

new. Nov. Sec 12/1/1974
6/72 Jeff. B. Hunt

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Properties of:

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Talullah Mine - Pershing Co.
Black Hawk Mine

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San Francisco, California.

December 4, 1933.

CERTIFICATE

I hereby certify that the following appended summary report and the accompanying exhibits have been compiled under my supervision, and that all field notes, assay data and information relative thereto are on file at the office of the Umatilla Tonopah Mining Company.

Chas. G. Patrick E.M. and C.E.

LOCATION.

The properties of the Umatilla Tonopah Mining Company are situated at the northerly end of the Pahute Range of mountains, in the Sierra Mining District, Parashong County, Nevada, and in Sections 4, 5, 8 and 9 of Township 33 N. Range 36 E., M. D. B. and L. The main line of the Southern Pacific Railroad is approximately four miles westerly, and the transcontinental Victory Highway is three miles westerly from the mine. Mill City, a station on the Southern Pacific RR., is 8 miles to the southwest and Cosgrove, a siding, is 6 miles to the northwest. Winnemucca, an important city and trading center, is 26 miles from the mine.

See Exhibit 1.

HISTORY

The Sierra Mining District is one of the oldest in Nevada, having been formed during the California gold rush. The settlement of Dun Glen, in this district, was established as a military base to protect the Overland Trail. The Calullah Mine, as the subject of this report was originally known, was one of the earliest discoveries and had been in operation for some years prior to 1868, when first mentioned by Rosaliter W. Raymond in the U. S. Government publications entitled "Mineral Resources of the States and Territories West of the Rocky Mountains." Raymond reports from 1868 to 1874, stating that first class ore shipped from this mine assayed \$550 per ton and second class ore \$140 per ton.

Recent history of the district begins in 1908, when the "Black Hole" mine, about two miles from the Umatilla properties, came into prominence as a producer of gold. It is stated that from 1908 to 1912 the district produced nearly \$1,000,000, mainly from the Black Hole mine.

The Umatilla properties were worked desultorily under various ownerships from about 1912 to 1927, principally by individuals who found and removed lenses of rich ore close to surface, which ore was shipped to smelters. In 1927 the Umatilla Tonopah Mining Company purchased the eleven mining claims which are the subject of this report. The company carried on development steadily until the financial crash of 1929. Since the result of this work was to place in sight a large tonnage of payable ore, the company was then planning the erection of a milling plant of 100 tons per day capacity. The financial situation that has prevailed since 1929, together with the decline of silver prices, prevented the company from carrying out its plans.

At this time the price of silver has so far increased and the dollar value of gold is so much greater than heretofore, that the developed ore has a value fully as high as it had prior to 1929, with prospects of great enhancement in value resulting from still higher prices for gold and silver which are freely predicted.

CORPORATE SET-UP AND TITLES

The Umatilla Tonopah Mining Company was organized under the laws of the State of Nevada in 1912. Authorized capital is 1,500,000 shares of the par value of \$1.00 each. As organized, the stock is assessable but may be made non-assessable at any time by action of the stockholders.

The eleven lode mining claims which comprise the company's property are held by location under the U. S. Mineral Land Laws. All have been conveyed to the Umatilla Tonopah Mining Company, which corporation holds full, complete and unencumbered title to the same.

In addition to the deeded mining property, the company owns 50,000 shares of Montana Tonopah Mining Company and 57,742 shares of Tonopah Western Consolidated Mining Company. These companies own large estates at Tonopah, Nevada.

PHYSICAL CONDITIONS

The property is situated in the low, west-facing foothills of the range, some 600 feet above the floor of the Humboldt River Valley. Elevation at the camp is 5000 feet above sea level. The climate is equable, with temperature rarely as low as zero in the winter. Snowfall is light and is no obstacle to transportation or operation in general. All mines in this section work the year around without any hindrance whatever due to climatic conditions.

Nearness to the railroad and main highway system results in exceptionally low freight costs by rail or truck. A good road connects the mine with the Victory Highway. The vicinity is a large meat producing and agricultural area which makes toward low cost of domestic supplies.

An ample water supply is available from the mine and from close-by springs and can be augmented to whatever extent desired by pumping from the valley.

The ground stands well, requiring almost no timbering, thus eliminating an ordinarily large item of mining expense.

Electric power may be had by tapping the Nevada Valleys Power Company's lines at a distance of about 8 miles. The experience in this and other sections has been that power derived from oil engines of the Diesel or semi-Diesel type can be had at much less cost than can electric power. An inquiry has disclosed that a 150 H.P. semi-Diesel plant, with 25 miles transportation factor and a more expensive fuel than now required, manufactured power at little more than \$4.00 per H. P.-month. It seems certain that a 250 H.P. plant, such as is recommended for this operation, can deliver power at a cost of not more than \$3.00 per horsepower-month.

PROPERTY AND EQUIPMENT

The mining property of the company consists of eleven lode mining claims, about 200 acres, located in a solid block. It is apparent that the locations were made with a view to covering a wide ore zone for a distance of 4650 feet along its northeasterly-southwesterly course. Including the main andesite dyke, the veins contained in the sedimentaries southeast of the dyke, and the fissures lying northwest of the dyke, the ore zone has a superficial width of 1200 feet. The claims are well placed to effectually include all of the most promising outcrops and to provide tunnel sites and mill site.

The camp is located close to the portal of the 500 foot level adit. There is a bunkhouse to accommodate 20 men, mess house with accommodations for cook, blacksmith shop, compressor house and office building. The compressor is a direct-connected hot head type good for four to five jackhammer drills. Some drilling equipment is on hand. There is the usual complement of cars, blacksmith equipment and small tools.

GEOLOGY

The geology of the vicinity is characterized by thick beds of sedimentary rocks, which are classified as Jurassic and Triassic by the U. S. Geological Survey. The time is early tertiary. The sedimentaries on the Umatilla properties are bedded limestones and calcareous slates and shales.

The sedimentaries have been intruded by two types of igneous rocks, one decidedly porphyritic and classed as andesite, and the other being diabase. Both types appear as dykes, with a northeasterly-southwesterly strike and with dip close to the vertical. Extensive development has been conducted along the andesite dyke and but little along the diabase dykes, probably due to the fact that mineralization in the vicinity of the andesite has been unusually intense. In other parts of the same district the diabase dykes are known as "ore makers".

The solutions accompanying the andesite dyke are directly responsible for the enriched zone following either wall and also for an important group of veins making out easterly from the dyke and following, generally, the bedding of the sedimentaries.

