

TYBO MINE

JANUARY 4, 1962
PROGRESS REPORT

JANUARY 8, 1962
ECONOMIC OUTLINE

BY, JAMES H. WREN

J. H. WREN & CO.

CONSULTING MINING ENGINEERS

CABLE ADDRESS
WRENCO

PHONE GLADSTONE 6-0922
4297 D STREET
SACRAMENTO, CALIF.

January 4, 1962

TO:

Mr. W. T. Carson, Sr., President
Cargold Mining and Development Corp.
P. O. Box 3068
Modesto, California

FROM:

James H. Wren

SUBJECT:

TYBO MINE PROGRESS POSITION ON DECEMBER 31, 1961

A thorough inspection of the Tybo Mine project, Nye County, Nevada was made on December 31, 1961. Following is listed various enterprise elements as well as recommendations for 1962 production alignment.

1. HEADFRAME:

- a) The steel headframe 58' high is finished with the exception of some minor internal bracing. Some 700 pounds of welding rod was used in the construction of the unit, a sheave wheel six feet in diameter was installed on the crown blocks, and generally the results are excellent.
- b) It is planned to move an ore bin of two compartments to the 2-G Shaft site and hook it to the headframe.
- c) I have advised Hal Jensen that two 2-1/2 tons net pay load capacity each skips are idle at the Horn Silver Mine, Milford, Utah. These skips are practically new, will fit the 2-G Shaft and have skip roll-over type dumping devices.
- d) Guard rails should be installed around the sheave wheel platform at top of the headframe. An electric horn should be installed at the shaft and synchronized with the bell signal system.

2. HOIST:

- a) An excellent, heavy duty hoisting works has been completed at the 2-G shaft. A 671 GM diesel engine delivers the hoist power to a large speed reducer connected to the jack shaft of the hoist.
- b) A hoist house has been constructed, with concrete floor and back wall.
- c) Remaining minor fittings yet to install are: Electric signal bell and signal light system, hoist indicator, engine exhaust stack.

3. HOIST AND HEADFRAME SUMMARY:

The heavy duty aspects of the hoist and headframe, their quality of workmanship, hoist house, etc., under existing equipment procurement and installation cost represents a valuation of some \$50,000.

4. UNDERGROUND:

- a) On December 31, 1961, the writer experienced his first power transport to the 300 level.
- b) From the collar to the 300 level of the 2-G shaft, the following remains to be accomplished:
 - Replacement of some shaft dividers
 - Installation of air, water, power transmission, and pump column lines.
 - Minor amount of loose rock cleanup.
- c) An inspection of the open areas on the 300 level was made. Eventually concentration of the stope fills' cerussite, ($PbCO_3$) as well as oxide ore in place can be treated by modern methods. There is some considerable tonnage of oxides above the 300' level, part broken and part in place, which former operators could not handle because of lack of present metallurgical procedure.
- d) An inspection was made at the back of a square set stope several hundred feet Easterly from the 2-G Shaft. By selective mining some direct crude smelting ore can be produced here. It is, however, suggested that a block lease be given for the production

d) Continuation:

of this tonnage on the usual block lease terms. Rehabilitation to the ore can be carried on by the block lessees during a period when the company needs its own labor for longer range and higher volume production movements.

- e) Bob Jensen stated that he worked his way over a closed portion of the 300 Easterly and made his way to the 300 East face. He reported that the footage driven by Mr. Hall was in ore as described.
- f) A minor slough several hundred feet Westerly from the 2-G Shaft blocks 300 level access in that direction. It is recommended to let out a block lease in this direction for the same reason listed above in "e)" to produce some tonnage from the intersection zone.
- g) The 400 level should be the company's first production elevation on company account. This level was formerly used with locomotive haulage and the drift will be of sufficient cubic displacement to allow our proposed production volume movement without enlargement of the entry. It will also afford storage balance above the 400, skip loading pocket and other important underground production movements.
- h) It is suggested that the block of ground between the 300 and 400 level about 300' Easterly from the 2-G Shaft, which Mr. Hall partly produced by underhand stoping, be produced from the 400 level. This zone will produce direct shipment grade ore, and a jig product for beneficiation.
- i) Work requirement between the 300 and 400 plus about 40' of skip pocket room below the level and pump setting is as follows:

Shaft rehabilitation - possibly 1/3 of the distance with new sets.

Skip loading pocket construction in one of the three compartments below the 400. The 2-G Shaft is a 3 compartment unit below the 400 which was used as a transfer shaft during the Treadwell operation.

Air, Water, Power Transmission, pump column lines.

- j) 400 Level rehabilitation work to first production zone is as follows:

400 station car switching installation

400 track, air and water pipe installation to a point some 400' Easterly from the 2-G shaft.

Setting up for the breakage of direct crude smelting ore, shipment of crude to the U.S.S.R. & M.C. selective flotation plant at Midvale, Utah, and a jig product for beneficiation.

