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Item 36

KILBORN-ESCOBAR CORRESPONDENCE  
March 12, 1928 - December 26, 1929

The following are chronological excerpts from letters written to Mr. M. J. Escobar from Mr. George D. Kilborn covering the period March 12, 1928 to December 26, 1929. The subject correspondence dealt with Kilborn's instructions to Escobar on the job of cleaning up the Equity property in preparation for an examination prior to a proposed sale. The following letters dealing on this matter are on file at the Austin office of the Nevada Equity Mining Company, Austin, Nevada.

The following excerpts contain what is considered to be pertinent information relative to geology, under-ground mine conditions, Kilborn's mining theories concerning the Equity ground, and certain engineering data such as assays and measurements. It should be noted that no mention is made of the method employed in obtaining the samples represented by the respective assays.

"March 12, 1928

In the course of the next month or two I expect an examination of the Nevada Equity will be made---

In view of this I want you to inspect the Hillside Incline Shaft and put it in a safe condition for examination. I do not want to go to any unnecessary expense, but I do want it made safe though it may be a rough sort of a job.

On the 300 ft., the bottom level, I want you to fix the old stope on the west side of the shaft so that the back of the stope can be sampled the entire length of it. There is one place where I had hard work to crawl through the opening but did so and found a streak of solid ore about 3 feet wide of very good grade. I want this made easy to get to. It will not do any harm if the dirt is thrown down in the drift, some of it might be stored in the shaft below the 300 ft. level.

I want the East and West Drifts on #6 Vein put in shape for inspection. Also the drift east on #1 Vein in as far as the faulted place where the drift sets are. I think the distance is between 85 and 100 feet from the main tunnel.

If it does not take too much work and time you may clear out the West Drift on #7 Vein.

If the expense of cleaning up is not too great I may want to do some work by putting in some shots in order to see the vein better. I have in mind to take the track up in several places in order to put in some shots to show that the ore is stronger in the bottom of the drift than in the top.

April 1st, 1928

I am herewith writing you an outline of work which I would like to do, or in part, after you have finished clearing up the necessary places for the examination in the Equity Tunnel. The most important thing is to make the drifts on #6 Vein presentable. Since you were not familiar with the work at the time these drifts were being driven, I shall, therefore, try to explain the best I can from memory and the knowledge of the ore I gained from my infrequent visits to the property, together with the description given me by Mr. Madden in his letters. I shall begin with

#### #6 East Drift

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Where the main tunnel cut #6 Vein it was some 15 feet a more-or-less broken formation. There were small stringers and bunches of ore throughout this broken mass, some of it assaying 30 ozs. or more. You will notice a small hole on the left side of the main tunnel in, say 10 or 15 feet beyond the entrance to #6 East Drift. Where this small hole is looks as though a drift was started. There were some high grade bunches of gray copper ore. Some of the bunches were 6 to 8 inches wide of almost solid ore and would assay 200 to 300 ozs. silver. This ore showed principally in the bottom of the tunnel. It always looked to me as though two veins came together near the tunnel level. This theory is borne out in part in driving the drift on #6 East.

At the entrance to #6 East Drift there was a high grade streak of almost solid gray copper. It extended up a little above the top of the drift as shown by the raise up a few feet above the top of drift.

From this point east there is a small streak of gray copper one inch to two inches wide on the hanging wall all the way to the upraise in, say 80 feet from the main tunnel.

This raise is up, I should say, 10 to 15 feet. I never was up this raise, but looking from the drift there seem to be two distinct ore streaks, 8 to 10 inches wide, which are getting farther apart as the raise was put up. In the drift there was 20 inches of gray copper ore the same now in the bottom of drift.

I am quite sure that one of the streaks in the upraise is the one the drift is driven on and the other, the foot-wall streak, is the same as the one I mention in the main tunnel 15 feet in from the entrance to #6 East Drift where the small hole is on the left side of the tunnel.

