2660 0022

MORNING STAR LODE

ofile Kinsley

We Cart Itemer

This property was first worked in the 1860s. Some interesting history was gained from a Mr. Phalen, who is a son of the original owner. Mr. Phalen now lives at Boone Springs. In view of difficult transportation facilities during the first working period of the property only high grade ore was marketed. In some areas silver values ran several hundred ounces per ton. Crumbs of high grade copper and silver values remain in the old production areas.

It appears as though the property was first worked through a shaft. Subsequently, someone has run a haulage adit and connected it with what seems to be the 50' level of the property. As no maps of previous work progress were available, little is known regarding the lower levels of the property. The shaft, according to Mr. Phalen, is 300' deep and was still in ore during the shut down period which occurred at a low metal market ebb. The writer scrutinized the workings to a depth of about 145'. Below that elevation the old shaft (now technically a winze) was still open but ladders were out making it inadvisable to go lower, without ropes.

To the 145' depth attained the main ore occurrence appeared to be about 50' long and had swells to about 18' in width. Easterly drifting at any point in the 145' of depth scrutinized stands some possibility of encountering another swell. "FIG. #1" herewith illustrates the plan of the old 50' level. Excepting for pillar material, the ground has been stoped to the surface. About 70' on the incline below the 50' is a drift

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which has been run in a Westerly direction. This drift is open for some 75 Westerly and shows evidence of economical grade silver ore. Easterly from the winze on what seems to be the 120' level, the ground has been stoped to the East and up to the 50' level sill. However, some pillars remain as well as scabs of probable shipping grade copper, silver ore. In this immediate area according to measurements of pillars, scabs, etc., it is possible that some 100 tons of available good grade rock can be produced at very little expense. The winze is in good shape to the 120' level and would require very little rehabilitation. Samples have been taken of this available salvage ore but returns are not in yet to evaluate with this report. However, it is safe to estimate that a gross value of \$5,000 in terms of salvage ore is immediately available in view of the obvious visual grade. This is pointed out as a possible consideration of shipping the upper level salvage ore as a means to pay for the lower level recovery.

Very little mining equipment remains on the property and that which is there would be of no value to an efficient operation. However, a good cabin is on the property which will make good living quarters for labor if production shipping is commenced.

## RECOMMENDATIONS:

A) Thoroughly sample and evaluate the immediate value of existing salvage ore. Some ore was shipped from this property during the Metallic Premium period which ended June 30, 1947. However, copper economics at 29.5¢ per pound are better than they were under the premiums. Also the 1946-1947 lessors were attempting to mine and hoist by

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hand which was very inefficient.

- B) Make an inspection of the lower levels of the property.

  By having some ladders and rope the shaft bottom may be available for sampling and the stopes can be inspected for additional salvage values.
- C) During a thorough mapping and sampling campaign some possibility of effecting the alignment of another upper level ore swell is likely.
- D) If the sampling and mapping indicate a worthwhile salvage volume to be available, a 210 Cu. Ft. per minute compressor, tugger hoist and drilling equipment on a rental or rental-purchase basis would be all of the equipment required. In consideration of the past production value at a much higher figure than \$50 per ton at lower marketing prices, the estimated salvage costs seem to allow a good working margin.

Estimated salvage cost delivered to surface for

Payment schedule based upon \$50 rock 90% pay 4.50 \$ 25.20

It would seem reasonable that \$50 rock should not some 24.80 on the basis of salvage. Any blocks of similar grade ground encountered intact, of course, would carry lower production values.

## DOTY LODE MINE:

The Doty Cross Cut is about one mile via road from the Morning Star property. The cross-cut portal is only about 300° off of the main graveled road which services the district. The location is ideal for ore bin installation and truck loading without having to negotiate excessive road grades which are a problem to most properties in the district.

