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# COMO MINES COMPANY

## Annual Report Year—1935

### DIRECTORS

E. CHACE BRADLEY

HUGH McL. FENWICK

CHARLES P. FRANCHOT

J. ROBINSON-DUFF

FERDINAND L. SALOMON

### OFFICERS

J. ROBINSON-DUFF ..... *President*

HUGH McL. FENWICK ..... *Vice-President*

CHARLES P. FRANCHOT . . . *Vice-Pres. and Gen. Counsel*

HERBERT G. FAUTZ ..... *Secretary and Treasurer*

**COMO MINES COMPANY**  
**DAYTON**  
**LYON COUNTY, NEVADA**

*To the Stockholders of*

May 11, 1936.

*Como Mines Company:*

Enclosed with this report you will find formal notice of the annual meeting of our Company, to be held on May 22nd, 1936, and a proxy which you are requested to sign and return if you cannot be present in person.

There is also attached a copy of our financial statement as of December 31, 1935, certified by Messrs. Appel & Brach, our Public Accountants, and a letter from our Consulting Engineer and General Manager, Mr. Carlos W. Van Law, relating developments of importance for the period from January 1st, 1936 to May 1st, 1936. On December 1st, 1935 our Company entered into a contract with Mr. Van Law, engaging him as Consulting Engineer and General Manager.

I wish to record the fact that there has been practically a complete change of management in our Company during the past year. I became a Director and President on December 23, 1935 at which time I placed Mr. Van Law in complete charge of the property.

I believe it of interest to note that the Company completed construction of its crushing plant and flotation mill about July 1st, 1935; that on October 10, 1935, our subsidiary, the Como Gold Mining Company was officially merged into Como Mines Company; that 37,000 shares of Treasury stock were sold for approximately \$55,000., during the year 1935, and that since January 1st, 1936 the balance of the Treasury stock, i.e., 63,000 shares has been sold for approximately \$75,800.

Faithfully yours,

J. ROBINSON-DUFF,

*President.*



# COMO MINES COMPANY

DAYTON

LYON COUNTY, NEVADA

April 30, 1936

To the President, Board of Directors and Stockholders  
of the COMO MINES COMPANY, Dayton, Nevada:

Of the various reports prepared to cover the properties of the Como Mines Company, the latest and most important is that of Mr. Carl Stoddard of Reno, Nevada, which was accepted by the Board of Governors of the New York Curb Exchange, March 13, 1935, for listing purposes of Como stock on that exchange.

That report evidenced 755,000 tons of ore as probably available on the Rapidan, Como and Mt. Como (Eglin) veins, above the Boyle Tunnel level at an average grade of \$7.774 per ton. Further allowance of probable ore was made of 470,000 tons on the Mt. Como, and 125,000 tons on the Como, both above the Boyle level, as expectable from further development; a total of 1,350,000 tons above the Boyle.

It further states that "Each 100 feet developed below the Boyle Tunnel level on all three veins should add approximately 423,000 tons." If calculated at 13 cubic feet per ton, this is equivalent to a continuous ore body 5499 feet long by an average width of ten feet. Stoddard classifies this as "possible" ore.

Elsewhere in the report appears the statement that "each 100 feet developed below the Boyle Tunnel workings within lateral limit of present workings, should add \$3,214,800.00." At the general average grade assumed, this approximately checks the 423,000 tons first mentioned. The inference is that this tonnage is merely the expectation in depth within limits of then existing lateral development, which by no means included all ground considered as hopeful, beyond such limits.

With the ample ore reserves assumed by this report, an unusually fine 300 ton flotation plant was erected, and operations commenced in June 1935. Equipment underground as well as on surface, was excellent. With a view to cheap mining, shrinkage stopes were started on the large quartz mass of the Yerkes vein (not included in the Stoddard estimates) and in a similar large showing on the 200 level of the Como vein. Unfortunately, the grades as mined in no way approximated those expected, and the hard hanging wall essential for successful shrinkage, was totally absent. The Yerkes stope had to be abandoned after only a few cuts. The Como stope not only failed to yield commercial grades, but serious caving took place which ruined possibility of continuance.

In spite of the fact that the Rapidan ores are almost completely oxidized and therefore not well suited to treatment by flotation, mining operations were commenced there and on the imperfectly developed Mt. Como (Eglin) vein. Late in the year, a new lens of ore, sulphide and relatively high grade, was found on the Boyle level at the extreme Eastern heading, on the Como vein, under what has been known as the old "Gold Shoot". An attempt was made to mine this by square setting, which proved too expensive and too slow for success.

The tonnages milled, with the gross values per ton, are shown below, from the start of operations until December 31, 1935. (Gold \$35.00, Silver \$0.77 per oz.)

<u>Month</u>	<u>Dry Tons</u>		<u>Value per Ton</u>		<u>Total</u>
	<u>Milled</u>	<u>Au. \$</u>	<u>Ag. \$</u>	<u>Total</u>	<u>Gross Value</u>
1935 June	1835	\$0.81	\$1.14	\$1.95	\$ 3,578.25
July	5370	1.73	1.53	3.26	17,505.20
August	7504	2.43	1.86	4.29	32,192.16
September	7311	1.82	1.49	3.31	24,199.41
October	5422	2.49	1.50	3.99	21,633.78
November	5843	2.92	1.85	4.77	27,871.11
December	3405	2.31	1.81	4.12	14,035.41
	36,690	\$2.20	\$1.64	\$3.84	\$141,016.32

From this \$141,016.32 gross value of ore, was recovered 551.8 tons of concentrates, whose gold and silver contents had a gross value of \$85,847.81, a recovery of 60.9%. The net settlement value of the concentrates paid by the receiving smelter was \$74,690.95, from which \$5,662.30 must be deducted for transportation from mine to smelter, or a final net value, f.o.b. mine plant of \$69,028.65.

