MAR 22 1954

2932

Hon. George W. Malone
United States Senate
Washington 25, D. C.

My Dear Senator Malone:

Reference is made to your letter of December 3, 1953, concerning the denial by this Administration of an application submitted by Mr. Silas Cordes, Director, Blue Jacket Mining Company, for exploration assistance at the Burns Mine, Elko County, Nevada, our Docket No. DMEA-2932, Tungsten.

In accordance with our reply of December 8, 1953, the above described application has been further reviewed by our Field Team and our Iron and Ferro-Alloy Division. The results of these reviews are now available and substantiate our former conclusion that the probability of disclosing significant ore reserves at the Burns Mine by the proposed exploration program is not sufficiently promising to warrant Government participation.

Only one assay out of eight samples taken by our engineers indicates economic value, and that sample is marginal (0.52% $WO_3$) for a deposit of the type and size that might be expected to occur on the applicant's property. In view of the lack of uniformity of mineralization, as well as the lack of geological evidence indicating the probability of finding sufficient ore to justify the expenditure required, we feel that it is unfair to the applicant, as well as not in the best interest of the Government, to encourage him to risk his own funds in such a dubious project.

We regret that we have been unable to find any justification for altering the denial of the application in question.

Sincerely yours,

C. O. Mittendorf

Administrator

Rutledge/Martin/Johnson/ls/bih
3/19/54
cc to: Docket
Adm. Reading File
Operating Committee
Region III (2)
Messrs. Mittendorf
R.W.Geehan - BM
T.P.Thayer - GS
Martin
F.E.Johnson

00

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

Hon. George W. Malone
United States Senate
Washington 25, D. C.

Not used

My dear Senator Malone:

Reference is made to your letter of December 3, 1953, concerning the denial by this Administration of an application submitted by Mr. Silas Cordes, Director, Blue Jacket Mining Company, for exploration assistance at the Burns Mine, Elko County, Nevada, our Docket No. DMEA 2932-Tungsten.

In accordance with our reply of December 8, 1953, the above-described application has been further reviewed both in the field and the Washington offices. The results of those reviews are now available and have substantiated our former conclusion that the probability of disclosing minable ore reserves at the Burns Mine by the proposed exploration program is not sufficiently promising to warrant Government participation. We regret to advise you, therefore, that we have not found justification for altering our denial of the referenced application.

Sincerely yours,

C. Hutchedon

Administrator

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

Hon. George W. Malone
United States Senate
Washington 25, D. C.

My dear Senator Malone:

Reference is made to your letter of December 3, 1953, concerning the denial by this Administration of an application submitted by Mr. Silas Cordes, Director, Blue Jacket Mining Company, for exploration assistance at the Burns Mine, Elko County, Nevada, our Docket No. DMEA 2932-Tungsten.

In accordance with our reply of December 8, 1953, the above-described application has been further reviewed by our Field Team and by our Iron and Ferro-Alloys Division. The results of those reviews are now available and have substantiated our former conclusion that the probability of disclosing minable ore reserves at the Burns Mine by the proposed exploration program is not sufficiently promising to warrant Government participation.

With your extensive background of information about mining, you will probably appreciate that the difficult decisions for us are the border-line cases. At prospects where the sampling shows strong mineralization over large mining widths, an exploration application can often be approved without any objection; and, conversely, if the sampling shows

that all the exposures are hopelessly low in grade, a denial is clearly indicated. [If an application came from a company believed to have large cash reserves and an experienced engineering staff, we might justifiably approve a small project of somewhat more than average risk because such an applicant could probably afford to lose his entire investment and would obviously be going into the project well aware of its disadvantages.]

In this instance, however, we have the benefit of more sampling than usual and there is a close correlation between the applicant's engineer's sample results and our check assays. With few exceptions, these results are discouragingly low. [The sampling returns on the test shipment to the Getchell mill are somewhat higher, but are by no means encouraging.] Also, without making any assumption as to the cash position of this applicant, we conclude from the application and related information that we are dealing with an operator of limited mining experience.

Consequently, we regret to advise you that we have not found justification for altering our denial of the application in question.

Sincerely yours,

Administrator

WSMartin/ls
3/17/54

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

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

March 4, 1954

WSM

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA-2932 - Tungsten
Blue Jacket Mining Company
Burns Mine, Elko County, Nevada

Reference is made to your letter of February 1, 1954, requesting comments on matters brought up in your office concerning the Field Team's recommendations on the subject application for exploration assistance.

Your letter was referred to Mr. A. G. Johnson and to Mr. Roscoe Smith for consideration. I now have a reply from each in which they comment on the points brought up by you. As the best way to get these comments to you is to send you copies of Johnson's and Smith's replies, there are attached a copy of Mr. Johnson's memorandum to me, dated February 11, and a copy of Mr. Smith's memorandum dated March 2, 1954.

I trust these two memorandums will give you the information you desire.

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

Attachments

Copy to: Roscoe Smith, USGS

February 11, 1954

Memorandum

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

From: Chief, Mining Division, Region III

Subject: Docket DMEA-2932 (Tungsten) Blue Jacket Mining Co., Burns Mine, Elko County, Nevada

In reviewing Mr. Selfridge's letter to you dated Feb. 1, 1954, relative to further consideration for exploration work on the Blue Jacket Mining Company's Burns Mine in Elko County, Nev., I wish to restate that the property was a border-line case. The property, at the present time, is nothing more than a prospect, and any work done will be speculative.

In going back to "exploration", as we have more or less considered it by the Mining Division, would be the search for unknown ore deposits, or, the extension of known ore deposits. The way the Mining Division has interpreted "exploration" is more comprehensive work than a preliminary examination. It would include sampling and other procedures for obtaining information upon which to base ore reserve estimates or plans for future mining operations.

The property that was examined by Mr. Gantry of the Bureau of Mines and Mr. Smith of the Geological Survey is a mere prospect, and to obtain further data more work will be necessary to base an ore estimate.

The preliminary sampling that was done by the engineer and geologist were more or less character samples that would not necessarily determine the grade of ore that might possibly be mined from deposits of this type; also, on the other hand, further work might demonstrate that there is no ore at the property.

Ore reserve estimates are based upon exploration and development and analyses of samples derived therefrom. Unless a deposit is fully developed, certain assumptions have to be made re-

garding the continuity and grade of ore that might possibly be found by further work.

The field team have used their best judgement, on a limited number of samples, in estimating their ore reserves. Under ORE RESERVES in their report, the examining engineer and geologist have definitely stated there are no measured ore reserves at the Blue Jacket Mining Company's scheelite prospect. This statement is modified by another statement stating that a few tons of indicated ore may be present at the surface exposures and 1,000 tons of ore averaging 0.5 percent $WO_3$ is inferred to be in a block above the lower road and north of the fault that displaces the vein. In calculating this tonnage, they have assumed the block to be 100 feet high, 175 feet long and 3 feet thick, and it would contain 3,000 tons of ore one-third of which is inferred to be ore of the estimated grade in an ore shoot represented by sample BM-738. The Bureau of Mines sample BM-738 was taken across a 4-foot quartz vein in a small open cut that is in this block of ground where the ore reserve estimate was made.

Mr. Gentry has informed me that in making this ore reserve estimate, it was inferred from surface exposures. The grade was partially estimated from sample BM-738 and from a careful inspection of the outcrops by the use of a mineralight at night.

The Mining Division does not have any new data at present as no further work has been done on the property. The merit of the property will have to be evaluated for a loan on data that has been presented. Another examination at this time would not materially alter the decisions that have been made.

A. C. Johnson

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
4 Homewood Place
Menlo Park, California

RECEIVED
MAR 5 1954

March 2, 1954

Subject: DMEA 2932 (Tungsten)
Blue Jacket Mining Co.
Elko County, Nevada

Mr. H. C. Miller
U. S. Bureau of Mines
1012 Flood Building
870 Market Street
San Francisco 2, California

Dear Mr. Miller:

In reply to your request for comments on Mr. Selfridge's memorandum of February 11, 1954, the points brought out by Mr. Selfridge have been reviewed.

Although no new information is available, additional explanation of points brought out in the report may clarify three questions raised in the letter.

1. The Field Team's estimate of inferred ore. Because this district has no production history, it is not possible to predict the proportion of the veins that will constitute ore, nor to predict the grade of ore.

The scheelite-bearing outcrops are not inferred to be the exposed parts of large ore shoots which might have continuity in depth. They are small ore shoots (mineralized showings) that may be representative of the grade of a larger one (if a larger one exists) inferred in the report to contain 1000 tons.

As the inferred ore cannot be seen, it cannot be measured nor sampled but quartz veins that may average 3 feet wide crop out at the site of proposed exploration and on adjacent mining claims in the area. If an ore shoot exists in these quartz veins, it is apt to be about 3 feet thick. Mineralized outcrops have yielded a few tons reported to have assayed 0.73 percent $WO_3$, selected samples of high grade material have assayed 1.64 percent $WO_3$, and one channel

sample, (BM 738) assayed 0.52 percent $WO_3$. If an ore body does exist, it might be expected to assay as much as 0.50 percent $WO_3$.

2. The improbability of making a significant discovery. The Field Team representatives do not consider that 1000 tons containing 500 units of $WO_3$ is a significant quantity but they do consider that there is a reasonable possibility that a small ore body may be revealed as the result of the proposed exploration. If it is, it will yield information about the occurrence of ore in this district which will aid and encourage further prospecting in the area. The tungsten showings revealed on this property constitute the best outcrops in the area--if they are not explored there is little hope that any tungsten showings will be explored for a considerable time.

3. The settlement sheet. The net returns from 5.717 dry tons simply confirms that the ore sent to the mill averaged 0.73 percent $WO_3$ or slightly more than the average of the inferred ore shoot.

Because there is a possibility of discovering ore in greater quantities than can be inferred by direct evidence, and because no ore bodies at all will be discovered if no work is done, it may be in the national interest to spend $11,000 at a property where there appears to be little chance of the Government loan being repaid.

Sincerely yours,

Roscoe M. Smith

Roscoe M. Smith

FEB - 1 1954

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

Re: Docket No. DMEA 2932 - Tungsten
Blue Jacket Mining Co.
Burns mine
Elko County, Nevada

Dear Mr. Miller:

This will acknowledge the Field Team's recommendations and review of a proposed exploration project at the Burns mine; the referenced application for exploration assistance was denied by letter of November 5, 1953. No new data were included in your review to warrant altering our denial of the referenced application, but we were at fault in not clearly instructing the Field Team that additional data must be secured if further consideration was to be given to this application.

Our letter of December 8, 1953, to Senator Malone regarding this application was in answer to a request by Mr. Silas Cordes through the Senator that the subject application be reconsidered. We felt that this was a case where we should have the benefit of your suggestions.

In reviewing the subject docket, the following points strike us as significant.

1. The Field Team's estimate of inferred ore. In calculating this tonnage, the block was assumed to be 100 feet high, 175 feet long, 3 feet thick, and to contain 3,000 tons, one-third of which is inferred to be ore of the estimated grade, in an ore shoot represented by sample BM-738, or 1,000 tons of 0.50 percent $WO_3$. The Field Team's assumption that one-third of the total block would average 0.50 percent $WO_3$ seems hardly valid. The weighted average of the three Bureau of Mines' samples from this segment is 0.285 percent $WO_3$ - width 3.5 feet (Samples B.M. 736, 738, and 740). The applicant submitted a map with the MF-103 that indicated 10 samples were taken from the same area.

The weighted average for the applicant's samples is 0.17 percent $WO_3$ - width 3.0 feet. A comparison of the sampling follows:

| Bureau of Mines | | | L. C. Clark | | | | |
|---|---|---|---|---|---|---|---|
| Sample No. | Width feet | % $WO_3$ | Sample No. | Width inches | % $WO_3$ | Width inches | & $WO_3$ |
| | | | 1 | 47 | 0.16 | | |
| 740 | 3.0 | 0.20 | 2 | 20 | 0.29 | 29 | 0.25 |
| | | | 3 | 38 | 0.04 | | |
| | | | 4 | 10 | 1.34 | | |
| | | | 5 | 32 | 0.39 | | |
| 738 | 4.0 | 0.52 | 6 | 38 | 0.19 | 34 | 0.20 |
| | | | 7 | 31 | 0.03 | | |
| | | | 8 | 70 | 0.17 | | |
| 736 | 3.7 | 0.10 | 9 | 43 | 0.03 | 46 | 0.10 |
| | | | 10 | 31 | 0.02 | | |
| | 3.5 | 0.28 | | | | 36 | 0.17 |

2. The improbability of making a significant discovery. Even on the basis of the assumed ore shoot, for which no evidence is presented, it is questionable whether 500 units of $WO_3$ is significant in the present situation.

3. The settlement sheet. The net return on 5.717 net dry tons of 0.61 percent $WO_3$ ore shipped to the Getchell mill for processing was $65.87 or $11.52 a ton. It is hard to justify spending $11,571.00 solely for exploration costs at a property when the net return on the assumed ore will probably leave nothing for mining and all other production costs.

With so few favorable factors, we would be reluctant to reconsider the referenced application unless there are some specific reasons for that action. Without appropriate substantiation, the generalized information that the property is in a new district, and the opinions of the engineer and geologist that the property has some merit, would be insufficient to warrant further consideration.

Please let us have your further comments.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee

Approved:

J. H. Hodges
Member, Bureau of Mines

s/ Philip W. Guild
Member, Geological Survey

OPER. COMMITTEE
R. W. GEEHAN, USBM
T. P. THAYER, USGS

cc: DOCKET
FT, REG.III
CODE 400
ADM. READ. FILE

FARutledge/ls
1/28/54

400 file

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

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

January 22, 1954

Air Mail

Memorandum

To: C. O. Mittendorf, Administrator, DMEA, Washington, D.C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-2932 - Tungsten
Blue Jacket Mining Company
Burns Mine, Elko County, Nevada
Letter dated Nov. 23, 1953, from Silas Cordes to Senator George W. Malone and Senator Malone's letter dated Dec. 8, 1953, to C. O. Mittendorf, regarding denial of loan.

Reference is made to the subject correspondence between the applicant and Senator Malone and between Senator Malone and you.

Upon receipt of our copies of the cited correspondence, I referred the matter back to the examining engineer and geologist for further consideration. I now have a memorandum, dated January 20, 1954, from A. C. Johnson, which is self-explanatory. Two copies are attached.

I agree with Mr. Johnson, Mr. Gentry, and Mr. Roscoe M. Smith, (my coworker on the DMEA field team vice E. H. Bailey), that this application is a "borderline" case. However, if, as Jim Boyd once told us "we should lean over backward in favor of the applicant," I believe the Washington office might review the application and possibly reverse its denial. It looks like a fair gamble.

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

Attachment

Copy to: Roscoe M. Smith, USGS (With attachment)

A. C. Johnson, Reno

January 20, 1954

Memorandum

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

From: Chief, Mining Division, Region III

Subject: Docket DMEA-2932 Tungsten Blue Jacket Mining Company, Burns Mine, Elko County, Nevada.
Letter dated Nov. 23 from Silas Cordes to Sen. George W. Malone and Senator Malone's letter dated Dec. 8 to C. O. Mittenderd, regarding denial of loan.

The report prepared in connection with an application for a loan on the Blue Jacket Mining Company, Burns Mine, Elko County, Nevada (tungsten) has been carefully reviewed with Mr. Glenn G. Gentry of the Bureau of Mines and Mr. Roscoe M. Smith of the U. S. Geological Survey.

The examination of this property indicates that the approval for a loan would more or less be a border-line decision because the reserves are small. The engineer and geologist were of the opinion that the property did have some merit and that a slight amount of exploration was warranted. The property is in a new district and if a substantial tonnage of scheelite ore could be proven, it could possibly open up a new tungsten mining district in the State.

As I stated before, a denial or a granting of this loan was more or less of a border-line case. In the event the DMEA Field Team believed that exploration of a property, where the inferred reserves are only 1000 tons of 0.5 percent $WO_3$, is in the national interest, it was recommended that the Government enter into a contract with the applicant for 200 feet of drifting and another 100 feet of crosscutting at a total cost of $11,571.

The examining engineer and geologist have no additional data or evidence available which justifies any change in their original conclusions and recommendations regarding this property.

A. C. Johnson

CC: Mr. R. M. Smith.

400

DEC 8 - 1953

Hon. George W. Malone
United States Senate
Washington 25, D. C.

My dear Senator Malone:

This will acknowledge receipt of your letter of December 3, 1953, concerning the denial by this Administration of an application submitted by the Blue Jacket Mining Company for exploration assistance for tungsten investigations at the Burns Mine, Elko County, Nevada, our docket No. DMEA 2932.

This application will be given further review both in the field and the Washington offices and, as soon as the results of that review are available, you will be further advised.

The correspondence pertaining to this application which you enclosed with your letter is returned herewith, copies having been made for our files.

Sincerely yours,

C. O. Mittendorf

Administrator

Enclosures

CC: DOCKET
FT. REG. III
CODE 400
ADM. LEAD. FILE
R. W. GRAHAM, USBM
T. P. THAYER, USGS

LScott

C
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P
Y

BLUE JACKET MINING CO.

502 Idaho Bldg.
Phone 2-2411 920 Main Street P. O. Box 2614
BOISE, IDAHO

November 23, 1953

Honorable George W. Malone
U. S. Senate Office Bldg.
Washington, D. C.

Dear Mr. Malone :

I am taking the liberty of writing to you concerning an exploration loan application from Blue Jacket Mining Co., a Nevada corporation.

This involves properties held by Nevada residents, one of whom is Mr. John Robbins, an Elko attorney. He is the owner of twelve patented claims, held by him since the early 90's at great financial loss on account of the high elevation (9000'). Adjoining his claim is property held by W. C. Burns, in whose claims I located tungsten deposits.

