

(59)

Item 3

2090 0003

TONOPAH MINING CO. OF NEVADA		
REC'D APR -2 1913		
	J. S. A.	J. E. S.
SEEN		
ANS'D		

R e p o r t

o n

T H E R E X M I N E

G o l d C i r c l e D i s t r i c t

Nevada

By W.H. Sirdevan,  
March 1913.

Report on the REX MINE

GOLD CIRCLE DISTRICT

Elko County, Nevada.

Location and Accessibility.

The Rex Mine is located in the Gold Circle Mining District about one mile east from the town of Midas. It is forty-five miles (air line) north of Battle Mountain, and about sixty miles by road. The elevation is about 4500 feet at Battle Mountain and about 6500 feet at the Rex Mine. The nearest shipping point is Red House on the Western Pacific Railroad and 32 miles distant. Golconda- 16 miles west of Red House and on the Southern Pacific- is also used as a distribution point. An auto stage makes tri-weekly trips to Midas from Golconda carrying the mail and passengers. The fare is \$10 per person.

Property.

The property consists of one full claim called the "Rex" (Sketch 2) The Rex claim is located along the ore body and is a patented claim. In addition there are two unpatented claims - the "Windfall" and the "Caledonia" - covering water rights for the mill, and located in a canyon about 2000 feet east of the mine.

Cost of Supplies.

There are two general stores in Midas for supplying ordinary food supplies, clothing, and small equipment.

Native timber costs from 5 cents per running foot for lagging up to 6" in diameter to 20 cents per running foot for poles with butts up to 14" in diameter. This is a poor grade

of timber and does not last long. The costs are F.O.B. at the mine.

California lumber - 2"x12" to 14" by 14" costs about \$50 per thousand delivered.

Coal costs about \$25 per ton delivered.

Distillate (900# drums) costs 21 cents per gallon.

Hauling from Red House costs about \$12 per ton.

#### Ore Body.

The ore occurs at the contact of a light colored rhyolite with andesite. The ore is confined to the rhyolite which is fractured and silicified up to twenty feet from the contact. Some of the fractures are filled with quartz stringers. Most of this rhyolite is heavily iron-stained. The strike of this lode is about N.15°W and the dip is 70° to the west near the surface but varies from this in depth. The footwall - or the wall along the contact - is fairly well defined, but the hanging wall is not distinct.

#### Development.

The property is developed by a vertical shaft 200 feet in depth - with drifting carried on from the 65', 100', 150', and 200' levels. The 65' level has been stoped nearly to the surface, the richest ore having been taken from this level. Considerable stoping has also been done from the 100' level. Both of these levels are inaccessible at present as the ground has caved badly. The 150' level shows some water at the north end. The ore is soft, decomposed and is hard to hold. Timbering has been necessary wherever any work has been done. In drifting the sets are placed about 5 feet apart and less than this distance in some places. 4" to 6" half round lagging is used. The posts and caps are from 10" to 14" in diameter. Wherever any stoping was done square sets were used. This timbering was quite a hindrance in sampling, as they could not be disturbed without bringing down large masses of soft ore.

Also it was impossible to take any representative samples across the full width of the vein - since no cross cuts were driven from the main drift to the walls. The drifting did not follow either wall although it touched the foot-wall in one or two places. The lower levels were quite wet as all of the water from the upper workings drained into it - no pumping being done.

#### Mining.

The ore is soft and can be picked or barred down. Timbering must be kept even with the work, however, and the mining cost is increased on this account. Mr. Triplett - foreman of the Rex - says that four men working one eight hour shift kept the 35 ton mill in operation at full capacity. The mining cost under present conditions is about \$1.60 per ton. From statements made by the foreman and millman the gold distribution is very irregular, and the ore varies in the lower levels from \$2 to \$10 per ton - the latter figure representing the best grade of ore.