I am writing this as my opinion has been from the beginning and still is; that the Equity Tunnel is driven on a poor elevation for ore and that had the tunnel been 50 feet deeper the veins and ore would have shown much larger than they do now.

In order to see if I am right about this theory I want to take up the track under the first upraise in #6 East Drift and sink a winze a few feet where the 20 inch streak of gray copper is in the bottom of the drift. I think it is 80 feet from the main tunnel to the upraise where this winze is to be sunk, or at least started.

A short distance from the upraise the vein and drift make a bend to the left. As I remember there is a fair streak of ore at this point. It looks as though there is a streak going back towards the main tunnel which may have been in the hanging wall of the drift from the main tunnel in to this point. The distance between #4 and #5 and between #5 and #6 is not far. So it would be quite possible for two of them to intersect not far east of the tunnel.

Going back to the bend in the drift above mentioned----- I think there is a fair sized streak of ore all the way to where the #2 upraise is. There was a small cut-out for stope started a little west of the upraise. In the bottom of the drift under this upraise or near under it, there is a streak of gray copper ore 30 inches to 3 feet wide, and I will want to take the track up here and sink a winze a few feet in order to expose the vein and ore at this point. Some of this gray copper assayed between 200 and 300 ozs. I shall be greatly disappointed if this is not the top or apex of a rich shoot of ore.

From this point in to the breast of the East Drift I shall not be able to describe very well, since I was in there only once when the drift was near its present heading, or breast. However, Mr. Madden said that at one point the ore (heavy sulphide) was 4 feet wide in the bottom of the drift. He said there was no ore in the roof of the drift at this point but that the upper segment of the vein was picked up near the breast of the drift. As near as I can figure it out the 4 feet of heavy sulphide ore was in about 285 feet from the main tunnel. It is best to prospect for this and if you find the place take up the track and expose the ore at this point.

I have a record of an assay at point 365 feet-to 367 feet in from the main tunnel. The streak is 14 inches to 24 inches. This is 20 ozs. silver and 6.8% lead.

Mr. Madden wrote me that in the breast of the drift the ground had caved some beyond the drift sets, exposing a vein of quartz 2 feet to 3 feet wide, which looks good and as though it would make into sulphide ore in a short distance in raising on it. This quartz is of little value. None of the quartz assays but very little unless it contains considerable sulphide of lead, copper, etc. This quartz changes into heavy sulphide frequently.

The last time I was in this drift it was just beyond the drift sets. In the back of the drift at this point there was a streak of quartz about 3 feet or 4 feet wide that I am sure will make into good grade ore if raised upon a short distance. I directed Mr. Madden to do so, but, instead he ran the drift ahead, in order, he afterwards stated, to prove a theory he had. You might examine this place since the ground may have sloughed off some more and exposed the vein higher up.

#### #6 Vein West Drift.

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This West Drift showed some bunches of ore near the main tunnel; at one place in about 50 feet there was a small streak (2 inches) of high grade gray copper, but of no consequence so far as shown until we reached a point about 75 feet in. Then we struck a 30 inch streak of gray copper, but it came up only about 2 $\frac{1}{2}$  to 3 feet in the drift. It is best to look for this ore and if you find it, put a few shots in in order to see what it amounts to.

This seems to be the beginning of the ore shoot on which the winze is sunk, in about 93 to 100 feet from the main tunnel. This winze should have been sunk at about 85 feet, since the ore shoot at this point dips (drags) towards the main tunnel. I insisted when I saw the ground and before the winze was started that the ore shoot dipped to the easterly. Mr. Ingram and Mr. Madden insisted that I was mistaken and said if I had seen the drift when the rock was clean I would agree with them. So I let them select the spot for the winze.

After going down a few feet the gray copper gave out, the streak went into white quartz. When we were about to quit sinking on account of so much drift water coming in I had them start a drift to the east at 16 feet deep. In 4 feet it came into the gray copper ore, thus proving they were wrong. I am giving this information in order that you understand the situation regarding it. I think this is an important ore shoot, the drift just cutting the top of it.