No maps of this property were available and there was only physical evidence to account for its historical background. On the basis of the accurate information gained relative to the Morning Star history - upper workings of the Doty Mine are assumed to be about the same age as the Morning Star. Doty workings consist of several open cuts, a number of x-cuts and drifts as well as two shafts. The depth of one shaft according to the dumpage is probably about 301. Timber is out and it cannot be inspected without ladders or a rope. It is, however, no doubt in ore as the dumpage carries mineral of the last rounds. The property without doubt has had some production record in yiew of the displaced ore cubics underground not represented on the surface dumps. Most of the workings show mineral in-place underground. There appear to be four NE-SW cross fractures which carry the mineral deposition. In the event that subsequent mapping indicates that these mineral occurrences will intersect at depth expectations of an acceptance volume ore body would be justified. Generally the area is highly mineralized and the Doty x-cut should be completed. With the exception of a minor bearing change the x-cut is within less than 200' of its objective, 451,5' of x-cut have been driven towards the depths continuation of upper workings ore. About 180' remain to complete the exploration objective.

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## DOTY X-CUT

Car, rail and pipe are present in this entry. A blacks mith shop on the dump is in good condition. The x-cut has been driven 451. 5' from the portal cap to the face. It is in excellent condition with no rehabilitation being necessary prior to resumption of driving. A magnetic survey of the x-cat with a section showing the surface ground profile is herewith as "FIG. #2." It will be noted that the heading has swung Northerly from the original bearing. The present bearing is headed for an area of copper gossan but very little or no surface development has been done in the area. A good possibility of encountering mineral under the gossan exists. However, with outlook towards cutting down risk element and production considerations connected with having some development already done in the upper levels of the more Westerly zone, it would be suggested to carry the original bearing. "FIG. #3". is a diagrammatic sketch illustrating the proposed continuation of the x-cut. As soon as the mineral has been connected to a raise could be driven to meet the bottom of the nearest shaft. This will furnish vitally required ventilation for production purposes and furnish a second exit. A corrected bearing of the cross cut would put it at right angles with the cross fractures carrying the ore. The only possible reason for not changing the present bearing would be if an ore rake tendency could be detected which would indicate the mineral to move Easterly as depth is attained.

## RECOMMENDATIONS:

a) In view of the considerable exenditure indicated by the completed footage represented in the x-cut and the short remaining distance to probable ore, completion of the project seems mandatory.

- Total cost to complete the x-cut assuming that the company compressor and tools will be returned, should not exceed \$15 per foot. That can be broken down as follows: \$10 per foot on the basis of a bonus contract. \$5 per foot for operating overhead, mining supplies, insurance, fuel, etc. Approximately \$2700 should finish this movement.
- A thorough sampling and survey of the upper level workings should be made at the earliest convenience. The area holds many favorable aspects regarding production considerations. Ore developed above the Doty x-cut can be cheaply produced via shrink stopes and gravity to haulage cars trammed to the shipment bin.
- d) Generally speaking, the Doty project should be a simple economic operation to conduct, after the connection with the ore has been made. It would require only a minimum of supervision and not much of a technical overhead as milling would not be contemplated. The production of direct smelting tonnage on a controlled basis and efficient marketing alignment should bring about an attractive outlook.
- e) If activity is contemplated during 1953, it would be suggested to complete the x-cut with very little loss of time. In regards to economy and cost outlook plus ventilation problems a single shift per day may be the most efficient manner in which to complete the entry. With that procedure about six weeks time would be required. If one were to commence immediately it would require about two weeks time to complete sampling, acquirement of

equipment, operating supplies and labor. That time element would put the first production possibility at around September 1st. On that schedule one would have sufficient time before severe winter weather to force out income. A postponed activity date may call for deferment to 1954 for operational economic reasons.

Very truly yours,

J. H. WREN & CO.

By

James H. Wren

STOPED ABOVE AND BELOW

SOME PILLARS AND SCABS OF

PROBABLE SHIPPING ORE

REMAINING FOR SALVAGE TO THE 70' LEVEL BELOW. TO THAT

ELEVATION TIMBER IS IN

CONDITION TO ALLOW PRODUCTION

SALVAGE. SOME REPAIR IS NECESSARY BELOW THAT LEVEL

STAR PRODUCTION AREA

MORNING

PLAN

"FIG. NO. I"