Sooner or later this discovery will affect Mr. Robbins' claims, and considering the mutual interests of all involved, I proceeded to open up this strike so I could apply for an exploration loan. I had a U. S. geologist and mining engineer at the property for verification of the strike. In addition I shipped five tons of ore to etchell Mines Inc. to establish the values. The ore for this shipment was taken from the grass roots and not selected. You will find a copy of the mill report enclosed.

These gentlemen, considering the strike worthwhile, advised me to instruct my engineer to apply for an exploration loan authorizing a 200' tunnel in and one 100' across to establish the ledge system. We proceeded to do so and under the exploration loan program they estimated about 5000 tons available in sight, not taking into consideration any further deposits from where I would start mining a 8200'. They recommended the exploration program as very practical. I am enclosing a copy of the letter which rejects the loan, which Mr. Mittendorf regrets.

I would like to ask you from which angle it would be best for me to proceed now in order to convince them that the property justifies government participation in an exploration program.

Our friend, Mr. John C. Sanborn, happens to be here visiting me, and he thought to send you a note to my benefit, since he had introduced us at a miner's hearing when you were in Weiser, Idaho in the interests of the small mines operators. Mr. Robbins will also contact you since I notified him of my intention to ask for your assistance.

I will hope to hear from you at your convenience, and will surely appreciate any aid you can give.

Sincerely,

/s/ Silas Cordes

Silas Cordes

SC:mbc
encl: Mr. John C. Sanborn's letter
Mr. Silas Cords copy of
Exploration papers
Photostatic copies of settlement,
which was made in 80% of the actual value.

C
O
P
Y

BLUE JACKET MINING CO.
502 Idaho Building
BOISE, IDAHO

August 28, 1953

Blue Jacket Mining Company
Box 2614
Boise, Idaho

Re: Blue Jacket WO Project
DMEA Docket No. 3

Gentlemen:

Following is an estimate of costs and recommended procedure and methods for the tungsten exploration drifting and cross-cuts on the Burns claims:

1. Location of work on Burns group of claims, Centennial Mining District, Elko County, Nevada.

2. Work Proposed:
Stage 1 200 ft. drift on tungsten vein
Stage II 100 ft. of cross-cut on tungsten vein

3. Size of entry:

5' x 7' in clear (inside timbers) timbered entry where needed.

4. Location:

Large dozer cut west of road and below the road leading to Burns tunnel.

5. Mucking Method:

Slusher and wooden ramp.

6. Tramming method:

One-ton car and hand tramming.

7. Rails and Pipe:

a. 12# rails available at Burns tunnel
b. 2" ø air line from Blue Jacket Mine. Water for drilling hauled to tunnel work and pressure tank used.

8. Drilling:

Jackleg machine and integral carbide steel sharpened on job w/ air-driven grinder and carballoy stone.

9. Housing:

It is planned for the crew of two men to live in the cabin on White Rock Creek 2½ miles below the tungsten workings.

10. Transportation:

A four-wheel drive pickup must be provided for the crew to travel to the job and to travel to Mountain City for supplies.

11. Estimated time for completion of job:

About 3½ months will be required to complete the 300 ft. of work.

12a. Stage I:

ESTIMATE OF COSTS FOR BURNS TUNGSTEN DRIFT ( 200 ft. )

| Direct Costs | | Costs / foot | |
|---|---|---|---|
| Labor (plus taxes, etc.) | $ | 12.00 | |
| Supervision and Engineering | | 3.00 | |
| Explosives | | 1.80 | |
| Timber | | 4.22 | |
| Gas, oil and grease (compressor) | | 2.48 | |
| Rail and pipe | | 1.50 | |
| Cable for slusher | | 0.32 | |
| Bits, steel and drill parts | | 1.68 | |
| Compressor repairs | | 1.00 | |
| Jackleg rental | | 0.62 | |
| TOTAL DIRECT COSTS | $ | 28.62 | 28.62 |
| **Indirect Costs** | | | |
| Rental on cabin | | 0.75 | |
| Bulldozer (Road and Dump) | | 2.00 | |
| 4 WD-pickup truck rental | | 0.75 | |
| Gas, oil for trucks, tires and repairs | | 3.60 | |
| 10% reserve for contingencies | | 3.60 | |
| TOTAL INDIRECT COSTS | $ | 10.70 | 10.70 |
| TOTAL COST PER FOOT | | | 39.32 |

12b. Stage II:

Estimate of costs for Burns tungsten X-cup (100 ft.)
(If work in 200 ft. drift justifies the 100 ft. X-cut)

See costs for State I.

| | | | |
|---|---|---|---|
| $39.32 | @ | 100 ft. | $3,932.00 |

TOTAL ESTIMATED COSTS OF PROJECT:

Stage I:

| | | | |
|---|---|---|---|
| 200 ft. of drift | @ $ 39.32 | - | $7,864.00 |

Stage II:

| | | | |
|---|---|---|---|
| 100 ft. of X-cut | @ $ 39.32 | - | $3,932.00 |
| | TOTAL COST | | $11,796.00 |

Very truly yours,

/s/ Ernest Oberbillig

Ernest Oberbillig
Consulting Mining Engineer
Idaho License No. 640

EEO/ co

C
O
P
Y

JOHN E. ROBBINS

Attorney At Law

ELKO, NEVADA

November 27, 1953

Hon. George Malone,
Senate Office Building,
Washington, D. C.

Dear Molly:

A client of mine, with whom I have been associated in an attempt to develop some mining property in northern Elko County, has informed me that he has made an application for an exploratory loan under the regulations which I understand do not cover the objective of my client, Mr. Cordes of Boise, Idaho, and has resulted in a denial of the loan by Mr. Mittendorf's Bureau.

This is a very meritorious case and one of those things that keeps the prospectors working in the hills, and I can assure you it is not an attempt to borrow money from the Government to exploit some wildcat property, as Mr. Cordes has spent a great deal of his personal funds in doing the work and having the work done that is necessary in his program, and I personally would be very appreciative of anything that you might do or have done to work out an allowance of the loan application, or at least an opportunity for us to do more work which can be pointed out by the officials who have rejected the application.

Thanking you in advance, and with kindest personal regards, I am,

Very sincerely yours,

/s/ John E. Robbins
by McF.

John E. Robbins

JER/McF.

C
O
P
Y

GETCHELL MINE INC.

Red House, Nevada

Custom Ore Settlement Sheet

Received of: Blue Jacket Mining Co.
H. E. Reed
Winnemucca, Nevada

Date Rec'd 7-17-53

By Getchell Mine Inc.

| | | | |
|---|---|---|---|
| 1 | Trucks weighing | 20,590 | Gross Lbs. |
| 1.0 | % Moisture | 9,040 | Tare Lbs. |
| 0.61 | % $WO_3$ | 11,550 | Net Wet Lbs. |
| 5.717 | Net Dry Tons | 116 | Moisture Lbs. |
| 3.487 | Contained STU $WO_3$ | 11,434 | Net Dry Lbs. |

PAYMENT:

Pay for 80% contained STU $WO_3$ 2.790 at $ 46.00 @ * $ 128.34

LESS CHARGES:

| | | |
|---|---|---|
| Treatment of 5.717 Net Dry Tons at $ 8.00 @ * | $45.74 | |
| Sampling & Assaying | 10.00 | |
| Gas | 6.73 | |
| | | $62.47 |

* (equals) NET PROCEEDS $ 65.87

400

NOV 2 1953

Mr. Silas Cordes, Director
Blue Jacket Mining Co.
P. O. Box 2614
Boise, Idaho

Re: Docket No. DMA 2932 - Tungsten
Blue Jacket Mining Co.
Gerna Mine
Elko County, Nevada

Dear Mr. Cordes:

Your application for aid for an exploration project and other data available to us in Washington concerning the above-referenced property have been reviewed.

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

Careful study of all our information, although noting the occurrence of tungsten mineralization on your property, indicates to us that the probability of disclosing minable ore reserves by your proposed program is not sufficiently promising to justify Government participation. Under these circumstances, we regret to advise you that your application is denied.

We wish to thank you for your interest in the Defense Minerals Exploration Program and for bringing the referenced property to our attention.

Sincerely yours,

C. O. Mittendorf

Administrator

JHopkins/ls
10/26/53

cc: DOCKET
CODE 400
FT. REG. 3

ADM. READ. FILE

cc: R. W. GEEHAN, USBM
T. P. THAYER, USGS
OPERATING COMMITTEE

October 26, 1953

MEMORANDUM

To: Administrator, DMEA

From: Iron and Ferro-Alloys Division

Subject: Denial of application for exploration assistance in the amount of $13,430.50
Docket No. DMEA 2932 - Tungsten
Blue Jacket Mining Company
Burns Mine
Elko County, Nevada

The denial of the subject application by this Division is based on the following information:

(1) The applicant requested exploration assistance in the sum of $13,430.50 to explore for tungsten in the Burns Mine, Elko County, Nevada. The proposed exploration program included a total of 325 feet of drilling in 3 diamond drill holes, with depths of 50, 100, and 200 feet beneath the outcrop of a scheelite bearing quartz vein.

(2) The scheelite prospect is in massive light and dark gray limestone. The limestone is cut by two faults: One fault strikes N. 30° W. and dips 60-80° W. and contains a scheelite bearing quartz vein as much as 5 feet wide; the second fault strikes N. 15° W. and dips 70° W. and displaces the quartz vein.

(3) The scheelite bearing quartz vein is poorly exposed in five pits and trenches over a distance of 175 feet and has been sampled by the examining team with the following analytical results.

| Sample No. | PERCENT $WO_3$ | Pb | Zn | Oz/T Au | Ag | Description |
|---|---|---|---|---|---|---|
| BM-736 | 0.10 | 0.2 | 1.3 | 0.06 | 0.02 | 3.7' cut in lower trench. |
| BM-737 | 0.18 | 0.2 | 0.3 | Tr. | Tr. | Chip sample 1 ton ore from lower trench. |
| BM-738 | 0.52 | 0.2 | 0.4 | " | " | 4' cut in open cut on upper road. |
| BM-739 | 0.13 | 0.2 | 0.3 | " | " | Chip sample of 3 tons from ore from open cut. |
| BM-740 | 0.20 | 0.2 | 0.8 | " | " | 3' cut in open trench south of 739. |
| BM-741 | 0.01 | 0.2 | 0.4 | " | " | 6' cut in open cut above road. |
| BM-742 | 0.17 | 1.4 | 0.9 | 0.01 | 3.40 | Chip sample of 300# from ledge near 741. |
| BM-743 | 0.01 | 0.2 | 0.3 | 0.005 | 0.70 | Chip sample of quartz boulder |
| BM-744 | 0.01 | 0.2 | 0.4 | 0.005 | 0.80 | Surface gossan-shallow cut on Burns claim. |
| BM-745 | 1.64 | 0.1 | 0.2 | Tr. | Tr. | Selected specimen from same pile as BM-739. |

The average grade of these samples is reported by the Field Team to be 0.27 percent $WO_3$.

(4) During the period of prospecting, the Operators report shipping six tons of selected ore averaging 0.73 percent $WO_3$ to the Getchell Mill near Redhouse, Nevada. A sample from the same location by the examining engineers assayed 1.64 percent $WO_3$.

(5) Analytical results of samples taken by the examining team in pits and trenches along the outcrop of the quartz vein clearly indicate that there are no measurable ore reserves on the Blue Jacket Mining Company scheelite prospect.

(6) The examining team report states that a few tons of ore may be present at the surface exposures, and 1000 tons of ore averaging 0.50 percent is inferred to be in the block north of the fault that displaces the vein. This block is assumed to be 175 feet in length, 100 feet in depth, and 3 feet in width, and to contain 3000 tons, one-third of which is inferred to be ore of the estimated grade in an ore shoot represented by Sample BM-738.

The examining engineer and geologist believe that there is a reasonable chance of discovering small ore bodies in a new district and have suggested a revised program to explore the vein with 250 feet of drifts and 50 feet of crosscuts.

(7) The Iron and Ferro-Alloys Division, DMEA agrees with the examining team's finding that a few tons of ore may be present at the surface exposures but concludes that these ore reserves are insignificant and that a discovery that would increase these reserves appreciably is too unlikely to justify Government exploration aid.

Because of the apparent improbability of making a significant discovery, this Division does not believe that the exploratory work proposed by the applicant or the revised program suggested by the examining engineer and geologist is sufficiently promising to justify Government participation. We, therefore, recommend that the request for Government aid, Docket No. DMEA 2932, be denied.

(8) The Commodity Division of the U. S. Geological Survey and the Bureau of Mines concur with the denial.

W. S. Martin, Chief
Iron and Ferro-Alloys Division

Copy to: Docket
Adm. Read. File
Oper. Committee
code 400

JHopkins/ls
10/23/53

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

402
DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 20 1953

October 19, 1953

Memorandum

To: W. S. Martin, DMEA

From: T. P. Thayer, USGS

Subject: DMEA-2932, Tungsten
Blue Jacket Mining Company
Burns Mine, Elko County, Nevada

Contrary to the opinion of the Field Team, I do not believe that the deposit warrants the proposed exploration. Only one assay out of 8 samples indicates economic value, and that sample is marginal (0.52 percent $WO_3$) for a deposit of this size. On the basis of the ore shoot assumed, for which no evidence is presented, and the Field Team estimate of inferred ore taken at its face value, exploration would be about $17 per unit of $WO_3$ hoped to be found. In a deposit of this size, such an exploration cost would be exorbitant.

I therefore recommend denial of the application on the basis of no worthwhile exploration objective. In the present situation, it is very questionable whether 500 units of $WO_3$ is significant.

T. P. Thayer

4021

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

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

October 6, 1953

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-2932 - Tungsten
Blue Jacket Mining Company
Burns Mine, Elko County, Nevada

Reference is to your letter dated March 30, 1953, requesting a field examination of the above captioned docket. For a number of reasons, first on account of snow and impassable roads, and second by our inability to get in touch with the applicant, the examination was not made until August 22.

Attached are four copies of a report entitled "DMEA-2932, Blue Jacket Mining Company, Burns Mine, Elko County, Nevada," by Glenn G. Gentry, Mining Engineer, U. S. Bureau of Mines, and Roscoe M. Smith, Geologist, U. S. Geological Survey, dated October 1, 1953.

The examining engineer and geologist believe the property has some merit and that there is a reasonable chance of discovering small ore bodies in a new district. The original proposal by the applicant was to explore the deposit by diamond drilling. The examining team, however, does not believe that diamond drilling will yield sufficient reliable information relative to the grade of scheelite because of the lack of uniformity of mineralization.

A revised program suggested by the examining engineer and geologist offers a moderate two-stage exploration project and comprises:

Stage 1: Drift on the vein for a distance of 200 feet in a southeasterly direction, beginning at an approximate elevation of 7,925 feet.

Reviewed by
DMEA OPERATING COMMITTEE
10-16-53
(date)

Stage 2: To be undertaken only if Stage 1 exposes sufficient scheelite in commercial quantities and only upon prior written authorization by the Government.

Crosscut in an easterly direction for a distance of 50 feet at or near the south end of the adit extended under Stage 1. Then drift south, off the crosscut, for a distance of 50 feet.

Although the examining team recommends a modest exploration program and Mr. A. C. Johnson concurs, Mr. Bailey and I are of the opinion that this is a decidedly borderline case. We are willing, however, to go along with your engineers if they approve a loan.

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

Attachment

Copy to: E. H. Bailey, USGS

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

# REPORT OF EXAMINATION BY FIELD TEAM
REGION III

## DMEA-2932, BLUE JACKET MINING CO.

## BURNS MINE

## ELKO COUNTY, NEV.

GLENN G. GENTRY, MINING ENGINEER
U. S. BUREAU OF MINES

ROSCOE M. SMITH, GEOLOGIST
U. S. GEOLOGICAL SURVEY

OCTOBER 1, 1953

Reviewed by
DMEA OPERATING COMMITTEE
10-16-53
(date)

## EXHIBITS

Fig. 1 - Index map of northeast Nevada.

" 2 - Geologic map of scheelite prospect, Blue Jacket Mining Co., Elko County, Nev.

" 3 - Claim map, Blue Jacket Mining Co., Elko County, Nev.

# REPORT OF EXAMINATION

Docket No.: DMEA-2932 (Tungsten)

Name and address of applicant: Blue Jacket Mining Co.,
Leon K. Carson, President,
924 Main Street,
Boise, Idaho.

Name and location of property: Burns Mine, Elko County, Nev.

## SUMMARY

Under date of March 13, 1953, the Blue Jacket Mining Co. submitted an application for Government assistance in the amount of $13,430.50 with which to conduct 825 feet of core drilling at the Burns Mine in Elko County, Nev.

Pursuant to receipt of this application, the Burns Mine was examined on the day and night of August 22, 1953 by a field team consisting of an engineer[1] of the U. S. Bureau of Mines, Region III and a geologist[2] of the U. S. Geological Survey. The delay in making the examination was due to snow and road conditions which prevented access to the property and to the applicant's failure (as per his letter dated June 17, 1953) to keep the Bureau of Mines advised when conditions at the mine would make the examination possible. Efforts by this office to contact the applicant at his official address in Boise, Idaho, prior to August 19, 1953, resulted in the letter being returned marked unclaimed.

---

1/ Glenn G. Gentry.
2/ Roscoe M. Smith.

During the examination, the field team were accompanied by:

Mr. Leon K. Carson, President
Mr. Jack Murdock, Secretary-Treasurer
Mr. Silas Cordes, Director
Mr. Ernest Oberhiltig, Consulting Mining Engineer
Mr. W. C. Burns, owner of the Burns Mine

The above men represented the Blue Jacket Mining Co.

The field team consider that the diamond drilling program as outlined in the application will not yield sufficient reliable information relative to the grade of scheelite because of the lack of uniformity of mineralization.

The analysis of the samples taken by the examining engineer are considered to be representative of the exposures open for sampling. However, the samples also indicate the speculative nature of future development work.