- k) Economic justification of 400 level rehabilitation for production instead of 300 level has been previously covered in detail.

5. PRODUCTION:

First production steps after rehabilitation and service installation before the company's selective flotation plant is in effect, should be as follows:

Select blocks on the 400 which are chiefly sulphide. Run the mine product over a sorting belt, pulling off direct crude shipment ore. Run the belt discharge product into primary and secondary crushing and then over a jig. Jig concentrates to go to U.S.S.R. & M. Co. for selective flotation treatment. Oxide minerals for the most part will be lost in jig beneficiation, so should be conserved until the company's own selective flotation plant is available.

6. TIME ELEMENT:

Time element for the first production will be dependent upon the number of manshifts worked against the required movements.

While there was but little snow on the property December 31st and the roads were mostly dry, January and February will be the most severe winter months. Normally the Tybo Mine area will not suffer production time loss during winter, however, construction and mine rehabilitation during severe storms would sustain lost time on account of transport delays.

An accurate time element estimate can be rendered when the writer knows exactly what program is desired by management.

7. LEASING:

The Cargold Mining and Development Corp. will have some considerable effort to expend on the 2-G Shaft area and 2-G Vein alone. There is eventually 1546' of depth below the Hales Shaft collar to reopen for production and about 3,000' of length on the strike of the vein, not including new drift footage in known ore zones Easterly. For that reason it is likely to be several years before any other company owned Tybo Mine zones can be approached. Markets at this time are in the throes of improvement for Tybo Mine products so all production income possibilities should be given consideration.

- a) An offer to lease the Gilmore Mine is now being considered. This will call for an expenditure of \$25,000 to get down to the mineral zone providing Mr. V. Barndt will give access through his Dimmick Lode Claim. Lacking that right-of-way would necessitate over \$50,000 expenditure. We don't have detailed maps on the Gilmore workings, no economic data, and so a lessee would serve to open the section, explore and develop the area at no expense to the company which, if successful, would result in a constant income to Cargold out of the net-to-the-mine-bin shipments regardless of the cost to the lessee.
- b) The Bunkerhill section holds great production volume potential. However, a minimum of \$150,000 is necessary to rehabilitate the area and conduct development and exploration. This zone, some 2,000' in length should be offered to a substantial mining organization for production exploitation.
- c) In the case of "a)" and "b)" above, the company cannot handle the investment nor the work required in view of the production alignment and capital required, at this time. Consequently in order to fully utilize all aspects of the possible Tybo Mine holdings production during a time element range which will be favorable for the present shareholders of Cargold Mining and Development Corp., all possible production income should be set into force.

8. SUMMARY:

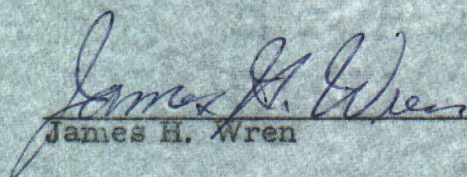
- a) Lack of manshifts worked during the past six months is the only reason why the property is not producing now. This has been brought about by the lack of capital delivery under the terms of a contract agreement with a finance source drawn in March of 1961.

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8. SUMMARY Continuation:

- b) Silver, as anticipated, has risen in market value and this metal will probably experience another rise in price.
- c) The company has an unlimited lead-zinc marketing acceptance.
- d) Work accomplishment to date is excellent and installation so far established could not be duplicated for the amount of investment by most mining companies.
- e) Please refer to Vol. No. One and Vol. No. Two of the November 4, 1960 Tybo Mine Report, and the reports of June 7, 1961, June 15, 1961, July 17, 1961

Very truly yours,


James H. Wren

J. H. WREN & CO.

CONSULTING MINING ENGINEERS

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4297 D STREET
SACRAMENTO, CALIF.

JANUARY 8, 1962

TO: Mr. W. T. CARSON, SR., PRESIDENT
CARGOLD MINING AND DEVELOPMENT CORP.
P. O. Box 3068, MODESTO, CALIFORNIA.

SUBJECT: TYBO MINE, NYE COUNTY NEVADA. ECONOMIC SUMMARY.

FROM: J. H. WREN.

1. PLEASE REFER TO THE FORMAL REPORT OF THE TYBO MINE DATED, NOVEMBER 4, 1960 CONTAINED IN TWO VOLUMES. PROGRESS REPORT OF JUNE 7, 1961, PROGRESS REPORT OF JULY 17, 1961, BOGDANICH MOUNTAIN CITY MILLING PLANT OF JUNE 25, 1962, PROGRESS REPORT OF JANUARY 4, 1962.

