

who has carefully described its general features and shown it to be a part of the Esmeralda formation.<sup>3</sup> His collections of mammal remains from the shore deposits of the ancient lake and from the terrestrial strata intercalated in the general sequence of lake beds have been shown by Merriam<sup>4</sup> to be approximately of late Miocene age.

No special examination of the lake beds was made during the present field work, as the formation is younger than the ore deposits of the region. One fact that appears to have escaped earlier notice is that the lake beds wherever seen, both at the Olympic mine and west of Simon, are faulted against the older rocks and in places let down into them in fault troughs. The evidence of faulting is generally poor or obscure in surface exposures because of the loose, unconsolidated condition of the lake beds, but is impressively shown in the underground workings of the Olympic mine.

### ORE DEPOSITS.

#### SILVER-LEAD LODES.

#### GENERAL CHARACTER AND OCCURRENCE.

The main ore bodies of the district are replacement deposits in limestone. The ore minerals are galena and zinc blende, which are inclosed in a dark-gray fine-grained aggregate of quartz, a jasperoid, as it is termed, that has resulted from the replacement of the limestone by quartz. Pyrite and arsenopyrite are subordinate metallic minerals, and calcite and limestone occur as gangue materials. The relative proportions of these several constituents differ considerably from place to place, but much of the ore consists largely of galena and sphalerite.

The only notable bodies of ore so far found in the district are those in the Simon mine, where two large irregular chimney-like shoots have been developed. It is said that 500,000 tons of ore, averaging 8 per cent of lead, 9 per cent of zinc, and 5 ounces of silver to the ton, is indicated by the work so far done.

The outstanding geologic feature of the Simon mine is that the two ore shoots so far found are localized along an alaskite porphyry dike. This dike averages 30 feet in thickness, has been injected along the contact of the Simon quartz keratophyre and the Triassic limestone, and dips 70° NE. The contact along which it has been injected appears to be a reverse fault, for the limestone, whose strike is parallel to that of the dike, dips 60° SW. near the dike but flattens away from the dike. Petrographically the dike is an aphanitic

white rock that carries scattered small phenocrysts of quartz, which is its only conspicuous constituent, and inconspicuous phenocrysts of orthoclase. Under the microscope the phenocrysts of quartz and orthoclase (orthoclase, not sanidine, as the potassium feldspars in the rhyolites of the district invariably prove to be) are seen to be set in a microgranular groundmass of orthoclase and quartz. Loosely this rock has been called both rhyolite and granite porphyry, but because it is barren of any dark minerals it will be here termed alaskite porphyry, which is the variety of granite porphyry that is devoid of dark minerals. It doubtless represents a part of the aplitic differentiate of the granodiorite that was injected farther

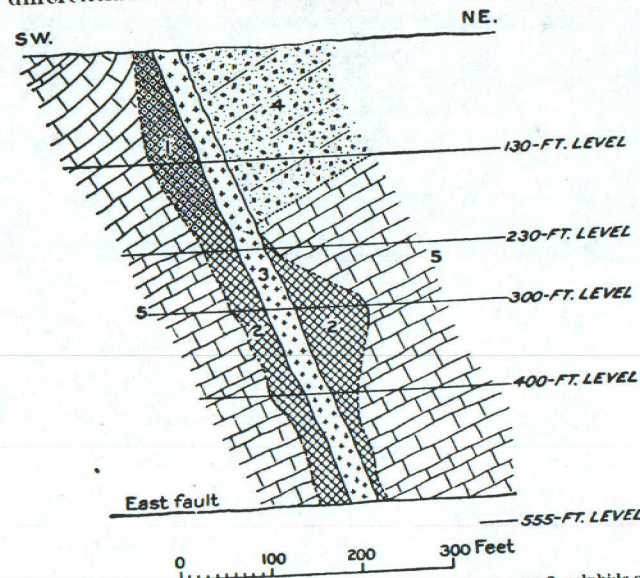


FIGURE 55.—Diagrammatic section through the Simon mine, Nev. 1, Gossan; 2, sulphide ore; 3, alaskite porphyry; 4, Simon quartz keratophyre; 5, Triassic limestone.

from the parent mass and therefore into a colder environment, where it cooled faster and consequently took on a porphyritic-aphanitic texture.

The geologic conditions at the Simon mine are epitomized in figure 55. The ore shoot in the footwall of the dike was discovered first, as it cropped out at the surface. Above the 230-foot level this shoot is composed largely of siliceous gossan, though it contains some galena and cerusite and in places considerable plumbojarosite (a basic sulphate of ferric iron and lead), recognizable by its silky luster and talc-like smoothness to the touch. The hanging-wall ore shoot does not extend to the surface, as the keratophyres, which form the

<sup>3</sup> Buwalda, J. P., op. cit., pp. 335-363.

<sup>4</sup> Buwalda, J. P., op. cit., p. 350. Also see Merriam, J. C., Tertiary vertebrate fauna from the Cedar Mountain region of western Nevada: California Univ. Dept. Geology Bull., vol. 9, pp. 162-172, 1916.



hanging wall of the dike near the surface, were evidently not easily replaceable by the ore-forming solutions, as was the limestone.

The contacts of the dike are sheared and reduced to gouge in places; evidently the old fault continued to be a locus of movement. The dike rock has been thoroughly altered by the ascending ore solutions, and it has been silicified, sericitized, and calcitized. Some sulphides also have been introduced, and some quartz veins occur in the porphyry, but the dike has not been highly enough metallized anywhere to constitute ore. The keratophyre that forms the hanging wall of the dike on the upper levels has been similarly altered, and arsenopyrite is relatively common in it, but no ore has formed in it.

A belt of calcium silicate rock lies parallel to the alaskite porphyry dike on the summit of the ridge west of the shaft. It is in the limestone about 100 feet from the dike on the footwall side and comprises both light-colored and dark aphanitic varieties. Under the microscope these rocks are seen to consist of garnet, diopside, actinolite, and calcite. Evidently these rocks represent the outer edge of the contact-metamorphic aureole of the granodiorite intrusion.

One of the problems connected with the Simon ore body is what has become of all the zinc that has been leached out of the gossan. This zinc should have been deposited as smithsonite (zinc carbonate) in the footwall of the lode by reaction with the limestone, but the quantity of secondary zinc minerals so far found is negligible: a little calamine occurs in vugs in the sulphide ore on the 230-foot level, and a small amount of typical iron-stained fine-grained zinc carbonate has been noted in the limestone on that level. Nevertheless the possibility that large bodies of such secondary zinc carbonate should occur ought to be kept steadily in mind.

Of mineralogic interest is the occurrence of adamite in aggregates of small white crystals that line the vugs in the smithsonite. I am indebted to Prof. W. E. Ford, of Yale University, for the identification of this mineral, which is a zinc arsenate— $\text{Zn}_3\text{As}_2\text{O}_8 \cdot \text{Zn}(\text{OH})_2$ —and which has not previously been recorded as occurring in the United States.

#### ORIGIN.

The contacts of the alaskite porphyry dike served as the pathways of hot ascending metalliferous solutions, which attacked the limestone and dissolved it and simultaneously deposited in the spaces thus made galena, sphalerite, pyrite, and quartz. The solutions also attacked the alaskite porphyry and converted it into an aggregate of quartz, sericite, calcite, and disseminated sulphides. Thus far we are on firm ground, but when we attempt to link up the origin of the ore-forming solutions with a particular period of igneous activity in the district the evidence becomes less secure. The balance

of the evidence, however, strongly favors the hypothesis that the ore-forming solutions were one of the postintrusive effects of the granodiorite. Obviously there have been two widely different kinds of mineralization in the district—one that produced the silver-lead ore and the other the gold-quartz ore, which is of a very marked individuality and is known to be of Tertiary age. These differences in kind strongly suggest differences in age, and, furthermore, to assign the silver-lead ores—the heavy basic ores—to an epi-Jurassic age instead of to the Tertiary age of the gold-quartz ores conforms best with the metallogenic history of Nevada.

#### MINES AND PROSPECTS.

##### SIMON MINE.

##### GENERAL FEATURES.

The chief ore bodies in the district are those in the Simon mine, which is owned by the Simon Silver-Lead Mines Co. The company owns the Mammoth, Lillian, Lillian No. 1, and Lillian No. 2 claims. The Mammoth lode, in which the chief ore bodies occur, was discovered as long ago as 1879, for it crops out as a huge ledge that projects 20 feet or more above the ground. A large amount of leached siliceous gossan occurs, and from this material some oxidized lead was shipped, but the possibilities of the mine remained undisclosed for nearly 40 years. Until recently the mine was known as the Nevada mine. In 1916 it came under the control of P. A. Simon, and exploratory work in depth began to be pushed. In 1919 it became evident that a valuable ore body underlies the gossan, and subsequent exploratory work has revealed another large ore body, which, unlike the other, never extended to the surface, owing to the geologic conditions that governed its formation.

The ore of the Simon mine is closely associated with an alaskite porphyry dike that dips 70° NE., which has been intruded along a reverse-fault contact between the Triassic limestone and the Simon quartz keratophyre. On the upper levels of the mine the quartz keratophyre forms the hanging wall of the dike and the limestone forms the footwall, but below the 230-foot level limestone forms both walls. The main body of ore occurs as a pipelike shoot in the footwall of the dike, but in the lower levels another shoot occurs on the hanging-wall side of the dike. The ore is an argentiferous lead-zinc jasperoid, which has resulted from the replacement of the limestone adjacent to the alaskite porphyry dike.

The mine is developed by a shaft which is vertical down to the sixth level, at 400 feet depth, but below that level it inclines steeply northeastward down to the seventh or bottom level. The bottom level is at a depth of 555 feet, but it is sometimes referred to as the



700-foot level. The largest amount of development work has been done on the fifth, sixth, and seventh levels. The mine makes considerable water on the two lower levels. In figure 55, which shows diagrammatically the main geologic features of the mine, the levels are indicated according to their vertical distances below the collar of the shaft. The outlines of the ore bodies between the levels are drawn in dotted lines to indicate that the exploratory work is not yet full enough to show precisely the location of the boundaries of the irregular ore bodies. Similarly, information is lacking as to the precise position of the floor on which the quartz keratophyre lavas rest.

Early in 1921 a milling plant was built at the mine and a flotation unit installed which is capable of treating from 150 to 175 tons a day. It is planned to add another unit as soon as the plant is running smoothly and satisfactorily. Late in the year a power line built by Mineral County from Hawthorne to the Simon district was completed.

#### DETAILS OF THE GEOLOGY.

The prominent outcrop that naturally attracted attention early in the history of the district consists of silicified alaskite porphyry, the surface exposure of the dike along which the ore bodies of the Simon mine are localized. Adjoining this alaskite porphyry on the northeast side is the outcrop of the lode proper—leached siliceous vein stuff, in places containing sufficient iron oxide to be termed gossan. This gossan continues down to the 230-foot level, where the sulphide ore from which it was derived appears. In places the gossan carries cerussite, and the richer material of this kind was stoped and shipped by the former operators. Locally the rare mineral plumbojarosite occurs in unusually large and solid masses, and it probably formed part of the ore shipped.

The alaskite porphyry dike, which is so important a feature in the geology of the mine, ranges from 15 to 35 feet in width. It has been considerably altered by the primary mineralizing solutions, which have silicified it so thoroughly that the quartz phenocrysts are now the only recognizable traces of its igneous origin. In addition to the newly introduced quartz, some sericite and calcite were formed in the dike, as well as the sulphides sphalerite, pyrite, galena, and arsenopyrite, but these sulphides are nowhere abundant enough in the dike to constitute ore. In the upper levels of the mine the hanging wall of the dike consists of Simon quartz keratophyre and the footwall consists of limestone; but in the lower levels both walls consist of limestone, as shown in figure 55. Because both the alaskite porphyry and the quartz keratophyre have been altered by mineralization it is difficult to distinguish them. The alaskite porphyry, however, is notably white, brittle, and shattered and tends

to break into small angular fragments; the quartz keratophyre is far more massive, is characteristically permeated with innumerable manganese dendrites, and is much richer in phenocrysts, of which those of quartz are larger and the feldspars are closely crowded.

Unoxidized ore carrying zinc blende and pyrite appears first on the 230-foot level, although more or less galena persists up to the surface. The typical ore consists of galena and deep-brown zinc blende in a gangue of dark-gray jasperoid, with pyrite as a subordinate constituent. The jasperoid has the usual appearance of the fine-grained quartz aggregate that results from the siliceous replacement of limestone.

The ore body first discovered occurs in the footwall of the dike and forms a shoot in places as much as 60 feet wide and more than 200 feet long, making an irregular chimney that pitches northwest. After this shoot had been extensively developed crosscuts driven through the dike disclosed another fine body of ore on the hanging wall of the dike, replacing the limestone that occurs below the keratophyres, which evidently were unfavorable for the deposition of ore. On the 300-foot level this new shoot attains a width of 80 feet. It is reported that the quantity of ore blocked out in the two shoots aggregates 500,000 tons. Ore on the 230-foot level is reported to average  $4\frac{1}{2}$  per cent of lead, 9 per cent of zinc, and \$2 in silver and gold to the ton.