The property has some merit and the field team suggest a moderate exploration project to be accomplished in two stages:

Stage I:- Drift on the vein for a distance of 200 feet in a southeasterly direction, beginning at an approximate elevation of 7,925 feet. (Fig. 2)

Stage II:- To be undertaken only if stage I exposes sufficient scheelite in commercial quantities and only upon prior written authorization by the Government. -

Crosscut in an easterly direction for a distance of 50 feet at or near the south end of the adit extended under stage I. Then drift south, off the crosscut, for a distance of 50 feet.

## CONCLUSIONS AND RECOMMENDATIONS

The field team conclude that there is a reasonable chance of discovering small ore bodies in a new district and that there may be inferred reserves of 1,000 tons containing about 0.50 percent $WO_3$ in the block to be explored.

If a tungsten deposit of this size and grade is in the National interest, it is recommended that Government enter into a contract with the applicant for the exploration as outlined in stage I and stage II.

## NAME AND LOCATION OF PROPERTY

The Burns mine is located in northern Elko County, Nev., 39.2 miles south and west of Mountain City, Nev. It is situated on the western slope of the Bull Run Mountains and at an elevation of 8,200 feet. The specific location of the mine is NW 1/4 of the NW 1/4 of sec. 28, T. 44 N., R. 52 E. in the Centennial Mining District.

Road conditions:- The roads are the usual unimproved desert roads and for the most part will be difficult and at times impossible to travel during the winter months. From the mine camp to the mine, a distance of 3.4 miles, the road is narrow with a steep gradient. This latter section of the road will probably be blocked by snowfall from late November until June unless the operator maintains heavy equipment for snow removal.

## APPLICANT'S PROPERTY RIGHTS

The application lists mining claims, considered as part of the Burns group, as the Silver, Wonder and Blue Grouse. These claims are held by W. C. Burns by right of location and are reported to be recorded in books 23 and 24, pages 551, 552 and 656 in the office of the County Recorder, Elko County Courthouse, Elko, Nev.

Under date of June 28, 1950, W. C. Burns and Inez Mae Burns, his wife, granted a lease and option on 30 mining claims to Silas Cordes of Boise, Idaho. The lease and option terminating on June 30, 1975.

Under date of February 25, 1952, Silas Cordes agreed to sell, assign, set-over and transfer his lease and option obtained from W. C. Burns and Inez Mae Burns, dated June 28, 1950 to the Blue Jacket Mining Co. This assignment covers the Silver, Wonder and Blue Grouse claims on which the applicant applied for Government assistance. The exposures examined by the field team are reported as being on the Silver, Wonder and Blue Grouse mining claims. The quartz vein examined is principally on the Silver mining claim.

The applicant reports that all assessment work has been done and that no debts have accrued against the property. A Landlord's Subordination Agreement, dated May 15, 1951, signed by W. C. Burns, is attached to and made a part of the application.

## COMPETENCY OF APPLICANT

The officers of the Blue Jacket Mining Company are a group of business men residing in Boise, Idaho. Mr. Silas Cordes, the engineer member of the group, states that he has many years of experience in developing and operating mines in various parts of the United States and in operating the Blue Jacket Mine near Mountain City, Nev. Mr. Cordes is now actively engaged in operating two restaurants in Boise, Idaho. Mr. Jack Murdock, Secretary-Treasurer of the company states that he conducts an automobile loan agency in Boise, Idaho.

Mining development and or exploration work would be under the supervision of Ernest Oberbillig, consulting mining engineer, and a graduate of the Idaho School of Mines, Moscow, Idaho. Mr. Oberbillig reports considerable experience in South America, of mostly metallurgical work. The field team consider that while the applicants are inexperienced in tungsten mining, that Mr. Oberbillig should be competent to supervise the proposed exploration program.

Mr. Cordes, one of the directors of the mining company, advises that his company has sufficient funds with which to pay for their portion of exploration expense and that they have sufficient mining equipment for the job.

## DESCRIPTION OF PROPERTY

The mine, at present, can be considered as a prospect only. The quartz exposures have been opened in a limited manner in several

places by means of shallow trenches, bulldozing and relatively small cuts. Heavy rains during the summer had partially filled the cuts with soil and debris and this condition made a more complete examination and study impossible.

The prospecting done so far has been insufficient to determine the extent of the exposure.

## GEOLOGY

The Scheelite prospect is in massive light and dark gray limestone that strikes N. 80° W. and dips 65° N. Two faults cut the limestone: One fault strikes N. 30° W. and dips 60-80° W. and contains a quartz vein as much as 5 feet wide; the second strikes N. 15° E. and dips 70° E. and displaces the quartz vein. There are reported to be granodiorite dikes about one half mile north and also about one mile west of the scheelite prospect.

## ORE DEPOSITS

The scheelite-bearing quartz vein to be explored is poorly exposed in five pits and trenches (fig. 2), and appears to be cut into two segments by a fault. The lower segment ranges in width from 2 to 6 feet and contains the best exposures of scheelite. The upper segment is about the same width but showings are poor or absent.

Scheelite crystals as large as one fourth of an inch occur in seams and are irregularly disseminated in parts of the vein. Total production from the vein is one shipment of 6 tons made in 1953 to the Getchell mill

0.61 [illegible]

which is reported to have averaged 0.73 percent $WO_3$. Samples taken by the Bureau of Mines indicate the average grade to be 0.27 percent $WO_3$; selected highgrade assayed 1.64 percent $WO_3$.

## SAMPLING

Samples were secured from all places where the quartz vein was exposed and are considered to be representative of the exposures:

| Sample No. | %, $WO_3$ | %, Pb | %, Zn | Oz/T Au | Oz/T Ag | Description |
|---|---|---|---|---|---|---|
| BM-736 | 0.10 | 0.2 | 1.3 | 0.06 | 0.20 | Width 3.7 feet; end of lower trench; white quartz, some oxidation; highly silicified; shows light scheelite under lamp. The quartz ledge consists mostly of loose boulders and may be only float in the overburden. Trench is caved in face and along sides. |
| BM-737 | 0.18 | 0.2 | 0.3 | Tr. | Tr. | Chip sample of about 1 ton of quartz on dump. This ore pile reported to have been mined from same trench as BM-736. |
| BM-738 | 0.52 | 0.2 | 0.4 | Tr. | Tr. | Width 4.0 feet; quartz vein in face of small open cut on upper road. |
| BM-739 | 0.18 | 0.2 | 0.3 | Tr. | Tr. | Chip sample from about 3 tons of quartz mined from open cut where BM-738 was taken. |
| BM-740 | 0.20 | 0.2 | 0.8 | Tr. | Tr. | Width 3.0 feet; quartz vein in small open trench south of BM-739; some lead sulphides noted in the quartz. |
| BM-741 | 0.01* | 0.2 | 0.4 | Tr. | Tr. | Width 6.0 feet; quartz vein in face of open cut above road. |
| BM-742 | 0.17 | 1.4 | 0.9 | 0.01 | 3.40 | Chip sample of 300 lbs. of quartz on dump. This quartz from ledge about 10 feet west of BM-741; considerable sulphides. |

| Sample No. | %, $WO_3$ | %, Pb | %, Zn | Oz/T Au | Oz/T Ag | Description |
|---|---|---|---|---|---|---|
| BM-743 | 0.01 | 0.2 | 0.3 | 0.005 | 0.70 | Chip sample of quartz boulders about 30 feet east of BM-741; quartz carries some sulphides. |
| BM-744 | 0.01* | 0.2 | 0.4 | 0.005 | 0.80 | Surface gossan from shallow cut on Burns claim. (Not shown on fig. 2). |
| BM-745 | 1.64 | 0.1 | 0.2 | Tr. | Tr. | Selected specimen pieces of quartz from same pile as BM-739. |

* less than.

## ORE RESERVES

There are no measured ore reserves at the Blue Jacket Mining Company scheelite prospect. A few tons of indicated ore may be present at the surface exposures and 1,000 tons of ore averaging 0.50 percent $WO_3$ is inferred to be in the block above the lower road and north of the fault that displaces the vein (fig. 2). In calculating this tonnage, the block was assumed to be 100 feet high, 175 feet long, 3 feet thick, and to contain 3,000 tons, one-third of which is inferred to be ore of the estimated grade in an ore shoot represented by sample BM-738.

## PROPOSED EXPLORATION

The applicant has proposed a core drilling program consisting of three stages:

Stage 1. Four holes, 315 feet $4,863.00
Stage 2. Two holes, 260 feet $3,447.00
Stage 3. Two holes, 250 feet $3,370.50

He proposed to drill from both sides of the vein in the mistaken belief that the dip of the vein is vertical. In addition, the applicant has proposed to build two frame buildings 12 x 16 feet for living quarters for six men at a cost of $1,750.00. The applicant has built a road to the site of a proposed adit to explore the vein at altitude 7,925.

The field team considers that core drilling of this deposit is not a satisfactory method of exploration. Because only one-third of the total quartz may contain scheelite in commercial quantities and because even there the scheelite is erratically distributed within the quartz, diamond drill holes would be most likely to cut the vein in areas containing scheelite in less than average amount. Results of drilling would in that case be unfavorable to the property. Diamond drilling would be advantageous as an aid to exploration but not as exploration in itself unless a great many holes were drilled. As this drill hole exploration would be too costly, it is concluded that a drift along the vein would be a better exploratory method. The location of the vein underground can be projected from surface information with sufficient accuracy to direct the adit.

These factors were discussed with the applicant who is in agreement with the following revised exploration program: From the existing road at altitude 7,925 crosscut 50 feet south to cut the vein and drift 150 feet southeast along the vein; (2) depending upon finding ore in stage 1, and subject to the prior written approval of the government, crosscut 50 feet northeast to cut the faulted continuation of the vein, and drift

50 feet along the faulted segment.

The program is estimated to require about five months to complete and to cost $11,571.00. The government's share of the cost would be $8,678.25.

## PAST OPERATION

During the period of prospecting, the operators report that six tons of selected ore, averaging 0.75 percent $WO_3$, was shipped to the Getchell mill near Redhouse, Nev.

The examining engineer secured a sample, BM-745, from the same location as the reported shipment. This sample was a chip sample of highest grade ore selected by using a mineralight, and it assayed 1.64 percent $WO_3$.

## MANPOWER, SUPPLIES, ETC.

It is usually possible to secure a few experienced miners and other types of mine labor in the town of Mountain City, Nev. and a small amount of mining supplies may also be obtained there. Other sources of labor and major supplies would be from Elko, Nevada and Boise, Idaho.

Water for mining operations would have to be hauled by truck from a spring located approximately one half mile from the portal of the proposed adit. There is no transmitted electric power in the immediate area. Therefore, it will be necessary to use equipment operated by either Diesel or gasoline engines.

## ALLOWABLE COSTS OF PROJECT

Independent contracts: None.

In a letter dated Aug. 29, 1953, addressed to the Mining Division, Region III, Mr. Ernest Oberbillig, consulting mining engineer for the applicant, submitted a detailed estimate of costs for the proposed project. These costs have been checked by the field team, appear to be reasonable for the location of the mine, and it is recommended that they be accepted. The detailed costs are as follows:

| Direct costs: | Cost per foot | |
|---|---|---|
| Labor (plus taxes, insurance) | $12.00 | |
| Supervision and engineering | 3.00 | |
| Explosives | 1.80 | |
| Timber | 4.22 | |
| Gas, oil, grease for compressor | 2.48 | |
| Rail and pipe | 1.50 | |
| Cable for slusher | 0.32 | |
| Bits, steel and drill parts | 1.68 | |
| Compressor repairs | 1.00 | |
| Jack leg drill rental | 0.62 | |
| | | $28.62 |
| **Indirect costs:** | | |
| Rental on cabin | 0.75* | |
| Bulldozer (roads and dump) | 2.00 | |
| 4 WD-pickup truck rental | 0.75 | |
| Gas, oil for trucks, tires and repairs | 3.60 | |
| 10% reserve for contingencies | 3.60 | |
| | | 10.70 |
| Total cost per foot | | $39.32 |
| Less rental of cabin | | 0.75 |
| Revised cost per foot | | $38.57 |

*Rental of the cabin should be deleted as it is a part of the facilities owned by the applicant.

Initial rehabilitation and repairs: None.

New buildings, improvements and installations: None.

Total cost of project:

| | |
|---|---|
| Stage 1. 200 feet of adit @ $38.57 per foot | $7,714.00 |
| Stage 2. 100 feet of crosscut @ $38.57 per foot | 3,857.00 |
| | $ 11.571.00 |

Government participation @ 75% = $8,678.25

The applicant believes that he can complete the project in about 3-1/2 months. However, allowing for time to bring in equipment, road repairs, etc., the field team consider that five months time should be allowed. The applicant also reports that he will be prepared to start work immediately if the project is approved.

Due to the lateness of this season, the isolation of the mine and the usual severe winters in the area, it is doubtful that much would be accomplished prior to heavy snowfall.

The field team recommend that the project, if approved, be considered only on a unit or footage basis, with the applicant furnishing all labor, materials, and supplies at a specified cost per foot.

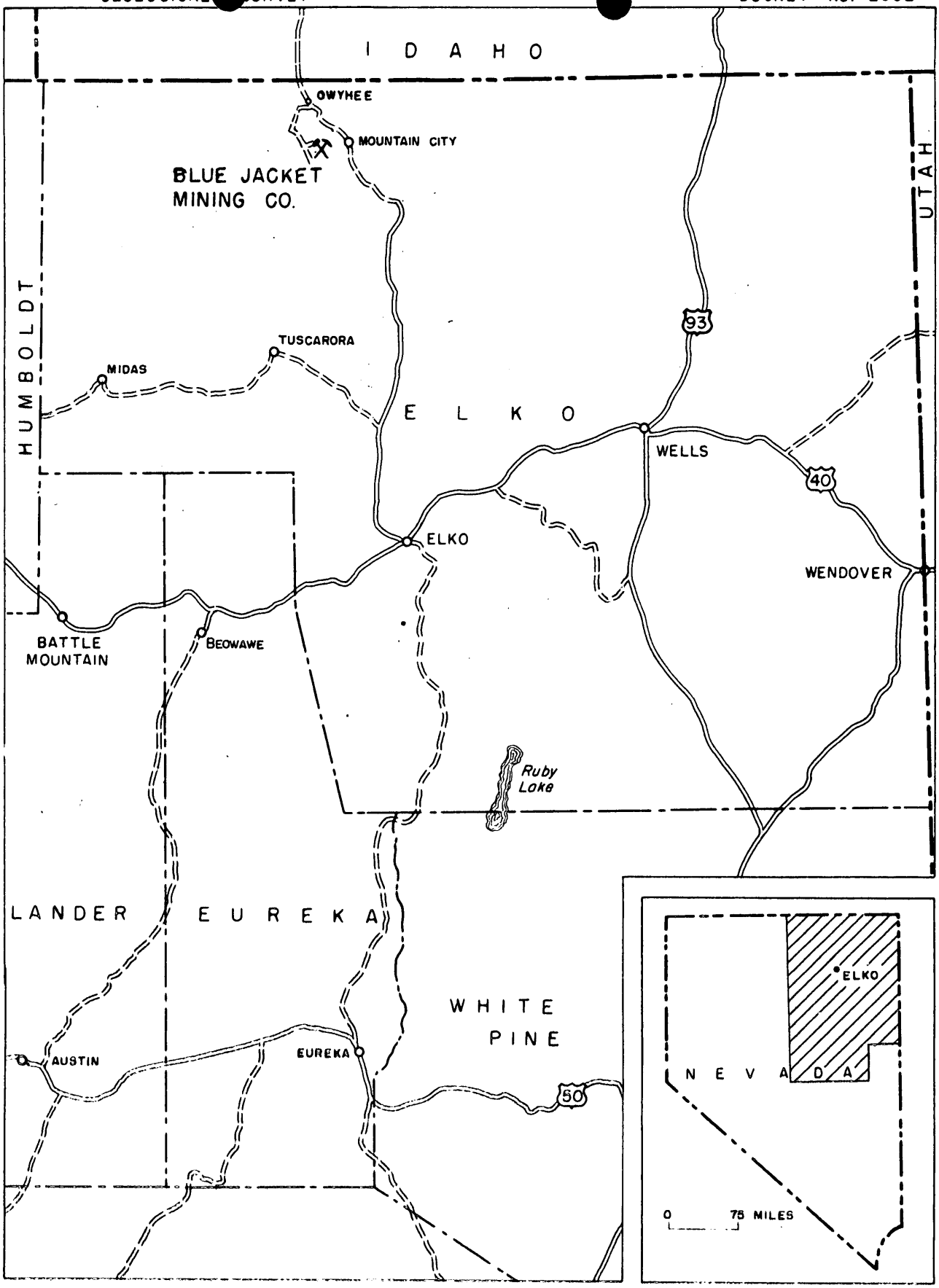
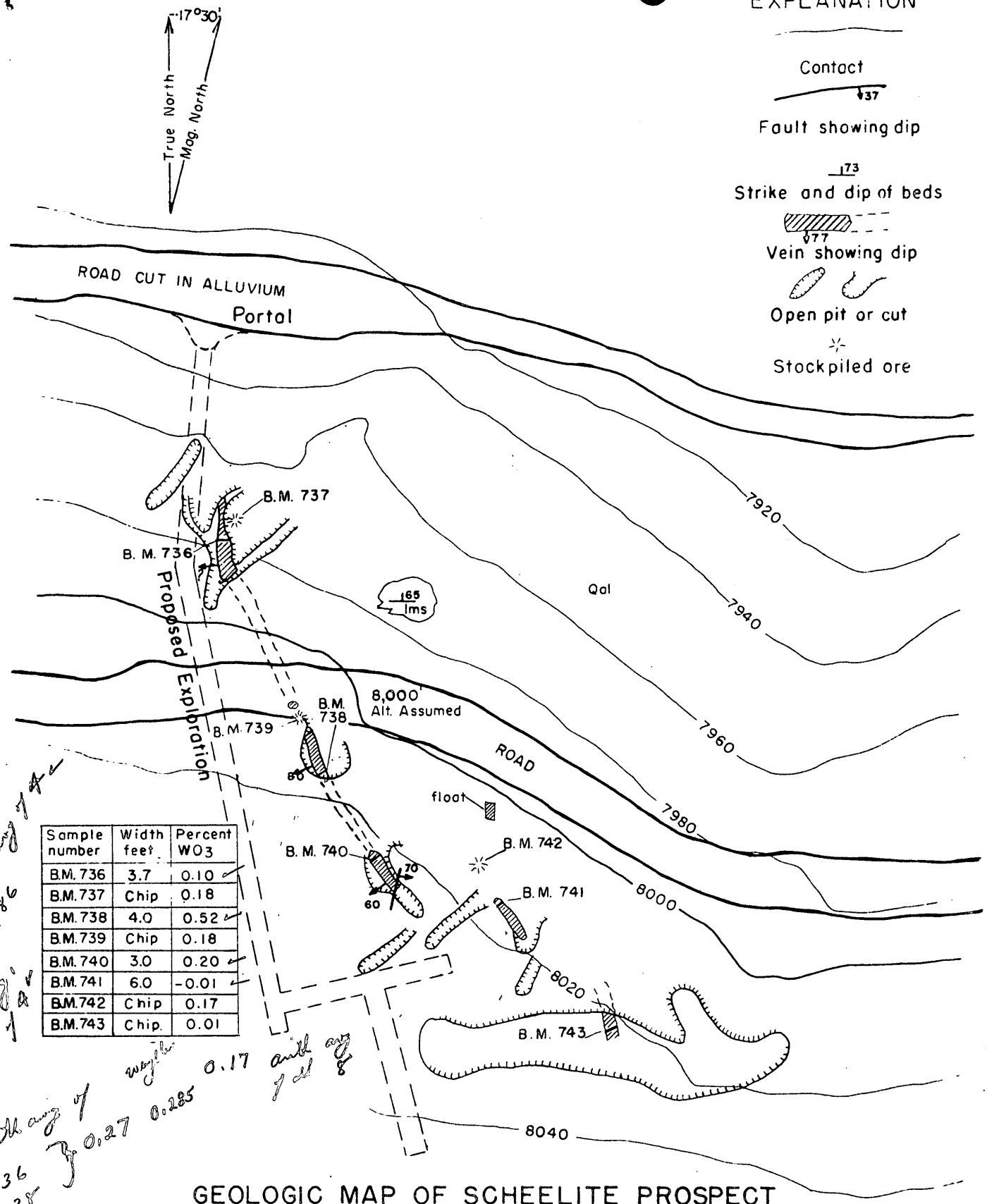



