbanks, Alaska

RECEIVED
JUL 12 1965
OME
SPOKANE, WASHINGTON

AMN:cac
Enclosures

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

TO:	DATE	INITIALS
CHIEF, DIVISION OF EXPLORATION OPERATIONS		
OFFICE OF MINERALS EXPLORATION	JUL 13 1965	
2. U. S. DEPARTMENT OF THE INTERIOR		
3. WASHINGTON, D. C. 20240		
4.		
5.		

OFFICIAL COPY
O. M. E.
RECEIVED
JUL 15 1965

FROM: Acting Field Officer Reg. I

INITIALS	CODE
	190
	170

FOR: Check items for action desired

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

Surname
Signature
File

REMARKS:

OME-630A (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska
Contract 2173

P.O. Box 630
Fairbanks, Alaska
July 7, 1965

Mr. W.R. MacLaren
Acting Field Officer
Office of Minerals Exploration
South 157 Howard Street
Spokane, Wash. - 99202

OME. 6304
Contract 2173
Keystone Mines, Inc.
Fairbanks, Alaska

Dear Mr. MacLaren:

In accordance with your letter of May 4th, 1965, the Northwest Commercial Company is preparing a statement of payments made to Keystone Mines, Inc. for gold purchased from Aug. 29, 1963 to Dec. 31st, 1964 together with copies of Mint Returns pertaining thereto.

They will be forwarded to you shortly.

Very truly yours,
Connell [illegible]

RECEIVED
JUL 12 1965
OME

Mel(2)

No. 157 Howard Street
Spokane, Washington 99204
May 24, 1965

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O. M. E.
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MAY 26 1965
INITIALS | CODE
120
120

Memorandum

To: Fiscal Section, Office of Management Operations
Office of the Secretary, Department of the Interior
Washington, D. C.

From: Acting Field Officer, Region I

Subject: Collections--Transmittal of Royalty Check
Contract No. 2173
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska
CME-6304 (Gold-Silver)

Appropriation Symbol: CME-142039

Check No.: 28

Date: 5/11/65

Amount: $3,325.19

From: Arnold M. Nordale (La Dessa Nordale, Sec'y.-Treas.)
Keystone Mines, Inc. (Main Office, First Nat'l.
Bank of Fairbanks, Fairbanks, Alaska)

Period: To December 31, 1964

Lots No.: --

D. R. MacLaren

Attachment
Distribution:
Operator
CME(2) wo/cys settlement sheets
CPF

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
5/26	Alley	800
	Selfridge	120
5/26	[illegible]	110
	[illegible]	100
		220

AIR MAIL

MAY 27 1965

Mr. Arnold M. Nordale, President
Keystone Mines, Inc.
P. O. Box 2413
Juneau, Alaska

Re: GME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska
Contract 2173

Dear Mr. Nordale:

Our Acting Field Officer, Region I, has forwarded to this office your check no. 28, dated May 11, 1965, in the amount of $3,325.19, in payment of royalty due to the Government to December 31, 1964, under the terms of the above referenced contract.

It is our understanding that the Acting Field Officer in a letter to you dated May 4, 1965, cited Article 5(d) of the contract which provides that the Operator shall furnish the Government with suitable accounting and documentary evidence covering all production to which the Government's royalty relates, including two copies of smelter or concentrator settlement sheets and certified accounts of production and sale or other disposition of production. This you have failed to do. In order that our records may be complete, please furnish Mr. D. R. MacLaren, Acting Field Officer, GME, Region I, So. 157 Howard Street, Spokane, Washington 99204, with the requested documents at your earliest convenience.

Sincerely yours,

George Fumich, Jr.

Acting Director

AMAlley/ama 5-26-65

cc:
Docket
Director's Reading File
CA & A Division
Region I

23263

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
So. 157 Howard Street
Spokane, Washington 99204
May 24, 1965

OFFICIAL COPY
O. M. E.
RECEIVED
MAY 26 1965

INITIALS	CODE
	120

Memorandum

To: Chief, Division of Exploration Operations

From: Acting Field Officer, Region I

Subject: Transmittal of royalty payment
OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2173

Enclosed are two Thermo-Fax copies of a self-explanatory letter dated May 11, 1965, from the subject Operator and Check No. 28 dated May 11, 1965, in the amount of $3,325.19 drawn on the Main Office of the First National Bank of Fairbanks, Fairbanks, Alaska, with copies of our usual memorandum to the Fiscal Section. This payment, made in response to my letter of May 4, 1965, to the Operator, was not accompanied by any of the documentation required by Article 5(d) of the contract which was cited and emphasized in the second paragraph of my May 4th letter.

I am routing this through your office as it appears I cannot "get through" to the Operator and am at a bit of a loss as to how I can make the point any clearer. Perhaps, a request from your end will "reach" him.

D. R. MacLaren

D. R. MacLaren

Enclosures

RECEIVED
MAY 19 1965
OME

Box 630
Fairbanks, Alaska
May 11, 1965

Mr R. R. MacLaren
Acting Field Officer
Office of Minerals Exploration
South 157 Howard Street
Spokane, Wash - 99204

OME 6304
Contract 2173
Keystone Mines, Inc
Fairbanks, Alaska

Dear Mr MacLaren

In reviewing the terms of the Office of Minerals Exploration regulations pertaining to the repayment of financial assistance, we find that we have been negligent in not making royalty payments as production occurred. The omission was due to misunderstanding and oversight.

Enclosed is a check in the amount of $3,325.19 which is the royalty due OME to December 31st 1964. We have received advance payments from the Northern Commercial Company for sponge gold deposited with them since but have received no mint returns. When they are received and the settlements are made a further accounting will be made with OME.

Very truly yours
Arnold M. Nordale

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
5'		

May 26, 1965

Memorandum

To: Chief, Branch of Fiscal Services
Office of Management Operations
Office of the Secretary

/s/ Anne M. Alley

From: Contract Administration and Audit Division

Subject: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2173

Enclosed for deposit to the subject OME account under symbol 142039 as a royalty receipt is check no. 28, dated May 11, 1965, drawn by Keystone Mines, Inc., in the amount of $3,325.19 on the Main Office, First National Bank of Fairbanks, Fairbanks, Alaska. Also enclosed is your copy of the transmittal memorandum from the Acting Field Officer, Region I.

Enclosures

AMAlley/ama 5-26-65

cc:
Docket
Director's Reading File
CA & A Division
Region I

23263

Ome (2)

Rm. 157 Howard Street
Spokane, Washington 99204

MAY 4 1965
(Dispatched by DC

OFFICIAL COPY

MAY 12 1965

INITIALS	CODE
EEJ	800
	120
	120

Air Mail

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
P. O. Box 2415
Juneau, Alaska

Re: OMX-6304 (Gold-Silver)
Keystone Mines
Fairbanks District, Alaska
Contract 2175

Dear Mr. Nordale:

From the statement near the end of your letter of April 12, 1965, it appears that Keystone Mines, Inc., has received a total of $66,303.78 from the sale of gold produced at the Keystone Mine since August 29, 1963, the date of the OMX contract.

Article 5(d) of the OMX contract provides that the Operator shall provide the Government with suitable accounting and documentary evidence covering all production to which the Government's royalty relates, such as two copies of smelter or concentrator settlement sheets and certified accounts of production and sale or other disposition of production.

Article 6(b) states in part: "The Operator * * * shall pay to the Government a royalty on all minerals and metals mined or produced from the land as follows:

(1) * * * from the date of the contract * * *."

Article 6(c)(1) states the amount of royalty and describes how it shall be determined, and Article 6(c)(2) states that the royalty shall be computed and paid currently upon each lot sold, held * * * as the case may be.

From the above, it appears that royalty in the amount of a least $3,385.19 is over due, some of it since the end of 1963. A prompt computation and payment of the royalty due is requested.

Two documents, none of which are signed or certified, are returned.

Sincerely yours,

D. R. Maclaren
Acting Field Officer, OMX
Region I

Enclosures

cc: J. A. Hartlick
OMX(2)
Maclaren
CFF

Director's Reading File
Resources Research Branch Chief

DRMaclaren/nls

Docket Copy

800

~~120~~

120M

~~120~~

~~100~~

~~220~~

120M

[illegible] Street
[illegible], [illegible]

MAY 4 1965

Air Mail

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
P. O. Box [illegible]
Juneau, Alaska

Re: [illegible]
[illegible]
Alaska [illegible], Alaska
Contract [illegible]

Dear Mr. Nordale:

From the statement near the end of your letter of April 12, 1965, it appears that Keystone Mines, Inc., has received a total of $66,[illegible].70 from the sale of gold produced at the Keystone Mine since August 29, 1963, the date of the [illegible] contract.

Article 5(d) of the [illegible] contract provides that the Operator shall provide the Government with suitable accounting and documentary evidence covering all production to which the Government's royalty relates, such as two copies of smelter or concentrator settlement sheets and certified statements of production and sale or other disposition of production.

Article 6(b) states in part: "The Operator * * * shall pay to the Government a royalty on all minerals and metals mined or produced from the land as follows:

(1) * * * from the date of the contract * * *."

Article 6(c)(1) states the amount of royalty and describes how it shall be determined, and Article 6(c)(2) states that the royalty shall be computed and paid currently upon the [illegible] sold, and * * * as the case may be.

From the above, it appears that royalty in the amount of at least $3,[illegible].13 is overdue, some of it since the end of 1965. A prompt computation and payment of the royalty due is requested.

The documents, none of which are signed or certified, are returned.

Sincerely yours,

/s/

[illegible] Maclaren
[illegible]
Region 1

Enclosures

cc: J. A. Herdlick
OMR(2)
MacLaren
CFF

Director's Reading File
Resources Research Branch Chief
CA&A Division
DNMaclaren/mls

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
So. 157 Howard Street
Spokane, Washington 99204
April 23, 1965

OFFICIAL COPY
O. M. E.
RECEIVED
APR 26 1965

INITIALS	CODE
EEP	800
	120
	120
	120

Memorandum

To: Chief, Division of Exploration Operations

From: Acting Field Officer, Region I

Subject: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2173

Enclosed are two copies of a letter dated April 12, 1965, and the originals and one copy of accompanying "documents." The originals of the accompanying documents should be returned to the Operator with my letter which is enclosed, or your letter if mine is not satisfactory.

I am enclosing my reply to Nordale as I am not sure that I am correct in assuming that Keystone has been paid the full $66,503.70, as the enclosed "documents" are unclear and there is no statement from Northern Commercial Company through whom shipments are sent and, as I understand it, payments are made.

If my letter is satisfactory, kindly date and mail it along with the originals of the three documents, and return the yellow tissue copy for our files.

D. R. MacLaren

D. R. MacLaren

Enclosures

The second paragraph of proposed letter to Mr. Nordale should refer to Article 5 (d), not (e).
With that change, I believe the letter should be sent. If Mr. Nordale feels that he owes less than $3,325.19, it is up to him to make a better computation.
E.E.P. 4/26/65

Why not audit the account of the Operator as, should be done, jointly with Northern Commercial Co.

OME (2)

RECEIVED
Geo
APR 1 6 1965
Air Mail

P.O. Box 2415
Juneau, Alaska
April 12, 1965

Mr. D.R. MacLaren
Acting Field Officer
Office of Minerals Exploration
South 157 Howard Street
Spokane, Wash. - 99204

OME 6304
Contract 2173
Keystone Mines, Inc.
Fairbanks, Alaska

Dear Mr. MacLaren:

Thank you for your letter of April 7th.

Concerning paragraph 2, the long delay in furnishing a statement of ore milled and the recovery therefrom was in part occasioned by the illness of Mr. Eugene Schrecker, Sec-Treas of Keystone who is presently recovering in Portland, Oregon from two major operations.

The accountant has been able to prove the figures for production from August 29, 1963 to Dec. 31st 1964 and the tons milled during 1964 but not that from Aug. 29th to Dec 31st, 1963. No doubt Mr. Schrecker has the figure in his records. I plan to go to Fairbanks on April 24th when I will obtain and forward it to you.

Keystone Mines, Inc. ships the ore in the form of sponge to the United States Assay

Via
APR 14 1965
Air Mail

Office at San Francisco through the Northern Commercial Company which on the receipt of it makes an advance of approximately $22 per ounce. An adjustment is made on the mint return.

The N.C. Co. generally holds the sponge gold until a sufficient amount has accumulated to warrant a shipment. This means that the Mint Settlement is often delayed 3 or 4 month. However it has been a very satisfactory arrangement. We have not yet received the Mint return for the cleanups made in Dec. 1964.

I am enclosing the records sent me by the Northern Commercial Company which I would like to have returned in order to keep my files intact.

	Net Value	Tons	Per ton
Mint Return Dated 1/17/64 includes all production in 1963 after Aug. 29th	$ 10,597.27 ✓	—	—
Mint Settlements in 1964 up to and including Nov. 18th	50,821.43	1437	$ 35.37
Advances by N.C.Co on cleanups from Nov. 18th to Dec. 29, 1964	5085.— ✓	160	31.78
	$ 66,503.70	—	

No concentrates have been shipped or sold. The ore milled included about 1% waste as no double mining was done.

Very truly yours
Arnold M. Nordell

	Initials	Date
Prepared By		
Approved By		

RECEIVED
View
APR 1 4 1965
Air Branch

1964	clean-ups	Total	Keystone	
12/31	144.25 oz.	288500	115400	85 Tons
29	106.17	220000	88000	75 Tons
		5085 -		
1965				
1/15	109.40 oz	230000	92000	
22	238.60	500000	200000	
29	223.80	400000	184000	

6794

UNITED STATES ASSAY OFFICE
AT SAN FRANCISCO CALIF.

Mint Form 436
(Revised)
SOURCE DATA

BULLION DEPOSIT - MEMO REPORT

Deposit No. 1255 Date 1/17/64

Assays Required by Depositor 5

Silver Price or Class $1.29

State Alaska
County Fairbanks
Mine Keystone

Depositor Northern Commercial Co.
419 Colman Bldg., Seattle, Wn. (98104)

Description of Deposit	Assay Number	Weights Before Melt Ounces Dec	Weights After Melt Ounces Dec	Assay Certificate Fineness Gold	Silver	Base	Refin. Chs. Per Oz.	GOLD—FINE OZ.	SILVER—FINE OZ.
Amalgam	1340	393.41	376.84	802	179	019	10	302.225	67.45

PAYABLE BY CHECK EXCEPT AS NOTED

Weigh Clerks P.B. Asst. Assayer Assayer

Melting	3.50	VALUES, $	10,577.88	87.01
Refining	37.62	NET VALUE	10,597.24	
Handling	26.44	Bars		
Other Chg.		Cash		
TOTAL CHGS.	67.62	Check		

C.J.
Calculator

GPO 939861

RECEIVED
APR 14 1965

MINT SETTLEMENTS - Bullion Deposit - memo Report taken from U.S. Mint Settlements for 1964

Dep. No.	Date	Assay No.	Weight Before	Weight After	Fineness Au	Fineness Ag	Fine Ounces Au	Fine Ounces Ag.
289	8-5-64	300	325.89	317.50	821.00	159.00	260.667	50.48
429	8-25-64	445	425.62	389.87	793.50	174.50	309.361	68.03
430	8-25-64	447	98.04	96.23	812.75	170.00	78.114	16.35
548	9-15-64	569	300.32	270.73	814.50	163.50	220.509	44.26
549	9-15-64	570	164.00	159.40	809.00	174.00	128.954	27.73
738	10-15-64	767	410.70	376.83	685.50	122.50	258.316	46.16
939	11-18-64	974	254.99	244.90	791.50	175.50	193.838	42.97
							1449.759	295.98

Please note differences in before & after weight also in fineness au & ag
JL

	Gold Value	Silver Value	Total Value	Mint Charges	Net Value
#289	$9,123.34	$65.12	$9,188.46	$58.06	$9,130.40
429	10,827.64	87.76	10,915.40	69.56	10,845.84
430	2,783.99	21.09	2,805.08	19.95	2,785.13
548	7,717.82	57.10	7,774.92	49.86	7,725.06
549	4,513.39	35.77	4,549.16	30.72	4,518.44
738	9,041.06	59.55	9,100.61	78.86	9,021.75
939	6,784.33	55.43	6,839.76	44.95	6,794.81
	$50,791.57	$381.82	$51,173.39	$351.96	$50,821.43

All Mint Settlements to Northern Commercial Co. 419 Coleman Bldg. Seattle, Wn.
State - Alaska - County-Fairbanks - Mine(Keystone ~~and~~ or Keystone-Ebbert)
JL

RECEIVED
APR 14 1965

MME FORM 6

REV. 2

REFERENCE SLIP

OFFICE OF MINERALS EXPLORATION

TO:		DATE	INITIALS
1.	Chief, Div. of Exploration Operations	5/3/65	
2.			
3.			
4.	M. L. Smelser		
5.	M. L. Smelser for D. R. MacLaren		

FROM: Acting Fld. Officer, Reg. 1

OFFICIAL COPY

MAY 5 1965

INITIALS CODE

~~120 M2~~

120

FOR: Check items for action desired

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

REMARKS: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska
Contract 2173

Transmittal of the Gov't., Audit, and Fiscal Section's copies of Amendment No. 5.

One (1)

So. 157 Howard Street
Spokane, Washington 99204
April 29, 1965

OFFICIAL COPY
O. M. E.
RECEIVED
MAY 3 1965

INITIALS	CODE
DEF	800
	120
	120

Air Mail

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
P. O. Box 630
Fairbanks, Alaska

Re: OME-6304 (Gold-Silver)
Keystone Mines
Fairbanks District, Alaska
Contract 2173

Dear Mr. Nordale:

In your letter of April 2, 1965, you requested that the recess now in effect be extended 30 days in order to avoid excessive pumping due to heavy spring run-off. In order to avoid the need of a third amendment relative to this recess resulting from unforeseen weather changes, Amendment No. 5 places the time for the end of the recess at July 1, 1965. Under the proposed Amendment No. 5, work may be resumed on or at any time before July 1, 1965.

We are returning herewith the original and four copies of Amendment No. 5 for your further consideration, as its terms in no way prevent the resumption of work by June 1.

Sincerely yours,

D. R. MacLaren
Acting Field Officer, OME
Region I

Enclosures

cc: OME w/cy incoming
Voucher File
MacLaren
Director's Reading File
Resources Research Branch Chief

DRMacLaren:mls

No. 6.30

Portland, Oregon

April 26, 1965

Mr. D. R. Mackenzie
Acting District Officer
Office of Minerals Exploration
South 157 Howard Street
Spokane, Wash. - 99204

EMUE 6304
Contract 2173
Kaylor Mine
Idaho

Dear Mr. Mackenzie:

I am returning the copies of Amendment No. 5 for a correction of the date on which the work is to be resumed and for the extension of the terminal date of Contract No. 2173 as requested in my letter of April 2, 1965.

The date originally stated of June 1st was found an oversight but inasmuch as Bird is to resume work on June 1st it might be quite important.

Very truly yours
Donald M. Mordaunt

RECEIVED
APR 27 1965
OVS

No. 157 Howard Street
Spokane, Washington 99204
April 23, 1965

OFFICIAL COPY
O. M. E.
RECEIVED
APR 26 1965
INITIALS | CODE
BEF | 800
| 120
| 120

Air Mail

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
P. O. Box 2415
Juneau, Alaska

Re: OME-6394 (Gold-Silver)
Keystone Mines
Fairbanks District, Alaska
Contract 2175

Dear Mr. Nordale:

In accordance with your request of April 2, 1965, enclosed are the original and four copies of Amendment No. 5 signed by the Acting Director for the Government.

If the proposed amendment is satisfactory to you, please sign all five copies, retain the Operator's copy, and return the other copies to this office.

If the amendment is not satisfactory, please return all copies unsigned to this office with a statement of your proposed changes for consideration.

Sincerely yours,

D. R. Maclaren
Acting Field Officer, OME
Region I

Enclosures

cc: J. A. Hardlick
OME
Maclaren
Voucher File
Director's Reading File
Resources Research Branch Chief

N.L. Snelser
~~D.R.Maclaren~~:mls

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
4/20	Murphy	120
		130
4/20	Johnson	110
		100
4/20	Cal	220
		120

APR 2 0 1965

Memorandum

To: Acting Field Officer, Region I

From: Chief, Division of Exploration Operations

Subject: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska
Contract 2173

In accordance with the Operator's request of April 2 and your memorandum of April 7, 1965, enclosed are the original and four copies of Amendment No. 5 signed by the Acting Director for the Government. Also enclosed is an extra copy for field use.

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

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

In reference to your letter of April 7, 1965, to the Operator, until the royalty due the Government has been received, its monthly vouchers should not be paid. However, do not inform the Operator of this action when you forward the amendment.

George C. Selfridge (gla)

Enclosures

FMMurphy/mm (4/20/65)
cc: Director's Reading File
Review Committee
Docket

23263

DRAFT
EMMurphy/mm 4/14/65

Worked

EXPLORATION CONTRACT
KEYSTONE MINES, INC.
OME-6304

AMENDMENT NO. 5

It is agreed this _____ day of _____, 1965, between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, hereinafter called the "Government," and Keystone Mines, Inc., hereinafter called the "Operator," that Exploration Contract 2173 (OME-6304), dated August 29, 1963, as amended, is further amended as follows:

The time fixed in Item 1. (a) of Amendment No. 4 for the end of the work suspension period is extended from May 1, 1965, to July 1, 1965.

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

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By _____
Acting Director, Office of Minerals Exploration

KEYSTONE MINES, INC.

By _____

Title _____

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
So. 157 Howard Street
Spokane, Washington 99204
April 7, 1965

Memorandum

To: Chief, Division of Exploration Operations

From: Acting Field Officer, Region I

Subject: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska
Contract 2173

Enclosed are two Thermo-Fax copies of a letter dated April 2, 1965, in which the Operator requests a 31-day extension of the current recess and the time for completion of the contract, and our reply. A 60-day extension is recommended.

D. R. MacLaren

Note

Enclosures

cc: J. A. Herdlick

To Fairbanks with amend.
Should not face any work where
[illegible] royalty fund. Should op.
ask approval Operator when sending
amend.

OFFICIAL COPY
O. M. E.
RECEIVED
APR 13 1965

INITIALS	CODE
ama	800
[illegible]	120
	120

Ona(v)

No. 157 Howard Street
Spokane, Washington 99204
April 7, 1965

Air Mail

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
P. O. Box 2415
Juneau, Alaska

Re: GME-6304 (Gold-Silver)
Keystone Mines
Fairbanks District, Alaska
Contract 2173

Dear Mr. Nordale:

Your request for an extension of the recess period has been forwarded to our Washington, D. C. Office for consideration.

On December 3, 1964, we requested a detailed account of all ore milled since August 29, 1963, and the recoveries therefrom either in the form of free gold or concentrates and any sales that may have been made. You advised us on December 26, 1963, that you had written for this information and would forward it as soon as it was received. Although that was more than 3 months ago, we have heard nothing further from you regarding this matter.

Kindly advise us as to when we may expect to receive this information.

Sincerely yours,

D. R. MacLaren
Acting Field Officer, GME
Region I

cc: J. A. Hardlick
GME(2) w/cys incoming
MacLaren
Voucher File
CFF
Director's Reading File
Resources Research Branch Chief

DRMacLaren:mls

Mel(r)

[illegible]

[illegible]

[illegible]

Mr. [illegible] Montana
Acting District Office
Office of Minerals Exploration
South 157 Howard Street
Spokane, Washington 99201

Re: Contract
Keystone Inc
Fairland

Dear Mr. Montana:

[illegible]
the Grant Deed, the dependent contractor pay
that the assumption of operation work be delay
one month or to June 1st 1965 the reason for such
it was to allow more time for the spring runoff
water to drain naturally and to avoid the pi[illegible]
of excessive amounts of water

We believe the request warrant
herewith ask your approval thereto and also
the terminal date of the contract a like number
of days or until September 30th 1965

Very truly yours
Keystone Mines, Inc
Arnold M Nordal
President

RECEIVED
APR 1965

MME FORM 6 REFERENCE SLIP

REV. [illegible]59 OFFICE OF MINERALS EXPLORATIO[illegible]

TO:		DATE	INITIALS
1.	Chief, Div. of Exploration Operations	2/9/65	
2.			
3.			
4.			
5.	D. R. MacLaren		

OFFICIAL COPY
O. M. E.
RECEIVED
FEB 11 1965

FROM: Acting Fld. Officer, Reg. 1

INITIALS	CODE
	120

FOR: Check items for action desired

X Action ____ Reply for signature of ____

____ Approval ____ Investigate ____ Surname

____ Comment ____ Recommendations ____ Signature

____ Conference ____ Rewrite ____ File

____ Instructions ____ Your information

REMARKS: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska
Contract 2173

Transmittal of the Gov't., Audit, and Fiscal Section's copies of Amendment No. 4.

One

OFFICIAL COPY
O. M. E.
RECEIVED
FEB 5 1965

INITIALS	CODE
ama	8 00
Fagan	12 00 m
	120

So. 157 Howard Street
Spokane, Washington 99204
February 3, 1965

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
3710 Brooklyn Avenue N.E.
Seattle, Washington 98105

Re: OME-6904 (Gold-Silver)
Keystone Mines
Fairbanks District, Alaska
Contract R173

Dear Mr. Nordale:

In accordance with your request of January 11, 1965, enclosed are the original and four copies of Amendment No. 4 signed by the Acting Director for the Government.

If the proposed amendment is satisfactory to you, please sign all five copies, retain the Operator's copy, and return the other copies to this office.

If the amendment is not satisfactory, please return all copies unsigned to this office with a statement of your proposed changes for consideration.

Sincerely yours,

D. R. MacLaren
Acting Field Officer, OME
Region I

Enclosures

cc: J. A. Herdlick

OME
MacLaren

Director's Reading File
Resources Research Branch Chief

MLSmelser:mls

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
1/29	Murphy	120
	GL	130
1/29	Johnson	110
		100
1/29	Cae	220
		120

JAN 29 1965

Memorandum

To: Acting Field Officer, Region I

From: Chief, Division of Exploration Operations

Subject: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska
Contract 2173

In accordance with the Operator's request of January 11, 1965, enclosed are the original and four copies of Amendment No. 4, signed by the Acting Director for the Government. Also enclosed is an extra copy for field use.

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

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

George C. Selfridge (gla)

Enclosures

MMerrithew/mm (1/29/65
cc: Director's Reading File
Review Committee
Docket

MME FORM 6 REFERENCE SLIP

REV. 2-5 OFFICE OF MINERALS EXPLORATION

TO:	DATE	INITIALS
1. ~~Associate Solicitor, 6042~~		
2. F. M. Murphy, 4455		
3.		
4.		
5.		
FROM: George C. Selfridge		

FOR: Check items for action desired

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

REMARKS:

SOLICITOR JAN 27 5

RECEIVED
JAN 26 1964
Division of Mineral Resources
and Genenral Legal Services

JAN 2 1965 FOR SIGNATURE

INTERIOR DEPT.

INTERIOR DEPT.
JAN 26 1965
SOLICITOR

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

In accordance with the
Operator's request of
Jan 14, 1965, enclosed ote

DRAFT 1/25/65
FMMurphy/mm

EXPLORATION CONTRACT
KEYSTONE MINES, INC.
OME-6304

AMENDMENT NO. 4

It is agreed this _____ day of _____, 1965, between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, hereinafter referred to as the "Government," and Keystone Mines, Inc., hereinafter referred to as the "Operator," that Exploration Contract 2173 (OME-6304), dated August 29, 1963, as amended, is further amended as follows:

1. (a) Work under the contract shall be suspended during the period beginning January 11, 1965, and ending not later than May 1, 1965.

(b) No costs incurred by the Operator during the suspension shall be allowable for contribution by the Government.

(c) The Government will not contribute to any cost of rehabilitation or repair which in its opinion would not have occurred if there had been no suspension of the work.

(d) The Operator at its own cost and expense, without contribution by the Government, during the period of suspension shall preserve and protect the project work.

2. The time fixed by the contract for the completion of the work is extended from 18 months to 24 months, or until August 29, 1965.

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

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

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By _____
Acting Director, Office of Minerals Exploration

KEYSTONE MINES, INC.

By _____

Title _____

Orig

KEYSTONE MINES, INC.
P. O. Box 630
Fairbanks, Alaska

OFFICIAL COPY
O. M. E.
RECEIVED
JAN 25 1965
INITIALS | CODE
ama | 800
120
120

December 31, 1964

Mr. D. R. MacLaren
Acting Field Officer, OME
Region I
U. S. Dept. of the Interior
OFFICE OF MINERAL EXPLORATION
South 137 Howard Street
Spokane, Washington 99204

Re: OME 6304 (Gold_Silver)
Contract 2173 as amended
Keystone Mines, Inc.
Fairbanks District, Alaska

Dear Mr. MacLaren,

In Accordance with the specifications of our OME contract, as amended, I am forwarding you herewith the original and three copies of:

Operator's Monthly Voucher (MME Form 60), Dec. 1964
Operator's Progress Report (MME form 61), Dec. 1964
Operator's Narrative Report, including
Narrative
Sketch map 516 showing work accomplished during Dec. 1964
Assay Reports

Reimbursement requested for Dec. 1964 is for 30[illegible] feet of drift and 30[illegible] feet of drift timbering.

I would appreciate receiving additional copies of forms 60 and 61.

RECEIVED
JAN 14 1965
OME

Very truly yours,

Arnold M. Nordale

Arnold M. Nordale
President
KEYSTONE MINES, INC.
P. O. Box 630
Fairbanks, Alaska

AMN:MM:jr
Enclosures

MME FORM 6 REFER[redacted] SLIP

REV. 2-59 [redacted]FFICE OF MINERALS EXPLORATION [redacted]

TO:	DATE	INITIALS
1. Chief, Geo Field Operations	1/22/65	
2.		
3.		
4.		
5.		
FROM: Acting Field Officer, Region I		

FOR: Check items for action desired

____ Action ____ Reply for signature of _____

____ Approval ____ Investigate ____ Surname

____ Comment ____ Recommendations ____ Signature

____ Conference ____ Rewrite ____ File

____ Instructions X Your information

REMARKS:

Forwarding correspondence re:

OME-630A (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2173

OME-631G (Silver-Gold)
Claims A + Another Bonebreaker
HSB Top et al Claims
Lincoln County, Idaho
Contract 2178

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

Fairbanks, Alaska
January 16, 1965

COPY
O. M. E.
RECEIVED
JAN 25 1965
INITIALS
ama 1800
120 m
120

Mr. J.A. Herdlick
Director, Area VIII, Mineral Resource Office
Bureau of Mines
P.O. Box 2688
Juneau, Alaska

Re: OME - 6304 (Gold-Silver)
Keystone Mines, Inc.
Fairbanks District, Alaska
Contract 2173

Dear Jerry:

Keystone Mines are submitting a request to OME for permission to suspend their operations under Contract 2173 until May 1965. The severe weather, -50° F. and colder, imposes numerous handicaps that add materially to operating costs. The State Highway Department has ceased snow removal on the Fairbanks Creek road and Keystone is obliged to maintain the access to the property. Because of the added costs imposed by current physical handicaps I think Keystone's request is reasonable and makes good sense.

