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M E M O R A N D U M

concerning the

R O U N D M O U N T A I N M I N E

in

Nye County, Nevada.

Carl Edward Julihn, E. M.

to

Wm. A. Read, Esq.

Alameda, California.

February 19, 1916.

I N D E X.

Wm. A. Read, Esq.,

New York City.

Dear Sir:

The following memorandum is designed to furnish you all the information in my possession in regard to the Round Mountain Mine.

SITUATION OF THE MINE.

The Round Mountain Mine is located about fifty miles north of Tonopah, Nevada, on the east side of Big Smoky Valley, which is a depression some eight miles wide between two mountain ranges. The mountain from which the mine derives its name is but a small outlying foothill of the Toquima Range. From its western side the floor of the valley dips away gently for three or four miles until it begins a symmetrical rise to the flank of the Toyabe Range.

THREE PLACES OF THE MINE.

The VEIN Mine.

On Round Mountain itself, not far above the valley, the Los Gazabo gold vein outcrops. It dips flatly into the mountain toward the north, varrying in dip from 15° to 28°. It has been mined by an inclined shaft 900 feet deep, from which drifts have been carried north and south along the vein at intervals of about 100 feet along the dip. The shaft is equipped with hoist, compressor, shops and necessary buildings. There is an amalgamation mill of 150 tons daily capacity. The mine is credited with a production to March, 1915, of $2,594,818. milled from 331,445 tons of ore, an average of $7.82 a ton. This is almost entirely in gold, as there is but little silver. The ore is oxidized and mills freely.

Profits above operating expense to March, 1915, the date of the last annual report, were $730,000.

The Placer Mine.

Coordinate with the vein mining is a placer enterprise quite exceptional in many ways and highly profitable. It is supposed that the Los Gazabo vein extended at one time far out over the present floor of the valley, for this is deeply covered with placers attributed to its disintegration. It is my opinion that this theory expresses only half the truth and that the placers were not only derived from the erosion of the Los Gazabo but from many other veins as well and from the rhyolite mass of the mountain itself. However that may be, these placers are exceptionally rich and of great extent. They have produced $339,583. to date from but 218,318 yards of gravel, an average of $1.55 a yard. This return has come from the washing of but 15 acres, while an additional area of 67 acres has been demonstrated to have similar deposits. It appears, moreover, that at least 200 acres beside can be classed properly as a potential resource for placer mining, though in this area no attempt has yet been made to effect a quantitative determination of values. In the 67 acres demonstrated, R. H. Ernest, the superintendent, reports an average value of about $1 a yard for an average depth of 14 feet, which means about 1,500,000 yards, or a gross of about $1,500,000. I have great confidence in the figures of his estimate. I knew Mr. Ernest well as a classmate. He is of unquestioned integrity and appears to have been extremely conservative in this matter. Thus, he states that the average of his tests in this 67 acres conformed closely to that obtained before actual placer operations in the 15 acres which have been worked. In the latter case the actual recovery was considerably higher than estimates had promised, due, probably, to the rejection of exceptional samples, while there were,

in fact, some spots of great enrichment which were recovered in placer operations. The margin between the $1 a yard estimated for the 67 acres and the $1.55 actually recovered in the 15 acres seems to warrant considerable confidence in the former figure. Moreover, the depth of 14 feet which was estimated appears to be misleading though properly conservative. This is merely the depth to which the present installation of flumes and sluice boxes will work the gravel, while the gravel is generally much thicker. One shaft in or near this block of ground shows 60 feet of gravel and, in general, a depth of 14 feet properly expresses the facts as they exist only on the placer margin, while the depth rapidly increases going away from the mountain toward the middle of the valley. For these reasons I believe there is little risk in accepting the estimate of $1,500,000 gross as applied to the 67 acres held to be demonstrated, and I would be surprised if the actual production did not exceed that amount by a good deal.