On the northwesterly side of the dike are several fissures, cutting the bedding of the sedimentaries, with a strike approximately parallel to the dyke and dipping northwesterly.

Since the major portion of the development done to date has been in and along the andesite dyke and upon veins in the sedimentaries southeast of it, a more detailed description of these areas is given. The intrusion of a hot, acid igneous rock into and through cold, alkaline sedimentaries, has resulted in a quite ideal instance of a contact-metamorphic deposit, which is particularly notable on the easterly wall of the dyke. Marbleization

and sericitization is pronounced and extends fifty feet or more into the sedimentaries. The metamorphosed zone is here referred to as the "contact zone". Within this zone are numerous veins, masses or lenses of quartz, often overlapping. These sometimes occur partly within the andesite and partly within the contact zone and sometimes fully fifty feet from the andesite. The quartz masses are usually from 4 to 12 feet in thickness and 100 or more feet along their dip and strike. They are much enriched, the valuable minerals being gold, silver and lead, with occasionally a small amount of copper and zinc. The material encasing the quartz masses is also mineralized to varying extent. It can be said that the entire contact zone is ore, the grade of which, as mined, would be largely controlled by the widths necessary to mine in order to include all quartz masses encountered.

Making out from the andesite dyke, and following the bedding of the sedimentaries upward and eastward, are several veins lying entirely within the sedimentaries. Two of these have been cut on the 300 foot level and at least one other has been located on surface. It is probable that still others exist.

DEVELOPMENT

The developmental and exploratory work in the mine has been well planned to locate and explore important sections of the ore zone, and also to render the ore available for economical extraction. The objectives of the work have been to prove the ore bearing character of the veins and deposits for a distance of some 1250 feet along their strike and to expose them at successive levels to a depth of 500 feet from the outcrops.

The contact zone on the east wall of the andesite dyke is obscured by soil and detritus in the vicinity of the vertical shaft which connects with the Upper Adit (300 foot level). At a point 310 feet southwesterly from the shaft erosion has been sufficient to uncover the outcrops and these have been explored for a further southwesterly distance of more than 300 feet. (N. Pit, S. Pit, B. O. Cut on Exhibit 2). This work consists of several pits and cuts and an adit 155 feet in length with 60 feet of lateral work from it. Two large quartz veins are disclosed in this work, approximately parallel and in close proximity to each other. Both show a good grade of ore. The downward extension of these veins should be encountered in drifts run southwesterly in the contact zone on the 300 and 500 foot levels.

Another vein (W. Vein on Exhibit 2) is parallel to and 100 feet northeasterly from the foregoing. This has not yet been correlated with veins encountered in the lower workings but is possibly in the contact zone on the west wall of the andesite dyke. The vein is 3 to 4 feet wide, is opened by cuts for about 70 feet along its strike and contains good ore.

At the north end of the Silver Queen claim a cut exposes a 2 foot vein of good ore, which is also apparently within the contact zone. Just beyond the south boundary of the Silver Queen

claim, on the Sierra Platada claim, a cut exposes a vein apparently in the contact zone. The ore here is of good grade, with a relatively high gold content.

Making out from the contact zone to the east, and contained within the sedimentaries, is another vein from 2 to 6 feet in width, containing excellent ore. This has been opened by cuts for a distance of 200 feet along its strike. (Upper Cut and Evans Cut on Exhibit 2). This vein should be encountered in the extensions of the Upper and Lower Adits.

About 300 feet southeasterly from the contact zone is a vein contained within the sedimentaries (E. Vein on Exhibit 2). It contains ore of above average grade and should be cut in the extensions of the Upper and Lower Adits.

Summarizing the superficial exploratory work, the contact zone and veins contained in it have been proven for a distance of 1250 feet along the strike. Three veins in addition to those in the contact zone have been exposed.

The vertical shaft has been sunk in the contact zone 185 feet to connect with the 300 foot level. (See Exhibit 4). At 65 feet a crosscut northwesterly of 25 feet enters a 4 foot vein lying along the andesite dike, and a drift of 51 feet follows the vein. On the same level there is a crosscut 162 feet southeasterly. At 25 - 78 feet from the shaft it passes through a diabase dyke, with ore showing on both contacts. At 120 feet it cuts a 3 foot vein in the sedimentaries which correlates with Vein No. 2 on the 300 foot level. The remainder of the crosscut is in sedimentaries.

The Upper Adit (300 foot level) is 484 feet in length and its course is approximately at right angles to the strike of the contact zone. At about 300 feet from the portal it cuts Vein No. 1 which, at this point, appears to lie within the andesite dyke and close to its easterly wall. This vein has been drifted on for 140 feet and has been stoped 15 to 20 feet both above and below the level. A winze goes down on this vein to a point 48 feet below the level, with excellent ore at the bottom, where a drift follows the vein 25 feet.

At 340 feet the Adit cuts Vein No. 2, which makes out from the contact zone just below the level and correlates with the vein cut at 120 feet in the east crosscut from the vertical shaft. (See Exhibit 4). A drift follows this vein 120 feet and it is stoped 20 feet above the level.

At 465 feet the Adit cuts Vein No. 3, which lies in the sedimentaries. This vein has been drifted on 90 feet and is stoped about 10 feet above the level.

-Note: The Upper Adit workings comprised the early development of the mine and from the stopes above described came the ore mentioned by Raymond (See Title "History").-

The Lower Adit (500 foot level) is 1086 feet in length.

At 755 feet from the portal it enters the andesite dyke. Ore occurs along the west wall of the dyke but has not been followed. At 860 feet the Adit enters the contact zone lying on the east wall of the dyke. Drifts have been run northeasterly and southwesterly within this contact zone for a distance of 225 feet. One large vein, or lense of quartz ore is followed to the southwest and is in close proximity to the dyke. To the northeast the drift bears to the east and crosscuts the contact zone. It then enters another quartz lense which is apparently in the contact zone about 50 feet from the dyke.

A raise starts from the south drift about 15 feet south of the Adit and follows a vein which here makes out from the contact zone and into the sedimentaries. This vein correlates with Vein No. 3 on the 300 foot level (See Exhibit 4).

A vertical raise starts from the back of the raise above referred to and connects with the 300 foot level at Vein No. 1.

The Lower Adit continues beyond the contact zone to and through a diabase dike.