Sincerely yours,

Bruce I. Thomas

RECEIVED
JAN 22 1965
OME

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
So. 157 Howard Street
Spokane, Washington 99204

January 19, 1965

OFFICIAL COPY
O. M. E.
RECEIVED
JAN 22 1965

INITIALS	CODE
ama	800
[illegible]	170
	170

Memorandum

To: Chief, Division of Field Operations

From: Acting Field Officer, Region I

Subject: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska
Contract 2173

The enclosed Thermo-Fax copy of a letter dated January 11, 1965, from the subject Operator requests authorization for a recess to end on or before May 1, 1965.

No date for starting the recess is given, and it is possible that he will attempt to continue operating inefficiently until he hears from this office. I shall therefore advise him that his request has been forwarded for consideration and that if he has stopped work prior to January 25, 1965, there will be no problem.?

It is recommended that the request be approved from January 25 to May 1, 1965, and that the time to complete the project be extended from 18 to 24 months, or August 29, 1965.

D. R. MacLaren

Enclosure

One

3710 Brooklyn
Seattle Wash
Jan. 11, 1965

Mr D R McLaren
Acting Field Officer
Bureau of Mines & Exploration
South 10 Howard Street
Spokane Wash - 99202

Dear Mr McLaren

I was informed from Burnaby by telephone yesterday that one of the attorneys in the other Hand Mine has found it too costly to carry on the exploration work and has requested that the work be suspended until spring or about May 1st

I have delayed writing you as I expected a detailed statement from Mr Birch but as it has not come I feel you should be informed of the situation I presume the trouble is mainly the cost of the shaft the freezing of the water discharge pipe

At this time we request that Mr H be granted the privilege of discontinuing his work until May 1st & we request that the work be resumed from that date

RECEIVED
JAN 1 1965

Yours truly
Keystone Mines
Ltd

So. 157 Howard Street
Spokane, Washington 99204

January 19, 1965

OFFICIAL COPY
O. M. E.
RECEIVED
JAN 22 1965
INITIAL & DATE
ama 1/20
120
120

Mr. Arnold M. Nordale
Keystone Mines, Inc.
3710 Brooklyn Avenue, N.E.
Seattle, Washington 98105

Re: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska
Contract 2173

Dear Mr. Nordale:

Your letter of January 11, 1965, is not clear whether the requested recess should start January 7, the day Mr. Birch telephoned you, January 11, the date of your letter, or some other date. Your request has been forwarded to OME in Washington, D. C., for consideration with the suggestion that the recess be authorized from January 25 to May 1, 1965. If you have already closed down, the short period between the closing date and January 25 should present no problem.

Sincerely yours,

D. R. MacLaren
Acting Field Officer, OME
Region I

cc:OME
Herdlick
MacLaren

Director's reading file
Resources Research Branch Chief

DRMacLaren:my

OME

OFFICIAL FILE COPY
O. M. E
RECEIVED DEC 30 1964

DATE	INITIALS	CODE
12/30	ama	800
		120
		120

So. 157 Howard Street
Spokane, Washington 99204
December 28, 1964

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
3710 Brooklyn Avenue N.E.
Seattle 5, Washington

Re: OME-6304 (Gold-Silver)
Keystone Mines
Fairbanks District, Alaska
Contract 2175

Dear Mr. Nordale:

In accordance with your request of November 9, 1964, enclosed are the original and four copies of Amendment No. 3 signed by the Acting Director for the Government.

If the proposed amendment is satisfactory to you, please sign all five copies, retain the Operator's copy, and return the other copies to this office.

If the amendment is not satisfactory, please return all copies unsigned to this office with a statement of your proposed changes for consideration.

Sincerely yours,

D. R. Maclaren
Acting Field Officer, OME
Region I

Enclosures

cc: J. A. Hardlick
OME
MacLaren

Director's Reading File
Resources Research Branch Chief

MLSmelser:mls

OME(2)

OFFICIAL FILE COPY
O. M. E.
RECEIVED DEC 30 1964

DATE	INITIALS	CODE
12/30	ama	800
		120 M
		120

Re: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks Dist., Alaska
Contract 2173

[illegible]

[illegible] a complete

part of all information gained together
with a statement of the good records
of a page milled when the work is completed.
Since receiving your letter I have written
on this information and I will forward
it to you as soon as I receive it

Sincerely yours
Donald M. Herd Jr.

RECEIVED
DEC 28 1964
OMF

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
12/14	Murphy	120 M
	Fisher	800
	GCS	130
12/14	Johnson	110
1	[illegible]	100
12/15	Cole	220
		120 M

DEC 1 5 1964

Memorandum

To: Acting Field Officer, Region I

From: Chief, Division of Exploration Operations

Subject: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska
Contract 2173

In accordance with the Operator's request of November 9, 1964, enclosed are the original and four copies of Amendment No. 3 signed by the Acting Director for the Government. Also enclosed is an extra copy for field use.

If the proposed amendment is satisfactory to you and the Operator, all five copies should be signed by the Operator. Thereafter, please distribute the copies in the usual manner.

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

George C. Selfridge (gla)

Enclosures

FMMurphy/mm
12/14/64
cc: Director's Reading File
Review Committee
Docket

23263

MME FORM 6 REFERENCE SLIP

REV. 2- OFFICE OF MINERALS EXPLORATION

TO:	DATE	INITIALS
1. ~~Associate Solicitor, 6042~~		
2. F. M. Murphy, 4455		
3.		
4.		
5.		
FROM: George C. Selfridge		

FOR: Check items for action desired

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

REMARKS:

Dec. 7 1964
ASSOC. SOLICITOR
MINERAL RESOURCES

INTERIOR DEPT. SOLICITOR
DEC 7 - 1964
SOLICITOR

DEC 4 1964

FOR SIGNATURE

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

In accordance with the operators request of November 9, 1964 - etc.

Ome(2)

Ro. 157 Howard Street
Spokane, Washington 99204
December 9, 1964

RECD. Dec 8 1964

DATE		
12/8	CST	800
12/12	[illegible]	120
		120

Air Mail

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
P. O. Box 650
Fairbanks, Alaska

Re: OME-6304 (Gold-Silver)
Keystone Mines
Fairbanks District, Alaska
Contract 2173

Dear Mr. Nordale:

I have been advised by our Washington office that an amendment will be prepared along the lines requested in your letter of November 9, 1964.

A review of the files causes us some concern regarding the progress of the OME work. Starting in November 1963, an average of only 24 feet of shaft per month was sunk for the first 3 months. Progress then declined to 16 feet in February, 8 in March, none in April, 10 in May, none in June (but 17.5 feet of station was driven during that month), and in July, 6 feet of shaft plus 15.5 feet of cross-cutting and drifting. Nothing was done in August, in September the shaft was sunk 13 feet, and only a little advance was made in October. In the meantime, between 200 and 300 feet of drifting and raising was done on the 50-foot level to the detriment of OME work. With two contractors on the job the OME work should progress more rapidly especially if both faces on the 147-foot level are advanced simultaneously. We would like to see a more rapid rate of advance on the remaining OME drifting as the completion date under the contract is February 29, 1965. — March 1, 1965

Apparently, you have been mill testing and milling stoped ore from the 50-foot level. If any sales of gold concentrates or ore have been made from production after the date of the contract, August 29, 1963, royalty thereon is due the Government. Will you please submit a detailed account of all ore milled since that date and the recoveries therefrom either in the form of free gold or concentrates and any sales that have been made.

Sincerely yours,

D. R. MacLaren
Acting Field Officer, OME
Region I

cc: J. A. Herdlick

Director's Reading File
Resources Research Branch Chief

cc: OME(2)
MacLaren
Voucher file
CFY

DRMacLaren:mls

DRAFT
FMMurphy/mm 12/2/64
Rewritten:
GCSelfridge/gla/mm 12/3/64

EXPLORATION CONTRACT
KEYSTONE MINES, INC.
OME-6304

AMENDMENT NO. 3

It is agreed this _____ day of _____, 19 ___, between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, hereinafter referred to as the "Government," and Keystone Mines, Inc., hereinafter referred to as the "Operator" that Exploration Contract 2173 (OME-6304), dated August 29, 1963, as amended, is further amended effective the date of the contract as follows:

. In Exhibit A of the contract:

1. Under General Provisions, the third paragraph is deleted and replaced as follows:

> The Government will not participate in the cost of work performed at locations which are within 100 feet of any land not subject to this contract, with the exception that work performed immediately east of the shaft may approach the south side line of the Kawalita claim but not pass beyond the vertical projection thereof.

2. Under Description of the Work, the fifth paragraph as amended in Amendment No. 2 is deleted and replaced as follows:

> From the shaft station a crosscut shall be driven southerly to intersect the vein, from where a drift shall be driven easterly along the vein. From this drift at a point not more than 50 feet from the shaft station crosscut, drive a "bypass" drift westerly in the hanging wall of the vein in such a manner that it may leave a 30-foot pillar and then will intersect

the vein at a point approximately 90 feet west of the shaft station crosscut from where drifting will be continued westerly on the vein. With prior Government approval, crosscuts may be driven into the footwall and/or hanging wall of the [redacted] vein, but the aggregate length of such crosscuts shall not exceed 100 feet nor all of the drifting and/or crosscutting exceed an aggregate of 300 feet.

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

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By _____
Acting Director, Office of Minerals Exploration

KEYSTONE MINES, INC.

By _____

Title _____

DRAFT 12/2/64
EMMurphy/mm

EXPLORATION CONTRACT
KEYSTONE MINES, INC.
OME-6304

AMENDMENT NO. 3

It is agreed this _____ day of _____, 196__, between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, hereinafter referred to as the "Government," and Keystone Mines, Inc., hereinafter referred to as the "Operator" that Exploration Contract 2173 (OME-6304), dated August 29, 1963, as amended, is further amended effective the date of the contract as follows:

In Exhibit A of the contract:

1. Under General Provisions, the third paragraph is deleted and replaced as follows:

The Government will not participate in the cost of work performed at locations which are not within the outer boundary of the property described in Annex I of this contract.

2. Under Description of the Work, the fifth paragraph is deleted and replaced as follows:

From the shaft station a drift shall be driven in an easterly direction along the vein structure. In the south wall of the east drift at a point not more than 50 feet from the shaft station, drive a ~~XXXXXXXXX~~ semicircular crosscut to enter the vein structure at a point about 90 feet west of the shaft station. The crosscut shall be designed to leave approximately a 30-foot pillar of ground between it and the caved ground on ~~XXX~~ the vein structure west of the station. From the bypass crosscut

a drift shall be driven in a westerly direction along the vein structure. Not more than an aggregate of 800 feet of bypass crosscut and drifts easterly and westerly along the vein structure shall be driven. With prior Government approval crosscuts may be driven into the footwall and/or hanging wall of the vein structure. The aggregate length of such crosscuts shall not exceed 100 feet.

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

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By _____
Acting Director, Office of Minerals Exploration

KEYSTONE MINES, INC.

By _____

Title _____

DRAFT

12/3/64

GCSelfridge/gla

1. The Government will not participate in the cost of work performed at locations which are within 100 feet of any land not subject to this contract, with the exception that work performed immediately east of the shaft may approach the south side line of the Kawalita claim but not pass beyond the vertical projection thereof.

2. Under Description of the Work, the fifth paragraph as amended in Amendment No. 2 is deleted and replaced as follows:

> From the shaft station a crosscut shall be driven southerly to intersect the vein, from which ~~From the crosscut~~ a drift shall be driven easterly along the vein ~~structure~~. From this drift at a point not more than 50 feet from the shaft station crosscut, drive a "bypass" drift westerly in the hanging wall of the vein in such a manner that it may leave a 30-foot pillar and then will ~~again~~ intersect the vein at a point approximately 90 feet west of the shaft station crosscut from where drifting will be continued westerly on the vein. With prior Government approval, crosscuts may be driven into the footwall and/or hanging wall of the vein, but the aggregate length of such crosscuts shall not exceed 100 feet nor ~~shall~~ of the drifting and/or crosscutting exceed an aggregate of 800 feet.

OFFICIAL FILE COPY

Date	Surname	Code
11/25	GCS	130
11/27	FMM	120M
11/27	Fisher	800
11/27	Johnson	110
"	in leave	100
"	fh	220
		120M

NOV 27 1964

Memorandum

To: Acting Field Officer, Region I

From: Chief, Division of Exploration Operations

Subject: CMR-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska
Contract 2173

We have reviewed your memorandum of November 20, 1964, and enclosures relating to the on-site examination of Bruce Thomas and requested amendments.

We shall amend the contract to allow work east of the shaft to approach the south side line of the Kawilita claim closer than the 100 feet now stipulated in the contract. Our main reason for limiting work near the property boundaries sometimes as much as 500 feet is not because of extralateral rights but because of the possibility of the discovery of blind veins or splits which might not crop out on the land in the contract and therefore, because of extralateral rights, the Government could not collect royalty on any production therefrom. It would seem that the Operator, for its own protection, would acquire an interest in Fraction No. 1 claim immediately to the south.

We shall also amend the contract to allow the requested drifting around the shaft station although, without having seen the area, it seems to be a lot of dead work for a new undertaking. The Operator should try to keep the extra footage to a minimum. It would appear that a Y switch would be better than putting a curve in the run-around.

To date we have received no royalty under the contract. Apparently the Operator has been mill testing and milling stoped ore from the 50-foot level for several months. Possibly no sales have been made. If they have, the royalty is due on any production after the date of the contract, August 29, 1963. The Operator should submit detailed information of all ore milled since that date and the recoveries therefrom either in the form of free gold or concentrate.

23263

Progress of the work set forth in the contract has been disappointing. Starting in November 1963, an average of 24 feet of shaft was sunk for the first three months. It then dropped off to 16 in February, 8 in March, nothing in April, 10 in May, nothing in June (but the station was driven), and 6 feet in July with 15.5 feet of drifting and cross-cutting. Nothing was done in August, and 13 feet of shaft was sunk in September. As the shaft length is approximate, it is not necessary to deepen the shaft to the full 126 feet if it now suffices at its present length. Only a little footage was driven in October. In the meantime, the Operator has drifted and raised between 200 and 300 feet on the 50-foot level to the detriment of the CME work. Now, with two contractors on the job, anything could happen with the limited hoisting capacity. For efficiency of the CME operation, both faces should be driven simultaneously on the 147-foot level. It might be well to mention to the Operator that we would like to see a more rapid rate of advance on the remaining drifting. Under the contract, the period for completion of the work is February 29, 1965.

George C. Selfridge gla

GCSelfridge/gla (11-25-64)
cc to: Director's Reading File
Docket
Review Committee
Mr. Selfridge

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
So. 157 Howard Street
Spokane, Washington 99204
November 20, 1964

OFFICIAL FILE COPY
O. M. E.
RECEIVED NOV 23 1964

DATE	INITIALS	CODE
11/23		100
11		~~110~~
11/24		800
		~~120~~
11/27		120

Memorandum

To: Chief, Division of Exploration Operations

From: Acting Field Officer, Region I

Subject: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2173

Enclosed are two copies each of:

1. Interim Inspection Report, dated November 2, 1964.

2. Supplement to the Interim Report, dated November 9, 1964.

3. Request for an amendment to the contract, dated November 9, 1964.

Also enclosed are two copies of an Equal Employment Report dated October 31, 1964. The Interim Inspection Report and the supplement, both prepared by Bruce I. Thomas, give an exceptionably clear description, not only of the work completed under the contract, but also of the geologic considerations and the ground conditions that make the requested amendment reasonable.

In view of Thomas' recommendation and Oregon the difficulty recently encountered by an OME Operator in Montana, approval of the requested bypass drift to the west is strongly recommended. Also, in view of and in concurrence with the final paragraph of page 2 of Thomas' November 2 inspection report, it is recommended that the apparent vein flexures and offsets that may be expected in the east drift be considered as exceptional conditions justifying the easing of the restriction that OME will not contribute to any work done within 100 feet of the Kawilita south boundary. To sort out those portions of the east drift which may, because of vein flexure be within 100 feet of the south boundary from those which may not, could be administratively confusing. Moreover, since the vein outcrops well within the Kawilita Claim, the Government's right to royalty is assured by extralateral rights as stated at the top of page 2 of the examination report by Thomas dated June 28, 1963.

D. R. MacLaren

D. R. MacLaren

Enclosures
cc: J. A. Herdlick

Area VIII

November 13, 1964

MEMORANDUM

To : D. R. MacLaren, Acting Field Officer OME, Region I

From : Area Director, Area VIII

Subject: Interim Inspection,
OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Fairbanks District, Alaska
Contract 2173

Enclosed is an interim report by Bruce Thomas on the progress and outlook at the subject project as requested by your memorandum of September 2, 1964.

Also enclosed is Bruce's discussion of certain conditions that have developed at the Keystone project and his recommendations relative to the amendments to the contract that have been proposed by Mr. Nordale.

You will note that both of Bruce's memorandums are addressed to me; however, I am sending them on to you without editing or conversion to a formal report as I think you would rather have the information first hand and as soon as possible.

Best regards.

J. A. Hardlick

Enclosure

RECEIVED
Vola
NOV 16
Air Mail

OME (2)

KEYSTONE MINES, INC.
P. O. Box 630
Fairbanks, Alaska
November 9, 1964

Mr. D. R. MacLaren
Acting Field Officer
Office of Minerals Exploration
South 157 Howard Street
Spokane, Washington 99204

OME 6304
Contract 2173
Keystone Mines, Inc.
Fairbanks, Alaska

Dear Mr. MacLaren:

As noted in paragraph 4 of the Narrative report for the month of October, a drift on the vein at the 147 foot level was started in a westward direction. The ground encountered was badly broken and consisted largely of a mud like material, which was very difficult to hold. A heavy run occurred which brought an overload on the timbering and caused several sets to shift, settle and buckle. It has been deemed inadvisable to attempt to rehabilitate this section of the drift as doing so will very likely cause another run which would probably endanger the main station timbering.

It is proposed to detour this section by constructing a by-pass drift in the hanging wall leaving a substantial pillar to protect the station and prevent any further ground action nearby.

We therefore apply for an amendment to Contract No. 2173 in conformity to the accompanying sketch and request that the detour drift apply as a part of the 800 feet of drifting in said contract.

Also, as shown in the sketch of vein positions, it appears that the vein, if projected eastward onits present bearing, will approach within 100 feet of the southerly side line of the claim at approximately 220 feet. This will allow for a total drift distance of only 660 feet.

We therefore request that Contract No. 2173 be also amended to permit the eastward drift to be constructed a distance of 360 feet with about 140 feet of it slightly within the 100 foot limit. A close survey will be maintained to know the exact position and strike of the vein relative to the southerly side line of the claim at all times.

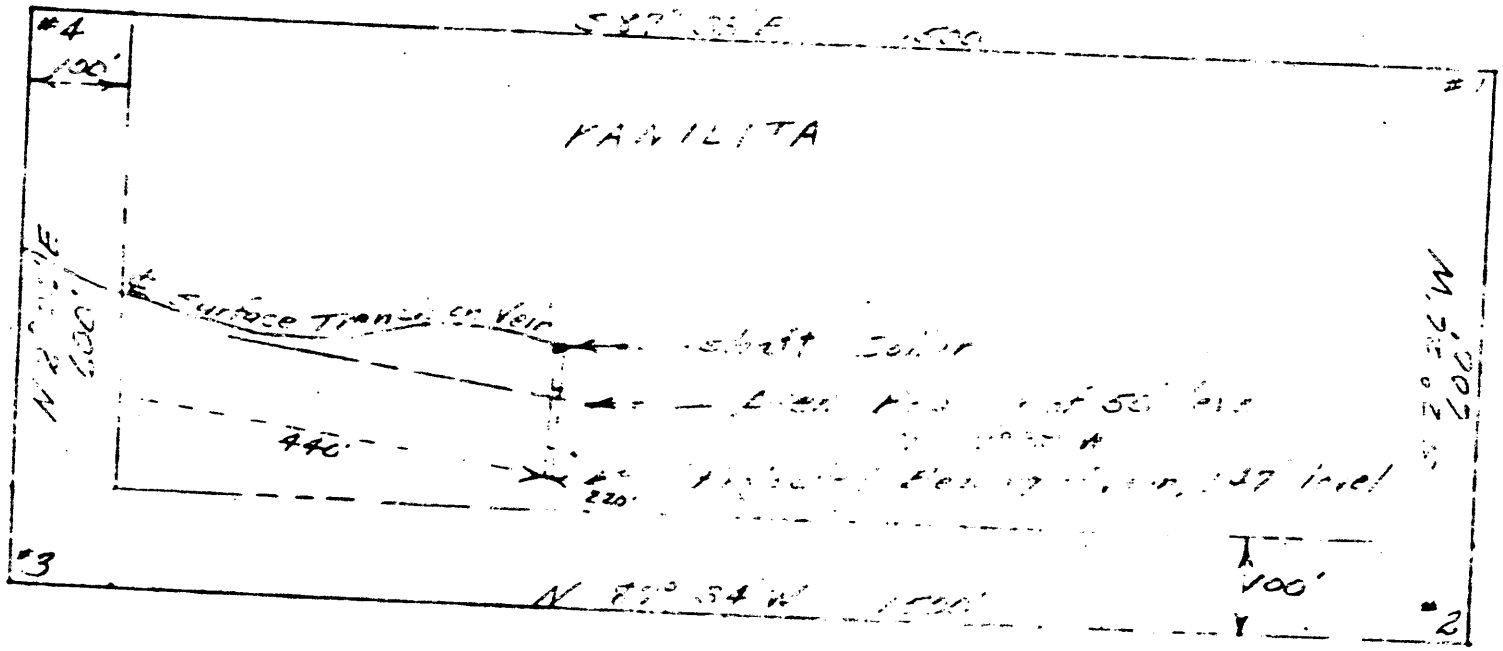
We presently plan to extend the eastward drift until we have your approval to proceed with the by-pass drift.

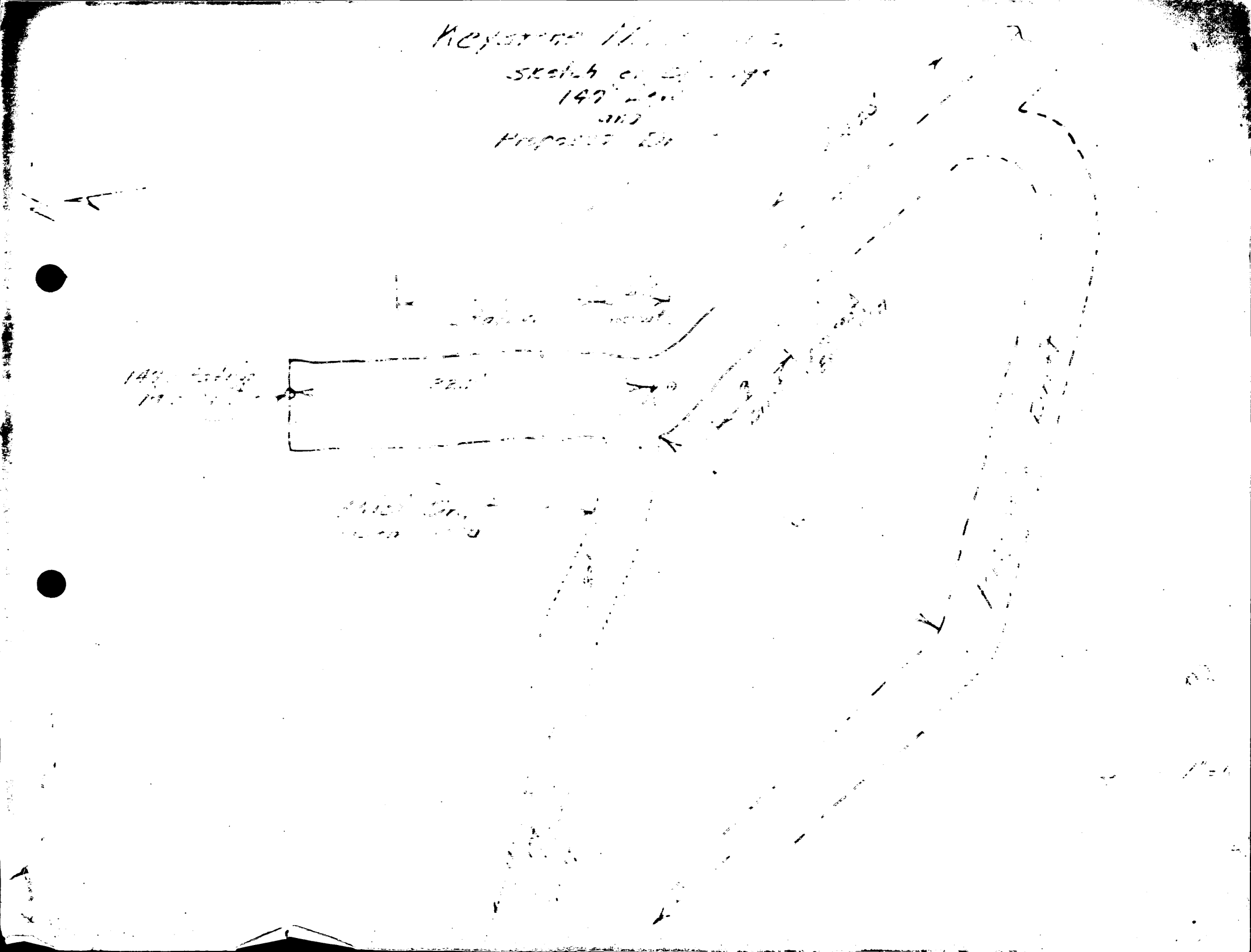
Very truly yours,
Keystone Mines, Inc.
Arnold M. Nordale
Arnold M. Nordale
President

RECEIVED
Via
NOV 12 1964
Airmail
OME
SPOKANE, WASHINGTON

Keystone Mines, Inc.

Sketch of Vein Positions





Fairbanks, Alaska
November 9, 1964

Mr. J.A. Herdlick
Area Director, Area VIII Mineral Resources Office
U.S. Bureau of Mines
P.O. Box 2688
Juneau, Alaska

Re: OME - 6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mine
Fairbanks District, Alaska
Contract 2173

Dear Jerry:

Mr. Nordale and also Mr. Birch arrived in Fairbanks subsequent to the transmission of my interim report on the Keystone Mines. I had hoped that I could have talked with Mr. Nordale about his objectives for the 147 level and also about ground conditions at the 147 station before sending in a report. Now I wish to submit this letter as a supplement to my letter of November 2nd.

I spent most of the morning of November 7 with Mr. Nordale, Mr. Beistline, and Mr. Birch going over Keystone's objectives on the 147 level. Discussion was centered around the possible trend of the vein in relation to the vertical projection of the south side line of the Kawilita claim, and ground conditions at the station and skip loading pocket. The discussion ended with the understanding that Mr. Nordale would apply to OME for two amendments to the contract; 1. permit the eastward drift to be constructed a distance of 360 feet with about 140 feet of drift between the 100 feet limitation and the south side line projection. 2. suspend present westward drifting and construct a by-pass drift in the hanging wall to allow for at least 30 feet of pillar around the station and skip loading pocket.

Both requests are fundamentally practical and I would recommend that OME consider amendments to the contract. I think that Mr. Nordale is not allowing enough margin on the eastward drift (1), or for eventualities in making the by-pass drift (2).

I believe Keystone should be permitted to drive the east drift in vein structure, without restriction to distance from shaft to face, to within at least 20 feet of the vertical projection of the south side line of the Kawilita. As long as a tight transit-tape survey is made there would be no chance of crossing into land not made a part of the contract. My reasoning is based summarily on the

apparent influence of local structure on the vein. The vein is near the crest and roughly parallels the axis of the Pedro-Cleary anticline. It most likely follows a fissure developed from tension stresses along the main structure. Locally the fissure was shaped from lines of weakness developed by premineral drag folds and faults, and subsequent to emplacement the vein was deformed by postmineral drag folds, and thrust and transverse faults. A warping parallel to the plane of the vein is probably caused by the multiplicity of stresses and other factors which produced the local complex structure. In general the vein is sinuous along strike and down dip, and in places it is offset by minor transverse faults. West of the shaft on the 50 level the vein is offset by minor cross faults which throw the vein southward along a general strike line. Projecting the same strike through the shaft to the east the vein would be thrown north by similar cross faults. (see diagram 1)

It is possible that the vein east of the shaft will be offset sufficiently northward by cross faults so that it will not come within the now established 100 feet limit, but cross faults west of the shaft are not numerous enough to indicate disruption of present trend. The sinuosity of the vein appears to be persistant enough so that in places it may bend and come within a few feet of the vertical projection of the side line of the claim. Therefore I think it would be judicious to allow Keystone more margin for drifting than is being requested.

Excessive run-ins, near the face of the west drift, caused from natural stoping over the back by crumbly or short ground, are superimposing loads which exceed the strength of sets and lagging. Some of the station sets are beginning to take weight as a result of these flows, I think it is advisable to suspend work in the west drift face and let the ground stabilize. Under the present circumstances I believe it unwise to advance the west face because any additional run-ins will only tend to cause excessive weight on sets at the station.

The proposal to leave about 30 feet of pillar at the station and the face of the west drift by drifting in the hangingwall from the east drift around to the vein on the west side of the shaft is practical. (see diagram 2) I think that as much as 175 feet of drift should be allowed for this by-pass. Without an allowance for this much drift I am afraid that curvature maybe tighter than is presently envisioned.

I wish to correct the last paragraph in my letter of November 2nd. Mr. Nordale advised me that Mr. Ebbert is operating the Cleary Hill mill and not Keystone. Keystone have no employees all work is being

done for Keystone under contract. Apparently Mr. Beistline was not fully aware of all the arrangements.

Kindest personal regards.