#### Milling.

A flow sheet of the mill is given on Sketch 3. The mill capacity is from 30 to 40 tons per twenty four hours. To maintain this capacity and secure a proper extraction of the silver in the ore two more agitation tanks must be added to the present equipment. The total labor payroll of the mill includes three mill men and two press men. The labor cost is about \$30 per day. The power cost using distillate with a 60 H.P. Fairbanks-Morse Gas Engine is about \$30 per day. It is estimated that this power cost can be reduced to \$15 per day by substituting California crude oil for the distillate. The Fairbanks-Morse Company will make this change in their engine for about \$500. The total milling cost with the present equipment is \$2.65 per ton, and the extraction is about 90%. The mill is in good condition and is ready to operate. Cost \$50,000

Total Costs.

The total cost of mining and milling with the present equipment is about \$4.25 per ton. By working the ore from the 150 and 200 levels the mill returns just about met the running expenses of the mine. Hence the average grade of ore mined must have been about \$5 per <sup>ton</sup> or less. With the mill and mine output increased the total cost could probably be reduced to \$3.50 per ton or less, thus making very low-grade ore workable.

Sampling.

Six samples were taken at the Rex - their location being shown on Sketch No.1. The results were as follows:

No.	Width	Silver	Gold	Total Value	Description
1	20'	1.36	.24	\$5.48	Across Vein
2	8	2.14	.06	\$2.27	Along strike of Vein
3	3.5	.66	.04	\$1.13	Across Face
4	4	1.20	.08	\$2.20	Across face stope
5	grab	.40	.04	\$1.00	Grab sloughed ore
6	6'3"	.96	.24	\$5.28	Vertical Sample.

With the exception of No.1 these samples are not representative of the full width of the ore zone, and will serve only to give an idea of the average grade of ore on these levels.

Conclusions.

While Sample No.1 shows twenty feet of ore that would pay to work - with costs as stated previously - the remaining samples indicate ore of much lower grade.

In view of the large amount of expensive timbering necessary for mining, the presence of water in the lower workings and the extremely low grade of the ore - this property is not a favorable prospect.

# THE TONOPAH MINING COMPANY OF NEVADA

EASTERN OFFICE  
572 BULLITT BUILDING, PHILADELPHIA, PA.

PLEASE ADDRESS ALL COMMUNICATIONS  
TO THE COMPANY TONOPAH, NEVADA

TONOPAH, NEVADA. March 4, 1913.

Mr. J. E. Spurr,  
Vice-Pres't, Tonopah Mining Co.  
Philadelphia, Pennsylvania

TONOPAH MINING CO. OF NEVADA		
REC'D MAR 10 1913		
	J. S. A.	J. E. S.
SEEN		✓
ANS'D		

Dear Sir:

Mr. Howell, of the Tonopah Banking Corporation, calls our attention to the Rex Mine at Golden Circle, about 40 miles North of Battle Mountain.

This ground is owned by the Horton Bros., Merchants and Bankers, at Battle Mountain. They have borrowed \$42,000 for use on the property from the Nixon Bank. They are now in such shape that Mr. Howell says the property can be gotten for \$45,000.

The vein is said to be 14 feet wide and to assay about \$9.00 in gold. A crosscut tunnel was run 900 feet to connect with a 200-ft. shaft. The tunnel seems to have been necessary on account of the water encountered in the shaft.

A five-stamp mill with cyanide has been installed and has been operated, the necessary water having been obtained from the tunnel. The property is now shut down. About 100 men are working in this district. The Elko Prince adjoining has been bonded for \$250,000.

Roads from Battle Mountain to Golden Circle are reported as very good. The Hortons could probably furnish machines.

Yours truly,

W. H. Blackburn, (S)  
Superintendent.

WHB/S.

# THE WESTERN UNION TELEGRAPH COMPANY

INCORPORATED

25,000 OFFICES IN AMERICA.

CABLE SERVICE TO ALL THE WORLD

THEO. N. VAIL, PRESIDENT

BELVIDERE BROOKS, GENERAL MANAGER

RECEIVER'S No.