FIG. 1 INDEX MAP OF NORTH EAST NEVADA

10 0 10 20 MILES

U. S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
DOCKET NO. 2932




| Sample number | Width feet | Percent WO3 |
|---|---|---|
| B.M. 736 | 3.7 | 0.10 |
| B.M. 737 | Chip | 0.18 |
| B.M. 738 | 4.0 | 0.52 |
| B.M. 739 | Chip | 0.18 |
| B.M. 740 | 3.0 | 0.20 |
| B.M. 741 | 6.0 | -0.01 |
| B.M. 742 | Chip | 0.17 |
| B.M. 743 | Chip. | 0.01 |

arith avg of 4 0.186

arith avg of 4 0.21

arith avg of 736 738 740 0.27 0.285

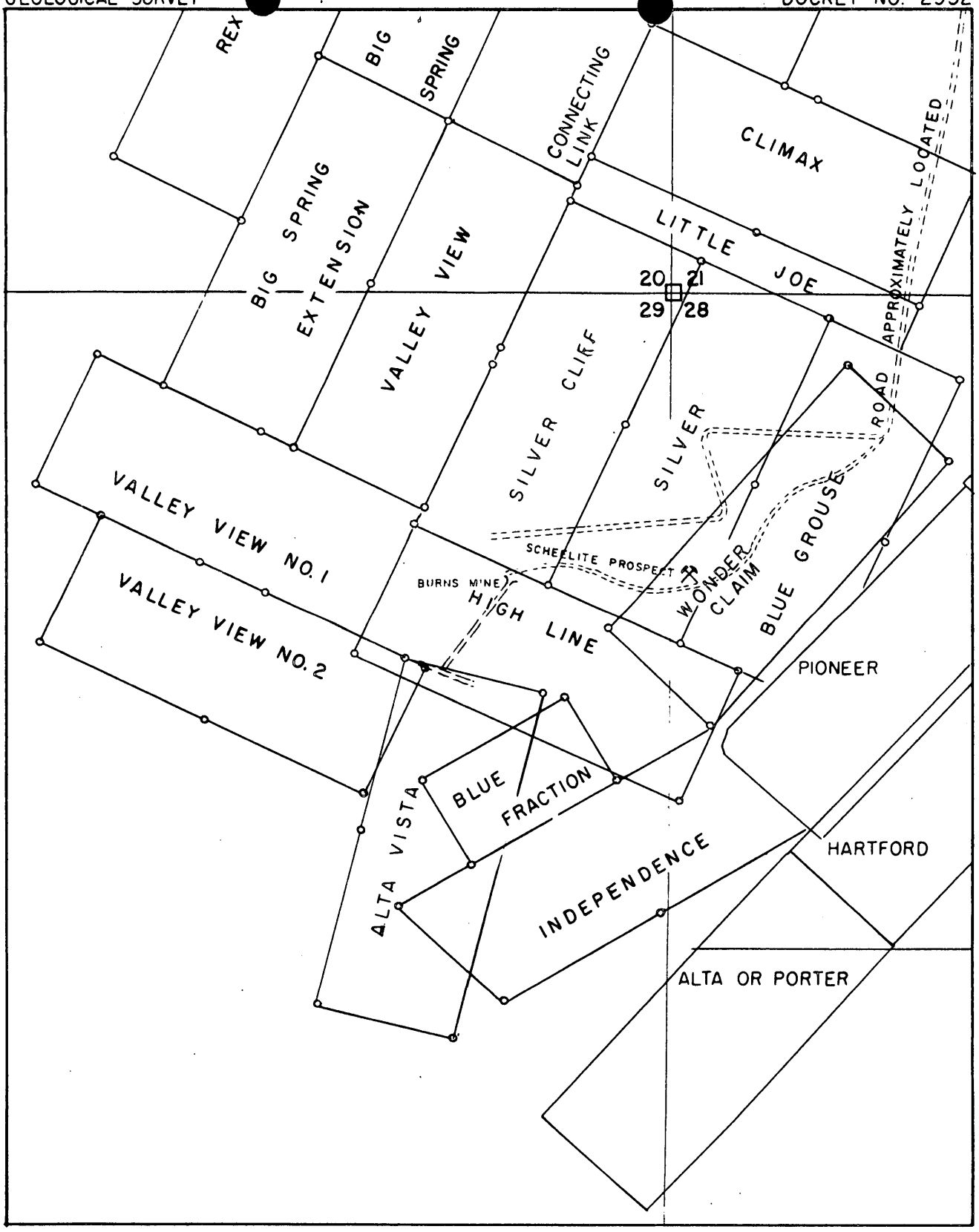
weighted avg 0.17 arith avg of all 8

FIG. 2

GEOLOGIC MAP OF SCHEELITE PROSPECT
BLUEJACKET MINING COMPANY
ELKO COUNTY, NEVADA

0 40 80 120ft.
Scale

After L. C. Clark 1952




CLAIM MAP OF PART OF THE BLUE JACKET PROPERTY

FIG. 3

ELKO COUNTY, NEVADA

0 600 1200 1800 ft.

Scale

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

402

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

September 8, 1953

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-2932 - Tungsten
Blue Jacket Mining Company
Burns Mine, Elko County, Nevada

In answer to your letter of September 4, 1953, regarding the present status of subject application which was referred to this office on March 30 for a field examination, the latest information from the field is that a joint Bureau of Mines - Geological Survey examination was made during the month of August and a report is now in preparation. Due to the elevation of the property, snow conditions kept the roads closed until late in the summer.

As soon as the report is received in this office, it will be reviewed and forwarded to you.

S. RICKER

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

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

Retained 400

400

SEP 4 1953

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

Re: Docket No. DMEA 2932 - Tungsten
Blue Jacket Mining Co.
Burns Mine
Elko County, Nevada

Dear Mr. Miller:

Reference is made to the above-docketed application for exploration assistance which was referred to your office by letter of March 30, 1953, for review and possibly a field examination of the property.

We shall appreciate it if you will advise us of the present status of this application.

Sincerely yours,

Ernest Wm. Ellis

ACTING Chairman, Operating Committee

APPROVED:

J. H. Hedges

Member, Bureau of Mines

A. R. Kinkel, Jr.

Member, Geological Survey

FARutledge:foc
9-3-53
cc: Docket
Code 400
Adm. Reading File
Operating Comm.
Ft. Reg. 3
R. W. Geehan, USBM
Mary Miller, USGS

TELEPHONE 3-3302

*Hand Sample Serial* 37570-81

ASSAY REPORT

# UNION ASSAY OFFICE, Inc.

J. V. SADLER, President
A. C. SELBY, Vice-Pres. & Treas.
A. C. SELBY, Jr., Secretary

Salt Lake City 11, Utah

*Mine* Leonard C. Clark

Nov. 17, 1952

RESULTS PER TON OF 2000 POUNDS

| NO. | GOLD Ozs. per Ton | SILVER Ozs. per Ton | LEAD Per Cent Wet | ~~COPPER~~ Per Cent | ~~INSOL.~~ Per Cent | ZINC Per Cent | ~~SULPHUR~~ Per Cent | IRON Per Cent | LIME Per Cent | Per Cent | Per Cent | VALUE GOLD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | $WO_3$ | | | | | | | | |
| 9906 | | | | 0.16 | | | | | | | | |
| 9907 | | | | 0.29 | | | | | | | | |
| 9908 | | | | 0.04 | | | | | | | | |
| 9909 | | | | 1.34 | | | | | | | | |
| 9910 | | | | 0.39 | | | | | | | | |
| 9911 | | | | 0.19 | | | | | | | | |
| 9912 | | | | 0.03 | | | | | | | | |
| 9913 | | | | 0.17 | | | | | | | | |
| 9914 | | | | 0.03 | | | | | | | | |
| 9915 | | | | 0.02 | | | | | | | | |
| 9916 | | | | 0.12 | | | | | | | | |
| 9917 | | | | 0.85 | | | | | | | | |

*Remarks*

J. V. Sadler

*Charges $* 36.00 Paid

C. C. CRISMON
PRESIDENT

M. CRISMON
VICE-PRESIDENT

ORRIN FISHER
SECRETARY

R. R. CASTO
TREASURER

# CRISMON & NICHOLS

PHONE 3-7417

229-231 SO. WEST TEMPLE ST.

P. O. BOX 1708

## CERTIFICATE OF ASSAY

SALT LAKE CITY 10, UTAH February 4, 1953

Silas Cordes

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

| DESCRIPTION | NO. | Per-cent Tungsten Tri-Oxide ($WO_3$) | | | | |
|---|---|---|---|---|---|---|
| | | 1.55 | | | | |

REMARKS:

CHARGES $ 3.00

CRISMON & NICHOLS

BY [illegible]

C. C. CRISMON
PRESIDENT

[illegible]. CRISMON
[illegible]E-PRESIDENT

ORRIN FISHER
SECR[illegible]

R. R. CASTO
TREASURER

# CRISMON & NICHOLS

PHONE 3-7417

229-231 SO. WEST TEMPLE ST.

P. O. BOX 1708

## CERTIFICATE OF ASSAY

SALT LAKE CITY 10, UTAH October 7, 1952

Silas Cordes

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

| DESCRIPTION | NO. | Per-cent Tungsten Tri-Oxide ($WO_3$) | | | | |
|---|---|---|---|---|---|---|
| | | 0.61 | | | | |

REMARKS: Samples arrived Monday afternoon too late to start. Tungsten assays take three days.

CRISMON & NICHOLS

BY [illegible]

CHARGES $ 3.00

C. C. CRISMON
PRESIDENT

P. M. CRISMON
VICE-PRESIDENT

ORRIN FISHER
SECRETARY

R. R. CASTO
TREASURER

PHONE 3-7417

# CRISMON & NICHOLS

229-231 SO. WEST TEMPLE ST.

P. O. BOX 1708

## CERTIFICATE OF ASSAY

SALT LAKE CITY 12, UTAH November 7, 1950

Silas Cordes

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

| DESCRIPTION | NO. | OZS. GOLD PER TON | OZS. SILVER PER TON | PER CENT LEAD | PER CENT COPPER | PER CENT INSOL. | PER CENT IRON | PER CENT ZINC | PER CENT ~~Tungsten~~ Tri-Oxide ($WO_3$) | VALUE OF GOLD PER TON |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | | 14.20 | 5.60 | | | | | 4.46 | |
| | 2 | | | | | | | | 1.43 | |

REMARKS:

CHARGES $ 7.50

CRISMON & NICHOLS

P. M. Crismon

400

400

Mr. Silas Cordes, Director
Blue Jacket Mining Co.
P. O. Box 2614
Boise, Idaho

MAR 20 1953

Re: Docket No. DMEA 2932 - Tungsten
Blue Jacket Mining Co.
Burns Mine
Elko County, Nevada

Dear Mr. Cordes:

Your application for assistance in exploring tungsten occurrences at the Burns mine of the Blue Jacket Mining Co., Elko County, Nevada, has been reviewed by the Iron and Ferro-Alloys Division, DMEA, and has been referred to Mr. H. C. Miller, Executive Officer, DMEA Field Team, Region III, 1012 Flood Building, 870 Market Street, San Francisco 2, California, for further consideration and possibly a field examination.

The application contains no supporting data such as sample returns to indicate that the proposed project should be considered under the Defense Minerals Exploration Administration's program for tungsten. The location and widths of twelve samples are indicated on Map No. 1 attached to the application, but the assay results are not given. Before your application can be given further consideration, we must receive these data to support the occurrence of tungsten. Please also forward a copy of the assays to Mr. H. C. Miller at the address given above.

After receiving the required assay data, the Regional Office will advise you whether an examination will be made at your property, and any assistance that you can render the members of the field team in that event will be appreciated.

Sincerely yours,

C. O. Mittendorf

Administrator

cc: Docket
Field Team, Region 3
Code 400
Admin. Read. File
R. W. Geehan, USBM
D. M. Lemmon, USGS

FAHutledge/hhb
3/25/53

400

400

Air Mail

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

APR 30 1959

Re: Docket No. DMEA 2932 - Tungsten
Blue Jacket Mining Co.
Burns Mine
Elko County, Nevada

Dear Mr. Miller:

Reference is made to the subject application for exploration assistance which is being referred to your office for review and possibly a field examination.

The application as submitted does not contain any sample data to substantiate the presence of tungsten mineralization. Assay results have, therefore, been requested from the applicant with a copy to be sent directly to your office.

In reviewing the subject application, the following points were noted which should be clarified:

1. Relative amount of tungsten present.

2. Dip of the faulted vein segments.

3. The layout of the drilling program. Why drill from both sides of the vein segments?

4. The need for both an engineer and a supervisor on such a small contract drilling project.

5. The high drilling costs.

6. The need for permanent housing instead of tents. Project will be short and in the summer.

The following memoranda have been prepared and are enclosed for your information:

Memorandum by D. M. Lemmon, U. S. Geological Survey, March 20, 1953.

Memorandum by R. W. Geehan, U. S. Bureau of Mines, March 20, 1953.

Sincerely yours,

George E. Soldridge

Chairman, Operating Committee

Enclosures

Approved:

W. W. Hodson

Member, Bureau of Mines

A. R. Kinkel, Jr.

Member, Geological Survey

cc: Docket
Code 400
Operating Committee
Admn. Read. File
Field Team, Region 3
R. W. Geehan, USBM
D. M. Lemmon, USGS

AARutledge/hhb
3/25/53

COPY

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

400

March 20, 1953

Memorandum

To: W. S. Martin, DMEA

From: R. W. Geehan, Assistant Chief, Ferrous Metals & Alloys Branch

Subject: DMEA 2932 - Blue Jacket Mining Co., Elko County, Nevada

The subject application has been received. The applicants should be requested to supply the results of the sampling indicated on the map. No action can be proposed without this information. At the same time it may be desirable to question the supervision item, as the engineer listed should be able to supervise the project. The docket will be held for action when this information is received.

Robert W. Geehan

IN REPLY REFER TO:

G-MD-CF

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

March 20, 1953

Memorandum

To: W. S. Martin, DMEA

From: D. M. Lemmon, USGS

Subject: Exploration application DMEA-2932
Blue Jacket Mining Company Tungsten
Burns Mine
Secs. 20, 21, 28, and 29,
T. 44 N., R. 52 E., MDM
Elko County, Nevada

The applicant states that scheelite is present in a quartz vein 3 feet thick and about 200 feet long, in limestone. The scheelite was identified with ultraviolet light, and no samples were assayed. It is proposed to core drill 825 feet in 8 holes to depths of 50, 100 and 200 feet beneath the outcrop. The total estimated costs are $13,430.50.

The Geological Survey has no information about scheelite at this property.

The proposal made by the applicant is completely unsatisfactory. The costs are at least twice too much. The feasibility of the proposed drilling is dubious because enough surface work has not been done to determine the dips of veins and faults. The identification of scheelite is not supported by assays. The applicants are not experienced in mining. Provision of housing and snow removal is not necessary for a project that will take only one month and can be done in the summer.

Docket DMA-309 was an incompleted application for this property, and may contain additional information.

The map submitted indicates that 12 samples were cut but not assayed. I suggest that the applicant be requested to provide the assays if available. If the surface sampling is favorable, the application should be referred to the Field Team for examination of the property when it is free of snow.

