

WM. L. deCARONEL
Mining Engineer and Geologist
Tonopah, Nevada
July 29, 1960

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item 1

1670 0001

Mr. A. H. Delareuelle
P.O. Box 1535
Las Vegas, Nevada

Dear Art:

I have recently examined the Copper King property situated in the German Springs Mining District, Mineral County, Nevada. This property is located 7 miles north of Basalt, at the intersection of U.S. Highway 6 and Nevada Highway 104, thence 2.8 miles north-westerly via all-weather gravel road to the mining area. Highway 104 leads to a railroad at Mina, Nevada, 27 miles.

The property consists of ten ~~small~~ lode mining claims held by discovery and annual labor, all of which has been done and recorded up to and including the year 1960.

The area consists of an unusual east-west graben, a continuation of the Candelaria structure, which has been intruded by Cretaceous or early Tertiary granitic rocks. The Paleozoic rocks of the intruded mass consist of Ordovician (?) and Permian sediments which have been overthrust and highly folded before the block faulting and intrusions. The Paleozoic sediments consist of shales, mudstones, dolomites, cherty dolomites, iron manganese rich chert beds, sandstones, and quartzites.

The high degree of shattering of the more brittle cherts, cherty dolomites and almost quartzitic sandstone have provided favorable sites for the circulation and deposition of mineral bearing solutions. Later faulting and fracturing during the Tertiary have reopened these channels, permitting the leaching of the upper zones, the formation of gossans, and deposition of secondary copper mineralization.

A great deal of bulldozer trenching, some drifting and raising, and open pitting demonstrates the structural and mineralogical features of the property. Consistently richer assays in copper have been found in the larger open cut zones, with the copper content increasing from 0.35% to 3.5% in 16 feet in depth. Large areas of gossan exist. Further trenching will only show an increase in areal extent of the showings. What the property needs is a drilling program of 10 or more drill holes to define the depth of the ore body.

Sufficient geology has been done by various persons to more or less delineate the areal extent of the ore bearing area. Insufficient structural details are known or mapped in the ore area and are considered extremely important for the location of drill holes.

Sites for preliminary drilling have been discussed by several geologists and all seem in good agreement.

The terms desired by the owners are liberal, six months with option to continue for an additional six months should work be kept up on exploration by drilling or other means. After the six month or one year period a royalty of 7 1/2% on the gross production with a minimum payment of \$1,000.00 per month is asked.

I feel that this property merits your examination and further exploration by drilling by rotary or churn drilling, and that the results will lead to continued exploration and exploitation.

Sincerely yours,

(Signed) William L. deCarbonel
W.L. deCarbonel

W.L. deC/er

Sanderson

COPPER-KING-MINE

MINERAL COUNTY

STATE of NEVADA

Copper King Mine

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PROPERTY

Consists of twelve unpatented lode mining claims, namely the East Side Copper Original Mining Claim, the East Side Copper No. 1, and the Copper King Claims Nos. 1 to 11 incl., comprising an area exceeding 300 acres.

LOCATION, ROADS, RAILROAD and TOWNS

The property is located in the German Springs Mining District, Mineral County, Nevada, about 7½ miles northerly from Basalt, the distance from Basalt to Bishop is 59 mis. the same distance as from Basalt to Tonopah, Nevada. The nearest railroad is at Mina, Mineral County Nevada, a branch of the Southern Pacific Railroad. The distance from the mine to Mina is approximately 28½ mis, via Highway 10 (State).

CLIMATE

Elevation of mine workings are approximately 6,300 ft above sea level. The climate of the mine is that of the intermediate altitudes of central Nevada. The mine being located on the southern slopes of the mountain the winters are characterized by moderate temperatures, and as a rule with only a few light falls of snow. In summer the days are moderately hot but the nights are comfortably cool, the rainfall is very light.

WATER

There is no water at the mine; however it can be anticipated that a shaft sunk to the four or five hundred ft. level should develop water sufficient for all mine and limited mill operations. Water for domestic use and for all mining operations can be obtained at German Springs, five miles distant or at Basalt at the water tank owned by the State of Nevada Highway Maintenance Station. Water for large scale milling and leaching operations can be developed at Teels Marsh, 8½ miles distant, by sinking one or more relatively shallow wells. The elevation of Teels Marsh is 4,900 ft.

POWER

It will be necessary to generate power for the mill and mine operations preferably with Diesel engines.

GEOLOGY and ORE BODIES

The oldest rocks of the area in general are of Triassic age and comprise andesite, soda rhyolite-felsites and lime stones, with subordinate quartzite and shales. The Triassic rocks are intruded, probably in Cretaceous time, by diorites and porphyries, which metamorphosed them strongly and converted relatively large volumes of limestone into calcium silicate rocks and allied silicates. After this metamorphism, dikes and bosses of various rocks were injected, subsequently faulting took place Tertiary

Geology and Ore Bodies----continued

volcanic rocks unconformably upon the Mesozoic rocks. They consist of andesite flows and an upper division of conglomerate, capped by basalt. The ore bodies are believed to be contact-metamorphic replacement of comparatively pure limestone, and are related to faulting. The principal ore consists of various copper sulphides, oxides, sulphate carbonates and silicate. Silver is present and to a lesser degree, gold.

