E.A.JULIAN

CONSULTING ENGINEER



#### OFFICES OF GEO. WINGFIELD RENO, NEVADA

1190 0006

Mr. J. E. Spurr, 571 Bullitt Bldg., Philadelphia, Pa.

Dear Sir:-

JUN 16 1915

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ANS'D

The tailings dump and property of the Nevada Deep Mines Company situated at Como has reverted to the Nixon National Bank, who are planning on cyaniding the material during the coming summer.

I have understood that your organization had sampled this material sometime within the past year or so, and if you could consistently do so, I should greatly appreciate a copy of your results, as to sampling averages and rough metallurgical results. I have previously made a similar inquiry of Mr. Blackburn, at Tonopah, who has advised me to write you.

Very truly yours,

EAJ/C

Consulting Engineer.

Referred to
Mr. Spurr for reply

WW-13

# THE TONOPAH MINING COMPANY OF NEVADA

EASTERN OFFICE 572 BULLITT BUILDING, PHILADELPHIA, PA.

PLEASE ADDRESS ALL COMMUNICATIONS
TO THE COMPANY, TONOPAH, NEVADA

TONOPAH, NEVADA. May 7,1913.

Mr.J.E.Spurr, Vice-Fres.,

Tonopah Mining Company,

Philadelphia, Fa.

Dear Sir:

TONOPAH MINING CO. OF NEVADA

MINING AND EXPLORATION DEPARTMENTS

REC'D MAY 12 1913

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ANS'D |

I am mailing you today under separate cover copies of my reports on the Nevada Deep Mine at Comp, Nevada, and on the Fink-Mahony Mine at Jumbo, Nevada.

Neither of these properties are worth further consideration.

The Nevada Deep Mine is, however, a much better looking property than the assay results would seem to indicate. In view of the very low assay results obtained - no tracings or blue prints of the workings and geology have been made. The rough maps and notes made at the mine have been filed with the original of this report at the Tonopah office.

Very truly yours, Sirdevan.

TONOPAH MINING CO. OF NEVADA

MINING AND EXPLORATION DEPARTMENTS

REC'D MAY 12 1913

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Report

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NEVADA DEEP MINES CO.

Comoo, Lyon County,

Nevada

Examination: Apr.11-18 Report May 6,1913. By W.H.Sirdevan

Report

o n

## NEVADA DEEP MINES CO.

The Nevada Deep Mines Company is located at Como, Lyon County, Nevada - about eleven miles south of Dayton.

Como is an old camp that was located in the early seventies and abandoned until a few years ago when some leasers began working on the Nevada Deep property. This mine was promoted for sale by the same man who is now trying to dispose of it. I enclose a copy of the report made by E.E.Wadleigh and his letter to the company with reference to the property. As usual - the assay rrsults and the values claimed by the promoter do not agree. In this case the discrepancy is very great.

Notes on the property.

The main vein is from ten to fifteen fet in width, strikes N 60°E to N 80°E and dips about 80° to the north. The ore is quartz with pyrite - oxidized above the first level but in sulphide form below this depth. Altered andesite - sometimes soft and again highly silicified - and from 4' to 8' of hard, white or slightly bluish-tinged quartz make up the vein width. The quartz is banded in some places and a few crystallized cavities occurindicating fissure filling. The pure quartz may be the result of a later filling - the original vein being a replace ment of the andesite. There is considerable quartz in the andesite giving indications of a large ore body if of sufficient value.

enough ore to pay the expense of operation.

A Brunton Compass survey of the workings was made, and a day spent on geology - as there was a strong fault almost parallel with the main vein and intersecting it on two levels. Three days were spent on sampling - twenty six samples being taken. This property looked good, and since there was a probability of a forced sale soon - it was desirable to know definately whether the mine was worth acquiring or not. For this reason more time was spent in the examination than would have been taken otherwise.

The vertical shaft is 280 feet deep. It is sunk in the foot wall with crosscuts at three levels. Considerable stoping has been done on the upper levels - where high grade ore is said to have been mined. The vein has been drifted for about 700 feet on the two upper levels, and about 200 feet in the bottom level. The samples were taken at representative points on all of the levels. Partial samples were taken in nearly every instance as the vein was wide was supposed to be rich near the walls and low grade between.