D. M. Lemmon

Copy retained 400

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1035.2.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 18 1953

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

*Not to be filled in by applicant*

Docket No. DMEA 2932
Metal or Mineral
Date Received 3-18-53
Estimated Cost
Participation (Government %)

## INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: Blue Jacket Mining Co., P.O. Box 2514, Boise, Idaho.
A Corporation incorporated in the State of Nevada
Leon Carson, President, 1621 Annett St., Boise, Idaho; Jack Murdock, Secty-Treas., 103 N. 10th, Boise, Idaho; Hubert D. Martin, Asst. Secty-Treas., Box 2514, Boise, Idaho

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

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

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

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

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract See accompanying sheet

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

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Lessee

(*d*) If you are not the owner, submit with this application a copy of the lease, contract, or other document under which you control the property. Copies of the lease are submitted.
Assignment of lease to Blue Jacket Mining Co.

(*e*) If you own the land, describe any liens or encumbrances on it

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

See accompanying sheet.

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

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

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

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

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

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

(*b*) Describe fully the proposed work, including a map or sketch of the property showing a plan (and cross sections if needed) of any present mine workings, and the location of the proposed exploration work as related to such features as contacts, veins, ore-bearing beds, etc. See accompanying 20 scale map.

(*c*) The work will start within 180 days and be completed within 3 months from the date of an exploration project contract.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Explain in detail on acompanying paper.

## CERTIFICATION

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

Dated March 13th, 195 3

Blue Jacket Mining Co Inc.
(Applicant)

By Jack Mudson Secy & Treas.

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

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

Blue Jacket Mining Company
Box 2614, Boise, Idaho

# APPLICATION FOR AID IN AN EXPLORATION PROJECT

Paragraph 4 Physical Description (a)

At the adjacent Burns Mine, on the High Line and Valley View Claims, a few hundred feet of underground work has been done. This is open for examination and contains some scheelite as well as lead, zinc, silver and copper. This is under lease to the Blue Jacket Co.

The original Blue Jacket Mine is located about one mile east and is developed by approx. 2000 feet of drifts and cross cuts and a 250 foot winze. This too is the property of the Blue Jacket Co. All the necessary machinery and tools and supplies for mining are presently on this property and are available for use at any other point on the property. The workings are open for examination with the exception of the winze which is filled with water.

The quartz vein containing scheelite has been developed on its strike by tractor trenches and hand dug pits for a length of 200 feet and averages 3 feet in thickness. Eight tons of quartz from one of the pits is estimated by Mineralite to assay about 1%. In another pit the quartz has a width of 70" of which 20 inches appears to be high grade, 2-3% WOz. The samples and widths are indicated on the accompanying 20 scale map.

b) The Burns Mine has had very little production. A pile of 3 or 4 tons now on the dump assays: Au 0.02 oz.; Ag 88.40 oz.; Pb 47.20%. No tungsten assays were made, but its presence is indicated by the ultra-violet light. This is sorted ore and does not represent ore in place. A sample 3 feet in width across the face in a raise assayed: Au 0.02 oz.; Ag 11.80 oz.; Pb 6.70%, Cu 0.05%. Production has been approximately 3000 oz. of silver; 17,000 pounds of lead; 120 pounds of copper and 1000 pounds of zinc.

Blue Jacket Mining Company
Box 2614, Boise, Idaho

Paragraph 4 (b) continued:

The Blue Jacket Mine is approximately 1 mile to the east and is owned and controlled by the Blue Jacket Mining Co. It has enjoyed sporadic interest since 1876. At that time a 30-day mill run of 11½ tons per day produced concentrates worth $12,219.90. Forty-five tons of crude ore was shipped in 1950 and assayed: Au 0.035 oz.; Ag 43.6 oz.; Pb 4.2%; Cu 1.08%.

Paragraph 4 Physical Description (c)

The vein which the Blue Jacket Mining Co. wishes to develop is one of quartz and contains tungsten (scheelite). It is nearly vertical and averages about 3 feet in width. It has been faulted as the accompanying 20 scale map indicates. Both walls are of limestone and in the faulted areas is much broken. Only very minor quantities of lead, zinc and copper are noted here as contrasted to veins in the Burns and Blue Jacket Mines.

d) The project lies at an elevation of 8000 feet and considerable snow falls and remains until late spring. Without being plowed out the snow drifts will remain until July. Access roads have been built to the project, but early spring work will necessitate some tractor work.

There are no buildings on the site suitable for living quarters; however, a cabin on a property about four miles distant is available on a rental basis. This is suitable to house three men.

Mountain Home, Idaho and Elko, Nevada are the nearest rail points. Mt. Home is 130 miles by unpaved road; Elko is 113 miles of which 75 is paved. Mt. City, Nevada is the nearest shopping center - 38 miles.

e) Unskilled labor is available at nearby ranches; all materials and supplies and equipment must be trucked in. Power is available at the Peton ranch 10 miles away. Water is available in White Rock Creek about 1 mile from the project. For a drilling program this would have to be hauled to the site.

Blue Jacket Mining Company
Box 2614, Boise, Idaho

Paragraph 5 Exploration Project (b)

The proposed work is layed out on the accompanying map as a number of diamond drill holes.

Stage 1 consists of four holes and is layed out to intersect the vein at approx. 50 feet below its outcrop.

Stage 2 consists of two holes, to be drilled, dependent upon the outcome of Stage 1 to intersect the vein at approx. the 7925 elevation as indicated on the map.

Stage 3 consists of two diamond drill holes of approximately 125 feet each and to be drilled, dependent upon the outcome of Stages 1 and 2, to intersect the vein at approx. 7825 elevation. These are not shown on the map and are intentionally omitted to lend flexibility.

Two 12X16-foot frame buildings are included for the use of the diamond drill crew.

A provision is included for tractor work for the removal of snow from the access road in early spring.

d) The officers of the Blue Jacket Mining Co. have had experience in operating the Blue Jacket Mine. Though production has been small a number of exploratory projects have been conducted. It is their plan to hire an engineer to take care of cores, samples, logs and drill locations.

Bl[redacted]cket Mining Company
Box 2614, Boise, Idaho

Paragraph 3 Applicant's Property Rights (a)

Consists of unpatented lode mining claims held by lessor and situated in Secs. 20, 21, 29, 28; T44N, R52E, M.D.M. and the claims on which it is proposed the work be done are a part of the Burns group and are situated in Sections 21, 29, 28; T44N, R52E; M.D.M. Claims of the Burns Group to be considered under the proposed contract are: Silver, Wonder and Blue Grouse.

Paragraph (f)

| Claim | Book | Page |
|---|---|---|
| Silver | 23 | 551 |
| Blue Grouse | 23 | 552 |
| Wonder | 24 | 656 |

Other claims in the immediate area which may benefit are:

| | | |
|---|---|---|
| Rex | 24 | 653 |
| Big Spring | 24 | 333 |
| Connecting Link | 24 | 335 |
| Big Spring Extension | 24 | 334 |
| Valley View | 24 | 335 |
| Valley View No. 1 | 24 | 654 |
| Valley View No. 2 | 24 | 655 |
| High Lime | 22 | 300 |
| Alta Vista | 23 | 551 |
| Blue Fraction | 24 | 658 |
| Independence | 23 | 552 |
| Silver Cliff | 23 | 551 |
| Climax | 24 | 657 |

Blu[redacted]ket Mining Company
P.O. Box 2614, Boise, Idaho

Paragraph (f) Continued:

| Claim | Book | Page |
|---|---|---|
| Little Joe | 24 | 654 |
| Grey Copper Extension | 24 | 334 |

And also the following claims of the "Robbins" group:

Pioneer

Shoshone

Tuscarora

Porter

Hartford

All of these claims are recorded in the office of the County Recorder of Elko County, Nevada.

Blue Jacket Mining Co.
Box 2614 Boise, Idaho

# ESTIMATE OF COSTS

Stage I 315 ft. drilling - 4 holes

| | |
|---|---|
| Total Diamond drilling @ $8.52/ft. for 315 ft. | $2684.00 |
| Equipment Haulage 340 miles | 500.00 |
| Bookkeeper @ $100.00 per month | 100.00 |
| Engineer @ $450.00 per month | 450.00 |
| Insurance and taxes | 40.00 |
| Supervision and expense | 600.00 |
| Snowplowing - three days @ $100.00 per day | 300.00 |
| Assaying - four samples per hole @ $4.00 ea. | 64.00 |
| Core boxes | 25.00 |
| Supplies and instrument cost or rental | 100.00 |
| | 4863.00 |

Cost per foot - $16.37 not counting housing

" " " - 21.91 including housing

Blue Jacket Mining Co.
Box 2614 Boise, Idaho

ESTIMATE OF COSTS

Stage 2 260 ft. drilling - 2 holes

| | |
|---|---|
| Total Diamond drilling @ $8.36 per ft. | $2175.00 |
| Bookkeeper @ 100.00 per month | 100.00 |
| Engineer @ .$450.00 per month | 450.00 |
| Insurance and taxes | 40.00 |
| Supervision and expense | 600.00 |
| Assaying | 32.00 |
| Supplies and rental | 50.00 |
| | $3447.00 |

Stage 2 cost per foot - $14.41 not counting housing

Stages 1 and 2 cost per foot - $18.52 counting housing

Blue Jacket Mining Co.
Box 2614 Boise, Idaho

ESTIMATE OF COSTS

Stage 3 250 ft. drilling - 2 holes

| | |
|---|---|
| Total Diamond drilling | $2098.50 |
| Bookeeper @ $100.00 per month | 100.00 |
| Engineer @ $450.00 per month | 450.00 |
| Insurance and taxes | 40.00 |
| Supervision and expense | 600.00 |
| Assaying | 32.00 |
| Supplies and rental | 50.00 |
| | $3370.50 |

Stage 3 cost per ft. - $14.68 not counting housing

Stages 1,2,3 - cost per ft. - $17.35 including housing

Blue Jacket Mining Co.
Box 2614 Boise, Idaho

ESTIMATE OF COSTS

Housing

Material

2 - 12' x 16' frame bldgs, lined , with aluminum roof ,

two doors, four windows @ $2.50/ sq. ft.

$950.00

Labor for erection

| | | |
|---|---|---|
| 1 carpenter | 10 days @ $25.00 per day | 250.00 |
| 1 helper | 10 days @ $15.00 " " | 150.00 |
| | | $1350.00 |

Sleeping and eating accomodations for six men

housing equipment $400.00

$1750.00

dmea
2932

MF-202

# LANDLORD'S SUBORDINATION AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the undersigned is the owner in fee simple of that certain parcel of ground in the county of ....., State of ....., described in a certain Exploration Project Contract dated ....June 28...., 1950, between

.....,

the Lessee of said property, and the United States of America;

NOW, THEREFORE, the undersigned, as Lessor of said property under lease dated .....

....., does by these presents subordinate all of his right, title, and interest under the provisions of said lease to the right, title, and interest of the United States of America under the provisions of said Exploration Project Contract, and agrees that the lien and claim of the United States of America under the provisions of said contract shall be prior to the undersigned's rights to rentals or royalties under the terms of said lease; and

The undersigned further agrees that if said leasehold interest should be surrendered or if said lease should terminate at any time prior to the expiration of the rights of the United States of America under said Exploration Project Contract, the undersigned shall assume and does hereby assume all of the obligations of the Lessee under said Exploration Project Contract to make repayment to the United States of America according to the terms of said contract; and

The undersigned agrees to commit no act, nor assert any claim under judicial process or otherwise that may contravene or conflict with the prior lien and claim of the United States of America under the provisions of said Exploration Project Contract.

This undertaking and covenant shall be binding upon the heirs, successors, and assigns of the undersigned.

Dated this ....1st.... day of ....May...., 195..1

.....

U. S. GOVERNMENT PRINTING OFFICE 940768

# LANDLORD'S SUBORDINATION AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the undersigned is the owner in fee simple of that certain parcel of ground in the County of Elko, State of Nevada, described in a certain Exploration Project Contract dated June 28, 1950, between Silas Cordes - - - - - - - - - - - - - - - - - - - - -, the Lessee of said property, and the United States of America;

NOW, THEREFORE, the undersigned, as Lessor of said property under lease dated June 28, 1950, does by these presents subordinate all of his right, title, and interest under the provisions of said lease to the right, title, and interest of the United States of America under the provisions of said Exploration Project Contract, and agrees that the lien and claim of the United States of America under the provisions of said contract shall be prior to the undersigned's rights to rentals or royalties under the terms of said lease; and

The undersigned further agrees that if said leasehold interest should be surrendered or if said lease should terminate at any time prior to the expiration of the rights of the United States of America under said Exploration Project Contract, the undersigned shall assume and does hereby assume all of the obligations of the Lessee under said Exploration Project Contract to make repayment to the United States of America according to the terms of said contract; and

The undersigned agrees to commit no act, nor assert any claim under judicial process or otherwise that may contravene or conflict with the prior lien and claim of the United States of America under the provisions of said Exploration Project Contract.

This undertaking and covenant shall be binding upon the heirs, successors, and assigns of the undersigned.

Dated this 15 day of May, 1951.

ORVILLE R. WILSON
ATTORNEY AT LAW
ELKO, NEVADA

______________________________

Blue Jacket Mining Company
Box 2614, Boise, Idaho

# LEASE AND OPTION

THIS LEASE AND OPTION, made and entered into as of the 28th day of June, 1950, by and between W. C. BURNS and INEZ MAE BURNS, his wife, of Idaho Falls, Idaho, first parties, and SILAS CORDES of Boise, Idaho, second party,

## WITNESSETH:

That for and in consideration of the promises, covenants and agreements of the second party hereinafter contained on his part to be performed, and in consideration of the sum of TEN DOLLARS ($10.00) lawful money of the United States by the second party to the first parties in hand paid, receipt whereof is hereby acknowledged, the said first parties do hereby lease, demise and let unto the second party all those certain unpatented lode mining claims situate in the Centennial Mining District in the County of Elko, State of Nevada, particularly described as follows:

| | | |
|---|---|---|
| BROADVIEW EXTENSION | Dec. 4, 1934 | Book 24, Page 337 |
| GRAY COPPER EXTENSION | Dec. 4, 1934 | Book 24, Page 334 |
| BIG SPRING | Dec. 4, 1934 | Book 24, Page 333 |
| BIG SPRING EXTENSION | Dec. 4, 1934 | Book 24, Page 334 |
| CANYON | Dec. 4, 1934 | Book 24, Page 332 |
| CHALLIS | Nov. 22, 1935 | Book 24, Page 546 |
| MIDWAY EXTENSION | Dec. 4, 1934 | Book 24, Page 336 |
| VALLEY VIEW | Dec. 4, 1934 | Book 24, Page 335 |
| CONNECTING LINK | Dec. 4, 1934 | Book 24, Page 335 |
| REX | Sept. 8, 1936 | Book 24, Page 653 |
| LITTLE JOE | Sept. 8, 1936 | Book 24, Page 654 |
| VALLEY VIEW NO. 1 | Sept. 8, 1936 | Book 24, Page 654 |
| VALLEY VIEW NO. 2 | Sept. 8, 1936 | Book 24, Page 655 |
| WONDER | Sept. 8, 1936 | Book 24, Page 656 |
| MOUNTAIN VIEW NORTH EXTENSION | Sept. 8, 1936 | Book 24, Page 656 |
| CLIMAX | Sept. 8, 1936 | Book 24, Page 657 |
| BLUE FRACTION Amended | Sept. 8, 1936 | Book 24, Page 658 |
| STORM KING | Nov. 27, 1936 | Book 25, Page 38 |
| STORM KING NO. 2 | Nov. 27, 1936 | Book 25, Page 38 |
| SILVER CLIFF | Oct. 9, 1933 | Book 23, Page 551 |
| SILVER | Oct. 9, 1933 | Book 23, Page 551 |
| ALTA VISTA | Oct. 9, 1933 | Book 23, Page 551 |
| BLUE GROUSE | Oct. 9, 1933 | Book 23, Page 552 |
| INDEPENDENCE | Oct. 9, 1933 | Book 23, Page 552 |
| HIGH LINE | Nov. 7, 1930 | Book 22, Page 300 |

Together with the following described unpatented lode mining claims which are situate in the said Centennial Mining District, County of Elko, State of Nevada,

which are the subject of an Agreement of Sale dated December 7, 1934, by and between L. R. BLEWETT, H. A. BLEWETT and E. F. BLEWETT, Of Elko, Nevada, sellers, and W. C. BURNS of Idaho Falls, Idaho, the buyer, pursuant to the terms of which contract there is owing and unpaid by the buyer unto the sellers the sum of $5,000.00 in full of purchase price of the following described claims:

| | | |
|---|---|---|
| SILVER FIELD | Nov. 3, 1933 | Book 23, Page 601 |
| GRAY COPPER | Nov. 3, 1933 | Book 23, Page 601 |
| MOUNTAIN VIEW | Nov. 20, 1933 | Book 23, Page 618 |
| MIDWAY | Nov. 20, 1933 | Book 23, Page 618 |
| BROADVIEW | Nov. 3, 1933 | Book 23, Page 602 |

TOGETHER with all the dips, spurs and angles, and also all the metals, ores, gold and silver bearing quartz, rock and earth therein; and all the rights, privileges and franchises thereto incident, appendant and appurtenant, or therewith usually had and enjoyed; and also all and singular the tenements, hereditaments and appurtenances thereunto belonging, or in anywise appertaining, and the rents, issues and profits thereof.

TO HAVE AND TO HOLD the same unto the second party for the term beginning June 22, 1950, and terminating at noon on the 30th day of June, 1975, unless sooner forfeited or terminated as herein provided.

As sole rentals, the second party promises to pay to the first parties royalties upon the net proceeds upon the sale of ore in the manner and amount as herein required:

15% of the net smelter return (as such return is hereafter specifically defined and limited) on all ore milled on or off the premises.

It is specifically understood and agreed that net smelter return on milled ore as hereinabove set forth shall be the smelter return after deducting only transportation costs, including trucking charges and the smelter treatment, and excluding milling and mining and all other costs of every name or nature.