Of the 200 acres which are still undemonstrated much may also be expected. I consider half that area to be of very great promise and almost certain to make large returns. The value of the other half is more problematical as it includes a considerable admixture of granite detritus, which may materially reduce the values and also complicate their recovery. As a partial offset to this, however, the placers in this case are very deep and may make up in yardage something of the above deficiencies.

As in the case of the vein mine, the placer mine is now fully equipped and a going concern. An excellent hydraulic installation was made last summer at a cost of about $200,000. Water rights were secured in a canon of the Toyabe Range, a dam was built and nine miles of a heavy water main were laid across the valley. There is an hydraulic head of about 700 feet at the workings. This installation makes placer operations possible through four months of the year, during which time there is sufficient water to wash from 1,000 to 1,500 yards daily at a cost of about 30¢ a

yard, while a future cost of 25¢ or less is anticipated. It appears, moreover, that a moderate expense for raising the dam would impound considerable water to such advantage that double the above yardage would be washed at a greatly lessened cost.

We have then, as a broad view of this mine, two features commonly recognized to date; first, the mine proper with its workings on the Los Gazabo and other veins and, second, the placers, which have been recognized as an important asset only in the last few years. The vein mining, lacks at present any considerable reserves of developed ore, but there is much undeveloped ground directly accessible from present workings. There is no serious problem connected with the development to be done, as no changes of formation or important faults are to be anticipated. I have much confidence that sufficient ore will be found from time to time to supply the mill with capacity tonnage. In view of the lack of reserves, however, the vein mining enterprise may be described as a speculative feature of a very high type. The placers are a very different matter as they assure returns greatly in excess of the present market price of the mine.

Of the two considered together, it may be said in summarization that they provide an assured return of the present market value, with ample margin for liberal interest through the period of realization, and two unusually good speculations, that of the undemonstrated placers and that of the undeveloped areas of the Los Gazabo and other veins.

Undemonstrated Low-grade Possibilities.

In addition to these well-known features of Round Mountain, there is a third, entirely unknown to the public and little understood by anyone. There is the strongest reason for believing that the mountain itself is so extensively mineralized as to make it available in great masses for low-grade ore. This possibility is of such great importance that it is the princi-

par subject, of this memorandum, the presentation of other matters being intended only as a background or setting. It should be stated at the beginning that no complete demonstration of this hypothesis is possible from the available evidence in the mine workings to date, but there are ten items of evidence which, considered together, seem to be related and they all consistently suggest the stated hypothesis. If it is correct it will probably lead to the demonstration of some millions of tons of ore and may result in the creation of an industry of exceptional magnitude. The necessary demonstration would cost a great sum of money if it were undertaken by itself, but the existence of vein mining in Round Mountain greatly simplifies the problem of such demonstration. It is possible so to direct the exploration of the veins that much of the work will bear upon the larger problem without impairing the value of the work in the normal exploration of the vein mine. It is also possible to demonstrate low-grade values in quantity, with certainty, and at small cost, by the occasional use of the mill for millruns on the whole product of low-grade crosscuts. From such tests there would be at least partial return in bullion off any expenditures directly chargable to the proving of large volumes of low-grade ore.

It will be necessary for an adequate presentation of this matter to begin with a discussion of the genesis of the ore deposits and to show the present state of the vein mine.

GENESIS OF ROUND MOUNTAIN ORES.

The so-called veins of Round Mountain are, with unimportant exceptions, dikes of rhyolite which have been intruded into cooling crevavges and other planes of weakness existing in an earlier rhyolite constituting the mass of the mountain.

The early rhyolite was a slow-moving surface flow, which solidified

into a grey rock with prominent phenocrysts of quartz and feldspar in a felsitic groundmass. After the cooling of this flow and before the time of dike intrusions, at least one fissure developed. This has since become known as the Keane Vein, which intersects the Los Gazabo Vein in an obtuse angle at the 800 Level. Subsequent to the formation of the Keane fissure, but still previous to the formation of the Los Gazabo and other dikes, there was a recurrence of volcanic activity and a residual of the rhyolitic magma sought an outlet toward the surface. This was in a period of expiring volcanism and the action was not in the least explosive but appears to have been very gentle, though protracted. The actual eruption of lava was preceded by the ejection of great volumes of siliceous, gold-bearing, waters, which ascended along the Keane fissure and spread out into the mass of early rhyolite through cooling cleavages and through the planes of at least two shearage zones. As a result, two types of deposits were formed, first, large masses of the country rock itself were silicified and impregnated with small quantities of gold, and, second, actual vein-stone was deposited in the Keane fissure and in the crevices of two shearage zones.