The upraise near this winze was also started at the wrong place. It goes up in the break that occurs just about where the winze is sunk. This raise should have been further to the west, although there is some good ore in the broken ground in it.

Farther in the drift, where the drift sets are, we struck what appears to be a cross vein. This ore is entirely different from anything we had in #6 West Drift. The cross vein I think shows on the right hand side between the first set of timbers. The streak is about 10 inches wide. It assayed 96 ozs. silver and besides it contains copper and lead. A few years after this drift was run, in cleaning up the drift Mr. Will Cummings wrote me that this streak showed 10 feet above the tunnel, the ground having caved to this height. Mr. Cummings said in re-timbering he left this streak exposed so that it could be seen. I am calling this to your attention so that you may look for it.

Farther in #6 West Drift, about 180 feet from the main tunnel we struck a good sized streak of gray copper ore. This copper carries more silver than any other place we encountered. I have a selected sample which assayed 520 ozs. silver, 8.2% lead and 23.2% copper. I think this is the ore shoot which throws so much float in the draw to the east of your ground. In my opinion this is an important ore shoot. The ore showed strong in the top and the bottom of the drift.

Mr. Cummings, when he retimbered and cleaned out this drift some 3 or 4 years ago wrote me that the breast of the drift was off the gray copper streak and that it would require a crosscut 20 feet from the breast of the drift to cut it. I think Big Andy was doing this work. I am wondering if there are not two veins which ran together for a distance and then separated, or, it may be, one vein split into two. This frequently occurs.

#1 Vein East Drift  
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There is a nice streak of ore in this drift beginning about 81 feet from the main tunnel. It shows in the back of the drift. A few shots were put in the roof of the drift several years ago. This is low grade at the beginning of this ore shoot, but in beyond the break where the timbers (driftsets) are the ore is of a higher grade. A sample sent me out of a 12 inch streak assayed 96 ozs. silver, 12.9% lead and 1.7% copper. I think this sample came from a point 160 feet in from main tunnel. I have always thought that this ore shoot outcrops on the very top of the high hill between Emigrant Canyon and the Lander Hill basin. Anyway I found a cropping of lead ore which assayed 28 ozs. silver and 12% lead. I found this cropping before the Equity Tunnel was driven. I am sure it is the apex of the ore shoot. On the slope of the vein it is between 1100 and 1200 ft. to the surface.

I understand that the drift is caved in beginning where the drift sets are, so it is inaccessible, but there is a strong vein of ore at the 160 ft. point and some further in. The ground is very soft and should not have been opened in advance of ore extraction.-----The total length of this drift is 343 ft.-----I do think the ore shoot at 80 feet in #1 Vein East Drift will prove to be a good producer, with backs of at least 1000 ft. on the slope of the vein and is well worth considering in examining the property.

#3 Vein  
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I think the drift on this vein should have been driven west from the tunnel in order to cut the ore shoot that outcrops on this vein. It was all right to have driven east on it while it was in the quartz monzonite, but after going through that the work should have been stopped as ore does not make in this kind of formation which occurs towards the breast of #3 Drift.

In my opinion if the upraise in #3 East is put up 50 to 100 feet farther it will come into good ore, the same as would probably be encountered in driving a drift west of the tunnel.

April 4th, 1928

I do not see that you can do anything about cleaning out to the breast of the 300 ft. West Drift, unless enough of the dirt can be thrown back in the drift to make room to see the face of the drift. I think it is 85 feet from the shaft to the face.-----Mr. Madden said the quartz

streak was 18 inches wide in the face of the drift and that it showed some gray copper. If I am right about its being 85 feet then your measure of 81 feet leaves only 4 feet to do anything more about clearing the face.-----

The main incline (shaft) leaves the vein about 30 feet below the 300 ft. level. A cross-cut was run from that point up the hill. It did not extend far enough to cut another vein so there is no reason for keeping the incline open below the 300 ft. level.