There is no blocked out ore in the true sense of the term "blocked out ore". However several thousand tons of leaching ore can be mined from the existing mine workings. Mine dumps will furnish possibly three thousand tons of leaching ore, of a good grade better than two percent.

Exploration of ore bodies has been accomplished in the existing mine workings, represented by drifts, cross-cuts, one winze and numerous raises, aggregating over 800 ft., and by many systematic surface exploration, consisting of pits, shallow shafts, trenches and other workings, and indicate that the chief ore body will attain a length of 800 ft. or more with width up to 75 ft. probably all in ore of mill or leaching grade, with an appreciable percentage of shipping ore, both oxidized and sulphides.

Sage brush soil covers the various outcrops followed by a few feet of barren capping and then follows an oxidized zone of the various copper ores, to an estimated depth of probably 300 to 400 ft. below the existing mine workings (elevation 6,300ft above sea level) on the East Side Original mining claim. This oxidized zone will be followed by the primary ore zone with secondary enrichment. Three known intersections or crossings will produce "high-grade" ore bodies. It is highly probable that the mineralization will go to the depth of the quartz-monzonite sill, -what the depth of the sill is- I cannot state. However, taking into consideration the well established length of the ore body accompanied by an average width exceeding 60 ft. (sixty ft) and favorable walls, line hanging wall and porphyry foot wall, the depth of the primary ore zone should be considerable and should produce a large tonnage of both milling and shipping ore.

Application of shrinkage methods are possible due to the fact that the rigid requirements to shrinkage stoping as to dip (80 degrees), shape and strength and character of ore body and walls are all present.

Shrinkage stoping methods are desirable methods, because simple requiring little timber and practically no shoveling in stopes, all features which tend to exceptionally low costs of mining.

ASSAYS

No.	Assays by	Gold oz.	Silver oz.	Copper %	Type of sample	Total Assay Value
1	CCMC	0.06	15.62	2.10	trench	\$36.12
2	SAML	trace	10.00	9.90	trench	59.52
3	UAOI	trace	3.10	1.11	cut	5.45
4	do	0.02	4.70	6.47	cut	27.43
5	do	trace	1.70	1.77	grab, dump	10.30 N dump
6	do	none	0.60	3.08	" "	15.54
7	do	trace	1.10	1.31	" "	7.50
8	do	none	1.30	3.44	cut	18.10
9	do	none	0.60	-----	cut, wall	.51
10	CCMC	0.03	0.46	3.40	cut	18.36
11	do	0.01	0.66	3.80	dump	19.81
12	do	0.01	0.55	3.60	cut	18.46
13	do	0.01	1.10	4.75	cut	23.50 S side
14	USBN	trace	0.80	1.73	grab, dump	9.21 small & uphill
15	do	0.005	2.35	2.77	" "	15.40 S dump
16	do	trace	0.70	7.17	" "	35.61
17	do	0.01	0.66	23.60	cut	115.89
18	AVHL	-----	-----	5.10	cut	24.38

RUN BY KENNICOTT, MCGILL, NEVADA

Ozs. Au	Per Ton Ag.	Per Cent Cu	Per Cent SiO ₂	Per Cent Fe	Per Cent CaO	Per Cent Al ₂ O ₃	Per Cent S
Gold	Silver	Copper	Silica	Iron	Lime	Alumina	Sulphur
None	47.46	7.64	60.5	10.0	0.9	5.4	0.1

One
Sample\$67.30 gross
ton

Total in dumps estimate tonnage, about 2,000 tons

NOTE: Gold 35

Gold \$35.00 per ounce

Silver, 90¢ per ounce

Copper, 24¢ cts per pound

COPPER KING MINESANDY SANDERSON
-24-
-1951-

COPY
of
ORIGINAL

COPPER-RING-MINE

MINERAL COUNTY

STATE OF NEVADA

Copper King Mine

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Geology and Orebodies-----continued.

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(Signed) Sandy Sanderson

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17	USAM	0.01	0.66	23.60	out	115.89
18	AVEL	----	----	5.10	out	24.38

SANDY SANDERSON
-EM- 1961

RUN BY KENNICOTT, MCILL, NEVADA

Oss. per ton		Per Cent	Per Cent	PerCent	PerCent	PerCent	PerCent
AM	AG.	Cu	SiO ₂	Fe	CaO	Al ₂ O ₃	S
Gold	silver	Copper	Silica	Iron	Lime	Alumina	Sulphur
None	47.46	7.64	50.5	10.0	0.9	5.4	0.1

\$87.30 gross ton

UNION ASSAY OFFICE, INC. for A. S. & R. COMPANY 933

South Large Dump Grab: Gold - 0.020; Silver - 5.6; Lead - None; Copper - 4.64%;
SiO₂ - 58.8%.