The ore zone is cut by faults. The largest of these faults is known as the West fault, because it cuts off the northwestward extension of the ore zone on the upper levels. It is shown on the surface, where it trends northward, making an angle of about  $35^\circ$  with the course of the alaskite porphyry dike, which it has displaced 300 feet. The fault has been cut underground, where the trend of the broad corrugations in the walls indicates that the movement on the fault surface had no lateral component. If this is true the total slip is probably 600 to 700 feet. In conformity with this large slip the Simon quartz keratophyre forms the west wall of the fault as far down at least as the sixth (400-foot) level, much farther down than its normal position elsewhere in the mine. Owing to this fault and to the northwestward pitch of the ore shoot, it is probable, as Mr. O. H. Hershey has pointed out to me, that the downward extension of the ore shoot will be found in the west segment of the ore zone west of the West fault.

A fault known as the East fault cuts the ore zone a few hundred feet southeast of the shaft on the upper levels. It strikes at right angles to the ore zone and dips  $60^\circ$  NW. Because of this northwestward dip it comes successively nearer and nearer the shaft on the lower levels and cuts it between the sixth and seventh (bottom) levels. This fault seemingly terminates the alaskite porphyry dike and the ore shoots along the line of the section shown in figure 55, which is



drawn through the shaft and at right angles to the ore zone. The displacement on this fault is small, however, the offset being not over 20 feet, and the ore shoot between the East and West faults has been found on the bottom level. After this segment had been cut further exploratory work was stopped late in 1920, and the energies of the company were turned to the construction of a milling plant.

#### SIMON CONTACT PROSPECT.

The Simon Contact prospect, owned by the Simon Contact Mines Co., is a few hundred yards northeast of the Simon mine. It is developed by an inclined shaft 350 feet long, which slopes 56° NW. and from the bottom of which a level has been driven for several hundred feet southwestward along the footwall of an alaskite porphyry dike.

The prevailing country rock is limestone of Triassic age, as shown by some *Ceratites* and *Spiriferina* that were found in it. This limestone strikes N. 65° W. and dips 20°–45° SW. It is cut by an alaskite porphyry dike, which is the easterly extension of the same dike on which the Simon mine is developed. In this prospect the dike strikes northeast, dips 50° NW., and is 25 feet thick. The Simon quartz keratophyre appears 200 feet west of the shaft, where it has been faulted down against the limestone. This faulting, however, antedates the injection of the alaskite porphyry dike, which cuts across the contact without offset.

The exploratory work has been done mainly along the footwall contact of the dike on the lowest level. Both the limestone and the alaskite porphyry have been heavily shattered and reduced to gouge along this contact. The alaskite porphyry has obviously been much sericitized, and the microscope shows that calcite also has been introduced. Some slabs of heavy sulphide ore occur in the limestone in the footwall of the dike beyond survey plug 311. The ore minerals are chiefly black zinc blende and galena, with pyrite, arsenopyrite, and chalcopryrite subordinate; the only gangue mineral is calcite.

#### SIMON STERLING PROSPECT.

The Simon Sterling prospect is a few hundred yards north of the Simon mine. It is developed by an incline of 20° that is sunk on the vein. The vein lies in a sheeted zone on the Simon quartz keratophyre, which appears here to be an explosion breccia rather than lava rock. The vein ranges in thickness from a few inches to 2 feet. It carries silver ore, whose tenor is spotty and reaches a maximum of 90 ounces to the ton. The metallic minerals are galena, arsenopyrite, pyrite, sphalerite, and minor chalcopryrite.

#### FAGAN PROSPECT.

The Fagan prospect, owned by the Simon Fagan Mines Co., is 5 miles in an air line southwest of the Simon mine. It is on the edge of the west flank of Cedar Mountain. The country rock is a fine-grained white marble, which is intruded a few hundred feet east of the shaft by granodiorite porphyry.

In 1920 a vertical shaft had attained a depth of 190 feet, from which crosscuts had been driven on the 50 and 100 foot levels. The vein is vertical and is irregular in width and on the 100-foot level has pinched down to a few inches. In places there is a highly sericitic gouge, possibly derived from the hydrothermal alteration of some intrusive igneous rock. The ore is chiefly limonite that carries lead carbonate; it probably averages between 5 and 10 per cent of lead and contains an ounce of silver for each per cent of lead. The best assay was obtained at a depth of 35 feet, where across a width of 4.9 feet the ore carried 26 per cent of lead, with 34 ounces of silver and 0.36 ounce of gold to the ton.

#### GOLD VEINS.

##### GENERAL FEATURES.

The gold veins occur only in the Tertiary volcanic rocks. They are not numerous, and only two have been worked; the Olympic has produced by far the most gold. The ore consists of fine-grained white quartz, much of it clearly pseudomorphic after platy calcite, containing the precious metal—a gold-silver alloy, so finely divided as to be invisible. Pyrite in traces is the only sulphide present, so that these highly siliceous ores contrast notably with the heavy lead-zinc ores of the earlier period of mineralization in the region.

The Olympic mine presents a number of perplexing problems in structure and faulting, the solution of which is vital to the future of the mine. These problems are discussed in the following description, and a solution is indicated.

#### THE MINES.

##### OLYMPIC MINE.

##### GENERAL FEATURES.

The Olympic mine, owned by the Olympic Mines Co., is at the north end of Cedar Mountain, 4 miles north of the Simon mine. The principal claims were located by J. P. Nelson in January, 1915, but it was not until May, after most careful prospecting, that the gold-quartz vein on which the mine is opened was discovered.<sup>5</sup> The property was shortly afterward promoted by F. J. Siebert, and the new

<sup>5</sup> Siebert, F. J., Nevada's latest gold camp: Min. and Sci. Press, vol. 114, pp. 449–450, 1917.



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Item 31



0500 0031

S. POWER WARREN, E. M. M. Sc.  
CONSULTING ENGINEER

A REPORT ON THE

SIMON MINE  
MINA, NEVADA.

Summarizing various data concerning

HISTORY

PRODUCTION

GEOLOGY

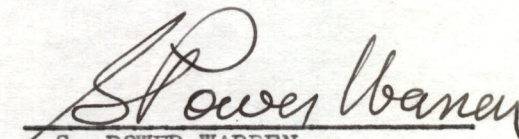
ORE RESERVES

POSSIBILITIES

Presented for your consideration

By

July 1, 1957

  
S. POWER WARREN.

S. POWER WARREN, E. M. M. Sc.  
CONSULTING ENGINEER



S. POWER WARREN, E. M. M. Sc.  
CONSULTING ENGINEER

July 1, 1957.

Gentlemen:-

The data that comprise this report are from many sources and of various types. They are combined herein for the purpose of presenting the possibilities, for the profitable operation of a mine. This mine has had very little careful and competent operating direction during its whole history.

This mine is presently at the point where it is avoided by most examining engineers because of an unfavorable operating reputation gained through poor management. It is avoided by some investors because during the last 10 to 15 years the surface plant and equipment has been sold off, burned or stolen.

Also the type of ore, combined gold - silver - lead - zinc - copper, is such that it must be concentrated and separated into classes of material most suitable for the market, in order to receive a favorable financial return per ton of ore. This must be done at the mine and a plant built to do it, in order to realize the greatest economic benefit.

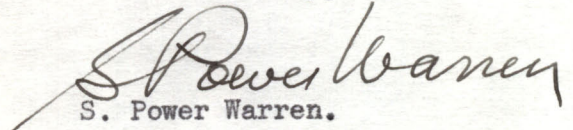
To some investors these conditions present a formidable problem, but others can see them as the reason why the mine is available.

It is also the reason why the writer feels that success will result from a carefully planned, adequate financed, step by step plan, that starts with confirming the presence of sufficient value, that is, a sufficient number of tons of ore, of good grade. This will then justify the expenditure for plant and development work, which in turn will provide the basis for a successful mining operation.

There are some data contained herein that may not seem pertinent but taken as a whole, the writer feels they show the present conditions of the situation.

These data are hereby offered for your consideration.

Yours sincerely,

  
S. Power Warren.

1400 Pierce Street,  
Lakewood - Denver 15,  
Colorado.



PURPOSE OF REPORT

This report will describe certain conditions presently existing at a mine in Nevada, which has a long history. The mine has produced ore from time to time containing varying quantities of gold, silver, lead, copper and zinc.

It is hoped that this report will interest, either a group of successful business men or the management of a successful mining company, that have funds they are willing to risk, on a proposition that is certainly more capable of developing a paying mine than is usually the case.

The writer, whose company unwatered it in 1937, is convinced that the mine can produce ore at a profit, if a plan worked out by competent engineers is backed by ample capital.

If a group of business men, not a mining company, take this risk the object of this exploration program will be to interest an operating mining company in the mine's possibilities with the idea of selling the property to them at a profit.



## SIMON MINE

### REASONS FOR EXPECTING SUCCESSFUL EXPLORATION.

The mine, called the Simon, is in a known mineralized zone having been first discovered in 1879 (see appendix #7 page 373).

At no time during its history has the operation been blessed, at the same time, with sufficient operating capital, efficient technical know how and effective management. (Appendices #9 - #10 - #11).

The history of the stock transactions on the San Francisco Mining Exchange (1916 to 1927) would indicate the possibility of an interest other than that of operating the mine for a profit.

The per ton value of the ore in the mine is higher than is usually found at presently operating properties handling this type of ore.

The ore occurs as a replacement in limestone, which is a type of ore deposit, that often is found in large quantities, but is not always discernable from outcrops and mine workings.

The post mineral faulting of these ore bodies has confused former operators because they failed to provide ample time to study this condition thoroughly.

Two concentrating mills have been built on the property, one for oxidized ore and one for sulphide ore, but both failed. Neither made use of methods of concentration now known to be successful, because the methods were not completely developed when the mills were operating.



SIMON MILE

REASONS FOR EXPECTING SUCCESSFUL EXPLORATION (cont'd)

The period from 1927 to 1932 was spent entirely doing development work on the seventh, eighth, ninth and tenth levels. No ore, other than that driven through, while drifting and cross-cutting was extracted.

Mr. B. B. Bryan, a large stockholder during the period, provided over \$400,000.00 for this development work. The work was guided by competent engineers who recorded each day the condition of each working face. These records described the geological conditions, quantity of ore and assays.

The records described above were available to the writer, along with other data, and are the basis of an assay map compiled by him and made a part of this report.

The writer obtained a good idea of the mine when he was president of a company, The Bryan Mining Company, which in 1937, unwatered the mine. However, he had to allow it to fill up again because of lack of funds.

The water is still in the mine as no operation has unwatered it since 1937, hence, the ore indicated on the accompanying assay maps is still available.



## SIMON MINE

### EXPLORATION PROGRAM CONTEMPLATED

No definite lease and option has been obtained from the owner, because he is favorably inclined to any program that contemplates developing the mine. This makes it possible to include in the agreement provisions favorable to all when the lease or sale option is drawn up.

The first work on the property should be the preparation of a complete surface geological map. While the surface geology map is in preparation, a thorough sampling of the ore in the mine above water level should be done and assay results placed on a separate map also showing the underground geology.

With the surface geological map finished, sampling, assaying and mapping of those parts of the mine now open, the drilling to confirm assays and tonnages below water level can be started. As each hole is finished its results will be used to augment the information already available and from such a study further drilling will be done.

It is estimated that after about 4000 ft. of diamond drilling has been done, enough data will be available to invite, to visit Simon, examining engineers of operating companies.

These engineers may desire additional information such as more mapping or drilling. This fact will make it necessary to set up a two stage program and consequently provide for its financing.

The first stage will cost about \$50,000.00 and will develop reasons for proceeding. The second step, detail plan should be delayed until data from the first step are available and studied, however, sufficient funds should be on hand during this time to protect the ownership of the property or lease and do further exploration work during sale negotiations.



## SIMON MINE

### EXPLORATION PROGRAM COST

To carry out the first step of the program suggested above, a cost estimate would approximate the following;

Geologist @ \$100.00 per day	\$ 1,500.00
Mapping	750.00
Traveling expense	500.00
Assays	1,000.00
5000 ft. diamond drilling @ \$7.50 per ft.	37,500.00
Supervision, data correlation and mapping, 8 months	8,000.00
	<hr/>
	\$ 49,250.00

The above estimate is based upon the assumption that a small group of business men will take this risk and the writer will be employed to spend his full time over a five to eight months period.

In case the risk is taken by an operating mining company, they will no doubt prepare their own exploration cost estimate, based upon a consideration of the property by one of their representatives.

The writer finds it necessary to request compensation if employed, because he can then refuse any other work during this period to give the full benefit of his experience to the successful completion of the exploration work.

The cost of the second step is indefinite because so much depends upon the data obtained from the first stage. It is the writer's opinion that when the above data are available, including the results of from 4000 to 5000 ft. of diamond drilling, the assays and tonnages indicated on the present map (appendix #5) will be confirmed and in addition a large limestone replacement ore deposit will have been indicated.