The sampling results were as follows:

No.	Width	Assay	Silver	Total	Level	Description
15	3'7"	\$.80	\$.42	\$1.22	100	
16	310"	tr	\$.12	\$ .12		at junction 11'-av.\$3.70 of crosscut
17	416"	\$7.60	\$.43	\$8.03		from shaft.
18	3'6"	\$ .80	\$.68	\$1.48		
19	4'3"	tr	\$.10	\$ .10	· ·	25' E of 14'9"-av.\$1.42 (15-16-17-)
20	7'0"	\$1.60	\$.61	\$2.21	n	
21	5'0"	\$ .80	\$1.00	\$1.80		5'0"-av.\$1.80 30' E of (20)
22	11'0"	\$ .80	\$ .32	\$1.12		11'0"-av.\$1.12 70' E of(21)
23	3'2"	tr	\$ .18	\$ .18	"	3'2"-am. \$.18 30' E of(21)
24	414"	tr	\$ .14	\$ .14		4'4"-av.\$.14 50' E of (21)
1	4'0"	\$2.80	\$ .58	\$3.38	200	
2	810"	tr	\$ .42	\$ .42	n .	near east 17'0"-av.\$1.11 face exposed in short x- cut.
3	5'0"	tr	\$ ,42	\$ .42	11	
25	3'0"	\$ .80	\$ .26	\$1.06	11	3'0"-av.\$1.06 300' W of 1.2.3.
26	3'6"	tr	\$ .20	\$ .20	n	3'6"-av.\$.20 31' E of (25)
4	5'0"	tr	\$ .42	\$ .42	300	5'0"-av.\$.42 Face of E dft.
5	4'7"	tr	\$ .38	\$ .38 n		4'7"-av.\$.38 20' W of (4)
6	5'0"	\$ .00	\$ .46	\$1.26	. "	5'0"-av.\$1.26 25' from W face
7	214"	tr	tr	tr		2'4"-av.tr. 7' " " "
8	5'0"	tr	tr	tr		
9	5'0"	tr	\$ .12	\$ .12		altered Andesite and 31'5"-av.\$.14 Quartz as ex- posed in a N crosscut.
10	5'0"	tr	\$ .00	\$ .10	0	
111	4'0"	tr	\$ .10	\$ .10	4. Z. <b>11</b>	
12	8'0"	tr	\$ 116	\$ .16	th.	
13	4'5"	tr	\$ .36	\$ .36		
14	5'6"	tr	\$ .42	\$ .42		5'6"-av.\$ .42 30' W of (4)

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## Equipment.

Mill Ten-Stamp mill with regrinding apparatus, concentrating and amalgamating tables, and a continuous cyanide plant. Capacity about 75 tons per day. Cost about \$40,000. The mail ran about three months on the best ore. Records indicate ore averaged less than \$6 per ton.

Hoist Leyner Electric, geared hoist operated by a 50H.P. motor. Capacity about 75 tons with the present shaft equipment.

Compressor. Ingersoll-Rand Type 10 - Cylinders 9x12 and 16x22. Operated by a 75 H.P. motor.

<u>Pumps.</u> 1 - No.8 Cameron Sinker now in the shaft and operated by air. 1-Aldrich Triplex Electric pump being installed. The flow of water is about 40 gallons per minute.

### Mill Tailings.

There are 6300 tons of tailings averaging about \$4 per ton. Scibird estimated that he could treat these tailings for about \$1.50 per ton.

#### Operating Costs.

Milling costs would not be less than \$2 per ton, and probably nearer \$2.50 per ton. Mining costs would be from \$3 to \$4 per ton.

The total operating costs would be then from \$5 to \$6.50 per ton.

Conclusions.

With operating costs as above the ore is obviously too low-grade to warrant further consideration.

COPY Reno, Nevada, 4th April, 1913. James Blackburn, Esq. Tonopah, Nevada. Dear Sir: I enclose a brief report of a mine that would repay you to investigate. The fine new mill of this property was finished about six weeks ago, and they, in order to realize money quickly, gouged a large amount of their higher grade of ore for the first run, and thro carelessness "or what you will" someone turned on the water in the tanks, and thousands ran off down the gulch, this has badly crippled the owner, so that PROMPT action might secure a splendid mine at reasonable figures. The price would be in the neighborhood of \$200,000 and my arrangement with owner is on a 10% basis. There is an immense tonnage of better than \$8.00 ore blocked and there is a large margin on this value. I state unqualifiedly, that this mine has the making of one of the greatest gold mines in the country, and would be so recognized by any competent economic geologist. If you are interested, will you wire me, and have one of your men meet me here in Reno, as soon as possible, and I will take him to the property in auto, three hours run from here. I refer you to Zeb Kendall, Tom Murphy, and Key Pittman of your town. I wish to again assure you that this is worth while, and no doubt your own experience will justify my urging haste, as good mines are scarce and have to be jumped for. Very truly yours, (Signed) M.E.E. Wadleigh Care Hotel Golden, Reno, Nev.