The 500 foot level development, including the raise connecting with the 300 foot level, thoroughly demonstrates the existence of the contact zone and the occurrence of lenses or veins of quartz within the zone. The width of the zone is 50 feet and the quartz masses are from 4 to 14 feet in width.

There is a total of more than 3000 feet of underground work done upon the property.

METALURGY

Due to the character of the ore and the metallic content, gold, silver and lead, there is no doubt, as shown by the tests made, but that bulk flotation is the most satisfactory process of treatment. The primary reason for this is that a mill can be designed to operate, by this method, at a minimum cost per ton, as well as at a minimum investment cost, and still make as high, if not higher recovery than any other method. Another factor in favor of flotation is that a relatively high lead content will occur in the concentrates, which will reduce smelting charges and very materially add to the value of the product.

Exhibit 9 shows the results obtained by the International Smelting and Refining Company on flotation of this ore. They make a recovery of from 92% to 96%. While the estimate made in this report is only on a 90% recovery basis, still it is possible in actual operation to make higher recoveries on all metals.

ORE RESERVES

To gain a comprehensive idea of the ore reserves it is necessary to analyse Exhibit 8, in connection with the maps, Exhibits 2, 4, 5 and 6. This will enable one to fully grasp the proven conditions as well as to assume the potential possibilities.

The tonnage averages are figured from the actual developed areas and from actual mine sampling. Employing this method the results arrived at are conservative and undoubtedly, upon actual mining, there will develop an even greater tonnage than estimated.

According to Exhibit 8 the actual ore in place is 75,500 tons, average value \$20.15 per ton, or a gross value of \$1,521,335.00.

POTENTIAL POSSIBILITIES

Referring to Exhibit 2 and the sampling and assay sheet, it will be seen that the actual area involved in estimating ore reserves is but about one-sixth of the proven area of enrichment as shown on the surface. With this in mind it is not at all improbable that, with proper development, approximately 300,000 tons of ore can be made available above the 500 foot level.

Every indication points to values continuing with depth, hence if development is carried to no more than a further 400 feet in depth, the possibilities range from 75,000 to 300,000 tons of additional ore thus to be developed, or an ultimate of from 150,000 to 600,000 tons of probable ore which may be estimated

PROPOSED DEVELOPMENT AND OPERATION

Since there are ample ore reserves to insure the operation of a 100 tons daily capacity mill for at least two years, it is recommended that a 100 ton mill be erected immediately. This will provide an immediate financial return in addition to making a liberal allowance for an extended development campaign.

In case the maximum ore reserves are developed, and a much larger production is economical, the 100 ton unit will still be efficient as it will be so designed that it will make a unit in an operation up to 500 tons daily.

The estimate is made of a capital of \$75,000 for operations and, as is seen from Exhibit 10, the full construction requirements can be met by this fund and still have a working capital of \$25,000.

Immediately upon the completion of the installation of the power plant and the equipment of the mine, a systematic development program should be undertaken to explore the area above the 500 foot level by drifts to the full extent of the surface enrichment and also, by use of the Mitchell diamond drill, crosscuts should be run at regular intervals. By this means the full extent of the ore bodies can be most effectively determined.

As soon as the above mentioned zone has been developed, information will then be available so that development at depth can be intelligently undertaken.

Due to local conditions, by shrinkage stoping and with proper equipment, the ore can be mined and milled at a minimum cost, as is shown in Exhibit 11.

CONCLUSION

In summing up the foregoing report the economic and physical conditions lead to but one conclusion, which is that the possibilities are great for future development into a major operation.

The writer is very favorably impressed by the fact that the Company records are so complete and that the values of the ores have been checked.

Besides the company sampling, which is quite complete, two check samplings were made:

O. E. Schiffner E. M. whose average showed:

Gold .09 oz. -- \$ 2.70
Silver 36 oz. - 16.20

Total \$18.90 per ton

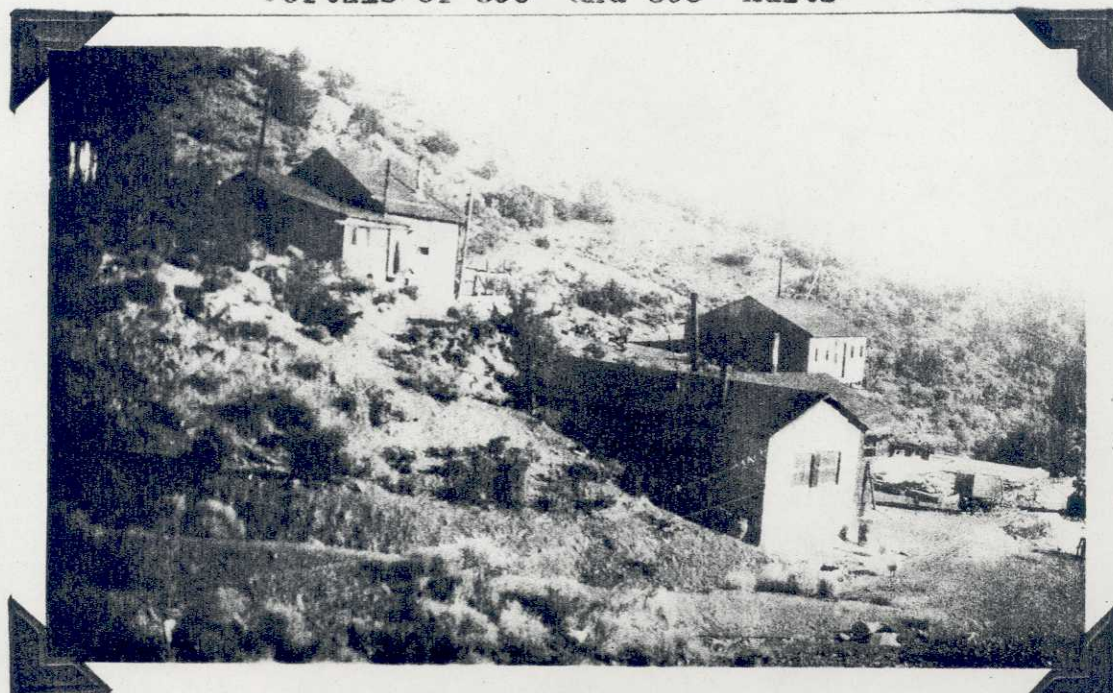
M. E. Pratt E. M. whose average sampling showed: \$18.20 per ton.