*The above figures taken from original mine records may vary slightly from those finally audited due to minor adjustments.*



final net return represents less than half of the gross value of original ore sent to mill and the smelter actions, etc., plus hauling charges represent 19.6% of the gross value of the concentrates, or one third. Under these conditions, the operating deficit for the period of mill operation June-December 1935 was \$303.12, roughly \$15,000. per month, before depreciation.

Since full reliance had been placed on ability to supply the mill from a few shrink stopes, the failure of this method made supply to mill very precarious, as no other points had been prepared for extraction on any systematic basis. The maximum tonnage which had been supplied in any month was 7504, or 242 tons per day, in August. December had declined to 110 tons per day with grade of \$4.12 per ton, and operations were approaching a standstill.

At this juncture, it was decided to turn over the whole affair to the writer, as Consulting Engineer in charge, with a view of full examination of conditions, and if possible, application of a remedy. After a preliminary examination in December, organized work of investigation started January 1, 1936. Underground work was placed in the charge of J. G. Neal, formerly for several years under the writer's direction in charge of similar but considerably larger operations than those at Como. Engineering and sampling matters were placed in the hands of Thomas W. Page, who has acted as the writer's assistant on almost constant examination work for the past 2½ years. The essence of the arrangement was that the investigation should be performed with completely free hand, and in the interest of the stockholders as a whole, without bias. This idea has been most completely upheld by all members of the Directing Board.

Since tests showed conclusively that the highly oxidized Rapidan ores could not be treated at a profit in a sulphide flotation mill, that supply was immediately cut out. Eglin ores, on test, showed somewhat better extractions by flotation and deliveries therefrom were allowed to continue for a brief test but discontinued in view of the low grade obtainable even by selective mining. The mill was definitely cut to a one shift basis, receiving its supply only from the Como vein.

In view of the very large amount of oxide ore presumably available under the Stoddard report, large samples of Rapidan, Eglin and other representative ores were placed in the hands of Hamilton, Beauchamp & Woodworth for testing by cyanidation or otherwise for best results. These tests showed that excellent extractions could be obtained by a combination of flotation and cyanide processes so that for treatment of the oxide ores, a mere addition to the existing mill of a cyanide tailings plant was all that would be required.

The approximate 20% loss in marketing concentrates mentioned on page 3 being extremely serious, the same metallurgical firm was asked to develop a method of converting these concentrates into bullion so that the entire mill product might be sold direct to the U. S. Mints at far less realization cost. These experiments were also carried to an extremely successful conclusion with a potential saving of a very large part of the marketing cost mentioned at small plant installation expense.

Since only the Como vein ores were suitable for flotation treatment and since the former management believed that this vein still contained very ample reserves which had merely been missed by the newer developments, attention was concentrated on the Como to the exclusion of other veins for the first two months of the investigation. The first step was the compilation of all existing information from previous studies.

While systematic assays had been made by mine employees of developments on the Boyle level and elsewhere as these progressed, at points properly related to survey plugs, these had in general not been plotted on any map although the record of such sampling existed in the files. There were sketches, geologic and otherwise, of individual workings or short pieces of development, but while the aggregate amount of data was considerable, it had not been brought together by Stoddard or others to give any comprehensive view of the workings as a whole.

The assay plans accepted by Stoddard as to the upper levels were prepared apparently in 1919 or 1920 by F. Borzynski, at that time assayer of the property. As these seemed very complete and detailed, attention was at first confined to reducing the assay and other data of the more recent development work into the form of an assay plan.

As this work took form, it became evident that so far as mineable widths and grades were concerned, developments on the Boyle Level had been completely unsatisfactory with the exception referred to; of the small shoot opened late in 1935, in the extreme East end of the Como heading. Also that the raises put up from the Boyle Level to connect with the 300 and 425 levels respectively had evidenced no workable values and that the 425 level itself was a practical blank.

In spite of the fact that the Borzynski maps showed excellent value from end to end of the long 300' level, it was notable that no stoping had been commenced thereon and a preliminary sampling found no points of workable grade. It became apparent that the ore shoots worked in large volume above the 200 level had either bottomed at some point between the 200 and 300 levels, or that in the very wide vein structure the 300 drift had



in some way missed the descending shoots either to hanging or foot wall. In this view, an energetic campaign was started, both on the 300 and 425 levels; in such manner as to completely prospect the vein. These cross cuts were all negative and diamond drill holes put into the walls for considerable distance beyond failed to disclose anything of value.

In view of this negative showing a raise was finally put up from the 300 directly under the heart of the largest showings on the 200 level. This raise went up 50 feet in practical waste and then broke simultaneously into ore and old workings. The transition from waste to ore was abrupt and the evidence was that with the exception of the Gold Shoot all commercial ore bodies of the Como Vein within limits of present lateral development terminate at the shallow depth of approximately 250 feet below surface. This had the result of throwing completely into the discard the overwhelming percentage of the tonnage recorded in the Stoddard report on the Como vein.

Sampling crews were thrown into the Rapidan, which was completely worked out above the 200 foot level some years ago. Between the 200 and the 350, four major stopes recently operated by shrinkage method had taken out approximately half of the intervening block. The largest of these stopes was completely caved by the shrinkage method and portions of the other stope backs were inaccessible through similar causes. In two of the stopes, the vein had pinched to negligible width, either in the stope back or in raises therefrom before reaching the 200 level. The last 8776 tons pulled from these stopes had yielded a gross grade of \$3.40 per ton, only.