If this is true the cost of selling the lease must be provided for as well as funds for additional work should it be necessary. Another \$50,000.00 should be available but not necessarily all spent.



## SIMON MINE

ANTICIPATED EARNINGS.

The composite assays of the two classes of ore present in the mine, according to all available records can be summarized as follows;

	<u>Oz/Ton</u>		<u>Percent</u>		
	<u>Au</u>	<u>Ag</u>	<u>Pb</u>	<u>Cu</u>	<u>Zn</u>
Upper Level	0.02	3.5	4.6	-	7.0
Lower Level	0.04	9.4	9.2	2.5	6.5

These ores can be treated in a differential flotation concentrating plant and should produce concentrate as follows;

	<u>Oz/T</u>	<u>Oz/T</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>Value per ton</u>
<u>Upper Level</u>	<u>Au</u>	<u>Ag</u>	<u>Pb</u>	<u>Cu</u>	<u>Zn</u>	<u>Mined</u>
Lead Conc.	0.13	31.5	70.0	-	4.0	\$14.40
Zinc Conc.	0.03	9.0	3.0	-	55.0	7.24
<hr/>						
<u>Lower Level</u>	<u>Oz/T</u>	<u>Oz/T</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>Value per ton</u>
						<u>ore mined</u>
Lead Conc.	0.16	52.6	70.0	1.0	1.0	\$25.76
Copper Conc.	0.14	11.0	2.1	25.0	2.3	11.70
Zinc Conc.	0.04	8.0	1.7	1.2	55.0	6.92

The indicated profit per ton can be tabulated as follows;

	<u>Upper Level</u>	<u>Lower Level</u>
Value of Pb Conc.	\$14.40	\$25.76
" " Cu "		11.70
" " Zn "	7.24	6.92
Total Value	<u>\$21.64</u>	<u>\$44.38</u>
<hr/>		
Cost of Mining & Concentration	<u>\$12.00</u>	<u>\$15.00</u>
Profit per ton	\$ 9.64	\$29.38



# SIMON MINE

## ANTICIPATED EARNINGS, (cont'd)

Various engineers have estimated the ore that can be considered probable. The amounts to be used in the following calculation can be considered a good average of these estimates.

	Tons of Ore	Profit per Ton	Total Indicated Profit
Upper Levels	30,000	\$9.64	\$289,200 -
Lower Levels	50,000	\$29.38	\$1,469,000 -
Total	80,000	\$21.98	\$1,758,200 -

The indicated profit of \$1,758,200 - is based upon the premise that the mine is ready to produce ore and the mill ready to operate.

This was the condition in 1937 when Mr. B. B. Bryan, after gaining control in 1927, and had spent over \$400,000.00 developing the lower level ores, turned the property over to the Bryan Mining Company of which the writer was President and Manager.

It is believed that the present campaign of exploration will not only confirm these ore grades and tonnage data, but will show a considerable number of tons of ore to be available on the extensions of the presently known ore bodies. With greater mine depth the number of tons of ore can be conceivably five times the figure used in the above estimate.



## SIMON MINE

### APPENDIX NO. 1

The Simon Mine is located 23 miles northeast of the town of Mina, Nevada, which is located on U.S. Highway #95 about equidistant to Reno or Los Vegas.

The map, labeled appendix No. 1, is a photostat of two U.S.G.S. topographical maps which show the location of Simon with respect to Tonopah (lower right hand corner), Mina and Hawthorne, just below Walker Lake.

Simon will be seen northeast of Mina, in Mineral County near the border between it and Nye County. The road to it is the usual desert mountain road with practically no steep grades. Heavy hauling (10 tons ore) is possible over this road and once production starts the county road maintenance crew will keep it in shape.







This is a standard 1660 ft. to the inch aerial map that has been blown up four times to a scale of 415 ft. per inch.

The mine buildings, the mill building and the small tailing ponds can be clearly seen. A red spot indicates the position of the deep (800 ft.) three compartment shaft.

The discovery (1879) outcrop and old shaft can be seen about  $1\frac{1}{2}$  inches west of the red spot showing the location of the deep shaft. The arroyo between the two is the trace of the West Fault described in Adolph Knopf's 1921 report on Ore Deposits of Cedar Mountain, Nevada. (Appendix #7).

Below the tailing ponds across one road and south of the other will be seen several mineral locations and a shaft with headframe on one of them.

The road to Mina, Nevada, leaves this photo on the south about three inches from the S.W. corner.

This map is made on the same scale as the claim map (Appendix #4) and the clear film of underground workings (Appendix No. 6) so that the points in the mine where the ore is, can be correlated with the surface geography and the claim lines.



APPENDIX No. 3

This is a photograph of the mine dump and headframe taken from a point on the hill northeast of the shaft. This picture is looking towards the southeast.

Its only importance is to show evidence of former operations as this picture was taken in about 1932.





APPENDIX NO. 4

This claim map shows the holdings as of 1937. The claims with a capital P on them are the patented claims, whereas, all the others are unpatented, but as of 1937, were in possession of the Bryan Mining Company.

It is very necessary to have control of these unpatented claims because, first, they have some evidence of mineral on them, but of most importance is the necessity of owning land for a tailing disposal pond.

The patented claims shown on this map were checked with the Sheriff's sale papers and the final deed and they were found to conform.

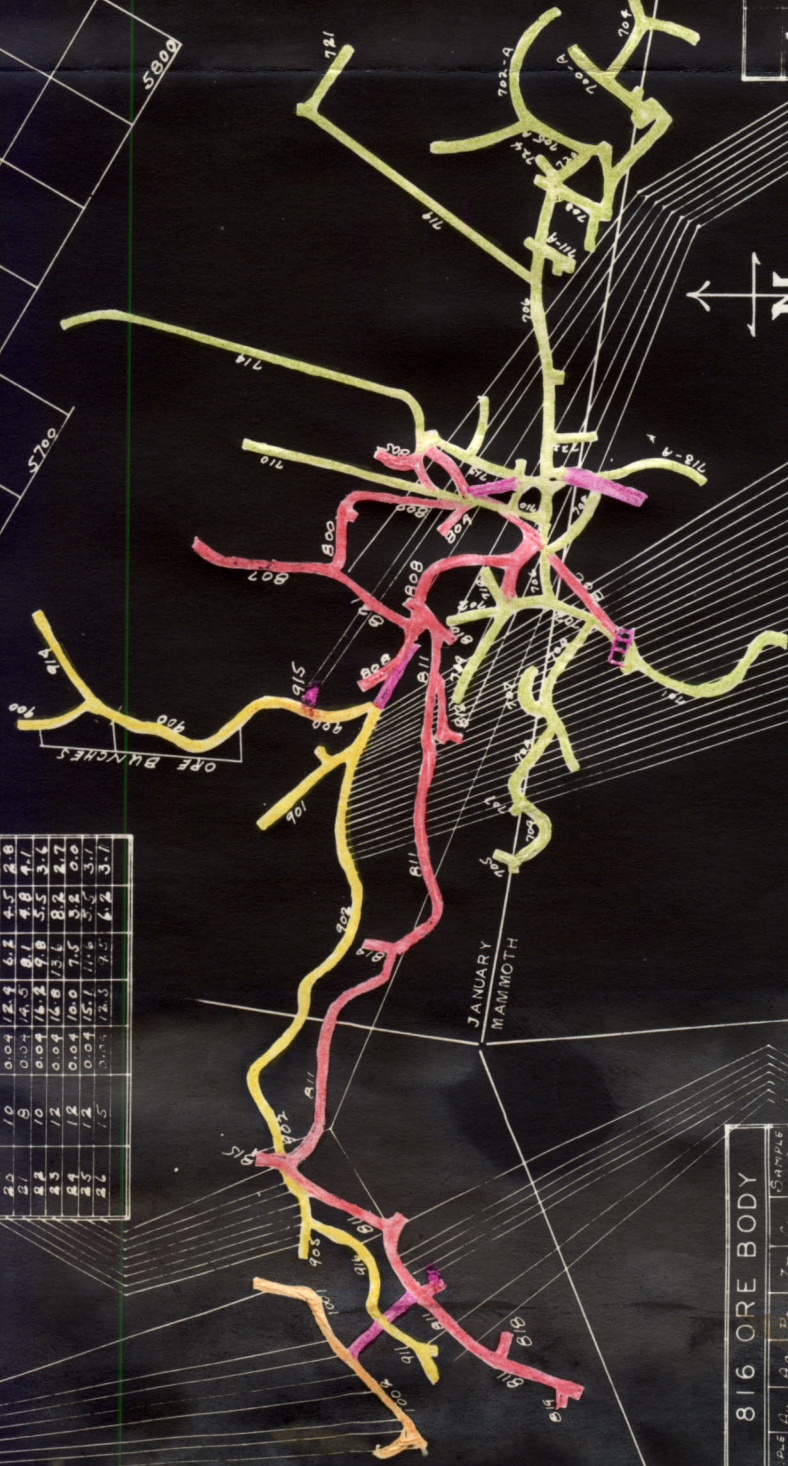


816 ORE BODY					BODY					808 ORE BODY				
SAMPLE AMOUNT	Ag	Pb	Zn	Cu	SAMPLE AMOUNT	Ag	Pb	Zn	Cu	SAMPLE AMOUNT	Ag	Pb	Zn	Cu
2.5' WIDE	0.00	0.00	0.00	0.00	1.0	0.00	0.00	0.00	0.00	1.0	0.00	0.00	0.00	0.00
4.0' WIDE	0.00	0.00	0.00	0.00	2.0	0.00	0.00	0.00	0.00	2.0	0.00	0.00	0.00	0.00
10' WIDE	0.00	0.00	0.00	0.00	4.0	0.00	0.00	0.00	0.00	4.0	0.00	0.00	0.00	0.00
15' WIDE	0.00	0.00	0.00	0.00	6.0	0.00	0.00	0.00	0.00	6.0	0.00	0.00	0.00	0.00
20' WIDE	0.00	0.00	0.00	0.00	8.0	0.00	0.00	0.00	0.00	8.0	0.00	0.00	0.00	0.00
25' WIDE	0.00	0.00	0.00	0.00	10.0	0.00	0.00	0.00	0.00	10.0	0.00	0.00	0.00	0.00
30' WIDE	0.00	0.00	0.00	0.00	12.0	0.00	0.00	0.00	0.00	12.0	0.00	0.00	0.00	0.00
35' WIDE	0.00	0.00	0.00	0.00	14.0	0.00	0.00	0.00	0.00	14.0	0.00	0.00	0.00	0.00
40' WIDE	0.00	0.00	0.00	0.00	16.0	0.00	0.00	0.00	0.00	16.0	0.00	0.00	0.00	0.00
45' WIDE	0.00	0.00	0.00	0.00	18.0	0.00	0.00	0.00	0.00	18.0	0.00	0.00	0.00	0.00
50' WIDE	0.00	0.00	0.00	0.00	20.0	0.00	0.00	0.00	0.00	20.0	0.00	0.00	0.00	0.00
55' WIDE	0.00	0.00	0.00	0.00	22.0	0.00	0.00	0.00	0.00	22.0	0.00	0.00	0.00	0.00
60' WIDE	0.00	0.00	0.00	0.00	24.0	0.00	0.00	0.00	0.00	24.0	0.00	0.00	0.00	0.00
65' WIDE	0.00	0.00	0.00	0.00	26.0	0.00	0.00	0.00	0.00	26.0	0.00	0.00	0.00	0.00
70' WIDE	0.00	0.00	0.00	0.00	28.0	0.00	0.00	0.00	0.00	28.0	0.00	0.00	0.00	0.00
75' WIDE	0.00	0.00	0.00	0.00	30.0	0.00	0.00	0.00	0.00	30.0	0.00	0.00	0.00	0.00
80' WIDE	0.00	0.00	0.00	0.00	32.0	0.00	0.00	0.00	0.00	32.0	0.00	0.00	0.00	0.00
85' WIDE	0.00	0.00	0.00	0.00	34.0	0.00	0.00	0.00	0.00	34.0	0.00	0.00	0.00	0.00
90' WIDE	0.00	0.00	0.00	0.00	36.0	0.00	0.00	0.00	0.00	36.0	0.00	0.00	0.00	0.00
95' WIDE	0.00	0.00	0.00	0.00	38.0	0.00	0.00	0.00	0.00	38.0	0.00	0.00	0.00	0.00
100' WIDE	0.00	0.00	0.00	0.00	40.0	0.00	0.00	0.00	0.00	40.0	0.00	0.00	0.00	0.00

816 ORE BODY				
SAMPLE AMOUNT	Ag	Pb	Zn	Cu
1.0	0.00	0.00	0.00	0.00
2.0	0.00	0.00	0.00	0.00
3.0	0.00	0.00	0.00	0.00
4.0	0.00	0.00	0.00	0.00
5.0	0.00	0.00	0.00	0.00
6.0	0.00	0.00	0.00	0.00
7.0	0.00	0.00	0.00	0.00
8.0	0.00	0.00	0.00	0.00
9.0	0.00	0.00	0.00	0.00
10.0	0.00	0.00	0.00	0.00