Respectfully submitted:

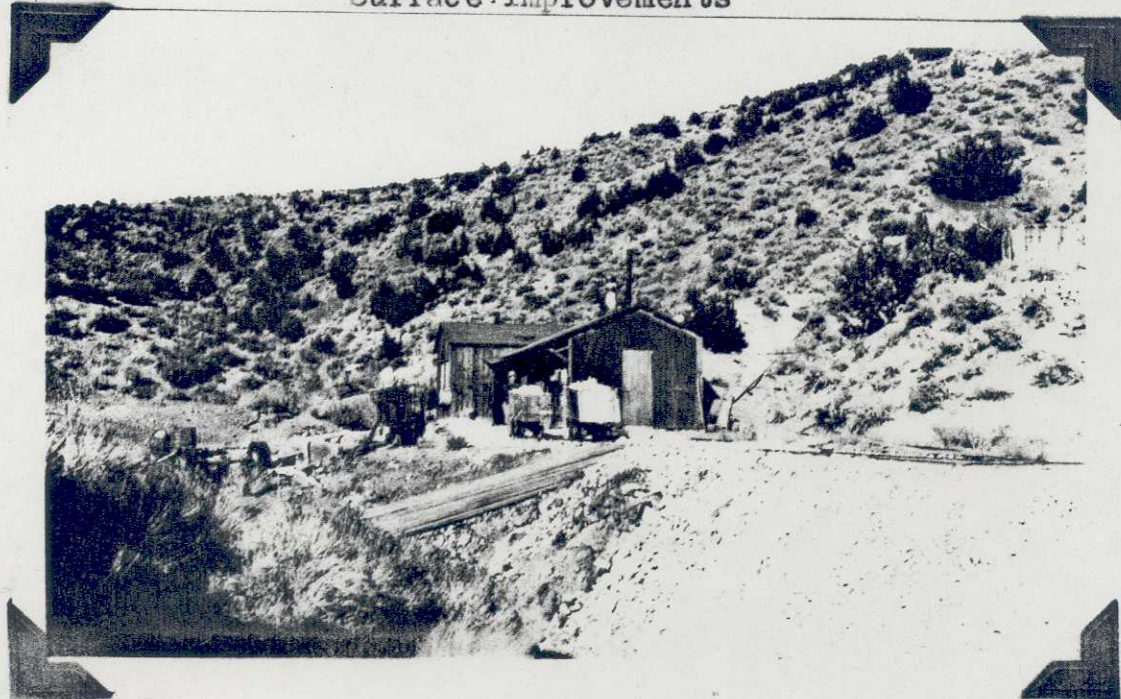
Chas. G. Patrick E.M. & C.E.



Portals of 300' and 500' Adits



Surface Improvements

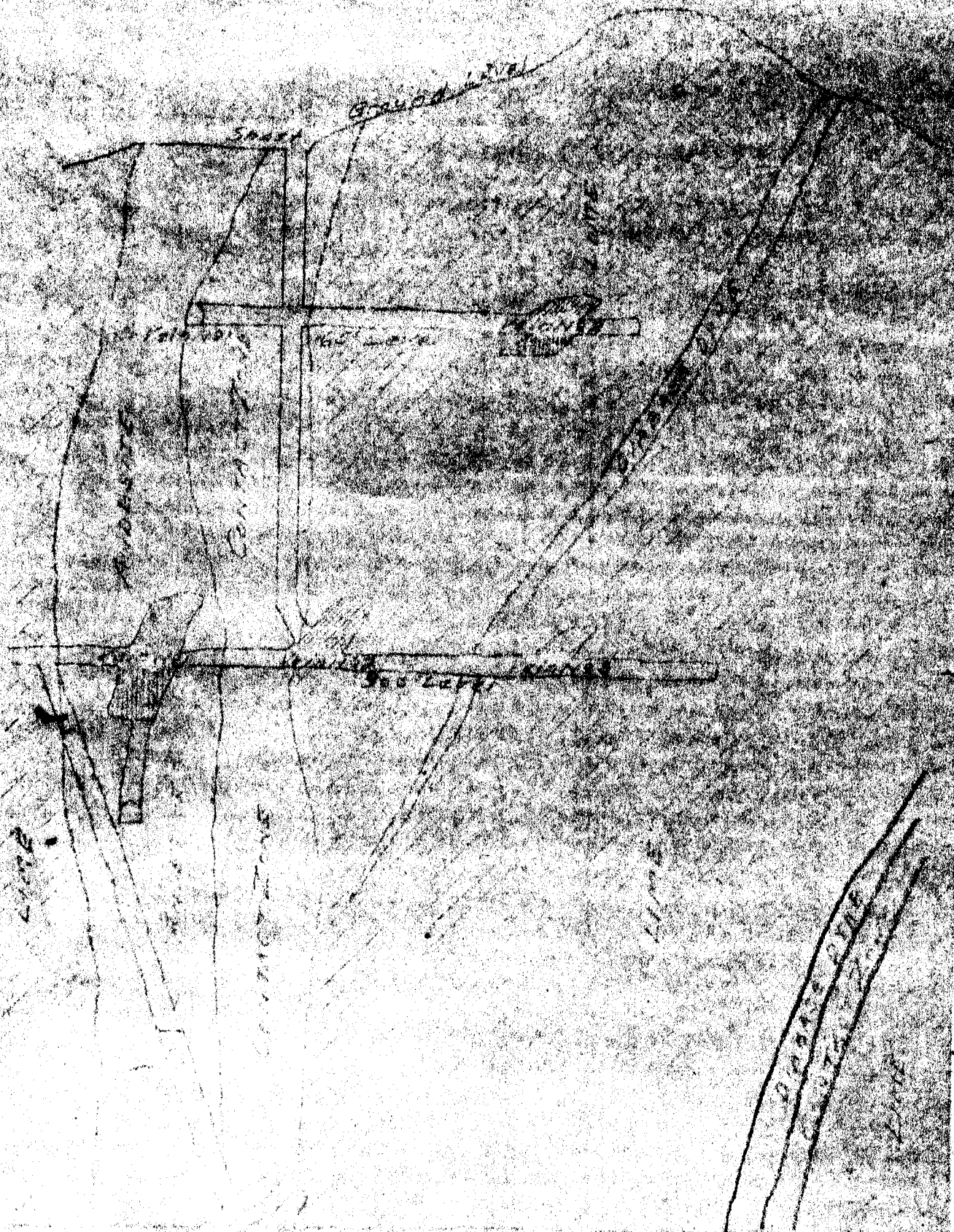


Portal 500' Adit

UNATILLA TONOPAH M. CO.
CROSS SECTION WEST TO EAST
UNDER 24110 WORKINGS
Scale 1" = 50'