A first flow of lava, nearly contemporaneous with the flow of magmatic waters, ascended along parts of the Keane fissure and was quickly cooled into the dark obsidian associated with manganese which is typical of the vein called the Gloom or Mariposa. This was followed by a second and more active burst of lava which ascended along the Keane fissure, filling it everywhere, superimposing itself upon the earlier obsidian flow and often tearing away from the walls of the fissure the vein-stone which had been deposited from aqueous solutions. The quartz of the Keane Vein is thus typically fragmental, embedded in rhyolite and with all sharp edges blunted by attrition or by the solvent action of the lava which enclosed it. The lava flow not only filled fissures previously existing but created new channels for itself, one of which is now known as the Los Gazabo Vein. This

vein has always differed strongly from the Keane in that it exhibits no quartz of aqueous deposition. The reason is very obvious. The quartz of the Keane was a previous deposition in an open fissure while the Los Gazabo is plainly and simply a dike. It is a very remarkable dike, however.

The gold for which the Los Gazabo is mined seems to have been an actual constituent of the lava and in such quantity that it made ore of considerable parts of the dike. There appears to have been a strong tendency to the segregation of heavy minerals in this rhyolitic magma. The dike exhibits well-marked phenomena of segregation locally in ferrugenous bands and globules carrying high values in gold. Indeed, such enrichments sometimes contain superconcentrations of pure gold which are probably of magmatic origin and not due to the later action of magmatic waters. Thus a narrow band of gold will be found equidistant from the margins of a ferrugenous concentration, all of which is solidly enclosed in unshattered rhyolite, without any suggestion of an open fissure leading into it and without the slightest sign of quartz from aqueous deposition, which might be expected from the action of aqueous solutions.

PRESENT STATE OF THE VEIN MINE.

On the east end of the levels on the Los Gazabo, work has been stopped, level by level, at some point marked by low values and erratic behavior of the Los Gazabo Dike. While no very clear opinion as to the reasons for discontinuing these explorations are available, abandonment of exploration appears to have arisen in a feeling that the vein goes to pieces toward the east, an assumption entirely unjustified by general considerations applying to the behavior of dikes. I have examined the faces carefully, level by level, and find only such confusion as is entirely normal to dike

action in a region of tight rocks offering resistance to intrusion. In some cases the dike narrows to a tiny stringer but continues on into the face; in others it exhibits sudden deflections along cleavage planes; in only one case it failed to express itself when its course along a cleavage plane tightened so greatly as to exclude it. Discouragement of exploration to the east has been due, in fine, solely to the misconception of the dike as a vein.

It must be admitted candidly that the dike to the east of present faces may not have been derived from a part of the magma as highly enriched with heavy minerals as that which ascended in the region of known stopes. It is certainly probable, moreover, that in view of the obvious tendency to magmatic concentration of values there must be considerable portions of the dike which are notably impoverished. Nevertheless, it is to be assumed with confidence that there is no magic about the region of present east faces which can have stayed the operation of general laws so clearly observed to the west of them, and the conclusion is inevitable that a following up of the dike to the east must disclose some additional areas of gold enrichment. They may be less frequent, enrichment in them may be less pronounced. I am not disposed to assume too much about them in the absence of direct evidence. But, on the other hand, I would object to intemperate generalizations in the other direction. Enrichment to the east beyond an impoverished zone may be more frequent, more intense. None may assume prescience in this matter of intensity of segregation. This only we do know, that the same laws of segregation will have operated to the east as to the west and, therefore, areas of enrichment in some degree must exist there. In view of the fact that certain surface workings, known as the Number 2, lie far to the east of the present faces and that another mine is operating on what may be an extension of the Los Gazabo to the east, there is a sound presumption that magmatic conditions were substantially uniform

over a much larger area than that covered by the present mine workings.