The following schedule of royalties shall apply on the net smelter return (as such return is hereinafter specifically defined and limited) on all ore shipped to smelter as raw ore: $25.00 per ton or less, 10%; $26-$50 per ton 15%; $51-75 per ton 20%; $76-$150 per ton 25%; $151.00 and over per ton, 50%.

It is specifically understood and agreed that net smelter return on raw ore shipped to smelter as hereinabove set forth shall be the smelter return after deducting only transportation costs, including trucking charges and smelter treatment, and excluding mining and all other costs of every name or nature.

All ore shipped from said premises and/or all concentrates or other products shipped therefrom hereunder shall be shipped in the name of the second party, with instructions to the smelter to make the said royalty payments due the first parties to the First National Bank of Nevada, Elko Branch, it being first understood and agreed, however, that all costs hereinabove specifically defined, to-wit, all transportation costs and smelter charges shall be first deducted by said processing agent.

All royalties paid hereunder shall be credited upon the option price for the sale of said above-described mining claims as hereinafter set forth.

The first parties shall pay all state and county real estate taxes that may be levied or assessed against the property; provided however, that the second party shall pay all state and county taxes levied or assessed against the structures and other improvements, machinery, equipment, tools, supplies and any other and all personal property whatsoever, placed upon the leased premises by the second party; and provided further, that all taxes levied and assessed against the net proceeds of the products taken from said property shall be pro rated according to the respective percentages resulting to the parties hereto based upon the above-described division. The said net proceeds tax shall be payable by the respective parties hereto, and the second party shall not pay the net proceeds tax for and on behalf of the first parties.

In the event either of the parties hereto shall fail to pay the said taxes on their part to be paid, as aforesaid, either realty, personal or net proceeds, then the other party or parties to this agreement shall have the right to pay the same, and all sums so paid shall be repaid by the party or parties in default, together with interest thereon at the rate of 6% from date of payment to the date of repayment of the same.

Said second party is to enter upon said premises and work the same ina proper, skillful and miner-like manner, and in a manner necessary to good and economical

mining, so as to provide for the extraction of the greatest amount of ore, with due regard to the safety, preservation and development of said mining property as a workable mine, at the sole cost of said second party and without any cost to said first parties.

Said second party further covenants and agrees well and sufficiently to timber all workings of said premises where proper, in accordance with safe mining practices, and to keep said property properly timbered at the sole cost of said second party.

The second party agrees to maintain the existing road in usable condition as measured by the requirements of said mining property, and in all events at least according to the specifications of the Bureau of Mines, it being acknowledged by said second party that he is acquainted with the fact that the first parties have obtained certain benefits from the Bureau of Mines in consideration of their maintenance of said road all according to standard.

Said second party agrees to post and keep posted in a conspicuous place on said premises, Notice of the Non-Liability of the said first parties, notifying all persons that said first parties will not be responsible or liable for any labor performed, materials furnished or improvements made upon said premises during the term of this agreement, and to place a copy of said Notice, together with an Affidavit that the same has been posted, on file in the Recorder's Office of Elko County, Nevada, in all respects as required by Section 3743 N.C.L. 1929, as amended, and in all respects as required by the laws of the State of Nevada to assure and guarantee the non-liability of the first parties in respect to any liens or claims that might be filed against said property.

Such non-liability of the first parties, and such Notice of Non-Liability of the first parties as referred to in the preceding paragraph, shall likewsie apply to any injury or damage to third persons or property of any third persons. Neither the first parties nor the property itself, nor any part thereof, shall be liable

for any such claims for labor, materials, damage or injury.

It is further agreed that with reference to any and all labor performed upon the said premises and all materials furnished in connection with this lease, the second party is and shall be in no respect whatsoever, the agent of the first parties, and the second party shall have no right, power or authority as the agent of the first parties, or at all, to bind the first parties, or the said property, or any part thereof, to the extent of any liability whatsoever for any labor or materials furnished in connection with operations of the second party hereunder.

That said second party agrees to carry Workmen's Compensation or Industrial Accident Insurance with the State of Nevada, and said second party shall, must and will at his own expense cause all workers, miners or other employees in and about said premises to be insured by the Nevada Industrial Commission, and that said second party further covenants and agrees to operate said mining property in accordance with the rules and practices prescribed by the State of Nevada and the Nevada State Mine Inspector. That said second party agrees to pay all fees and costs in connection with the carrying and handling of said Industrial Insurance.

The second party acknowledges that he is acquainted with the terms of the L. R. BLEWETT, et al, agreement with W. C. BURNS for the purchase of the properties hereinabove specifically identified as being the subject of said contract, and that said second party agrees to perform all of the covenants in said agreement required to be performed by the said W. C. BURNS, including the requirement that there be performed at least 240 shifts of labor per year on said claims specifically described in the Blewett Agreement. It is understood and agreed that at such time as there have accumulated royalty payments unto the sellers in the Blewett Contract retiring the purchase price for claims in said contract in full, then and in that event the minimum of said 240 shifts may be worked on any of the claims the subject of this lease and option. A shift shall be defined as the equivalent of one man working eight hours in any one day.

The second party shall perform all the necessary assessment work required to protect the title to all of the above-described unpatented mining claims for the year 1949 and 1950, and for each and every year thereafter, and for such succeeding years said work shall be done on or before thirty days prior to the last date as established by law for the performance of such assessment work, and the second party shall notify the first parties when said work shall have been accomplished, and at least thirty days prior to the last date for performance thereof, all to the end that if the same is not performed by the second party the first parties will have a period of one month to protect the said properties.

The second party shall, on or before the 15th day of each calendar month during the term hereof, furnish the first parties with a written report showing as to the preceding calendar month the tonnage of ore shipped or sold, and the tonnage of concentrates or products shipped or sold.

The second party shall also promptly furnish the first parties with duplicate copies of smelter, mint or other purchasing agencies, receipts and settlement sheets for all concentrates and products extracted and shipped or sold from the leased premises.

The first parties and their authorized agents shall at any and all reasonable times be permitted to inspect all books and records, including assay reports, of the second party relating to the leased property, in order to ascertain the correct amount of royalties due the first parties, or to determine whether or not the provisions of the lease are being satisfied. The second party shall allow the first parties and their agents from time to time to enter upon and into all parts of said leased premises for purposes of inspection at such reasonable times as shall not interfere with the regular operation of the leased premises. It is understood that the second party shall assume no responsibility for the safety of the first parties or their agents when and while upon the leased premises for the purposes herein described.

Blue Jacking Mining Company
Box 2614, Boise, Idaho

Subject to the first parties' right of inspection, the second party shall have sole possession of the said above described property from the date hereof, and during the life of this said lease or until the same is terminated.

The second party shall not mix any ores or products from the leased premises with the ores or products derived from any other property.

Said second party promises and agrees promptly and punctually to pay all bills for labor and materials furnished to the said property during the life of this agreement and particularly not to permit any liens to accrue or to be filed against said property, and in the event of the filing of any such liens, and the failure of the second party to discharge the same within twenty days thereafter, or in the event the second party becomes insolvent or suffers his properties to be attached or otherwise assessed by process, then the first parties may, at their option, declare this agreement cancelled and terminated and may forthwith re-enter and take possession.

It is mutually understood and agreed that in case of forfeiture, surrender or other termination of this lease all underground timbering, shaft linings, air lines and other fixtures necessary for the preservation of any mines and all rails and head frames upon or in the said leased premises shall be and remain a part of the realty and shall revert to the first parties. All personal property of the second party located within the leased premises, including machinery, equipment and tools shall, in the case of forfeiture, surrender or other termination of this lease, remain the property of the second party, and the said second party shall have ninety days after the termination of this lease to remove such personal property from the leased premises.

All houses and buildings of any name, nature and description, constructed upon the premises by the second party shall become a part of the realty and revert to the first parties in the event of forfeiture or termination.

Blue Jacket Mining Company
Box 2614, Boise, Idaho

The parties acknowledge that the first parties have, upon a portion of the above-described unpatented mining claims, an air compressor, mine rails, trucks, air line and incidental mining equipment. The second party must maintain the said properties in a workable condition during the life of this agreement, or during the life of such equipment, and it is specifically provided that should the second party remove the air compressor from the premises, he shall then pay the sum of $150.00 a month as rental therefore during the period of time that such compressor is off the said premises.

In consideration of the premises, the first parties hereby grant unto the second party the right and option to purchase all of the above-described claims standing in the name of the first parties, and all of the right, title and interest of the first parties in and to those certain unpatented mining claims described in the Blewett contract, together with the appurtenances hereinabove described, at any time during the life of this agreement, and while the second party is not in default in the performance of any of his covenants herein contained. Said purchase price is the sum of $100,000.00, and all royalties that shall have been paid by the second party to the first parties prior to the exercising of the option by the second party to purchase shall be applied upon and become a part of the purchase price.

Said purchase price may be paid at the option of the second party in full, at any time.

It is specifically agreed and understood that royalty payments as described in the Blewett Contract shall be paid to the said sellers as therein described at the First National Bank of Nevada, Elko Branch, all according to the royalty percentage as set forth in the Blewett contract directly by the second party herein, or as a result of his arrangements with the smelter or other purchasing organization. Any percentage of royalty payment to which the first parties herein are entitled over and above the royalty payable to the owners of the Blewett

Contract shall be handled in all respects as herein set forth.

The second party specifically agrees to not co-mingle the ore taken from the claims specified in the Blewett contract with ore taken from the other properties and claims herein specifically described, until after the sellers in the Blewett contract have been paid in full in the sum of $5,000.00.

All royalties accumulating by virtue of processing and sale of ore from mining claims herein described other than those set forth as being in the Blewett contract shall be payable to the first parties herein without regard as to whether or not payments are being made upon the claims as specified in the Blewett contract.

In the event the second party should pay the purchase price in full, such necessary portion thereof as is required to retire the unpaid portion of the purchase price of the mining claims set forth in the Blewett contract shall be paid unto the First National Bank of Nevada, Elko Branch, as escrow holder of the Blewett contract.

The first parties agree to convey to the second party, by Warranty Deed, all of the above-described unpatented mining claims, and including the mining claims specified in the Blewett Contract, and to place said Deed in escrow with the said First National Bank of Nevada, Elko Branch. At the time the existing deed in escrow from L. R. BLEWETT, et al to W. C. BURNS, is delivered unto W. C. BURNS as of date of final payment on the Blewett contract, the first parties covenant to record such deed at their own expense.

A triplicate original copy of this agreement for the instructions of the escrow holder shall be delivered to the First National Bank of Nevada, Elko Branch.

In the event of termination of this agreement for any reason whatsoever, the second party agrees to furnish the first parties with copies of all drilling and sampling data, reports of metallurgical tests, a copy of any map in the possession of the second party showing the development work performed by the second party upon the premises, and copies of any and all geological maps relating to the

premises prepared by the second party. The first parties agree to furnish any and all available material as in this paragraph described presently in their possession to the second party to assist him in the operations as herein described.

The escrow holder herein is hereby instructed to surrender the Deed or Deeds in escrow to the second party as of the date of final payment in the sum of $100,000.00 herein, duly prorated between the Blewett contract and this said contract. Likewise said escrow holder is instructed to receive all royalty payments hereinabove described payable unto the first parties and deliver same to said first parties, subject however to the specific clauses requiring that the terms of the royalty payments in the Blewett contract be first honored from ores recoverable from the claims described in said contract.

It is agreed and understood that time is the essence of this agreement, and upon the violation of any covenant or covenants herein reserved against the second party, said lease and option shall terminate and become void at the option of the first parties, provided, however, that such option must be evidenced by twenty days' notice in writing given to the second party by registered mail from the first parties. Said twenty days' notice is intended to apply to any and all covenants, including the covenant for the payment of royalties as rentals hereunder.

During said twenty day notice period, the second party shall have the right to perform all necessary things to restore the lease and option to good standing under the terms hereof.

In the event of forfeiture or termination for any cause, all sums of money paid to the first parties by the second party as royalties shall be retained by said first parties as rentals hereunder.

All of the clauses contained in printing on the first page of this said agreement above the caption are hereby referred to and made a part hereof as though fully set forth herein, and the parties agree to be bound by each and every clause therein contained as to the defining of each of their relationships with the First

Blue Jacket Mining Company
Box 2614, Boise, Idaho

Bank of Nevada, Elko Branch, escrow holder.

is agreement is to be binding upon the inure to the benefit of the heirs, tors, administrators, successors and assigns of the respective parties hereto.

IN WITNESS WHEREOF, the parties hereto have subscribed their respective names as of the date first hereinabove written.

/s/ W. C. Burns

/s/ Inez Mae Burns

/s/ Silas Cordes

STATE OF NEVADA, )
) SS.
COUNTY OF ELKO. )

On this 28th day of June, 1950, personally appeared before me, a Notary Public in and for said County and State, W. C. BURNS and INEZ MAE BURNS, his wife, known to me to be the persons described in and who executed the foregoing instrument, and acknowledged to me that they executed the same freely and voluntarily, and for the uses and purposes therein mentioned.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year in this certificate last above written.

(SEAL)

/s/ Elizabeth A. Lind Hackquet
NOTARY PUBLIC

STATE OF IDAHO )
) SS
COUNTY OF ADA )

On this 22nd day of June, 1950, personally appeared before me a Notary Public in and for said County and State, SILAS CORDES, known to me to be the person described in and who executed the foregoing instrument, and acknowledged to me that he executed the same freely and voluntarily and for the uses and purposes therein mentioned.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year in this certificate last above written.

(SEAL)

/s/ J. W. Galleway
NOTARY PUBLIC

copy - 3-11-53

## SUPPLEMENT TO LEASE AND OPTION

THIS SUPPLEMENT to Lease and Option, made and entered into as of the 7 day of February, 1953, by and between W. C. BURNS and INEZ MAE BURNS, his wife of Idaho Falls, Idaho, first parties, and Silas Cordes, Boise of Idaho, second party.

WITNESSETH:

WHEREAS, the first parties have hereinbefore entered a Lease and Option to SILAS CORDES of Boise, Idaho, second party, on the 28th day of June, 1950 to certain lode mining claims situate in the Centennial Mining District in the County of Elko, State of Nevada, fully set forth in said agreement, and

WHEREAS, it is now the desire of the said first parties and SILAS CORDES or his assigns to amend a portion of the terms of the original Lease and Option.

THEREFORE, for and in consideration of the mutual covenants on the part of the respective parties hereto, to be performed and in consideration of the payment of $1.00 by each of the parties to the other in hand paid, receipt whereof is hereby acknowledged, the following paragraph appearing on Page 3 of said Lease and Option:

> The following schedule of royalties shall apply on the net smelter return (as such return is hereinafter specifically defined and limited) on all ore shipped to smelter as raw ore: $25.00 per ton or less, 10%; $25-$50 per ton, 15%; $51-$75 per ton, 20%; $76-$150 per ton 25%; $151.00 and over per ton, 50%.

is hereby amended as follows:

> The following schedule of royalties shall apply on the net smelter return (as such return is hereinafter specifically defined and limited) on all ore shipped to smelter as raw ore: $75.00 per ton or less, 15%; $76-$150 per ton 25%; $151.00 per ton and up 50%.

Each and every paragraph contained in the original Lease and Option dated June 28, 1950, other than that specified hereinabove as amended and supplemented, shall continue to be in all respects the agreement of said parties.

This agreement shall be binding upon and inure to the benefit of the heirs, executors, administrators, successors and ssigns of the respective parties hereto.

IN WITNESS WHEREOF, the parties have hereunto subscribed their respective names as of the date first hereinabove written.

/s/ Silas Cordes

Inez Mae Burns

copy - 3-11-53

## SUPPLEMENT TO LEASE AND OPTION

THIS SUPPLEMENT to Lease and Option, made and entered into as of the 7 day of February, 1953, by and between W. C. BURNS and INEZ MAE BURNS, his wife of Idaho Falls, Idaho, first parties, and Silas Cordes _____, Boise of Idaho, second party.

WITNESSETH:

WHEREAS, the first parties have hereinbefore entered a Lease and Option to SILAS CORDES of Boise, Idaho, second party, on the 28th day of June, 1950 to certain lode mining claims situate in the Centennial Mining District in the County of Elko, State of Nevada, fully set forth in said agreement, and

WHEREAS, it is now the desire of the said first parties and SILAS CORDES or his assigns to amend a portion of the terms of the original Lease and Option.

THEREFORE, for and in consideration of the mutual covenants on the part of the respective parties hereto, to be performed and in consideration of the payment of $1.00 by each of the parties to the other in hand paid, receipt whereof is hereby acknowledged, the following paragraph appearing on Page 3 of said Lease and Option:

> The following schedule of royalties shall apply on the net smelter return (as such return is hereinafter specifically defined and limited) on all ore shipped to smelter as raw ore: $25.00 per ton or less, 10%; $25-$50 per ton, 15%; $51-$75 per ton, 20%; $76-$150 per ton 25%; $151.00 and over per ton, 50%.

is hereby amended as follows:

> The following schedule of royalties shall apply on the net smelter return (as such return is hereinafter specifically defined and limited) on all ore shipped to smelter as raw ore: $75.00 per ton or less, 15%; $76-$150 per ton 25%; $151.00 per ton and up 50%.

Each and every paragraph contained in the original Lease and Option dated June 28, 1950, other than that specified hereinabove as amended and supplemented, shall continue to be in all respects the agreement of said parties.

This agreement shall be binding upon and inure to the benefit of the heirs, executors, administrators, successors and ssigns of the respective parties hereto.

IN WITNESS WHEREOF, the parties have hereunto subscribed their respective names as of the date first hereinabove written.