UMATILLA TOMBACUM CO
 CROSS SECTION OF SOUTH NORTH
 L. V. CH. O. U. M. WORKINGS
 Scale 1:400



Section 14-15 E 1944

Section 14-15 E 1944

Section 14-15 E

115'
10'
Portals

100'
10'
Portals

LEGEND

65' Layer Blue

300' Layer Green

100' Layer Red

Slopes Diagonal Shading

Winzes Vertical Shading

ASSAY SHEET

<u>Sample Number</u>	<u>Description</u>	<u>Oz. Au.</u>	<u>Oz. Ag.</u>	<u>% Pb.</u>
1.	West Drift 65' level. Six 2' cuts spaced 10'. Hanging wall section	.02	18.40	
2.	West Drift 65' level. Six 2' cuts spaced 10'. Footwall section	Tr.	2.82	
3.	West Drift 65' level. Character sample taken at three points. Selected ore.	.12	234.10	
4.	East Crosscut 65' level. 25' East of shaft. 4' cut in diabase dyke.	Tr.	3.66	
5.	East Crosscut 65' level. 78' east of shaft. 5" cut on diabase-lime contact.	Tr.	5.56	
6.	East Crosscut 65' level. 120' east of shaft. Four 3' cuts on vein	.01	51.03	
7.	East Crosscut 65' level. 120' east of shaft. 12" cut in footwall zone.	Tr.	4.72	
8.	East Crosscut 65' level. 120' east of shaft. Selected material, 5 cuts.	Tr.	30.04	14.00
9.	300' level. Vein No. 1 So. stope. Six 50" cuts on vein.	.015	12.26	1.00
10.	300' level. Vein No. 1. So. drift. Pillar in underhand stope. 42" cut	.015	16.80	1.50
11.	300' level. Vein No. 1. No. end of So. stope. 30" cut.	Tr.	3.90	
12.	300' level. Vein No. 1. Center Back of stope. Character sample.	Tr.	82.62	9.95
13.	300' level. Vein No. 1. Bottom of winze, south end of underhand stope.	.15	110.00	
14.	300' level. Vein No. 2. No. end of So. stope. 24" cut.	Tr.	7.18	
15.	300' level. Vein No. 2. No. end of So. stope. 24" cut.	Tr.	6.08	

<u>Sample Number</u>	<u>Description</u>	<u>Oz. Au.</u>	<u>Oz. Ag.</u>	<u>% Pb.</u>
16.	300' level. Vein No. 2. Back So. stope. Character sample	Tr.	44.70	14.70
17.	300' level. Vein No. 3. South drift. 33' along vein. Four 26" cuts, south end.	Tr.	6.40	8.00
18.	300' level. Vein No. 3. Central 34 feet of drift. Five 30" cuts. Sulphides avoided.	Tr.	6.60	8.00
19.	300' level. Vein No. 3. North 24' of drift. Four 33" cuts. Sulphides avoided.	Tr.	4.00	5.00
20.	300' level. Vein No. 3. Breast of South Drift. 18" cut.	Tr.	6.40	8.00
21.	300' level. Vein No. 3. No. end of So. drift. 8" cut. Character sample.	.70	993.20	13.77
22.	500' level. So. Drift. So. Raise 12" cut on vein	1.32	532.00	8.9
23.	500' level. So. Drift. So. Raise 24" cut on vein	.24	515.50	
24.	Raise between 500' and 300' levels. 75' to 90' above 500'. 15 feet wide	.16	9.30	
25.	Raise between 500' and 300' levels. 200' above 500'. 2' cut	1.65	7.80	
26.	Raise between 500' and 300' levels. 70' above 500'. 15 feet wide	.055	5.20	
27.	500' level. North drift. Breast. 3' cut	.03	2.40	
28.	500' level. No. Drift. Footwall at Raise. 4' cut in dyke matter.	.21	1.73	
29.	500' level. No. Drift raise. Car sample from all muck. Average width 4'. Dyke matter	.165	6.36	
30.	500' level. No. drift. 75' No. of Adit. 4' cut. Dyke matter	.13	2.20	
31.	500' level No. drift. 25' north of Adit. 2' cut	.13	6.36	
32.	500' level. No. drift. 25' north of Adit. 4' cut, footwall	.03	1.02	

<u>Sample Number</u>	<u>Description</u>	<u>Oz. Au.</u>	<u>Oz. Ag.</u>	<u>% Pb.</u>
33.	500' level. Intersection of Adit and drifts	.13	76.00	
34.	500' level. So. Drift. No. 1 raise. 14' cut	.06	4.00	
35.	500' level. So. drift. Back of No. 1 raise. 4 1/2' cut	.29	23.00	
36.	500' level. S. Drift. 34' south of Adit. Average of 6' vein	.04	22.50	1.30
37.	500' level. S. Drift. 50' south of Adit. Average of 4' vein	.06	17.90	3.40
38.	500' level. S. Drift. 60' south of Adit. Average of 6' vein	.13	43.60	10.00
39.	500' level. S. Drift. 75' south of Adit. Average of 7' vein	.04	20.40	4.13
40.	500' level. Breast of main adit 4 1/2' cut	.02	1.56	
41.	500' level. S. Drift. 100' south of Adit. Average 5' vein	.06	13.80	0.45
42.	500' level. S. Drift. Raise No. 2. Average of 10'	.04	24.60	
43.	500' level. S. Drift. 5' south of Raise No. 2. 4' cut	.04	1.00	
44.	500' level. S. Drift. South breast. 4' cut	.13	1.00	
45.	500' level. West wall of andesite dyke. 2 1/2' quartz	.06	7.00	
46.	North end surface cut. 24"	Tr.	39.60	
47.	B. O. surface cut. 43"	.03	59.90	
48.	East Vein outcrop for 200'	.02	52.00	
49.	Upper Cut. N. end. 17"	Tr.	10.74	
50.	Upper Cut. N. end. 22"	.02	39.64	
51.	Evans Cut. Average three 24" cuts	.04	23.00	
52.	N. Pit. Middle vein. 43" cut	.02	32.16	
53.	S. Pit. Middle vein. 55" cut	.03	13.50	
54.	West Vein. Pit. 42" cut	Tr.	12.20	
55.	South end outcrop	.18	13.06	

SCHEDULE ORE RESERVES

65 foot Level.