Sincerely yours,

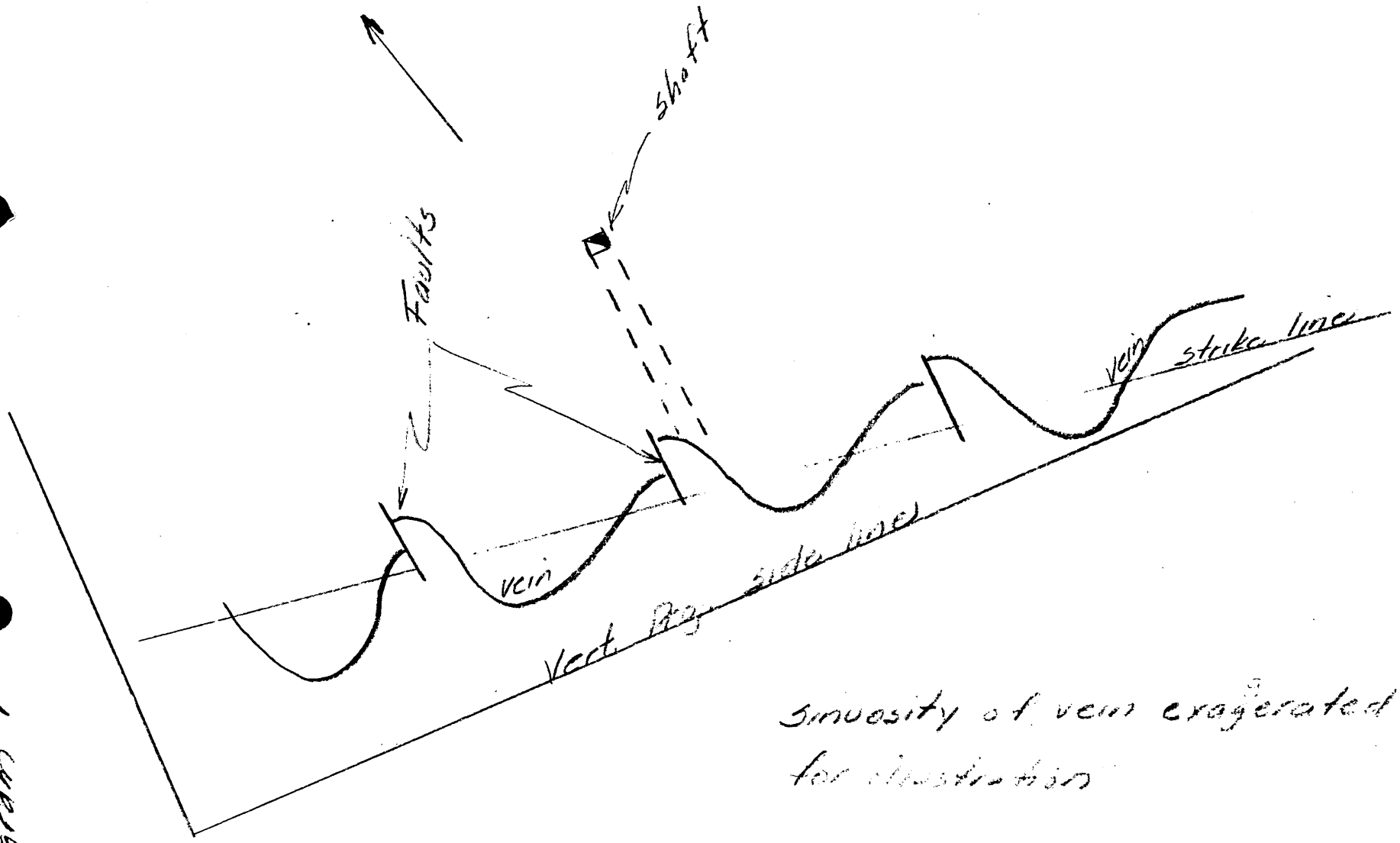
Bruce I. Thomas

Attachments

RECEIVED
Via
NOV 16 1964
Air Mail
OME
BOISE, IDAHO

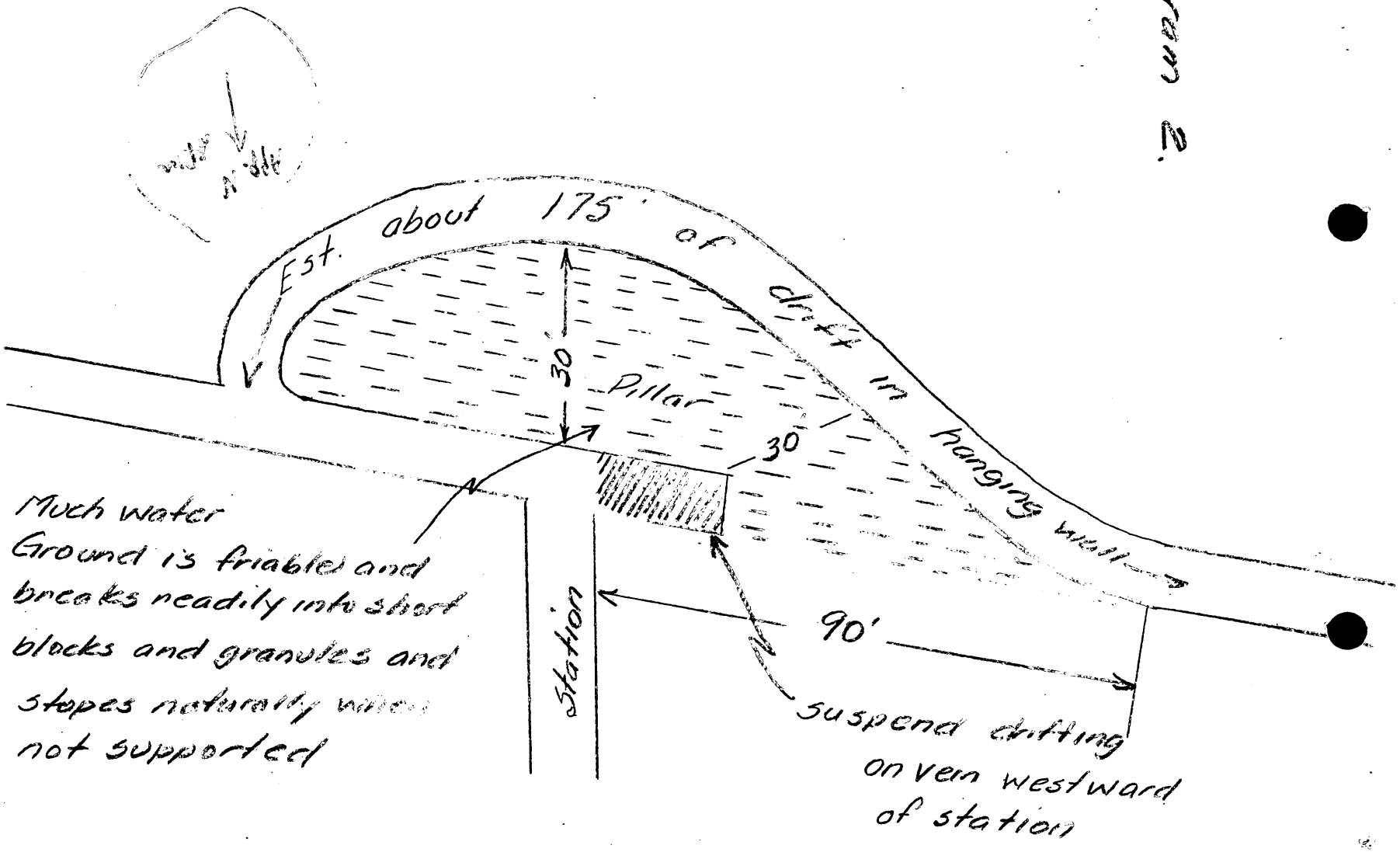
RECEIVED
NOV 12 1964
BUREAU OF MINES
JUNEAU, ALASKA

Diagram 1



Sinuosity of vein exaggerated for illustration

Diagram 2.


water
middle
Est. about 175' of drift in hanging wall
30'
Pillar
30
Station
90'
Much water
Ground is friable and
breaks readily into short
blocks and granules and
stopes naturally when
not supported
suspend drifting
on vein westward
of station

Ome 1

Fairbanks, Alaska
November 2, 1964

Mr. J.A. Herdlick
Area Director, Area VIII Mineral Resource Office
U.S. Bureau of Mines
P.O. Box 2688
Juneau, Alaska

Dear Jerry:

Interim inspection of the Keystone Mines was made October 31. I accompanied Earl H. Beistline to the property; Earl was making his usual end of the month progress inspection.

Overall progress at Keystone Mines, under the above captioned OME contract, is slow but the work completed todate conforms with contract specifications.

Keystone's contractor appears to be discouraged, almost to the point of despair, from on the job problems and from personal ones as well. The contractor situation is in the process of being resolved by Keystone; this in itself contirbutes much toward confusing and upsetting Mr. Ebbert the present contractor. According to plan Ebbert is to continue to stope from the upper level and drifting on the 147 level (under OME) will be undertaken by Mr. Birch. Mr. Birch is the same man that worked at the Little Squaw in the Chandalar. According to reports he will arrive in Fairbanks with equipment some time this week. At the moment work at Keystone seems to be in a state of "flux" and the sooner something crystallizes the less chance for deterioration of the current conformance with the OME contract. To date Keystone's work under OME has proceeded quite smoothly, and I am certain every effort will be made to continue to perform in this manner. I will discretely observe the transition of contractors at the property to see if there is any deviation from contract specifications.

The surface plant which includes, blacksmith shop, hoist and compressor house, headframe and miscellaneous storage facilities are adequate. The hoist is small but is safely operated within the limits of its capacity. Ore and waste handling at the surface is typical of most small operations. I think water disposal at the surface could be improved. Water is discharged a safe distance from the shaft collar but it is permitted toflow over intensely fractured vein and wall rock in the old open cut. I wouldn't be a bit surprised if some water is being circulated by this practice. With the present subfreezing temperatures icing of fractures will doubtless stop some water from returning underground.

The two-compartment shaft is down 176 feet on incline below the collar making a total of 123 feet of shaft under OME contract. To complete the shaft it is necessary to advance an additional 3 feet; this advance will make 126 feet of shaft from an established point 53 feet below the collar. The bottoming round was blasted but not mucked out at the time of inspection. As soon as this round is mucked and the bottom set is placed the shaft will be finished. Shaft sets, hoisting compartment, and manway are to specifications.

The collar of the shaft is about 550 feet East of the West end line of the Kawilita Lode Claim, and about 275 feet North of the South side line. It is located within permissible distances, as defined by OME, from both end and side lines of the claim. On the 147 level the center line of the drift on vein, at the end of the crosscut from shaft to vein, is about 135 feet North of the vertical projection of the South side line of the Kawilita. The drift at this point is at a loction permissible under contract requirement, Exhibit A, General Provisions, Paragraph 3. If the general strike of the vein at the 147 level conforms with the general strike, 282°, of the vein on the 50 level then drifting eastward on vein at the 147 will be restricted to about 200 feet from the shaft. (See attached diagram) By advancing the drift eastward from the aforsaid point 210 feet the face of the drift will be approximately 100 feet from the vertical projection of the South side line of the claim. The Government will not participate in costs of work performed at locations which are within 100 feet of any land not subject to the contract. This means that the drift could not be advanced eastward from the shaft station more than 210 feet because land along the South side line of the Kawilita is not included as part of the contract. A survey station at the collar of the shaft is tied into the corners of the patented Kawilita by closed transit-tape survey therefore the collar is accurately located in relation to end and side lines. Another survey station in the shaft at the 50 level is tied into the collar survey station by transit-tape, but points in the shaft below the 50 level are from Brunton -tape. The survey stations in the shaft and on vein at the 147 appear to be accurate enough to demostrate what can happen if the vein at 147 trends the same as vein on the 50.

It has been my impression that one of the primary objectives of the project is to explore that section of vein between the shaft and the southward projection of the Nordale adit on the Keystone Lode Claim. The principal reason for this, as I understand it, is to determine if the width and values of vein would justify extending the Nordale adit to intersect the vein at adit level. I have not discussed the drifting situation on the 147 level with Mr. Nordale so do not know if he is aware of the possible developments and has changed his plans. Nevertheless I am of the opinion that Keystone should continue down shaft with their transit-tape

so that they will not become involved in the embarrasing position of not being able to take full advantage of OME participation.

The station and skip loading pocket at the 147 level are complete. The station measurements conform to specification and timbering is standard 8" x 8" sets. The loading pocket has a measured capacity of over 400 cubic feet which makes it at least 50 cubic feet larger than OME contract requirement.

The size mine rails, airlines, waterlines, and ventilating tubing are as specified.

That portion of the shaft under OME is in the footwall of the vein so it has not been necessary to do much if any sampling. I have been informed that Keystone has provided for saving splits of all sample pulps. Mr. Nordale and Mr. Schreiber are not in Fairbanks so I was unable to follow through with their exact sampling proceedures.

Requirements relating to Equal Employment Opportunity Under Government Contracts were discussed with Mr. Ebbert. Enclosed is the memorandum, submitted by Mr. MacLaren on the subject. Ebbert stated that he hired one negro but he failed to show up on the job site. At the present time he has two Indians on the job and he said that he is willing to hire anyone who is qualified to do the job as long as he is willing to work. As far as I can learn there have been no complaints about Keystone's or Keystone's contractor on hiring.

Ore is being stopped from the 50 level and milled at Cleary Hill. I do not know what the tonnage is or the recovery todate; I presume that Mr. Nordale is keeping Mr. MacLaren advised. Keystone has two millmen and a truck driver on their payroll. I stopped at the mill on the way from the mine to Fairbanks but did not spend much time there.

Enclosed is the Juneau file on the captioned OME contract.

Sincerely yours,

Bruce I. Thomas

Encl.

RECEIVED
Via
NOV 16 1964
Air Mail
OME
WASHINGTON

Docket copy

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
So. 157 Howard Street
Spokane, Washington 99204

Date: Oct. 31, 1964

Memorandum

To: Compliance Officer

From: Acting Field Officer, Region I

Subject: Equal Employment Opportunity Under Government Contracts
OME-6304 (Gold-Silver)
Operator: Keystone Mines, Inc.
Name of Property: Keystone Mines
County-State: Fairbanks District, Alaska
Contract No. 2173

I have obtained the following information from my visit to the operating project under the subject contract:

1. Number of all employees — 5
2. Number of women employees — None
3. Number of Negro employees — None
4. Number of other minority groups (Indian, ~~Eskimo, Oriental, etc.~~) — 2
5. Was employment through a union? — No
6. Distance to the closest union headquarters — About 30 miles
7. Are the discrimination posters prominently displayed? — Yes
8. If employment was through a union, was the union furnished Standard Form 38? — --
9. If employment was not through a union, in what manner was employment made? — State Employment Office and local recruiting by Ed Ebbert, the present contractor.
10. Acts of intimidation matter has been discussed with Mr. Ebbert, the independent contractor — Yes

6304

OFFICIAL FILE COPY O. M. E RECEIVED SEP 4 1964		
DATE	INITIALS	CODE
		120M

No. 157 Howard Street
Spokane, Washington 99204
September 2, 1964

Memorandum

To: J. A. Hardlick, Area Director, Area VIII Mineral Resources Office, Juneau, Alaska

From: Acting Field Officer, OME, Region I

Subject: OME Alaska Contracts

Please extend our thanks to Kimball for the fine job he did with the trenches at Rowe's property.

I understand that the drilling by Sunnmna Gold, Inc., on Prince of Wales Island has been discontinued, but whether temporarily or permanently I will not know until Frank Duval returns to Spokane about the 15th. According to Mrs. Duval, who telephoned me yesterday, the drilling was stopped at the insistence of Sunnmnto who is considering taking over the property and is currently carrying on an I.P. Survey.

Little Squaw did not get off to an early start due to financial difficulties, and I do not know just how much OME work, if any, they may have done. In any case the contract is in default unless they sign an amendment providing for a recess during last winter and a pseudocertification. It is the latter they object to.

6304

That leaves only Keystone Mines, Inc., which has been working right along. According to their August voucher, the following contract work has been completed:

110 ft of shaft sinking (starting 53 ft below the collar)

17.5 ft of shaft station

4 station sets

15.5 ft drifting and/or crosscutting

15.5 ft timbering drift and/or crosscut

The last inspection was made early in February 1964 by Bruce Thomas. We would appreciate it if you could have him or someone else visit the property before access becomes too difficult, in order to check

the total advance to that date and submit a brief report of conditions, outlook for the future, and so on -- in other words, make an interim inspection.

As I mentioned in my letter of June 4, 1964, we now have to make an annual report under the Equal Employment provision of the contract. I have enclosed a form for this report. Please ask whoever makes the inspection to fill out the form while he is on the property and return it. Item 10 is relative to whether or not any group has tried to intimidate the Operator either to hire or not to hire because of race, color, or creed. Filling in the data and blank spaces with pencil is O.K.

We have just received an application from Valdez Mines, Ltd., for a nickel, copper, and iron project at the Spirit Mountain property, but the application has not yet been referred to the field, however, I thought I'd alert you to the possibility.

D. R. Maclaren

Enclosure

cc: CME ✓

Director's Reading File
Resources Research Branch Chief

DRMaclaren:mls

OFFICIAL FILE COPY
O. M. E
RECEIVED MAY 6 1964

DATE	INITIALS	CC
5/6	[illegible]	800
5/6	Murphy	500

No. 157 Howard Street
Spokane, Washington 99204
May 4, 1964

Air Mail

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
Box 2415
Juneau, Alaska

Re: OME-6304 (Gold-Silver)
Keystone Mines
Fairbanks District, Alaska
Contract 2173

Dear Mr. Nordale:

In accordance with your request of April 10, 1964, enclosed are the original and four copies of Amendment No. 2, signed by the Acting Director for the Government.

If the proposed amendment is satisfactory to you, please sign all five copies, retain the Operator's copy, and return the other copies to this office.

If the amendment is not satisfactory, please return all copies unsigned to this office with a statement of your proposed changes for consideration.

Sincerely yours,

D. R. Maclaren
Acting Field Officer, OME
Region I

Enclosures

cc: J. A. Herdlick
OME(2)
Voucher file
MacLaren

Director's Reading File
Resources Research Branch Chief

MLSmelser:mls

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
4/27	Murphy	500
	[illegible]	500
4/27	Talbot	800
	[illegible]	130
4/27	Johnson	110
	[illegible]	100
4/28	[illegible]	220
		500

APR 28 1964

Memorandum

To: Acting Field Officer, Region I

From: Chief, Division of Field Operations

Subject: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska
Contract 2173

In accordance with the Operator's request of April 10, 1964, enclosed are the original and four copies of Amendment No. 2, signed by the Acting Director for the Government. Also enclosed is an extra copy for field use.

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

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

George C. Selfridge (gfa)

Enclosures

MMerrithew/mm
4/27/64
cc: Director's Reading File
Review Committee
Docket

43683

OME(2)

C O P Y

AL FILE COPY
O. M. E.
APR 29 1964

P. O. Box 2415
Juneau, Alaska
April 20, 1964

Mr. D. R. MacLaren
Acting Field Officer
Office of Minerals Exploration
South 157 Howard Street
Spokane, Washington 99204

OME-6304
Contract 2173

Dear Mr. MacLaren:

This will acknowledge the receipt of your letter of April 17th.

You might be interested to know that the crosscut struck the vein at 30 feet. The vein is 2 feet wide and a grab sample taken when first found gave an assay value of $18 in gold and $200 in silver.

As soon as the crosscut is advanced to fully expose the vein systematic sampling will be commenced.

Sincerely yours,

/s/ ARNOLD M. NORDALE

RECEIVED
APR 22 1964
OME
SPOKANE, WASHINGTON
(VIA AIR MAIL)

April 21, 1964

Memorandum

To: The File

From: F. M. Murphy, Mining Engineer
Division of Minerals

Subject: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska
Contract 2173

Justification for Amendment No. 2

In a letter dated April 10, 1964, to Mr. MacLaren, the Operator requested an amendment to allow the shaft station and drifting to be performed at the 150-foot level instead of the 200-foot level stipulated in the contract.

Mr. MacLaren in his memorandum of April 17, 1964, to Washington, recommended that the Operator's request be granted and submitted a cross section of the shaft and vein in relation to the south side line of the Kawilita claim.

The vein apparently is being offset into the hanging wall by a series of faults and according to MacLaren's sketch would be about 160 feet from the south side line of the Kawilita claim at the 150-foot level. If this series of faults continue offsetting the vein, it could possibly move it to a point inside the 100-foot limit to the exterior boundary of the claim at the 200-foot level.

In view of this, it appears that it would be to the Government's interest to drift along the vein at the 150 level. Therefore, the writer concurs with Mr. MacLaren in his recommendation.

This amendment will permit the work to be performed within the 100-foot limit stipulated by the contract. The Government will not participate in the cost of work closer than 100 feet to the side line of the claim; however, since Alaskan laws grant extralateral rights, any ore mined to the south of the south side line of the Kawilita claim will be subject to the Government's percentage royalty.

F. M. Murphy

cc: Director's Reading File
FMMurphy/mm

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
So. 157 Howard Street
Spokane, Washington 99204
April 17, 1964

OFFICIAL FILE COPY
RECEIVED 1964

DATE		
4/20	[illegible]	800
		~~120~~
4/21	Murphy	500
4/22	[illegible]	~~110~~
4-22	[illegible]	100

Memorandum

To: Chief, Division of Field Operations

From: Acting Field Officer, Region I

Subject: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska
Contract 2173

Enclosed are two Thermo-Fax copies of a letter dated April 10, 1964, from the subject Operator and our reply. Also enclosed is a sketch I have prepared from the Operator's narrative reports and sketches.

On the first page of his letter the Operator describes certain problems that have arisen and requests clarification of the type of side line -- whether vertical or extralateral -- specified in Exhibit A, paragraph 3 of the General Provisions of the contract. On the next page he requests in effect that the level station, crosscutting, drifting, etc., which the contract states shall be done about 200 feet below the shaft collar be permitted about 150 feet below the collar.

The section through the shaft which accompanied the Operator's narrative for October 1963 shows no graphic description of the geology. However, a side note states: " . . . Vein was reported to be offset several times toward the hanging wall and finally moved into the hanging wall." On my sketch the vein as shown above the 50-foot level is purely schematic. The Operator's sections showing the shaft below the 50-foot level indicate at least 3 faults any or each of which could account for the vein at the 150-foot level being ahead of the presently shown face of the crosscut.

As nearly as I can determine from the available maps and sections, the south side line of the Kawilita claim which is an exterior property boundary is about 160 feet south of the shaft at the 150-foot level. This is comparable to the Operator's estimate of 175 feet. If there should be no more offsetting faults between the southernmost one shown and the south boundary, and if the vein on the 150 level is somewhere between the last fault and where I have provisionally shown it, and if the dip of the vein does not flatten, then the shaft could be continued and the drifting done between the

150 and 200 levels, possibly at the 200 level. However, it is most probable that the offsetting fault pattern will continue so that on the 150-foot level the vein may not be found until the crosscut reaches or nearly reaches the 100-foot-from-boundary limit. In this case, or nearly so, a crosscut from the shaft to the vein would necessitate crossing the 100-foot-from-boundary line in order to cut the vein.

A plan of the 50-foot level accompanies the October 1963 Narrative Report. This shows several swings in strike which may be the case at the 150-foot level or deeper. If so, and the vein is found to be close to the 100-foot-from boundary line, any swing in strike toward the south could force an abrupt cessation of OME assistance for any portion of drift that might cross the 100-foot limit, unless and until another swing brought the vein back to the north. The chance of this situation being encountered will increase with depth below the 150-foot level.

By eliminating 25 feet of shaft sinking (95± feet already driven plus a 30-foot sump substracted from 150 feet authorized) the total cost of the contract and the Government's participation respectively will be reduced by $2,875.00 and $1,437.50. Also the potential backs in the plane of the vein will be on the order of 150 feet. Based on the values of the samples taken on the 50-foot level, the value of the potential discovery would still be significant with respect to cost of the project.

It is therefore recommended that the Operator's requested amendment be approved.

D. R. MacLaren

D. R. MacLaren

Enclosures

Ome

Rm. 157 Howard Street
Spokane, Washington 99204
April 17, 1964

Air Mail

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
Box 2415
Juneau, Alaska

Re: OME-6304 (Gold-Silver)
Keystone Mines
Fairbanks District, Alaska
Contract 2173

Dear Mr. Nordale:

Your letter of April 10, 1964, has been forwarded to our Washington D. C. office for consideration of your request that the contract be amended to permit drifting on the 150 level rather than at the 200 level.

All claim or exterior property boundaries mentioned in the OME contract relative to exploration are vertical boundaries. However, any ore that might be produced by virtue of extralateral rights is subject to royalty payable to the Government.

Sincerely yours,

D. R. MacLaren
Acting Field Officer, OME
Region I

cc: J. A. Herdlick
OME(2)
MacLaren

Director's Reading File
Resources Research Branch Chief

DRMacLaren:mls

One

P.O. Box 2415
Juneau, Alaska
April 10, 1964

Mr. D. M. Macharen
Acting Field Officer
Office of Minerals Exploration
South 157 Howard Street
Spokane, Washington, 99204

OME 6304
Contract 2173
Keystone Mines, Inc.
Fairbanks, Alaska

Dear Mr. Macharen:

With reference to the second paragraph in the Narrative Report for the month of March in which it was stated that a crosscut had been driven in the hanging wall of the shaft, the purpose of this crosscut was to determine the precise location of the vein. Projections had been made of the dip of the vein as it appeared at the 50 foot level and of the slope of the shaft which indicated that an intersection should occur at approximately the 120 foot level.

When the shaft had passed that point and had reached the 150 foot level it became obvious that some further displacement of the vein had taken place and rather than continue the shaft blindly it was decided to find out definitely with a short crosscut. It was believed that the vein would be found within a very few feet from the shaft and no large size crosscut would be warranted nor would we expect the OME to participate in its cost.

The crosscut has now reached more than 20 feet with no evidence of the vein. This, naturally, has brought up several points for consideration, particularly with regard to present and future procedure.

The principal conditions and points of uncertainty are:

(1) The location of the vein both in respect to the shaft and in respect to the southerly side line of the Kawilita Claim which adjoins adversely owned ground.

(2) The strike of the vein is not parallel with the claim side lines and converges with the southerly side line in an easterly direction.

(3) The deeper the shaft is sunk the more acute the above condition becomes if paragraph 3 of the General Provisions alludes to a vertical boundary line determination.

(4) At the 150 foot level the bottom of the shaft is approximately 175 feet from the southerly side line or 75 feet within the 100 feet limitation. If the shaft is continued at the same slope to the 200 foot depth these figures would be reduced by about 35 feet which would allow for only a 40 foot vein offset and would preclude any drifting on the vein in an easterly direction.

Therefore we request your approval of the following proposals:

(1) That the present crosscut at the 150 foot level shall be enlarged to conform with OME specifications as set forth in Contract No. 2173 and that payment for the crosscut shall be made by OME according to said contract.

(2) That if and when the vein is reached a station and skip loading pocket shall be established and constructed at the 150 foot level.

(3) That the shaft shall be sunk an additional 30 feet to accomodate the loading pocket, pump platform and to provide ample sump capacity. The present water inflow is estimated at 800 gallons per hour.

(4) That drifts on the vein at the 150 foot level shall be started in either one or both directions and continued as conditions determine.

Very truly yours,

Keystone Mines, Inc.

Arnold M. Nordale

Arnold M. Nordale
President

RECEIVED
APR
OME
SPOKANE WASHINGTON

6304

OFFICIAL FILE COPY
O. M. E
RECEIVED FEB 17 1964

DATE	INITIALS	CODE
2/17	[illegible]	800
		~~120~~
2/17	Murphy	500

Fairbanks, Alaska
February 3, 1964

Mr. J.A. Herdlick
Director Area VIII
Mineral Resources Office
Bureau of Mines
P.O. Box 2688
Juneau, Alaska

Dear Jerry:

At the request of Earl Beistline I accompanied him on his usual end of the month inspection of the Keystone Mines shaft sinking project. Earl prepares Keystones' OME monthly reports during the absence of Arnold Nordale.

The shaft was advanced 24 feet during January by a contractor crew of three men. It is now down a total depth of 123 feet on the incline. Heavy ground, water, and freezing problems retards work. The heavy ground is a fractured crinkled talcy chlorite-schist interbedded with thin layers of quartzite schist, and in places is severely contorted and crumpled by drag folding. The foliation of the schist strikes E-W and dips 15° N, and the shaft is inclined 45° south. The back of the shaft caves along talcy parting planes parallel to foliation; the parting planes are lubricated with water and the back will chamber if lagging is not driven ahead before mucking below the bottom set. It has been necessary to reduce set spacings from 6 to 4 foot centers between levels 83 to 123. The shaft makes about 200 gallons of water per hour and frequent freezing of water lines and the air motor on the sump pump causes many delays.

The vein is in the hanging wall of the shaft and the contractor estimates that about 14 feet of crosscut will ~~will~~ intersect it. This is based on the assumption that dip at depth conforms with dip between the surface and 50 level. Considering some local thrust faults in drag folds I think it is expecting too much to predict a general attitude for the vein on surface and one opening on the 50 level. The bottom round in the shaft appears to be getting into more solid ground and it is anticipated a crosscut will be started at or near the 140. I think that another intersection of the vein at or near this level will assist considerably in arriving at a general attitude. The way the vein flattens and steepens along the 50 level it could be one foot or forty feet from the back of the shaft at the 140. I am certain a little more experience at depth will help considerably in future development planning.

I think the contractor crew is doing a commendable job under present adverse conditions, and Keystone is fortunate to have them. They appear

to be fellows that will stick with the job until the breaks start going their way and then start making up for lost footage. I am sure Bob Thorne remembers what it was like over at Gilmore Dome back in 1942-43 -- well the fellows at Keystone are getting a taste of the same weather conditions.

Kindest personal regards.

Sincerely yours,

Bruce T. Thomas

OME (2)

OFFICIAL FILE COPY
O. M. E
RECEIVED FEB 5 1964

DATE	INITIALS	CC
2/5	MW	800
2/7	Murphy	500

No. 137 Howard Street
Spokane, Washington 99204
February 3, 1964

Air Mail

Mr. Arnold H. Nordale
President
Keystone Mines, Inc.
Box 2415
Juneau, Alaska

Re: OME-6304 (Gold-Silver)
Keystone Mines
Fairbanks District, Alaska
Contract 2173

Dear Mr. Nordale:

In accordance with my letter of January 14, 1964, advising you that our Washington office would amend your contract allowing the starting point of the contract shaft work to be at a point 53 feet below the collar, reducing the unit cost of the shaft work from $140.00 to $115.00 per foot, and increasing the unit cost of drifting from the bottom of the shaft from $53.00 to $55.00 per foot, as you requested, enclosed are the original and four copies of Amendment No. 1 signed by the Acting Director for the Government.

If the proposed amendment is satisfactory, please sign all copies, retain the Operator's copy, and return the other copies to this office. I will then start processing your vouchers for November 1963 through January 1964.

If the amendment is not satisfactory, please return all copies to us unsigned with a statement of your proposed changes for consideration.

Sincerely yours,

D. R. Maclaren
Acting Field Officer, OME
Region I

Enclosures

cc: OME(2)
Voucher file
MacLaren

Director's Reading File

Resources Research Branch Chief

MDMaclaren:mls

Ore 12)

KEYSTONE MINES, INC.
P. O. Box 630
Fairbanks, Alaska

OFFICIAL FILE COPY
O. M. E
RECEIVED FEB 5 1964

DATE	IN	CODE
2/5		800
2/7	Murphy	500

January 31, 1964

Mr. D. R. MacLaren
Acting Field Officer, OME
Region I
U. S. DEPT. OF THE INTERIOR
Office of Mineral Exploration
South 157 Howard Street
Spokane, Washington 99204

Re: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Fairbanks District, Alaska
Contract 2173

Dear Mr. MacLaren:

In accordance with the specifications of our OME contract, I am forwarding you herewith the original and four copies of:

Operator's Monthly Voucher (MME form 60)
Operator's Progress Report (MME form 61)
Operator's Narrative Report, including
- Narrative
- Sketch map #5 showing work accomplished during Jan. 1964
- Statement of wages paid

As was done for the month of December 1963, the forms have been completed using the original contract price because we have not learned if the amendment has been officially approved. I assume that your office will make the necessary corrections. Please let me know of anything that I can do to expedite this matter.

Very truly yours,

Arnold M. Mordale
President
Keystone Mines, Inc.
Box 630
Fairbanks, Alaska

AMN:EHB:jp
Enclosures

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
1/29	Murphy	500
1/29	Talbut	800
	GCS	130
1/29	Johnson	110
	[illegible]	100
1/30	Cal	320
		500

JAN 30 1964

Memorandum

To: Acting Field Officer, Region I

From: Chief, Division of Field Operations

Subject: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska
Contract 2173

In accordance with our memorandum of January 8, 1964, enclosed are the original and four copies of Amendment No. 1, signed by the Acting Director for the Government. Also enclosed is an extra copy for field use.