Between the backs of these stopes and the 200 and in ground opened by the 350 beyond the stopes themselves it is possible to figure a maximum of 15,000 tons of available ore whose grade will approximate \$8.50 with a working width of 5 $\frac{3}{4}$  feet.

On the Boyle level the drift does not fully follow the vein but in places wanders into one or the other wall. Sampling of the vein fully disclosed, shows only occasional spots of commercial grade ore, discontinuous and not capable of being mined on a commercial basis. The same is true of the raises which connect the Boyle with the 350 level. For all practical purposes the above 15,000 tons may be considered as the sole available reserve in the Rapidan Vein above the Boyle level, as disclosed by present development. The grade is fair, but the quantity altogether too small to warrant consideration of any mill addition to enable treatment.

Under previous management, a winze had been started from the Boyle level downward and had attained a depth of approximately 50 feet on the incline of the vein. In the view that a new ore zone might develop at the depth where the oxidized Rapidan ores gave way to sulphides, this winze was unwatered and sinking recommenced.

The bottom of the old winze was found to be in country rock with a mere stringer of quartz on both foot and hanging wall of the winze. As sinking continued, this has given way to solid quartz, and at present depth, 100 feet below the Boyle, some sulphides are showing with spotty values. From the 100 feet station now being cut (April 27) cross cut will be carried clear across the formation, and further development will be dependent on findings.

A very large amount of the tonnage figured in the Stoddard report is allocated to the Mt. Como (Eglin) vein upon which present developments consist only of a shaft 265 feet in depth, on the incline of the vein, connecting the Boyle Tunnel level with the surface, with a short stub from this shaft at the 210' level and a level 115' long, 142' below the shaft collar. The Boyle Tunnel goes through the Eglin vein formation at a very oblique angle for a considerable distance, giving an exaggerated idea of vein width. A lateral from the Boyle Tunnel extends on the vein for 190' to the North after communicating with the old Eglin shaft.

From the 210' level, near the Eglin shaft communication, a shrink stope extends up to the 142' level, which stope has a cross section of roughly 13'x35'.

This stope yielded 1907 tons of ore with gross grade of \$4.13 per ton, during October, November and December 1935. 186 tons mined in January 1936 from selected best spots, gave grade of \$4.63. The stope was stopped.

Sampling of the Eglin exposures on the Boyle level show no commercial value, and the ore left in the short levels above is negligible in amount. In view of the strength and known length of Eglin outcrop (2000'), the developments covered above are quite insignificant; though it is probable that the Eglin shaft was sunk on what was regarded as the best portion of the known outcrop.

Since January 1, 1936, the development work performed has been exclusively on the Como vein with the exception of the Rapidan winze sinking from the 50' to 100' level, and a search for the Yerkes upward extension at the 425 level.



Excluding raises and other work incidental to the actual operating of stopes, there was performed 399 lineal feet of development work in January, 513 feet in February, 566 feet in March and 400 feet in April, a total of 1878 feet. In addition, there has been 362 feet of diamond drilling. The overwhelming proportion of this has been without result in the finding of ore.

Development of the "Gold Shoot" at the East end of the Como Boyle heading was pushed, with the result of opening up a shoot 205' in length with one short pinch in the middle. Including this pinch the average width was 5.31' with an average grade of \$12.95. The ore found was characterized by spots of very high grade containing much ruby silver and assays were encountered over widths of several feet running over \$100.00 per ton. At the East end the ore shoot branched, both branches terminating very abruptly, leaving nothing to follow except a geologic break.

It was known that this same shoot had been worked from surface down to the 300' level, 225' above the Boyle and over approximately the same lateral extent. A raise was quickly put through from level to level, and although spotty, was found entirely in commercial ore averaging \$11.61 per ton in grade and 7.9' in average width. With this data the appearance was that of a possible stoping block 225'x208'x6' or upwards of 20,000 tons of very desirable ore.

Half way up this raise values were exceptionally high, with values close to \$100.00 per ton, and widths of 6' to 7'. At this point an intermediate level was opened out and stoping operations were commenced both from this intermediate and from the Boyle level below. It was hoped that this might enable the starting of a second shift on the mill and the carrying of all expense from mine production.

Unfortunately, stoping operations almost immediately eliminated the hope of a solid block. At the Eastern end of the Boyle exposure, stopes pinched to practically nothing within 30' to 40' above the Boyle. At the Western end, next to the main raise, an irregular stope has been carried up to a height of 98' above the Boyle, constantly shortening in length and of extremely irregular grade.

The intermediate level although started in very high grade ore, has been practically negative throughout its length aside from the initial spot.

The entire appearance is that of a "pipe" through the center of which the main raise went, mineralization widening below and above, into the Boyle exposure and the old stopes above the 300 respectively.

The entire ground between the Boyle and the 300 in this section is extremely heavy, wet and almost completely crushed. In this crushed mass are small kidneys and lenses of relatively high grade ore, discontinuous and not capable of cheap mining. Only in the 30' or 40' immediately above the Boyle Level and along the axis of the main raise, do these kidneys consolidate into really workable mass.

A development drift pushed to the East for a distance of 150' beyond the face of the main Boyle heading has followed what is unquestionably the same geologic break upon which the Gold Shoot occurs. Midway of this distance it found a crushed quartz mass similar in appearance to that of the Gold Shoot but with values below \$2.00; otherwise, the drift has been completely negative.