Reno, Nevada, Sept. 19th, 1912. COPY The Nevada Deep Mines property - known locally as the Como-Eureka - is situated ten miles from Dayton (Railroad point). Lyon County, Nevada, good country road to the mine. The District is an old one and was discovered about the first time Virginia had its boom, and but little surface work was done, and when the big boom struck Virginia, it was abandoned. Ore at that period, forty years ago, had to be bonanza to pay. In November 1910 two men took a bond upon the Como-Eureka, cleaned up old workings, drove many hundred feet of new drifts, and developed a large tonnage of mill ore, and also chutes of very rich high grade. The property was then sold to H. L. Taylor, who incorporated as the Nevada Deep Mines Co., which Company continued active development, tearing down the old antiquated mill, and have about completed a modern up-todate seventy five ton mill, that must have cost in the neighborhood of a hundred thousand dollars. Mill consists of ten stamps, plates, tube mills and continuous cyanide plant. They expect to start the mill the first of October. GEOLOGY No survey has been made by the U. S. Geological Survey, but this property is in a basin at head of east branch of Eldorado Canyon, this basin is surrounded by high hills and mountains and generally resembles Virginia City (distant about fifteen miles). The district is in late eruptives, the lode porphyry is andesite exactly as found in Virginia and also similar to the lode porphyry found in Tonopah and Goldfield. I believe

3 . 1 that this country and district was formed the same time as Virginia City, and is also contemporaneous during period of mineralization. There has been an immense amount of fissuring and several eras of deposition can be recognized and the ore is a replacement of the country rock. The mineral is almost entirely gold, easily amenable to modern mill practices, nearly complete extraction should be made. COMO EUREKA MINE The writer made the initial report of this mine, when presented to present owners, and was made on the basis of so much tonnage of Twelve Dollar ore exclusive of all high grade chutes opened and developed. Mr. Taylor had this report checked and verified by the following well known mining engineers, H. C. Cutler, Reno, (Recently Consulting Engineer of the Goldfield Consolidated) A. Hamilton, of San Francisco. They were unanimous in passing upon the property, and all found higher values in their extensive sampling than my vendee's report. Thereupon Mr. Taylor completed the purchase, paying a large amount for the property, and already has expended nearly as much in betterments. I have not visited the mine in some months, but hear that extended work has proved all that could be wished for. Quoting from memory are the following physical conditions: A vertical shaft 360 feet deep, with cross cuts to veins at 50-115-200 and 300 foot, and extended lateral work at points of contact. The mine has not been unwatered below the two hundred foot level in many years -- the mine was purchased by Mr. Taylor on showing above this level -- the most rigid search was made for old time miners who were familiar with conditions

on the 300 foot level, and all stated that ore was there in enormous quantities, with commercial values -- old dumps, claimed to be from this section gave values better than nine dollars.

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Adequate pumps are now installed and the Company is preparing to get below and also sink several hundred feet deeper. On the fifty foot level for a distance of fifty feet the values were better than twenty dollars. The one hundred and fifteen foot level for two hundred feet the average was better than thirteen dollars -- this level recently extended two hundred feet with better values so stated by present management, this vein averages ten feet across. A cross cut on this 115 level opened another parallel vein of eleven foot width, values better than ten dollars.

When I last saw this vein, little work had been done upon it, but on the two hundred foot level it causes what some think is a fault by joining the Eureka Vein. I believe it simply a shattered zone, entirely local, and should lower down in my opinion make for a large lenze of ore.

On the two hundred foot level the conditions pertain as on one hundred and fifteen, except for this several hundred feet of so called faulting.

There are a number of remarkably rich chutes of ore in the property. No cognizance was taken of them in estimating value of mine.

One place there is four feet of better than two hundred dollar ore, and another fourteen inches of three thousand dollar.

An adjoining claim owned by the Company, named "Star of the West" bonanza ore of great richness on the surface has been found. The one hundred and fifteen foot level is being extended to get under these rich chutes.

3 4 7 My original estimate of ore in sight was twenty thousand tons of twelve dollar per ton, and forty thousand dollars in the tailing pound. I believe the mine was now in sight a two hundred and fifty thousand dollars net. The Virginia and Truckee Electric Power Company's power line passes directly through this property. The low cost of its power make it possible to treat and mine the ores under \$3.50 per ton. I warmly endorse this property. I unqualifiedly state it will be a fine paying mine, and it is in competent and experienced hands. I travelled many miles and looked over many properties and it is very seldom I can make a statement of this character. (Signed) M.E.E. Wadleigh E.M. Dec. 7th, 1912 P.S. Since date this written, the Company has developed in sulphides on the 50' level of the "Star of the West" claim for a length of over 100 feet, 16 inches of ore running better than \$1700.00 per ton.