TIME FILED

CHECK

**SEND** the following message subject to the terms  
on back hereof, which are hereby agreed to }

Philadelphia, March 10, 1913.

W. H. Blackburn,  
c/o Tonopah Mining Co. of Nevada,  
Tonopah, Nevada.

Your telegram ninth. Have Sirdevan examine Rex property.

J. E. Spurr

Chge: Tonopah Mining Co.

# ALL MESSAGES TAKEN BY THIS COMPANY ARE SUBJECT TO THE FOLLOWING TERMS WHICH ARE HEREBY AGREED TO

To guard against mistakes or delays, the sender of a message should order it REPEATED, that is, telegraphed back to the originating office for comparison. For this, one-half the unrepeated message rate is charged in addition. Unless otherwise indicated on its face, THIS IS AN UNREPEATED MESSAGE AND PAID FOR AS SUCH, in consideration whereof it is agreed between the sender of the message and this Company as follows:

1. The Company shall not be liable for mistakes or delays in the transmission or delivery, or for non-delivery, of any UNREPEATED message, beyond the amount received for sending the same; nor for mistakes or delays in the transmission or delivery, or for non-delivery of any REPEATED message, beyond fifty times the sum received for sending the same, *unless specially valued*; nor in any case for delays arising from unavoidable interruption in the working of its lines; *nor for errors in cipher or obscure messages.*

2. In any event the Company shall not be liable for damages for any mistakes or delay in the transmission or delivery, or for the non-delivery of this message, whether caused by the negligence of its servants or otherwise, beyond the sum of FIFTY DOLLARS, at which amount this message is hereby valued, unless a greater value is stated in writing hereon at the time the message is offered to the Company for transmission, and an additional sum paid or agreed to be paid based on such value equal to one-tenth of one per cent. thereof.

3. The Company is hereby made the agent of the sender, without liability, to forward this message over the lines of any other Company when necessary to reach its destination.

4. Messages will be delivered free within one-half mile of the Company's office in towns of 5,000 population or less, and within one mile of such office in other cities or towns. Beyond these limits the Company does not undertake to make delivery, but will, without liability, at the sender's request, as his agent and at his expense, endeavor to contract for him for such delivery at a reasonable price.

5. No responsibility attaches to this Company concerning messages until the same are accepted at one of its transmitting offices; and if a message is sent to such office by one of the Company's messengers, he acts for that purpose as the agent of the sender.

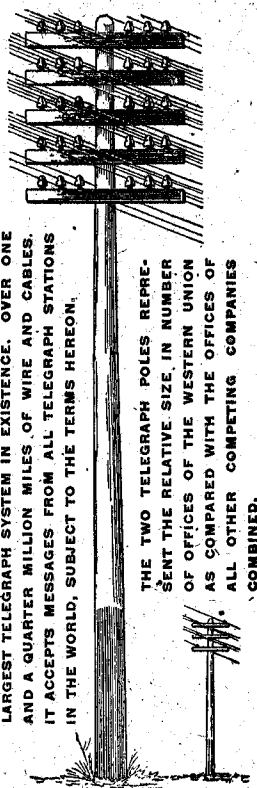
6. The Company will not be liable for damages or statutory penalties in any case where the claim is not presented in writing within sixty days after the message is filed with the Company for transmission.

7. *No employee of the Company is authorized to vary the foregoing.*

THEO. N VAIL, PRESIDENT

BELVIDERE BROOKS, GENERAL MANAGER

THE WESTERN UNION TELEGRAPH CO. IS THE LARGEST TELEGRAPH SYSTEM IN EXISTENCE. OVER ONE AND A QUARTER MILLION MILES OF WIRE AND CABLES. IT ACCEPTS MESSAGES FROM ALL TELEGRAPH STATIONS IN THE WORLD, SUBJECT TO THE TERMS HEREON.