The consolidated mass of high grade quartz on the Boyle level of the Gold Shoot was fairly impressive; its dimensions are much greater and its mineralization more intense than at a short distance above. It is the only place where commercial values have reached the Boyle level. The appearance of stope maps is such as to indicate the possibility that the Boyle may be at the top of an entirely new ore shoot and development of such possibility by a winze is clearly indicated. In view of the extremely spotty nature of the ground, such exploration is by no means certain of commercial success, but should be tried, especially in the possibility that as greater depth is attained, the ground may be less broken up and mineralizing solutions more closely confined to regular channels.

On account of the extremely heavy nature of the ground and the large amount of water contained, such sinking will be somewhat expensive and will require power for pumping and hoisting not at present available. Provision of this power and other equipment for proper sinking operating will entail a capital expense of \$5,000.-\$7,000. after which sinking will cost from \$35.-\$50. a foot to depth attained dependent upon conditions encountered.

Early development on the Yerkes vein from the Boyle Level was referred to on page 1. In view of the Como experience of better values as surface was neared, a search for this Yerkes vein on higher levels was pursued. On the old 425 level a drive was made to the North to a point directly over the major showing of quartz on the Boyle level and cross cutting was performed to find the Yerkes vein. This was finally encountered as a quartz vein  $3\frac{1}{2}'$  wide but carrying no commercial values. After driving both ways on this showing for an aggregate 30'-40', the work was discontinued. The Yerkes vein has not been encountered at any higher level.

On the 100 level an old footwall drift disclosed a North vein in what was known as the "Anchor Drift" which when sampled, showed commercial values. A raise was put through to surface in the midst of this showing and drirage performed in both directions on the vein. This is now under production and driving to cut the same showing on the 200 level is in progress.



## OPERATION SINCE JANUARY 1, 1936

Since January 1st, the mill has been supplied on a one shift basis from the sources above mentioned, supplemented by production from upper portions of the Como vein. The old 2460, a hanging wall development on the 200 just below the stopes which were caved by shrinkage method earlier, was worked completely out. A fills raise was put up to surface from the old 202 West and that operation put on a strictly cut and fill basis. While the ores are somewhat oxidized, they yield fair extraction; the vein is 10'-12' wide and grades reasonable. This stope, the 2460, and the Gold Shoot operation has supplied the bulk of ore milled.

The following tonnages have been milled during January, February and March, 1936.

	<u>Tons</u>	<u>Value</u>	<u>Gross</u>
January -----	2871.2	\$6.77	\$19,438.02
February -----	2019.4	7.42	22,403.95
March -----	3406.4	8.76	29,840.06
	<u>9297.0</u>	<u>\$7.71</u>	<u>\$71,682.03</u>

April figures not yet available in final form indicate approximately 3000 tons at or above the March grades.

From the above tonnage (April excluded) was produced 244.09 tons of concentrate having a gross value of \$51,066.81, or a final extraction of 71¼%. The net settlement value after deducting haulage costs was \$43,671.45.

The above grades are more than double those of the tabulation on page 1 showing figures for June to December 1935. Part of this is due to the Gold Shoot contribution. An important factor has also been the change from shrink stoping to the cleaner cut-and-fill type of operation. January to March grade would have been even higher except for the fact that all "marginal" ores encountered in development or in the preparation for removal of ore have been sent to the mill in considerable quantities. During January and February especially, there was a considerable admixture of stoped ores with quite low grade material of this sort.

It will be noted that on page 1 the combined extraction is given at 60.9% and the January-March figure is 71¼%. Both these are lower than currently reported figures during both periods which approximated 71% for the earlier and 82% for the later epoch. Recent investigation has shown that from the start of operations to date, the automatic heads samples of ores milled used at all times have been subject to a systematic error with results higher than the fact. Changes made in April should eliminate this error for succeeding months.

The improvement in extractions is primarily due to the exclusion from mill feed of Rapidan and other fully oxidized ores, though it is believed that some improvement has likewise been made in mill practice and a somewhat higher extraction is usually obtainable on higher grade ores such as fed to the mill from January 1st.

From January 1st, 1936 a reduction was obtained in the smelter treatment rate from \$7.00 to \$5.00 per ton of concentrate.

With these improved heads and extractions it is interesting to note that the dollar value of concentrates produced during March was 38% higher with the mill operating on one shift only than the average concentrate return per month for the June to December period when the mill was largely operating on a 2 or 3 shift basis.

The primary activity underground has been the search for ore and preparation for systematic extraction from the few points where ore existed rather than the routine operation of a mine fully developed. Not until March was there any portion of the mine in shape for actual economic stoping and even today there are only three actual stopes in the Como Vein. All are small and in the Gold Shoot case highly irregular. Under such circumstances, cheap mining cannot be performed.

March costs were for direct mining \$3.038, for transportation through the Boyle Tunnel to mill \$0.368, and for milling \$0.924. All of these figures are capable of considerable improvement if reasonable bodies of ore were available.

The mill has been operated systematically on a one shift basis, but such obviously uneconomical basis has been continued only as a means of partially defraying deficits of the development campaign, while at the same time securing better information as to the treatment of the ores involved. In addition, it was highly desirable to perform active extraction on the newly developed Gold Shoot to determine the questions of persistence and regularity of these ore bodies rather than take such factors for granted.



The local operating deficit for January was \$10,987.04, February \$6,938.56, March \$5,617.84, representing a total of \$23,543.44 for the three month period. To these figures was added \$5,227.91 representing expenditures for stock transfer registration, New York office expenditures, transportation, etc., making a total deficit of \$28,771.35, an average of \$9,600.00 per month. The above deficits include charges for development, amounting to \$6,596.55 in January, \$7775.27 in February and \$8,707.06 in March, or \$23,078.88 in all, as well as all overhead of every description.

Present status may be summarized as follows: After having performed 1878 feet of development work in the months January to April, we have in sight the following ores above the Boyle level;—

On the Rapidan the 15,000 tons referred to on page 3. This is not suitable for treatment in the present mill.