811 ORE BODY				
SAMPLE AMOUNT	Ag	Pb	Zn	Cu
1.0	0.00	0.00	0.00	0.00
2.0	0.00	0.00	0.00	0.00
3.0	0.00	0.00	0.00	0.00
4.0	0.00	0.00	0.00	0.00
5.0	0.00	0.00	0.00	0.00
6.0	0.00	0.00	0.00	0.00
7.0	0.00	0.00	0.00	0.00
8.0	0.00	0.00	0.00	0.00
9.0	0.00	0.00	0.00	0.00
10.0	0.00	0.00	0.00	0.00

816 ORE BODY				
SAMPLE AMOUNT	Ag	Pb	Zn	Cu
1.0	0.00	0.00	0.00	0.00
2.0	0.00	0.00	0.00	0.00
3.0	0.00	0.00	0.00	0.00
4.0	0.00	0.00	0.00	0.00
5.0	0.00	0.00	0.00	0.00
6.0	0.00	0.00	0.00	0.00
7.0	0.00	0.00	0.00	0.00
8.0	0.00	0.00	0.00	0.00
9.0	0.00	0.00	0.00	0.00
10.0	0.00	0.00	0.00	0.00



# PLAN

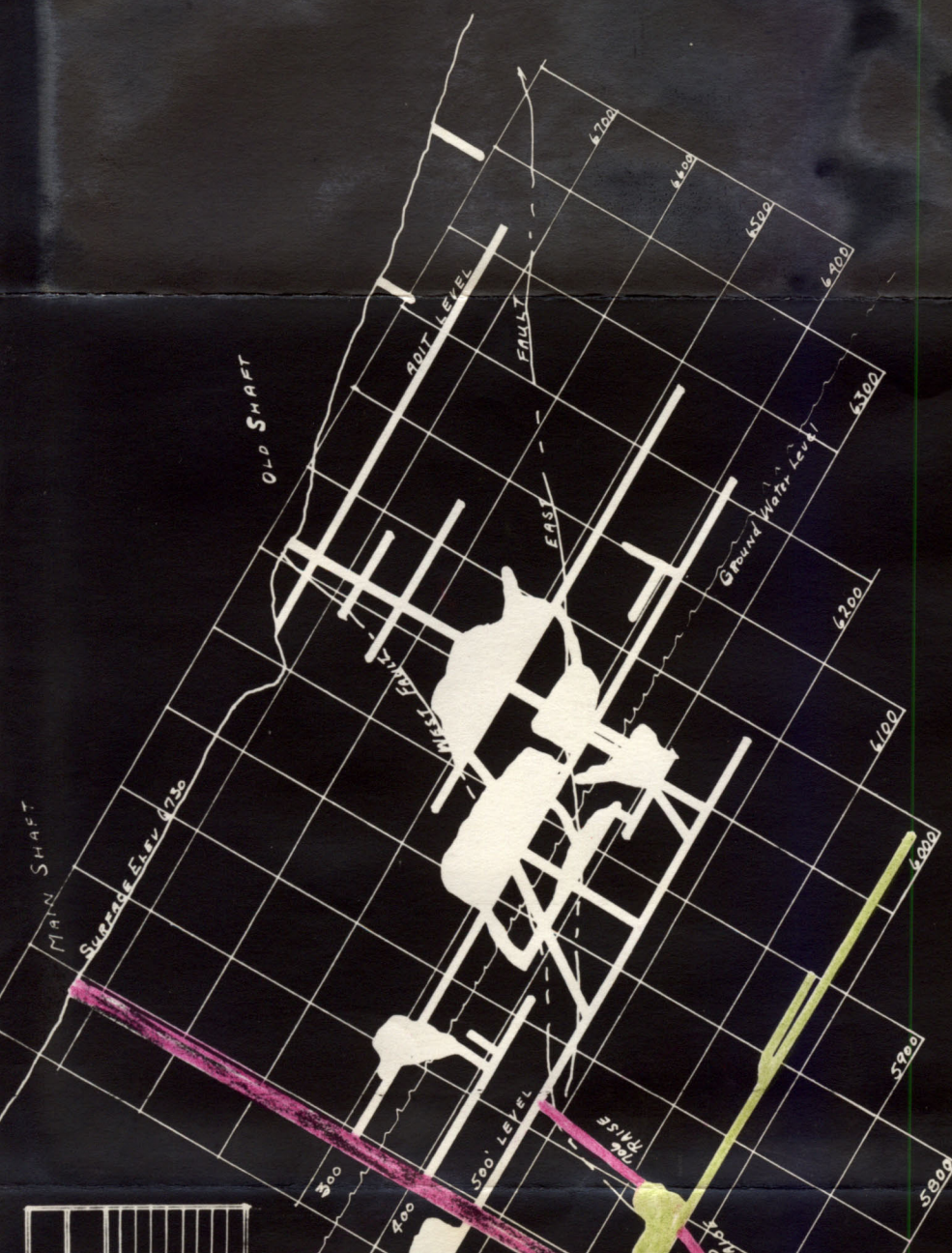
SHOWING LOWER FOUR LEVELS  
SCALE 1"=100'

# LEGEND

1000 LEVEL  
900  
800  
700  
SHAFTS - RAISES - WINZES.

# SECTION N-60°-W

SHOWING ENTIRE MINE  
SCALE 1"=100'



808 ORE BODY				
SAMPLE AMOUNT	Ag	Pb	Zn	Cu
1.0	0.00	0.00	0.00	0.00
2.0	0.00	0.00	0.00	0.00
3.0	0.00	0.00	0.00	0.00
4.0	0.00	0.00	0.00	0.00
5.0	0.00	0.00	0.00	0.00
6.0	0.00	0.00	0.00	0.00
7.0	0.00	0.00	0.00	0.00
8.0	0.00	0.00	0.00	0.00
9.0	0.00	0.00	0.00	0.00
10.0	0.00	0.00	0.00	0.00

DATA FOR THIS SUMMARY SHEET TAKEN FROM REPORTS BY  
VARIOUS ENGINEERS, DAILY PROGRESS REPORTS ABOUT DEVELOPMENT  
WORK AND VERBAL REPORTS FROM FOREMEN IN CHARGE DURING  
DEVELOPMENT PERIODS.

TONNAGE ESTIMATES VARY FROM 40,000 TO 75,000.

# CALCULATED ANALYSIS

	Au	Ag	Pb	Zn	Cu
0.04	9.6	9.4	0.5	2.5	

COMPILATION  
AND  
ARRANGEMENT BY  
B. F. HOWARD, SUPERVISOR, MINE  
CONSULTING ENGINEER  
Denver, Colorado



#### APPENDIX NO. 5

This composite assay map of the four lower levels is the key map of this whole report. It is a compilation of data available to the writer from different sources most of which are not presently available, such as the daily operating records of the lower level development work.

The upper level workings are not shown here, because on the plan they would add to the confusion. These upper level workings are important and will be the subject of an intensive search for additional ore once a comprehensive geological and assay map is available.

This report stresses the lower levels because the ore exposed is all in virgin ground of higher grade and higher indicated tonnage. The lower level ore must be proven so that the combination of both ores will make a profitable operation.

The fact that the lower level ores are under water also makes it necessary to stress their importance to this exploration program. Once there are sufficient data available to confirm the assays on the sheet under discussion (Appendix No. 5) the ores from the upper level will no doubt increase in importance.



APPENDIX NO. 6

This is a clear film of the composit map (Appendix No. 5) reduced in scale to equal that of the claim map (Appendix No. 4) and the aerial map (Appendix No. 2). This scale is approximately 400 ft. to the inch.

APPENDIX NO. 7

This is a few pages from a report by Adolph Knopf on the Ore Deposits of Cedar Mountain, Nevada. It describes many mines in this district and is known as U.S.G.S. Bulletin #725 H.

When this report was written the mine was mostly in the oxidized zone and before the 800 ft. three compartment shaft was put down.

S. POWELL, JR., M. M. S.C.  
CONSULTING ENGINEER

S. POWELL, JR., M. M. S.C.  
CONSULTING ENGINEER



*Reinforced*

GOLD SPRINGS BOND

100% CONTENT



2. HOWEY, W. H. 1902. M. M. 1902.



APPENDIX NO. 8

This is L. B. Spencer's report made in 1930. It contains many assays and exerpts from the daily report. None of the maps that accompanied Spencer's report are available for study at the present time.

Mr. Spencer, at the time he wrote the above report, was accustomed to make a survey of the Simon Mine each month, and report the progress made developing the mine. His knowledge is all first hand. This report is quite accurate and came into the writer's possession in 1933 when B. B. Bryan wanted to sell the property.



C O P Y

REPORT TO

SIMON SILVER LEAD MINES, INC.,

SIMON, NEVADA.

ON

SIMON MINE

FROM EXAMINATION MADE BY

L.B.SPENCER,

MINING ENGINEER,

MINA, NEVADA.

Dated June 23, 1930

( BB Memo - I think Spencer is known as State of Nevada examiner.  
Report was, I understand, furnished to S.F.S.&K. Mining  
Exchange before latter Exchange permitted trading under new  
Cal. laws. Please study assay sheets).



L. B. Spencer, Mining Engineer,  
Mina, Nevada.

June 23, 1930.

Simon Silver Lead Mines, Inc.,  
Simon, Nevada.

Gentlemen:-

As requested by you I have examined the Simon Mine and have prepared the following brief report:

LOCATION: The location of this property is shown on Maps No. 1 & 2 which accompany this report. It lies about 22 miles northeast of Mina, Nevada, a town at the terminal of the So. Pacific R.R. in Southern Nevada. A good road, suitable for trucking and travel extends from this supply point to the mine.

TITLE: The property consists of 35 claims, 20 of which are patented, and 15 locations upon which the annual work has been regularly performed. All mining requirements and regulations have been complied with and all claims are accurately and definitely staked on the ground so as to be readily identified. The claim map accompanying this report shows the group as a whole.

GEOLOGY: The ore bodies of the Simon Mine occur along an alaskite dike which generally lies along the contact between Triassic limestone and Tertiary flows and intrusives. The ore frequently forms as replacement bodies in the limestone near the contact. A brief description of the geology of Cedar Mountains, in which the Simon Mine is situated, is given in Bulletin 725H of the U. S. Geological Survey by Adolph Knopf, from an examination he made in 1919. Subsequent development work has in general borne out Mr. Knopf's deductions.

In general the ore occurs along the Simon foot-wall which forms the boundary of the upper ore bodies on the south. These have been faulted by numerous cross faults cutting segments with a displacement downward and to the south and west in a series of off-sets. On this account the new work now



being done on the 800 and 900 levels west is of great importance.

The ore is a lead-zinc sulphide carrying silver which in the lower levels has also an added silver value due to copper sulphide coming in with important percentages.

WORKINGS: The workings of the Simon Mine consist of an 800 foot shaft of two compartment manway from which levels extend to 353, 442, 505, 706 and 807 feet deep respectively. In addition to these the old workings to the east have the 252 level and several smaller above this. Of these levels separate maps are included in this report on which the positions of the ore bodies and blocked out ore given below are indicated.

ORE IN SIGHT: At the present time the following orebodies have been developed and opened up for production. From some considerable tonnage has been taken at the time of the last mill run so the amounts given are the estimated tonnage remaining:

509 stope from 505 raise	10,000 tons
410 stope below 353 level	4,600 "
409 stope above 353 level	5,200 "
403 stope below 353 level	6,000 "
401 stope above 353 level	3,000 "
356 stope above 353 level	1,000 "
354 stope above 353 level	4,200 "
	<u>3,000 "</u>
Total Ore in sight	37,200 "

In addition to these ore bodies there are the following partially developed ore shoots which are estimated as probable ore:

Between 700 and 800 levels:

807 stope below 700 level	8,000 Tons
808 above 800 level	3,000 "
812 above 800 level	2,000 "
Between 800 and 900 levels	<u>12,000 "</u>
Probable Ore	25,000 "

As to the value of the ore per ton, from the stope of the



blocked-out ore, the average of about 30,000 tons milled was 2-1/2 ounces silver, 4% lead and 5% zinc. In the samples taken from the ore in the lower workings, both lead and zinc values are higher, 7 to 9% and in addition from 3% to 10% copper is found and the silver values more than doubled.

(Tonnage estimated low 100,000 tons. J. T. Robertson.)

EQUIPMENT: The property is equipped with a double drum electric hoist 125 HP capable of sinking to 1500 feet deep if necessary, to 100 HP compressor and motors, ample machine and blacksmith shop, a 250 ton mill equipped with flotation machinery to handle the complex ores of the property. This mill sets near the main shaft so the ore is handled direct to the mill when hoisted. There are enough housing accommodations to take care of 200 men. Electric power is supplied by the Mineral County Power System where main transmission line ends at the Simon Mine. The water supply is pumped from one of the upper levels of the mine and is clean and wholesome. There is plenty of water for the mill operation when metal prices permit.

