

2900 0023

CROWN CONSOLIDATED GOLD MINES COMPANY.
GOLDEN LION MINES.

REPORT BY,
John A. Hassell. Consulting Engineer.

Copy in file 214
Butler Item 7
9/19/33
enf

Gentlemen:-

The object of this report is to present for your information my observation on your Longstreet Mine, which I have visited on several occasions for the purpose of inspection to verify reports by J.M. Butler, Consulting Engineer.

The property embraces 14 mining claims and one water claim, approximately 300 acres situated in Longstreet Canyon, Nye County, Nevada, and is more fully described in the report by Mr. Butler, and attached hereto, with accompanying maps, and to which reference is made for general description of location, topography, geology, mineralogy of vein and mine and mill equipment erected on the property.

The distance from Los Angeles by auto, to the mine is 470 miles, about $\frac{2}{3}$ being over state highway to Tonopah, Nevada, and then 50 miles in a Northeasterly direction of which about 30 miles is over a state highway and 20 miles over a fair desert road, which can be made a very good road at small cost.

The general conditions and descriptions of the property and equipment are substantially as reported by Mr. Butler, and each inspection left one more favorably impressed with the mine. Especially is the geology favorable for the continuation of the ore bearing bodies at considerable depth. On a complete checkup of the tonnage and value of the ore immediately available for milling, after allowing ~~24~~ 25% for waste, and 10% loss in metallurgy, both of which are conservative, there should be left something over 300,000 tons of ore exposed on the present workings of the gross recoverable value of \$9.00 per ton, a body of ore sufficient to run the 100 ton mill for several years.

In estimating the tonnage no allowance is made for the probable increase width and values of the ore between the 600 ft and the 1000 ft levels, and if the vein continues to widen, as indicated between those levels it is highly probable that the present workings body of ore will expose exceed 400,000 tons, and as there are several sections in the mine where the ore will assay from \$12. to \$30. per ton, it is quite possible that with careful mapping of the exposed ore, the mill head value could be materially increased and thereby earning a very satisfactory profit from the start of milling operations.

If the management deemed it expedient to increase the present mill capacity to 200 tons per day, increase economy in mine and mill costs could thereby be affected, and an even larger tonnage of lower grade ore made available.

Under the exceptionally favorable economic conditions at the mine by reason of gravity of ore and water to the mine, it should not cost over \$3.25 per ton on the basis of 100 tons per day, and if mill capacity were increased to 200 tons per day, the cost could be reduced to possibly \$2.80 per ton.

Estimating therefore the possible earnings of a mill treating 200 tons per day of \$9.00 per ton ore, amounting to \$1800.00 per day, and operating 300 days each year, would yield a gross for the year of \$540,000.00 which after deducting a charge of \$2.80 per ton would leave a net profit of \$372,000.00 for distribution.

Besides the gold content of the ore which at present time represents about 60% of its value, 40% is represented by silver, which for purpose of ore valuation is estimated at 25 cents per ounce. Therefore it can be readily be seen that as the silver advances to 50¢ per ounce, as is confidentially predicted, much increased price over the present valuation will more than pay all mining and milling costs and thereby possibly double the estimated earnings on present conditions and prices of silver.

The machinery and mill equipment is in excellent condition..

(Note) As the machinery in the old mill has been removed this item will not be copied, and thereby omitted.

The ore contains no refractory elements and can be treated profitably by finer grinding, sliming and the cyanide process of extraction which has been standardized for many years and in general practice at present time.

The mine is developed by two cross-cut tunnels at a depth of 600 ft and 1000 ft, from the vein outcropping, and a raise to the surface connecting both tunnels. Also the vein has been drifted on to daylight on the East side of the hill, which drift is in ore the entire distance of 500 ft, and besides improving the ventilation of the mine, affords a cheap and convenient outlet for disposing of waste rock from the workings above the 600 ft level.

The ore exposed in this east drift is of excellent mill grade, samples taken across 5 ft for several hundred feet averaging \$9.80¢ per ton, with occasional selected spots in the hanging wall side of the vein where the values were higher. This body of ore extends clear to the surface and represents a considerable tonnage of good mill grade values.

South and paralleling this vein about 350 ft distant, is an other vein outcropping on the surface considerably larger than the one in which the workings occur.

This vein is heavily mineralized and appears to have the same deep seated origin at the other. The 1000 ft level cross-cut should be continued to this vein as soon as funds are conveniently available for that purpose, as the discovery of another large body of ore similar to the one already developed would place this mine in the rank of the major producers of the country.

It is also worthy of mention that an exceedingly strong and well mineralized dike of porphyry occurs on the property having a strike and dip from the developed vein. This dike has an almost North and South strike, with a convergence towards the developed vein and will apparently intersect it at about 250 ft westerly of the breast of the 1000 ft level.