/s/ Silas Cordes

Inez Mae Burns

COPY

THIS AGREEMENT, made and entered into as of the 3rd day of January, 1949, by and between JOHN E. ROBBINS and MILDRED ROBBINS, of the City and County of Elko, State of Nevada, parties of the first part, and SILAS CORDES of Boise, Idaho, whose address is in care of the Milner Hotel, party of the second part,

"W I T N E S S E T H"

That said parties of the first part, for and in consideration of the sum of THREE HUNDRED ($300.00) DOLLARS, to them in hand paid by the said second party, the receipt whereof is hereby acknowledged, and in consideration of the royalties, payments, covenants, agreements, and conditions, hereinafter contained to be paid, kept and performed by said second party, hereby give and grant unto said second party the exclusive right, option, and privilege to purchase the following described mining claims situate in the Centennial Mining District, in the County of Elko, State of Nevada, to wit:

| | |
|---|---|
| Parter (or Porter) | U.S.S. Hartford |
| Buckeye State | Charmer |
| Eclipse | Avalanche |
| Atlanta | Pioneer |
| Shoshone | Tuscarora |

First Polosi (or Potosi) (or Eagle,
Three-fourths interest in Breslau Lode.

Together with all improvements, fixtures, hereditaments, and appurtenances, and all water and water rights appurtenant to or connected with said property.

For the full purchase price of SEVENTY THOUSAND ($70,000) DOLLARS, lawful current money of the United States of America, payable in the following manner:

The sum of $300.00 upon the execution of this agreement, being the consideration above expressed:

A further sum of $300.00 on or before April 1, 1949;
A further sum of $400.00 on or before December 15, 1949;

A further sum of $1000.00 on or before April 1, 1950;
A further sum of $1000.00 on or before July 1, 1950;
A further sum of $3000.00 on or before December 15, 1950;
A further sum of $2000.00 on or before April 1, 1951;
A further sum of $2000.00 on or before July 1, 1951;
A further sum of $6000.00 on or before December 15, 1951;
A further sum of $7714.28 on or before December 15, 1952;
A further sum of $7714.28 on or before December 15, 1953;
A further sum of $7714.28 on or before December 15, 1954;
A further sum of $7714.29 on or before December 15, 1955;
A further sum of $7714.29 on or before December 15, 1956;
A further sum of $7714.29 on or before December 15, 1957;
A further sum of $7714.29 on or before December 15, 1958;

Said deferred payments shall bear no interest and shall be paid to the credit or account of the first parties, or either of them, or the survivor of them, at the Nevada Bank of Commerce, at Elko, Nevada. It is understood that the said first parties are the owners of the said property as joint tenants with right of survivorship and are in like manner the owners of this contract and the profits thereof as joint tenants with the right of survivorship.

It is hereby agreed that said second party shall have the immediate possession of said property for the purpose of developing same, extracting ore therefrom or for any purpose consistent with the general intent of this agreement, and to work the said property in a manner necessary to good and economical mining, and with due regard to the safety, development, and preservation of the said property as a workable mine.

The said first parties hereby agree that upon the payment to them of the sum of ONE THOUSAND ($1000.00) DOLLARS, to be paid during the year 1949, they will make, execute and deliver to the Nevada Bank of Commerce, as escrow agent, a good and sufficient deed conveying said mining property to the said second party or his nominee or nominees, upon the full payment of the purchase price above set forth.

The second party agrees to keep all workmen insured with

the Nevada Industrial Commission; to post and record, as agent of the said first parties proper notice of non-liability of said first parties on the property for work, labor, materials, and supplies, as required by the Mechanic's Lien Law of the State of Nevada.

To comply in all respects with the laws of the State of Nevada and the laws of the United States relative to mines and mining; and to recognize at all times the title of said first parties to said property, and not to do or suffer to be done any act or thing which shall impair or cloud said title.

It is further agreed between the parties hereto that all permanent improvements placed upon said property by the second party shall become the property of said first parties, in the event this agreement is cancelled prior to final payment, except that the party of the second part may erect a mill to treat the ores from said property or any other property operated by the second party, which mill and all machinery placed upon said property by the second party may be removed by them at any time within six months after the cancellation or other termination of this option and lease.

It is further understood and agreed that said second party shall and will keep books of account showing the amount of ore or ores extracted from said premises, the amount of ore mined, milled, shipped, sold, or concentrated, and the amount of money received from the sale of said ore or ores, or the values extracted therefrom; that from and out of the values obtained from the ore or ores so mined, shipped, milled, sold, or concentrated, and extracted, and which may be found in, upon or around said mine, and so mined, shipped, milled, sold, or concentrated, said second party shall and will pay to said first parties a royalty of TEN (10%) per cent of the NET VALUES; NET VALUE to be the amount received from ore or ores shipped, milled, sold, or concentrated, less hauling charges to the railroad, railroad freight and treatment charges. All of said royalties to apply upon and be considered as payment on the purchase price hereinbefore mentioned, and to apply upon the installment next due.

It is further agreed that said second party shall and will instruct all mills and smelters to deduct and remit all amounts due as royalties direct to said first parties at the Nevada Bank of Commerce, Elko, Nevada, and that a duplicate of all mill, smelter, retort or mint returns shall be furnished to first parties by the mill owner, or by the owner of the smelter, retort or mint, and that books of account shall be open at all reasonable times to said first parties or their agent.

It is hereby understood that upon violation by the second party or any other person under him of any covenant or covenants hereinbefore reserved, or default in any of the payments as herein specified, the terms of this agreement shall expire within thirty days after such default, during which period, the second party shall have the right to remedy such default by performance of such covenant or covenants, and for failure so to do within such period the said premises shall become forfeited to said first parties, and said first parties, or their agent, may thereupon, after demand for possession, enter upon said premises and dispossess all persons occupying same, with or without force, and with or without process of law, or at the option of the first parties in any other manner; and any and all payments that shall have been made as provided, together with all buildings, improvements, fixtures, and hereditaments upon and connected with said mining claims on the date of this agreement, and all timbers, rails, and ties, which may have been placed in said property by the second party shall be retained by the first parties, it being expressly agreed that the second party may remove any mill or other building and all mill and other machinery and equipment placed upon said mining claims or used by the second party during his operations under this agreement.

TIME IS OF THE ESSENCE OF THIS AGREEMENT.

It is understood and agreed that each and every clause, covenant and agreement of this indenture, where the content requires it, shall extend to and include the heirs and assigns of the first parties, and the executors, administrators and assigns of the second party.

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

/S/ John E. Robbins

/S/ Mildred Robbins

Parties of the First Part

/S/ Silas Cordes

Party of the Second Part

STATE OF NEVADA, )
) ss.
COUNTY OF ELKO. )

On this 29th day of January, 1949, personally appeared before me, a Notary Public in and for said County and State, JOHN E. ROBBINS AND MILDRED ROBBINS, his wife, known to me to be the persons described in and who executed the foregoing instrument; who acknowledged to me that they executed the same freely and voluntarily and for the uses and purposes therein mentioned.

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

/S/ Verla McFarlane

(Seal) NOTARY PUBLIC.

MY COMMISSION EXPIRES:

STATE OF IDAHO, )
) ss.
COUNTY OF ADA. )

On this 19th day of January, 1949, personally appeared before me, a Notary Public in and for said County and State SILAS CORDES, known to me to be the person described in and who executed the foregoing instrument; who acknowledged to me that he executed the same freely and voluntarily and for the uses and purposes therein mentioned.

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

/S/ J.W. Galloway

(Seal) Notary Public.

COPY

ASSIGNMENT

KNOW ALL MEN BY THESE PRESENTS, That the undersigned, SILAS CORDES, a single man of Boise, Idaho, for and in consideration of One Dollar ($1.00) and other good and valuable consideration in hand paid by Blue Jacket Mining Co., does hereby sell, assign, set-over and transfer to the Blue Jacket Mining Co., a Nevada Corporation, and its assigns, all my right, title and interest in that certain agreement between the undersigned and John E. Robbins and Mildred Robbins, of Elko, Nevada, dated at Elko, Nevada the 3rd day of January, 1949, giving and granting unto said Blue Jacket Mining Co., its successors and assigns, full power and authority to exercise all my rights to said contract, receive the properties therein described, bring official action as it may be necessary in my name, or in its name, and do all things and exercise all rights of every kind or character that I myself might do.

And I further agree to execute any instruments which may be deemed necessary to perfect title to said property or otherwise carry out the intent and purpose of this assignment.

DATED at Boise, Idaho, this 26th day of February, 1952.

/S/ Silas Cordes

STATE OF IDAHO )
: ss
County of Ada )

On this 26th day of February, 1952, before me, the undersigned, a Notary Public in and for said State, personally appeared SILAS CORDES, known to me to be the person whose name is subscribed to the above and foregoing Assignment, and acknowledged to me that he executed the same.

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

/S/ Willis C. Moffatt
Notary Public for Idaho
Residing at Boise, Idaho

(Seal)

COPY

ASSIGNMENT

KNOW ALL MEN BY THESE PRESENTS, That the undersigned, SILAS CORDES, a single man of Boise, Idaho, for and in consideration of the sum of One Dollar ($1.00) and other good and valuable consideration, in hand paid by Blue Jacket Mining Co., does hereby sell, assign, set-over and transfer to Blue Jacket Mining Co., a Nevada corporation, and its assigns, all my right, title and interest in that certain agreement between the undersigned and W.C. Burns and Inez Mae Burns, husband and wife of Idaho Falls, Idaho, dated the 28th day of June, 1950, giving and granting unto the said Blue Jacket Mining Co., its successors and assigns, full power and authority to exercise all my rights to said contract, receive the properties therein described, bring official action as it may be necessary in my name, or in its name, and do all things and exercise all rights of every kind or character that I myself might do.

And I further agree to execute any instruments which may be deemed necessary to perfect title to said property or otherwise carry out the intent and purpose of this assignment.

DATED at Boise, Idaho, this 26th day of February, 1952.

/S/ Silas Cordes

STATE OF IDAHO)
: ss
County of Ada )

On this 26th day of February, 1952, before me, the undersigned, a Notary Public in and for said State, personally appeared Silas Cordes, known to me to be the person whose name is subscribed to the within and foregoing Assignment, and acknowledged to me that he executed the same.

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

/S/ Willis C. Moffatt
Notary Public for Idaho
Residing at Boise, Idaho

(SEAL)

## SAMPLES

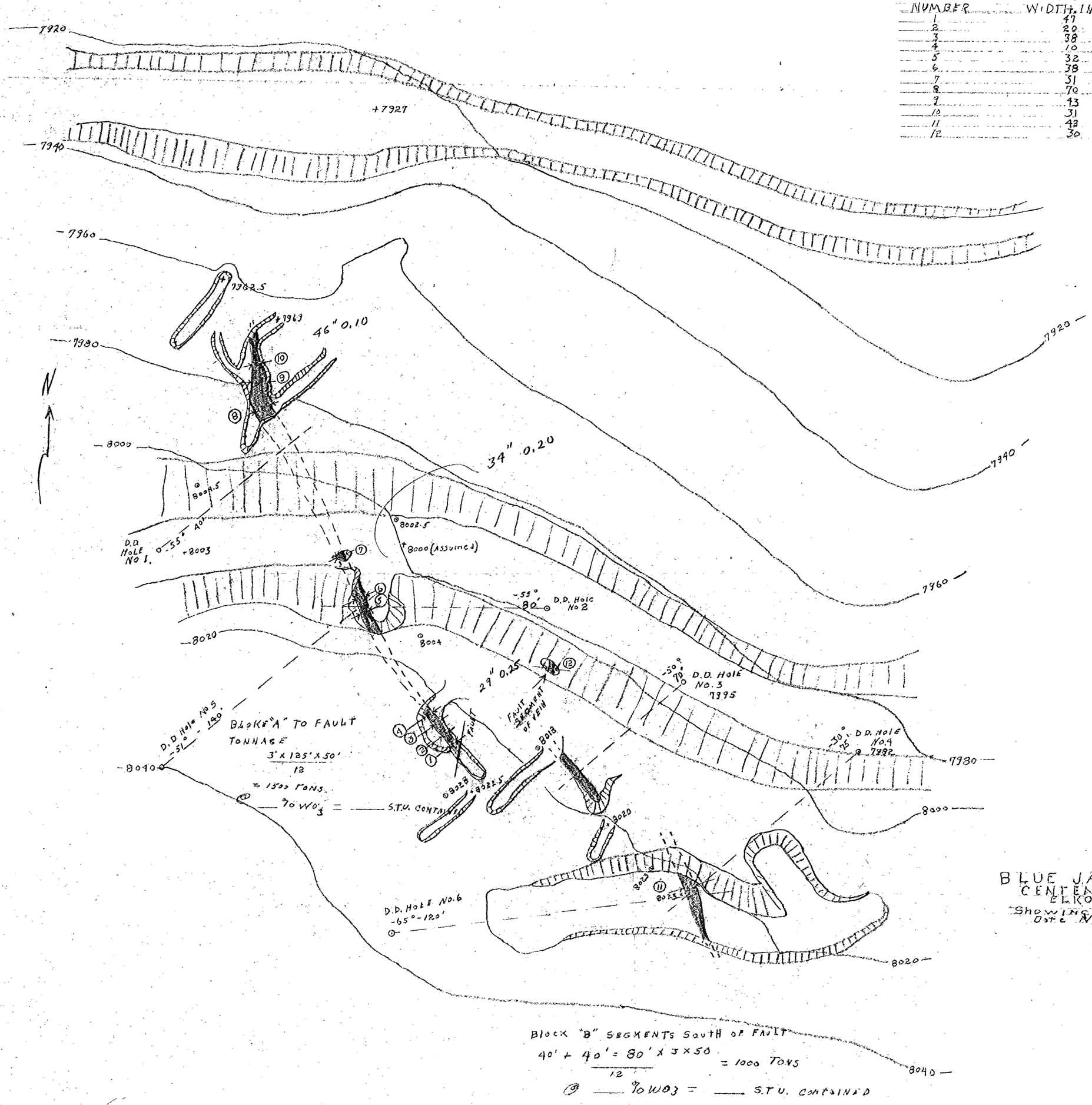
| NUMBER | WIDTH, INCHES | ASSAY % WO3 |
|---|---|---|
| 1 | 47 | 0.16 |
| 2 | 20 | 0.29 |
| 3 | 38 | 0.04 |
| 4 | 10 | 1.34 |
| 5 | 32 | 0.39 |
| 6 | 38 | 0.19 |
| 7 | 31 | 0.03 |
| 8 | 70 | 0.17 |
| 9 | 43 | 0.03 |
| 10 | 31 | 0.02 |
| 11 | 43 | 0.12 |
| 12 | 30 | 0.85 |