Yes, I would like to have you let me know the size of the ore streak in the East drifts. Also, the size of the ore streak in the West stope and the length that the ore shows in the stope and how it all looks to you and Mr. Myles, looking at it from a strictly ore showing view point. It is 22 years (nearly) since I saw it. At that time most of the openings were badly caved so I could not see much of them.

I have never been in the Moss Shaft. Mr. Madden said there was a strong vein and some good ore exposed in this shaft. Since it will not take but a little work to repair the bad places it is best to do it.

P. S. Please examine the face of the 250 ft. East Drift of the Hillside and let me know how it looks to you. At the time I sampled it it looked to me that it was coming into a high grade ore body. My sample across the face assayed just under 30 ounces silver. Mr. Pine took a large sample from on the foot wall which assayed 86 ounces silver and  $7\frac{1}{2}\%$  copper. He had it assayed in Denver, Colorado. The streak was about 6 inches wide he told me.

April 18, 1928.

I received also your letter April 10th. The stope in Hillside West Drift is much longer than I thought it to be. It was so badly caved that I could not see much of it, but I had an idea that it was about 30 feet long. The place I sampled was nearly closed. I had to work myself along on my back, since there was not space enough for me to crawl in and then turn over. I got a sample across three feet which I had assayed at my office in Cripple Creek. This was taken for an average sample. It assayed 68.2 ozs. silver, .60 cents gold, 2.5% lead and 2.2% copper. I took another large piece of ore, 5 or 6 lbs. This assayed 60.5 ozs. silver, 40 cents gold, 8.6% lead and 1.8% copper and 4.5% zinc. I have a government report of two shipments made. One on Sept. 30, 1866 containing  $79\frac{1}{2}$  tons settled at \$39.04 in silver, the other December 31, 1866 containing  $64\frac{1}{2}$  tons settled at \$54.01 silver. The other metals, lead, copper and

zinc were not paid for. This was the ore that the local mills could not successfully treat, as you no doubt have heard about.

I think the chances are good for opening better ore than the above if the 250 ft. East Drift is driven ahead. The stain you mention in this drift comes from the copper in the ore above. Water was dripping from the breast of the drift when I took my sample.

May 5th, 1928

Your letter May 1st just received, and you made the condition in the Hillside workings clear to me. There seems to be a much better showing of ore than I thought. Mr. Mitchell, who was Supt. for Mr. Farnsworth under the Stokes regime made a report of the Hillside for Mr. Stokes in which he estimated 8000 tons in sight. From what I could see when I saw it I did not agree with his estimate. I am glad that you mentioned that there is still ore in the west end of the stope. I intended to ask you about this but forgot to do so.

I am also very glad that you saw the ore in the drift from the cross cut from the Austin-Manhattan main tunnel. Some prospective buyers ask if I have seen this ore. When I say "no" they appear to question its being there, though I know of several who have seen it. Besides I have another report in addition to Mr. Wishon's which tells about it.

May 11th, 1928

It is not worth while to clear the old tunnel 550 ft. west of the Hillside shaft. The Hillside vein there looks fine, heavily iron stained, 3 to 4 feet wide, but it does not carry any values. It will, though, as soon as the sulphide zone is reached. -----

In regard to clearing #6 East Drift to its face I think there will not be time for doing this. While the quartz streak is from 2 to  $3\frac{1}{2}$  feet wide there is but little sulphide in it; consequently, it assays but a few ozs. silver. I think it will soon turn into a fine body of ore either in raising or driving ahead. It is the kind of quartz that carries gray copper and lead.

The engineer who I expect will make the examination is Mr. Blackburn, formerly of Tonopah but now manager of the Tybo Mine at Tybo.-----

May 21st, 1928

I expect that Mrs. B. S. Bethel of Fort Worth, Texas will be in Austin in the course of the next week or so. She has undertaken the task of finding a buyer or buyers for all of my Nevada mining properties.