Two 4' veins open for length of 150' with 65' backs

Gives Gross tonnage 6500 tons to surface.

Average of 7 mine samples and 10 surface samples

gives Au. .035 oz., Ag. 41.04 oz., Pb. 3%. Gold at \$34.00

Silver at 45¢ and lead at 4½¢ gives value \$22.35 per ton.

Gross value 65' Level \$145,275.00.

300 foot Level.

Three 4' veins open for length of 200' with 120' backs

gives gross tonnage of 24,000 tons.

Average of 15 mine samples gives Au. .06 oz., Ag. 27.56 oz.

Pb. 4½%. Gold at \$34.00, silver at 45¢, lead at 4½¢ gives value of \$18.49 per ton.

Gross value 300' Level \$343,760.00.

500 foot Level.

Average width of all samples crosscutting ore zone 12 feet.

Length ore zone 225 feet, with 200 feet backs gives gross

tonnage 45,000 tons. Average of 24 mine samples, character

sample out out, gives Au. .16 oz., Ag. 34.3 oz. Pb. 2.3%.

Gold at \$34.00, silver at 45¢, lead at 4½¢ gives value of \$22.94 per ton.

Gross value 500' Level \$1,032,300.00.

<u>Summary:</u>	<u>Level</u>	<u>Tonnage</u>	<u>Value per ton</u>	<u>Gross</u>
	65	6,500.	\$22.35	\$145,275.00
	300	24,000.	18.49	343,760.00
	500	<u>45,000.</u>	<u>22.94</u>	<u>1,032,300.00</u>
Totals		75,500.	Av. \$20.15	\$1,521,335.00

INTERNATIONAL SMELTING COMPANY-CONCENTRATION DEPT.

Ore Testing Summary

Date: March 8, 1929.
 Test on: Matilla Tonopah.
 Machine used: Fahrenwald Flotation.

Test No. 1-1

(To produce high grade concentrate. Weight 6.7% of whole)

	<u>Heads</u> <u>Assay</u>	<u>Tails</u> <u>Assay</u>	<u>Concentrates</u> <u>Assay</u>	<u>Concentrates</u> <u>Per Cent</u>	<u>Tails</u> <u>Per Cent</u>
Oz. Silver	32.78	2.59	470.2	92.6	7.4
Oz. Gold	.02	.01	.3	67.4	32.6
% Lead	1.0	.2	13.2	82.2	17.8
% Copper	.2	.05	1.2	62.0	38.0
% Iron	3.8	2.6	18.8	31.0	69.0

Test No. 1-2

(To produce low grade concentrate. Weight 14.8% of whole)

Oz. Silver	32.78	1.25	217.77	96.8	3.2
Oz. Gold	.02	.005	.13	81.7	18.3
% Lead	1.0	.2	5.9	83.7	16.3
% Copper	.2	.05	1.56	75.6	24.4
% Iron	3.8	1.5	13.6	47.5	52.5

Screen Analysis

<u>Screen Size</u>	<u>% Weight of Total</u>
Plus 65	6.0
" 100	9.0
" 150	13.6
" 200	9.4
Minus 200	62.0

Construction Schedule:

Buildings and Equipment:

Building Improvement	\$1,500.00	
Truck	<u>1,500.00</u>	\$3,000.00

Mine:

Miscellaneous Tools etc	2,500.00	
Repairs to Compressor	<u>500.00</u>	3,000.00

Power Plant:

250. H.P. Diesel Engine		
Direct Connected Generator	5,000.00	
Foundations	1,000.00	
Electric Installation	1,500.00	
Building	<u>1,000.00</u>	8,500.00

Mill: (100 Ton Unit)

Buildings	2,500.00	
Ore Bins & Feeders	1,000.00	
6 ft. Ball Mill	5,500.00	
Classifiers	1,500.00	
8 Cell Flotation Comp.	3,250.00	
Reagent Feeders	375.00	
10"x12" Blake Type Crusher	500.00	
Filters	1,500.00	
Laboratory & Engineering Equipment	<u>1,500.00</u>	17,625.00

Water Supply	10,000.00	
Engineering & Supervision	5,000.00	
Add 10% for incidentals	<u>3,712.50</u>	\$50,937.50

Notes:

This estimate includes all installation costs and delivers plant ready to operate.

OPERATING SCHEDULE
(Estimate)

MINE;	Per Day		Per Day Per Ton	
Underground 16 men @ \$4.00		\$64.00		
Blksmith & Surf 3 @ 4.00		12.00		
Foreman	5.00	5.00		
Powder & Supplies		<u>30.00</u>	\$111.00	\$1.11
Power PLANT:				
Engineers 3 @ \$4.50		13.50		
Fuel & Lubricants		20.00		
Incidentals		<u>5.00</u>	38.50	.38½
MILL:				
Operators 3 @ \$4.50		13.50		
4 Helpers @ 4.00		12.00		
Suprentendent		6.00		
Reagents & Supplies		30.00		
Incidentals		<u>10.00</u>	71.50	.71½
OVERHEAD:				
Assayer		4.00		
Suprentendent		7.00		
Labratory & Office Supplies		10.00		
Managers Salary		<u>15.00</u>		
Totals			\$257.00	\$2.57

SUMMARY:	Per Day		Per Ton	
Labor 33 men		\$137.00		\$1.37
Supplies and Material		105.00		1.05
Supervision		<u>15.00</u>		<u>.15</u>
Totals		\$257.00		\$2.57

This schedule allows for four men on development at all times in the mine.

FINANCIAL SUMMARY.

Monthly Basis

Mill operation 100 tons per day
Actual 28 days per month

2,800. tons @ \$20.15	Gross Value	\$56,422.00
Less 10% Metallurgical Loss	\$5,642.20	
" Marketing @ 75¢ ton	<u>2,100.00</u>	<u>7,742.20</u>
Actual Recovery		\$38,679.60

Costs Monthly basis av. 30 days

Labor	4,110.00	
Material & Supplies	3,150.00	
Supervision	450.00	
Emergency for development	<u>2,800.00</u>	<u>10,510.00</u>
Net operating profit		\$28,169.00
25% for Reserve Fund		<u>7,042.40</u>
Monthly Surplus		\$21,127.20

ANNUAL BASIS:

Surplus	\$253,536.40
Reserve	<u>84,508.80</u>

\$338,045.20 Annual Operating Profit.

: PROSPECTUS :

UMATILLA TONOPAH MINING COMPANY

THIS STOCK HAS NOT BEEN REGISTERED WITH THE FEDERAL TRADE COMMISSION.