NOTE : ECONOMICS OF THE NOVEMBER 4, 1960 REPORT HAVE BEEN BENEFICIATED BY THE RISE IN SILVER PRICE, THE LEAD-ZINC SUBSIDY BILL PASSED LAST FALL WHICH SUPPORTS THE MARKET PRICE TO $14\frac{1}{2}\%$ FOR LEAD AND ZINC ABOVE THE EXISTING QUOTATIONS TO THE PRODUCER.

2. RESERVES. PROBABLE :

A). SELECTIVE FLOTATION MILLING TONNAGE
AS OF NOV. 4, 1960 REPORT, 112,000 TONS TO THE
710 LEVEL, @ \$37.37 PER TON GROSS VALUE..... \$4,275,800

B). MINIMUM OF 50,000 TONS OF OXIDE ORE ABOVE
THE 400 LEVEL @ \$15 PER TON GROSS VALUE 750,000

\$5,025,800

- C). THIS RESERVE SUMMARY DOES NOT INCLUDE 30,000 OR MORE TONS OF OLD SMELTER SLAG, \$14 PER TON GROSS WHICH IS NOW BEING NEGOTIATED ON A JOINT VENTURE PRODUCTION AGREEMENT, OLD MILL TAILINGS WITH OVER \$10 PER TON GROSS VALUE, 1,500 FEET ALONG THE MINERALIZED ZONE IN THE BUNKERHILL MINE SECTION, 600' OF BACKS ABOVE THE SOUTHEASTERLY 300 LEVEL WHERE ORE IS IN THE DRIFT FACE SOME 1600' FROM THE 2-G SHAFT, THE GILMORE MINE SECTION WHERE AN OPTION-LEASE AGREEMENT IS NOW BEING NEGOTIATED FOR ROYALTY PLUS A \$150,000 PURCHASE PRICE, 800 FEET OF DEPTH BELOW THE 710 LEVEL OF WHICH THE DISTANCE FROM THE 1310 LEVEL TO THE 1546 FOOT ELEVATION BELOW THE SURFACE HAS NOT BEEN EXPLOITED.

ECONOMIC OUTLINE OF JANUARY 8, 1962 :

3. IMMEDIATE TIME ELEMENT OUTLOOK :

- A). AT 100 TONS PER DAY MILLING OF THE HEREIN LISTED RESERVES WOULD REQUIRE..... 1500 DAYS.
- B). ADDED TO ABOVE PRODUCTION IS SIX TO SEVEN MONTHS OF SLAG CONCENTRATION, BLOCK LESSEE DIRECT CRUDE ORE SHIPMENTS, ROYALTY FROM THE GILMORE LEASE, LEASE TO A MAJOR MINING COMPANY ON THE BUNKERHILL'S 1500 TO 2000 LONGITUDINAL LENGTH ON STRIKE OF THE MINERALIZED ZONE.
- C). ON A THREE SHIFT BASIS, RECOVERY AND PRODUCTION HAULAGE INSTALLATION TO 40 FEET BELOW THE 400 LEVEL IN THE 2-G SHAFT WILL REQUIRE ----- 60 WORK DAYS.
- D). 400 AND 300 LEVEL REHABILITATION, HAULAGE INSTALLATION TO FIRST PRODUCTION ZONES CAN BE DONE DURING THE ABOVE LISTED 60 DAYS SIMULTANEOUSLY.
- E). BOGDANICH MILL DISMANTLING, TRANSPORT, SETUP..... 90 DAYS.
- F). JIG PLANT FOR PRODUCTION INCOME PRIOR TO THE AVAILABILITY OF A SELECTIVE FLOTATION PLANT, SET UP 30 DAYS.
- G). COMPRESSOR, DIESEL ELECTRIC PLANT, HEADFRAME ORE BIN, 2½ TON CAPACITY SKIP INSTALLATION, ROLLOVER DUMPING DEVICES INSTALLED DURING THE 60 DAY UNDERGROUND UTILITY INSTALLATION INTERVAL.

NOTE : THE ABOVE TIME ELEMENT SCHEDULE AND WORK PERFORMANCE REQUIRES BEING PROFESSIONALLY SETUP WITH CONTRACT ACTIVITY WHERE POSSIBLE.

4. COST ESTIMATE :

- | | | |
|-----|--|--------------------|
| A). | 2-G SHAFT SURFACE TO 300 LEVEL | \$1,500.00 |
| B). | 2-G SHAFT 300 TO 400 LEVEL | 5,450.00 |
| C). | 400 LEVEL REHABILITATION TO FIRST ORE ZONE.... | 2,000.00 |
| D). | 300 LEVEL REHABILITATION FOR BLOCK LESSEE ORE.. | 1,500.00 |
| E). | SKIP, BIN, DUMPING DEVICES, COMPRESSOR AND
DIESEL ELECTRIC PLANT INSTALLATION, MISC..... | 3,950.00 |
| | | <hr/> \$ 14,400.00 |
| F). | BOGDANICH MILL DISMANTLE, MOVE, SETUP..... | 23,500.00 |
| G). | 455 K. W. GENERAL ELECTRIC GENERATOR G. M.
1200 H. P. DIESEL PLANT PURCHASE \$5,000, SET
UP AND MOVE, CHECKOUT, \$2,000..... | 7,500.00 |