GENERAL REMARKS: The property as a whole has been much improved by the past year's development work and is now showing important mineralized areas through which are of higher grade than any heretofore encountered. The 800 level has been extended about 1000 feet west and south along the lime-porphry contact. It cuts through an important series of ore lenses and ore of different character to that of the upper levels, indicating, it seems to me, another period of ore deposition carrying copper and higher silver values as well as a richer content of the lead and zinc. Having been acquainted with the progress of this mine almost from its first production and knowing the structure from many examinations over a period of the past ten years, I consider the 900 level development work is sure to open up important ore bodies. As to further ore of milling grade in the upper workings,



7182 10110 400133 4/

these have by no means been exhausted and there are several showings that justify investigation and development work. The 354 stope which produce a part of the last mill run was discovered through such work and there are many places just as important.

In conclusion, while operation of the mill upon the grade of ore showing in the stopes cannot be profitable under the present price of metals (June 23, 1930) any reasonable increase in these prices will permit it and the increase metal content from the ores of the lower levels may at any time be sufficient to overcome all present deficiencies.

Respectfully submitted,

(Signed) L. B. Spencer.



SIMON SILVER LEAD  
MINES INC.  
ASSAYS

816 Winze & 100 Ft. Station

		<u>Au</u>	<u>Ag</u>	<u>Pb</u>	<u>Zn</u>	<u>Cu</u>
12' down	Cut 2-1/2 Ft.	-	6.88	3.8	-	2.4
27'	Cut 6 Ft.	.-5	18.8	18.5	12.2	5.5
55'	Muck grab	.04	5.28	6.02	-	.4
60'	cut 4 ft.	.04	19.6	17.0	13.5	3.6
67' - 70'	16 car comp.	.04	15.28	8.0	6.5	6.8
70' - 73'	20 car comp.	-	8.24	7.4	-	1.0
73' - 76'	15 " "	-	11.2	9.6	-	2.0
76' - 79'	15 " "	.04	10.28	9.5	6.2	2.8
79' - 82'	16 " "	.04	7.64	6.3	5.5	2.2
82' - 85'	16 " "	.04	8.60	9.6	7.0	1.4
85' - 88'	14	.04	7.6	6.3	5.5	2.2
88' - 91'	17	.04	4.36	3.4	2.0	1.2
100' - 111'	30	.04	5.72	7.1	4.5	.2
111' - 114'	18	.04	5.0	6.2	3.1	.4
114' - 117'	17	.04	7.28	9.4	6.1	.8
122'	cut 5 ft.	.02	6.04	7.2	6.5	.2
122' - 136'	75 car comp.	.04	7.4	7.7	4.5	.4
136' - 151'	65	.04	7.32	8.2	5.2	
151' - 165'	65	.04	10.6	12.5	8.7	.0
165' - 170'	32	.06	5.44	7.7	5.3	
170' - 172'	100	.08	6.24	7.2	4.5	
1000 ft. Sta. (East Wall)	cut 14 ft.	.08	4.72	10.0	8.1	.2

905 Drift

From 902						
0-5	15 car comp.	.04	12.48	9.5	6.2	3.1
5-10	12	.04	15.08	11.6	5.5	3.1
10-15	12	.04	10.04	7.5	3.2	-
15-19	12	.04	16.92	12.6	8.2	2.7
19-23	10	.04	16.16	9.8	5.5	3.6
23-27	8	.04	14.52	8.6	4.8	4.1
27-31	10	.04	12.4	6.2	4.5	2.8
31-35	14	.06	9.76	7.0	5.2	1.8

1001 Drift

From 1000 Sta.						
15' - 23'	Car sample	.08	5.36	7.5	5.3	
25' - 29'	" "	.06	7.04	6.1	3.3	
8'	cut sample 3'	.08	15.08	24.9	20.3	
108'	" " 2'	.04	23.32	19.6	16.8	6.5

1002 Drift

30'	cut sample 3'	.16	21.00	14.1	8.5	12.8
33'	" " 4'	.06	4.92	6.5	7.0	
77'	" " 4'	.08	8.08	12.3	12.1	
125'	" " 6'	.04	7.24	9.5	8.0	

911 Drift

From 816 Winze						
60' #17	2' cut	.10	42.00	16.5	10.5	13.8

910 Drift

60' #77	picked sample	.08	28.72	19.5	8.1	3.8
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Aug. 6, 1934

SUMMARY OF WORK DONE IN  
SIMON MINE FROM JULY 1, 1930  
UNTIL SHUTDOWN MARCH 1, 1932

In July and August 1930, the 902 Drift was advanced about 160 feet to a total of 665 feet, where it connects with the 916 Drift. 20 feet of ore was found at the junction, very high grade, and this was later cross-cut, as described further on.

During the same time the 910 drift was advanced 157 feet with 4 feet of ore at the end. The 911 drift was also advanced 30 feet or more, a little nice ore being encountered at the end.

The 905 drift was run 39 feet during September and October 1930, from where the 902 and 910 came together, and of the ore found, Whitney stated in a letter at the time, "This is some of the finest ore ever seen in the mine". An assay, September 15, 1930 of a black high-grade sample showed: -

	Gold	0.08	ozs.	
	Silver	28.7	"	✓
A.	Lead	19.5%		<u>905</u>
	Zinc	8.0%		
	Copper	3.8%		

89 cars of ore were taken out of this drift and a composite average of 8 assays covering them is as follows:

	Gold	.04	ozs.	
	Silver	12.0	"	✓
B.	Lead	9.0%		<u>905</u>
	Zinc	5.7%		
	Copper	3.0%		

Whitney also stated this was the finest lot of high-grade ore encountered in the Simon mine. The 905 drift was discontinued at this point, as it encountered the Mammoth Fault, and it was to re-discover this ore body and the 1000 foot level that the 1001 drift was run. The same ore was found in the 1001 drift just before the power failure in 1931 caused us to lose the 1000 foot level, as described in the account of the work on the 1001 drift.



In September 1930, the 913 Cross-cut was run a few feet off the 911 drift and a two foot sample assays:

	Gold	0.1	ozs.	
	Silver	42.1	"	
G.	Copper	14%		<u>913</u>
	Lead	16%		
	Zinc	10%		

During November and December 1930, the 816 Winze was put down to completion, bottoming at the 1000 foot level. It was in ore the first 87 feet and then dipped under the ore. At the bottom ore showed on the right. During this time 201 cars of ore were taken from the winze, and an average of the assays made on the samples taken from them shows:

	Gold	0.04	ozs.	
D.	Silver	8.0	"	<u>816 Winze</u>
	Lead	9%		
	Zinc	6%		

During the first six months of 1931, until the power failure stopped the work, two drifts, 1001 and 1002, were run in opposite directions from the bottom of this winze.

The 1001 drift was in ore the first 30 feet, when alaskite was encountered on the face and the ore stopped. From this point on ore was found at irregular points. An average of assays made from three cut samples 15 feet in from the bottom of the winze shows:

	Gold	.08	ozs.	
	Silver	4.72	"	
E.	Lead	10%		<u>1001</u>
	Zinc	8.1%		
	Copper	.2%		

Altogether the drift was in ore 80 feet of its length of 150 feet. March 15, 1931 a pocket of high grade ore was encountered from which three or four cars were taken, assaying:

	Gold	.04	ozs.	
	Silver	23.32	"	
F.	Lead	19.6%		<u>1001</u>
	Zinc	16.8%		
	Copper	6.5%		



Near the end, 150 feet from the winze, the drift was in the same high grade ore as was found<sup>above</sup> in the 905 drift and which was considered the best ore ever found in the Simon mine. This is most important as showing the downward extension of this ore. Just at this most interesting point there was a power failure in the Mineral County Power System and it was 18 hours before current was again available to run the pumps. Meanwhile the water had risen above the top of the 1000 foot level, drowning out the pumps and short-circuiting the motor in spite of its having been raised as high as possible. Before arrangements could be made to remove the surplus water it had risen to such a point that it was not deemed wise to attempt to regain this level under the conditions prevailing at the time.

During the first six months of 1931 the 1002 drift was also extended 150 feet with varying amounts of ore showing, and approximately the last 60 feet being in ore. At one point the ore was 10 feet wide due to sluffing; 14 feet from the bottom of the winze the ore was 1 foot wide, and at 30 feet was 2 feet wide. Ten days later there were showings of ore containing copper. A month later 100 feet in, five feet of ore assayed:

	Gold	.06	ozs.	
	Silver	5.0	"	
G.	Lead	7.0%		<u>1002</u>
	Zinc	7.0%		
	Copper	.3%		

Three weeks later, March 27, 1931, this drift was in ore assaying:

H.  
Lead 10%, Copper .7%; also zinc and silver 1002

In April 1931, some work was done on the 821 drift and two assays covering four feet of ore were made:

		<u>High-grade ore</u>	<u>"Peacock Ore"</u>	
	Gold	.08	.1	oz
	Silver	35.28	13.2	"
I.	Lead	30.3%	13.5%	<u>821</u>
	Zinc	25.7%	7.6%	
	Copper	.5%	Trace	



After the 1000 foot level was abandoned, from August 1931 to March 1, 1932, the 900 drift was advanced 393 feet for development purposes partly in limestone and partly on lime-porphyry contact and several small bunches of ore were found. Some were encountered 105 feet from the 808 winze; 136 feet further small bunches of ore showing copper. About 50 feet from the end a cross-cut showed 4 feet of ore and a raise was also run up 11 feet of which 7 feet were ore of good quality.

In December 1931, a 914 Cross-cut was run 91 feet, mostly porphyry, and a 915 Cross-cut was run in January and February, 1932, but did not develop important ore. In the same period a 915 raise was run 51 feet 40 feet of which showed varying amounts of the same ore as found in 821 drift above. An assay at 35 feet shows:

J.	Gold	.08	ozs.	<u>915</u>
	Silver	12.32	"	
	Lead	17.2%		
	Copper	.3%		

The following assays Jan. 31, 1932, are also from the 915 raise;

K.		11 cars	15 cars	
	Gold		.02	ozs.
	Silver	5.2	7.08	ozs.
	Lead	3%	3.6%	"
	Zinc	3.2%	3.4%	<u>915</u>
	Copper		Trace	

The following are some assays made during Jan., Feb., and March 1931.

	1002	1001	1001	1002	1002	1002
	30 ft. in	8 ft. in	13 cars	93 ft. in	4 ft. wide	124 ft. in
Gold	.16 ozs.	.08 ozs.	.04	.08 ozs.	.06 ozs.	.04 ozs.
Silver	21.0 "	15.08 "	2.24%	8.08 "	4.9 "	7.24 "
Lead	14.1%	24.7%	1.4%	12.3%	6.5%	9.5%
Zinc	8.5%	20.0%	1.5%	12.4%	7.1%	8.1%
Copper	12.8%	--	Trace	.5%	.3%	.9%

	1001 0 108 ft. in -- picked	Aug. 1931 - 821 100 ft. in	April 1931 - 821 At connection
Gold	.04 ozs.	.1 ozs.	.08 ozs.
Silver	23.34 "	13.2%	25.1 "
Lead	19.6%	13.5%	30.0%
Zinc	16.8%	7.6%	25.7%
Copper	6.5%	-	-



The information and data on which the above report is based are contained in various reports, letters, assays, etc. which are all in files of the company at Simon, Nevada.

The following estimate of all ore reserves was made by J. T. Robertson and J. H. Simpson on November 7, 1932, and the first 12 items were covered by Spencer's report, whose estimate differs somewhat in some cases.

505 stope	10,000 tons	
410, below 353	5,000 "	46,000 above 700
409 stope	10,000 "	
403 below 353	6,000 "	
401 above 353	3,000 "	
356 above 353	2,000 "	
354 " "	10,000 "	
Ore on dump	4,000 "	
706, below 700-800	8,000 "	
808 above 800 level	3,000 "	
812 " " "	2,000 "	
808 winze, between 800 & 900	12,000 "	
Probable ore to 50 ft. below		
900 ft level, 808 winze	10,000 "	
821 above 800	1,000 "	
800-900	1,000 "	
816 winze 800-900	2,000 "	
900-1000	2,000 "	
1002 drift, above 1000 ft.		
level	2,000 "	
905 below 900 ft. level	2,400 "	
1001 above 1000 ft. level	1,500 "	

96,900 tons.



## PROBABLE ORE BELOW PRESENT WATER LEVEL.

816 Winze  
Body

Probable ore. This ore body is exposed on the 1000 foot 120 feet along the drift. On the 800 foot level for 80 feet with an average width of at least 5 feet. Depth exposed is 210 feet on stope and figures 210,000 cu. feet, or 21,000 tons. From 35 assays taken as work progresses with many samples made or 10 to 20 car composites, this ore body will run:- Gold .04 oz., Silver 10.6 oz., Lead 10.4%, Zinc 7.3%, Copper 2.9%. This estimate taken only between the 800 foot and 1000 foot levels, extensions taken both up and down may be expected which will at least double it.

905 Ore  
Body

Probable Ore. As exposed in the 902 and 905 drifts on the 900 foot level and in 811 and 815 cross-cut, on the 800 foot level. A corner apparently cut in the 1001 drift on the 1000 foot level. Figured as pyramids above and below, this body contains 13,000 tons and an average assay about:

Gold .04 oz. Silver 9.0 oz. Lead 8.4%  
Zinc 4.7%, Cu. 2.6%

If figured as a prism instead of two pyramids, this body contains about 18,000 tons.