- (a) The name of the issuer is Umatilla Tonopah Mining Company; incorporated under the laws of the State of Nevada, in 1912.
- (b) The Directors and Officers of the Corporation are as follows:
 Chas. G. Patrick, Director and President, 1361 California St., San Francisco, Cal.
 Myron Grotjohn, Director and Secretary, 333 Kearny St., San Francisco, Cal.
 John F. Van Dyck, Director, Dobbins, Calif.
 (Two additional Directors to be added).

(c) The Company is capitalized for 1,500,000 shares of non-assessable common stock of a par value of 25¢ per share or total par value of \$375,000.00.

NOTE: The articles of Incorporation were amended June 12th, 1934, making the stock non-assessable.

(d) There are issued and outstanding 650,000 shares of common stock with 850,000 shares of common stock in possession of the treasury of the Company.

The original treasury stock was issued on the following basis:

1912— 1,000 shares issued to original incorporators.

300,000 shares issued for purchase of property.

1,103,623 shares exchanged for stock of the Tonopah Home Mining Co. and Midway Extension Mining Co., basis of share for share and \$33,108.69 in cash or at the rate of 3¢ per share.

1912 to March 1, 1928; 95,377 shares issued for \$4,034.29 cash.

This makes a total of 1,500,000 shares original Treasury Stock.

The present stock in Treasury was reacquired by Company by purchase of delinquent stock from various assessments; the company has acquired an aggregate of approximately 2,813,325 shares by this means; the following is a summary of cash and property and service for which the Company has issued stock. The property shown is only that which is now owned by the Company and carried as an asset at this time:

	Cash	Property	Services
Original stock issue as above.....	\$ 37,142.98		
20 assessments from 1/2¢ to 1¢ each, levied from 1913 to 1931.....	148,484.70		
*Resale of delinquent stock reacquired by assessments 1915 to 1928, 2,418,432 shares.....	14,198.94	\$14,198.93	
May 11, 1934; Issued to E. S. Van Dyck account Metal Securities Co., in consideration for cash advances, services and completion of payments for property, acquired in 1927, 95,491 shares.....		13,472.30	\$5,871.77
Total receipts for stock \$233,369.62.	\$199,826.62	\$27,671.23	\$5,871.77

*Allocations to cash and property in this item are estimates only.

- (e) The issuer, Umatilla Tonopah Mining Company proposes to issue 300,000 shares of non-assessable stock owned by it and in the Treasury of the Company.
- (f) The issuer, Umatilla Tonopah Mining Company proposes to offer the above stock to net the Company 20¢ per share or \$60,000.00.
- (g) The issuer, Umatilla Tonopah Mining Company has no funded debt.
- (h) The issuer, Umatilla Tonopah Mining Company has outstanding debts as follows:

Metal Securities Co. Cash Adv.....	\$37.97
Review Miner, Publishing Notice.....	47.00
Miscellaneous Items.....	69.00
Total Outstanding Debts.....	\$203.97

(i) The issuer, Umatilla Tonopah Mining Company will not pay any salaries or sums to any officer or employee for services in excess of \$6,000.00 per annum within one year.

(j) The issuer, Umatilla Tonopah Mining Company has not acquired any property within the past three years.

(k) The issuer, Umatilla Tonopah Mining Company has Capital Assets as follows:

Current Assets:

Cash in Bank.....	\$ 6.32	
Accounts Receivable.....	100.93	
Total Current Assets.....		\$106.32

Fixed Assets:

Investment Tallulah Mine.....	\$ 22,500.00	
Tallulah Mine Development and Equipment.....	9,570.73	
Corporation Maintenance.....	15,051.79	
Total Fixed Assets.....		\$47,122.52

Deferred Assets:

†50,000 shares Stock of Montana Tonopah Mining Co.....	1.00	
†57,742 shares Stock of Tonopah Western Consolidated Mining Co.....	1.00	
*75,500 tons ore in the Tallulah Mine of net worth of \$7.50 per ton after deducting oper- ating expense, fixed charges and taxes.....	\$566,250.00	
Total Deferred Assets.....		\$566,252.00
Total Assets.....		\$613,480.84

*The estimate of ore reserves is based on estimate of average of three mine samplings by reputable Mining Engineers, and the figure of \$7.50 per ton net worth is but approximately 60% of the estimated net return based upon these reports.

†The above stocks represent no liability to Umatilla Tonopah Mining Co.

(1) The issuer, Umatilla Tonopah Mining Company has no Royalty Obligations.

(m)

HISTORY OF UMATILLA TONOPAH MINING COMPANY:

Prior to 1927 the Company operated and developed mining property in and adjacent to Tonopah, Nevada, with no outstanding success, expending some several hundred thousand dollars. In 1927 the Company acquired the Tallulah Mine in Pershing County Nevada, consisting of eleven claims, held by location, and deeded to the Company. Until 1930 they carried on an extensive development campaign, opening up large bodies of commercial ore.

HISTORY AND LOCATION OF TALLULAH MINE

The Tallulah Mine is located in the Sierra Mining District formerly known as the Dun Glen District, in Pershing County Nevada, in T. 33, N. R. 36 E., six miles from The Southern Pacific Railroad and eight miles easterly from the town of Mill City. Dun Glen is one of the oldest settlements in Nevada. It was established as a military post and a Pony Express Station, but came into prominence in the early 60's as a mining community. The Tallulah Mine was one of the earliest producers in the district. In the days before the railroad, ores are reported to have been shipped of a value of from \$300.00 to \$500.00 per ton. Up to the time the property was acquired by the Umatilla Tonopah Mining Company the mine is credited with a production of approximately \$400,000.00.

In the same district the Auld Lang Syne Mine had an estimated production of \$1,000,000.00 and as late as from 1908 to 1912 the Black Hole Mine produced between \$900,000.00 and \$1,000,000.00.

DEVELOPMENT

THE UMATILLA TONOPAH COMPANY developed the TALLULAH MINE. The tunnel on the 500 ft. level was driven into the ore zone; drifts were run on the veins and a raise extended from the 500 ft. level to the 300 ft. level, thus proving the continuity of the main ore body from the surface to the 500 ft. level with a length of at least 200 feet. The surface shows commercial ore extending some 1200 feet in length, so the possibilities of future development and extension of ore zone are very large. When the depression started in October, 1929, the Company was planning to finance the erection of a mill for treating the ores and putting the property on a production basis. Due to the conditions since that time and the drop in silver price from 51¢ in 1929 to 26¢ in 1932 it was not possible to make satisfactory arrangements. As a result of the action of the Federal Government in raising the price of domestic production of silver to 64½¢ per ounce at the mint to the producer and the advance in the price of Gold to \$35.00 per ounce, a more opportune time to successfully operate this property could not be found.