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

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

George C. Selfridge (gfs)

Enclosures

MMerrithew/mm 1/28/64
cc: Director's Reading File
Review Committee
Docket

43683

AXXXXXXXK074

OFFICIAL FILE COPY
O. M. E.
RECEIVED JAN 20 1964

DATE		
1/20		800
		120
	Murphy	500

JAN 20 11 PM '64
GSA-REGION 3
TFS
COMMUNICATIONS

AXXXXXXXK075

XDXXXXXXK076

FWA-022

SF035 WWAF FSP 11 I-MME

SPOKANE WASH 1-20-64 0946U

MR. GEORGE C. SELFRIDGE

CHIEF DIV OF FIELD OPERATIONS OFFICE OF MINERALS EXPLORATION

WASHINGTON DC

RE. OME-6304, KEYSTONE MINES INC., FAIRBANKS DISTRICT, ALASKA, CONTRACT 2173, OPERATOR ADVISES BY TELEGRAM HE WILL SINK SHAFT FROM 53 FEET BELOW COLLAR TO 200 FT BELOW COLLAR OR A DISTANCE OF 147 FT.

D R MACLAREN ACTING FIELD OFFICER OME REGION ONE

OME-6304 2173 53 200 147

BJR 0947U

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

WESTERN UNION
TELEGRAM

W. P. MARSHALL, PRESIDENT

SF-1201 (4-60)

SYMBOLS
DL = Day Letter
NL = Night Letter
LT = International Letter Telegram

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

241P PST JAN 19 64 PRA055
PR SEA144 NL PD SEATTLE WASH 19
D R MAC LAREN, OFFICE OF MINERALS EXPLORATION
SOUTH 157 HOWARD ST SPOKANE WASH
RE OME 6304 CONTRACT 2173 WE WILL SINK SHAFT UNDER AMENDMENT
FROM 53 FEET BELOW COLLAR TO 200 FEET BELOW COLLAR OR A DISTANCE
OF 147 FEET STOP PLEASE MAIL PROPOSED AMENDMENT TO BOX 2415
JUNEAU ALASKA
KEYSTONE MINES INC ARNOLD M NORDALE

6304 2173 53 200 147 2415.

RECEIVED
JAN 21 1964

OFFICIAL FILE COPY
O. M. E.
RECEIVED 1964
DATE 1/4-21

One (v)

OFFICIAL FILE COPY
O. M. E.
RECEIVED JAN 1964

DATE		
1/16	[illegible]	800
		720
1/17	Murphy	500

So. 157 Howard Street
Spokane, Washington 99204
January 14, 1964

Air Mail

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
Box 630
Fairbanks, Alaska

Re: OME-6304 (Gold-Silver)
Keystone Mines
Fairbanks District, Alaska
Contract 2173

Dear Mr. Nordale:

I have been advised by our Washington, D. C. office that an amendment will be prepared allowing the starting point of the contract shaft work to be at a point 55 feet below the collar, reducing the unit cost of the shaft work from $130.00 to $115.00 per foot, and increasing the unit cost of drifting from the bottom of the shaft from $55.00 to $55.00 per foot, as you have requested.

However, before preparing the amendment, it is necessary for us to know whether you will sink the shaft 800 feet below the collar or 800 feet below the starting point. This is not quite clear in item 1 of your letter of December 15, 1963.

As explained in my letter of November 15, 1963, and during our December meeting in Spokane, we cannot process your vouchers until the amendment has been executed and becomes part of the contract. The only suggestion I can make that might expedite matters would be for you to send us a wire stating whether you intend to bottom the shaft 800 feet or 855 feet below the shaft collar. You might also advise us whether the proposed amendment should be sent to your Fairbanks' address or to Box 2415, Juneau.

Sincerely yours,

D. R. MacLaren
Acting Field Officer, OME
Region I

cc: Arnold M. Nordale
Box 2415
Juneau, Alaska

Director's Reading File
Resources Research Branch Chief
OME(2)
Voucher file
MacLaren

DRMacLaren:mls

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
1/7	Murphy	500
1/7	Talbot	800
/	GLS	130
1/8	Johnson	110
	Smith	100
1/8	Cole	220
/		500

JAN 8 1964

Memorandum

To: Acting Field Officer, Region I

From: Chief, Division of Field Operations

Subject: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska
Contract 2173

With reference to your memorandum of December 19 and the Operator's letter of December 13, 1963, we will prepare an amendment allowing the starting point of the contract shaft work to be at a point 53 feet below the collar and reduce the unit cost of the shaft work from $130.00 to $115.00 per foot.

The Operator's request for an increase in the unit cost for drifting is justified. In arriving at the contract unit cost of $53.00 per foot for drifting, the depreciation cost of the Operator's equipment valued at about $18,000 was not included. Based on 6 month's' time for completing 900 feet of drifting, this depreciation cost would amount to about $2.00 per foot; hence, we will increase the unit cost from $53.00 to $55.00 per foot for the drifting and crosscutting.

Before preparing the amendment, it is necessary for us to know whether the Operator will cut the station above the 200-foot depth, or use all the 200 feet of shaft work allowed under the contract and cut the station just above the 253-foot depth. As soon as we receive this information, the proposed amendment will be prepared.

George C. Selfridge (gla)

FMMurphy/mm
1/7/63
cc: Director's reading file
Review committee
Docket

43683

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
So. 157 Howard Street
Spokane, Washington 99204
December 19, 1963

OFFICIAL FILE COPY
RECEIVED 1963
DATE 12/23 500

Memorandum

To: Chief, Division of Field Operations

From: Acting Field Officer, Region I

Subject: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska

Enclosed are two copies of a basically self-explanatory letter dated December 13, 1963, from the subject Operator. In conjunction with this letter kindly refer to my letter of November 15, 1963, to Mr. Nordale and the Mine Construction Contract of April 26, 1963, which accompanied the application.

Mr. Nordale was in Spokane for the NWMA meetings and called at the office December 5, 1963. He is an unusual man in that he is unhappy with the contract prices because they exceed those he is paying the subcontractor as set forth in the Mine Construction Contract above cited. He stated that he was surprised to find certain specifications and prices in the OME contract that exceeded those in his Mine Construction Contract. Our meeting was pleasant and certain misunderstandings on both sides were clarified.

About the end of August the mine contractor notified Mr. Nordale that unless he could get started with the work so as to complete the surface installations and get down the shaft before cold weather he would leave the property. As the company knows him to be a good miner and as his subcontract prices are considerably lower than other bidders, they were reluctant to lose him so they authorized him to start his subcontract work early in September.

The OME contract was received at this office September 3d but was held here pending receipt of the necessary MME Forms 52. These were received and the contract was mailed to Mr. Nordale September 18, by which time the headframe had been installed and the shaft had been put down 50 feet. This would have presented no problem except that the shaft dimensions were 5' x 8' outside timbers and the timber used was 6" x 6", whereas the OME contract specifies that the shaft shall have a hoisting compartment not less than 4' x 4' and a manway 4' x 3' in the clear of timber and that the timber shall be 8" x 8".

When he received my November 15 letter, Nordale stopped the shaft work at 53 feet and ordered 8" x 8" timber and instructed the contractor to continue the shaft below 53 feet as specified in the OME contract. This was done before he came to Spokane.

During our discussion Nordale mentioned the waste in time, labor, and cost that would result from tearing out the timber already installed and enlarging the shaft from the collar. He asked if the OME contract could be considered as starting 53 feet below the shaft collar. He also asked if the cost of sinking could be reduced to what the company will actually pay the subcontractor and if the drifting cost could be increased to cover the increase in size of the drift timbers and the larger drift section.

I explained that the OME shaft price of $130.00 per foot included provision for the cost of installing a headframe, hoist, etc., and that as they were installed prior to the contract a reduction in the sinking cost would be in order if the OME work were to start at the 53-foot level. Nordale not only accepted that probability but even went so far as to request a sinking price of $115.00 per foot which is what the company will actually be paying. I further explained that there might be some difficulty in raising the unit cost for drifting as the OME price was based on the drift and timber sizes specified in the contract. I also told him that because of the nature of his request it would be best if he made it in a letter.

If the requests are granted, the actual bottom of the shaft will be 253 feet below the collar instead of 200 feet. Accordingly, I also called to his attention the specification that the Government would not contribute to the cost of any work within 100 feet of any land subject to the contract and pointed out the necessity to submit with his vouchers a section in the plane of the shaft showing the south property boundary.

The comparative costs of the OME contract and those of the requested changes show a savings in the total cost and the cost to the Government as follows:

OME Costs

200 ft of shaft at $130.00/ft	$26,000.00
900 ft of drifting and crosscutting at $53.00/ft	47,700.00
	$73,700.00

Requested Changes

200 ft of shaft at $115.00	$23,000.00
900 ft of drifting and crosscutting at $55.00/ft	49,500.00
	$72,500.00

Thus, if both changes are authorized, the total cost of the project will be reduced $1,200.00 to $78,700.00 and the Government's participation will be reduced $600.00 to $39,350.00.

It is therefore recommended that the Operator's request be approved.

D. R. MacLaren

Enclosures

KEYSTONE MINES, INC.
P. O. Box 630
Fairbanks, Alaska

December 13, 1963

Mr. D. R. MacLaren
Acting Field Officer
Office of Minerals Exploration
South 157 Howard Street
Spokane 4, Washington

Re: OME-6304
Contract 2173

Dear Mr. MacLaren:

In furtherance to our verbal understanding of December 5th, request is herewith made to amend Contract 2173 as follows:

1. That the point of beginning shall be at a point 53 feet down the shaft from the surface and shall continue downward a further distance of 200 feet along the slope of the shaft;
2. That the fixed unit cost for sinking the shaft shall be $115.00 per foot to compensate the independent contractor for increased shaft dimensions and timber sizes, and;
3. That the fixed unit cost for drifting and cross-cutting shall be $55.00 per foot to conform with the independent contract figure.

Very truly yours,
Keystone Mines, Inc.

Arnold M. Nordale

Arnold M. Nordale
President

RECEIVED
DEC 16 1963
I. & C. D.
WASHINGTON, D.C.

Ome(2)

So. 157 Howard Street
Spokane, Washington 99204
November 26, 1963

OFFICIAL FILE COPY
O. M. E.
RECEIVED 1963

DATE		CODE
12/4		800
12/2		100
12/2		110
		120
12/3		500

AIRMAIL

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
P. O. Box 2415
Fairbanks, Alaska

Re: OME-6304 (Gold-Silver)
Keystone Mines
Fairbanks District, Alaska
Contract 2173

Dear Mr. Nordale:

I am glad to hear that you will be in Spokane from December 5th to 8th. I think a meeting regarding the OME contract will be most beneficial and I am looking forward to seeing you during that period.

Sincerely yours,

D. H. MacLaren
Acting Field Officer, OME
Region I

cc: OME(2) w/cys incoming
MacLaren

Director's Reading File
Resources Research Branch Chief

DHMacLaren:mls

Ome (2)

COPY COPY

Juneau, Alaska
November 24, 1963

OFFICIAL FILE COPY
O. M. E
RECEIVED NOV 29 1963
CODE
500
500

Mr. D. R. MacLaren
Acting Field Officer
Office of Minerals Exploration
South 157 Howard Street
Spokane, Washington

Re: OME-6304
Keystone Mines Inc.
Contract 2173

Dear Mr. MacLaren:

I have received your letter of Nov. 15th in which you stated that a request to amend the contract will be necessary owing to the differences in size of shaft timbers and because work was commenced before the contract was granted.

My present plans are to be in Spokane from Dec. 5th to Dec. 8th during which time I would like to discuss this matter with you personally.

I will be calling you by phone for an appointment shortly after my arrival there.

Sincerely yours,

/s/ ARNOLD M. NORDALE

(Orig.)

OFFICIAL FILE COPY
O. M. E
RECEIVED NOV 18 1963

DATE		
11/18		800
		120
11/26	Murphy	500

So. 157 Howard Street
Spokane, Washington 99204
November 15, 1963

AIRMAIL

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
P. O. Box 630
Fairbanks, Alaska

Re: OME-6304 (Gold-Silver)
Keystone Mines
Fairbanks District, Alaska
Contract 2173

Dear Mr. Nordale:

I have read with interest your narrative report of the work that was done at the Keystone mine during October. This report is particularly appreciated as it gives us an opportunity to call to your attention various departures from the contract specifications that would cause an appreciable delay in processing a voucher for the OME work had one been submitted.

The contract price of $130.00 per foot for "200 feet of shaft, plus hoist, etc." is based on 8" x 8" timber, 4' x 4' hoisting compartment and 4' x 3' manway. Therefore, these are minimum sizes that can be accepted at this unit cost.

It is noted that the timber installed is only 6" x 6" and that the manway is only 4' x 2½'. It is doubtful that 6" x 6" caps, posts, girts, and dividers to which 2" pieces have been nailed could be considered as meeting the 8" x 8" contract specification. In any case, the addition of the 2" pieces, according to your statement at the top of page 2, has apparently reduced the skipway to 3'10" x 3'10" and the manway to 3'10" x 2'4".

Also noted in your statement on page 3 under Future "Sinking of the shaft under OME contract will begin during November 1963. The place of beginning will be at about the present 50 foot level." However, in the contract Exhibit A, Description of the Work, indicates in the first two paragraphs the general location of the shaft site and provision for installation of a headframe. Thus, it appears that the intent of the contract is that the shaft be started at the surface; the $130.00 per foot for shaft sinking includes provision for a headframe.

Presumably, your intention is that the present shaft will be continued at 45° until it intersects the vein and that below the 50-foot level it will conform to the contract specifications as to timber and compartment size. This still leaves the question of acceptability for OME participation in the first 50 feet of the shaft.

If 6" x 6" timber and a 4' x 2½' manway meets with the regulations of the Alaska Department of Mines and Minerals and you prefer these sizes, you should request an amendment to that effect. However, until such an amendment is authorized and approved, you would be proceeding at your own risk and if the request were approved, the unit price for shaft sinking would be reduced. If you wish to proceed below the 50-foot level meeting the present contract specifications, the work from the shaft collar to that point will have to be disallowed as it does not meet the contract specifications.

With regard to the 50-level stope and any other ore that is being test milled, your attention is directed to Article 6 of the contract regarding royalty due the Government.

I am glad to have the opportunity to call to your attention the problems raised by deviating from the contract specifications before they become more serious. With the exception of the level station for which the contract price is based on a maximum length, all prices are based on the minimum sizes cited in the specifications. Any changes involving less than specified minimums or more than specified maximums necessitate contract amendments which you should request; your request should include a statement as to why the requested change is deemed necessary or advisable.

Sincerely yours,

D. R. MacLaren
Acting Field Officer, OME
Region I

cc: OME(2) w/Orig.&2 cys of narrative, accompanying papers, and map

MacLaren

Director's Reading File
Resources Research Branch Chief

DRMacLaren:mls

KEYSTONE MINES, INC.
P. O. Box 630
Fairbanks, Alaska

October 29, 1963

Mr. D. R. MacLaren
Acting Field Officer, OME
Region I
U. S. Department of the Interior
OFFICE OF MINERALS EXPLORATION
South 157 Howard Street
Spokane, Washington 99204

Ref: OME-6304 (Gold-Silver)
Contract 2173
Keystone Mines, Inc.
Fairbanks District, Alaska

Dear Mr. MacLaren:

In accordance with the specifications of our OME contract, I am forwarding you herewith an original and three copies of the narrative report for October 1963. Because a voucher for the month of October 1963 is not being submitted, I am not forwarding you copies of MME forms 60 and 61, Operator's Monthly Voucher and Operator's Progress Report.

Very truly yours,

Arnold M. Nordale

Arnold M. Nordale
President
Keystone Mines, Inc.
Box 630
Fairbanks, Alaska

AMN:jp
Enclosures
Narrative report for October 1963
and accompanying material

RECEIVED
Via
NOV 5 1963
Air Mail
U.S.G.S.
ANCHORAGE, ALASKA

KEYSTONE MINES, INC.

Narrative Report for October 1963

Re: OME-6304 (Gold-Silver)
Contract 2173
Keystone Mines, Inc.
Fairbanks District, Alaska

Current

Because of the importance of installing a surface plant and to get underground before interior Alaska winter conditions begin, Keystone Mines, Inc. has done some initial work on the Kawilita mining claim. Payment is not being requested during October 1963 and hence the Operator's Monthly Voucher form and the Operator's Progress report form are not being submitted.

Work accomplished includes the installation of a surface plant which consists of a 22' X 26' wood-frame hoist-compressor house, a 16' X 32' supply tent, an 8' X 16' wannigan, a headframe, haulage track leading to the waste dump and truck loading ore chute, and a road system to allow access to the claim from the main highway system. Photograph #1 shows a portion of the surface plant and map #1 shows the relative location of the units.

An inclined (45°) two compartment shaft was sunk to the fifty foot level. Six inch by six inch timbers were initially used to frame the shaft sets and appropriate lagging was used to provide ground support. The hoisting compartment is 4' X 4' in the clear and the manway is 4' X 2½' in the clear where six inch timbers were used. The first 30' of shaft timber has had

the 6" timbers increased to 8" by adding a 2" piece to the posts. The compartments are reduced 2" each in this length.

The hoisting plant installation and the timbered shaft meets the State of Alaska mining regulations as is shown by the accompanying statement of an engineer of the State Division of Mines and Minerals. Photograph #2 shows the timbering in the shaft.

The inclined shaft was begun on the vein and continued on the vein to a depth of about 30 feet at which point the veins evidently faulted into the hanging wall of the shaft. A cross-cut driven at the 50' level in a southerly direction intersected the vein about 12 feet from the hanging wall. The vein at this point had a dip of about 60° indicating that the shaft if continued on the present dip will intersect the vein at a lower elevation if geological conditions do not change.

At the fifty foot level a drift was driven in a westerly direction following the vein structure for a distance of an estimated 130 feet. Photograph #3 shows a portion of the 50 foot level and map #1 shows the relative location of the drift with reference to the shaft.

Ore recovered from the drift and ore from some stoping at selected areas above the level is being test-milled at the present time. Soon milling will probably be stopped for the winter months.

Assay values are shown on sketches 1 and 2.

The above information, although not pertaining to the work proposed in the contract, provides background data that will

allow a rather complete picture to be obtained of the entire operation.

Future

Sinking of the shaft under the OME contract will begin during November 1963. The place of beginning will be at about the present 50 foot level. Shaft timber sizes and compartment sizes specified in the contract will be used and the sampling procedure specified will be followed.

Enclosures

Map 1, Plan of surface installation and underground workings.

Photographs

1. Portion of surface plant.
2. Shaft timbering.
3. 50' level.

Sketches

1. Section showing shaft and assay values.
2. Plan showing 50' level and assay values.

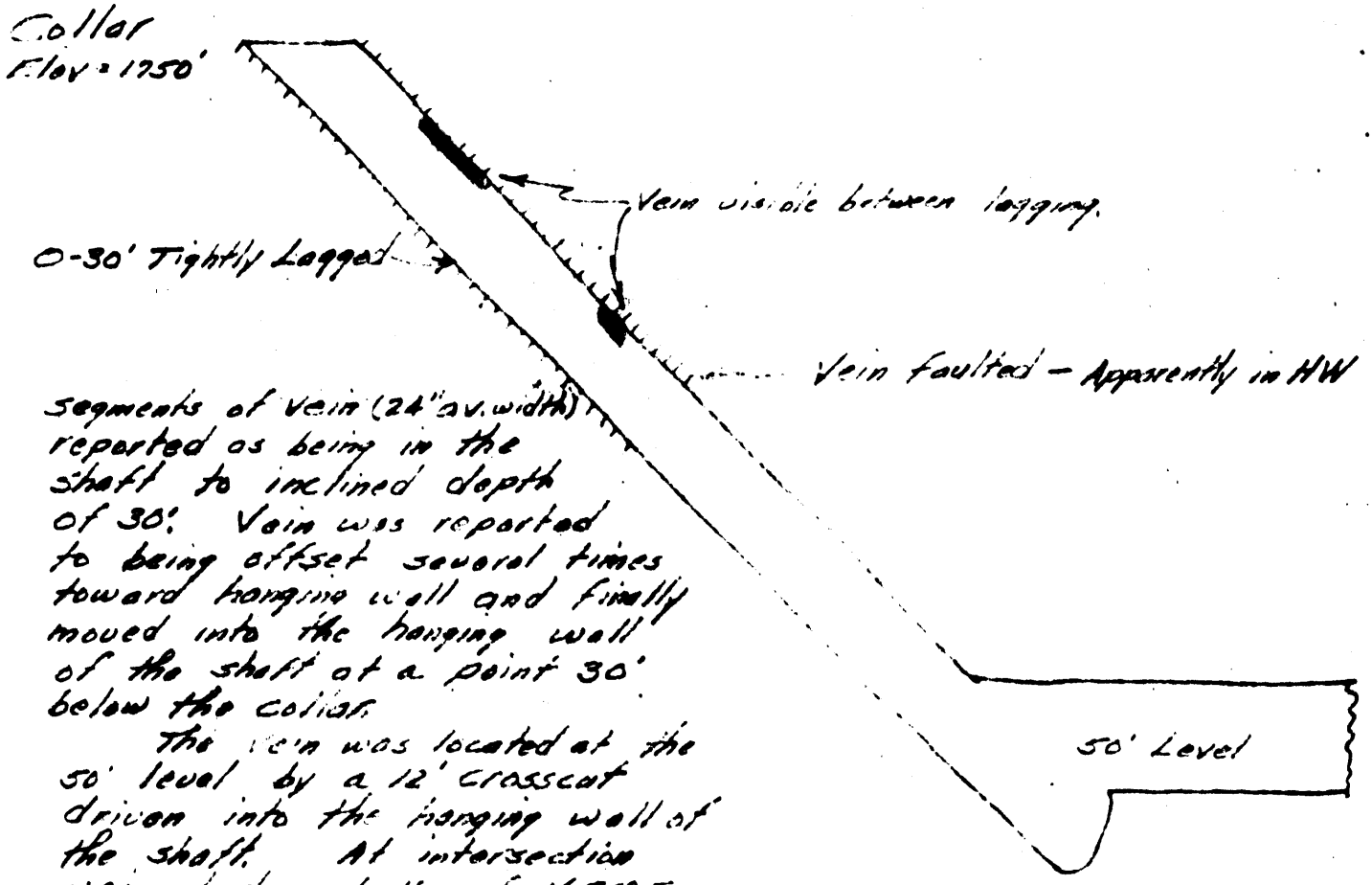
Letter, State Mining Engineer

RECEIVED
Via
NOV 5 1963
W. Mace
U.S.G.S.
Spokane, Wash.

Keystone Mines, Inc.
Sketch of Shaft
East Wall

#1
10/31/63

Scale: Approx 1" = 10'



Segments of vein (24" av. width) reported as being in the shaft to inclined depth of 30'. Vein was reported to being offset several times toward hanging wall and finally moved into the hanging wall of the shaft at a point 30' below the collar.

The vein was located at the 50' level by a 12' crosscut driven into the hanging wall of the shaft. At intersection vein had a strike of N 86° E and a dip of 60° S.

Assays

Assay No.	Location	Width	Ounces/Ton Au	Ounces/Ton Ag	Value per Ton
27692	Surface	38"	2.03	1.22	$72.62
27693	5' from Collar	26"	7.79	2.79	274.07
27[illegible]	10' " "	30"	0.88	1.38	33.58
28091	18' " "	24"	5.00	0.[illegible]	176.13
28092	18' " "	24"	0.38	0.20	13.55
27830	15' " "	18"	0.02	0.35	1.11
27831	20' " "	18"	0.10	0.44	4.03
27857	30' " "		1.03	1.30	
27858	35' " "		Tr	Nil.	
27859	40' " " 2' [illegible]		Tr	Nil.	
27860	40' " " 4-6' " "		Tr	Nil.	

Assays by Alaska State Division of Mines, Fairbanks

SHB

MME FORM 6 REFERENCE SLIP

REV. 2- OFFICE OF MINERALS EXPLORATION

TO:	DATE	INITIALS
1. Chief, Div. of Fld. Operations	9/25/63	
2.		
3.		
4.		
5. D. R. MacLaren		
FROM: Acting Fld. Officer, Region I		

FOR: Check items for action desired

X Action ____ Reply for signature of ____

____ Approval ____ Investigate ____ Surname

____ Comment ____ Recommendations ____ Signature

____ Conference ____ Rewrite ____ File

____ Instructions ____ Your information

REMARKS: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska
Contract 2173

Transmittal of the Gov't., Fiscal Section, and Audit copies of cited contract signed by Arnold M. Nordale, president of the company.

Ore

So. 157 Howard Street
Spokane, Washington 99204
September 25, 1963

RECEIVED
DATE INITIALS
Murphy 500

AIRMAIL

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
P. O. Box 630
Fairbanks, Alaska

Re: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska
Contract 2173

Dear Mr. Nordale:

We are enclosing a three-month supply of Operator's Monthly Voucher and Progress Report, MME Forms 60 and 61. The original and three copies of the completed report forms, as well as the narrative, maps, assays, and all technical data, should be submitted for each month in which costs have been incurred under the contract. However, in the event that you do not wish to submit a voucher for any month, the narrative report for the work done in that month is required. Delay in processing can be avoided if reports are submitted promptly to this office.

Also enclosed are three copies of Standard Form 38, entitled "Notice to Labor Unions or Other Organizations of Workers--Nondiscrimination in Employment." In accordance with Executive Order 10925, which is Exhibit B of your contract, you should complete one copy and send it to any labor union that may be involved in your OME contract work and should post one or more copies in conspicuous places available to employees or applicants for employment.

In addition, there is enclosed a poster which should be exhibited in a conspicuous place available to both employees and applicants for employment.

Sincerely yours,

D. R. MacLaren
Acting Field Officer, OME
Region I

Enclosures

Reading copies to:
Nolan
Killegaard

MLSmelser:mls
cc: OME
Voucher file

OFFICIAL FILE COPY
O. M. E
RECEIVED SEP 25 1963

DATE	INITIALS	CODE
9-27	D	200
		500

Press release to be as of 10/2/63

SEP 25 6 18 AM '63
GSA-REGION 3
TCS
COMMUNICATIONS

AXXXXXXXK149

AXXXXXXXK150

AXXXXXXXK151

AXXXXXXXK152

XDXXXXXXK153

FWB-096

SF117 WWAF FSP 32 I-MME

SPOKANE WASH 9-24-63 1515U

GEORGE C SELFRIDGE CHIEF DIV OF FIELD OPERATIONS

OFFICE OF MINERALS EXPLORATION WASH DC

RE OME 6304/GOLD SILVER/, KEYSTONE MINES INC. SIGNED CONTRACT RECD

THIS OFFICE SEPT. 24, 1963

D R MACLAREN ACTG FIELD OFFICER REGION ONE

OME 6304 24 1963

HLC 1518U

Mre/2)

OFFICIAL FILE COPY
O N E
RECEIVED SEP 30 1963
MINES CODE

So. 157 Howard Street
Spokane, Washington 99204
September 18, 1963

4/22 Murphy 500

Air Mail

Mr. Arnold N. Nordale
President
Keystone Mines, Inc.
P. O. Box 630
Fairbanks, Alaska

Re: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska

Dear Mr. Nordale:

Enclosed are the original and four copies of a proposed contract for the subject project. The contract consists of MME Form 51, Annex I (two pages), Exhibit A (three pages), Exhibit B, two Lien and Subordination Agreements, and one map (Figure 1). All copies of the contract have been signed by the Director for the Government.

If the terms and conditions of the proposed contract are satisfactory, insert in Article I(a) the date on or before which work will commence. This date must not be prior to the date of the contract. Then sign all copies, keep the Operator's copy, and return the other copies to this office.

The 6½ percent interest accrues from the dates on which the individual payments are made by the Government and like the principal is repayable from royalty on production.

If the contract is not satisfactory, please return all copies unsigned to this office with a statement of your proposed changes for consideration.

Sincerely yours,

D. R. MacLaren
Acting Field Officer, OME
Region I

Enclosures

DRMacLaren:mls
cc: J. A. Herdlick w/cy incoming
OME(2) w/cys incoming
Reading copies to:
Nolan; Killgard

KEYSTONE MINES, INC.
P.O. BOX 630
FAIRBANKS, ALASKA
September 16, 1963

OMB5304

Mr. D. R. MacLaren
Acting Field Officer
Office of Minerals Exploration
South 157 Howard Street
Spokane, Washington 99204

Dear Mr. MacLaren:

In accordance with the instructions contained in your letter of September 3rd, I am enclosing 5 copies of each of the Lien and Subordination Agreements.

Very truly yours,
Keystone Mines, Inc.

Arnold M. Nordale
President

RECEIVED
SEP 18 1963

So. 157 Howard Street
Spokane, Washington 99204
September 3, 1963

OFFICIAL FILE COPY
RECEIVED SEP 1963
9/5 Murphy 500

AIRMAIL

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
P. O. Box 630
Fairbanks, Alaska

Re: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska

Dear Mr. Nordale:

We have today received a proposed contract for the subject project signed by the Director for the Government. However, before we can present this contract to you for signature, we must have executed the reverse side of all six copies of the enclosed two sets of Lien and Subordination Agreements. A proper representative having authority to act for each company involved should retain the sixth copy of the respective forms, the original and four copies being returned to this office.

As soon as we receive the Lien and Subordination Agreements in this office, we will attach them to the contract and forward it to you for signature.

Sincerely yours,

D. N. MacLaren
Acting Field Officer, OME
Region I

Enclosures

MLM:Melaer:als
cc: OME
Reading copies to:
Nolan
Killagnard

A Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
8/29	Murphy	500
8/29	Talbot	800
"	Owlesane	130
"	Owlesane	110
"	Tinney	100
8/29	coe	220
		500

AUG 29 1963

Memorandum

To: Acting Field Officer, Region I

From: Acting Chief, Division of Field Operations

Subject: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska

As recommended in your memorandum of July 15, 1963, we are enclosing the original and four copies of a proposed contract for the subject project. The contract consists of MME Form 51, Annex I (two pages), Exhibit A (three pages), Exhibit B, and one map (Figure 1). An extra copy is also enclosed for your use. All copies have been signed by the Director for the Government. You should insert the date for commencement of the work.

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

Please advise the Applicant that the 6¼ percent interest accrues from the dates on which the individual payments are made by the Government and like the principal is repayable from royalty on production.

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

W. R. Griswold
mm

Enclosures

MMerrithew/mm
8/29/63
cc: Director's Reading File
Review Committee
Docket

P.S. The Director has signed the proposed contract subject to attachment of the executed copies of the enclosed two sets of Lien and Subordination Agreements.