801 Ore  
Body

Probable Ore. This body is exposed for 140 feet along 901 and 902 drifts on 900 foot level, shows in 811 and 812 drifts on the 800 level for 90 feet. Average width 10 feet. Estimated, 12,000 tons. Assays:-  
Silver 8.1 oz., Lead 8.2% Zinc 7.8%



MINING COSTS PER TON

	<u>Past</u>	<u>Future</u>
Explosives	\$0.15	\$0.15
Repair and Maintenance	0.06	0.04
Timbers	0.46	0.30
Liability Insurance	0.10	0.08
Power	0.17	0.14
Mine Office	0.19	0.10
Labor	1.59	1.26
Interest	0.02	
Supplies	0.03	0.10
General Expens	0.73	0.24
Fire Insurance	0.01	0.01
Assaying, Engineering	0.03	0.03
Taxes	0.01	0.01
Hoisting	0.22	0.22
	<u>\$3.77</u>	<u>\$2.68</u>

MILLING COSTS PER TON

<u>Crusher and Conveyor</u>		
Labor	.04	.04
Power	.06	.05
Supplies	.03	.01
<u>Concentrator</u>		
Royalties	.05	.01
Labor	.35	.34
Repair & Maintenance	.06	.04
Power	.46	.30
Tails Disposal	.03	.03
Reagents	.17	.21
Liability Insurance	.03	.02
Balls	.09	.12
Mine Office	.20	.10
Supplies	.07	.05
Interest	.02	
Assaying	.06	.02
Taxes	.02	.02
Repair Supplies	.03	.06
Fire Insurance	.03	.03
Water Supply	.15	.02
Labor, Water	.15	.05
Replacements	.02	.06
General Expence	<u>2.42</u>	<u>1.80</u>

<u>Last Operations</u>	<u>Aug. 20, 1926 to Jan. 31, 1927</u>		
Tons of ore milled, 27,542	Ag. 2.5 oz.	Pb 4.00%	Zn. 4.85%
1--Tons of Lead Conc. made 1,648	31.52	57.54	8.17
2--Tons of Zinc Conc. made 1,509	5.00	4.0	46.4
Tailings	.35	.33	1.80

1---- Shipped to U.S.S.R. & M. Co. at Midvale

2---- Shipped to Vieille Montagne Co. Chenec Belgium



APPENDIX NO. 9

This is my report made for B. B. Bryan to be used to attract Klopstock and Company and induce them to raise some money to unwater the mine. .

The history given in this report came from the study of much data available in B. B. Bryan's New York Office.

The small amount of money to be raised was set low enough to avoid S.E.C. regulations. Some scheme, not known to the writer, was to be used to raise the maney to adequately finance the operation when the original 100,000 was used up.

However, as seen from Klopstock and Company's letter of September 30, 1937, the scheme did not work after Mr. B. B. Bryan's death.



C O P Y

BRYAN MINING COMPANY  
(A Nevada Corporation in the Process of Formation).

New York, New York.  
April 12, 1937.

Klopstock & Co., Inc.,  
120 Broadway,  
New York City.

Dear Sirs:-

In connection with your agreement to provide this corporation with funds to re-open the mine of the Simon Silver Lead Mines, Inc., I desire to advise you as follows:

The Bryan Mining Company, upon completion of its incorporation, (which is to be effected under the laws of the State of Nevada) will have an authorized capital of 1,500,000 non assessable shares of common stock, of the par of 10 cents per share, or a nominal authorized capitalization of \$150,000.

Under the arrangement which I have effected with the Simon Silver Lead Mines, Inc., a Nevada Corporation, The Bryan Mining Company will acquire title to all the properties formerly owned by this company.

LOCATION AND SIZE

The property of the Simon Silver Lead Mines, Inc. is located in Mineral County, Nevada, about 22 miles northeast of the town of Mina. Mina is about 40 miles northwest of Tonopah and about 175 miles southeast of Reno. A paved road over which it is possible to travel at all times of the year connects those towns to Mina. Mina is also on a branch line of the Southern Pacific which starts from the main transcontinental line at Hazen, a station east of Reno. The road between the town of Simon, U.S. Postoffice, where the mine is located, and Mina, is the ordinary desert type road which is satisfactory for all present purposes and which can be put in shape for all year use at a small cost. It is a county road and when operations are started it will be easy to obtain the cooperation of the county officials to improve this road and keep it in first-class condition.

The property consists of 35 claims, 20 of which are patented and 15 of which are held by annual assessment work as required by law. In all, they comprise about 700 acres.

A power line is in place that runs from Mina to the mine. It is of ample capacity to handle all the motors that are contemplated to be used. It is operated by the Mineral County Power Co. Should the cost of power from this source prove costly, the accessibility of the mine to the railroad makes the consideration of a Diesel power plant entirely practical.



### HISTORY

The property being acquired was discovered in the beginning of the present century and somewhat before the revival of mining in Nevada which commenced in 1901 with the discovery of Tonopah and Goldfield. Small shipments of high grade oxidized silver lead ores were made, from what was known as the Bell Mining District, but which ceased temporarily with the 1907 panic. Small indifferent operations were carried on until early in 1919, when the shaft on one of the claims ( which are now being acquired by the Bryan Mining Company) reached the 300 foot level, where it ran into a large body of oxidized silver lead ore. This caused a rush of prospectors into the district and claims were staked for miles on all sides of the discovery. So great was the rush that a new mining district was formed called the Simon Mining District.

From 1919 to 1923 a period of poorly managed operation was carried out, during which time high grade ore was shipped to the smelters, as well as concentrates from a mill that had been erected. Lack of sufficient water for milling purposes and high mining costs occasioned by working through the original, part inclined and part vertical shaft, caused the directors to decide to cease all mining operations and sink a new 3 compartment shaft. This was finished to the 700 foot level in 1924.

As this shaft reached a point 200 feet below the lowest point in the old workings, it was necessary to connect these workings and attempt to develop ore from points in this shaft. This work and the sinking of the shaft to 800 foot level took up the time until August 1926, when the 250 ton mill was operated until January 31, 1927, when it was shut down because of lowering metal prices and inefficient operation.

At this point, it is well to call attention to the fact that the ore was being treated was a complex sulphide of silver-lead-iron- and zinc. Up until 1926 only a few plants in the United States had learned how to take advantage of a newly discovered process known as Differential Flotation. This plant was one of the many unfortunate ones that started using this method of treatment and had to shut down because of poor and insufficient capital to absorb the cost of operation while the process was being worked out. Up until the present time no attempt has been made to again operate this plant. During the ten years that have elapsed since this mill operated this method of treatment known as Differential Flotation has been developed to a point where it can easily be applied to ores of this character without the uncertainty that existed before.

After shutting down the mill in 1927, a campaign of development was inaugurated and continued until 1932, when the whole plant was shut down, the shaft allowed to fill up with water and the property turned over to a care-taker.



During the last period of development work and up to the present, the Company, being without funds except for those raised by assessments on the stock, operated only on money furnished by Mr. Benjamin B. Bryan to the extent that when the present announcement was made Mr. Bryan had loaned the Company approximately \$420,000.

This sum of money may seem large, but at the time it was amply justified because a good portion was spent for development work on the 800, 900, and 1,000 foot levels at a point west of the shaft where ore bodies were encountered, and opened up, in a part of the property hitherto unknown to contain ore. This new ore is much higher grade than any ore encountered to date in the mine, principally because of increasing amounts of gold and copper. When all work ceased in 1932 practically all the faces of the drifts in the vicinity of this new ore body are reported to be still in ore. The shut down in 1932 was caused by the fact that a good body of ore had been indicated, and as metal prices were at a very low point, there was no reason for starting a production which would have resulted in simply depleting the ore reserve, and the difficulty of obtaining capital.

From 1932 to the present time a caretaker has remained on the property, so that except for the unavoidable wear and tear, its condition is about the same as when shut down in 1932. A precaution, worthy of mention here, that was taken when decision to allow the mine to fill up with water was made, was to thoroughly inspect the shaft and take every step necessary to leave it in shape so that no trouble would be encountered when the mine was de-watered.

#### ENGINEERS REPORT

During the life of this property several prominent engineers were employed to make reports on geology and mining systems.

There is no necessity of including the full report in this letter, however, a list of them will follow;

- U. S. Geological Survey, Bulletin #725-h  
written by Adolph Knopf.
- Geological Report in 1919  
written by Walter Harvey Weed.
- Management Reports by Consultants  
Messrs. Bursch & Hershey - 1920
- Geological and Development Recommendations  
John Burgess. Progress reports up to 1924.
- Compilation of Reports and Company Data Up to Shutdown in 1932  
written by L. B. Spencer.



In addition to the above reports, the Company was fortunate in having for the President and General Manager from 1925 to 1932, Mr. Jasper T. Robertson, who was a successful mining engineer and geologist, being a graduate of Michigan College of Mines and having been experienced prior to accepting the position with Simon Silver Lead Mines Inc.

#### GEOLOGY

This deposit of ore can be considered to be a contact metamorphic ore. The ore occurs along a contact between limestone and intrusive porphyry and as a replacement in limestone. Some places it seems to be a true fissure, filling the space between the limestone and the intrusive while in other places bedded deposits show that there are favorable horizons in the limestone where it is replaceable.

Three main faults cross the ore bodies, which complicates the ore finding and accounts for the large number of drifts and crosscuts that have been run. Because of these drifts and crosscuts, however costly to the former operators, the nature of the ore occurrence was more easy to understand, so that future ore bodies will be opened up with a minimum of work.

Rock descriptions and more detailed geological data can be found in the various reports listed in the heading under "Engineers' Reports", so that it will not be gone into here.

#### DEVELOPMENT WORK

At the present time the upper levels of the mine are partly caved, and the lower levels, below 400, are filled with water. This makes it impossible to accurately measure the amount of work actually done. However, maps and old reports indicate that in all there were 19,000 feet of drifts and crosscuts run in the mine. In addition to this, there are two shafts. The discovery shaft is 500 feet deep but can be used only for ventilating and for a safety exit for the men. The new shaft is a vertical 3 compartment shaft of ample proportions.

#### MINE EQUIPMENT

This 3 compartment shaft is completely equipped with headframe and double drum hoist. Hoisting was done with cages operating in balance. The hoist motor is 125 H.P. which insures sufficient rope speed to make the operation of hoisting standard practice when depth of shaft, weight of ore, and speed of hoisting are considered.



The third compartment of this shaft has a large manway with ladders in good shape and platform at regular intervals as required by law. In this compartment are the necessary air and water lines down to the 800 level. Fortunately, the character of the gangue in which this ore occurs is alkaline, being partly in limestone, so that none of the metal parts left in the mine will be eaten out by acid water.

Triplex pumps capable of throwing water to the surface from the 800 foot level are also available. They were removed from the mine before the water rose to their level and have been kept in good condition. The motors used to operate these pumps are also available.

All the auxiliary equipment necessary for an operation of this type is still in place, such as change house for men - blacksmith shop - machine shop - warehouse - pipefitting and threading machines, etc.

Two air compressors of more than ample capacity to handle the operation contemplated for some time to come are installed and ready for use.

In addition to the above are a large number of various types of motors, cars, pumps, tools, pipe and pipe fitting, rock drills, jack hammers, etc. Although some of these may not be as efficient as present day machines, a large part of this material can be used.

All the necessary transformers and electrical equipment are in place and in operating condition as they were used recently during a mine examination.

#### MILL EQUIPMENT

Rather than go into detailed description of the mill machinery, will say that the mill when last operated ran about 200 tons of ore a day. All the machinery necessary for such an operation is still on hand. Some of it will have to be replaced, but for the most part it can be used.

In the mill are two ball mills with motors, two gyratory crushers, (one worn out) obsolete flotation machines, Dorr thickeners, Oliver filters, etc.

The mill is situated so that cars of ore can be taken from the mine cages and dumped directly into bins at the top of the mill.

The water that will be pumped from the mine will be sufficient to operate the mill, especially as there are provisions made for reclaiming most of the water used in the mill.



In the valley below the mill there is ample room for storage of tailing without fear of trespassing other property or polluting streams.

#### BUILDINGS

Most of the buildings, with the exception of a few that have been occupied during shutdown, will be in need of repair.

The mill building will need a new roof and some other repairs. Bunk houses and boarding house will need some repair work but there will be no great cost to this work.

#### EXPENDITURES TO DATE

Probably the best way to get a picture of what the operation has passed through will be to consider the cost to date.

Out of a total of \$2,735,558.26 hereto fore spent on the property, I believe that but \$960,103.66 can now be considered as being of present value to the property. Neither item above includes the cost of and/or the present worth of the mining property. An item carried on the books of the company as Mine Property Cost and not considered above is \$1,410,153.44.

Whereas it is appreciated that these items are of little importance, if there is no ore left in the mine, of high enough grade to allow an operation at a profit, it does show quite emphatically that others considered there was sufficient evidence in the mine to make it worth while to attempt to operate it.