ECONOMIC OUTLINE OF JANUARY 8, 1962 :

4. COST ESTIMATE, CONTINUATION :

- H). JIG PLANT INSTALLATION (RENTAL ON CRUSHING PLANT TEMPORARILY, JIG, CONVEYORS, DEWATERING DEVICE, BINS), \$6,000.00

\$65,800.00

NOTE : THIS DOES NOT INCLUDE THE BOGDANICH MILL DOWN PAYMENT NOR THE MUCKING MACHINES, HAULAGE MOTOR, ORE CARS, DRILLING EQUIPMENT. HOWEVER, THE BOGDANICH DELIVERY WILL SUPPLY MOST OF THESE ITEMS AND THE REST CAN EASILY BE ESTIMATED. THE BOGDANICH NEGOTIATION SHOULD BE OUTLINED WITH REGARD TO CARGOLD DEALING LATITUDE BY EXPERIENCED ENGINEERING ADVICE AS THE MILL AS IT STANDS IS A DEFICIT TO BOGDANICH AND THERE ARE ITEMS IN ITS CAPACITY AND METALLURGY THAT CAN ONLY BE ALIGNED BY CAPABLE, EXPERIENCED JUDGEMENT. THESE ITEMS WILL SERVE TO REDUCE CARGOLD ORIGINAL COST PAID TO BOGDANICH.

5. LONG RANGE ALIGNMENT :

- A). IMMEDIATELY AFTER FINANCE IS PROCURED FOR THE ABOVE MOVEMENTS, LONG RANGE OUTLOOK MUST BE INSTITUTED.
- B). O. M. E. APPLICATION FOR U. S. GOVERNMENT PARTICIPATION IN THE RECOVERY OF THE HALES SHAFT, EXPLORATION AND DEVELOPMENT OF THE 1,500 FOOT LEVEL. RECOVERY OF THE HALES SHAFT WILL GIVE ACCESS TO THE LOWER LEVELS FOR PRODUCTION, A THREE COMPARTMENT SHAFT WITH TWO ORE HOISTING SKIPS IN BALANCE, RELEASE ALL TONNAGE FOR 800 FEET BELOW THE 710' LEVEL.
- C). THE COMPANY, AFTER FIRST PRODUCTION COMMENCEMENT SHOULD EITHER GO THROUGH THE SEC FOR INTERSTATE TRADING OF ITS SHARES AND OBTAIN A LISTING ON A GOOD STOCK EXCHANGE OR MERGE WITH A CORPORATION ALREADY BY THE SEC AND LISTED WITH EXCELLENT STOCK POSITION, GOOD BACKGROUND BUT NO INVENTORY WHEREBY A FAVORABLE MERGER ARRANGEMENT CAN BE MADE FOR CARGOLD.
- D). IT WILL BE NECESSARY TO INCREASE THE MILLING CAPACITY AS SOON AS THE WHOLE MINE IS OPENED, FROM 100 TONS PER DAY TO ABOUT 300 TONS. THIS WILL LOWER OVERHEAD COST AGAINST TONNAGE PRODUCED AND INCREASE INCOME VOLUME. THERE WILL BE A MINIMUM OF 150,000 MILLING TONS BELOW THE 700 LEVEL AND AS A CONSEQUENCE THIS DEVELOPED ORE ALONE WITHOUT ANY NEW DEVELOPMENT WOULD ADD ANOTHER 1500 DAYS TO THE ALREADY ESTIMATED 1500 DAYS. AT 27 DAYS PER MONTH UNLESS A SEVEN DAY PER WEEK COULD BE RUN, IT WOULD TAKE OVER NINE YEARS TO RUN THE PROBABLE TYBO ORES NOW KNOWN, AT ONLY 100 TONS PER DAY TREATMENT CAPACITY.

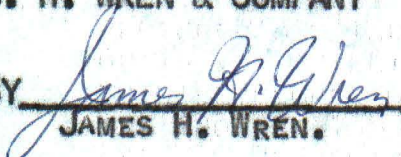
ECONOMIC OUTLINE OF JANUARY 8, 1962 :