8623

CARL HAYDEN, ARIZ., CHAIRMAN

RICHARD B. RUSSELL, GA.
ALLEN J. ELLENDER, LA.
LISTER HILL, ALA.
JOHN L. MCCLELLAN, ARK.
A. WILLIS ROBERTSON, VA.
WARREN G. MAGNUSON, WASH.
SPESSARD L. HOLLAND, FLA.
JOHN STENNIS, MISS.
JOHN O. PASTORE, R.I.
ESTES KEFAUVER, TENN.
A. S. MIKE MONRONEY, OKLA.
ALAN BIBLE, NEV.
ROBERT C. BYRD, W. VA.
GALE W. MCGEE, WYO.
HUBERT H. HUMPHREY, MINN.
MIKE MANSFIELD, MONT.
E. L. BARTLETT, ALASKA

LEVERETT SALTONSTALL, MASS.
MILTON R. YOUNG, N. DAK.
KARL E. MUNDT, S. DAK.
MARGARET CHASE SMITH, MAINE
THOMAS H. KUCHEL, CALIF.
ROMAN L. HRUSKA, NEBR.
GORDON ALLOTT, COLO.
NORRIS COTTON, N.H.
CLIFFORD P. CASE, N.J.

EVERARD H. SMITH, CLERK
THOMAS J. SCOTT, ASST. CLERK

United States Senate

COMMITTEE ON APPROPRIATIONS

OFFICIAL FILE COPY
O. M. E
RECEIVED AUG 6 1963

DATE	INITIALS	CODE
8/9	Murphy	500

July 24, 1963

Mr. Frank E. Johnson
Acting Director
Office of Minerals Exploration
Department of the Interior
Washington 25, D. C.

OME-6304

Dear Mr. Johnson:

Thank you for your courtesy in providing me with copy of your letter of July 19 to Mr. Arnold Nordale of Keystone Mines, Inc., I will appreciate your continuing to keep me advised as to the status of this application.

Sincerely yours,

E. L. Bartlett

E. L. Bartlett

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RECEIVED AUG 26 1963
DATE
CODE
500

KEYSTONE MINES INC.
P. O. BOX 630
FAIRBANKS, ALASKA

August 21, 1963

Mr. George Funich, Jr.
Director
Office of Minerals Exploration
Washington 25, D. C.

Re: OME 6304

Dear Mr. Funich:

Pursuant to your telegram of August 8th, I am enclosing a copy of an option agreement which I trust will satisfy the requirements of OME regulations.

Very truly yours,

KEYSTONE MINES, INC.

Arnold M. Nordale

ARNOLD M. NORDALE
President

AMN/emm

Enclosure: One

OPTION AGREEMENT

NORDALE HOTEL CORPORATION, THE ALGO COMPANY, a Minnesota corporation, and EUGENE F. SCHREIBER, parties hereto jointly called Optionors; and the KEYSTONE MINES, INC., an Alaska corporation, called Optionee, for and in consideration of the sum of Ten Dollars ($10.00) payable by optionee to each of optionors, receipt whereof is hereby acknowledged, optionors do hereby grant to optionee the sole and exclusive privilege of exercising the option to purchase or lease from optionors their lode mining claims as are more particularly described by virtue of the following exhibits attached hereto:

1. Nordale Hotel Corporation, Exhibit "1".
2. The Algo Company, Exhibit "2".
3. Eugene F. Schreiber, Exhibit "3".

This option shall expire one year from the date hereof unless extended by optionors. This option may only be exercised by optionee with respect to all of optionors, and all of the property described on the exhibits hereto attached.

Optionors have caused to be formed optionee and have subscribed to the shares of optionee as more particularly set forth in a Subscription Contract dated April 18, 1963.

Optionee may, at its election, either:

a) Purchase the properties of optionors more particularly described on the exhibits hereto attached by issuing in payment therefore, shares of the capital stock of optionee corporation equally to each optionor to the limit of the outstanding and unissued shares then

COLLINS AND CLASBY
ATTORNEYS AT LAW
FIRST NATIONAL BANK BUILDING
P. O. BOX 1368
FAIRBANKS, ALASKA
GLOBE 2-2153

CJC:sp

remaining over and above shares issued to commence and carry on the purposes of the corporation prior to the exercise of the option. Optionors may agree with optionee on a lesser number of shares.

b) To lease from optionors the properties described on the exhibits hereto attached, for the rental of 8% of the gross proceeds of minerals and other minerals extracted with the obligation of optionee to do all assessment work and in form common to such transactions in the Fairbanks area and as approved by counsel for the parties, and for such term as shall be consistent with performance for the Office of Mineral Explorations of any loan granted to optionee pursuant to pending applications for an exploratory loan.

This option may be exercised with respect to either purchase or lease, by optionee giving to optionors a written notice of exercise of the option prior to expiration of the term of this option or an extension thereof.

This option shall not be assigned or any interest therein transferred, directly or by operation of law, without the prior written consent of optionors.

IN WITNESS WHEREOF the parties have hereto set their hands on the 19th day of August, 1963.

NORDALE HOTEL CORPORATION

BY Arnold M. Nordale
Arnold M. Nordale, President

COLLINS AND CLASBY
ATTORNEYS AT LAW
FIRST NATIONAL BANK BUILDING
P. O. Box 1368
FAIRBANKS, ALASKA
GLOBE 2-2153

CJC:sp

THE ALGO COMPANY

BY William L. Basham
William L. Basham, President

Eugene F. Schreiber
EUGENE F. SCHREIBER

STATE OF ALASKA)
) ss.
FIRST DISTRICT)

THIS IS TO CERTIFY That on this the 21st day of August, 1963, before me, the undersigned, a Notary Public in and for the State of Alaska, duly commissioned and sworn, personally appeared ARNOLD M. NORDALE, President of the corporation named in the foregoing Option Agreement, and he acknowledged to me that he executed the same for and on behalf of said corporation as the President thereof, under authority of said corporation so to do granted by the Board of Directors, as the free and voluntary act and deed of said corporation.

WITNESS my hand and notarial seal on the day and year in this certificate first hereinabove written.

James H. Nordale
NOTARY PUBLIC in and for the State of Alaska. My commission expires: 5/17/64

(SEAL)

STATE OF ALASKA)
) ss.
FOURTH DISTRICT)

THIS IS TO CERTIFY That on this the 19th day of August, 1963, before me, the undersigned, a Notary Public in and for the State of Alaska, duly commissioned and sworn, personally appeared WILLIAM L. BASHAM, President of the corporation named in the foregoing Option Agreement, and he acknowledged to me that he executed the same for and on behalf of said corporation as the President thereof, under authority of said corporation so to do granted by the Board of Directors, as the free and voluntary act and deed of said corporation.

WITNESS my hand and notarial seal on the day and year in this certificate first hereinabove written.

Sue A. Pace
NOTARY PUBLIC in and for the State of Alaska. My commission expires: 4/25/65

(SEAL)

STATE OF ALASKA)
) ss.
FOURTH DISTRICT)

THIS IS TO CERTIFY That on this the 19th day of August, 1963, before me, the undersigned, a Notary Public in and for the State of

COLLINS AND CLASBY
ATTORNEYS AT LAW
FIRST NATIONAL BANK BUILDING
P. O. Box 1368
FAIRBANKS, ALASKA
GLOBE 2-2153

C:sp

Alaska, duly commissioned and sworn, personally appeared EUGENE F. SCHREIBER, to me known to be the person described in and who executed the within and foregoing Option Agreement, and acknowledged to me that he signed and sealed the said instrument as his free and voluntary act and deed for the uses and purposes therein mentioned.

WITNESS my hand and notarial seal on the day and year in this certificate first above written.

(SEAL)

NOTARY PUBLIC in and for the State of Alaska. My commission expires: 4/25/65

COLLINS AND CLASBY
ATTORNEYS AT LAW
FIRST NATIONAL BANK BUILDING
P. O. Box 1368
FAIRBANKS, ALASKA
GLOBE 2-2153

CJC:sp

EXHIBIT "1"

NORDALE HOTEL CORPORATION

The following described lode mining claims, situate in the Fairbanks Mining and Recording Precinct, as more particularly appears from and are described on United States Mineral Survey No. 1607, to-wit:

Hope Lode Claim
Fairbanks Claim Lode
Wolf Lode Claim
Keystone Lode Claim
Kawilita Claim Lode

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GLOBE 2-2153

EXHIBIT "2"

THE ALGO COMPANY

The following lode mining claims situate on Moose Creek, a tributary of Fairbanks Creek, in the Fairbanks Mining and Recording Precinct, Fourth Division, State of Alaska, to-wit:

Lilian Quartz Mining Claim
Helen S. Quartz Mining Claim
Insurgent #2 Quartz
O'Farrell Fraction Quartz Mining Claim
Mame Lode Claim
Homestake Quartz
Hi Yu Quartz Mining Claim
Insurgent Lode Claim
Flying Joe Lode Claim, situate between Moose Creek and Too Much Gold Creek, Tributaries of Fairbanks Creek
Bonus Lode Claim
Julia Lode Claim
Jumbo Lode Claim
NRA Lode Claim
Roy Lode Claim, situate on Too Much Gold Creek, tributary of Fairbanks Creek
Rand Quartz Mining Claim
Long Thin Quartz Fraction
Santa Clara Fraction Mining Claim
Summit Quartz Mining Claim
Durando Quartz Mining Claim
Yankee Doodle Quartz Mining Claim
Teddy R. Quartz Mining Claim
Sunnyside Quartz
Mars Quartz Mining Claim
Don Lode Claim
Gold Point Lode Claim
Inez Lode Claim
Royalty Lode Claim
Red Top Lode Claim
Edythe Lode Claim
Rob Lode Claim
Laura Lode Claim
Mohawk Lode Claim
Ohio Lode Claim, situate on Fairbanks Creek
No. 1 Placer Claim
No. 2 Placer Claim, situate on Moose Creek, tributary of Fairbanks Creek

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FIRST NATIONAL BANK BUILDING
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FAIRBANKS, ALASKA
GLobe 2-2153

EXHIBIT "3"

EUGENE F. SCHREIBER

The following lode mining claims situate at the head of Fairbanks Creek, a tributary of the Chena River, in the Fairbanks Recording Precinct, State of Alaska, to-wit:

Little Jim	Caribou No. 1
Laughing Water	Caribou No. 2
Minnie Ha-Ha	Henry Ford No. 2
Caribou Fraction	Henry Ford No. 4
Marigold	Henry Ford No. 1
Henry Ford No. 3	Free Gold
The Pioneer	The Pennsylvania
Henry Ford	The Henry Clay
The Willy	Buttonweezer
Fern	Ruth Fraction

COLLINS AND CLASBY
ATTORNEYS AT LAW
FIRST NATIONAL BANK BUILDING
P. O. Box 1368
FAIRBANKS, ALASKA
GLOBE 2-2153

OFFICIAL FILE COPY

Date	Surname	Code
8/23	Murphy	500
	Marshall	500
	On leave	120
8/23	Johnson	110
	Fumich	100
8/23	Cal	220
		500

AIRMAIL

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
P. O. Box 630
Fairbanks, Alaska

AUG 23 1963

Re: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska

Dear Mr. Nordale:

On August 8, 1963, the following teletype was forwarded to you:

> "Re OME-6304 OME regulations 30 CFR 381.4 provide 'the operator must have and preserve the right to possession of the land (as owner, lessee, or otherwise) for a term at least sufficient to complete the exploration work.' The agreement to grant to the corporation (Keystone Mines, Inc.) an option to purchase as recited in Article 4 of subscription contract dated April 18, 1963, does not meet the requirements of above quoted regulation. Please furnish option agreement, lease or other evidence of corporation's right to possession of property for a term sufficient to complete exploration work."

Will you kindly advise the approximate date we may receive your reply in this matter.

Sincerely yours,

George Fumich, Jr. (gla)

Director

FMMurphy/mm
8/23/63
cc: Director's Reading File
Region I (2)
Docket

8623

MME Form 1
(10-58)

OFFICE OF MINERALS EXPLORATION
DEPARTMENT OF THE INTERIOR
WASHINGTON, D. C. 20240

X

X

14X0108, S&E, OME, Interior

OFFICIAL FILE COPY

Date	Surname	Code
8/8	Murphy	500
	Yarnell	500
	Selfridge	120
8/8	Johnson	110
8/8	Frost	100
8/8	Case	220
		500

TO: ARNOLD M. NORDALE, PRESIDENT
KEYSTONE MINES, INC.
P. O. BOX 630
FAIRBANKS, ALASKA

RE OME-6304 OME REGULATIONS 30 CFR 301.4 PROVIDE "THE OPERATOR MUST HAVE AND PRESERVE THE RIGHT TO POSSESSION OF THE LAND (AS OWNER, LESSEE, OR OTHERWISE) FOR A TERM AT LEAST SUFFICIENT TO COMPLETE THE EXPLORATION WORK." THE AGREEMENT TO GRANT TO THE CORPORATION (KEYSTONE MINES, INC.) AN OPTION TO PURCHASE AS RECITED IN ARTICLE 4 OF SUBSCRIPTION CONTRACT DATED APRIL 18, 1963, DOES NOT MEET THE REQUIREMENTS OF ABOVE QUOTED REGULATION. PLEASE FURNISH OPTION AGREEMENT, LEASE OR OTHER EVIDENCE OF CORPORATION'S RIGHT TO POSSESSION OF PROPERTY FOR A TERM SUFFICIENT TO COMPLETE EXPLORATION WORK.

George Fumich, Jr.

DIRECTOR

RWLong/mm
8/8/63
cc: Director's Reading File
Region I (2)
Docket

1 1

R. W. Long, Assistant Solicitor RE-7-1820 756 August 8, 1963 3:00 p.m.

43683

KEYSTONE MINES, INC.

P.O. BOX 630

FAIRBANKS, ALASKA

OFFICIAL FILE COPY
O. M. E
RECEIVED AUG 1 1 1963
DATE | INITIALS | CODE
OME 6304

July 29, 1963

Mr. Frank E. Johnson
Acting Director
Office of Minerals Exploration
Washington 25, D. C.

Dear Mr. Johnson:

The suggestion made in your letter of July 19 to increase the drifting on the vein at the bottom of the shaft from 400 to 800 feet is quite agreeable to us and you can process our application accordingly.

Enclosed are copies of records showing the patent numbers and book and page numbers of the recording data as requested. They are my file copies of those sent to the Washington and Spokane offices at an earlier date and I would appreciate your returning them.

Mr. Ebbert, the independent contractor, furnished Keystone Mines, Inc. a list of the Machinery and Equipment he would need on Projects 1 and 2 and the approximate on site cost for each item. The list enclosed includes only those items and amounts which will be used on Project No.1. Detailed description of many items is ommitted as the ordering has been deferred awaiting the approval of our OME application. The value of items

now on hand is fixed at present replacement cost depreciated according ?
to condition.

The situation regarding property referred to in paragraph 1 on page 2 of your letter has not changed, but if it does and control can be acquired the claims could be added to the OME contract as you suggest.

Very truly yours
Keystone Mines, Inc.

Arnold M. Nordale

Arnold M. Nordale
President

MACHINERY & EQUIPMENT
To be used on Project No. 1

Headframe - Heavy timber construction with bolted cross and diagonal bracing. Height 30 feet above shaft collar with cedar foundation timbers resting on bedrock.	$ 3,000
Hoist - Jaeger Utility, No. 2B4, powered with 50 H.P. Hercules gas engine. Hauling speed either 200 or 400 feet per minute. Drum capacity 1500 feet using 5/8" wire rope. Set on 12"x12" fir foundation skids having 1 1/2" wire rope anchor bridles.	4,000
Portable Compressor - Gardner-Denver-125 cu. ft. per minute at 100 lbs. pressure.	4,000
Portable Compressor - Gardner-Denver-155 cu. Feet per minute at 125 lbs. pressure.	3,000
Ventilating Blower - Air driven 3000 cu. ft. per min. at 10 lbs. pressure.	1,000
Sponge Pump - air driven	300
Pump - 250 ft. head-air driven	800
Pump - drill water supply	400
3-Sinking Hammers	900
2-Rock Drills	1,000
2-Air Legs	1,500
Mucking Machine	5,000
Skip - 3/4 ton capacity	500
3-3/4 ton Mine Cars	900

2-1 ton Mine Cars - surface use	1,200
Wire Hoisting Rope - 2 pcs. - 300' each 5/8"	200
Rails - 3000 feet - 12#	4,000
Fish Plates, Bolts, Switches, etc.	700
150 pcs. Drill Steel - 4 ft.	3,000
150 pcs. Drill Steel - 6 ft.	4,500
600 ft. 1" Air Hose & Fittings	500
600 ft. 1/2" Water Hose & Fittings	300
500 ft. 3" Air Pipe & Fittings	400
800 ft. 2" Air Pipe & Fittings	400
500 ft. 1 1/2" Water Pipe & Fittings	200
800 ft. 1" Water Pipe & Fittings	200
300 ft. 2" Water Discharge Pipe & Fittings	200
1000 ft. 8"x10" Ventilating Pipe & Fittings	400
2 Air Receivers	900
1 Water Receiver	300
Complete Blacksmith Shop with Bit Sharpening Machine and grinders, forge, vises, etc.	5,000
Spare parts for Compressors, Hoist, Gas Engines, Air Pumps, Drills, etc.	2,000
Carpenter Tools	200
Misc. Small Tools	500
Unforeseen	4,000

Small gasoline driven light and power plant for hoist, house, headframe and grinding equipment.	2,000
Ford Truck - 6 ton dump for utility use.	2,000
Total	$59,400
Trammer - for use on Project No. 2 but may be used on Project No. 1.	6,000
Total	$65,400

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
7/19	Jeffrey	120
7/19	Murphy	500
	Thomas	500
		110
		100
7/19	Cac	220
		500

AIRMAIL

JUL 19 1963

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
P. O. Box 630
Fairbanks, Alaska

Re: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska

Dear Mr. Nordale:

We have reviewed the report of Bruce I. Thomas relating to his on-site inspection of the referenced property and would give favorable consideration to your proposed Project No. 1 of sinking a 200-foot inclined shaft on the Kawilita vein. However, we believe that 800 feet of drifting on the vein from the bottom of the shaft rather than the 400 feet you requested would be more appropriate.

If you wish us to process your application on the basis suggested above, please advise this office and submit the following additional data:

1. A list giving the patent number or the recording data (book and page number) of each of the following claims:

Wolf	Marigold	Henry Ford No. 4
Keystone ✓ 1062411	Freegold	Fern
Kawilita ✓ "	Pennsylvania	Buttonweeser
Fairbanks ✓ "	Pioneer	Caribou Fraction
Hope ✓ "	Henry Ford	Caribou No. 1
Ruth Fraction	Henry Ford No. 2	Caribou No. 2
Willie	Henry Ford No. 3	Henry Clay
Minnehaha	Laughing Waters	

These are sufficient for contract purposes.

2. A list of the equipment you plan to use on Project No. 1 and the fair market value of each item, or present book value, whichever is lesser. No mention was made of a headframe or hoisting equipment for the shaft in either the application or in Mr. Thomas' report. Will you kindly supply this information, including type of headframe, hoist, cable, et cetera, and their values as outlined above.

23263

3. With regard to the adjoining property mentioned in item 4(b) of your letter of May 16, 1963, in the event an OME contract is approved it will contain a special agreement adding these claims if control of them is acquired by your corporation.

Upon receipt of the above-listed additional information we shall immediately continue to process your application.

Sincerely yours,

(signed) FRANK E. JOHNSON

ACTING Director

(pl)

FMMurphy/GCSelfridge/ama/gla
(7-19-63)
cc to: Director's Reading File
Region I (2)
Senator Bartlett
G. C. Selfridge

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Q. M. E
RECEIVED JUL 23 1963

DATE	INITIALS	CODE
7/23	Murphy	500

Keystone Mines, Inc.
P.O. Box 630
Fairbanks, Alaska

July 18,1963

Mr. Geo. C. Selfridge
Chief Division Field Examinations
Office Minerals Exploration
Washington 25, D.C.

Re: OME-6304

Dear Mr. Selfridge:

The Spokane office has advised that above numbered application of Keystone Mines, Inc. has been referred to you for final clearance, and that any information with regard to it must be obtained through you.

It is urgent that we know what decision is made as soon as posible, as summer is rapidly passing and much preliminary work must be done before cold weather sets in and equipment and supplies must be ordered.

The independent contractor, Mr. Ebbert, is becoming restive as he has been waiting now for almost 3 months without assurance that his contract will be operative, and moreover, he must make arrangements for the cutting and milling of timbers and lumber before winter.

Please advise at your earliest convenience whether we should proceed with these pre-operating preparations and assure Mr. Ebbert that his contract is a certainty.

Very truly yours,

Keystone Mines, Inc.

Arnold M. Nordale

Arnold M. Nordale, President

5P

CARL HAYDEN, ARIZ., CHAIRMAN
RICHARD B. RUSSELL, GA.
ALLEN J. ELLENDER, LA.
LISTER HILL, ALA.
JOHN L. MCCLELLAN, ARK.
A. WILLIS ROBERTSON, VA.
WARREN G. MAGNUSON, WASH.
SPESSARD L. HOLLAND, FLA.
JOHN STENNIS, MISS.
JOHN O. PASTORE, R.I.
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A. S. MIKE MONRONEY, OKLA.
ALAN BIBLE, NEV.
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THOMAS H. KUCHEL, CALIF.
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GORDON ALLOTT, COLO.
NORRIS COTTON, N.H.
CLIFFORD P. CASE, N.J.

EVERARD H. SMITH, CLERK
THOMAS J. SCOTT, ASST. CLERK

United States Senate

COMMITTEE ON APPROPRIATIONS

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RECEIVED JUL 22 1963

DATE	INITIALS	CODE
7/22	FEJ	110
		500

July 19, 1963

Mr. Frank E. Johnson
Acting Director
Office of Minerals Exploration
Department of the Interior
Washington 25, D. C.

Dear Mr. Johnson:

Thank you for your letter of July 17 in which you advised me that you expected to make a decision on the Keystone Mines proposal in the next few days. I refer to your file OME-6302 (Gold-Silver), Keystone Mines, Inc., Keystone Mines, Fairbanks District, Alaska.

Sincerely yours,

E. L. Bartlett

E. L. Bartlett

No reply nec

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
7/17	Murphy	500
	Grant	500
	Selfridge	120
7/17	Johnson	110
	on leave	100
7/17	cac	220
		500

JUL 17 1963

Hon. E. L. Bartlett
United States Senate
Senate Office Building
Washington 25, D. C.

Re: OMM-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska

Dear Senator Bartlett:

This is in response to your letter of July 15, 1963, to Mr. W. R. Grimwold of this office relating to the status of the referenced application for exploration aid.

We have just received the field report on the proposed exploration of the Keystone Mines. As soon as we have reviewed and analyzed this report, we will inform you of our decision on the proposal, which we expect will be made in the next few days.

Sincerely yours,

(signed) FRANK E. JOHNSON
ACTING Director

FMMurphy/FEJohnson/ama/gla
7-17-63
cc to: Director's Reading File
Region I (2)
Docket

23263

CARL HAYDEN, ARIZ., CHAIRMA
RICHARD B. RUSSELL, GA.
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E. L. BARTLETT, ALASKA

LEVERETT SAL TALL, MASS.
MILTON R. YOU N. DAK.
KARL E. MUNDT, S. DAK.
MARGARET CHASE SMITH, MAINE
THOMAS H. KUCHEL, CALIF.
ROMAN L. HRUSKA, NEBR.
GORDON ALLOTT, COLO.
NORRIS COTTON, N.H.
CLIFFORD P. CASE, N.J.

EVERARD H. SMITH, CLERK
THOMAS J. SCOTT, ASST. CLERK

United States Senate

COMMITTEE ON APPROPRIATIONS

OFFICIAL FILE COPY
O. M. E
RECEIVED JUL 16 1963

DATE	INITIALS	CODE
7/16	Murphy	500

July 15, 1963

Mr. W. R. Griswold
Office of Minerals Exploration
Department of the Interior
Washington 25, D. C.

Dear Mr. Griswold:

Please refer to my letter dated June 11, 1963. I wrote to you concerning an application filed in your office for financial assistance in the exploration of a quartz vein by Keystone Mines, Inc.

Prior to my writing to you at that time, a member of your staff had stated over the telephone that a field examination was being made of the subject quartz vein and that upon receiving the field report you would be making a decision on the Keystone application. I am now wondering if the field report has been received and how soon we make expect approval or disapproval of the Keystone application.

I will appreciate your advising me on this matter.

Sincerely yours,

E. L. Bartlett

E. L. Bartlett

Re: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks, Alaska.

WARREN G. MAGNUSON, WASH., CHAIRMAN
JOHN O. PASTORE, R.I.
A. S. MIKE MONRONEY, OKLA.
STROM THURMOND, S.C.
FRANK J. LAUSCHE, OHIO
RALPH YARBOROUGH, TEX.
CLAIR ENGLE, CALIF.
E. L. BARTLETT, ALASKA
VANCE HARTKE, IND.
GALE W. MCGEE, WYO.
PHILIP A. HART, MICH.
HOWARD W. CANNON, NEV.
NORRIS COTTON, N.H.
THRUSTON B. MORTON, KY.
HUGH SCOTT, PA.
WINSTON L. PROUTY, VT.
J. GLENN BEALL, MD.

EDWARD JARRETT, CHIEF CLERK

United States Senate

COMMITTEE ON COMMERCE

EXTRA COPY
O. M. E
RECEIVED JUL 16 1963

DATE	INITIALS	CODE

July 15, 1963

Mr. W. R. Griswold
Office of Minerals Exploration
Department of the Interior
Washington 25, D. C.

Dear Mr. Griswold:

Please refer to my letter dated June 11, 1963. I wrote to you concerning an application filed in your office for financial assistance in the exploration of a quartz vein by Keystone Mines, Inc..

Prior to my writing to you at that time, a member of your staff had stated over the telephone that a field examination was being made of the subject quartz vein and that upon receiving the field report you would be making a decision on the Keystone application. I am now wondering if the field report has been received and how soon we make expect approval or disapproval of the Keystone application.

I will appreciate your advising me on this matter.

Sincerely yours,

E. L. Bartlett

Re: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks, Alaska.

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
So. 157 Howard Street
Spokane, Washington 99204
July 15, 1963

OFFICIAL FILE COPY O. M. E RECEIVED JUL 17 1963		
DATE	INITIALS	CODE
		130
6/17	Received	500
	Murphy	500

cy 130

Air Mail

Memorandum

To: Chief, Division of Field Operations

From: Acting Field Officer, Region I

Subject: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska

Enclosed are two copies each of a letter dated July 2, 1963, from J. A. Herdlick and an examination report on the subject property dated July 28, 1963, by Bruce I. Thomas, U.S.B.M.

Thomas recommends that the applicant's proposed project be approved. However, he implies that the lower portion of the shaft and the proposed drift therefrom will pass beyond the south vertical side line of the Kawilita Claim. He does not believe that it is necessary for the applicant to secure the Fraction No. 1 Claim, south of the Kawilita, as he has extralateral rights. As neither DMEA nor OME has ever recognized extralateral rights for contract purposes, the applicant will have to add the Fraction No. 1 Claim. Thomas does point out that Keystone should keep the drift on the vein if south of the Kawilita Claim.

Thomas' estimated costs of $129.79 per foot for timbered shafting, $49.28 per foot for drifting, and $10.51 per foot for drift timbering do not include any depreciation for applicant-owned equipment. When the list of this equipment is received, these costs will be slightly higher. The cost for shafting is already higher than the contractor cites, but his cited drifting and rehabilitation costs will probably still be slightly higher than Thomas' estimate.

I concur with Thomas' recommendations.

D. R. MacLaren

D. R. MacLaren

Enclosures

ON-SITE EXAM. REPORT

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION I

ALASKA OFFICE OF
MINERAL RESOURCES

P. O. BOX [illegible]
JUNEAU, ALASKA

July 2, 1963

Mr. D. R. Maclaren
Acting Field Officer, Region I
Office of Minerals Exploration
South 157 Howard Street
Spokane 4, Washington

RE: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Fairbanks District, Alaska

Dear Mac:

Bruce Thomas has made an on-site examination of the referenced project; his report is attached.

I know that Bruce is thoroughly familiar with property, the competence of the operators and with conditions in the area; therefore, I have no reservations in endorsing his recommendations.

The Docket is returned herewith; extra copies of pertinent correspondence have been retained.

Best regards.

Sincerely yours,

J. A. Hardlick, Chief
Alaska Office of Mineral Resources

Enclosures: 4

RECEIVED
JUL 1 2 1963
[illegible]

COPY

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION I

ALASKA OFFICE OF
MINERAL RESOURCES

P. O. BOX 2688
JUNEAU, ALASKA

Fairbanks, Alaska

June 28, 1963

Mr. J. A. Herdlick
Chief, Alaska Office of Mineral Resources
Bureau of Mines, Region I
P. O. Box 2688
Juneau, Alaska

RE: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska

Dear Jerry:

The above named OME application file has been reviewed and an on-site inspection was made on June 26. It is my opinion that the applicant proposes a practical exploration program to develop the gold-bearing quartz vein on the Kawalita claim. Open-cut mining along the vein has demonstrated that there is a reasonable chance to develop sufficient tonnage to amortize an exploration expenditure approximating $100,000.

The open-cut is sloughed and most of the vein is covered by fallen rock and fines that have migrated down slope during the spring runoff. Sporadic exposures in sloughed rubble, and work that is currently being done near the west end of the open-cut, confirms the continuity of the vein as pictured by the map accompanying the application. According to Mr. Nordale, payshoots along the vein rake eastward. (The vein parallels the broad crest of an anticline which forms the main structure in which the various gold lodes of the Pedro Dome-Cleary area occur. The anticlinal structure is essentially meta sediments, provisionally dated Precambrian age, and known locally as Birch Creek schist. Mineralized veins appear to be genetically related to granitic intrusions that are localized in the vicinity of Pedro Dome.) The trace length of the vein is about 1100 feet and the sporadic exposures appear to confirm an average width of about 24 inches. The surface work was along the breakover of the vein and the true dip is indeterminate, however, it is my guess (based on the severe deformation of the schist) that the true dip will be less than the contemplated 60° south.

The westward projection of the vein is outside the end line of the Kawalita claim into property not held by the loan applicant. On first analysis this appears to be a deterrent for exploring the vein without first acquiring claims to the west and south of the Kawalita. However, the applicant has 1100 feet of strong vein in possession; this vein is "open" for development to the east and the advantage of extralateral rights protects the claimants privilege to mine down dip beyond the vertical projection of the southern side line of the Kawalita claim. With payshoots raking eastward Keystone is able to protect its rights to ore along the present strike length of the vein. Should the rake be westward, I would say that Keystone was obliged to acquire property to the west of the Kawalita claim. If a loan is granted, I think it would be unwise to permit Keystone to explore beyond the confines of the vein; especially outside of the vertical projection of the southern sideline of the Kawalita claim. In other words, Keystone should stay on the vein when south of the vertical projection of this sideline.

Mr. Nordale has said that he contemplates sinking the shaft (as set forth in applicants Project #1) at a point on the vein about 800 feet east of the west end line of the Kawalita claim. This is practical and makes good sense. It is also my opinion that the contemplated extension of the Nordale adit to intersect the projection of the Kawalita vein at adit level is a good practical approach to the development of the vein below a 200 foot level established by sinking and drifting. The extension of the Nordale adit 700 feet to intersect the vein is based on projection at 60° dip. Should shafting indicate a flatter dip necessitating an extension of the adit beyond the 700 feet contemplated, I would be inclined to extend to the applicant the privilege of converting Project Number 2 toward further sinking in the shaft. I have not suggested this to Mr. Nordale but offer it as a means of encouraging development of the vein if assays and width justify and dip discourage undertaking Project Number 2.