From the above discussion the general state of affairs in the vein mining operations will be understood readily. There is little ore developed at present and the mill is kept going from day to day without assurance for any considerable time ahead. Nevertheless, new discoveries of ore are made at reasonable intervals and the field of legitimate exploration is not limited in any direction as yet. Encountering the intersection of the Los Gazabo with the Keane seems to have delayed the prosecution of work in depth for two reasons, first, the discovery of numerous orebodies in the vicinity of the intersection and, second, some confusion as to structural relations, for the surmounting of which there was no adequate organization. The ship seems to have drifted a bit while the fair weather time of abundant ore continued. Or, to put it another way, there was an inadequate policy of development coupled with a misconception as to the structure and genesis of the ore deposit.

At present this is being sharply remedied. A winze is going down on the Keane Vein below the 900 Level and it is in ore of fair grade. There is no reason that the next nine hundred feet on the dip should not average as well as the nine hundred feet above it, as the dike enrichment had nothing to do with nearness to the surface except, perhaps, very locally. Moreover, it is realized that any and all dikes in the mine, of whatever thickness, dip or direction, are expressions of the same thing which made the Los Gazabo. Exploration to the east is being resumed and it will no longer be feared that a dike dipping 60° cannot in the very nature of things be as rich as the Los Gazabo, which dipped only 20°.

On the whole, it is my expectation that while vein mining will suffer for a time from the lack of adequate development ahead, especially of that type which boldly strikes into new territory, this condition will gradually remedy itself and the chances are good that the vein mine will do very

well for some years to come.

THE LOWGRADE SILICIFIED COUNTRY ROCK.

It has been stated that the magmatic waters which preceded the eruption of the dikes extended themselves from the fissures along which they rose and silicified the nearby country rock. Thus, both the hanging wall and the footwall of the Keane Vein are of flinty, silicified early rhyolite, of normal texture but hardened and changed from a gray to a bluish hue. Now while the stopes are wide enough to give the impression that the Keane Vein is of considerable width, it appears upon examination to be generally very narrow - often no more than a foot in width. As a matter of fact a large part of the ore from its stopes appears to have consisted of silicified wall rock which proved to be valuable enough to be sent to the mill. This phenomenon is not confined merely to the immediate vicinity of the vein. Much valuable ore has been extracted from vertical crevices in the vein walls which antedate the dike eruptions and invariably show silicification of the country rock, while there are often little stringers of true vein quartz filling narrow planes of shearage. The ore from these places appears as mere bluish, silicified country rock.

Item I.

But these are the least remarkable phases of this mineralization. Beneath the footwll of the Keane Vein the 70L Crosscut has been driven out into the country for many hundreds of feet and it discloses a truly extraordinary state of affairs. For over two hundred feet it passes through silicified country rock all of which returns low assays, said to average not less than $2 a ton in gold. No accurate data exists as to this as exploration here is guided by panning tests, which are sufficient to show whether rock will make milling grade under present operating conditions or

will fall below it. It can only be said with certainty that all this 200 feet or more panned sufficiently well to attract attention and create an impression of values somewhere around $2.

Thereafter a great dike of later rhyolite is cut. It is from thirty to fifty feet wide. As it disclosed no commercial values at the point of exposure it received no further consideration.

Item II.

Just beyond the dike, mill values were found in silicified country rock similar to that on the other side of the dike. This resulted in the extraction of some tonnage from a stope below the level of the crosscut. A drift was carried easterly for about 100 feet, nearly parallel to the big dike. In it another little orebody was encountered and mined below the level. All the country rock exposed in this drift is of the silicious type.

Item III.