29" 0.25

34" 0.20

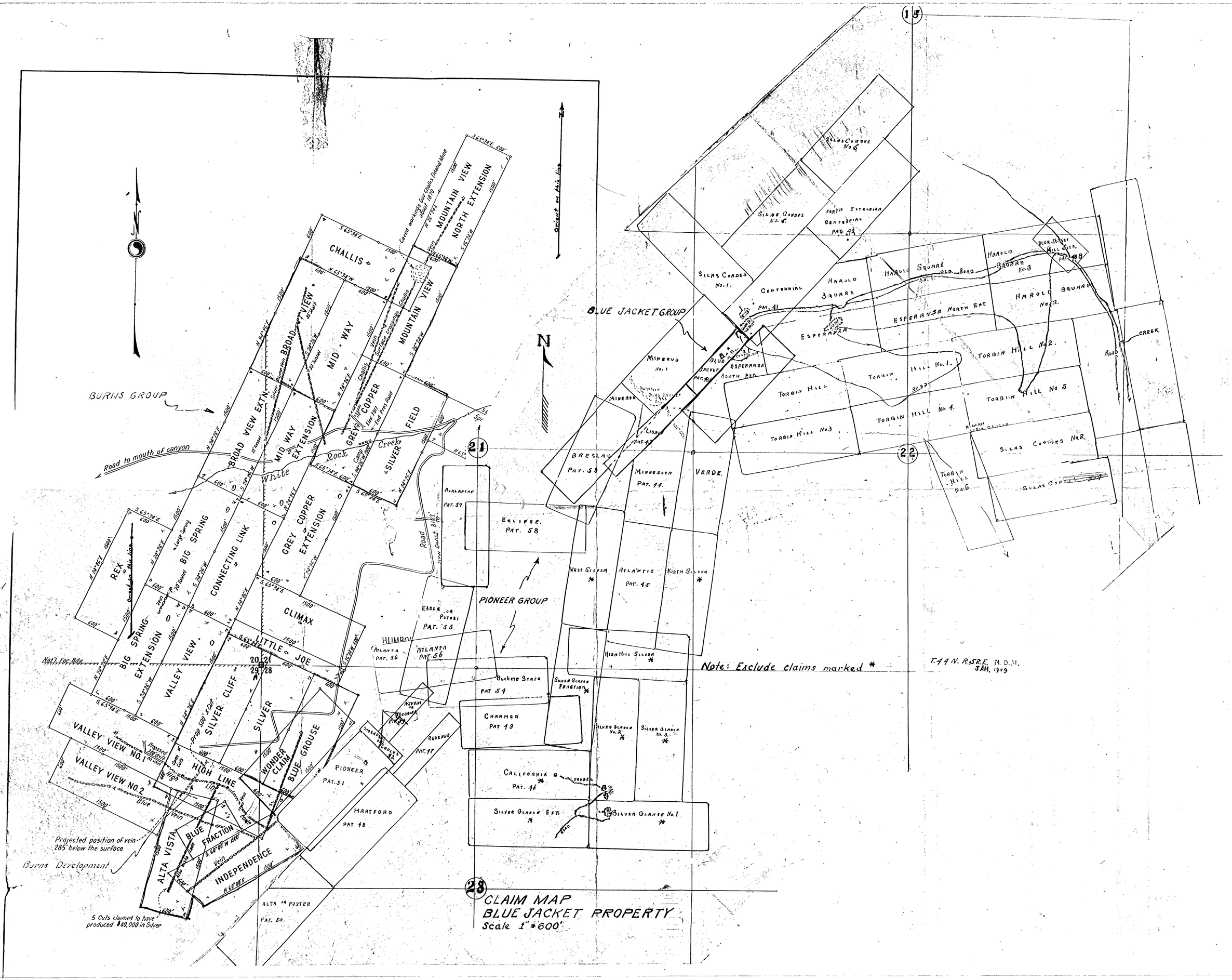
46" 0.10

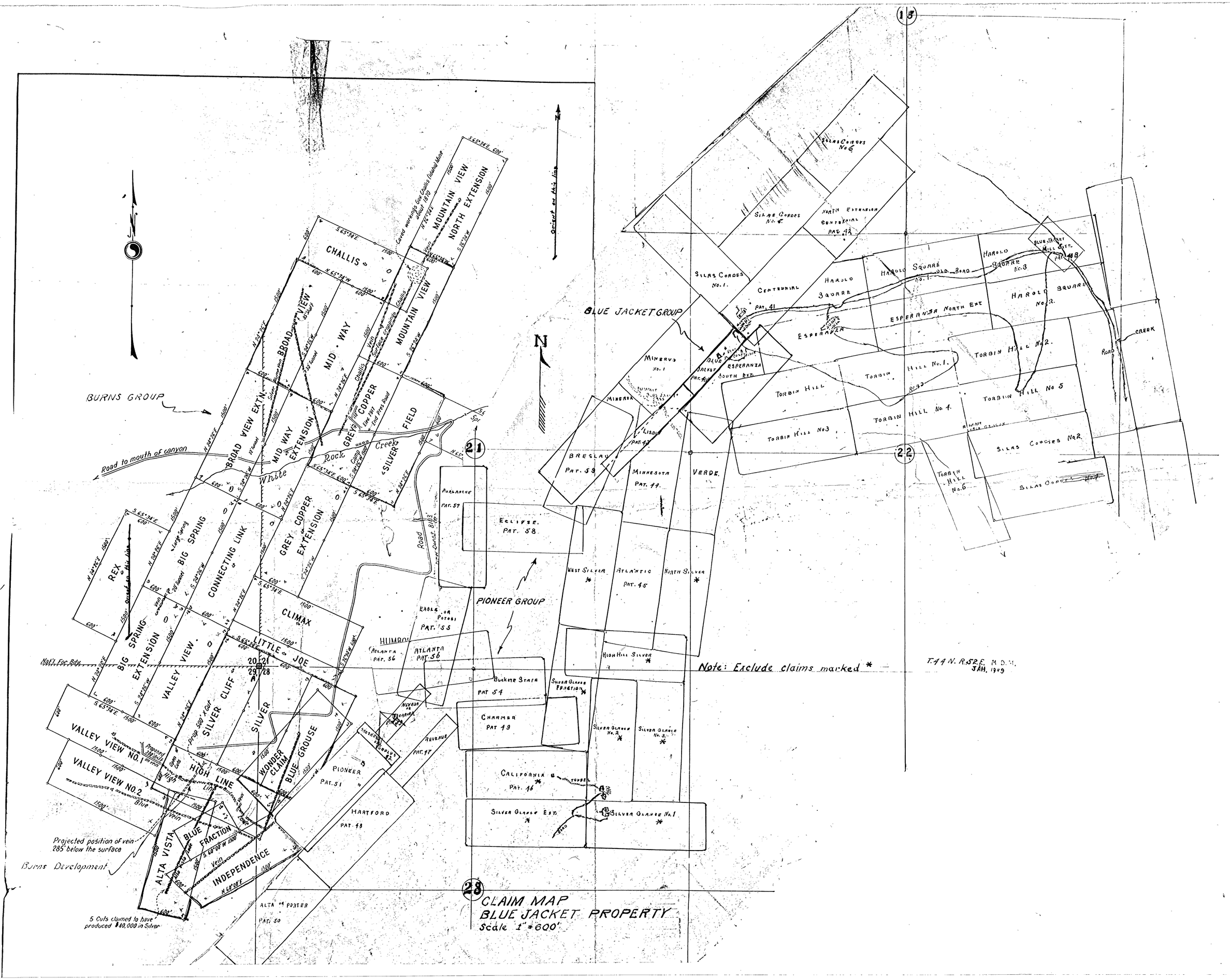
36.3 0.17




MAP NO I
BLUE JACKET MINING CO
CENTENNIAL MINING DIST
ELKO COUNTY, NEVADA
Showing Proposed Drill Holes
Date Nov. 1952 By L.C. CLARK
Scale 1" = 20'

Omen 21932


CLAIM MAP
BLUE JACKET PROPERTY
Scale 1" = 600'
Burns Development
BURNS GROUP
BLUE JACKET GROUP
PIONEER GROUP
Note: Exclude claims marked *
T.44 N. R.52 E. M.D.M.
JAH. 1949
Orient on this line
Road to mouth of canyon
Nat'l Fec. Bdy.
Projected position of vein 285' below the surface
5 Cuts claimed to have produced $40,000 in Silver
CHALLIS
MOUNTAIN VIEW
MOUNTAIN VIEW NORTH EXTENSION
BROAD VIEW
BROAD VIEW EXTN.
MID WAY
MID WAY EXTENSION
GREY COPPER
GREY COPPER EXTENSION
SILVER FIELD
REX
BIG SPRING
BIG SPRING EXTENSION
CONNECTING LINK
CLIMAX
LITTLE JOE
VALLEY VIEW
VALLEY VIEW NO. 1
VALLEY VIEW NO. 2
SILVER CLIFF
SILVER
WONDER CLAIM
BLUE GROUSE
HIGH LINE
PIONEER
HARTFORD
ALTA VISTA
BLUE FRACTION
INDEPENDENCE
ALTA OR PORTER
BRESLAU
MINNESOTA
VERDE
MINERVA
ESPERANZA
ESPERANZA NORTH EXT
ESPERANZA SOUTH EXT
HAROLD SQUARE
TORBIN HILL
SILAS CORDES
CENTENNIAL
NORTH EXTENSION CENTENNIAL
BLUE JACKET MILL SITE
AVALANCHE
ECLIPSE
EAGLE OR POTOSI
ATLANTA
HIMROD
BUCKEYE STATE
CHARMER
REVENUE
WEST SILVER
ATLANTIC
NORTH SILVER
HIGH HILL SILVER
SILVER GLANCE FRACTION
SILVER GLANCE
CALIFORNIA
TUNNEL
SILVER GLANCE EST.
SILVER GLANCE No. 1
SILVER GLANCE No. 2
SILVER GLANCE No. 3
Road
Creek
Rock Creek
White
Blue Vein
Vein
Caved workings long Challis (Idaho) Mine about 1870
Surface exposure
Old Prospect Road
Large Spring
Proposed Tunnel
Gem Cuts
High Line
Tunnel
Shaft
Prop. 500' X cut
Road to New Contact Blds.
N 24°26'E
S 24°26'W
S 65°34'E
N 65°34'W
N 60°00'E
S 60°00'W
1500'
600'
15
21
22
28


CLAIM MAP
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MOUNTAIN VIEW NORTH EXTENSION
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BROAD VIEW EXT'N.
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MID WAY EXTENSION
GREY COPPER
GREY COPPER EXTENSION
SILVER FIELD
REX
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BIG SPRING EXTENSION
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CLIMAX
LITTLE JOE
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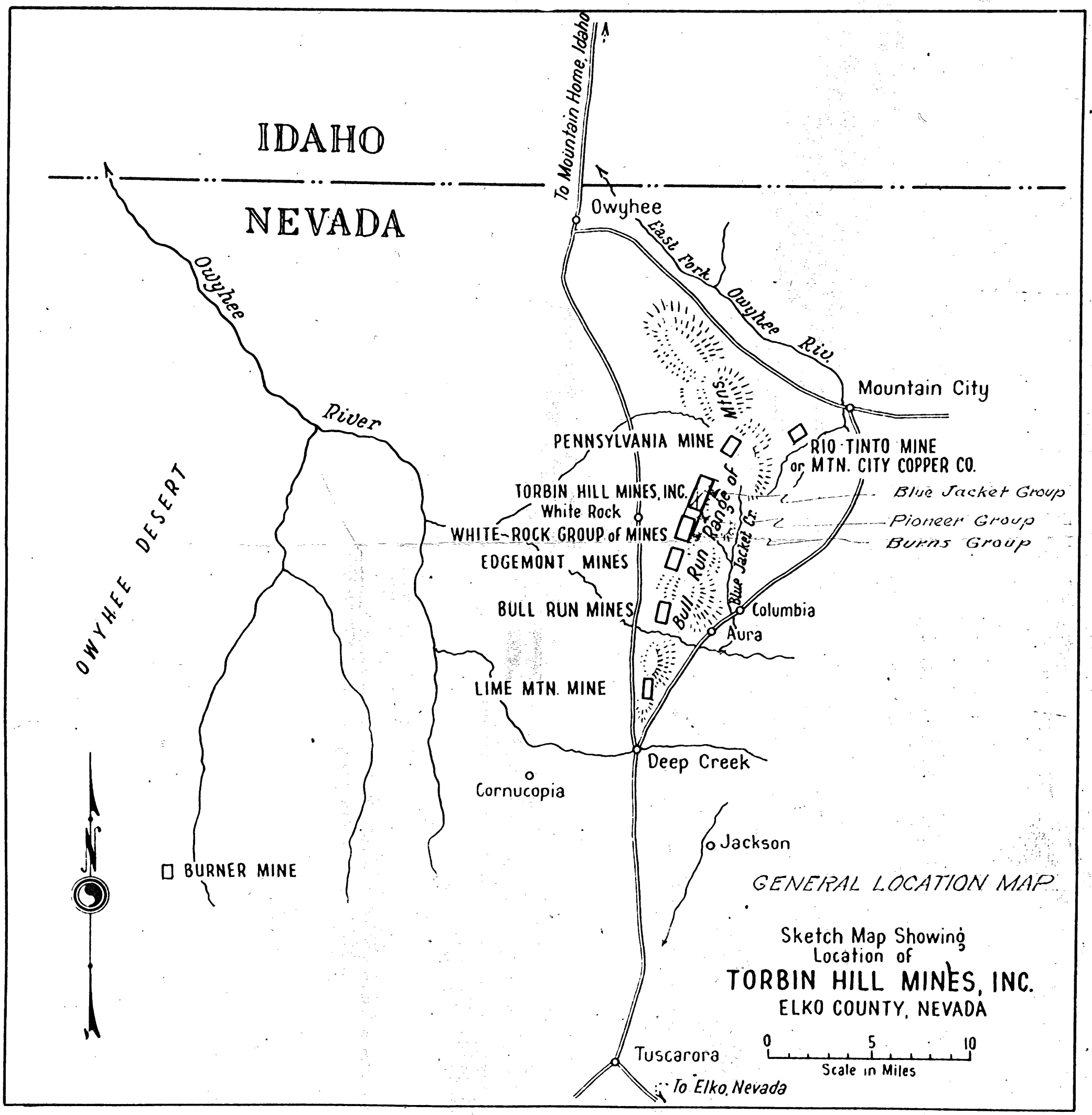
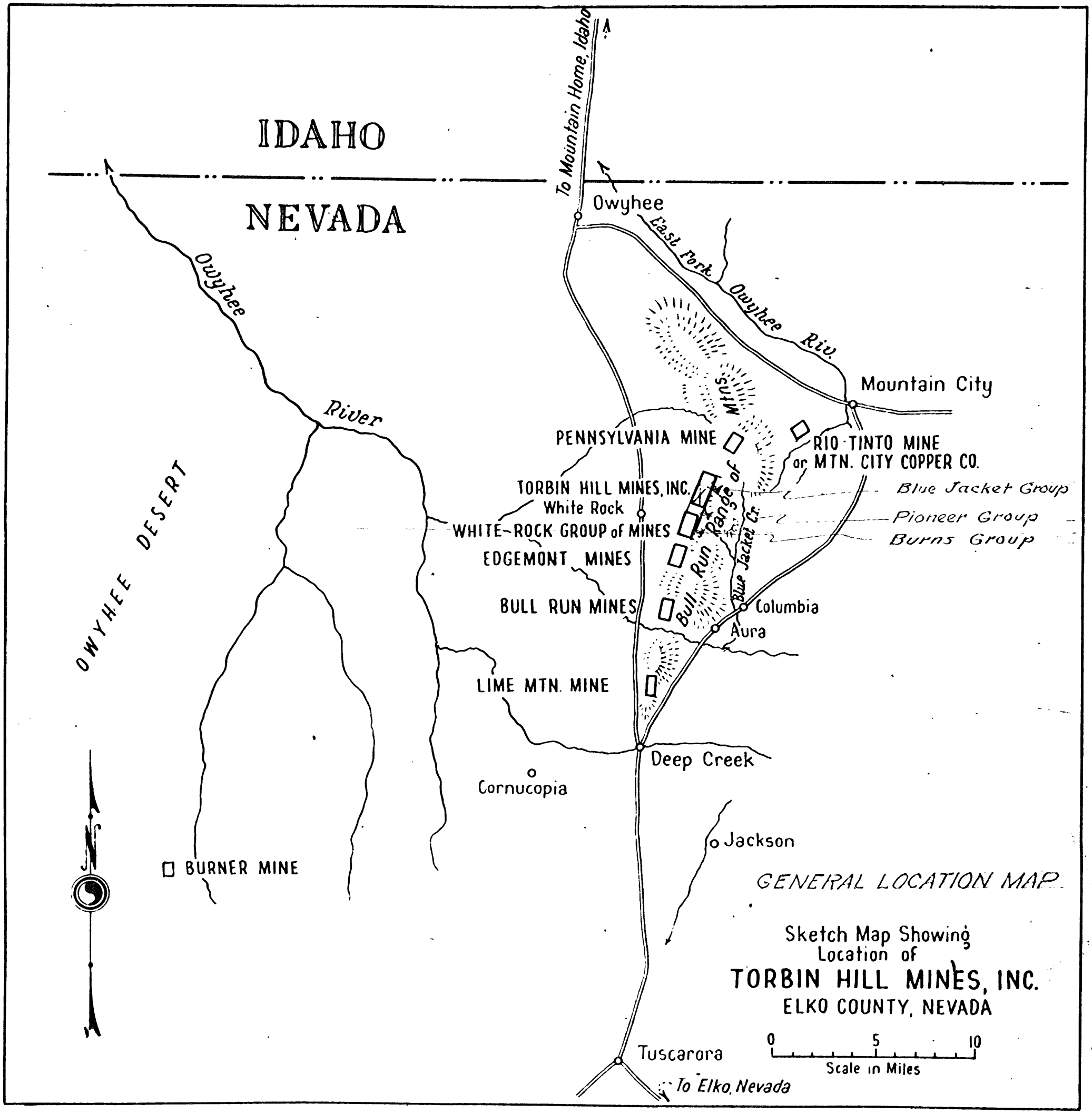
VALLEY VIEW NO.1
VALLEY VIEW NO.2
SILVER CLIFF
SILVER
WONDER CLAIM
BLUE GROUSE
HIGH LINE
ALTA VISTA
BLUE FRACTION
INDEPENDENCE
ALTA & PORTER
PAT. 50
HARTFORD
PAT. 48
PIONEER
PAT. 51
REVENUE
PAT. 47
CHARMER
PAT. 49
BUCKEYE STATE
PAT. 54
ATLANTA
PAT. 56
EAGLE OR POTOSI
PAT. 55
ECLIPSE
PAT. 58
AVALANCHE
PAT. 57
BRESLAU
PAT. 53
MINNESOTA
PAT. 11
VERDE
MINERVA
MINERVA No. 1
ESPERANZA
ESPERANZA SOUTH EXT.
ESPERANZA NORTH EXT.
TORBIN HILL
TORBIN HILL No. 1
TORBIN HILL No. 2
TORBIN HILL No. 3
TORBIN HILL No. 4
TORBIN HILL No. 5
TORBIN HILL No. 6
HAROLD SQUARE
HAROLD SQUARE No. 1
HAROLD SQUARE No. 2
HAROLD SQUARE No. 3
CENTENNIAL
PAT. 41
CENTENNIAL NORTH EXTENSION
PAT. 42
SILAS CORDES No. 1
SILAS CORDES No. 2
SILAS CORDES No. 3
SILAS CORDES No. 4
SILAS CORDES No. 5
SILAS CORDES No. 6
WEST SILVER
ATLANTIC
PAT. 45
NORTH SILVER
HIGH HILL SILVER
SILVER GLANCE FRACTION
SILVER GLANCE No. 2
SILVER GLANCE No. 3
CALIFORNIA
PAT. 46
SILVER GLANCE EXT.
SILVER GLANCE No. 1
TUNNEL
ROAD
CREEK
Nat'l. For. Bdy.
Large Spring
Camp Rock Creek
Old Pres. Road
Cave workings Gov. Challis (Indian) Mine about 1870
Direct on this line
Silver Warrior Vein
Surface Croppings
Prop. 500' x 100'
Proposed 300' drift on vein
Blue Vein
Vein
Tunnel
Shaft
Adit
Dump
Cabin
Tower
Road
N
S
E
W
18
21
22
28


IDAHO
NEVADA
To Mountain Home, Idaho
Owyhee
East Fork Owyhee Riv.
Owyhee River
OWYHEE DESERT
Mt Sun
Mountain City
PENNSYLVANIA MINE
RIO TINTO MINE
or MTN. CITY COPPER CO.
TORBIN HILL MINES, INC.
White Rock
WHITE-ROCK GROUP of MINES
Blue Jacket Group
Pioneer Group
Burns Group
Range of
Bull Run
Blue Jacket Cr.
EDGEMONT MINES
BULL RUN MINES
Columbia
Aura
LIME MTN. MINE
Deep Creek
Cornucopia
Jackson
BURNER MINE
GENERAL LOCATION MAP
Sketch Map Showing
Location of
TORBIN HILL MINES, INC.
ELKO COUNTY, NEVADA
0
5
10
Scale in Miles
Tuscarora
To Elko, Nevada


IDAHO
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To Mountain Home, Idaho
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