I want you both to go over the Equity ground carefully, so that you will know its boundaries, besides knowing all the old shafts, etc., where the surface indications look promising. Mr. Blackburn intends to make a close study of the Equity surface ground---this probably before he goes underground.

From the Hillside go to the New York shaft. The white quartz on this dump came out of the 16 ft. winze on the 200 ft. level. The ore streak is  $3\frac{1}{2}$  feet wide. Tom Ward, an old ore sorter and leaser of Cripple Creek, Colorado sampled the ore in the winze. His sample across  $3\frac{1}{2}$  feet assayed 24.4 ozs. silver and a selected sample assayed 135.2 ozs. It was not assayed for the other metals. I think the pile of heavy sulphide ore on the dump came out of the 300 ft. level.

From the New York go to the Moss shaft, this before going through the Equity Main Tunnel. Of course, the important things there are #6 and #1 Veins, which I have already given you my views about the ore in them.

June 9th, 1928

I have no data as to how many sets of timbers there are at the different points. I contracted most of the tunnel work and have the distance driven each month and the cost of the timbers which were put in by the contractor, I supplying only the timbers. As it has turned out it would have been less expensive to have driven a new tunnel around the caved ground, but of course that could not have been foreseen in advance of the work.

In looking over my record, I see that you and Fred Jenkyn worked in the tunnel as late as Oct. 1926, so if you get through this bad place the rest of the tunnel to #6 Vein may not be in bad shape. I have no idea as to conditions in #6 East and West Drifts. It is nearly nine years since I was in Austin.

I have no objection to your showing Mrs. Bethel your ground should she go to Austin. As I wrote you she might find a buyer for your property. So far as Mr. Blackburn is concerned his people want only a developed property. The only fear I have is that Equity has not enough ore development for them to be interested in its purchase at its present stage of development. This is why I asked you and Myles how the ore showing looked to you after timbering the slope in the Hillside. I have thought with the Hillside showing, together with the Moss, the Wishon ore from the Austin-Manhattan cross-cut, the ore showing on the New York dump with what data I have on the showing in the winze that it might be sufficient for Mr. Blackburn to pass favorable on the property even though he is unable to see the #6 Vein and the ore at the different points I wrote you about.

I am sure there is a splendid shoot of ore in #1 Vein and I think the beginning of this shoot can be seen if the tunnel is cleared to this point. Of course the high grade ore is beyond the drift sets in #1 East Drift. Mr. Madden said this was inaccessible when the last work was done in Oct., 1926.

June 13th, 1928

I think the tag you mention marked 357, is where Mr. Madden said the ore streak is four feet in the bottom. Beginning at 312 ft. to 367 the assay record shows ore streak from 12 inches to two feet. He may not have sampled in the widest place. I imagine the samples came principally from the bottom of the drift.

The Cross Vein in #6 West which I wrote you about showed between the first drift set of timbers on the right side of the drift. Cummings said it showed also over the timbers when he re-timbered.

It is not necessary to clean out the #6 East Drift near the cross-cut into the hanging. There is a fine streak of quartz  $2\frac{1}{2}$  to 3' beyond the crosscut started in the hanging, but it is very low grade. It may be possible to see this with a little work without training the caved dirt out.

June 19th, 1928

The veins near the portal to the tunnel would not interest Mr. Blackburn. He will probably notice them as he passes. I am depending on the Hillside, New York, Moss workings, the #1 and #6 veins to interest him. If they do not, the others will not.

You are probably right about #5 and #6 Veins coming together with depth. About ten years ago I took all the courses and dips of the different veins in the tunnel, also what I could from the old shafts from the surface. According to this survey if they keep their dips, some of them are certain to come together at depth. It is best to mention this to Mr. Blackburn.