The main 70' Crosscut beyond the dike was then resumed. It continued to be in silicified country rock and it was excellent ore for 40 feet, all rock from this distance being sent to the mill. It is supposed to have averaged from $6 to $8 a ton. Ore was mined up a few feet above the crosscut as long as that grade continued and then the crosscut was resumed. The silicious country rock thereafter continued to return low pannings of gold for 200 feet beyond the big dike. It is perfectly safe to say that a total width of 400 feet of intense silicification is in evidence while there is a further width exposed in which the alteration of the country rock has not been so intense.

Discussion of Items I-II-III.

These phenomena may be explained as follows: The big dike exposed

in the 70' Crosscut probably fills a considerable fissure vein, as in the case of the Keane fissure, was a vent for magmatic waters before the dike intrusions. These waters silicified and impregnated with gold a wide zone extending from the margins of the fissure through which they ascended. Under favorable conditions the country rock was transformed to good ore, worth as much as $20 a ton in one place; but generally it created only low values through immense quantities of the early rhyolite.

While we see this silicified zone pierced only in one section, it may be assumed safely that the vent which made it, though now obscured by the dike, was of considerable extent on both sides of the exposure. It is my impression that a drift following the margin of the dike so as to include both the dike and the silicified margin of early rhyolite would accomplish three objects at once. First, it would define the course of the mineralizing channel from both sides of which the country rock should be silicified and impregnated for a distance of about 200 feet each way. Second, it would explore the most favorable locus for intense enrichment in the margin of silicified country, which might pay for the drift by occasional discoveries of ore similar to those previously found. Third, it would disclose any tendency to magmatic enrichment which is very likely to have occurred in the dike itself. An enrichment in a portion of dike as wide as this one would mean tonnage in quantities never before known in this mine.

There has never yet been an attempt, even roughly, to determine the general average value of the silicified country rock. If large masses of it will show $1.50 a ton, it will be safe to expect it to mine much better than that as a whole, as there would surely be many places in which there would be comparatively high enrichment, which counts very heavily in such low-grade material. Thus, a casual 100 ton block of $20 ore would raise 3,600 tons of $1.50 ore to an average grade of $2. The men at the mine think the low-grade would do better than $2 but their impression requires checking

by actual mill tests on a considerable tonnage of samples.

Item IV.

We will next consider the Number 2 Gloryhole. This is on the surface, roughly in line with the course of the dike just considered but over two thousand feet away from the location of Items I-II-III. The product of this gloryhole has been used as a supporting tonnage for the mill since 1910 and an enriched stockwork of stringers extending from it is still being mined, yielding ore which averages about $12. The gloryhole itself has produced to date 232,142 tons of rock, 61,098 tons of which have been milled with gross recovery of $452,183., an average of $7.40 a ton. The balance of 171,044 tons was roughly sorted out, sampled and rejected. The waste pile is estimated to contain 194,000, an average of $1.13 a ton. As a whole, approximately a quarter of a million tons from this gloryhole are shown to have an average value of not less than $2.75 a ton. As this does not include tailings losses in the mill, it is probable that the gloryhole averaged not far from $3. a ton. Similar low-grade ore continues in the sides of the gloryhole but the values have decreased in the bottom.

Item V.

However, on the 70 Level, about 600 feet away from the gloryhole and toward the location of Items I-II-III., a crosscut enters a region of silicified country rock and for 160 feet to the present face of the crosscut, all rock was passed over a grizzley and the fines were milled, averaging $4 to $5. It is thought by those responsible for the work that all rock from the crosscut averaged $2. Similar material stands in the face of the crosscut over 400 feet away from the gloryhole and a shaft between the two shows material similar to that of the gloryhole. It is reasonable to suppose that Items IV. and V. are closely related phenomena and that they may be related also to items I-II-III.

Item VI.

There are said to be surface indications that the zone shown in the Number 2 Gloryhole has an extension for 600 feet around the hill and that then good exposures similar to those in Number 2 are encountered on property of the Bluejacket Company, where a lessee is mining the rich stringers to a grade of about $30.

Item VII.