#### ANTICIPATED EARNINGS

As mentioned before, a good portion of the upper levels are caved and the lower levels are full of water, making it impossible to definitely vouch for the figures now to be used as it would be if they had been measured and sampled personally by the writer. However, the source of the information makes these figures quite reliable.

For the most part, these figures come from daily records of the mine operations. They cover a period of years and were gathered by various individuals not contemplating a single mine examination and report but rather as a guide to development work or ore extraction.

The ore that is to be considered available in the mine will be divided into two classes. That which is above the 700 level and that below. This is done because the ore below the 700' level was developed in a portion of the mine that is away from and in the light of present information apart from the ore worked on during mill operating periods.

Various estimates of the upper level ores show from 60,000 to 75,000 tons available. A study of all this data caused the writer to conclude that there is a possibility of extracting 30,000 tons of this ore. This should assay approximately

Au 0.02   Ag 3.50   Pb 6.40   Zn 7.60



In a report compiled by L. B. Spencer from data taken from daily operating office records and checked by the writer as closely as possible without actually seeing the ore in place, is evidence that there is available some 50,000 tons below the 700' level assaying

Au 0.04      Ag 9.4      Pb 9.2      Cu 2.5      Zn 6.5

When these two ores are subjected to treatment in a concentrating plant that will effectively separate the various minerals into concentrates acceptable to existing smelting plants, a calculation for earnings can be made. By the above statement it is implied that nothing but standard up-to-date differential flotation practice will be used and nothing difficult or special is contemplated.

The method of doing this will not be described nor will the calculations necessary to arrive at these figures be given in detail. The operations simply consist of making lead, zinc and copper concentrates and shipping these to existing smelters on schedules offered by the smelting companies.

Values for metals will be taken as follows;

Au \$32.00 per oz.  
Ag 0.73 " "  
Pb 0.065 " pound  
Cu 0.155 " "  
Zn 0.065 " "

Segregated into mill and smelter losses and various freight, hauling, treatment, mining and milling costs, we have

	Lower level ores	Upper Level ores
Gross value ore to be mined	\$36.30	\$21.65
Value in mill tailing	4.00	4.25
Cost of hauling mine to R.R.	.79	.53
Cost of freight to smelter	2.34	1.90
Value of smelter losses	7.13	3.43
Cost of smelter treatment	2.65	2.71
Cost of mining	4.00	4.00
Cost of milling	1.50	1.50
Total	\$36.30 2241	\$21.65 18.32
Profit per ton to be mined	\$13.89	\$ 3.33
Tons ore indicated	50,000	30,000
Net earning indicated before taxes depletion	\$694,500	\$99,000
Total		\$794,400



### SUGGESTED PRESENT PROGRAM

The anticipated earnings just covered are based upon the mine and mill being in shape to deliver and successfully treat the ore. Inasmuch as that is not the case, a program must be outlined and its approximate cost estimated.

The first move to reppen this mine will be unwater the shaft. Because of the excellent condition of the shaft, down to water level, as seen by the writer and reports, that it is in good condition down to the 800 level, plus the condition of the hoisting equipment, it was decided to de-water the mine by means of a bailer. In order to do this one of cages be removed and a bailer attached in its place. Inasmuch as the hoist can be operated in balance a power saving will be possible by carrying a weight on the cage in the second compartment equal to the weight of the bailer.

As near as it is possible to calculate, there are about 6,000,000 gallons of water in the mine. This can be removed at the rate of 300 gallons a minute, which with good luck should finish the operation in a couple of weeks after actual start of bailing.

When the water has been removed it will be necessary to clean up 1,200 feet of drift on the 800' level in order to get into where the ore is to be found. Because no stoping has been done on this level there is no danger of any serious caving so this should not take long, although it is hard to estimate how long. Once this drift is cleaned out it will be necessary to unwater the 816 winze from the 800 level to the 1,000 level.

Immediately after that water has been removed down to the 800' level and the drift cleaned out, the check sampling and surveying will start. This can be carried on during the time it takes to unwater the 900 and 1,000 levels. When all the water is out and all sampling done a future program will be outlined.

This program will undoubtedly consist of getting the ore at these levels ready to mine, having metallurgical tests made on the ore found, and designing the changes necessary in the mill.

For the start of operations the scheme is to handle a minimum of 100 tons a day. The mill, however, will be so arranged that it will be possible to increase the capacity if the development work in the mine indicate sufficient tonnage to make this possible.



Details of the present plans are not being given here because they are too dependent upon what will be found in the mine. However, a budget of costs must be made and adhered to as closely as possible. Roughly, such a budget would be as follows;

Mine unwatering - cleaning up drifts check sampling, etc.	\$ 15,000
Camp Re-habilitation	5,000
Mine preparation	25,000
Mill re-habilitation	30,000
Operating capital	<u>25,000</u>
	\$100,000

There is no need to call the attention to the fact that the above figures do not mean that the mill will be ready to operate at its highest efficiency, however, it will be ready to operate at a profit on the ores that are reported as being present in the mine.

Very truly yours,

(signed) S. Power Warren.

SPW:GH



APPENDIX NO. 10

Letter from Klopstock and Company advising about conditions to  
be followed in order to shut down.



COPY

Austin, Nevada.

September 30, 1937.

Mr. S. Power Warren, President,  
Bryan Mining Company,  
Simon, Nevada.

My dear Mr. Warren:-

I have been giving considerable thought since leaving you yesterday at Simon, to the subject of and the information developed during our extended conferences of last Tuesday and yesterday in which in addition to your good self, your Company was also represented by Walter Tyler and Paul Klopstock, Jr., while Konrad Szttykgold and I represented Klopstock and Company, Inc., at said meeting.

You were good enough to submit a full and frank report at said meeting of your Company's operations up to last Tuesday evening and to compare the results so far obtained - with the representation made by you on April 12, 1937 to Klopstock and Company, Inc., which constituted the basis of that Corporation's undertaking to finance your Company's program, as fully set forth in the beforementioned letter of April 12, 1937, prior to which you had made extended studies and examinations of the properties now owned by your Company and which were the subject of your said letter to Klopstock and Company, Inc., in which among other things - you set forth on Page 8 thereof - under the heading "Suggested Present Program" the following estimates to wit:-

Mine unwatering - cleaning up Drifted	
check sampling, etc.,	\$15,000
Camp Rehabilitation	5,000
Mine preparation	25,000
Mill Rehabilitation	30,000
Operating Capital	25,000
	<hr/>
	\$100,000

You stated at the beforementioned meeting that you had dewatered the shaft to its 800' level and found the shaft in good condition - but to do this you removed about 13,000,000 gallons of water instead of an expectancy of about 5,000,000 gallons; that no work had been done by you on or below the 800' level; that your efforts to rehabilitate the mine have been and are being confined to its third and fifth levels; that fully \$30,000.00 had been spent on the foregoing work but that some money had been spent on camp rehabilitation.

Based on money already spent - and your more recent estimate covering the cost of rehabilitating the mill - you now state that your original estimate of \$100,000 is and will be absolutely inadequate to put the property into profitable operations as a going concern, but based upon your present knowledge of the condition and necessities of the property, the sum of \$175,000 will be needed to accomplish the same purposes as were covered by your estimate of April 12, 1937 - viz: - \$100,000.00.



Obviously, this unforeseen change in your Company's condition; its inability to accomplish but a small part of the objective originally ear-marked to cost \$15,000 and on which fully \$30,000 has been spent to-date - while no part of the lower workings have been opened - but which were to have also been opened for examination - as part of the \$15,000 estimate - creates in combination with the need of an additional \$75,000 to carry out the original plans "a complete new state of facts" obviously far different from the representations made by you to Klopstock and Company, Inc., on April 12, 1937, who in reliance thereon undertook to provide your Company with \$100,000 to carry out its program and furnished it with all the funds expended by it to date.

Inas-much as your Company's formation and the financial plans relating thereto were based entirely on your estimates of April 12, 1937, we do not see - based on the statements now made by you - how they can now be realized in view of your need of additional \$75,000. especially considering the fact that your Company's capital structure and the financial arrangements relating thereto provided no ways or means through which the needed additional capital can be raised; obviously in view of the beforementioned facts, we cannot sell or offer to sell any of your shares or under these circumstances, place any further sums of money at your disposal. We are therefore regretfully compelled to reserve all of our rights of action against your Company for complete redress and to do such thing or things as will fully protect our own and the interests of all who are concerned with us in this matter.

Realizing that you have a pay day due tomorrow for labor to date - we are willing without prejudice to our rights to loan you the sum of \$2500.00 to meet these obligations. We are willing to waive interest on said loan - which is to be repayable on demand. If this is agreeable to you and if this letter correctly sets forth the facts, please confirm the same by affixing your signature to a duplicate hereof and we will place the beforementioned \$2500 at your immediate disposal against delivery of your Company's note in that amount.

In conclusion we desire to state - that the work done under your management has been well done; that I realize fully that this changed condition is not your making but is due to conditions difficult for you to have foreseen and that we do not question your good faith. We assure you of our most earnest effort to help you work out from this trying - and to us wholly unexpected situation in which we must protect our own and the interests of our friends.

Very truly yours,

Klopstock and Company, Inc.

By Paul Klopstock  
President.

Read and Approved

By S. Power Warren - President

Bryan Mining Company.



APPENDIX NO. 11

This is simply an attempt to put into the record just what happened and what caused the mine to close down.



Reno, Nevada.  
May 9, 1938✓

Bryan Mining Company,  
Simon,  
Nevada.

Gentlemen:-

During the first year of it's existence your company, because of lack of funds, was forced to cease operations after about six months. The contract which your company made with Klopstock and Company, does not provide for any method of financing company operations other than by sale of stock to Klopstock and Company. So when Klopstock and Company saw fit to refuse to thus continue furnishing funds, but at the same time maintained that their contract was still in force, there was nothing left for your president and board of directors to do but shut down. This condition has continued to the present time and as the Bryan Mining Company is entirely out of funds and therefore powerless to act for itself, independent of Klopstock and Company your president and board of directors have been compelled to wait for some plan of action to be submitted by Klopstock and Company.

To date there has been no definite plan submitted for the continuing of these operations and for this reason, combined with others, your president intends to accompany this report with his resignation as president and general manager because he feels he has done all he possibly can for the company under the present circumstances and that it is time for someone else to be given a chance.

#### FINANCIAL REPORT.

The financial statement and trial balance, which is attached, has been prepared by A. J. Brennan who has been employed by Mr. Paul Klopstock for the last three years as controller for the Austin Silver Mines Company.



Mr. Brennan set up the original books of the Bryan Mining Company and audited them each month during the operating period. He therefore was completely familiar with all financial matters.

You will note that there is no capital set up in this statement. This is because Mr. Klopstock requested that a price of the stock be not set last June at the time when the government capital tax returns should have been filed. As this return was not filed it was impossible to make a complete income tax return in March of 1938. However, all tax forms for which we had data have been filed including an incomplete corporate Income Tax Return.

As this is to be a report on the work done during the months of operation from May 10, 1937 to October 31, 1937 reference is made to my report of April 12, 1937 made to Klopstock and Company. This report was based upon information gathered from engineers reports, some daily operating reports and what I was able to see in the mine at which time was full of water to a point about fifty feet below the third level.

SOURCE OF NEW INFORMATION.

The expression, "some daily operating reports," is used in the foregoing paragraph because at the time of the writing of the report I was led to believe that all the operating data had been put at my disposal. This, however, was not the case because it later developed that the most important part of this data was not in the Simon Silver Lead Incorporated company files and were found only several months later. After a couple of months, practically all of this information was found and it is now placed in Chronological order, in loose leaf note books and locked in the safe at the mine office at Simon.



In addition to this, data from the reports of several of the engineers was carefully studied and used for the construction of a mine model on a scale of forty feet to the inch.

It was because of new information gathered as described above that the changes to be explained later were recommended.

#### GEOLOGY

The geological description given in my report of April 12, 1937 was taken from the reports of several geologists who have had charge of directing the development work at the property. However, a careful study underground after the mine was cleaned out showed that their work was all based upon vein systems and had failed to give consideration of the well known limestone manto theory of ore deposition. Deposits of ore formerly called veins were found to be simply post mineral faults that had drawn broken pieces of ore into them from manto deposits cut by these faults and therefore a good part of the development work to date has been done in the wrong places. It is realized that this statement is easy to make now that former operators have done the work and failed to find the ore they were looking for, however, if these geologists had had the information now available, before they started this work, they too would no doubt have formed the same conclusions.

Unfortunately, for the confirmation of this statement, we were unable to do any drifting or cross-cutting in favorable places, before the mine closed down, and therefore its verification will have to remain some future date when operations are again started.



### UNWATERING

A careful calculation of the drifts, cross-cuts, shafts, winzes and stopes shown on the maps indicated that the amount of water these openings contained was from 5,000,000 gallons to 6,000,000 gallons. This calculation, however, failed to allow for the subsequently discovered, porosity of the rock surrounding these openings, with the result that when the eighth level was reached and it was decided to temporarily abandon cleaning it up, some 13,000,000 gallons of water had been removed.