In the Como the Gold Shoot seems rapidly nearing end of production. It may still contain 2000 tons of ore.

Above the 202 West Stope there is probably a remnant of 1500 tons. Possible salvage from the caved block above the old shrink stope next East, 7000 tons. In the 3460 and Anchor Drift stopes, a possible 3500 tons. The aggregate on the Como vein may be stated as a possible 14,000 tons. On the Eglin (Mt. Como) nothing.

Since Stoddard's estimate of 755,000 tons above the Boyle Level and "within limits of lateral development", 60,000 tons have been removed, and only 30,000 tons are left. The balance of his estimate was non-existent.

Instead of the Stoddard allowance below the Boyle, equivalent to a continuous ore shoot more than a mile long and averaging 10 feet wide, we have a single occurrence 200 feet long x 5½ feet wide in the Gold Shoot as the only occurrence of workable ore on any vein, at that level. These amazing discrepancies merit discussion.

Mr. Stoddard was engaged as mine engineer by the Como Mines Company in June 1934. At that time practically all of the old workings on the Como vein and a large part of those on the Rapidan were caved and inaccessible to him. He accepted the old Borzynski plans, prepared during the regime of Herbert Humphrey (1919 or 1920) as correct. It is not known whether Borzynski himself performed the sampling appearing in his plans, or whether he merely compiled them from data furnished him by others. Stoddard's checking of the Borzynski plans was confined to a small portion of the 200 level of the Como vein in the heart of the main ore shoot. He states that this check was approximately correct.

From these Borzynski plans, Stoddard derived the idea of great widths and continuous values, although my analysis of the same plans does not give ground for the same conclusions. He also relied on verbal statements of some of the earlier operators as to widths and from these statements and his analysis of the Borzynski maps, he drew the conclusions expressed in his report.

Prior to the date of his report the Boyle level had reached all three of the veins mentioned, and considerable development done thereon. The unfavorable nature of such development would appear not to have been taken into any account, in his statements as to persistence of ore in depth, to and below that level. There is no evidence that he performed any systematic sampling at that level except at one point on each of the three veins and this single sample was used by him to fix valuation on 60,000 tons of the Rapidan, 175,000 on the Como and 100,000 on the Mt. Como (Eglin) veins. This is frankly stated in the report.

It is interesting to note that the careful sampling performed by the present regime has found only isolated spots on the Boyle level on either of the three veins mentioned which would yield the assays over the widths claimed in the Stoddard report. Such check-sampling as has been done on the Borzynski work has shown his results to have been fantastic.

### OUTCROP POSSIBILITIES

The area held by the Como Mines Company is very large. There are within it a large number of known and fairly continuous outcrops covering undeveloped veins. Principal among these may be cited:—

The Mt. Como or Eglin vein is wide and its prominent outcrop known for some 2000 feet in length. Developments are laterally insignificant.

The Rapidan and Yerkes vein in all probability are on the same geologic break with intervening but unexplored 1000 feet between. In view of the originally considerable ore mass of the Rapidan and the large quartz mass of the Yerkes at the two ends of this stretch, there is room for considerable development between.

The Fredericks vein, cut by the Boyle Tunnel near its portal, is well formed, of good width and shows spots of workable value. It is highly oxidized and would require cyaniding treatment. Its outcrop has been traced for a considerable distance. It is well located for delivery to mill and worth further investigation.

The Lucky Sunday has a prominent outcrop and occasionally high assays have been obtained from prospecting workings thereon. Further sampling is in progress.



Star of the West has a traceable outcrop which is long and its intersection with the Como vein is being sought by drivage Eastward on the Como. It dips to the East and from surface indications will be encountered somewhere between 200-300 feet of present Como face.

On the Paymaster claim is an enormous outcrop 60'-70' wide, very prominent. An old tunnel extends from the bottom of a neighboring gulch to within a comparatively short distance of being directly underneath. It is conveniently located as regards the mill. Sampling of the outcrop has shown no significant values, but this may be due to leaching and the tunnel below has not reached its objective.

All of these are under study and sampling, but it is only fair to note the probability that the main workings of the Como, Rapidan and Mt. Como probably were on the most promising outcrops of the entire property and that all may be expected to follow the same "vein habit" of the major workings. Most of them are remote from the mill.

As a generality covering the whole of the property, all veins are in the same andesite matrix which is probably all part of a fairly uniform flow. In general it is soft, crushes and weathers easily. The entire mass has been profoundly and minutely crushed and dislocated by small movements in every direction, on which heavy "gouge" is common. Very few of these movement planes are continuous for more than short distances; they fan out into stringers or entirely disappear.

The quartz masses which have been termed veins are in general mere infiltrations of quartz into the irregular discontinuous fissures so created. With very few local exceptions, walls are ill-defined, and large masses which at first sight appear to be vein quartz are really only high silicified andesite, the silicification extending in tongues and stringers indefinitely out into the country rock on both sides.

There is strong evidence that these original quartz masses were probably without significant mineralization when deposited but when crushed by subsequent movements of the country admitted mineralizing solutions to the more completely broken up portions of the quartz. These re-crushed portions constitute the ore bodies and represent only a small proportion of the quartz involved.

As is frequent in many such deposits, commercial mineralization has been largest and most continuous near surface, bottoming at relatively small depth except for ascending trunk channels through which the solutions came; of which the Gold Shoot may be one and the Rapidan another.

The "vein habit" observable except near surface is that of discontinuous lenses of mineral which may be abruptly terminated by cross faults and not recur beyond.