The dike which carries considerable quartz can be explored cheaply by simply drifting in on it from the surface, or drifting westerly in the 1000 ft tunnel until it is intersected. The surface showing justifies the hope that a considerable body of good milling ore will result from the contact of these two mineralized bodies.

It is further deserving of mention that although part of the vein exposed in the 1000 ft level has shown a slight decrease in value from the highly oxidized ore in the upper levels, and it is clearly evident that the character of the ore has undergone a change from an oxidized condition to more definite sulphide forms, with resultant leaching of the primary values which frequently occurs in ores of this character.

From a study of the ore on this horizon it is certain that a transition from the oxidized to permanent sulphides has occurred, and that a secondary enrichment of the ore will slightly increase with depth in all probability is to be expected.

Taking into consideration the high and healthy location of the mine; its strong and well defined vein system, their deep seated origin; large tonnage developed in ore to run a mill for several years; modern and excellent conditions of the mine and mill equipment, and finally the exceptionally favorable economic conditions for mining and milling, this property presents an opportunity for capital investment that is rarely associated with mining ventures, and I recommend it to the favorable consideration of yourselves and those who become associated with you in an enterprise of exceptional merit.

Los Angeles, Calif.

Sept, 10, 1931.

Respectfully submitted.

John A. Hassell.

(Signed)---- Consulting Mining Engineer.

- Golden Lion Mine -

B. C. Austin, B.M.
Preliminary report on the Longstreet Mine.
November, 16th-1931

Under date of January 10, 1931, I made a preliminary investigation of the Longstreet Mine which is situated in Nye County, Nevada, about 52 miles Northeast of Tonopah, Nevada. The purpose of this visit was to determine if a further examination was necessary and if a workable agreement could be made with the owners.

My conclusions were that the property justified a further examination provided an equitable agreement could be made. The following is practically a copy of a report I made under date of January, 10, 1931.

All prices quoted below are as of 1931-old prices.

All underground workings were inspected, but no samples taken. Summarizing the information obtained, it is the opinion of the writer that there is approximately 160,000 tons of ore above the lowest tunnel level which may be expected to average \$6 per ton in gold and silver. (75% gold; 25% silver) at the present price of silver 29¢..

Mining cost should not exceed \$1. per ton and milling should be done on a basis of 150 tons per day for approximately \$2. per ton. If reasonable extraction is obtained, there should be an operating profit of about \$2. per ton.

There are good possibilities for development of additional ore below the present workings, and the writer recommends the property for examination.

The following is a brief description of the property:

The Longstreet mine is situated in Nye County, Nevada, 52 miles by road Northeast of Tonopah. The elevation is about 7000 ft at the mine. There is sufficient water piped to the property to mill 150 tons per day. There are permanent camp bldgs sufficient for 25 men. General conditions are favorable for economic operations.

ORE DEPOSIT. --- The ore is a brecciated rhyolite between well defined walls, of rhyolite. The strike of the vein is East and West; the dip is 49°. The deposit crops at the top of a ridge and dips towards a canyon, the dip being more or less parallel with the contour of the surface.

The deposit was opened up by a vertical shaft, about 60 ft deep, located about 200 ft in elevation below the top of the hill. After the ore had been proven in this shaft a cross-cut 320 ft long was driven and cut the ore at a distance of about 200 ft on the dip of the vein below the bottom of this shaft.

From the cross-cut a raise was made in ore connecting with the bottom of the shaft, and the ore was drifted on to the East 700 ft coming out at the surface at that point, and a drift to the west on the ore 79 ft long still shows values in the face. This level is approximately 600 ft below the croppings on top of the hill, measured on the dip of the vein.

Later an other cross-cut ~~xxxxx~~ tunnel 550 ft long was driven intersecting the ore 400 ft on the dip of the vein below this level, and the two levels connected by a raise, all of which is in ore.

The lowest level is called the 1000 ft level, because it is 1000 ft below the top of the hill measured along the dip of the vein or ore., and on lowest level the ore has been drifted on 98 ft in each direction from the cross-cut. The 1000 ft level shows considerable sulphides, and the oxidation seems to extend to within 100 ft of this level.

The ores in the oxidized zone contain about 75% of their values in gold, and about 25% in silver, while values of the ores in the sulphide ~~xxxxx~~ zone are about 75% silver, and 25% gold--the present price of silver being about 29¢ an ounce.

It is estimated that about 15 to 20% of the ore body consists of more or less rounded rhyolite boulders which carry almost no values. These should be screened out of the ore before it is milled. The width of this vein varies from 18 inches to at least 11 feet, and as nearly as the writer could estimate the average width may be around 5 ft. There is a talc gouge on both walls varying from 1 inch to several feet. There ~~xxxxx~~ is considerable iron pyrite in the sulphide zone, but in the oxidized zone no minerals were

noticeable other than small quantities of hematite and limonite. The brecciated pieces in the ore varied from 1/4 inches to 2 inches, with occasional large fragments weighing as much as 50 to 60 lbs. The ore breaks clean, leaving perfect foot and hanging walls.