5. EXHIBITS :

- A). NOVEMBER 4, 1960 FORMAL REPORT CONTAINED IN TWO VOLUMES. PHOTOSTAT OF OWNERSHIP DEED, TITLE INSURANCE, MARKETING ACCEPTANCE, HISTORY, GEOLOGY, RESERVES, ECONOMICS, METALLURGY.
- B). PROGRESS REPORT OF JUNE 7, 1961.
- C). PROGRESS REPORT OF JULY 17, 1961.
- D). BOGDANICH MILL OBSERVATION OF JUNE 25, 1961.
- E). NUMEROUS TYBO MINE TRANSIT MAPS.
- F). SOME DIAMOND DRILL LOGS.
- G). U. S. MINERAL SURVEY PATENT MAPS.
- H). PRODUCTION RECORDS.
- I). CORPORATE ALIGNMENT.
- J). PROJECT PHOTOS.
- K). U. S. BUREAU OF MINES REPORTS OF THE TYBO MINE.
- L). U. S. G. S. REPORTS OF THE TYBO MINE GEOLOGY.
- M). NEVADA STATE BUREAU OF MINES TYBO MINE REPORTS.
- N). STATEMENTS OF TECHNICAL MEN FORMERLY EMPLOYED ON THE PROPERTY.
- O). HISTORICAL PRODUCTION RECORDS.

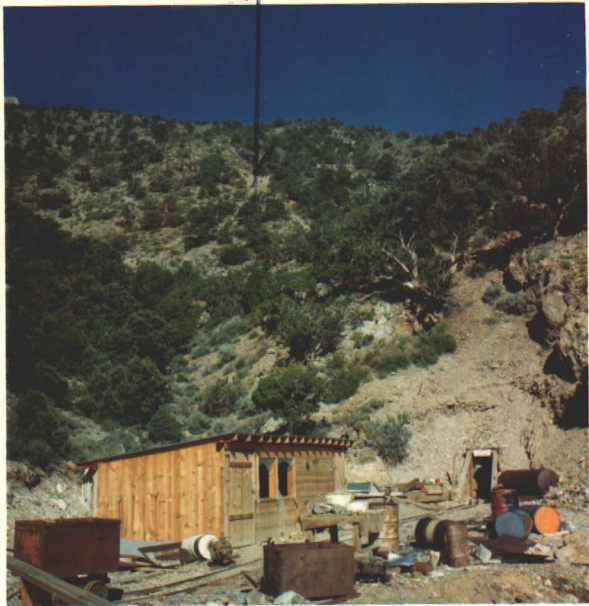
VERY TRULY YOURS,
J. H. WREN & COMPANY

BY

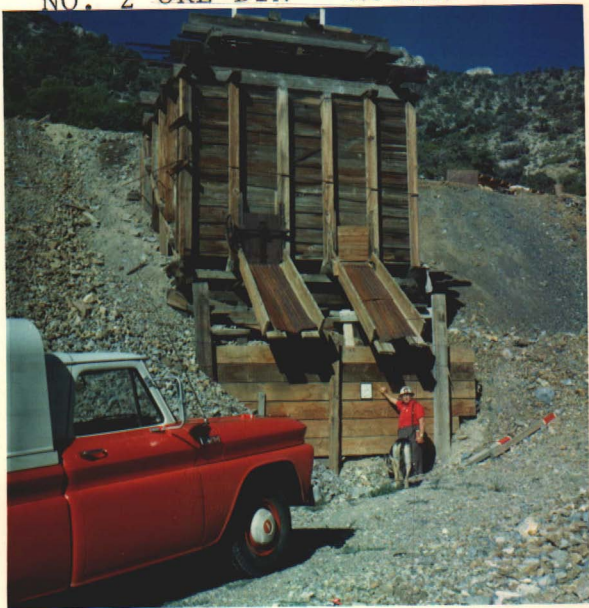

JAMES H. WREN.