While the general belief is that ore shoots have oftenest occurred at the junction or intersection of veins, this must by no means be taken as indicating that all intersections will be accompanied by ore. The largest quartz masses on the Como vein from surface to the Boyle level are found on what is probably the line of junction between the Como and the Yerkes, but only in the upper 250 feet is this accompanied by workable ore.

I regard the sinking on the Rapidan winze to the point of encountering sulphide ores as promising, with a view to a possible zone of secondary enrichment at that point. It may require an additional 100 feet lift below the bottom of the present winze. Sinking on the Gold Shoot, I have already referred to.

Given the Como and Rapidan experience of apparent impoverishment at relatively short distance below surface and in view of the result to date of the exploratory drift East of the main Como Boyle heading, I would substitute for this development an equivalent drive from the East face of the 300 level.

I would list the more interesting developments as follows:—

1. Sinking the Rapidan and Gold Chute winzes.
2. Easterly advance on the 300 level Como toward the Star of the West intersection.
3. Outcrop study followed by some development on the Fredericks vein from the Boyle Level, and further reconnaissance on the Eglin.
4. Reopening and close sampling of the Lucky Sunday.

This report has confined itself strictly to a setting forth of conditions as they are found today at the property. The presentation and discussion of a concrete future program is reserved for discussion at the Annual Stockholders Meeting shortly to be held in Dayton.

Respectfully submitted,

C. W. VAN LAW

*Consulting Engineer in Charge.*



**APPEL AND BRACH**  
PUBLIC ACCOUNTANTS AND TAX CONSULTANTS  
19 RECTOR STREET, NEW YORK

COMO MINES COMPANY,  
Dayton, Lyon County, Nevada

May 2, 1936.

Gentlemen:

In accordance with your instructions, we have made an examination of the books of account and records of Como Mines Company for the year ended December 31, 1935, and submit herewith our report containing:

EXHIBIT "A" — Balance Sheet — December 31, 1935;

SCHEDULE 1 — Pre-operating, Property Maintenance and Preparation Expenses — December 31, 1935.

The scope of our examination and other information pertinent to the statements herein set forth are contained in the following comments:

PROPERTY, PLANT AND EQUIPMENT-----		\$1,901,746.29
Less: Reserve to adjust valuation of mining property and claims -----	\$783,750.00	
Reserve for depreciation -----	10,545.07	794,295.07
TOTAL FIXED ASSETS -----		<u>\$1,107,451.22</u>

These are segregated into three general classifications as follows:

Mining property and claims -----	\$1,638,383.03
Construction and equipment -----	261,743.28
Office furniture and fixtures -----	1,619.98
TOTAL -----	<u>\$1,901,746.29</u>

MINING PROPERTY AND CLAIMS:

BALANCE — January 1, 1935 -----	\$989,300.31
Transfer of unsold or abandoned balance of original equipment purchased with original claims and part of the cost thereof, from "Mining and Construction Equipment account".	46,331.87
Acquisition of 24 mining claims situated in the Palmyra and Indian Springs Mining District in the county of Lyon, State of Nevada from Como Gold Mining Company pursuant to the plan and contract of reorganization dated December 14, 1934, effective December 22, 1934, wherein it was provided that Como Mines Company exchange 1,000,000 shares of its capital stock for the entire outstanding capital stock of Como Gold Mining Company.	600,000.00
Miscellaneous debits less miscellaneous credits-----	2,750.85
BALANCE — December 31, 1935 -----	<u>\$1,638,383.03</u>

CONSTRUCTION AND EQUIPMENT:

BALANCE — January 1, 1935. -----	\$121,354.94
Additions consisting of Mine Buildings, Mill Buildings, Mine Machinery and Equipment, Mill Machinery and Equipment, road construction and power line construction.-----	187,740.21
	309,095.15
Less: Transfer to Mining property and claims account of unsold and abandoned Equipment -----	\$47,081.87
Miscellaneous credits -----	270.00
BALANCE — December 31, 1935 -----	<u>\$261,743.28</u>



# OFFICE FURNITURE AND FIXTURES:

Balance — January 1, 1935 -----	\$598.56
Additions during the year (net) -----	<u>1,021.42</u>
Balance — December 31, 1935 -----	\$ <u>1,619.98</u>

RESERVE TO ADJUST VALUATION OF MINING PROPERTY AND CLAIMS ----- \$783,750.00

This account has been fully described in the Company's annual report as of December 31, 1934.  
Quoting from this report:

"The directors valued the mining claims at \$989,300.31, which represented the par value of stock issued in acquisition of such claims, less the par value of the shares reconveyed to the corporation as treasury stock. The reserve has been provided to reflect a valuation based on contemporaneous sales of stock at the times claims were acquired".

All additions during the year ended December 31, 1935 are at cost.

Depreciation has been calculated from the approximate date of completion of the construction work, at the rate of 8 percent per annum on construction and equipment and at 10 percent per annum upon office furniture and fixtures.

SCHEDULE 1, shows in detail all pre-operating, property maintenance and preparation expenses consisting of the following:

Pre-operating expenses to January 1, 1935 as adjusted -----	\$133,622.36
Additions during the year 1935 -----	35,878.99
Property maintenance and preparation expense -----	21,510.07
Mine and mill costs applicable to property maintenance and preparation -- \$146,711.10	
Less: income applicable to property maintenance and preparation -----	<u>69,797.27</u>
Depreciation -----	<u>10,545.07</u>
TOTAL -----	<u>\$278,470.32</u>

In connection with these expenses, it is to be noted that no profit and loss statement has been incorporated in this report. The officials of the company do not consider that in the year under review the mine attained a complete state of operation and that such production of ore as the company mined and treated, was merely incidental to the pre-operating work and the setting up of an efficient organization.