Once the ground was drained the mine continued to make water at the rate of seventy gallons per minute. This, however, will no doubt decrease after the property has remained dry a year or two.

Although this large amount of water increased the time necessary to unwater, the condition of the shaft between the fifth and seventh levels had a greater slowing down effect. At this point a fault about fifty feet in width crossed the shaft. It was found to be full of gouge and broken porphyry which had swollen and broken a large number of shaft timbers throughout the width of the fault. Innumerable times the bailers were stuck throughout this zone and days were lost while replacing the dislodged and broken timbers. After the water had been removed down to the eighth level, two weeks were spent strengthening the shaft timbers in this place. There is no way to tell how permanent this work will be because it is impossible to estimate how much ground was opened in back of the shaft timbers by the material that was removed which may cause trouble again, during an unwatering period.

### CAVED DRIFTS

Geological descriptions of the position of the drifts in the mine indicated that they were on contacts between various types of rocks. In as



much as there were few stopes directly above these drifts it was assumed that the amount of caving would be small, that is, simply the arching of the back of the drift.

Although the contacts were found as reported, they were not original contacts but fault contacts containing gouges several feet in width which had caved into the drifts and had filled them completely. The drift on the fifth level when cleaned out needed timbering in order to keep it open, as did several on the third level, that were inaccessible during the first examinations.

The third level, because it had not been under water, did not show this tendency as much, but the fourth, fifth, and seventh were caved full a few feet away from the shaft stations.

This fact was the principal cause for my suggesting a modified program although there were other contributing causes, such as, limitation of funds available, possibility of more ore in upper levels, etc.

#### PROGRAM CHANGE.

On August 1, 1937 a general modification of the original program in my report of April 12, 1937, was suggested by me to Mr. Klopstock and on August 15, 1937, a detailed plan was presented.

Th This program recommended that work be concentrated on the third, fifth and seventh levels. The idea was to determine whether or not there was enough ore available from these upper levels, of high enough grade, which at the metal prices existing on the above dates, would show sufficient profit to warrant re-habilitating the mill putting it into operation before continuing the work of opening up the lower levels. It was further suggested that the original idea of cleaning up these lower levels, (eighth, ninth and tenth) be permanently abandoned and that in its place a program be adopted calling for sinking the shaft two hundred feet deeper and driving direct to the point where the ore was indicated on the tenth level.



The reason for these changes, briefly stated were-

- (1) Detailed study of geological conditions under-ground in the mine on the third level and above, made after these workings were accessible, pointed strongly to possibilities of more ore in this section than was shown in my report of April 12, 1937.
- (2) Caved condition of the levels unwatered in upper part of mine exemplified what would be found on eighth, ninth and tenth levels which showed the probability of a high cost of opening them.
- (3) When all operating data were finally available they indicated that they could be considered as authentic as data obtained by actually opening up the ground for check sampling. Therefore money spent for opening up these drifts and checking would be lost and should be spent getting ready to mine the ore. This should be done by sinking the shaft to the 1000' level and driving straight haulage levels, away from contacts, from the bottom of the shaft out under the ore.
- (4) Klopstock and Company advised me prior to August 1, 1937 that they would be unable to furnish more than \$5,000.00 a month for any work so this plan was suggested as one that had a chance of bringing the mine closer to the point of producing for the least possible money.

This change of program was discussed informally with two of the directors, Mr. Chas. A. Cantwell and Mr. Paul Klopsrock, Jr., about the time it was forwarded to Klopstock and Company. No comments, however, were received from Klopstock and Company until a visit was had with Mr. Klopstock in Reno, on August 24, 1937, and there was no definite action taken until Mr. Klopstock visited the mine on September 28-29, 1937 and at a meeting in Austin on



September 30, 1937 at which time it was decided to immediately shut down all work but that of bailing.

In a letter addressed to me and presented by Mr. Paul Klopstock on the afternoon of September 30, 1937 in Austin, Nevada, a copy of which is attached, Klopstock and Company used this change of program, which had been made known to them two months previous, during which time they had furnished funds, as a reason for refusing to continue to furnish funds in accordance with their contract with the Bryan Mining Company.

It will be seen by refering to this letter of September 30, 1937 in the next to the last paragraph that it was absolutely necessary for me to sign it that afternoon, in order to obtain money with which to pay off the employees of the Bryan Mining Company, the next morning when the property was shut down except for bailing. At the time of signing, exception was taken to some statements which will not be detailed here because a study of the attached financial statement will disclose them. Also attention was called to the fact that I as president of the Bryan Mining Company had no authority to borrow money for the company except with the approval of the Board of Directors.

To date this approval has not been given and it is still a question whether this \$2500.00 and subsequent \$500.00 obtained in the same way should be considered as a loan to the company repayable in cash or whether it is simply a sum of money put up by Klopstock and Company for which stock at the contract price will be furnished. In answer to these exceptions Mr. Klopstock in the presence of Mr. Szytkgold promised that if in the opinion of Mr. Cantwell such a loan was not legal, it would be disregarded. To date nothing has been done concerning this matter although Mr. Cantwell



promptly expressed his opinion that the Company could not legally borrow such funds from Klopstock and Company on its notes, for operating expenses, in view of their contract with the Bryan Mining Company which called for their furnishing money for stock at a definite price.

Although promising to furnish funds to keep the mine unwatered as an additional incentive for your president to sign the before mentioned letter and note, it was not done because soon afterwards instructions were given to discontinue all work, shut everything up and place the property in the hands of a caretaker on November 1, 1937.

With the exception of the \$500.00 mentioned above, which was received the latter part of October no money whatsoever was received from Klopstock and Company not even sufficient to cover the cost of the caretaker, which Klopstock and Company asked be placed on the property. Money had been promised several times but has never materialized. One caretaker left after two months without pay, except money loaned him personally by me to keep him on the job, and the present caretaker who I have loaned \$50.00 to is staying only because the house he is living in at Simon is better than the cabin he had on his own property six miles away. He intends to leave as soon as weather conditions will permit which will leave the property without a caretaker and subject to pilfering.

#### PRESENT CONDITIONS

At the present time the water has reached a point about 50' below the third level. This point is the usual water level as indicated by past history.

The third level, when last visited in December, is in good condition and with a small amount of work can be considered ready to start mining the ore opened up. In all about 45,000 board feet of timber was placed in



this level in the form of drifts sets, lagging and new chutes.

In all about 1500 cars of waste was cleaned out of this level along with fifty cars of ore that was placed in the mill bins.

Because of lack of funds the repairing and re-equipping of the assay office had been postponed and for this reason the campaign of check sampling the third level was also postponed as the money spent for assaying the number of samples that would have been taken was considered better spent on a company assay office when funds were available.

The fifth level was found caved full up to within 50' of the shaft. About 200' of this level had been spiled through and timbered when the mine was shut down. The opening of this level was necessary as it was to be used as a haulage way for ore that lay below the third level. This ore was seen in places from the third level but was not in a position to be mined from that level.

The seventh level was caved in the same manner as the fifth. The station timbers held up because they had been supported by cribbing and not posts. Work had just been started on this level. This work consisted of cleaning out the old pump station and sump. Sufficient new lead covered waterproof electric cable is on hand, never taken from the original package, to reach this station and the eighth if necessary.

The eighth level was allowed to fill up with water a couple of days after it was unwatered because a cap just inside the station gave way and filled the station and part of the sump with rock.

The office and company houses are in fairly good condition. The Boarding house is fully equipped and ready to open up. All the beds and furniture in the staff house and manager's house has been carefully watched by the caretaker.



The electrical equipment is in good shape with the exception of the fuse boxes on the 6600 volt transformers. New fuse boxes have been purchased and are in the stock in the warehouse and not installed as the property was shut down just about the time that these fuses were received.

The hoist is in fair condition with the exception of the rawhide pinions that will have to be replaced.

LIENS.

It is my understanding that the Home Lumber Company has filed a lien against the property and that the Power Company is preparing to do so.

CONCLUSION.

Please be assured that my decision to resign active participation in the affairs of Bryan Mining Company is not because I have lost faith in the property or its possibilities, because I feel that some person with a definite well thought out, and adequately finance program will be able to make a paying mine out of it. Under the present conditions I do not seem to be that person.

Yours sincerely,

(signed) S. Power Warren.

Bryan Mining Company.









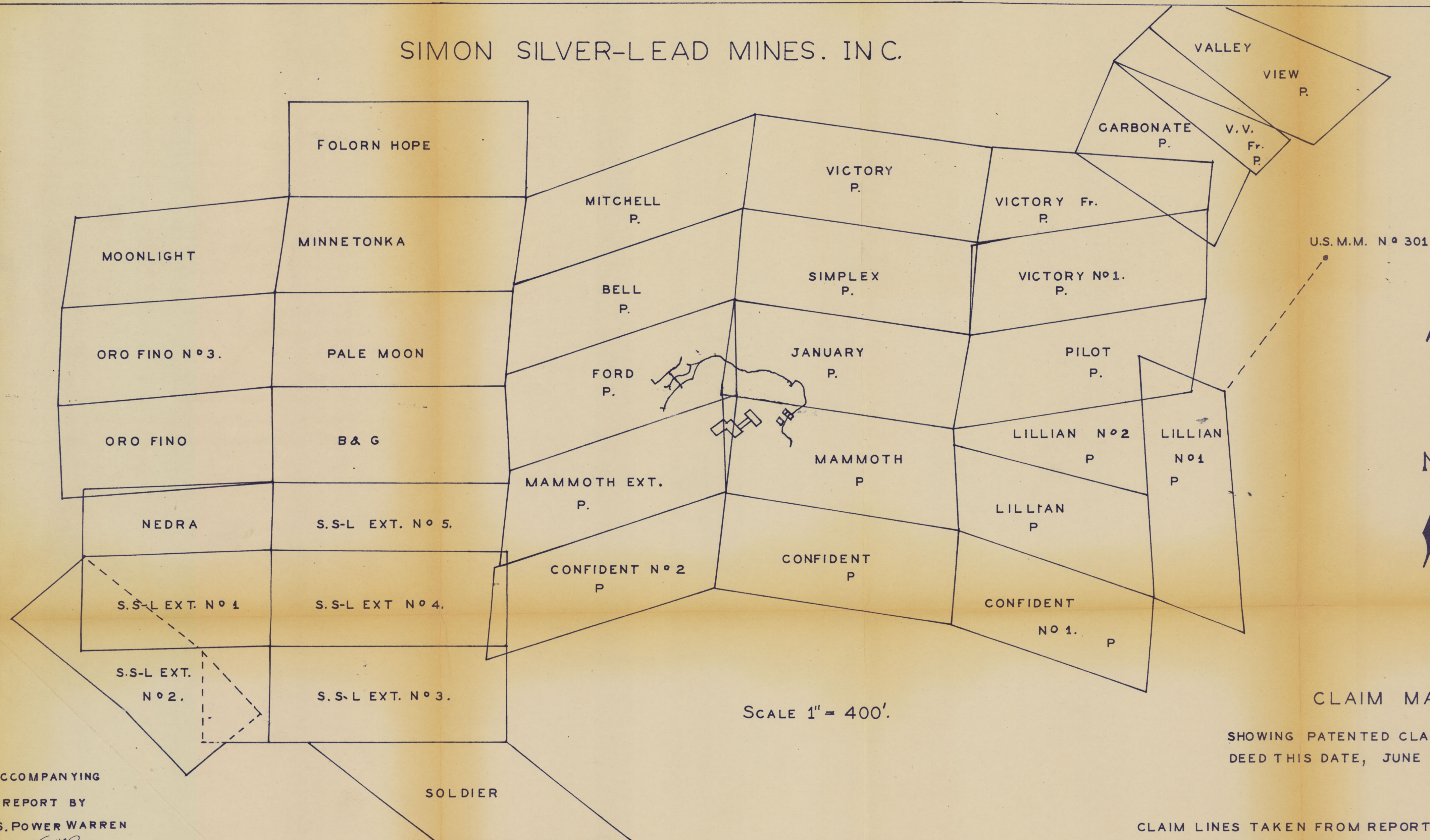
Scale: 1 inch = 10 miles  
Contour interval: 100 feet  
Projection: Transverse Mercator  
Datum: 1927  
Published: 1930

NEVADA-CALIFORNIA  
HAWTHORNE QUADRANGLE  
Scale: 1 inch = 10 miles  
Contour interval: 100 feet  
Projection: Transverse Mercator  
Datum: 1927  
Published: 1930

NEVADA  
TONOPAH QUADRANGLE  
Scale: 1 inch = 10 miles  
Contour interval: 100 feet  
Projection: Transverse Mercator  
Datum: 1927  
Published: 1930



# SIMON SILVER-LEAD MINES. IN C.



## CLAIM MAP

SHOWING PATENTED CLAIMS AS OF  
DEED THIS DATE, JUNE 15, 1957.

ACCOMPANYING  
REPORT BY  
S. POWER WARREN

CLAIM LINES TAKEN FROM REPORT OF L.B. SPENCER