LARSH CUT-ORE 18' WIDE

JUL . 67



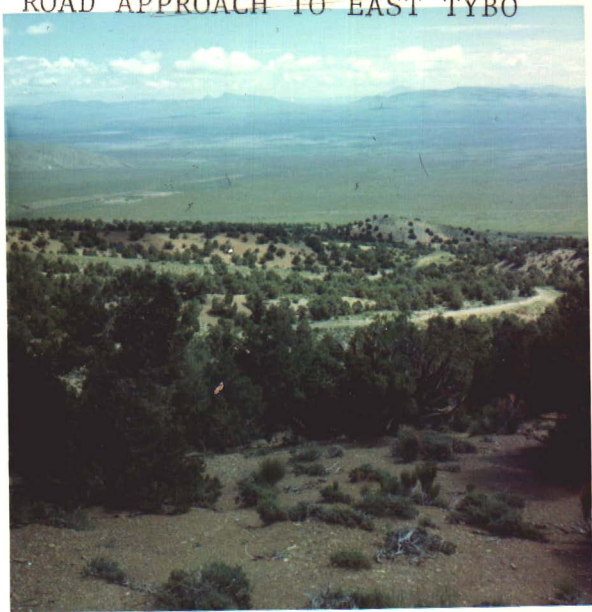
NO. 2 ORE BIN - NOTICE



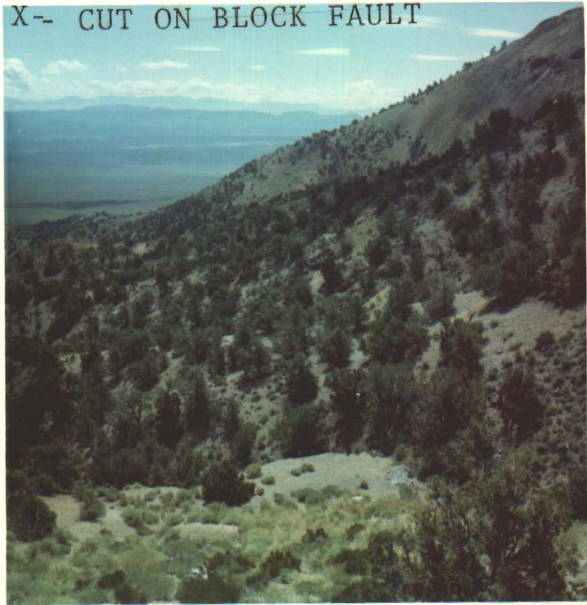
JUL • 67

ROAD APPROACH TO EAST TYBO

• JUL • 67



X-- CUT ON BLOCK FAULT



• JUL • 67

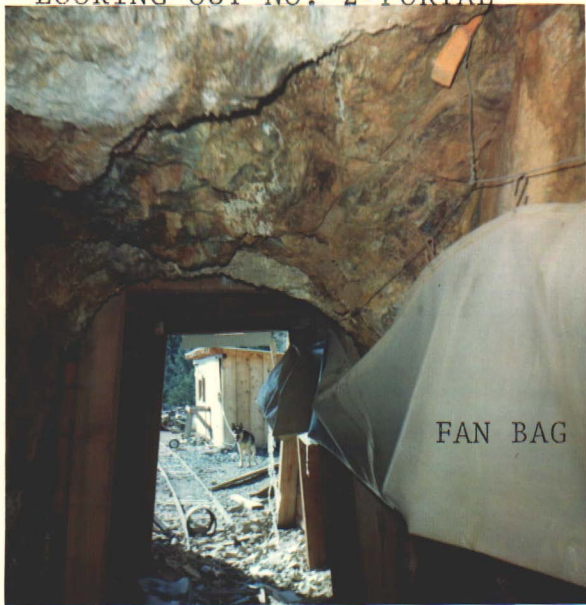
MILL STOCKPILE TONNAGE OREBIN

• JUL • 67



LOOKING OUT NO. 2 PORTAL

• JUL • 67



FAN BAG

STOPE IN NO. 2 TUNNEL

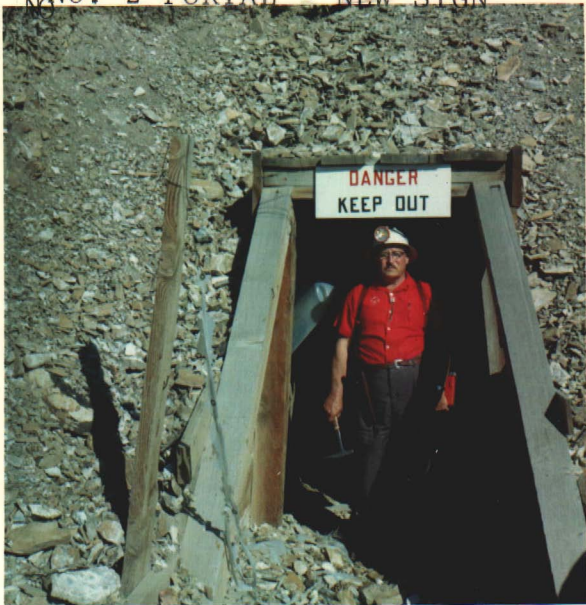


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NO. 2 PORTAL - NEW SIGN

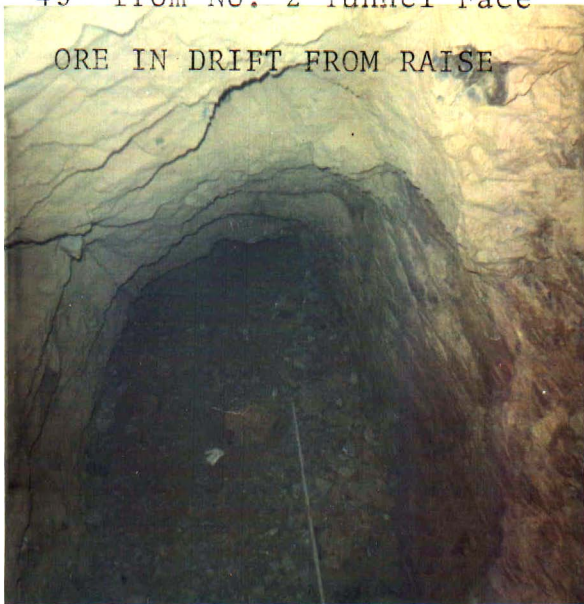