Mill, and other mining structures were not completed until about the middle of the year; organization work was not completed until almost the close of the year when Mr. C. W. Van Law assumed active management at the mines.

Investment in securities of affiliated company -----	\$87,500.00
Less: reserve to adjust valuation -----	<u>81,250.00</u> <u>\$6,250.00</u>

This consists of 350,000 shares of 25 cents par value each of Lucky Sunday Mining Company, acquired prior to January 1, 1935 in exchange for 5 lode mining claims. The reserve to adjust valuation is detailed as follows:

Sale to Lucky Sunday Mining Company of 5 unpatented lode mining claims in exchange for 350,000 shares of Lucky Sunday Mining Company capital stock of the par value of \$.25 per share. -----	\$87,500.00
Valuation of above investment adjusted to equal 5/32nds of the adjusted cost of the original claims acquired, more fully described in the company's annual report as of December 31, 1934. -----	<u>6,250.00</u>
AMOUNT OF RESERVE NECESSARY TO ADJUST:-----	<u>\$81,250.00</u>

We were informed by officers of the Como Mines Company that Lucky Sunday Mining Company was organized under the laws of the State of Nevada for the sole purpose of holding the five mining claims acquired from Como Mines Company and, that the company has no books of account. All necessary payments cover-



ing taxes and other expenses have been made for the account of the corporation by Como Mines Company and St. Joe Consolidated Mines Corp.

The assets of the company consist of mining claims valued at -----	\$125,000.00
and deferred expenses amounting to -----	<u>1,787.38</u>
TOTAL -----	<u>\$126,787.38</u>

Liabilities are as follows:

Amount due to Como Mines Company -----	\$1,427.16
Amount due to St. Joe Consolidated Mines Corp. -----	<u>360.22</u>
leaving net worth of -----	<u>\$125,000.00</u>

which is represented by 500,000 shares of capital stock outstanding of 25 cents par value, of a total authorized capital of 1,000,000 shares.

SUPPLIES — mine and mill (at cost) -----	<u>\$ 11,028.71</u>
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Consists of physical inventories taken as of December 31, 1935 and priced at cost, as certified to us by the management.

TREASURY CAPITAL STOCK — 74,000 shares:

Consists of 63,000 shares registered in the company's name and 11,000 shares registered in the name of an officer. These 11,000 shares have been "earmarked" by the directors for delivery on an Employment Contract extending over a period of 11 months, ending with the month of November, 1936, at 1,000 shares per month.

DISCOUNT ON TREASURY STOCK SOLD -----	<u>\$599,010.42</u>
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This item covers the difference between the par value, and the amount at which treasury stock has been sold. As at December 31, 1934 1,000,000 shares were held in the treasury. These shares were exchanged for the outstanding capital stock of Como Gold Mining Company on a share for share basis in accordance with a plan and contract of reorganization dated December 14, 1934, effective December 22, 1934. The plan provided that upon completion of the exchange of capital stock 100,000 shares of Como Mines Company capital stock would be donated back to the treasury by certain principal stockholders of Como Gold Mining Company. The 100,000 shares of capital stock were received during the period herein reviewed.

Transactions in the account for the fiscal year are as follows:

Balance January 1, 1935 -----	\$617,507.08
Addition during the year:	
Cost of mailing charges of stock certificates -----	<u>3.34</u>
	617,510.42
Deductions during the year:	
Premiums received on sales of 37,000 shares -----	<u>18,500.00</u>
Balance December 31, 1935 -----	<u>\$599,010.42</u>



St. Joe Consolidated Mines Corp., made an agreement with the company dated Feb. 9, 1935 respecting the amount of \$86,606.85 due by company as at December 31, 1934. St Joe Consolidated Mines Corp., consented to refrain from demanding payment of the said amount until January 1, 1936 and to extend such payment for three additional 6 month periods in case payment at said date or subsequent extended 6 month periods would embarrass the company's operations. We were informed by officers of the company that this agreement is still in effect.

We have examined the "Minutes" of the meetings of stockholders and directors covering the entire fiscal period and found the financial records to be in proper accord.

Our examination was conducted in New York City from records of the company sent there from its office in Dayton, Nevada.

## CERTIFICATE

We have made an examination of the books of account and records of Como Mines Company for the year ended December 31, 1935.

In connection therewith we traced to properly authorized vouchers all additions to fixed assets. We examined or tested accounting records and other supporting evidence and obtained information and explanations from officers and employees of the company: we also made a general review of the accounting methods but we did not make a detailed audit of the transactions.

In our opinion, based upon our examination and subject to the comments contained herein, the accompanying balance sheet fairly presents, in accordance with accepted principles of accounting consistently maintained by the company during the year under review, its position at December 31, 1935.

Respectfully submitted,

APPEL and BRACH

By HENRY BRACH

*Certified Public Accountant*



## COMO MINES COMPANY

## BALANCE SHEET

DECEMBER 31, 1935

## ASSETS

## FIXED ASSETS:

Property, plant and equipment .....	\$1,901,746.29	
Less: Reserve to adjust valuation of mining property and claims .....	\$783,750.00	
Reserve for depreciation .....	10,545.07	794,295.07
TOTAL FIXED ASSETS .....		\$1,107,451.22

(Includes Mining property and claims, Mine construction, Mill construction, Mine machinery, Mill machinery, Road construction and Power line construction.)

