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CONSOLIDATED COPPERMINES CORPORATION

MEMORANDUM

FROM J. McLaren Forbes, Chief Geologist CITY

Kimberly, Nevada

TO A. J. O'Connor, Vice President & Gen. Mgr.

June 6. 1956

UNITED STATES COPPER COMPANY, COPPER CHIEF OR RUBY HILL MINE, PINE NUT MINING DISTRICT, DOUGLAS COUNTY, NEVADA

Conclusion: If this property is available on an exploration basis it should be mapped, sampled and possibly drilled. The geological environment appears to be favorable for a large low grade ore body to exist in the area.

Location, etc.: The Copper Chief or Ruby Hill Mine is in Douglas County, Nevada about 14 miles southeast of Gardnerville and is in the Pine Nut Mining District. The property is held by the United States Copper Company, 421 Atlas Building, Salt Lake City, Utah. Mr. Preston M. Neilson is President of this company. The property was presented by the United States Copper Company and was visited on June 29th and 30th, by J. McLaren Forbes in company of R. D. Morris, of Gardnerville, who is Vice-President of the United States Copper Company.

The property consists of 52 unpatented mining claims as follows: The Copper Chief and Copper Chief 1 through 22 and the Copper Chief Extension I through 29.

History and Workings: The Ruby Hill Mine, now known as the Copper Chief, was first mined in 1912, according to Hill in U.S.G.S. Bulletin 594. There are no production figures. The property is opened up by a 47° inclined shaft 185 feet deep with workings at the 60, 100, and 160 foot levels. There are 4 adits, adit No. 1 is 650 feet long, No. 2 has a total length of 438 feet, adit No. 3 is 750 feet long and the Spray Adit is 80 feet long. There are also 13 bulldozer cuts, some of which are several hundred feet in length, and a few small pits or shafts.

At some time in the past 7 churn drill holes were put down. There are no records concerning these. Rumor has it that some copper was encountered in these holes and that several of them stopped in ore. Some of these holes appear to be open and possible could be deepened or side sampled.

Geology: The mineralization is found in a quartz porphyry (probably quartz monzonite) and overlying andesites. The porphyry outcrop is at least 250 feet to about 450 feet wide. The porphyry, in the mine area, dips southwest and is overlain by andesitic rocks. At its extreme southwest exposure, in the Spray Adit area, the dip may be nearly vertical or steeply to the east. From the observations made during a hasty trip into number 2 and 3 adits it appears the porphyry may be wider at depth than where exposed.

The mine workings of the old Ruby Hill Mine, were according to Hill in U.S. G.S. Bulletin 594, in the andesite and predominantly in the oxide zone down to the 150 foot level. Reportedly there is sulfide ore in the shaft from the 150 foot level to its bottom at 185 feet. Copper mineralization appears in bulldozer cuts 300 feet south of the shaft.

To the east of the Ruby Hill shaft the porphyry is exposed in three bulldozer cuts. Here copper mineralization shows in the form of tenorite with some malachite. Samples from the upper bulldozer cut taken from southwest to northeast were as follows:

**	***			% Cu
#	5631	1st 20'	Porphyry-iron stained and some tenorite	. 02
#	5632	36' to west	Porphyry less iron stain and some tenorite	. 12
#	5633	16' to west	Fresher porphyry with sparse copper stain some tenorite. Some shearing	1.09
#	5634	15' to west	Iron stained and bleached porphyry - no copper stain some tenorite	. 37
		10' gap to west		
#	5635	12' to west	Bleached and oxidized shear zone with copper stain	1.86

These three bulldozer cuts represent the same mineralized zone as is seen in number 2 adit below them. Sulfides, chalcopyrite and pyrite were seen in the adit and recent samples taken in this adit were said to run from 0.5% Cu to 1.5% Cu.

Two to three hundred feet south of these three bulldozer cuts other cuts near the mouth of number 3 adit show copper minezalization.

As explosed, the copper minegalization in the Ruby Hill area is some 700 feet in diameter. To the northwest there are signs of mineralization such as quartz veins outcropping in the andesite and weak mineralization in small showings of porphyry where it is found in shallow pits.

To the southwest from the number 3 adit, which is at the edge of the Ruby Hill area, there are five bulldozer cuts exposing porphyry and andesite to the Spray adit. Little mineralization is seen until the Spray area is reached about 1000 feet southeast of number 3 tunnel. In the Spray adit area a fairly strong copper bearing outcrop has been found.

The copper metallization is probably disseminate in favorable areas of the porphyry and where found in the andesites may be related to mineralization in the underlying porphyry. All such andesite areas and the full extent of the mineralization in the porphyry have not been explored.

Ore Reserves: No attempt has been made to calculate ore reserves from the data at hand. The problem is does the property merit examination and exploration to see if a large open pit copper mine could be developed here.

The United States Copper Company in its application for a D.M.E.A. Exploration Project gives the following probable tonnages:

Location	% Cu	Tons
Main Shaft Workings	2.0	100,000
Adit 2 workings	1.5	150,000
Adit 3 workings	1.7	50,000
Spray workings	1.5	100,000

Present Status: The property, as mentioned previously, is held by the United States Copper Company. In a telephone conversation with Mr. Neilson, the company President, on the morning of June 5, 1956, Mr. Neilson seemed to be favorable to the type of deal Coppermines might make. Mr. Neilson said that one of the associates in the organization had a fear of dealing with large corporations but could probably be persuaded, in due time, if matters were not rushed.