The members of Keystone Mines are reliable people and are fully cognizant of their financial responsibility as related to OME assistance. They are capable, willing and able to proceed with their proposed exploration program as soon as their application is approved.

Mr. Nordale has told me that he will delete the objectionable portion of Keystone's construction contract as soon as he has been advised to do so. I apparently fail to impress upon him that it is to his advantage to do so withou further delay. However, I presume that he will act quickly upon receipt of further prompting.

I have prepared an estimate of costs for Project Number 1, without including allowances for depreciation of applicant owned equipment, and find the costs per foot proposed by Keystone to be fair and reasonable. In making my estimate I used the base wage rate of $4.67½ which is the union scale for underground work at Usibelli's

coal mine. Projected on an 8 hour day for six days per week it gives an average of $5.064 per hour. Unit costs of various materials and supplies were collected locally and incorporated in the cost estimate. Inasmuch as my time element was paramount, I must admit that my estimates were prepared hastily, however, I believe they are fairly realistic. I think that the cost of crosscutting and drifting in Project Number 1 is applicable to Project Number 2, with exception of rehabilitation of the adit portal. At current local prices, timber will cost $10.50 per foot of drift or crosscut and if the contractor chooses to place it at cost I presume that is his prerogative. Mr. Nordale told me that Mr. Schrieber is preparing a list of owner equipment to be used in the exploration work; without this list I was unable to incorporate an allowance for depreciation. Attached is a breakdown of the cost estimate.

The complete docket is enclosed.

Sincerely yours,

Signed

Bruce I. Thomas

Enclosure

$4.56 difference between metal & coal mine wages. gmm
50¢

RECEIVED
JUL 12 1963
U. S. S.
SPOKANE, WASH.

COST ESTIMATE

Project No.	1 - 200' incline shaft		
Labor:	3200 man hours $5.064	16,204.80	
	Workmens compensation at $10.36/100	1,678.81	
	Social Security at 3 1/8%	488.17	
	Employment Security at 2.9%	469.94	
	Total labor		18,841.72
Mat. & Sup:	Timber 22,608 b.f. at $170/m.b.f.	3,843.36	
	Powder 1750# 40% at $32.75/100	573.14	
	Fuse 9240' at $1.80/100	166.32	
	Caps #6 840 at $4.00/100	33.60	
	Fuel oil, gasoline and lubes	1,200.00	
	Lights and carbide	50.00	
	Blacksmith coal	50.00	
	Pipe, fittings, bolts, spikes & nails	800.00	
	Steel and bits	300.00	
	Small expendible tools e.g. picks, shovels, etc.	100.00	
	Total materials and supplies		7,116.42
	Total cost shaft		$25,958.14
	cost/foot		129.79

Bolts

application

$100.00/ft

$20,000.00

3200 = man hours

2 miners/ft

6 ft/day

35)200

200 = 35 wks

2 miners a/end.

35 | 840

35 5 1/2

9

COST ESTIMATE

breaking 5'/shift

Project No. 1 - 400 feet of drift

Labor:	2560 man hours at ~~$5.064~~ 4 man $4.50	12,963.84	
	Workmans compensation at $10.36/100	1,345.05	
	Social Security at 3 1/8%	389.08	
	Employment Security at 2.9%	376.15	
	Total labor		15,075.12
Materials and Supplies:			
	Powder 2000# 40% at $32.75/100#	655.00	
	Fuse 6480' at $1.80/100'	116.64	
	Caps 801' at $4.00/100	32.04	
	Fuel oil, gasoline and lubes etc.	1,500.00	
	Lights and carbide	75.00	
	Blacksmith coal	85.00	
	Pipe, fittings, bolts and nails	1,600.00	
	Steel and bits	425.00	
	Small expendible tools e.g. picks, shovels etc.	150.00	
			4,638.68
	Total cost drift		$19,713.80
	Cost per foot		49.28

2560 ÷ 8 = 320 man shifts

Timber 309 b.f./5' of drift at $170/m.b.f.
$52.53 or $10.51/ft. drift

OFFICIAL FILE COPY
O. M. E
RECEIVED JUN 27 1963

DATE	INITIALS	CODE
6/22	Murphy	500

June 21, 1963

Memorandum

To: Bruce I. Thorne, Mine Examination and Exploration Engineer
Fairbanks, Alaska, Region I

From: Chief, Alaska Office of Mineral Resources, Region I

Subject: Docket OMR-6304 (Gold-Silver)
Keystone Mines Ltd. (Mordale and Associates)
Fairbanks District, Alaska

Enclosed is the complete docket on the subject application which has been referred to this office for a field examination and recommendations.

Please arrange to make an on-site examination and an appraisal of the proposed exploratory work and forward your recommendations to this office as soon as possible. Your recommendations should include an estimate of costs (itemized in detail if possible); note that the government will allow depreciation on operator-owned equipment which is used but will not contribute toward the rental of operator-owned buildings. Mordale included an item for rental of buildings and equipment to the contractor as an item of expense in which the government would participate. This is not allowable and should be eliminated. Depreciation of operator-owned equipment can be included in the estimate of unit costs at the rate of 1/60 of the fair value of such equipment per month of use.

If you have any questions, please call rather than write as I know Mordale is anxious for an early decision.

Note that MacLaren mentions an examination of the Richard Rowe project when convenient. Keep this in mind--you may be able to work it in with other examinations in the vicinity of the Rowe project.

Best regards.

J. A. Herdlick, Chief
Alaska Office of Mineral Resources
U. S. Bureau of Mines
P.O. Box 2688
Juneau, Alaska

Enclosure
CC: D. R. MacLaren, O. M. Bishop, C. H. Johnson, Thorne, File 001, 440 Keystone M...

June 21, 1963

Memorandum

To: M. Helen Lee, Finance Officer, Region I, Albany, Oregon

From: Chief, Alaska Office of Mineral Resources, Region I

Subject: Reimbursable services for OMR

Attached is a copy of a letter from D. R. Hamlaren requesting several examinations for OMR.

Probably there will be no out-of-pocket expense connected with the Keystone Mines examination as the property is within easy daily driving distance of Fairbanks.

Examination of the Red Devil, Little Squaw, and Richard Rose projects, however, probably will involve airplane charters and per diem.

Do you wish to assign us an account number for the out-of-pocket expenses resulting from miscellaneous examinations for OMR in FY-1964?

J. A. Vandlick

Enclosures

CC:
Thomas
Maloney
Thorne
Wilcox
File 661.31

JAVandlick:mj

CARL HAYDEN, ARIZ., CHAIRMAN
RICHARD B. RUSSELL, GA.
ALLEN J. ELLENDER, LA.
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GORDON ALLOTT, COLO.
NORRIS COTTON, N.H.
CLIFFORD P. CASE, N.J.

EVERARD H. SMITH, CLERK
THOMAS J. SCOTT, ASST. CLERK

United States Senate

COMMITTEE ON APPROPRIATIONS

OFFICIAL FILE COPY
O. M. E
RECEIVED JUN 12 1963
DATE | TR | ... | ...
Ed Murphy | 500

June 11, 1963

Mr. W. R. Griswold
Office of Minerals Exploration
Department of the Interior
Washington 25, D. C.

Dear Mr. Griswold:

This refers to a telephone conversation between Mr. Fred Murphy of your office and Mr. William Boesch of my staff on June 5.

Mr. Boesch phoned at my request with regard to Keystone Mines, Inc., of Fairbanks, Alaska. Mr. Arnold M. Nordale, one of the directors of Keystone Mines, is a long-time friend of mine. He recently informed me that he was having some difficulty concerning an application filed in your office for financial assistance in the exploration of a quartz vein located on the divide between Wolf and Fairbanks Creeks near Fairbanks.

I was happy to hear from Mr. Murphy that the necessary information regarding the Keystone application has now been received and that you have been able to order a field investigation by a Bureau of Mines engineer at Fairbanks.

I will certainly appreciate hearing from you when the field report is in and you have decided whether to approve the Keystone application.

Sincerely yours,

E. L. Bartlett

E. L. Bartlett

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code

June 6, 1963

Memorandum

To: The File

From: F. M. Murphy, Mining Engineer
Division of Minerals

Subject: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska

Bill Boesh from Senator Bartlett's office called today to inquire about the subject application. He was advised that additional data had been received in this office from the Applicant June 5 and that the application had been referred to the field today for an examination and recommendations.

Mr. Boesh asked that he be kept informed on the progress of this application.

F M Murphy

MMerrithew/mm
6/5/63
cc: Mr. Fumich
Director's reading file
Docket

43683

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
6/5	Murphy	500
	Hurwitz	500
6/5	Talbert	800
	GCS	130
6/5	Johnson	110
6/5	[illegible]	100
6/6	TEB	220
		500

JUN 6 1963

Memorandum

To: Acting Field Officer, Region I

From: Chief, Division of Field Operations

Subject: OME-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska

The subject application is referred to Region I for review, a field examination and recommendations.

Enclosed are two copies of a self-explanatory letter, dated May 29, 1963, from the Applicant; also two copies of the assay data, correspondence, and deposit slips mentioned in the letter.

With regard to the Applicant's estimated costs, the unit costs for independent contracts are high partly because the contractor is actually renting buildings from the Applicant. In our contracts we can allow depreciation on operator-owned equipment which is used but cannot contribute to the costs of any buildings that are already on the property. In any case, the Applicant's private arrangements with an independent contractor are no concern of OME. In the event a contract is granted its share of the costs will be based on the examiner's findings.

George C. Selfridge (gla)

Enclosures

FMMurphy/mm
6/5/63
cc: Director's Reading File
Review Committee
Docket

43683

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
6/5	Murphy	500
	Dwyer	500
6/5	Tallant	800
	Selfridge	430
6/5	Johnson	110
"	Fumich	100
6/6	JAS	220
		500

JUN 6 1963

AIRMAIL

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
P. O. Box 630
Fairbanks, Alaska

Re: OMK-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska

Dear Mr. Nordale:

Your letter of May 29 and enclosed information are acknowledged. The captioned application has been referred to Mr. D. R. MacLaren, Acting Field Officer, Office of Minerals Exploration, Region I, South 157 Howard Street, Spokane 4, Washington.

The Regional Office will contact you in case any additional information is required.

We have made copies of the data submitted with your letter and, as requested, are returning the deposit slips, assay certificates, and correspondence you forwarded to Mr. Griswold.

Sincerely yours,

George Fumich, Jr.

Director

Enclosures

FMMurphy/mm
6/5/63
cc: Director's Reading File
Region I (2) ~~w/2 copies of all incoming data~~
Docket

43683

Mac Laren

KEYSTONE MINES, INC.
P. O. Box 630
Fairbanks, Alaska

May 29, 1963

O. M. E.
RECEIVED JUN 3
DATE
Issued 500
Murphy
OME 6304

Mr. W. R. Griswold, Chief
Divisions of Minerals
U. S. Department of the Interior
Office of Minerals Exploration
Washington 25, D.C.

Dear Mr. Griswold:

This will acknowledge the receipt of your letter of May 22nd, in which you advise that ours of May 16th did not furnish all the information you require. In order to clarify our position with regard to the deficiencies we offer the following explanations:

1. When soliciting bids on an Independent Contract we stipulated that the prices should be quoted on a per foot basis separately for sinking of the shaft, for drifting from it, for tunneling, for drifting at the tunnel level, and for the rehabilitation of the tunnel entrance, each with and without timbering. We believed this to be in conformity with Section 7(a)-Independent Contracts-as set forth on the reverse side of the application form. We did not request an itemized break-down of estimated costs as we were, and we presumed you were, primarily interested in obtaining a firm cost per foot figure.

Although the Mine Construction Contract is in the name of Mr. Edwin W. Ebbert, he has two partners all of whom are experienced hard rock miners from California and, no doubt, determined their bid figures on experimental knowledge and prepared no detailed estimate.

Of the several individuals and firms that were solicited for bids, the majority stated that they were not interested in a contract, but would undertake the work on wage basis; others suggested figures that were not acceptable to us, and we knew would not be to you, the prices ranging from $200 to $350 per foot, exclusive of equipment. I am enclosing a copy of the reply received from General Mining and Contracting Limited, a company which has been contracting exploration work for United Keno Hill and Conwest for many years. The figures shown are indicative of the prices that are obtained in Yukon for this type of work. Incidently this was the second lowest bid we received.

As evidenced above, the tender submitted by Mr. Ebbert was by far the lowest and quite within the price range we considered acceptable. Mr. Ebbert has neither machinery, equipment, tools nor housing, and in formulating the Mine Construction Contract some provision had to be included whereby Keystone Mines, Inc. could supply them and receive payment for doing so. At first it was thought that a second and separate contract should be executed between Mr. Ebbert and Keystone Mines for this purpose, but it was deemed unwise, as we felt that O.M.E. should be cognizant of all details connected with the Independent Contract.

Although Keystone Mines, Inc. has considerable machinery, etc. available, there are many items which it will have to purchase or rent. An arrangement has been made with the U. S. Smelting, Refining and Mining Company for whatever usable equipment they have. To provide for all the needs of the contractor will entail a substantial expenditure by Keystone Mines, Inc.

In order furnish you a list of machinery, equipment, tools, etc. now on hand, and what we will have to procure, I am requesting Mr. Schreiber to consult with Mr. Ebbert to ascertain his requirements, and to make a complete inventory setting forth itemized values. In our discussions to arrive at a fair price per foot to include in the contract, it was estimated that the over all value would be somewhere between $75,000 and $100,000, for which we should receive approximately $20,000 for its use. This incidently roughly approximates your depreciation rate of 1/60 per cent of its value per month. With 3 men it will take at least 14 months to complete the contract. Now assuming a value of $80,000, we have 1/60 x 14 x $80,000 = $18,300.

If you consider it necessary to revise or amend the Mine Construction Contract to conform to your depreciation allowance rate, I am sure it can easily be done.

2. As stated in my letter of May 16th, the sampling of the vein has been meagre, and not done in a way that would give a true or even a reasonable indication of the average value. However I am enclosing a number of assay returns which will amply assure the presence of gold and silver, and in sufficient quantity to justify further exploration. Also enclosed are bank deposit slips which show deposits made in 1958, 59, 60 and 61. The letter from Mr. Clasby to Mr. Vetter shows the approximate amount of gold recovered in the last mill run in 1961, and which is now held pending court action. Mr. Vetter told me personally it amounts to about $14,000, but in order to be on the conservative side it is included in the 1961 production as $13,000. You will note that the total gold production reported is after bank charges have been deducted.

Would you please return the deposit slips, assay certificates and correspondence that I may keep my files intact.

3. The present assets of the Keystone Mines, Inc. are the bank balance of $7032.95, and the physical assets of the Hi Yu, McCarty and Nordale Mines, which are controlled under the Subscription Contract. There are no liabilities. At the present time ore is being mined from the surface or outcrop of the vein, which should shortly increase its liquid assets to at least $30,000.

To assure you that Keystone Mines, Inc. is financially able to undertake its share in the exploration program, Mr. Schreiber, the Algo Company, and the Nordale Corporation will jointly underwrite any deficit that might occur. ?

4. We have been advised by our attorney, Mr. Charles J. Clasby of Fairbanks, Alaska, that the Subscription Contract is a legal instrument equal in constraint to an option, and is sufficient for the present purpose. An option in effect would be a legal duplication.

I might say, however, the reason for using the Subscription Contract form of agreement was briefly outlined in the first paragraph of the document. To be in accordance with the terms of the Nordale Estate Trust which held title to the 5 claims of the Nordale Mine, it was necessary to transfer ownership to the Nordale Hotel Corporation. The Articles of Incorporation of the Nordale Hotel Corporation had to be amended to accomplish it. These transactions naturally took considerable time, and with the short summer season time is an important factor indeed.

Very truly yours,

Keystone Mines, Inc.

Arnold M. Nordale

Arnold M. Nordale
President

AMN/emm

GENERAL MINING & CONTRACTING LIMITED

Box 473,
Whitehorse,Y,T.
April 22/63

Mr.Arnold M. Nordale,
Nordale Hotel,
Fairbanks,Alaska.

Dear Mr.Nordale:

Yours of the 8th. received this date.Have been engaged on a small job in the Freegold district and out of communication.

However,after studying your letter and terms of contract, I,m of the opinion the job is somewhat out of our line. The primary reason for this statement is the fact that the job may be terminated at any unspecified time.

We would plan on operating on a three shift basis, seven days a week.In order to do this,we would have to put a full crew;supplies forat least one month,and peferably two months,on the claims, at considerable expense.There is absolutely no guarantee that our expenses would be met.

All other terms can be overcome.Our estimated time on the overall job would be 165 days.

A shotgun estimate on timbered shaft to your specifications would be $ 187.50 per foot.

An estimate on drift or tunnel would be $ 164.50 per foot.This would include timber where necessary for safety.

We would reserve the right to use our equipment where deemed adviseable.

I am quoting these figures as a guide only,in the hope they may be of some value to you.

Unless General Mining & Contracting is guaranteed a certain footage, I,m reluctant to submit a firm quotation.

We thank you for your interest and only trust that we may be of service in the future.

Our mutual friend, Mr.Alex Berry asks me to send his regards.

Sincerely,

AL Crocker.

AL Crocker.

FILE NO. 426-5

DATE Sept 7th 1958

ASSAY CERTIFICATE

WHITEHORSE ASSAY OFFICE

P.O. Box 346, Whitehorse, Yukon

RECEIVED FROM Mr A. M. Nordale, c/o Y.C.G.C. Dawson Yukon

SAMPLE No.	GOLD OZ. PER TON	SILVER OZ. PER TON	Antimony					
(WIDTH)								
No. 1 ( )	1.76	8.5						
2 ( )	.04	5.9	47.4					
3 ( )	5.85	39.2	20.6					
4 ( )	10.7	17.2						
5	.28	4.42						

Samples 1 to 4 inclusive were taken across the vein at a location where high mineralization was evident. The main vein was split by a seam of antimony about 1 ft thick. The overall width of the vein at that place was 4 inches.

Sample 5 was a grab sample of what appeared to be wall rock A.M.N.

ASSAYER

METALLURGICAL LABORATORY

WILLIS H. OTT

ASSAYERS
Umpire and Smelter Control

METALLURGISTS
1519 WESTLAKE AVENUE NORTH
SEATTLE 9, WASHINGTON

CHEMISTS
Chemical Testing

No. 1919

CERTIFICATE OF ANALYSIS

Date Aug. 15, 1958

Submitted by Rudolph Vetter, 1425 Ash Street, Arctic Park, Fairbank

Sample No. 1

Lead 23.6%
Antimony .. 29.0%
Gold ..... 0.12 oz per ton.
Silver ....79.88 " " "

216

Sample No. 2

Gold ..... 19.82 oz per ton.
Silver .... 12.94 " " "
Tellurium . nil

698

The mineral in No. 1 sample appears to be Sulphantimonite of lead, with some pyromorphite on the surface.

METALLURGICAL LAB ORATORY.

METALLURGICAL LABORATORY

WILLIS H. OTT

ASSAYERS
Umpire and Smelter Control

METALLURGISTS
1519 WESTLAKE AVENUE NORTH
SEATTLE 9, WASHINGTON

CHEMISTS
Chemical Testing

No. 2552

CERTIFICATE OF ANALYSIS

Date Sept. 25, 1959

Submitted by Rudolph Vetter, 1425 Ash Street, Fairbanks

Gold ..... 0.40 oz per ton.

Silver ..... 43.60 " " "

Lead 9.78%

Ant imony 13.5%

METALLURGICAL LABORATORY.

Theodore H

214 Ton Milled
Operated 17 Days 1959

Mill - 5 stamp Hendy
Recovery Method - Amalgamation For Gold
Wisley Table For Concentrate
Grind - 40 Mesh
This Assay is Concentrate

Product of Wisley Table Following Amalgamation Inside Montan Box Outside
" " Table
Concentration Ratio 20 to 1 Estimated By Volume

ATWATER 2-6666

METALLURGICAL LABORATORY

WILLIS H. OTT

ASSAYERS
Umpire and Smelter Control

METALLURGISTS
1519 WESTLAKE AVENUE NORTH
SEATTLE 9, WASHINGTON

CHEMISTS
Chemical Testing

No. 2719

CERTIFICATE OF ANALYSIS

Date Jan 28, 1960

Submitted by Arctic Alaska Fisheries & Enterprises, Inc.,

115 # sample

5.3 # total

Sample No. 1	Gold	103.12 oz per ton.
	Silver	24.60 " " "
	Lead	1.46%
	Antimony	2.54%
Sample No. 2	Gold	1.46 oz per ton.
	Silver	1.02 " " "
	Lead	0.54%
	Angimony	0.93%
Sample No. 3	Gold	0.32 oz per ton.
	Silver	13.08 " " "
Sample No. 4	Gold	0.20 oz per ton.
	Silver	1.60 " " "
Sample No. 5	Gold	0.38 oz per ton.
	Silver	1.62 " " "
Sample No. 6	Gold	0.44 oz per ton.
	Silver	2.40 " " "

METALLURGICAL LABORATORY.

Heads - 5.27 oz. gold
silver. - 1.4 oz silver

METALLURGICAL LABORATORY
WILLIS H. OTT

ASSAYERS
Mine and Smelter Control

METALLURGISTS
1519 WESTLAKE AVENUE NORTH
SEATTLE 9, WASHINGTON

CHEMISTS
Chemical Testing

No. 2740

CERTIFICATE OF ANALYSIS

Date Feb. 3, 1960

Submitted by Arctic Alaska Fisheries & Enterprises, Inc.,

Sample No. 1.

QUALITATIVE SPECTROGRAPHIC EXAMINATION

Element	Approximate quantity
Silicon	Major Constituent
Chromium, Iron, Lead	Intermediate Constituents
	Minor Constituents
Aluminum	1%
Copper	1%
Antimony	0.5%
Arsenic	0.5%
Magnesium	0.5%
Barium	0.1%
Zinc	0.1%
Calcium	0.01%
Magnesium	0.01%
Strontium	0.01%
Boron	0.005%
Bismuth	0.005%
Nickel	0.005%
Tin	0.005%
Titanium	0.005%
Gold ...	large amouny
Silver ..	present
Rare Earths	none found.

METALLURGICAL LABORATORY.

ATWATER 2-6666

METALLURGICAL LABORATORY

WILLIS H. OTT

ASSAYERS
Umpire and Smelter Control

METALLURGISTS
1519 WESTLAKE AVENUE NORTH
SEATTLE 9, WASHINGTON

CHEMISTS
Chemical Testing

No. 2742

CERTIFICATE OF ANALYSIS

Date Feb. 3, 1960

Submitted by Arctic Alaska Fisheries & Enterprises, Inc.,

Sample No. 6

QUALITATIVE SPECTROGRAPHIC EXAMINATION

Element	Approximate Quantity
Silicon	major Constituent
Aluminum	Intermediate Constituent
	Minor Constituents
Lead	1%
Iron	1%
Copper	0.5%
Magnesium	0.5%
Antimony	0.1%
Arsenic	0.1%
Barium	0.1%
Zinc	0.1%
Chromium	0.05%
Calcium	0.01%
Strontium	0.01%
Titanium	0.01%
Boron	0.005%
Nickel	0.005%
Manganese	0.001%
Silver	present
Rare Earths	none found

METALLURGICAL LABORATORY.

ASSAY MEMORANDUM

OF

FAIRBANKS, ALASKA. December 15, 1958

GOLD DEPOSITED FOR ASSAY AT THE FIRST NATIONAL BANK BY Arctic Alaska Fisheries & Enterprises

Weight				Gold			Silver			Deductions Transportation Insurance, Melting Assaying Financing, Etc.		Returned to Depositor	
Before Melt		After Melt		Fineness	Value		Fineness	Value					
OUNCES	DEC.	OUNCES	DEC.	1000 THS	DOLLARS	CTS.	1000 THS	DOLLARS	CTS.	DOLLARS	CTS.	DOLLARS	CTS.
197	50	191	94	793	5,332	32	192	33	17	5365	49	5,258	19
										Advanced		5,000	00
										Balance		258	19

Value per ounce after melting - - - $ _____

" " " before " - - - $ _____

" " " after deducting charges $ _____

Percentage of loss in melt _____

NOTE—This Memorandum is for the information of the depositor, and is of no other value.

E. B. Collins (Ret.)
Charles J. Clasby
Mary Alice Miller

LAW OFFICE
COLLINS AND CLASBY
FIRST NATIONAL BANK BUILDING
P. O. BOX 1369
FAIRBANKS, ALASKA
BLoss 2-2159

COPY

November 28, 1962

Mr. Rudolph Vetter
1425 Ash Street
Fairbanks, Alaska

Dear Mr. Vetter:

Re: Nordale Trust--Arctic Alaska Fisheries and Enterprises, Inc. Lease

Mr. Nordale discussed with me the above-noted lease, and particularly the royalties that are due on 1961 production. He understands from Mr. Sheldon that production amounted to approximately 400 ounces, and that the gold is in your possession.

We are not, of course, concerend with any of the internal problems of the lessee, nor with who has the gold or why it has not been submitted to the smelter. Whatever those problems may be, they are no reason for withholding the payment of royalty. The lease calls for a royalty of 6% 7% at the probable rate of production you had in 1961; and while this provision is for the net in dollars after all shipping, assaying and other handling charges, I know of no objection to the settlement of royalty in kind.

Therefore, if you are still retaining gold upon which royalty is due, and you have some reason for not converting the gold into money, if you will be kind enough to let me know, I will be happy to arrange for the proper division of the gold in kind in satisfaction of the royalty.

Sincerely yours,

Charles J. Clasby for
COLLINS & CLASBY

CJC:dl
cc Mr. Arnold Nordale

Date	No oz.	Advances	Additional	Total	Bank Charges	Net
Nov 24, 1958	197.5	500000	36549	536549	10730	525819
Sept 2, 1959	90.7	225000	19493	244493	4749	239744
Sept 18, 1959	460	1150000	117744	1267744	23193	1244551
July 17, 1960	187	467500				
Aug 3, 1960	317.60	780000				
Aug 26, 1960	514.35	1280000				
Sept 19, 1960	218	545000				
Sept 19, 60	298	745000				

			V/T		Tons.
1958	—		47.80	525819	110
1959	—		69.41	1484295	214
1960	—		75.73	3921955	508
		Total		5932069	
1961	(Approx. production)		69.65	2214934	318
1962	—		47.30	355397	75
			68.59	8402400	

Total Tonnage reported by Mr Sheldon and Mr Burham 1225

DEPOSITED WITH ALASKA NATIONAL BANK OF FAIRBANKS 32-70
FAIRBANKS, ALASKA

FOR ACCT OF
ARCTIC ALASKA FISHERIES & ENTERPRISES INC.
HEREWITH REVERSE SIDE FOR ACCOUNTS CHECKED

DATE 9-2-59 19

Items drawn on other banks are credited subject to final collection. Items drawn on this bank will be credited immediately and if found not good at maturity, will be charged back to the account of the depositor. In making this deposit the depositor agrees to the foregoing conditions.

PLEASE LIST EACH CHECK SEPARATELY

	DOLLARS	CENTS
CURRENCY		
SILVER		
CHECKS		
ADV. ON 90.7 ozs.		
RETORT	2250	00
TOTAL		

SEE THAT ALL CHECKS AND DRAFTS ARE ENDORSED

DEPOSITED TO THE CREDIT OF

NAME Morlaf State Trust

ADDRESS Fairbanks

WITH

First National Bank
OF FAIRBANKS

FAIRBANKS, ALASKA. Sept. 7, 19 60

	DOLLARS	CENTS
CURRENCY		
SILVER		
CHECKS AS FOLLOWS #923	1516	50
PLEASE LIST EACH CHECK SEPARATELY		
TOTAL $	1516	50

Checks on this bank will be credited conditionally. If not found good at the close of business, they will be charged back to depositors and the latter notified of the fact.
In making this deposit, the depositor hereby assents to the above conditions.

ARCTIC ALASKA FISHERIES & ENTERPRISES, INC.
FAIRBANKS, ALASKA

DETACH AND RETAIN THIS STATEMENT
THE ATTACHED CHECK IS IN PAYMENT OF ITEMS DESCRIBED BELOW. IF NOT CORRECT PLEASE NOTIFY US PROMPTLY. NO RECEIPT DESIRED.

DATE	DESCRIPTION	AMOUNT
7/17/60	Advance on gold $4,675.00	
8/3/60	Advance on gold $7,800.00	
8/26/60	Advance on gold $12,800.00	
	$25,275.00 @ 6%	$1516.50

Arctic Alaska Fisheries + Enterprises
7-11 60

DEPOSITED WITH ALASKA NATIONAL BANK OF FAIRBANKS FAIRBANKS, ALASKA

FOR ACCT OF ARCTIC ALASKA FISHERIES & ENTERPRISES

DATE 8-26-60

ADV. ON 514.35 oz
RETORT 12800.00

SEE THAT ALL CHECKS AND DRAFTS ARE ENDORSED

DEPOSITED WITH ALASKA NATIONAL BANK OF FAIRBANKS FAIRBANKS, ALASKA

FOR ACCT OF ARCTIC ALASKA FISHERIES & ENTR. INC.

DATE 8-3-60

ADV. ON 312.60 oz
Retort 7800.00

SEE THAT ALL CHECKS AND DRAFTS ARE ENDORSED

DEPOSITED WITH ALASKA NATIONAL BANK OF FAIRBANKS FAIRBANKS, ALASKA

ARCTIC ALASKA FISHERIES & ENTERPRISES INC.

DATE 9-21-59

PLEASE LIST EACH CHECK SEPARATELY

	DOLLARS	CENTS
CURRENCY		
SILVER		
CHECKS		
ADV. ON 460 cs.		
BETSEY	11500.00	
TOTAL		

SEE THAT ALL CHECKS AND DRAFTS ARE ENDORSED

1-13-032-3

ARCTIC ALASKA FISHERIES & ENTERPRISES, INC.

8-8-61

ADV. ON 366.75oz

Retort $150.00

ARCTIC ALASKA FISHERIES
& ENTERPRISES, INC.
FAIRBANKS, ALASKA

DETACH AND RETAIN THIS STATEMENT
THE ATTACHED CHECK IS IN PAYMENT OF ITEMS DESCRIBED BELOW
IF NOT CORRECT PLEASE NOTIFY US PROMPTLY. NO RECEIPT DESIRED

DATE	DESCRIPTION	AMOUNT
Aug. 8, 1961	Deposit on gold sales advance, 7% of $9,150.00	$640.50

Arctic Alaska Fisheries & Enterprises, Inc.,
Fairbanks, Alaska

November 26, 1958

Mordale Estate Trust,
Mr.Arnold M. Mordale,
Dawson City, Y.T., Canada

Dear Sir,

The one hundred and ten ton test mill run was completed and clean up was effected Friday the 21st. The First National Bank weighed the gold sponges in at 197.50 ozs., the same as the mill weighed it at. The bank advanced $5,000.00 on the shipment. Attached hereto,an original bank receipt and a copy of depositors receipt for $300.00, this as per terms of agreement.

Upon receipt of final returns you will be furnished a complete report, and payment in full.

At this time we have received one assay of tailings from the mill run and this report is fantastic, but will give it to you just as we received it from the assay office, $368.00 per ton in sulphided gold and $12.00 per ton in silver. We have six carbide drums of tailings which we will check out thoroughly and furnish you with details. We expected that there would be considerable loss but no where near that amount. We feel that the mill has recovered the free milling gold satisfactorily, considerable panning has proved this pretty well. The assay office did not give us the lead and antimony content of the tailings. We will have stateside assays made very soon now.