One peculiarity of this deposit is what the gold bearing solutions were apparently very low in silica, and in this respect may have been similar to the Round Mountain deposit at Round Mountain, Nevada. No minerals indicating the presence of copper, zinc, lead or any arsenides were noted. An inspection of this ore would lead one to think that it would be amenable to cyanide treatment.

The estimate of 160,000 tons is ~~xx~~ based on the assumption that the ore body is continuous between these levels, which are 400 ft apart. The interval is rather long to be positive of the values being continuous between the openings, but on account of the persistence and regularity of the walls, the writer thinks there is reasonable surty of the continuance of the ore.

The possibilities of developing additional tonnage in the sulphide zone looks very good, and while the silver values predominate, they are very much higher than in the oxidized zone, and probably represent secondary enrichments. There is an opportunity to drive a cross-cut tunnel which would give 300 ft more of backs on the ore and which would still be above the level of the mill.

The water supply for this mill is from a pipe line about 2 miles long which brings hot water (temperature about 80° F.) to the mill. This water has been measured and there is about 130 tons of water in 24 hours.

The cyanide plant was recently tried out and a run of about 500 tons of ore put through. The operation was very much handicapped, however by lack of sufficient equipment and finances, and results can hardly be judged from this trial.

A total of \$2,300. was cleaned up. The tanks are still full of pregnant solution, and it is difficult to figure what the actual recovery was. The cyanide treatment was for 45 hours, and mechanical agitators were used. --- Considerable free gold must have concentrated in the Dorr Classifier as an assay of the Classifier sands ran \$198.00. There is no assaying equipment on the property. The power line of the Nevada Calif Power Co which supplies the camp of Tybo is about 5 miles distant from the property. The fuel used by the engines cost 9 1/2¢ per gallon laid down at the mines.

In the early part of May, 1935, the property was inspected by Mr. H.W. Gould under my supervision and ~~xx~~ recently I was on the ground, but did not go into the mine. Apparently the plants have been dismantled and most of the machinery and buildings removed from the property. As far as I was able to see, no development work or mining has been done since 1931.

A preliminary sampling of the mine by Mr. Gould gave us the following impressions. With gold at \$35, an Oz, and silver at 77¢ an Oz. The mine will average between \$6 and \$5 per ton, but physical conditions are such that a profit could be made on this ore if these figures on checking proved to be right.

Twelve samples taken over the property lead us to believe that the upper level will show a high content in gold values, and that the lower levels will run higher in silver, and that the ore might average \$6. per ton---this to be determined, however, by a thorough examination, and a re-sampling of the mine. It is apparent that some of the early sampling was misleading, and the results are far too high. It is my opinion that the metallurgical problem is not serious and that tests by flotation will prove satisfactory..

I believe this property is well worth a thorough examination providing reasonable terms can be had. In the past the owners were so far out of line ~~xx~~ that it was impossible to give consideration to this ~~xx~~ property. Trusting that the above information may be of value to you, I am

B.C.A./ Lr

Very truly yours,

B. C. Austin.--- E.M.

----Nevada Testing Laboratory.---

233 East Plaza Street. Reno. Nevada. Assay Cert-
May, 18th, -1935.

H.W. Gould.

Sample No.	Owners Mark.	Gold Oz per ton	Silver Oz per ton.
10473	No. 33	0.33	2.20
74	34	0.23	1.80
75	35	0.11	2.90
76	36	.06	2.20
77	37	.06	2.80
78	38	.12	2.90
79	39	.60	7.60
80	40	.07	9.90
81	41	.07	7.90
82	42	.01	1.50
83	43	.03	1.10
84	44	.15	13.80
Total-12		1.84 Oz	1256.60 Oz. total.
		0.153 Oz, Average	4.71 average Oz.

Gold 0.153 Oz x \$35.-----\$5.354

Silver. 4.71 Oz, x 77¢-----3.634

\$ 8.98 -- Total value per ton, gold and silver.

Copy of this
report from
Butler
replied in
signature
2/11/29

Report on the
The Golden Lion Mining and Milling Corporation.

Descriptive statement and report of the assets and resources of the Longstreet Mill and Mine, which is the principal assets of the Golden Lion Mining Corporation.

LOCATION AND PROPERTY.

The property is situated in the Longstreet Mining Dist in the North Central parts of Nye County, state of Nevada, and about 60 miles from Tonopah, the County Seat and railroad point for the property.

Forty miles of the road between the mine and Tonopah is graveled surfaced State Highway. The other 20 miles is a good desert road and is kept in repair by the County and the Company.