Engineers' estimates on file with the Company show ore reserves of 75,500 tons available above the 500 ft. level with an average gross value of \$20.15 figured with gold at \$30.00 per ounce and silver at 45¢ per ounce, with the possibility that further development above the 500 ft. level may produce an additional 225,000 tons of commercial ore.

METALLURGY

From extensive tests made and due to the character of the ore a flotation mill will give the most economical method of treating the Tallulah ores. As the concentrates produced will carry a considerable lead content that would not be recovered by any other process, thereby reducing the cost of smelting and transportation, and from the fact that a modern flotation plant can be operated at a less cost per ton and also requires a less investment cost per day tonnage capacity, it has been decided to use the flotation method. The International Smelting & Refining Co. made extensive tests on this ore and show a recovery of from 92% to 96% of the values. The basis of our estimate is for a recovery of 90% though it is expected that a higher rate will result from operations. The International Smelting & Refining Co., in submitting their report stated that their metallurgists had found this ore most suitable for the flotation method and an ideal ore for this treatment.

PROPOSED DEVELOPMENT

The proposed financing amounting to \$60,000.00 is to be used in equipping the mine and erecting a 50-ton mill at a cost of \$45,000.00, the balance of the fund to provide ample working capital for operations. The mill will be so designed that with but little additional expense the capacity can be increased to 100 tons per day.

OPERATING ESTIMATE

On a basis of operating at 50 tons a day capacity the engineers estimate the following schedule per ton to apply:

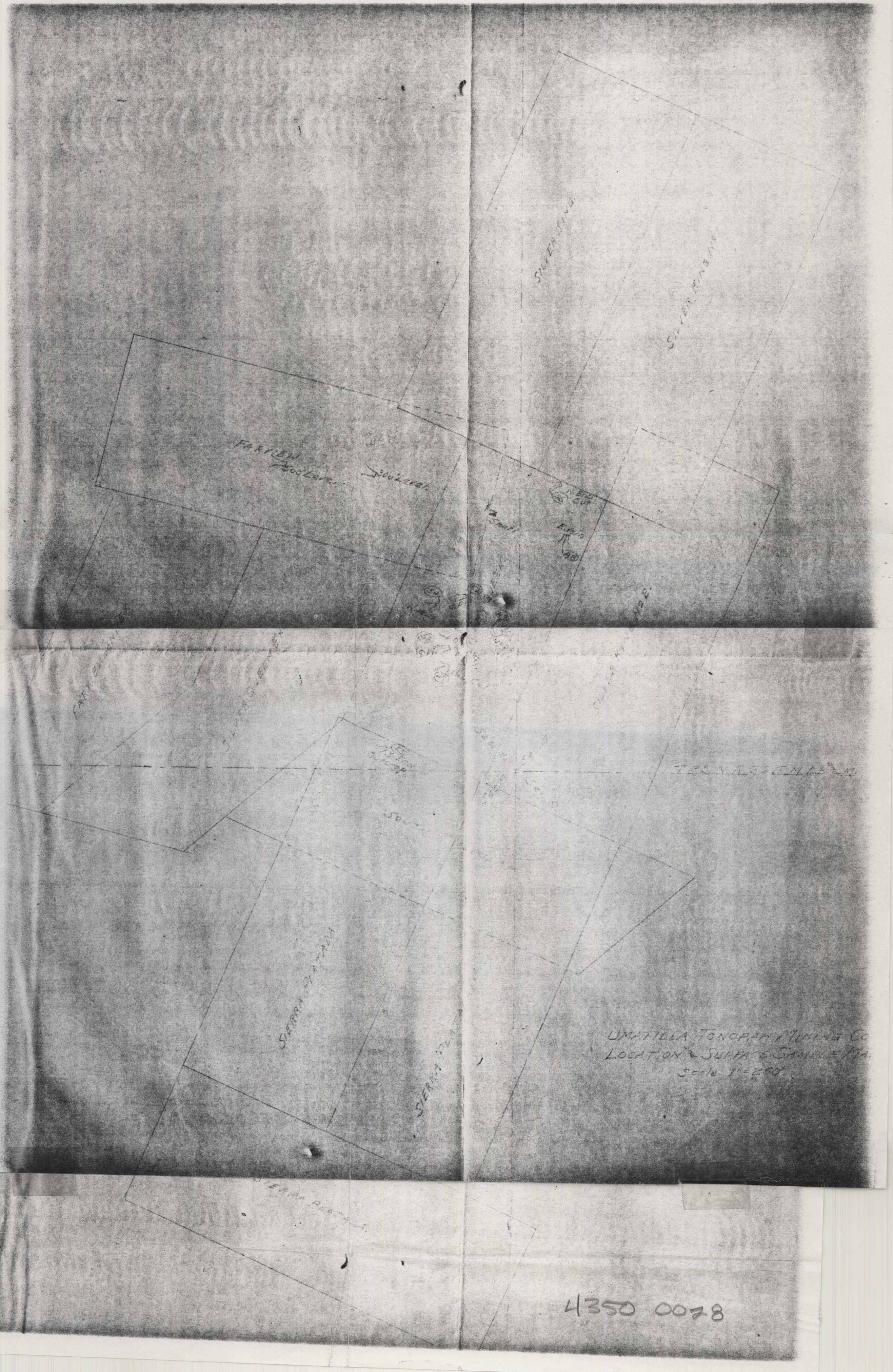
Gross value ore.....	\$20.15	
Less 10% metallurgical loss.....	2.02	
Gross recovery per ton.....		\$18.13
Operating, fixed charges, marketing.....	\$ 4.95	
Taxes per ton (Estimated).....	1.00	\$ 5.95
Net to surplus per ton.....		\$12.18

On a basis of 50 tons per day or actual 1400 tons per month the net realization from the above figures would be \$17,052.00 per month.

The estimate of operating costs of \$4.95 per ton includes ample provision for an adequate development campaign to be carried on at all times to insure most efficient operation. It is the intention of the management to increase the mill capacity as rapidly as conditions warrant.

June 12th, 1934.

UMATILLA TONOPAH MINING COMPANY
Mill City, Pershing County, Nevada



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