In referring to my assay record I see that the west heading of #7 veins across 2 feet assayed 10.8 ozs. silver. This sample was taken by Mr. Madden.

June 26th, 1928

I think it best that you look the foot wall side of #6 West Drift over. - - - - Mr. Cummings was so positive about the drifts being off the main vein that I gave considerable weight to his opinion about it.

I do not want you to spend much time in checking - - - but it is worth while to look the foot wall side of the #6 West Drift over very carefully, back 25 to 35 feet from the face of the drift in order to see, if you can, what Cummings based his statements on that the main vein is in the foot wall.

Have you any idea as to how much work it will require to make an opening to crawl through in order to see the face of #6 East Drift? Mr. Madden thought it was the beginning of a good sized ore shoot. If an opening can be made in a few days work it is best to do it. - - - -

If the places you are to put some shots in show as well as I expect it will help to prove the theory that the big end of the property lies at greater depth than the elevation of the tunnel. This theory is partly borne out by the size of what I call the Wishon ore, which is 500 feet on the slope of the vein below the Equity tunnel, or 250 feet vertically.

July 3rd, 1928

As soon as you have #6 West Drift passable start at once prospecting the places I have written you about. All that we can do at this time is to try to show the ore in these places in the bottom of the drifts. It may not require but a few shots in each place to show the ore to some advantage over its present condition.

July 18th, 1928

In looking over the mine measurements as given me from month to month while #6 East Drift was being driven I find that the total is  $458\frac{1}{2}$  feet. Tilden's survey as shown on the map gives the length of #6 East Drift as 418 feet, a difference of  $40\frac{1}{2}$  feet. This difference throws my assay record out of kilter so that I am certain that you have found the place that Mr. Madden said the heavy sulphide streak of ore was 4 feet wide. I am glad that you found this place, since it helps to show that the tunnel level is on a poor elevation. Just the same as in opening a mine from a shaft there will be some good and some poor levels in all mines.

Now if the other places show well in the bottom where you are to prospect it will help very much. I hope the gray copper streak in #6 West beyond the drift sets shows up well after washing the dirt off. My record shows that this streak is 19 inches wide at 180 feet in from the main tunnel. The streak showed strong in top and bottom of the drift.

July 27th, 1928

In my last letter I forgot to tell you to remove the engineer's mark which you wrote me about---and remove any other marks you may see of this kind. If you cannot remove them with a pick take a moyle or drill and chip the rock off so it cannot be seen by anyone visiting the property. If you know of any in the Hillside do the same with them. I do not want engineers to take such liberty without asking me. You are in no way to blame for it.

August 3rd, 1928.

I do not expect anything to come from the Blackburn incident. In fact for some time before he went to Austin I could not see how he could make a favorable report owing to his connection with the people controlling the Tybo. Mr. Bradley, the head of that organization claims that he has a report from his field engineer, Mr. Dennis on the Equity property. Mr. Dennis has never examined the property, but since Mr. Bradley claims that he has Mr. Blackburn could not go counter to Bradley's field engineer and hope to remain with them without creating more or less friction in the organization. Had I understood the situation about the so-called Dennis Report, I would have written Mr. Blackburn suggesting that I would release him from the promise he had made to come to Austin to inspect the Equity. So I consider the incident closed.

When you write again please state whether he took his sample out of the breast of the 250 ft. East Drift of the Hillside where the copper stain is or back in the drift before it entered the ore in the drift. If I remember correctly the drift was driven in ore for about 15 feet. I wondered if he took his sample near the mouth of the drift where there is no ore showing.

Your report on the #6 Vein, Equity tunnel was very good. As I understand it the gray copper showed about as strong after you put the shots in as it did in running the drift. I understand, also, that the 44 inch streak farther in the drift and which I never saw has a large amount of sulphide in the ore. Does it show any gray copper?