The mine is about 7000 ft above sea level and is on the North east slope of the Monitor Range of mountains. A plentiful supply of pinion (native pine) surrounds the camp. This pinion pine assures a supply of wood and mine timbers. Water from a natural warm spring (about 30° F.) is piped by gravity from a distance of about 2 miles to the property. This warm water is a wonderful thing for the property, for it prevents freeze-ups in the winter, and also keeps the solutions hot in the mill and greatly aids the extraction in the metallurgical process to which the ore is subjected.

There is sufficient water piped to the mine from the spring to run a 500 ton plant, and also supply all the water for the camp.

The property consists of the following lode claims; - Mountain Lion's 1 to 7, also three placer claims known as the Golden Seals 1 to 3. This placer ground has considerable merit, and should develop into a valuable holding for the company.

TITLE TO CLAIMS:- The title to the 7 Mountain Lion Lode claims is held by the company on a quit claim deed paid in full to Jack Longstreet and O.K. Reed. This gives the company complete right to the ground. The water rights and placer claims are included in this deed. This makes seven mining claims or 144.27 acres of lode ground, and three full placer claims or 60 acres of placer ground that are held by the company by Deed from the original locators.

GEOLOGY AND VEINS:- The general country rock is Rhyolite, consisting of two distinct flows. The upper or capping flow is of later or a new rhyolite, it is dark reddish brown in color with a coarse grain structure. The 2nd or ore bearing rhyolite is an older flow of rhyolite, it is fine grained having a grayish white color, comparable in structure to the Oddie Rhyolite of Tonopah

It has been ruptured by numerous dikes on the foot-wall side. A Porphyritic intrusion in this rhyolite forms the hanging wall of the main vein. The porphyritic intrusion has itself been ruptured by several large veins which are approaching the main vein from an angle of about 45° from the Northwest direction.

The 1st of these porphyry veins should intersect the main rhyolite vein in the 1000 ft level at about 350 ft West of the lower cut (X) and a greatly enlarged and enriched body of ore should be encountered at this point. The vein is a true fissure having an East and West trend, with a dip of 50° to the North. Both walls are well supplied with a talc gangue ranging from one inch to several ft in thickness.

The ore is crushed material composed of quartz interlaced with talc. The ore was apparently formed by an upward percolation of ore bearing solutions and should extend to a great depth. The upper portions of the mine are in a highly oxidized state. The Mineral is free gold.

The gold is the predominating mineral in the upper or oxidized zone while in the transition zone the silver becomes the more predominating mineral. The ore becomes a silver ore in the sulphide zone with gold as the accessory mineral. This condition shows that the upper zone has been leached of part of its silver value. This silver has been precipitated as a secondary sulphide in the sulphide zone, with more depth the sulphide zone should be considerably richer than the sulphides that are now exposed.

I make this statement because the sulphides that are now exposed are still in the transition zone as evidenced by oxidized and semi-oxidized places in the lower level. This oxidization will cease with depth and the true sulphides will come in with probable secondary enrichment of the

primary sulphides that should extend to a considerable depth. The porphyritic veins on the hanging wall side have values scattered here and there and with depth should become valuable producers..

ECONOMIC MINING:

The upper portions of the ore body are well developed. The vein is opened for a distance of 600 ft on the 700 ft level, all mill ore. A cross-cut having its principal at the mills, cuts the vein at an additional depth of 300 ft. A raise on the ore connects this level with the upper level. Drifts in both East and West directions are out about 100 ft on the lower level. These drifts are in ore all the way. A raise connecting with a shaft 400 ft above the upper level gives a good air supply as well as making 400 ft more of ore available for sampling. The outcroppings are still 300 ft above this point and from ore exposed in open cuts on the out-croppings, I should say the actual ore opened up is of a depth of 1000 ft, from the lower level to the Outcroppings.

An enriched mineralized zone starts from the outcroppings and dips to the West. This zone was cut on the 700 ft level, and some stoping was done there. It is also cut about 200 ft above the 1000 ft level in the connecting raise and the West drift on the lower level should enter this zone in an other 100 ft of work.

This enriched zone or ore shoot ~~xxxx~~ makes an excellent reserve to draw up to keep the mill heads up to a maximum value. The vein is 4 ft wide at the Eastern Portal of the 700 ft level, and is 14 ft wide at the West heading of this 700 level, and this western heading is 760 ft from the portal at the present writing.

The vein on the 1000 ft level is 4 ft wide in the Eastern heading and over 20 ft wide in the Western heading. A tremendous ore body should be encountered in another 240 ft of drifting from this point for it would never be where the porphyry vein makes a junction with the rhyolite vein.

Samples from the vein indicates that it is getting richer as it penetrates to the West. The ore should be at its maximum value on this junction.

There are no breaks in this ore body and with raises already penetrating it, mining should be done for 75¢ per ton or cheaper. The ore is shot down and flows by gravity down the 50° raise to the lower level, and is then trammed directly into the mill. The hanging and foot-walls both stand well and only a minimum amount of timbering is required. The ore is soft and the caving or shrinkage system can be used throughout the whole of the upper part of the vein.