On the 300 Level, in the vicinity of the intersection of the Keane and Los Gazabo Veins, a large body of fair grade mill rock was encountered and has been partly mined by an underground gloryhole. Part of this ore is in the veins themselves but a great preponderance of the tonnage is to be classified as impregnated country rock. The working is now many feet in diameter and its limits are not yet defined. While its average value is low for milling on the present basis, it would be very highgrade for the purpose of mining and milling on a large scale.

Item VIII.

In the shaft, below the Keane Vein on the 300 Level, a general mineralization in the country rock of finely disseminated pyrite is exposed. The country rock appears to be affected in a very extensive way. A vertical winze was sunk 40 feet below the 300 Level and it was all in this material, which returned assays from $3 to $5. As a whole it is said to average about $4. A crosscut from the bottom of this winze is now being driven and has not yet shown any limits to the orebody.

Item IX.

About 1,500 feet northwest of Number 2 Gloryhole is another gloryhole at the intersection of a dike with a mineralized sheeted zone called the Blackhawk. Unfortunately the records of this gloryhole have not

been kept distinct. It has, however, produced a considerable tonnage of profitable ore. The Blackhawk sheeted zone has a demonstrated length of about 600 feet and a width of about 200 feet. Narrow stringers through it are often very rich but the ground is suitable only for leasing operations at present. It is thought that as a whole the Blackhawk zone might average $2 a ton.

Item X.

I am advised that at one point on the mountain, covered by heavy snow during my visit, is a partially developed outcrop 40 feet wide and averaging about $6 a ton. It has been entirely rejected as only about $1 a ton is recoverable by amalgamation. From descriptions of the showing I have no doubt that this is another shearage zone of exceptional value, though its ore would require cyanidation no doubt. A factor of great importance in this matter is that it strikes for an intersection with the great dike exposed in the 702 crosscut and such an intersection might have great possibilities.

General Discussion of the Silicified Low-grade Ore.

In regard to these ten items, it appears that while the showings are not continuous they are all very similar and a relation between some of them is strongly suggested. All involve silicified country rock carrying low values in gold; all apply to large tonnages; values indicated are generally well above $7. Extraction from all these places at once might have returned an average between $3 and $4, or even higher. To me the tendency shown is very important.

It becomes a question whether a great zone of silicification shown in the 702 Crosscut is indeed an isolated phenomenon or whether it has important extensions, as I think it must have. If, for instance, this exposure were shown to be related to the Number 2 Gloryhole by a continuous

zone of silicification, it would involve a length of say 2,500 feet. The vertical distance between the showings is about 400 feet and each of them is about 400 feet wide. However, it must not be understood that this is in any sense a discussion of possible tonnage. It is only a suggestion to indicate that the question under discussion is concerned with possibilities of a very large tonnage. Only two or three million tons of $3 rock might be well worth while and, on the other hand, half a billion tons of $1 rock might not. It is all a question of values and they must be determined further.

In summarization of these lowgrade possibilities, it may be said simply that Round Mountain probably contains many millions tons of silicified rhyolite, all of which probably carries appreciable quantities of gold; that an average value of $2 a ton in a great tonnage would probably make this material highly profitable, as it could be mined very cheaply with gloryholes and shrinkage stopes and the rock is generally well adapted for very cheap milling; but that the question of tonnage and values has not yet been determined even roughly.

SUGGESTION AS TO A PROCEDURE FOR DETERMINING VALUE AND EXTENT OF LOWGRADE ORE.

The existence of vein mining near this lowgrade material and of a mill in operation constitute very favorable factors as a base for determining the lowgrade possibilities of Round Mountain, for at once they relieve such determination of all overhead charges whatever and promise a reduction of the direct cost to a minimum. A very small proportion of profits systematically applied to exploration of the lowgrade would prove a great deal about it in a reasonable time. Thus, drifts on vein dikes might be favored which tended to give access to regions where lowgrade might be expect-

ed to occur. The carrying of but one face as a direct charge to lowgrade investigations would be sufficient for some time. Drifts, raises and winzes so carried would generally be planned with a view to covering the lowgrade zone only in a large way and to providing points of attack for lateral exploration with short diamond drill holes.