DANGER
KEEP OUT

JUL . 67



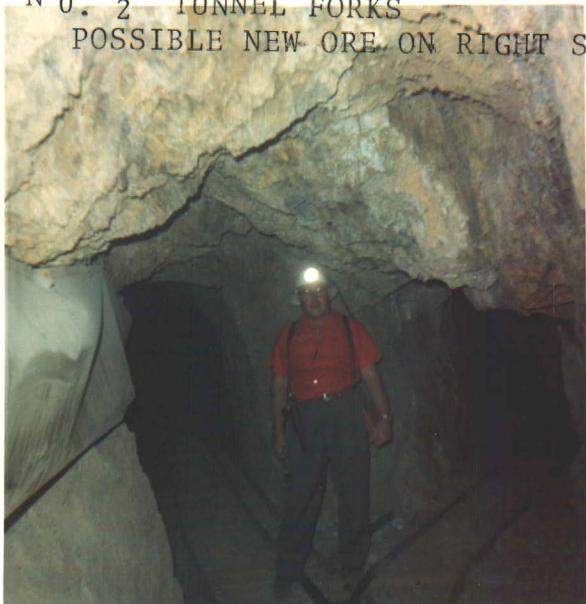
45' from No. 2 Tunnel Face

ORE IN DRIFT FROM RAISE



• JUL • 67

N 0. 2 TUNNEL FORKS
POSSIBLE NEW ORE ON RIGHT SIDE



• JUL • 67

NO. 2 TUNNEL PORTAL

JUL • 67



NO. 2 TUNNEL ROAD NEAR PORTAL



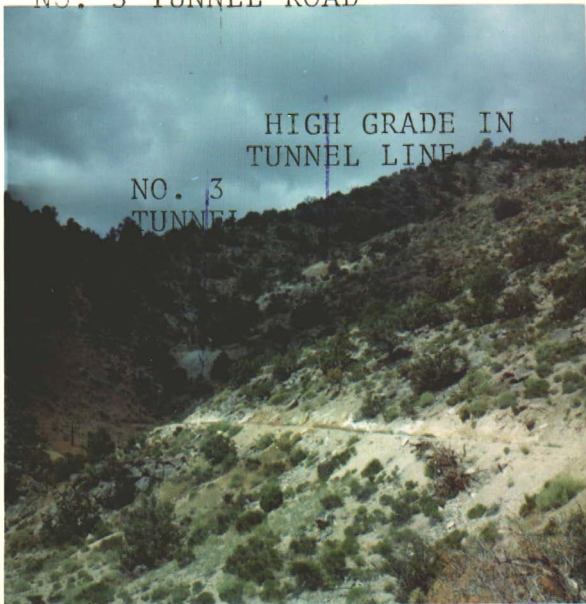
• JUL • 67

NO. 3 TUNNEL ROAD

HIGH GRADE IN
TUNNEL LINE

NO. 3
TUNNEL

• JUL • 67



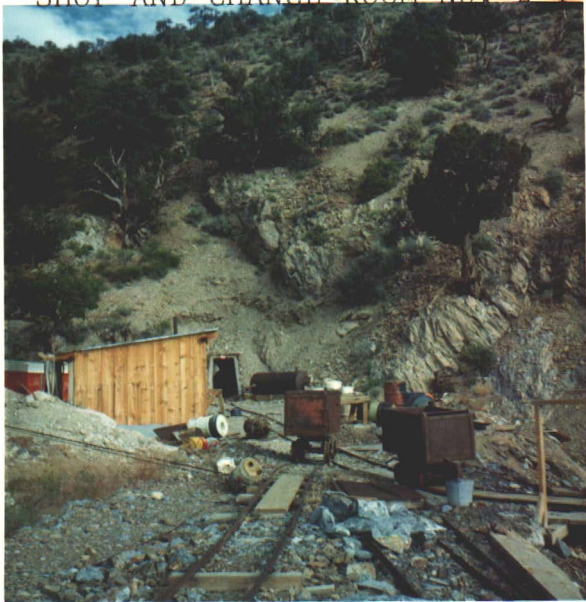
LOOKING S-E FROM NO. 2 TUNNEL



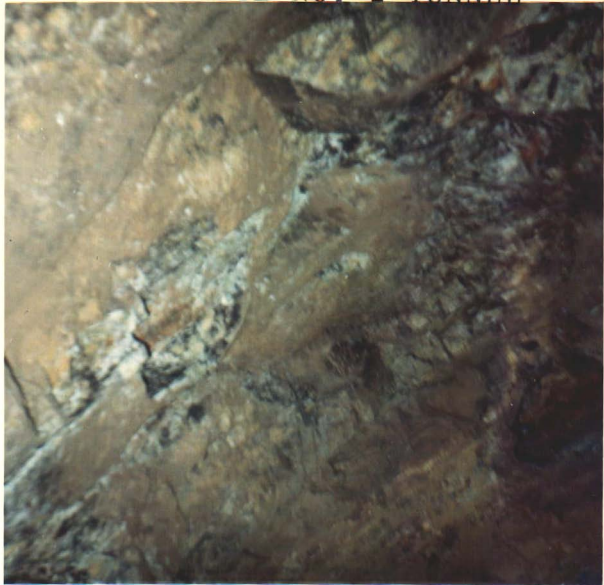
• JUL • 67