The ore in the lower level is on a whole of a better average value than that of the upper level, and should be explored and developed by the Co. A shaft should be sunk at a point about 200 ft lower than the lower tunnel level, and an other cross cut run to intersect the vein. This shaft should be at least 200 ft deep, as this would make an additional 400 ft of depth on the vein and this cross cut should hit the vein in the enriched zone of primary sulphides. The ore that is already exposed and ore that could be exposed by future development should make this property one of the largest gold and silver producers in Southern Nevada.

WORKINGS.--The total amount of workings surveyed amounted to 2555. ft. Only such workings as were on the mineralized part of the vein were sampled.

SAMPLING AND ANALYSIS:-- The following comprises a table of the samples taken and their value. The numbers from 1 to 245 are indicated and correspond with the map submitted.

Number.	Total Value of Ag and Au.	Number.	Total Values, Ag and Au.
1.	\$7.30¢	2.	\$5.05
3	5.20	4	10.95
5	10.10	6	15.35
7	11.40	8	14.05
9	11.90	10	18.65
11	16.40	12	14.90
13	---	14	19.40
15	9.70	16	8.80
17	9.00	18	8.05
19	25.50	20	32.70

Number.	Total Values. Ag and Au.	Number.	Total Values. Ag and Au.
21.	\$12.95¢	22	\$29.25
23	25.15	24	23.90
25	31.10	26	15.60
27	57.95	28	9.85
29	13.70	30	19.90
31	8.30	32	7.05
33	7.45	34	.75¢
35	6.00	36	10.70
37	13.20	38	7.60
39	6.35	40	3.85
41	3.80	42	10.30
43	11.55	44	12.95
45	3.80	46	7.50
47	18.40	48	13.80
49	7.35	50	6.30
51	14.20	52	31.10
53	20.80	54	8.20
55	8.60	56	6.15
57	3.85	58	2.65
59	3.90	60	6.10 \$6.10¢
61	5.70	62	7.85
63	9.15	64	12.90
65	9.05	66	8.55
67	6.10	68	6.15
69	8.15	70	3.85
71	30.25	72	30.15
73	23.00	74	18.20
75	15.95	76	7.10
77	8.00	78	7.40
79	6.20	80	7.00
81	9.60	82	7.20
83	5.90	84	16.30
85	8.10	86	7.10
87	6.95	88	6.15 \$6.15
89	10.00	90	11.30
91	12.50	92	10.40
93	10.15	94	10.60
95	12.10	96	9.40
97	8.70	98	5.10
99	7.85	100	6.60
101	19.40	102	15.60
103	12.75	104	8.60
105	6.55	106	5.70
107	3.70	108	6.00
109	9.15	110	9.15
111	7.25	112	10.10
113	19.40	114	18.65
115	9.85	116	5.80
117	6.85	118	7.80
119	9.70	120	12.50
121	8.60	122	11.90
123	26.80	124	22.60
125	21.30	126	6.55
127	5.10	128	5.40
129	4.80	130	5.30
131	7.20	132	8.70
133	55.95	134	7.45
135	16.45	136	1.25
137	2.50	138	8.55
139	7.60	140	9.50
141	10.40	142	8.80 --\$8.80¢
143	8.65	144	6.90
145	5.45	146	11.65
147	10.25	148	9.35
149	8.85	150	10.00
151	7.80	152	6.65
153	7.55	154	8.00
155	6.50	156	4.70

Starting
400 ft from
Tunnel Portal.
No 53 & 54 at
Rasle

700' Level.

Raise
above 700' level.
sampled
from bottom
60 ft shaft
down.

700 Level.

Raise
Above 700' Level.

Raise 30' below
700' Level.

Raise 30' below
700' Level.

All samples were taken at intervals of 6 ft on the vein on the 700 ft level, and 5 ft intervals on the 1000 ft level, and 5 ft intervals on the raises and each sample measured exactly 5 ft in length, and were cut at right angles to the hanging wall and footwall. All samples were cut with a hammer and moil.

The average of the above samples as computed is in the amount of \$10.90¢ per ton.

TONNAGE.-- To measure to an exact certainty the amount of positive milling tonnage in sight would be quite impossible without a great deal of time being spent for that particular purpose.

Therefore from such measurements as I have been able to take there is an excess of 410,000 tons of milling ore in sight that can be mined at 75¢ per ton or cheaper.

It has a computed value of of \$10.90¢ per ton, or estimating 410,000 tons with a value of \$10.90¢ a ton, and allowing 6% metallurgical loss, there is roughly \$4,172,660.00¢ worth of positive ore exposed on three sides. This ore will run the present mill for 10 years.

MILLING AS DONE IS OMITTED, AS THE MACHINERY IS ALL REMOVED..

The extraction was 94.5% at a cost of about \$3. per ton. However the report states that flotation should be used.