WESTERN UNION  
TELEGRAPH  
COMPANY

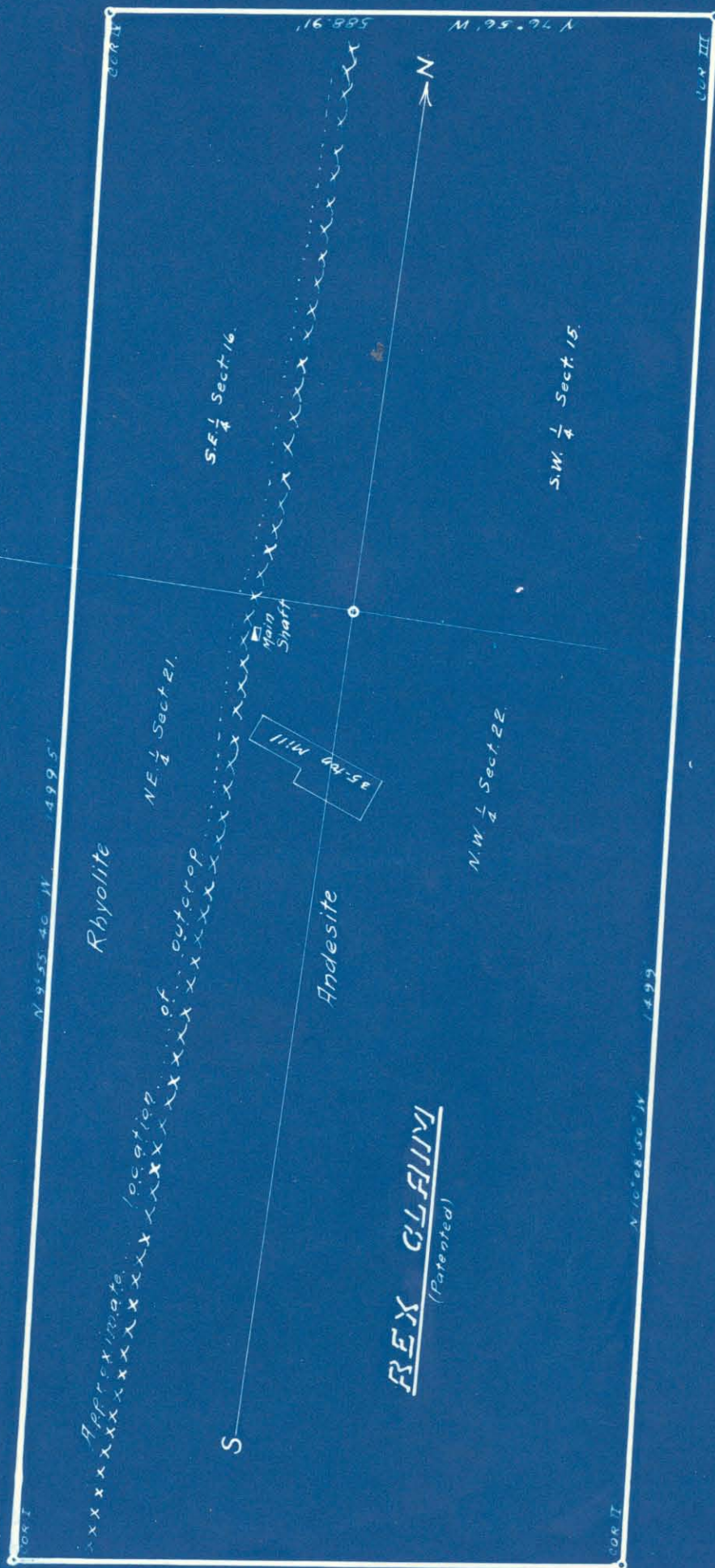
ALL  
COMPETING  
COMPANIES

**MONEY TRANSFERRED BY TELEGRAPH AND CABLE TO ALL THE WORLD**



# Property Map

Scale: 1" = 150'



REX CLAY  
(Patented)

Also two claims "Windfall" and "Caledonia" located in bottom of canyon these control water rights for the mill.

Sketch-II

Mich. 1913  
W.H.S.