SHOP AND CHANGE ROOM NO. 2 T

JUL • 67



ORE IN RAILROAD NO. 2 TUNNEL

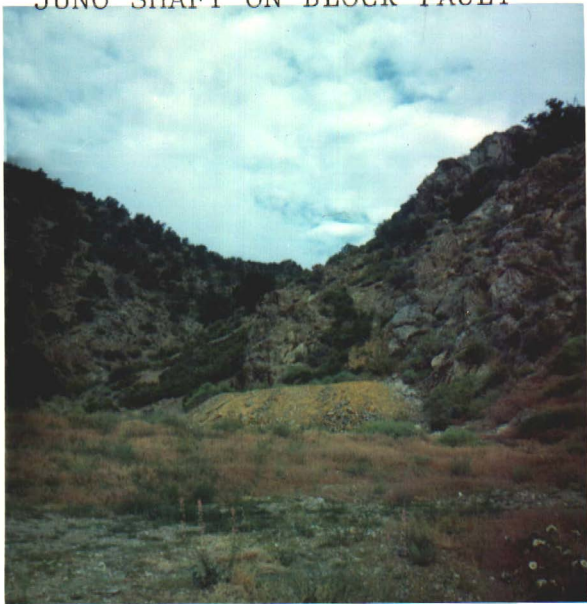


HUNT & LARSH ORIGINAL CABIN



JUL • 67

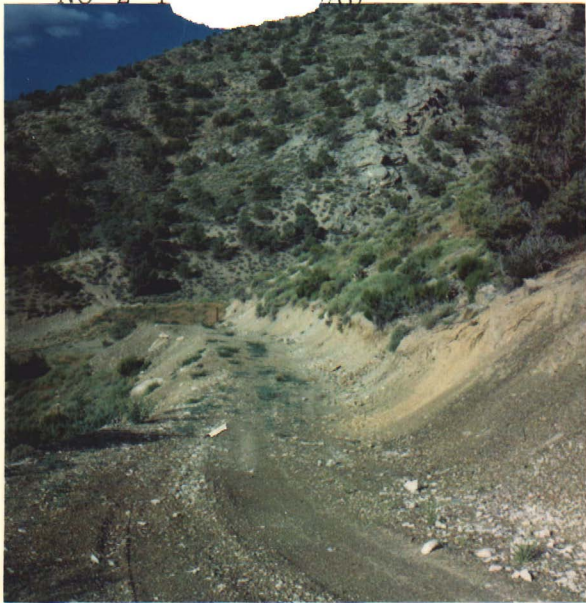
JUNO SHAFT ON BLOCK FAULT



• JUL • 67

NO 2 1 AD

• JUL • 67



ORE BIN TOP NO. 2 TUNNEL
ORE

• JUL • 67



HUNT & LARSH CABIN WITH NEW
NO. 2 TUNNEL ROAD IN BACK-
GROUND

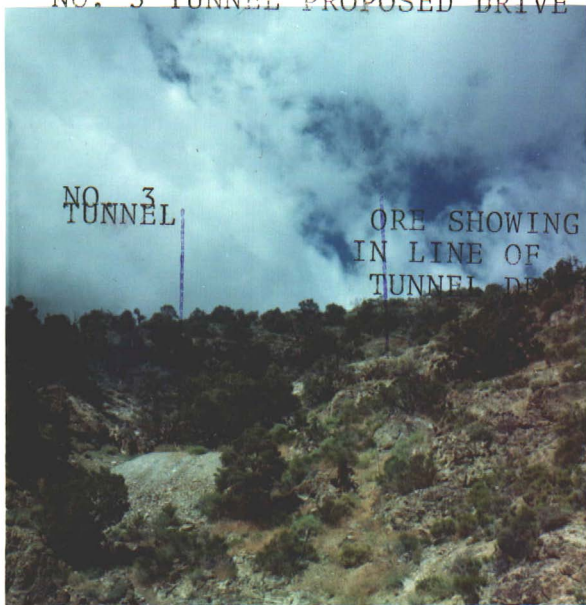


NO. 3 TUNNEL PROPOSED DRIVE

NO. 3
TUNNEL

ORE SHOWING
IN LINE OF
TUNNEL DRIVE

• JUL • 67



ROAD TO NO. 3 ROCK WORK NEED

• JUL • 67