Engineer recommends a 200 ton mill be built.

RECOMMENDATIONS..

Built a 100 ton flotation unit with room for expansion to take care of the sulphides at present developed and that can be developed.

Sink a 200 ft shaft at a point 200 ft lower than the lower tunnel level, and cross-cut the vein in the sulphide zone, also drift both ways on the vein on this level.

Extend the present cross-cut on the 100 ft level until the foot-wall dikes are cut. Float found on the hillside above the present outcrop indicates a vein parallel to the present vein somewhere in the foot-wall.

CONCLUSION..

From the foregoing it can be seen that the raising of money to increase this capacity of the mill and for further development of the mine could not rightfully be termed as speculative venture, and the writer unhesitatingly recommends the property of the Golden Lion Mining and Milling Corporation as one of merit.

Respectfully submitted.

Dated, _____ 1929.

Consulting Engineer.

Golden Lion Mine

Descriptive Statement and Report of the
LONGSTREET MINE. NYE COUNTY, NEVADA.

----- November, 1936.-----

Location and Property;-

The property is located in the Longstreet Mining District, in the North Central part of Nye County, about 52 miles from Tonopah, Nevada. The mine is about 7000 ft above Sea Level on the North slope of the Monitor Range.

A plentiful supply pinion (native pine) surrounds the camp. This supply of Pinion assures a supply of wood for camp purposes, as well as for timbers.

Water from a natural warm spring (about 80° F.) is piped by gravity from a distance of about 2 miles. This warm water is a wonderful thing for the property, as it prevents freezing in the winter and also assures a plentiful supply for the milling of about 150 tons of ore per day. More water is available with additional piping.

The property consists of eight (8) lode claims and three (3) placer claims.

The general country/rock is rhyolite, consisting of two flows. The upper capping flow is of a later, or new rhyolite, and is a dark reddish brown, with a coarse grain structure. The second, the ore bearing rhyolite is the older flow, is fine grained and of a grayish color, comparable to the "Oddie Rhyolite" of Tonopah. It has been ruptured by numerous dykes on the foothill side. A porphyritic intrusion has in itself been ruptured by several veins, which are approaching the main vein from an angle of 45° or from a North West direction. The first of these porphyry veins should intersect the main vein, about the 1000 ft level, at about 350 ft West of the western head, and a greatly enriched ore body encountered at this point.

The vein is a true fissure vein, having an East and West trend, with a dip of 45° deg to the North. Both walls are well supplied with Talc gangue, from 1 inch to several feet in thickness..

The ore is crushed material composed of a quartz, interlaced with Talc. The was apparently formed by the upward percolation of the ore bearing solutions, and should ~~xxx~~ extend to a great depth. The mineral is free gold and Horn Silver, or cerargyrite and argentite, or silver sulphide.

Gold is the predominating mineral, in the upper or oxidized zone, while in the transition zone, the silver becomes the predominating mineral. This condition shows the upper zone has been leached a part of its silver values.

This silver has been re-precipitated as a secondary sulphide, and with more depth, the sulphide zone should be considerable richer than sulphides that are now exposed.

I make this statement, because the sulphides ~~that~~ that are now exposed, are still in the transition zone, as evidenced by the oxidized and semi-oxidized places in the lower level. This oxidization will ease with depth, and the true sulphides will come in with probable enrichments of the primary sulphides, that should extend to a considerable depth. The Porphyritic veins on the hanging wall side, have scattered values here and there, and with depth, should become valuable producers.

The upper portion of the ore body is well developed, the ~~x~~ vein is opened for a distance of 785 ft, all mill ore. A cross cut having its portal at the mill, out of the vein at an additional depth of 300 ft. A raise on the ore connects this level with the upper level. There are 100 ft drifts East and West on this lower level, in ore all the way.

There is a 60 ft shaft on the surface, 400 ft above the 700 ft level. This connects with a 400 ft raise from the 700 ft level, which gives a good air supply, besides making 400 ft more ore for sampling. The outcroppings are still 300 ft above this shaft. I would say, the actual ore opened up, is for a depth of 1000 ft from the lower level to the outcropping.

The vein on the lower level is 4 ft wide ~~xxx~~ at the eastern heading, and 20 ft wide at the Western heading. A tremendous ore body should be encountered in an other ~~x~~ 200 ft of drifting to the ~~West~~ West.

The enriched mineralized zone starts from the cropping and dips west. This zone was cut on the 700 ft level and some stoping was done there. It is also out on ~~the~~ 200 ft, above the lower level, in the connecting raise, and ~~the~~ the West drift on the lower level should enter this zone very soon. The vein is 4 ft wide at the Western heading. This western head, is 750 ft from the eastern portal at this writing.