I note what you say about mining engineer's marks. I do not like one man's opinion being that of others and vice versa. I shall continue to try to find a buyer for Austin property though I realize it is an uphill task. Too many engineers' marks on the district.

March 2nd, 1929.

I am returning Mrs. Bethel's letter. There may be something in it to which you may wish to refer. Upon receipt of telegram announcing her death I wired Fort Worth to preserve all letters, maps etc, also wrote the same to Hotel Rosslyn and to her Phoenix address.

I can demonstrate that the ore at Austin in the primary zone goes to great depth, but by a different method from that at Cripple Creek. I went to San Francisco and had a talk with A. A. Curtis, who managed the old property at Austin for twenty five years, as to the physical conditions in the bottom of the old workings--- this before mining the long tunnel. Upon what I learned from him I pursued the tunnel work. It had several purposes. A leading one was to prove a theory. The tunnel has made the theory's fact.

Mr. B. evidently was not observing enough or he had not sufficient knowledge of the subject matter to see the real purpose of the tunnel. No one would consider it for deep mining; but, as an engineer who went through the tunnel said "Kilborn has found the key to ore deposition in Austin in driving the tunnel." Evidently Mr. B. should be more studious and more observing before committing himself if he cares to protect himself from unfavorable comment.

April 2nd, 1929.

Since my letter to you of March 30th I have been thinking over several things Mr. Blackburn commented on: I am not sure there is a true fault shown in the Equity tunnel at this time. Some confusion may be caused owing to a bedded plane which shows at intervals. This being of a soft material has caused, by pressure, a weakening at places of the foot walls. This is particularly noticeable wherever there is a cross fracture, sometimes a mere seam crossing the vein. As you have noticed the hanging wall is always regular and strong. To be sure there are evidences of movement, such as slickensides, etc. but I am not convinced that there is a true fault among them. More development work I have no doubt will disclose at least one important fault.

It was quite proper for you to call Mr. Blackburn's attention to the veins coming together. Mr. Madden and I took the course and dip of the veins in the shallow shafts. We then took the course and dips in the Equity tunnel. There is hardly a doubt but that some of them will come together at no great depth. I am sure that this condition has taken place in the case of #6 Vein, not alone from what can be seen on the tunnel level but from what measurements we took on the surface. In looking towards the Hilltop (which the Equity tunnel is penetrating) from the Lander Shaft and from below it one cannot help but think that the veins in Lander Hill basin are getting closer together and that some are sure to unite with depth, in the vicinity of the Equity tunnel.

Why I asked you what Mr. Blackburn said about the Hillside was because he told Mrs. Bethel that he did not think much of it. He is the only person of whom I know so expressing himself. Mr. Curtis thought it was fine, but he could not treat the ore at the time he was in Austin. Said if I could treat it that it would make a great producer etc.

I am wondering if it would not be a good idea if the examining engineer expresses any doubt about the importance of the ore in the bottom of the drifts on the #6 Vein for you to say to him: "Why don't you test it out by sinking a winze or two and make an upraise on #6 West beyond the drift timbers where the gray copper shows strong in the back and bottom of the drift?"

I have written to these people that the drifts on #6 Vein, both east and west look to me as though the drifts just skimmed the top of a very important ore shoot; and I gave them your description to me after you cleaned off the dirt and put some shots in last summer. I have been very careful not to overstate anything about the property as I see it. I realize, however, that it is seldom that two persons see things exactly alike.

After thinking about a little work in #1 East Drift, should they want to test this place it would be better to start the raise in beyond the drift sets. I think the heavy sulphide ore streak is in about 163 feet from the main tunnel. This point would be better than at 80 feet in as I wrote you last year. At 80 feet it is too near the westerly end of the ore shoot and unless the raise leans to the east it might go through the ore shoot on its westerly drag.

I think the pile of heavy sulphide ore at the New York Shaft came from the 300 ft. level. It is certain that the white quartz on the dump came out of the 16 ft. winze on the 200 ft. level.