In view of the greatness of the prize which may be won here, the showings to date fully warrant such investigations even if they had to be carried alone with a burden of overhead charges. With the support of other operations, profitable in themselves, and with the exceptional security for invested capital provided by the placers it is obvious that the lowgrade possibilities of Round Mountain become a speculative feature which adds enormously to the value of the property.

THE ROUND MOUNTAIN COMPANY.

The Round Mountain Mine is owned by the Round Mountain Mining Company, a Nevada corporation of March 28, 1906. It has 1,500,000 shares of $1 each. About 1,300,000 shares have been issued and the balance is reserved in the treasury to be used in acquisition of additional territory. The company started with 1,000,000 shares and 60 acres of ground. A policy has been consistently followed of acquiring adjacent property for which payments have been made partly in cash from operating profits and partly in stock of the company. Its territory has steadily grown until it now includes over 900 acres and most of the available water is also owned by the company. These purchases were responsible for the increase of the capital stock to 1,500,000 shares, for the company has always made money by its mining operations from the start. There are a few other valuable adjoining properties which the company hopes still to acquire. Generally they include valuable placers as well as vein extensions.

The present directors are J. R. Davis, L. D. Gordon, W. H. Webber, H. G. Mayer and W. C. Erb. Mr. Davis was the president until about two months ago when he asked Mr. Gordon to take over the position, which carries with it the duties of general manager. The directors own a full control of the company, Davis having the largest single interest. These men appear to have guarded the interests of the company in a very creditable manner and its reputaion is very good, very exceptional in fact, and it is held in high esteem by the interested public.

The company does its banking through John S. Cook & Co., of Goldfield, Nevada and the American National Bank of San Francisco, California.

It has no debts except current ones.

R. H. Ernest, a Columbia man, is the superintendent. He has advised me that in view of the heavy snows he expects a placer run of six months this year, which should involve a gross recovery somewhere between $180,000 and $250,000. This may be expected to lead to improvements of the dam which will make it possible to do at least as well in subsequent years even when there is less water.

MARKET PRICE AND VALUE OF ROUND MOUNTAIN.

Shares of the Round Mountain Mining Company are listed on the San Francisco stock exchange and are about to be put on the New York curb. They were selling at 42¢ when I first wrote you but have advanced to 57¢ since then. This has been due to heavy snowstorms which promise a long run of water for placer operations this year and to the assumption of the general management by Mr. Gordon. Many people appear to follow Gordon with considerable confidence in view of his notable success in reopening the Cerro Gordo Mine. Perhaps the present price of 57¢ is only temporary but I hardly think it is. The prediction is often heard that Round Mountain

will reach $1 within a year and many San Francisco people are anxious to hear about the mine.

At any rate, the present price is extremely reasonable, in my judgment. The proven placers should net at least 70¢ a yard and will probably do much better. As there are 1,500,000 yards, this would mean $1,050,000 net to be realized in eight or nine years at the present rate of washing, which will probably be doubled after this year and realization may be expected actually to take about 5 years. The present price of the mine at 57¢ for 1,300,000 shares is $741,000, which would be about right considering only the proven 67 acres of placer. But in addition to that area figured to a depth of 14 feet there will be the lower parts of the placer below the first working, which will be a considerable asset though the costs of working the deep gravel will be higher than in the first working. Then there are areas contiguous to the proven acreage, favorably situated with reference to the mountain and in which values are known to exist, though they have not been determined quantitatively. Without considering more remote possibilities, such as the large area of deep wash previously described, these two factors alone are worth a great deal and correspond to "probable ore" in vein mining. I would say, in a merely suggestive way, that they might be counted as probable to the extent of about $2,000,000 profits. The market price of stock would thus appear to be very moderate, based on the placer features alone.

There is the vein mine, however, and the exceptional speculation as to the lowgrade possibilities in addition.