IN ORDER TO PERMIT PRODUCTION

BREAKAGE

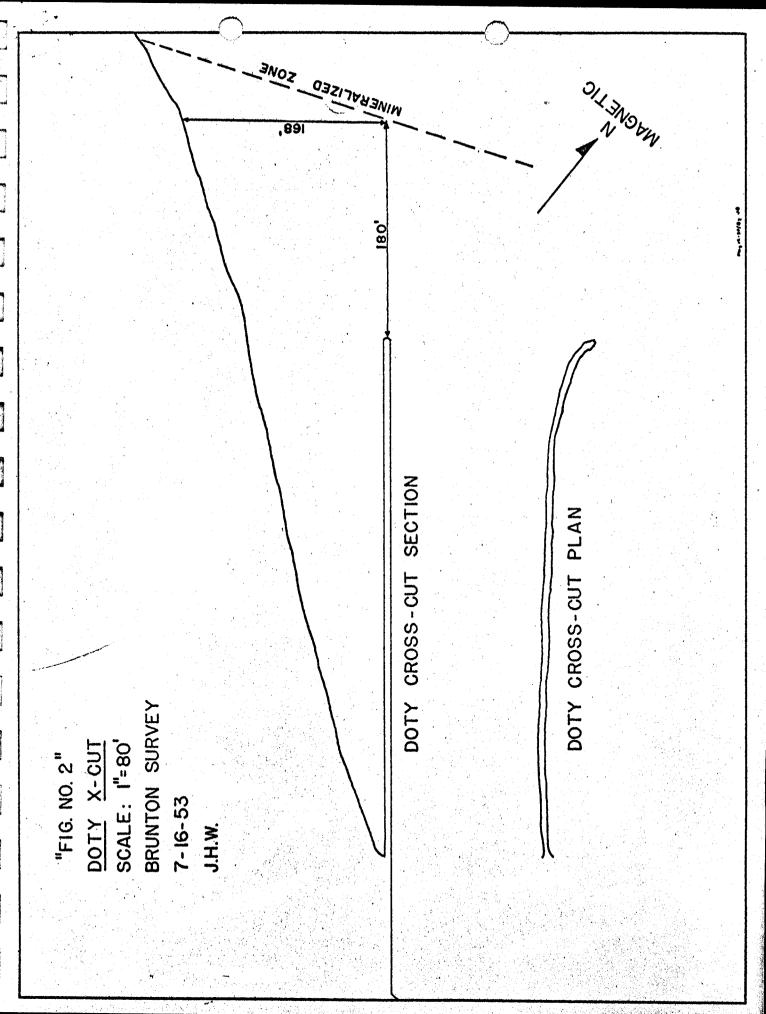
REPORTED WINZE DEPTH: 300' INSPECTED DEPTH : 145'

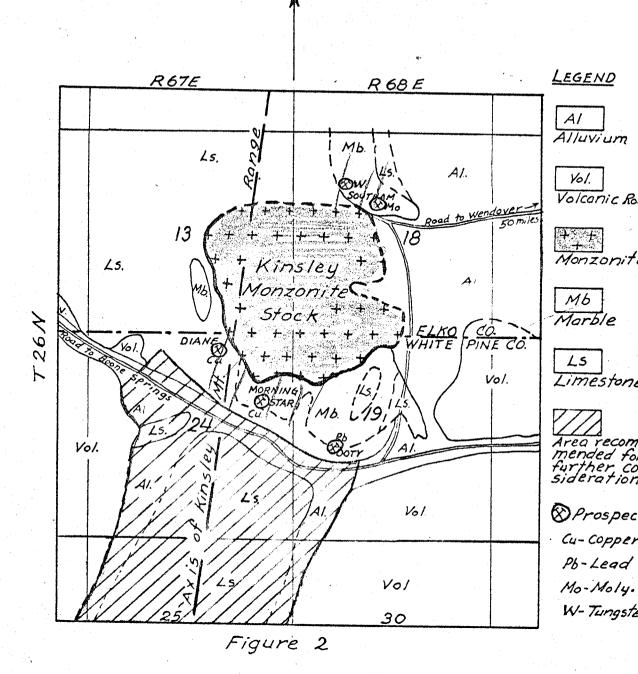
MAGNETIC BEARING

SCALE: 1" = 20'

7-16-53

J.H.W.





<u>Map Of</u>

<u>Kinsley Monzonite Stock</u>

<u>White Pine & Elko Counties, Nevada</u>

<u>scale:</u> 1"= 2,500

- To accompany E.J. Longyear Company report of October 1963 to Nevada Metals, Inc.
- And to show area recommended for further consideration.
- · Adapted from map by R.A. Paige and W.M. Haglund.

Fig. 2