Recommendations: The the property, if a reasonable deal can be made, be mapped and drilled. Probable costs and footages are as follows:

Geological mapping of surface and underground, sampling and logging of core during drilling	\$1000.00
Diamond drilling of favorable areas contingent	
upon results of geological mapping and sampling.	
Roads and drill sites	1000.00

Mobilization and de-mobilization 5500 feet of diamond drilling at \$8.00 per foot (this is approx. the prices per foot quoted the United States Copper Co. by Boyles Bros. as a flat bid including cementing, etc. as of October 31, 1955)

\$\\\ 45500.00

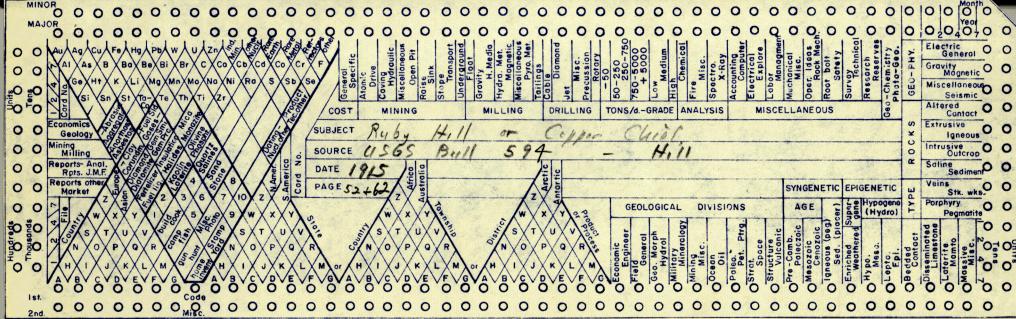
The drilling will be spread approximately as follows:

Area	Feet
North of shaft	1000
Line of No. 2 Adit to shaft	1000
Andesite area south of shaft to	
No. 3 Adit	1500
No. 3 Adit to Spray area	1000
Spray Area	1000
Total Footage	5500

Preliminary drilling will be on the Shaft to No. 2 Adit line, followed by the Andesite area south of the Shaft, and then the Spray areas. If the preliminary holes are disappointing the project could possible be dropped after 2000 feet of drilling or drilling expenditure of about \$15,000.

JMF/al

38° 50' N 119" 34' W near contact Angelite Otz + Volcanie rocks, chiefly andesite In augite andesite of Buttalo Creek drainage. Authoritist are cut by two series of fractures. Older N 25° E 45° NU 19 zme # 160-150' wed & Crusher and altern Cut off to west hy 9 northerly fracture t Un mile west at Dural Popt. N 45 E zone of sil Anderile with no sulplude but Are and resembles Speid croppings of late ter. For deposite Rur AH Z angelet gar-anderely Per Mmz. at a monganet coeller are much to last



Mr. Max D. Eliason President United States Copper Company Atlas Building Salt Lake City 1, Utah

Dear Mr. Eliason:

About a year and a half ago I wrote you concerning the copper claims owned by the United States Copper Company, which are located near Gardnerville, Nevada. In your reply, dated November 9, 1964, you wrote that the property was subject to an option to purchase agreement.

At the present time I am doing some work for a client who might well be interested in a property, such as I remember this one was. If the preopery is available at the present time they might be interested in considering it.

Very truly yours,

707 South Lark Ellen Avenue West Covina, California 91790 October 7, 1964

Mr. Max D. Bliason United States Copper Company 422 Atlas Building Salt Lake City, Utch

Dear Mr. Eliason:

In the fall of 1961 I was inquiring concerning the availablilty of the United States Copper Company claims near Gardnerville, Nevada. In your raply of October 31, 1961 you said that the claims were under an Option to Purchase Agreement. I am writing on the chance that the Purchase Agreement did not go through and the property is available for a deal. If this is the case I might have a client who would be interested in the claims.

Then I was thief Geologist for Coppermines I looked at this property nometime prior to 1958. Although we thought it warrented some exploratory work we drd not make a deal. Of course, by now, the property may have been drilled out and shown to be non-commercial under present conditions.

Very truly yours

J.Mcleren Forbes Consulting Geologist

UNITED STATES COPPER COMPANY 422 Atlas Building Salt Lake City, Utah

October 31, 1961

Mr. J. McLaren Forbes 707 South Lark Ellen Avenue West Covina, California

Dear Mr. Forbes:

Mr. Robert D. Morris has forwarded to us your letter to him dated October 21, 1961, in which you inquired about the mining claims located near Gardnerville, Nevada, in which our Company owns an interest.

Kindly be informed that our interest in these claims is presently subject to the terms of an Option to Purchase Agreement. In the event that the option granted under this Purchase Agreement is not exercised prior to August 15, 1962, this property may again be available for a deal. In this event we will get in touch with you.

Very truly yours,

UNITED STATES COPPER COMPANY

Wax D. Eliason President

UNITED STATES COPPER COMPANY

ATLAS BUILDING
SALT LAKE CITY J. UTAH

KAKKKEKKE KOKKEKKEKE

November 9, 1964

Mr. J. McLaren Forbes Consulting Geologist 707 South Lark Ellen Avenue West Covina, California 91790

Dear Mr. Forbes:

Thank you for your letter dated October 7, 1964, in which you enquired concerning the availability of the copper claims owned by United States Copper Company, which are located near Gardnerville, Nevada.

These claims are presently subject to an option to purchase agreement which will not expire until August 1, 1965. If you are still interested in said properties after that date, you might contact us to see if the option to purchase was exercised. We will file your letter and may be in touch with you ourselves at a later date.

Very truly yours,

Wax D. Elmon

Max D. Eliason President