We regret to report that the local assay office is so very slow,almost useless to assist during a test run like the one we just made.

Very truly yours,

John Shelden

DEPOSITED TO THE CREDIT OF

NAME Nordale Estate Trust

ADDRESS

WITH

First National Bank

OF FAIRBANKS

FAIRBANKS, ALASKA. Nov. 23 1958

	DOLLARS	CENTS
CURRENCY		
SILVER		
CHECKS AS FOLLOWS		
Artic Alaska Fisheries + Enterprises Ina #1036	300	00
TOTAL $	300	00

PLEASE LIST EACH CHECK SEPARATELY

Checks on this bank will be credited conditionally [illegible] and good at the close of business, [illegible] paid back to depositors and the [illegible] of the fact.

[illegible] this deposit, the depositor hereby [illegible] conditions.

Territory of Alaska

DEPARTMENT OF MINES

Assay Office

College, Alaska, Dec 15, 19 58

REPORT OF ASSAY

On samples received from Rudy Vetter

Address 1429 Ash St. Fairbanks, Alaska

Assay No.	Mark on Sample	OUNCES PER TON		Value Per Ton	PERCENTAGE OF
		Gold	Silver		
	Tabling results				
2 830	Heads	0.18	3.42	$9.38	
24831	Heads(grab)	0.18	3.00	9.00	
24832	Tails	~~0.08~~ 0.10	2.24	5.52	
24833	Tails (grab)	0.12	2.10	6.09	
24834	Middlings	0.16	1.40	6.86	
24835	Middlings	0.16	1.40	6.86	
24836	Conc	16.26	66.89	651.35	

concentration ratio: 54:1
% extraction of Au. 166%
% extraction of Ag. 36%

The concentrate value ma y be high because of some amalgam picked up which did not show up in the heads sampling thus accounting for the erroneous % of gold extraction. If this piece of amalgam is disregarded in the concentrate, the % of gold extraction will be 80%.

Taking into account the amount of gold recoverd in the retort and the amount wasted in the tailings. the total ore value would be approximately $75 per ton.

Territory of Alaska

DEPARTMENT OF MINES

Assay Office

College, Alaska, Nov 20, 19 58

REPORT OF ASSAY

On samples received from Rudy Vetter

Address 1429 Ash St. Fairbanks, Alaska

Assay No.	Mark on Sample	OUNCES PER TON		Value Per Ton	PERCENTAGE OF
		Gold	Silver		
24828	Tailings	10.34 ~~1.03~~	22.96	$382.56	

Assayer

Territory of Alaska

DEPARTMENT OF MINES

Assay Office

College, Alaska, January 21, 1958

REPORT OF ASSAY

On samples received from Rudy Vetter

Address 1425 Ash Fairbanks, Alaska

Assay No.	Mark on Sample	OUNCES PER TON		Value Per Ton	PERCENTAGE OF	
		Gold	Silver			
23981	Heads	3.64	34.30	$ 158.50	Sb. 2.58%	Pb 3.3
23982	Concentrate	53.88	105.26	1,982.11	Sb. 4.66%	2.0
23983	Middling	7.88	79.42	346.40	Sb. 1.58%	5.1
23984	Tails	.48	23.20	79.42	Sb. 2.06%	2.2
				23.20		

Assayer

METALLURGICAL LABORATORY
Willis H. Ott

1519 Westlake Avenue North
Seattle 9, Wash.

CERTIFICATE OF ANALYSIS

No. 1803 Date July 5, 1958

Submitted by Rudolph Vetter, 1425 Ash Street, Arctic Park, Fairbanks, Alaska

Sample No. 2 Gold..... 3.90 oz per ton.
Silver .....141.62 " " "

Sample No. 1 Gold ..... 4.32 oz per ton.
Silver .....75.10 " " "

QUALITATIVE SPECTROGRAPHIC EXAMINATION

Element	Approximate Quantity
Silicon) Antimony)	Major Constituents
Iron) Lead)	Intermediate Constituents
	Minor Constituents
Aluminum	0.5%
Arsenic	0.5%
Boron	0.05%
Copper	0.05%
Calcium	0.05%
Magnesium	0.05%
Zinc	0.05%
Barium	0.01%
Strontium	0.01%
Tin	0.01%
Titanium	0.01%
Chromium	0.005%
Nickel	0.001%

METALLURGICAL LABORATORY

C O P Y

DEPOSITED WITH

FIRST NATIONAL BANK

OF FAIRBANKS

FAIRBANKS, ALASKA

All deposits made by or for the account of a depositor are accepted by the bank subject to Rules and Regulations Governing Checking Accounts

THIS IS YOUR RECEIPT

ALWAYS OBTAIN A REGISTERED RECEIPT WHEN MAKING A DEPOSIT

Mordale Estate Trust

UNITED STATES MINT
SAN FRANCISCO CALIF.

FEB Jan 8 82.34

BULLION DEPOSIT - MEMO RECEIPT

Mint Form 428 (Revised) SOURCE DATA

Deposit No. 1319 Date Dec. 8, 1959 Memos Required by Depositor 7 Silver Price or Class 91¢ State Alaska

Depositor Alaska National Bank of Fairbanks, Northward Bldg., Fairbanks, Alaska Other Date

County Arctic Alaska

Mine Fish & Enter. Inc.

Description of Deposit	Assay Number	Weights Before Melt Ounces	Weights Before Melt Dec	Weights After Melt Ounces	Weights After Melt Dec	Assay Certificate Fineness Gold	Assay Certificate Fineness Silver	Assay Certificate Fineness Base	Refin. Cts. Per Oz.	GOLD—FINE OZ.	SILVER—FINE OZ.
Amal. Cake	1494	90.70		89.20		777-3/4	207	015	9	69.375	18.46

PAYABLE BY CHECK EXCEPT AS NOTED

Weigh Clerks Asst. Assayer Assayer

Bank of America NT & SA, Main Office, San Francisco, California credit acct. of Alaska National Bank of Fairbanks.

Melting	3.00	VALUES, $	2,428.13	16.80
Refining	8.03	NET VALUE	2,427.83	
Handling	6.07	Bars		
Other Chg.		Cash		
TOTAL CHRGS.	17.10	Check		

Calculator

UNITED STATES MINT
SAN FRANCISCO CALIF.

BULLION DEPOSIT - MEMO RECEIPT

Mint Form 428 (Revised) SOURCE DATA

Deposit No. 1320 Date Dec. 8, 1959 Memos Required by Depositor 7 Silver Price or Class 91¢ State Alaska

Depositor Alaska National Bank of Fairbanks, Fairbanks, Alaska Other Date

County Arctic Alaska

Mine Fish & Enter. In

Description of Deposit	Assay Number	Weights Before Melt Ounces	Weights Before Melt Dec	Weights After Melt Ounces	Weights After Melt Dec	Assay Certificate Fineness Gold	Assay Certificate Fineness Silver	Assay Certificate Fineness Base	Refin. Cts. Per Oz.	GOLD—FINE OZ.	SILVER—FINE OZ.
Amalgam	1495	460.00		448.36		803	187	010	9	360.033	83.84

PAYABLE BY CHECK EXCEPT AS NOTED

Weigh Clerks Asst. Assayer Assayer

Bk of America, a/c Depositor

Melting	3.00	VALUES, $	12,601.15	76.29
Refining	40.35	NET VALUE	12,602.59	
Handling	31.50	Bars		
Other Chg.		Cash		
TOTAL CHRGS.	74.85	Check		

Calculator

GPO 943492

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
5/22	Murphy	500
		~~500~~
5/22	Talbert	800
	Selfridge	120
5/22	Johnson	110
	Tandy	100
		220
		500

MAY 2 2 1963

AIRMAIL

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
P. O. Box 630
Fairbanks, Alaska

Re: OMK-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska

Dear Mr. Nordale:

Your letter of May 16 and enclosed information have been reviewed, however, the data submitted does not cover all the information requested in my letter of May 8, 1963.

1. Our request for a breakdown of the costs listed in the Mine Construction Contract meant individual items that contribute to the unit cost per foot of shaft work, drifting, and rehabilitation of the tunnel, such as: number of men employed and their wages, operating material and supplies, operating equipment, etc., as listed under Item 7 of the information required with the application. A sample copy of the application form is enclosed.

We note that Keystone Mines will supply the contractor with machinery, equipment, housing, etc., at certain prices. Under OMK contracts the Government does not contribute to the rental or cost of existing buildings in a project area. With regard to equipment and machinery owned by the applicant, we require a list of these items and their individual fair market value. On such equipment we allow a depreciation rate of 1/60 of its value per month.

2. We note your answer regarding assays, however, we must have this information to determine the eligibility of the principal minerals for which you wish to explore. The application states you milled 1,225 tons of ore from the vein outcrop in the proposed project area. Will you kindly submit copies of the assay results of the head samples of the ore milled and the settlement sheets for the concentrates sold?

43683

3. With regard to our request for a financial statement of Keystone Mines, Inc., the bank statement submitted showing $7,032.95 on deposit does not serve our purpose. Therefore, will you kindly submit a statement showing the assets and liabilities of the corporation?

In connection with financial eligibility we note that in addition to using the corporation's treasury funds to contribute its share of the costs, you estimate that rental of equipment and sales of ore produced will cover the corporation's 50 percent share of the costs. Our experience has shown that rental of equipment results in only a small percentage of the costs and the possible sale of ore is a very intangible asset, therefore, will you kindly advise as to the corporation's ability to carry its share of the proposed costs in case the work does not result in the anticipated production of ore?

4. You have submitted proof that Keystone Mines, Inc., has been certified, however, you did not submit proof that it has rights to the claims listed in the application sufficient for the purpose of an exploration contract. Therefore, will you kindly submit copies of the documents showing that the owners have given the corporation a deed, lease, or option on their properties?

We will hold the referenced application in abeyance pending receipt of the above requested additional information.

Sincerely yours,

W. R. Griswold (gla)

W. R. Griswold, Chief
Division of Minerals

Enclosure

FMMurphy/ama 5-22-63

cc:
Docket
Director's Reading File
Region I (2)

BLM Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
5/7	Murphy	500
	[illegible]	120
5/7	[illegible]	110
5/8	[illegible]	100
5/8	Carl	220
		500

MAY 8 1963

AIRMAIL

Mr. Arnold M. Nordale
President
Keystone Mines, Inc.
Juneau, Alaska

Re: OMX-6304 (Gold-Silver)
Keystone Mines, Inc.
Keystone Mines
Fairbanks District, Alaska

Dear Mr. Nordale:

The Division of Minerals has reviewed the referenced application for Federal assistance in exploring the Keystone Mines, Inc. property, and find it lacks the following essential information:

1. A breakdown of the estimated costs for each item of work listed in the Mine Construction Contract submitted.

2. Plan and cross section maps or sketches of the trench work on the Kawilita claim, showing sample locations and assay results. The plan map should show the location of the trench work in relation to the end and side lines of the claim.

3. A cross section showing the location of the adit that starts at the head of Wolfe creek with relation to the large vein on the Kawilita claim.

4. A list of claims giving the patent number or the recording data (book and page number) of each claim.

The dip and strike of the large vein as shown on the map and mentioned in the text of the application indicate that it will extend outside of your property. If this assumption is correct, can your corporation obtain control of such adjacent claims?

The application form states that Keystone Mines, Inc, is an Alaskan corporation. However, under the "Subscription Contract," dated April 18, 1963, item 1 of page 2 states in part "The parties shall

Reply - dated May 16, 1963
application - left side docket,
File

8623

cause to be formed an Alaska corporation known as Keystone Mines, Inc.....," In view of this discrepancy, we will withhold action on the subject application until you submit a copy of an instrument showing that the corporation does exist and has control of the claims mentioned in the "Subscription Contract." In addition, kindly send two copies of the additional information requested above to Mr. D. R. MacLaren, Acting Field Officer, OME, Region I, South 157 Howard Street, Spokane 4, Washington, and one copy to this office.

Sincerely yours,

W. R. Griswold

mm

W. R. Griswold, Chief
Division of Minerals

FMMurphy/mm
5/7/63
cc: Director's Reading File
Region I(2)
Docket

P. S. To facilitate the processing of your application, will you kindly submit a recent copy of a financial statement showing the assets and liabilities of Keystone Mines, Inc.

May 6, 1963

Keystone Mines, Inc.
Box 630
Fairbanks, Alaska

Subject: OME-6304

Gentlemen:

Your application for exploration assistance, dated April 29, 1963 submitted to our office at Juneau, Alaska has been assigned Docket Number OME-6304.

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

Sincerely yours,

Allen S. Dakan, Chief
Division of Administrative
Management

Copy to:

Region I

WESTERN UNION

TELEGRAM

A. P. MARSHALL, PRES. & GNT.

APPROVED
Day Letter
Night Letter
International Letter Telegram

APR 23 63 PRA030

FAIRBANKS ALASKA 22

ACTING FIELD OFFICER OFFICE OF MINERAL EXPLORATION

WARD ST SPOKANE WASH

APPLICATION WILL BE SUBMITTED TO YOUR OFFICE BY THE KEYSTONE

APRIL 29TH FOR AN EXPLORATION CONTRACT ON A GOLD

PROPERTY NEAR FAIRBANKS STOP THE ONE PORTION OF COST

APPROXIMATE BUT NOT EXCEED SIXTY THOUSAND DOLLARS STOP

CONTRACT IS GRANTED WORK WILL BE STARTED IMMEDIATELY ON

FIXED COST CONTRACT BASIS

NORDALE NORDALE HOTEL

OTE.

500

Appl. not yet received.

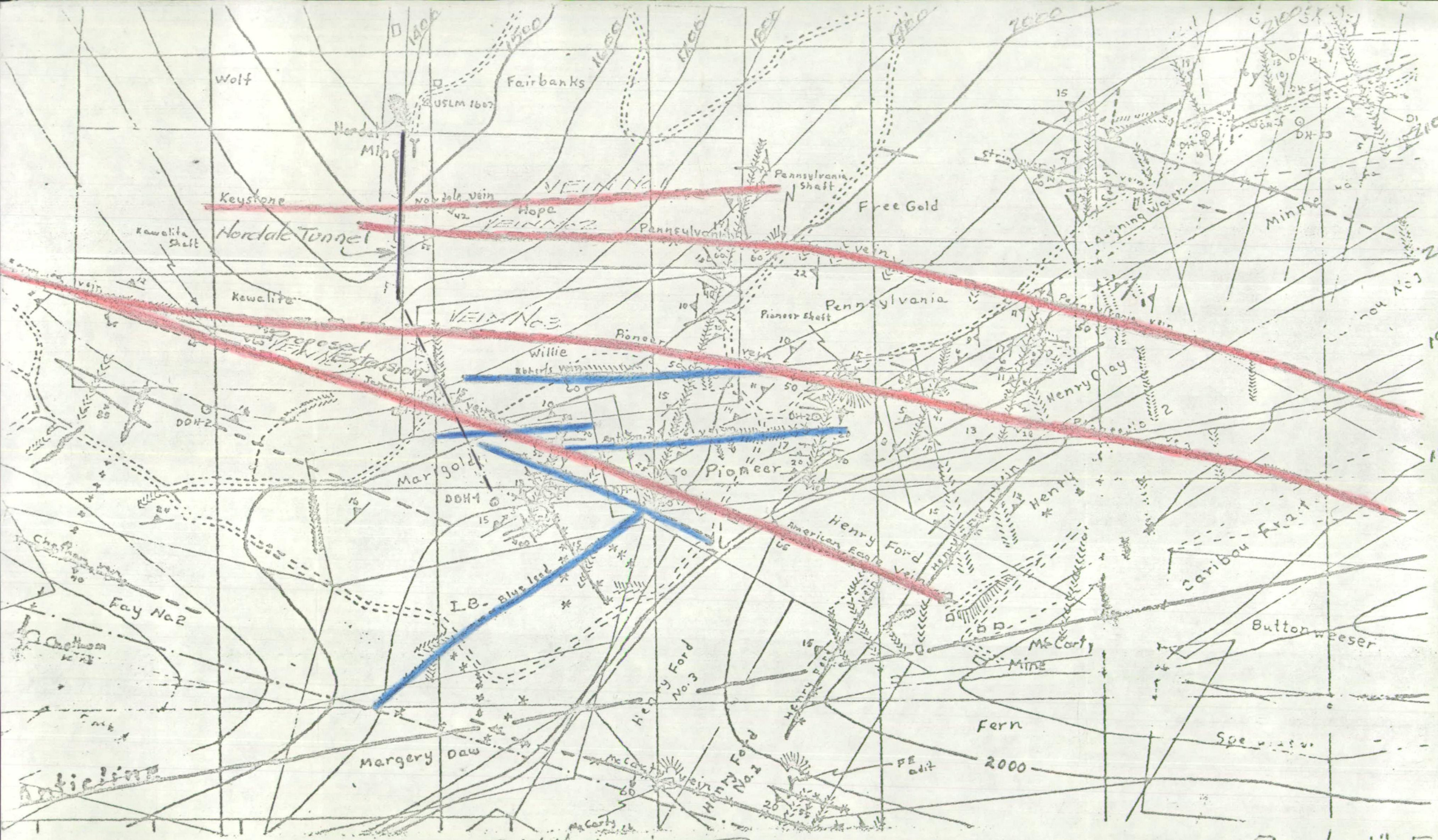
FIG.-1

KEYSTONE MINING

LODE CLAIMS

FAIRBANKS ALASKA

Scale 1" = 800'

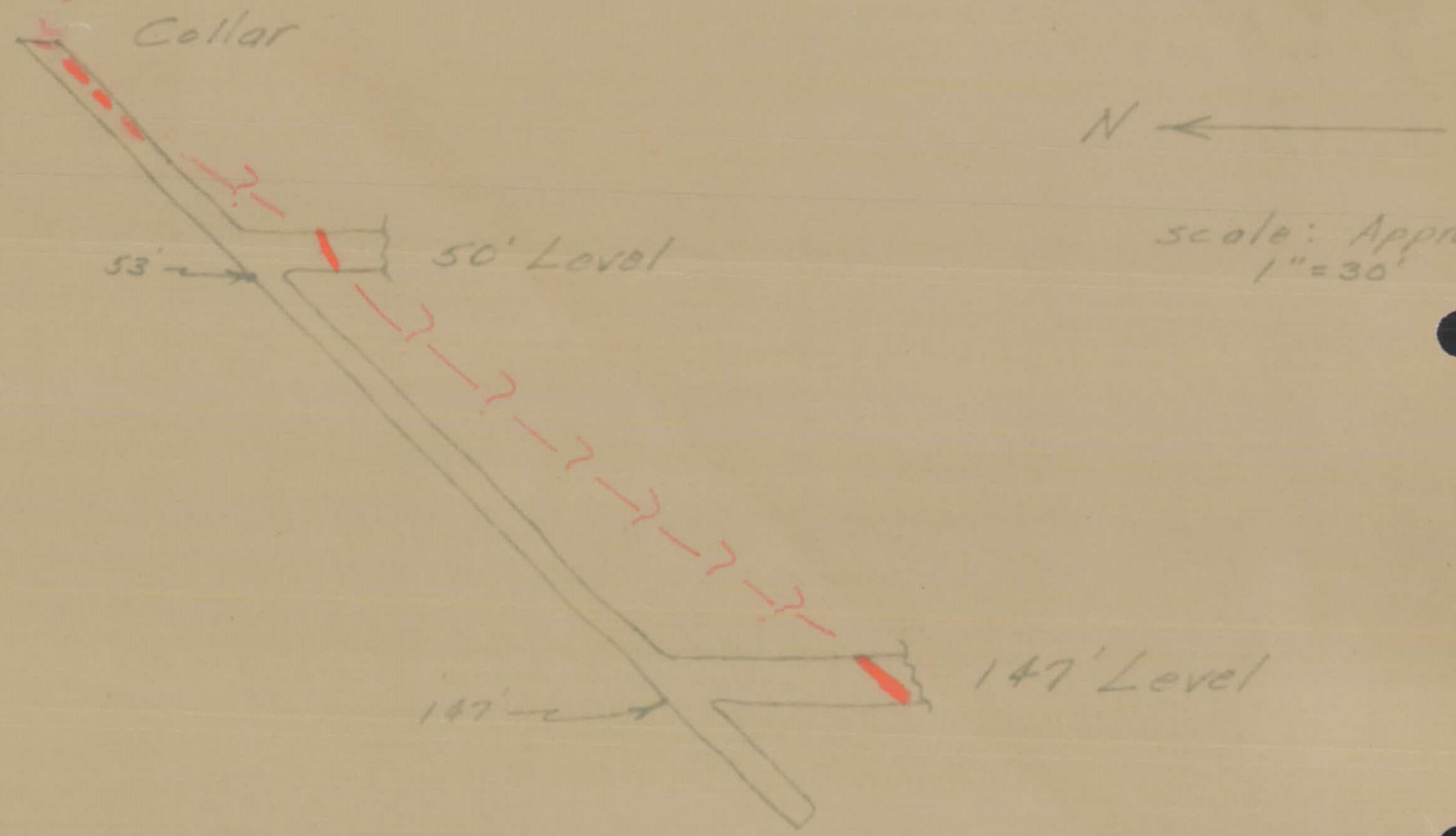


Gold Veins in Red
Base Ore Veins in Blue

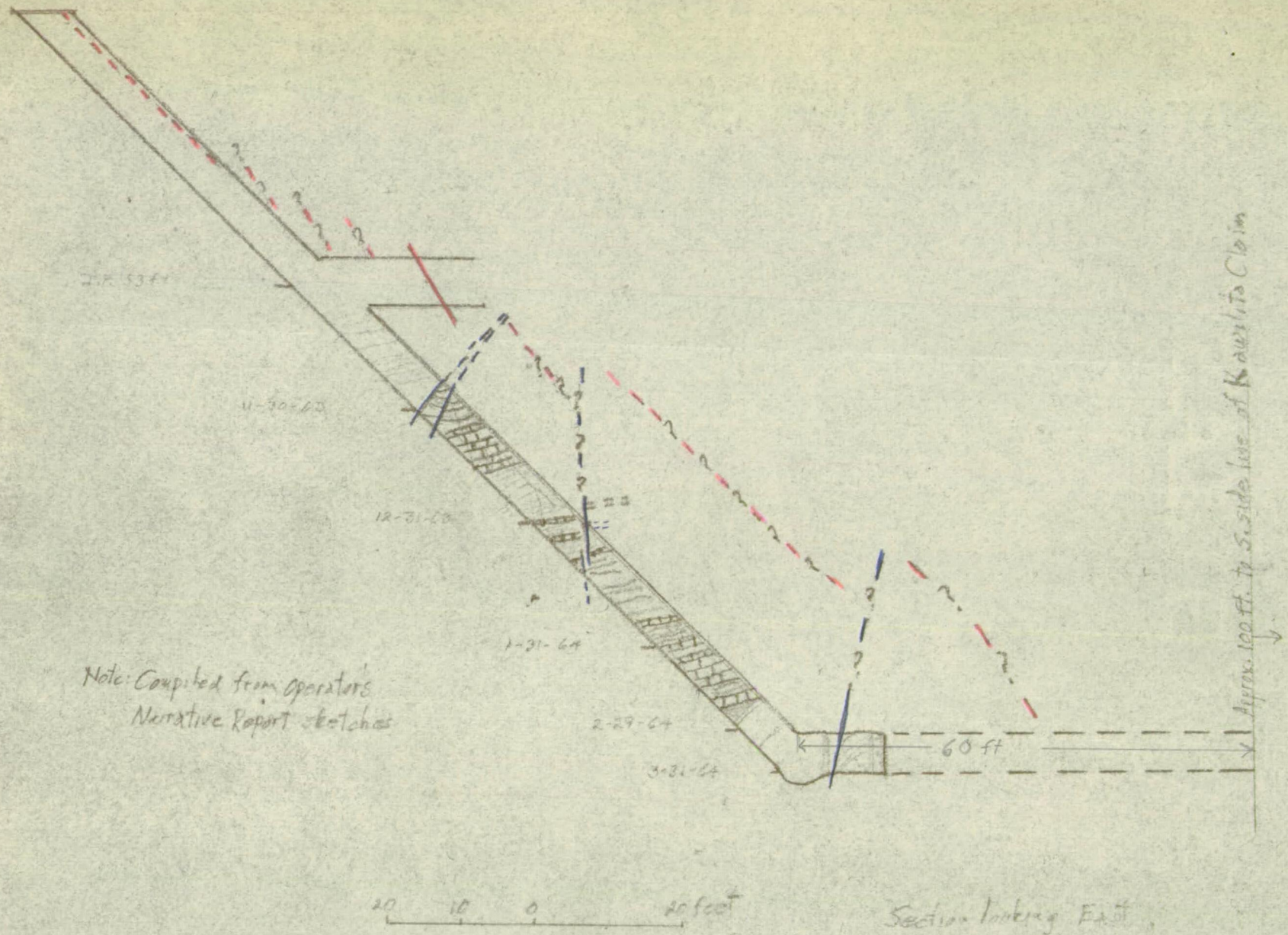
Scale 1" = 500'
Contour Interval 100'

#22
5/25/66

Keystone Mines, Inc.
sketch
showing vein location with reference
to shaft.



OME-6304

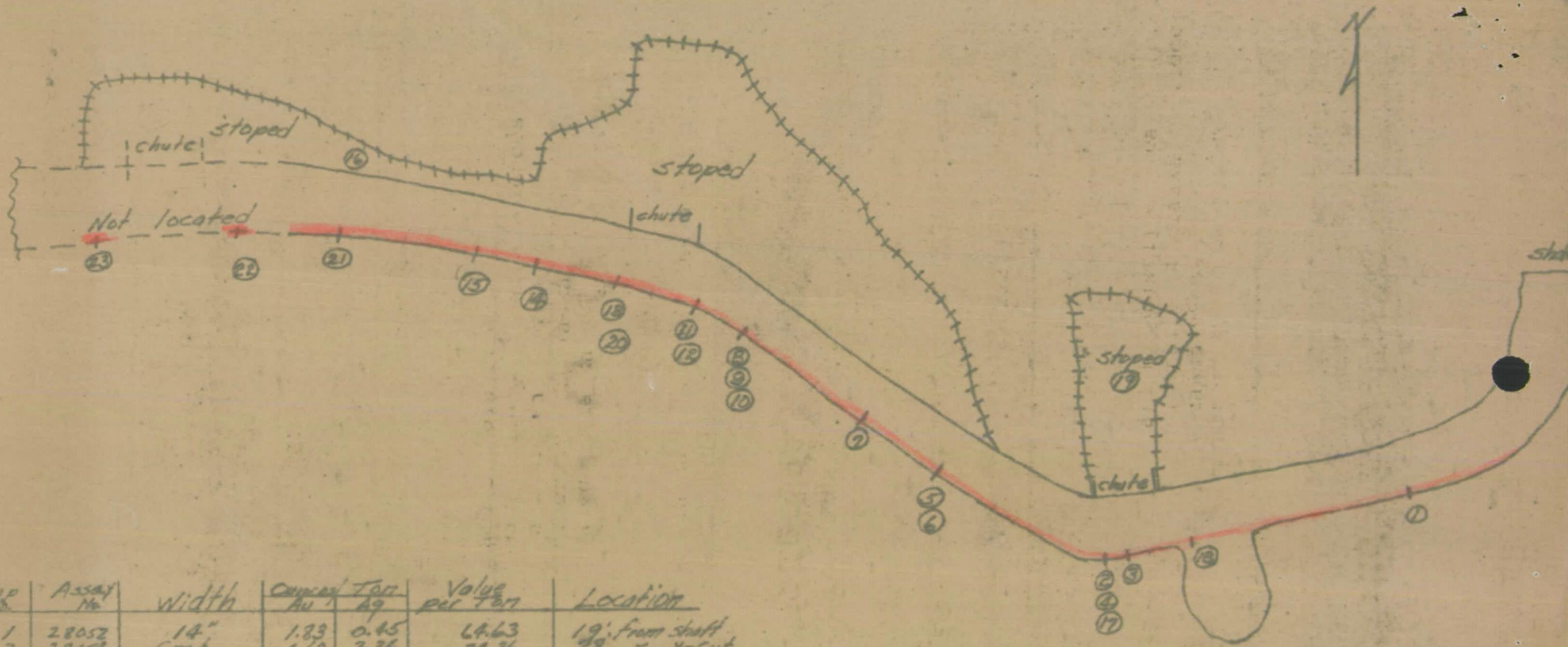


Note: Compiled from Operator's Narrative Report sketches

Section looking East through Keystone Shaft
Keystone Mines Inc.
Keystone Mine
Fairbanks District Alaska
April 1963

Keystone Mines, Inc.
Sketch of 50' Level - Plan
Scale Approx. 1" = 10'

#2
8/31/43



Map No.	Assay No.	Width	Ounces/Ton Au	Ounces/Ton Ag	Value per Ton	Location
1	28052	14"	1.23	0.45	64.63	19' from shaft
2	28154	Grab	0.60	3.36	24.36	28' " X-Cut
3	28152	18"	1.35	0.28	47.61	26' " "
4	28153	24"	52.10	2.06	1826.12	28' " "
5	28193	6"	1.28	0.06	44.86	38' " "
6	28194	30"	4.30	1.70	152.68	38' " "
7	28195	24"	0.06	nil	2.10	44' " "
8	28224A	24"	0.50	0.20	17.76	55' " "
9	28224B	24"	0.17	0.25	6.30	55' " "
10	28224C	30"	0.78	0.24	27.61	55' " "
11	28256	Grab	2.32	65.96	165.50	60' " "
12	28259	23"	3.63	1.87	129.45	60' " "
13	28260	18"	0.16	5.96	13.23	65' " "
14	28261	30"	0.24	2.12	11.22	70' " "
15	28295	32"	0.83	0.47	29.66	75' " "
16	28296	24"	0.09	6.26	11.16	85' " "
17	28297	—	3.25	0.70	114.65	28' " "
18	28298	—	3.24	1.06	115.92	23' " "
19	28321	—	0.11	0.87	4.99	Stope
20	28325	—	24.48	26.78	891.08	25' from X-Cut
21	28361	13"	0.77	16.28	48.49	85' " "
22	28362	24"	0.09	4.00	8.27	90' " "
23	28378	12"	14.42	11.48	519.40	100' " "

Vein shown in floor of drift. True width and minor faulting not shown.