The ore is shot down and flows by gravity, the 50° degree raises to the lower level, and trammed directly to the mill. The foot and hanging wall stand well, and only a minimum of timbering is required. The ore is soft and the caving or shrinking ~~xxxxx~~ system could be used throughout the whole upper vein. Mining should be done for 75¢ per ton or cheaper. The total amount of workings at this time, amounts to 2554 ft. Only such workings as were mineralized parts of the vein, were sampled.

TONNAGE:-

To measure to an exact certainty the amount of positive milling ore in sight, would be quite impossible without a great deal of time being spent, but by such measuring as has been done, there is an excess of 300,000 tons of milling ore in sight, that can be mined for 75¢ per ton or less.

It has ~~x~~ a computed value of over \$10.00 per ton, in both Gold and Silver.

Estimating this tonnage at \$10.00 per ton, allowing 10% for metallurgical loss, is roughly over \$2,750,000. of positive ore exposed on three sides, or enough ore to run a 100 ton mill for over 6 years.

From

~~By~~/the foregoing it can be seen, this cannot rightfully be termed a speculation venture, and the writer unhesitatingly recommends this property on its merits.

Respectfully submitted,

(signed) J. N. Butler,
Consulting Engineer.

(The above was taken from the Report of J.N. Butler)

Copied by R.E.Tilden from a Photolithographic copy of the original report.
9-6th-37.

----- Assay Certificate.-----

Nevada Testing Laboratory, 233 East Plaza St
Reno, Nevada.

H.W. Gould.

Sample No.	Owners No.			May, 18th, 1935..		Total Values.
		Gold	Value	Silver	Value.	
		Oz per ton	per ton	Oz per ton		
10473.	#33	0.33	\$11.55¢	2.20	\$1.54¢	\$13.09¢
474	34	.23	8.05¢	1.80	1.26	9.31
475	35	.11	3.85	2.90	2.03	5.88
476	36	.06	2.10	2.20	1.54	3.64
477	37	.06	2.10	2.80	1.96	4.06
478	38	.12	4.20	2.90	2.03	6.23
479	39	.60	21.00	7.60	5.32	26.32
480	40	.07	2.45	9.90	6.93	9.38
481	41	.07	2.45	7.90	5.53	7.98
482	42	.01	0.35	1.50	1.05	(1.40)
483	43	.03	1.05	1.10	.77	(1.82)
484	44	0.15	5.25	13.80	9.66	\$ 14.91¢

Gold at \$35. per Oz.
Silver at 70¢Nevada Testing Laboratory.
by H. W. Walker.

The average of high and low is \$10.80¢ per ton.

George R. de Groot. 615. University Ave, Berkeley. Calif.

Assay Certificate.

Nov, 6th, 1936.

R. K. Schmidt.

Sample No.	Owners No.			Ozs		Total Value.
		Gold	Value.	Silver.	Value	
		Ozs per ton		per ton,		
4441	#2.	0.10	\$3.50¢	6.50	\$5.00	----- \$8.50¢
42	3	.06	2.10	2.36	1.81	3.91
43	4	.04	1.40	1.37	1.05	2.45
44	5	.28	9.80	6.74	5.18	14.98
45	1	.035	1.22	5.30	4.08	5.30

George R. de Groot...

out crop - West

ASSAY MAP

LONGSTREET MINE.

NYE COUNTY, NEVADA

Drift samples taken 6 ft apart on 700 ft.

Raise "Assay map" traced from an old lithograph map given by one of the owners.

scale $1'' = 50 \text{ ft}$

by R. E. Tilden, engr.