While the vein mine is not, indeed, very satisfactory at the present moment, it is at least more than carrying itself and such periods of depression are fairly normal to most mines. They recur as an inevitable penalty for insufficient development; and in this case there is a vast extent of undeveloped territory of great promise. It is, furthermore, in the

very act of yielding a new orebody in the winze on the Keane Vein below the 900 Level, not to mention the great body of $4 to $5 sulphide ore now being explored from the vertical winze below the 900 Level. This latter is not free-milling, but there may soon be enough tonnage developed to justify a cyanide plant for treatment.

SUGGESTION FOR A BASIS OF INVESTMENT.

I am not interested in this mine in your behalf because of the investment features but solely for the large speculative feature of the low-grade silicified zones. It is true that but for the investment features which I have carefully explained, I would not propose to you a consideration of this speculative feature; but, as it is, I consider this a rare opportunity. It means a chance to participate in the development of what may become a very great enterprise, so great that I hesitate to express myself unreservedly about it.

As to an actual basis of proceedure for effecting a participation in the company, there are several possible ways. The matter presents some difficulties as control could not be bought at this time. Mr. Gordon has told me that he and his associates are not selling any of their stock and he certainly increased his own interest a few months ago, investing in this mine some of his profits from the Cerro Gordo lease. However, 175,000 shares were paid the Iphynx Company when it sold out to Round Mountain and most of this stock will probably be realized upon by sales in the open market. Other former owners of ground absorbed by the company also have stock. It is possible that as much as 300,000 shares might be bought in the open market from present price up to $1, to average about 80¢. Gordon thinks 100,000 shares might be bought from present price up to 80¢. You might do even better as those who came into the market because of the heavy snow and as followers of Gordon have probably been satisfied by now.

and you might expect to get without opposition any stock about to be sold.

My feeling about the matter is that it would be worth while to buy in the open market a moderate interest as a basis for further action as circumstances might warrant later. 50,000 shares would be about as much as I have in mind as a start unless stock came out very freely, in which case I would suggest buying as much as 100,000 shares. If you had such a holding transferred to me so that I would appear as a stockholder of record, while the stock itself were actually held by you, of course, I believe I would naturally receive first chance to purchase any large blocks of stock which might become available.

I am already in a rather strong position with the people controlling the company and appear to have their confidence. I have just made a study of the mine for them and will probably do further work from time to time as an informal counsellor of Mr. Gordon, who gave me permission to write you whatever I wished as to my recent observations. Under such circumstances a moderate interest of record would create a situation potentially much better than that in which a direct attempt is made to secure options for control, as it would put the burden of the initiative up to the other side. Thus, for example, Mr. Davis, when ill recently, was much discouraged and it is probable that he would have been glad to sell out and retire had he known a possible purchaser for his stock. One might well afford to wait patiently for similar chances, which inevitably occur. The mere fact that there was someone who might be approached at any time in regard to a sale would tend to cause the very thing contemplated. There would be no risk in waiting with Gordon in the management, as he is active, capable and honest, so the property would be ably and respectably administered. Each of his associates in the control is likewise trustworthy. I have little doubt that after a time those in control would consent to a division of their interests with you if I asked it, as they are very reasonable

people and are only concerned to have the control vested in a strong and harmonious group.

Moreover, it is very obvious that if the lowgrade developes as I think it may, the management will be confronted with the necessity of raising a very large sum of money for building a great mill, buying steamshovels, locomotives, etc. and opening up glorynoles, even after the value of the rock is proven. This is vaguely recognized even now and it should tend to make these gentlemen disposed to cordially welcome a new interest which might be of assistance in this matter. I have observed that mining companies in such circumstances seldom choose to wait until accumulated profits furnish the required capital, as the first investors are too impatient for dividends.

Respectfully submitted,

Carl Edward Julihn E. M.

Alameda, California.
February 19, 1916.

M E M O R A N D U M

concerning the

R O U N D M O U N T A I N M I N E

of

Nye County, Nevada.

Carl Edward Julinn, E. M.

to

Wm. A. Read, Esq.

Alameda, California.

February 19, 1916.