Idem 3

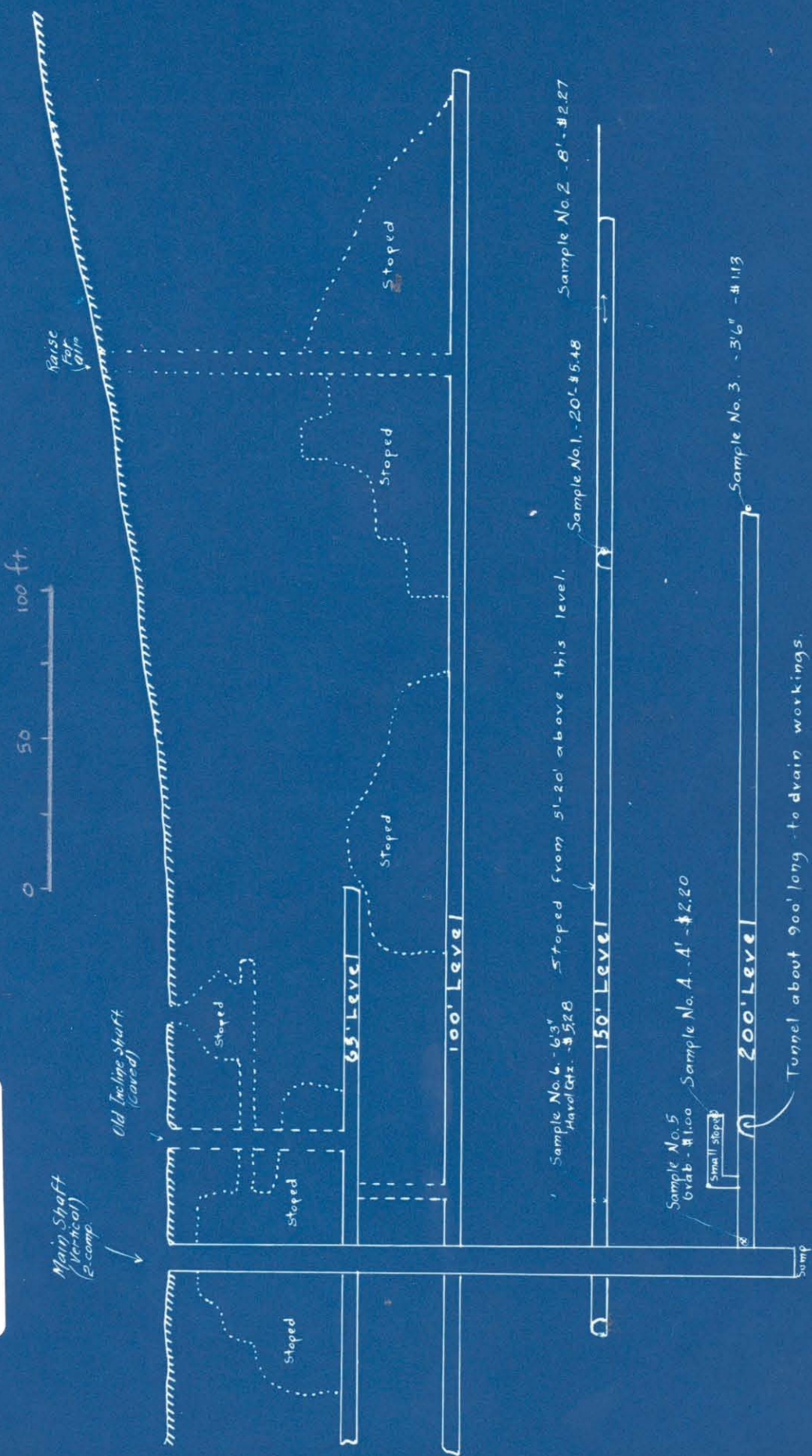


# Longitudinal Section

of  
Rex Workings

Scale: 1"=50'

0 50 ft.



Sketch - I.