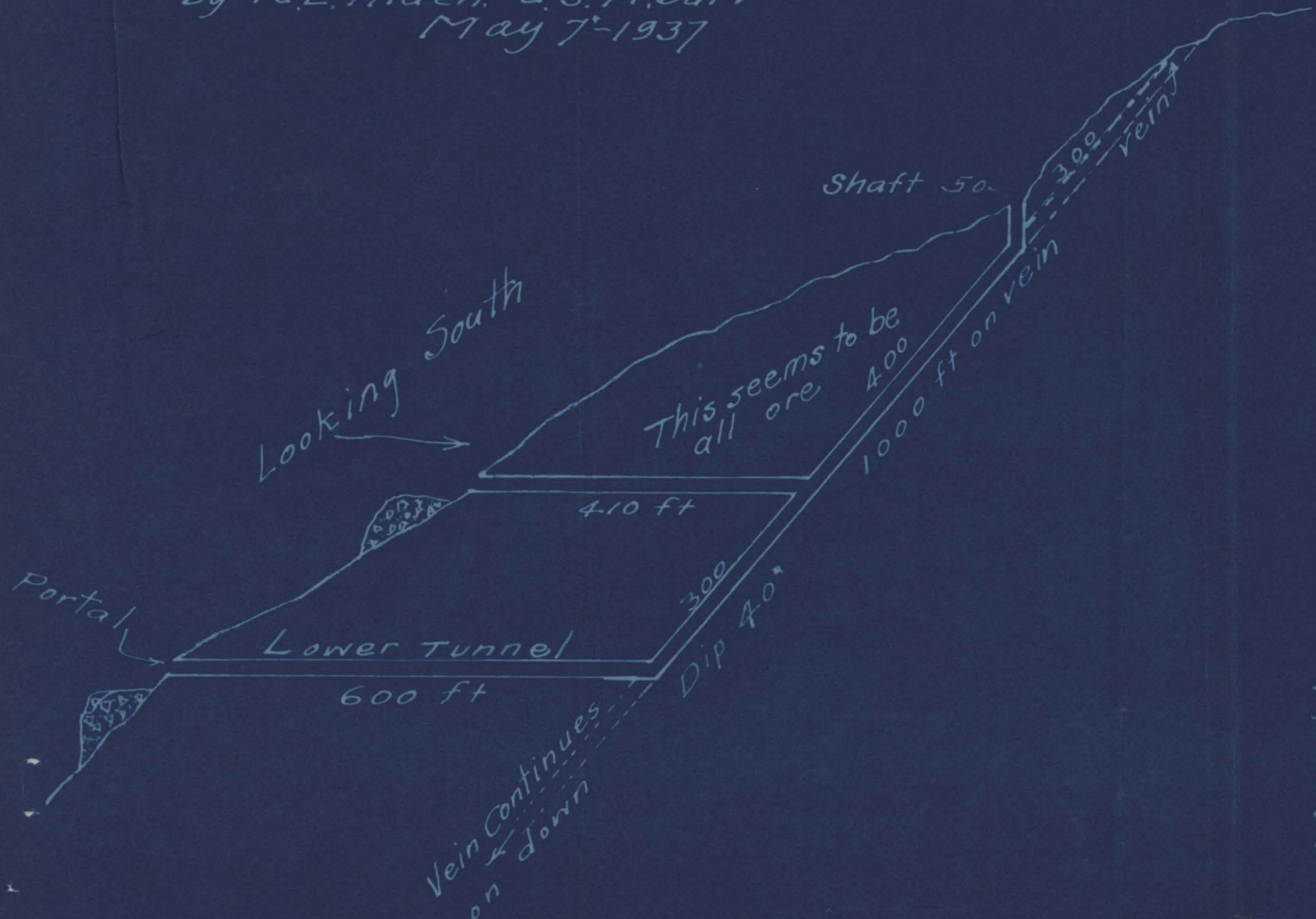
Mch, 1938.



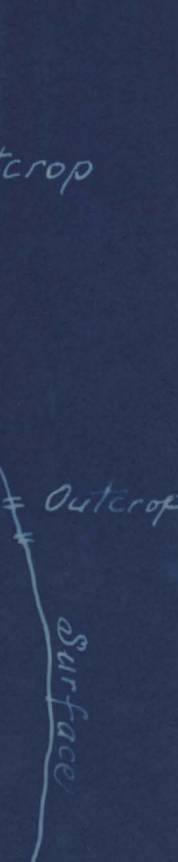
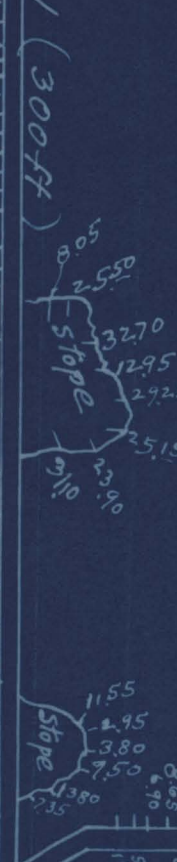
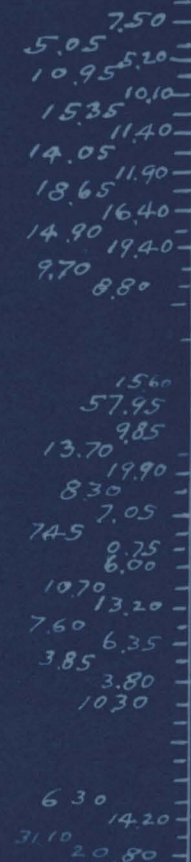
Location of cross rein 6 ft on
out crop same material as
main vein

(214) 2900 0023
Item:

Golden Lion M & M Corp
 Map showing Vertical Section
 along vein as developed. Profile
 is showing looking East
 scale 1" = 200 ft.
 Copied from an old blueprint
 by R.E. Tilden, U.S.M. Surv
 May 7-1937



300ft raise



Golden Lion Min & M Corp-
 Nye County
 Nevada
 Showing assay sheet on the
 vein as developed.
 Scale 1" = 60 ft
 For a better set of samples
 see report by Mr Butler
 Figures on old map were very faint
 Date assays were taken as per
 report would be Feb 1929.

Outcrop
 Surface
 Outcrop
 Surface
 Outcrop