(5) Map Assay Number
Assays by Alaska State Division of Mines, Fairbanks

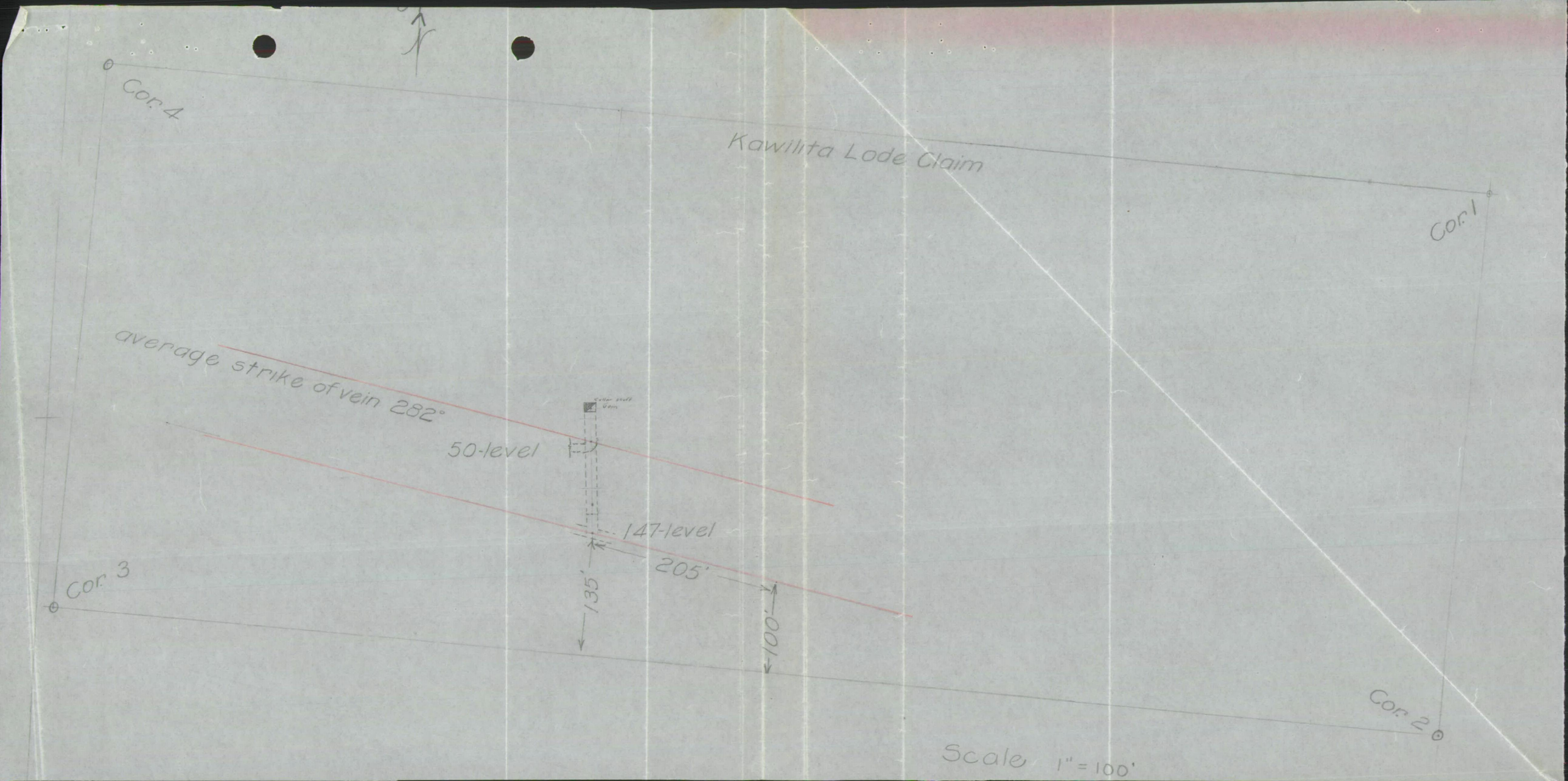

Cor. 4
Kawilita Lode Claim
Cor. 1
average strike of vein 282°
50-level
147-level
205'
135'
100'
Cor. 3
Cor. 2
Scale 1" = 100'

FIG-1

KEYSTONE MINES INC.

LODE CLAIMS

FAIRBANKS ALASKA

Scale 1" = 800'

OME 6304

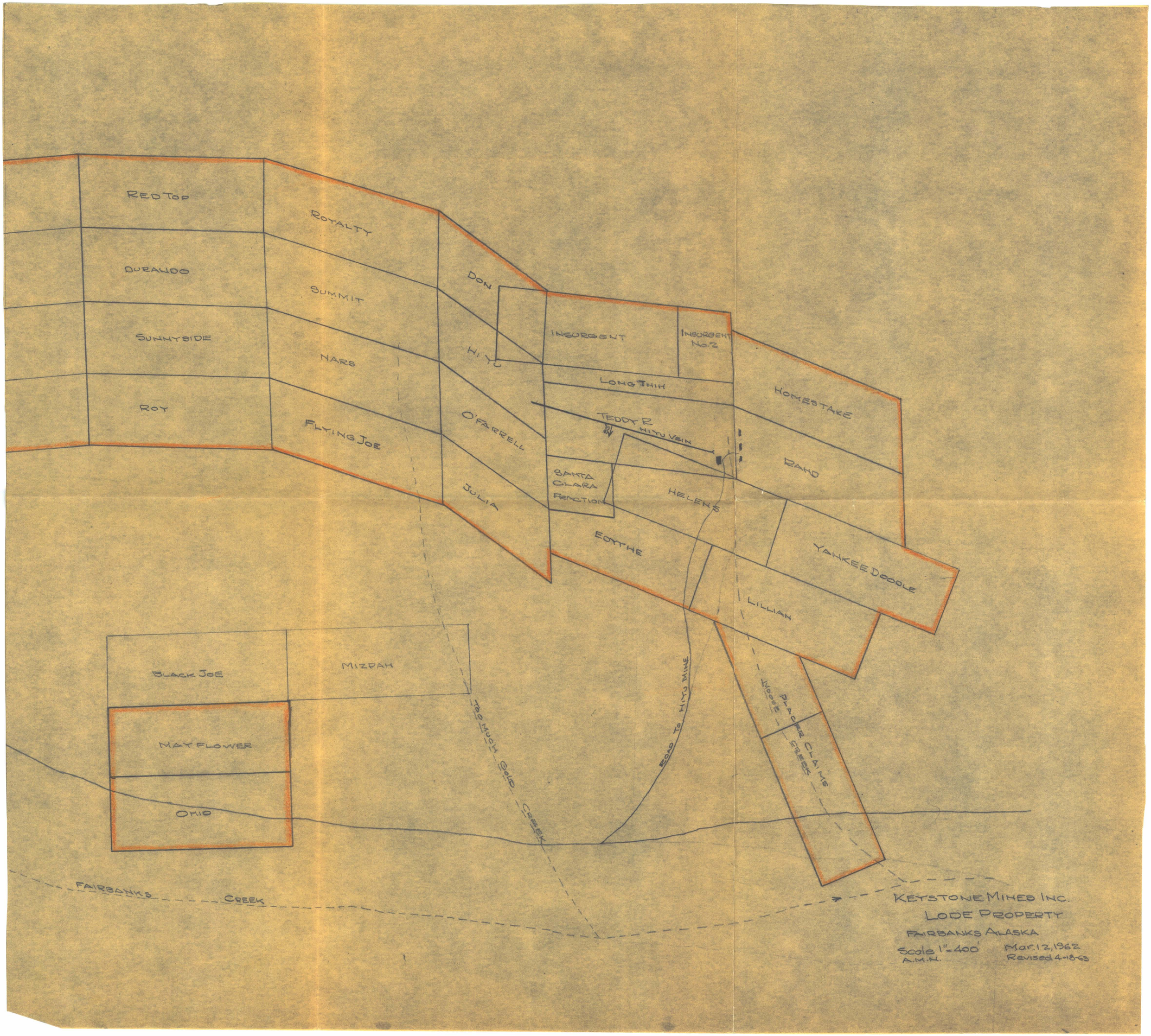

RED TOP
ROYALTY
DURANGO
SUMMIT
SUNNYSIDE
NARS
ROY
FLYING JOE
DON
HI YU
O'FARRELL
JULIA
INSURGENT
INSURGENT No. 2
LONG THIN
TEDDY R
HITU VEIN
SANTA CLARA FRACTION
HELENS
EDYTHE
HOMESTAKE
RAND
YANKEE DOODLE
LILLIAN
BLACK JOE
MIZPAH
MAY FLOWER
OHIO
TOO MUCH GOLD CREEK
ROAD TO HITU MINE
WOODS
PLACER CLAIMS
CREEK
FAIRBANKS CREEK
KEYSTONE MINES INC.
LODE PROPERTY
FAIRBANKS ALASKA
Scale 1" = 400'
A.M.N.
Mar. 12, 1962
Revised 4-18-63

FIG.-1

KEYSTONE MINES INC.

LODE CLAIMS

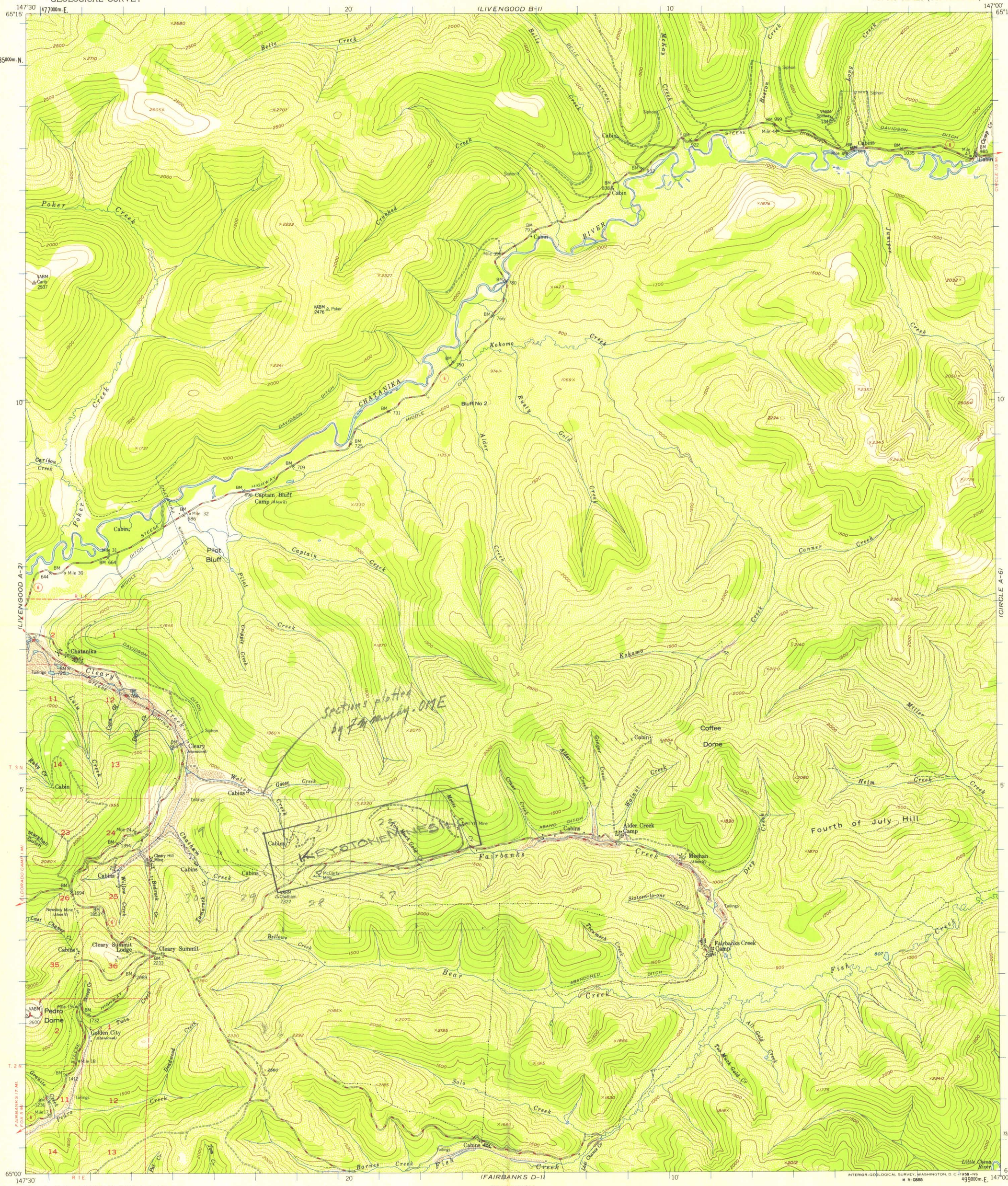
FAIRBANKS ALASKA

Scale 1" = 800'

OME 6304

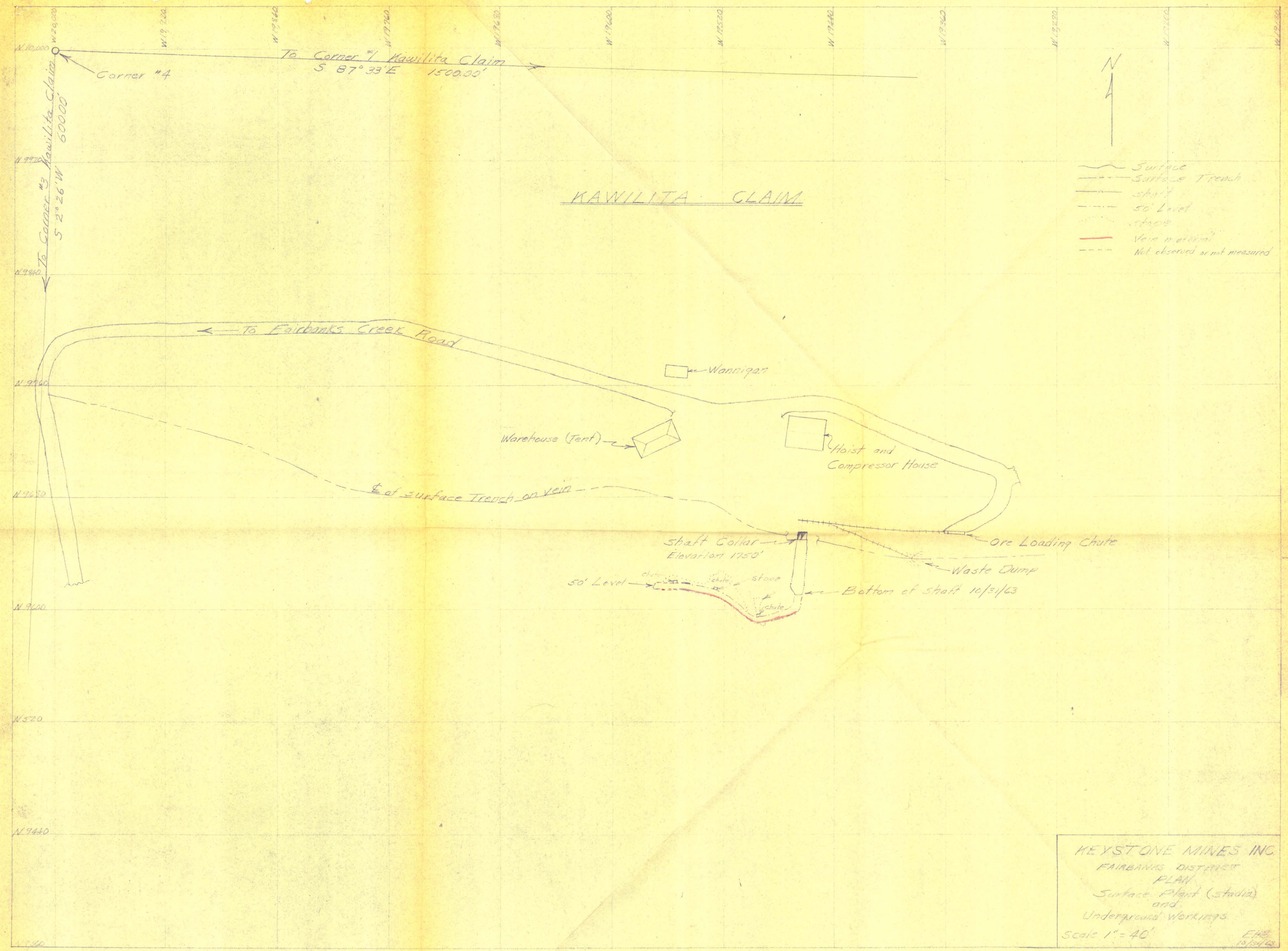
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LIVENGOOD (A-1) QUADRANGLE
ALASKA-FOURTH JUDICIAL DIVISION
1:63 360 SERIES (TOPOGRAPHIC)



FOR SALE BY U.S. GEOLOGICAL SURVEY
FAIRBANKS, ALASKA FEDERAL CENTER, DENVER, COLORADO WASHINGTON 25, D.C.
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

Map of Wolf Creek Divide, June, 1960
Scale 1" = 100'
Copy of Robert Saunders, NORDALE TUNNEL from Bulletins No's 592, 662 & 842-B
Location of Nordale in pit by A. Nordale
Location of vein in adit May 14, 1965 U.H. Pace
gold bearing
Jamesonite "lead" uncovered by trenching June, 1960
Vein pretracted @ 60°
Vein varies in width 1'-6'
bottom of pit
750'
460' below pit elev. 1280'
Homestake ore body mined prior to 1916
NORDALE TUNNEL
To surface
Possible intersection est. @ 670'
Minimum intersection est. @ 490'
ELEVATION
HOPE
FAIRBANKS
NORDALE ADIT
KEYSTONE
WOLF
KAWAHLIA
Elev. of pit approx. 1740'
Mined 1961
Av. depth 12'
Mined area
partly covered
Stripped June 1960
Mined 1961 & '62
Av. depth 12'
unimproved road
Tenmile
1700
1750
1800
1850
1900


N 10,000
W 19,000
W 19,280
W 19,560
W 19,840
W 19,120
W 19,400
W 19,680
W 19,960
W 19,240
W 19,520
W 19,800
To Corner #1 Kawilita Claim
S 87° 33' E 1500.00'
Corner #4
To Corner #3 Kawilita Claim
S 2° 26' W
60.00'
N 9920
N 9840
N 9760
N 9680
N 9600
N 520
N 9440
N 9360
KAWILITA CLAIM
N
Surface
Surface Trench
shaft
50' Level
stope
Vein material
Not observed or not measured
To Fairbanks Creek Road
Wannigan
Warehouse (Tent)
Hoist and
Compressor House
℄ of surface Trench on vein
Shaft Collar
Elevation 1750'
Ore Loading Chute
Waste Dump
50' Level
chute
chute
stope
chute
Bottom of shaft 10/31/63
KEYSTONE MINES INC.
FAIRBANKS DISTRICT
PLAN
Surface Plant (stadia)
and
Underground Workings
Scale 1" = 40'
F.H.B.
10/31/63

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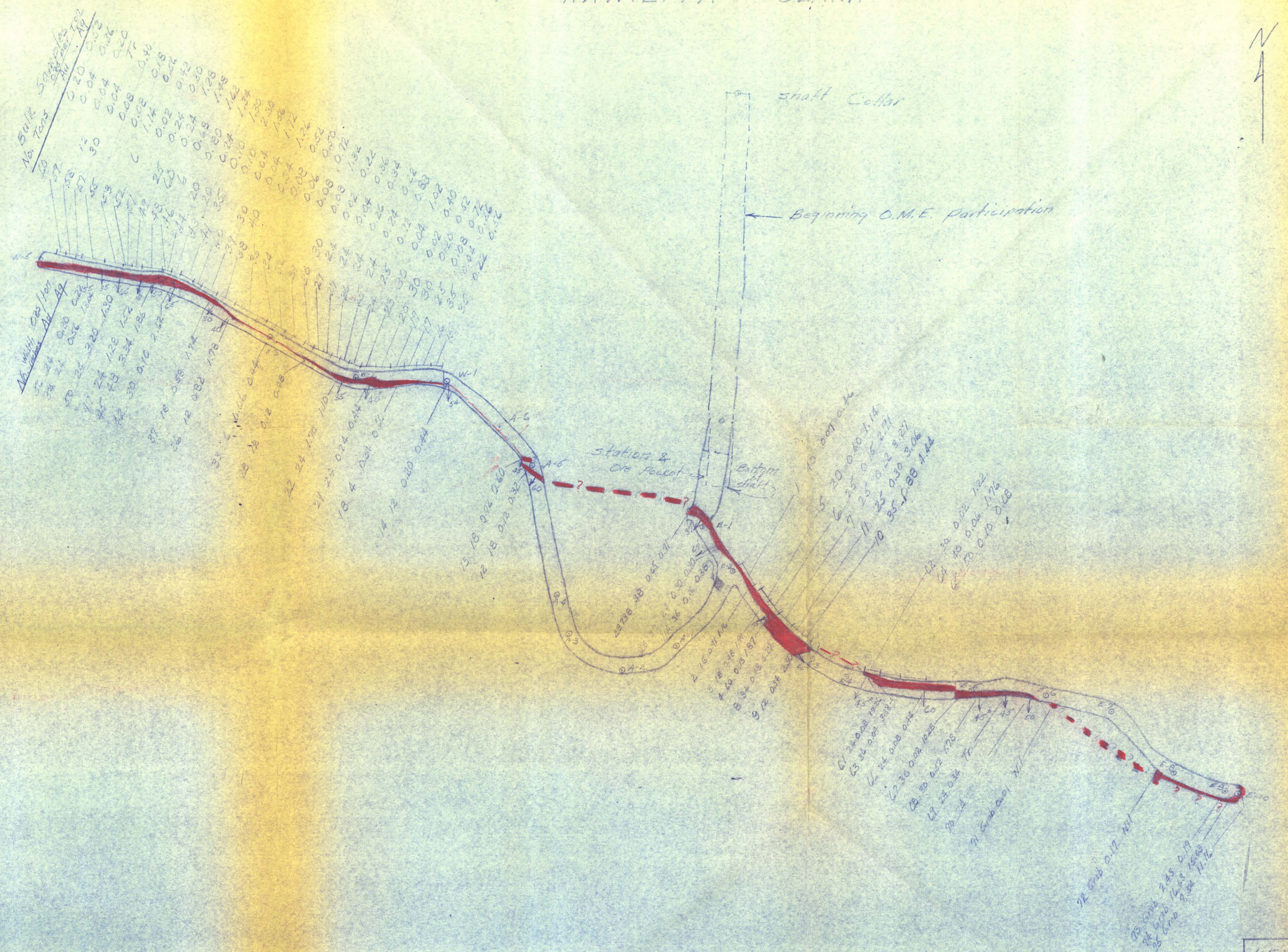
MAR 2th 1955
INITIALS

KEYSTONE MINES, INC.

Scale 1" = 40'

KAWILITA CLAIM



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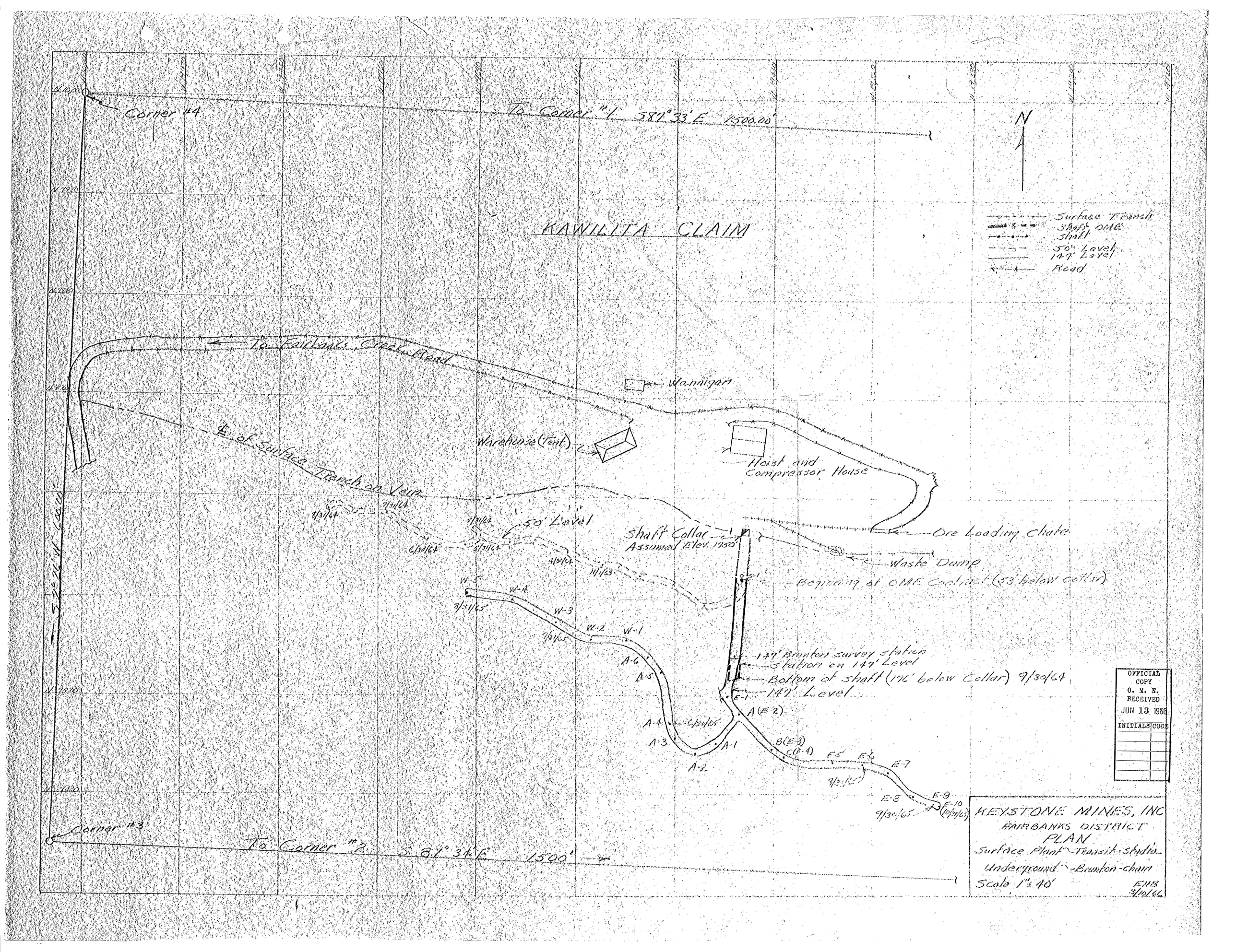
INITIALS CODE

KEYSTONE MINES, Inc.
FAIRBANKS DISTRICT, ALASKA
Assay Map Plan
Brunton-Chain Survey
Scale 1"=20'
3/10/66
RHB


Corner #4
To Corner #1 S87°33'E 1500.00'
N
Surface Trench
Shaft OME
Shaft
50' Level
147' Level
Road
KAWILITA CLAIM
To Fairbanks Creek Road
Wannigan
Warehouse (Tent)
Hoist and Compressor House
℄ of Surface Trench on Vein
8/31/64
9/31/64
50' Level
6/30/64
5/31/64
4/30/64
11/1/63
Shaft Collar
Assumed Elev. 1950'
Ore Loading Chute
Waste Dump
Beginning of OME Contract (53' below collar)
S2°26'W 600.00
W-5
W-4
W-3
W-2
W-1
8/31/65
7/31/65
A-6
A-5
A-4
A-3
A-2
A-1
6/30/65
147' Brunton survey station
Station on 147' Level
Bottom of shaft (176' below Collar) 9/30/64
147' Level
E-1
A (E-2)
B (E-3)
C (E-4)
E-5
E-6
E-7
E-8
E-9
E-10
9/30/65
10/31/65
Corner #3
To Corner #2 S87°34'E 1500'
OFFICIAL COPY
O. M. E.
RECEIVED
JUN 13 1966
INITIALS
CODE
KEYSTONE MINES, INC
FAIRBANKS DISTRICT
PLAN
Surface Plant - Transit - Stadia
Underground - Brunton - chain
Scale 1" = 40'
EHB
3/10/66

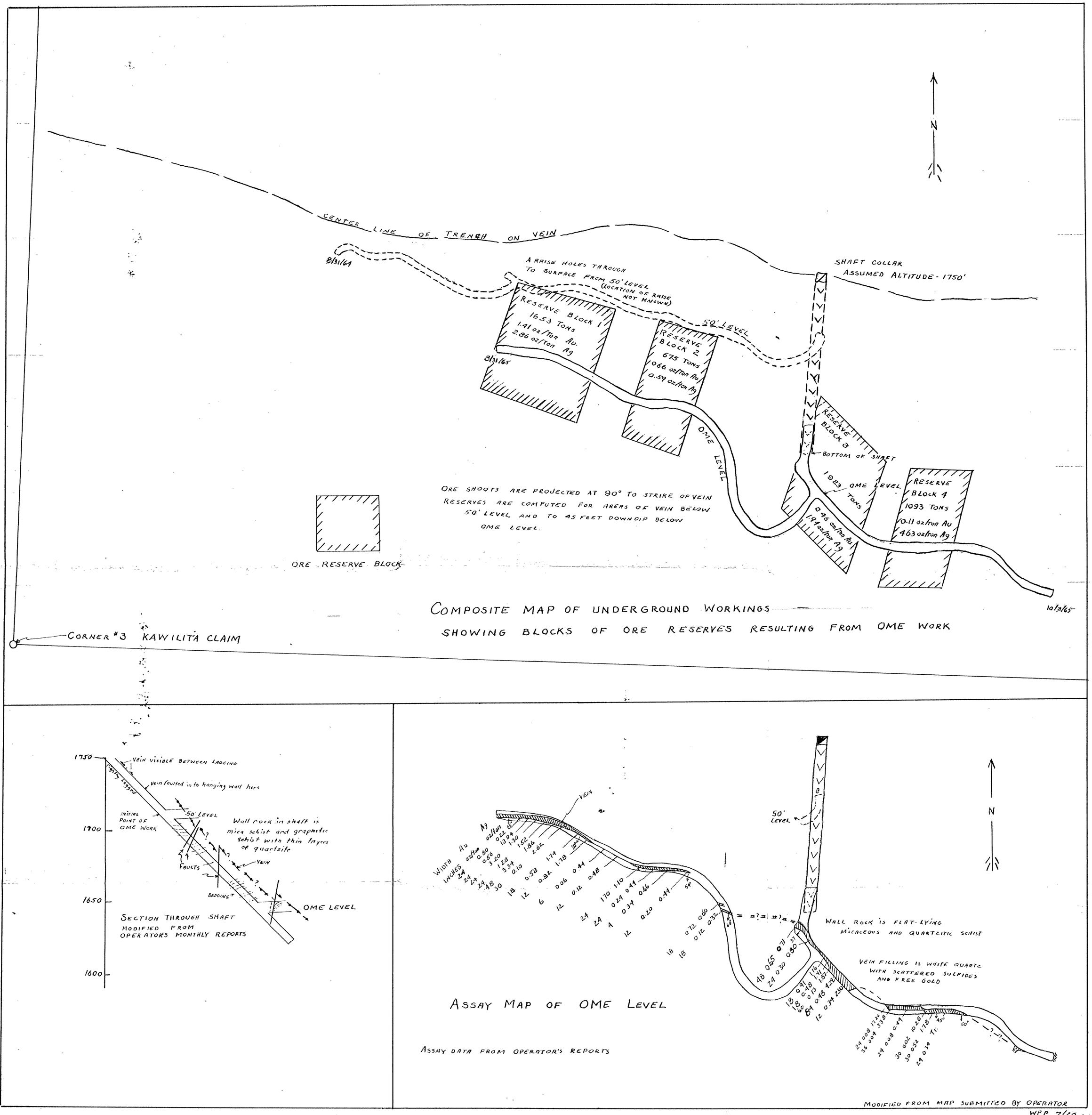


FIGURE 2. MAPS, ASSAY DATA, AND ORE RESERVE BLOCKS, KAWILITA CLAIM, KEYSTONE MINES, INC., FAIRBANKS DISTRICT, ALASKA