## INTANGIBLES:

Development expense .....	263,019.90	
Pre-operating, property maintenance and preparation expense (Schedule 1) .....	278,470.32	
Organization expense .....	1,963.55	
TOTAL INTANGIBLES .....		543,453.77

## INVESTMENTS:

Securities of affiliated company .....	87,500.00	
Less: Reserve to adjust valuation .....	81,250.00	
NET INVESTMENT .....		6,250.00

## CURRENT ASSETS:

Cash on hand and in banks .....	3,767.69	
Bullion on hand .....	2,039.87	
Accounts receivable—trade .....	7,663.92	
Accounts receivable—others .....	1,184.19	
TOTAL CURRENT ASSETS .....		14,655.67

## INVENTORIES:

Supplies—mine and mill (at cost) .....	11,028.71
--	-----------

## OTHER ASSETS:

Accounts receivable—affiliated company .....	1,427.16	
Deposits with service companies .....	1,700.00	
Prepaid insurance premiums .....	956.67	
TOTAL OTHER ASSETS .....		4,083.83
TOTAL ASSETS .....		\$1,686,923.20

## LIABILITIES AND CAPITAL

## CAPITAL:

Authorized capital stock of \$1.00 par value 3,000,000 shares		
Treasury capital stock 74,000 shares		
Issued and outstanding .....	2,926,000 shares	\$2,926,000.00
Less: Discount on treasury capital stock sold ..	\$599,010.42	
Excess directors valuation of mining property and claims over market value of stock based on contemporaneous sales .....	865,000.00	1,464,010.42
		1,461,989.58
Donated surplus .....		12,000.00

(Represents the par value of 12,000 shares of the company's \$1.00 par value capital stock donated to the corporation by several principal stockholders.)

TOTAL CAPITAL .....	\$1,473,989.58
Reserve for replacements of heavy equipment .....	3,035.30

## CURRENT LIABILITIES:

Loans payable .....	10,000.00
Accounts payable for materials, supplies, services and expenses .....	29,488.00
Reserve for disputed claim .....	1,084.33
Taxes accrued .....	366.56
Wages and salaries accrued .....	5,807.48
Accounts payable—St. Joe Consolidated Mines Corp. ....	88,675.80
Accounts payable—National Exploration and Development Co. ....	74,476.15
TOTAL CURRENT LIABILITIES .....	209,898.32

TOTAL LIABILITIES AND CAPITAL .....	\$1,686,923.20
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The above Balance Sheet is subject to the accompanying explanatory comments.



# COMO MINES COMPANY

## PRE-OPERATING, PROPERTY MAINTENANCE AND PREPARATION EXPENSES YEAR ENDED DECEMBER 31, 1935

		Total	Pre-operating Expenses	Property Maintenance and Preparation Expenses
BALANCE—January 1, 1935.....	\$142,969.42			
Less: Adjustment of accrual .....	\$3,800.00			
Transfer of compensation and other insurance to "Development Expense".....	5,547.06	9,347.06		
BALANCE—January 1, 1935 as adjusted....		\$133,622.36	\$133,622.36	
ADDITIONS DURING 1935				
Legal and accounting fees.....	20,031.04		\$12,288.11	\$ 7,742.93
Office salary and expense.....	11,505.44		5,499.08	6,006.36
Listing, registrar and transfer agent expenses .....	8,805.59		7,632.18	1,173.41
Traveling expense .....	4,452.53		2,670.43	1,782.10
Telephone and telegraph .....	3,411.22		1,944.23	1,466.99
Stock certificates.....	1,796.86		1,287.05	509.81
Stockholders meetings, literature, etc..	1,366.59		1,366.59	
Miscellaneous .....	1,625.69		553.20	1,072.49
Rent .....	800.00		500.00	300.00
Transfer and miscellaneous taxes.....	1,510.82		1,450.00	60.82
County taxes .....	244.38		244.38	
Capital stock tax .....	510.00			510.00
Printing and stationery .....	623.53		407.17	216.36
Miscellaneous freight .....	226.31			226.31
Postage .....	151.08			151.08
Dues and subscriptions .....	51.87		36.57	15.30
Reels and containers charged off.....	52.00			52.00
Insurance .....	24.75			24.75
Maintenance of dwellings, boarding and bunk houses .....	906.69			\$906.69
Less: Ground rents receipts.....	75.00	831.69		75.00
		58,021.39		831.69
		632.33		22,142.40
Deduct discounts earned .....		57,389.06	35,878.99	632.33
				\$21,510.07
MINE AND MILL COSTS APPLICABLE TO PROPERTY MAINTENANCE AND PREPARATION				
Mine .....	\$122,737.42			\$122,737.42
Mill .....	42,289.10			42,289.10
	165,026.52			165,026.52
Less: Amount charged to development expense .....	18,315.42			18,315.42
	146,711.10			146,711.10
INCOME APPLICABLE TO PROPERTY MAINTENANCE AND PREPARATION				
Gold .....	\$48,407.63		\$ 48,407.63	
Silver .....	31,048.14		31,048.14	
	79,455.77		79,455.77	
Less: Smelter charges.....	4,316.92		4,316.92	
Loading and delivery concentrates..	5,341.58		5,341.58	
	9,658.50	69,797.27	9,658.50	69,797.27
Net cost applicable to property maintenance and preparation .....		76,913.83		76,913.83
Depreciation — buildings, construction and equipment at the rate of 8 percent per annum from July 1, 1935 .....	10,426.10			10,426.10
Depreciation—office furniture and fixtures at the rate of 10 percent per annum .....	118.97			118.97
TOTAL DEPRECIATION .....		10,545.07		10,545.07
TOTAL ADDITIONS DURING 1935.....		144,847.96	35,878.99	108,968.97
BALANCE—December 31, 1935 .....		\$278,470.32	\$169,501.35	\$108,968.97

The above statement is subject to the accompanying explanatory comments.