In looking the maps over I have concluded that the Hillside 300 ft. level west ore shoot is 400 feet or more west from the Wishon ore shoot from the Austin Manhattan north crosscut. I have so stated in my letter to the people I am writing to. As you know the Panamint-Hillside Vein was worked extensively east of the long crosscut from the Austin Manhattan Tunnel. This work proved the apex of the vein in Equity ground, as well did the work in the Hillside and New York.

I think it is best to show the engineer the large dyke back of the stable opposite the International Hotel. Also show him the dykes crossing the Dolorite, Ballard and Gold King claims. These dykes run nearly parallel to the course of the Equity tunnel but well towards the canyon that the tunnel starts from. I think these dykes will interest the engineer; and the veins in connection should be gold bearing like the Jack Pot ore, about \$25 in gold to 100 ozs. silver, not unlike the Tonopah ore in gold content. I have but little doubt that large ore bodies will be found in connection with these dykes.

April 13th, 1929.

The black ore in the shop came from #6 Vein West in driving the drift. The ore did not reach the top of the drift except just at the point where the winze is. It barely reached the top there. This seemed to be the apex of the ore. Just at the east end of the winze it showed a strong streak, about 12 inches of the very heavy sulphide ore. I think if you wash the dirt off you will see it. Certainly so unless it was taken out and stolen. Mr. Madden wrote me that quite a quantity of it had been stolen from the blacksmith shop and from the pile on the platform on the side of the shop.

In mining the drift Ingram took out 7 to 8 tons. His average sample assayed over \$100 in silver, copper, lead and zinc. A picked sample assayed 451.2 ozs. silver, 20% copper and I did not have it assayed for lead and zinc.

I am enclosing a sketch showing just where the ore came from, the heavy marks in drift is the place. The winze was started too far west to go down on the ore. Ingram and Madden insisted that the ore shoot dipped to the west. I differed about this and after arguing for some time I took two shovels and stood them up in the drift in order to illustrate to them how the shoot dipped to the east. They said regardless of this that had I been there when the rock was free from dirt that I would have agreed with them. I finally let them have their way. When the winze was 16 feet deep with no ore in it except low grade white quartz I had a drift run east from the bottom. When in 4 feet it came into ore, not as solid as in the drift but it contained large blotches of gray copper, the size of a silver dollar. Some of it was placed to the right of the door to the ship alongside the building. Some of it might be there now.

The water was quite bad from seepage from the drift. The winze was nearly full of water each morning, so after getting the ore in the 4 ft. drift east from the bottom of the winze I stopped the work, it being too expensive to buck the water with buckets. That year the ground was very wet and all that I wanted to do at that time was to prove that the ore went down and that the winze should have been sunk some distance east of where it was. I blame myself only for this mistake, not Madden nor Ingram.

It may be necessary to do some work in #1 East in order to see that heavy sulphide ore beyond the drift sets. This is in I think about 160 feet from the main tunnel. Some of this ore assayed over \$100. The distance to the surface on the dip of the vein is 900 to 1000 feet according to my measurements. I am sure this is quite an important ore shoot. I think, however, that the ore in the bottom of #6 East and West drifts will be of more interest to an engineer.

April 19th, 1929.

It is best to go ahead and fix the places up as outlined in your letter. Clear out #1 East Drift so the ore can be seen to good advantage. In order to do this it may not be necessary to muck all of the dirt out of the drift and none beyond where the heavy sulphide ore is in about 160 feet from the main tunnel.

April 23rd, 1929

I will wait until the very last of April to write to them about the engineer's coming to make the examination about May 10th.

What I am afraid of is that they will think that the property will not develop large enough for them. I think their decision will be based upon what the chances are for developing large ore bodies at great depth, around 1000 feet or more. If I am right about this they will no doubt make an exhaustive examination of the surface and a large portion of the district.

Mr. Wishon told me not long after he did the work from the Austin Manhattan Crosscut that in one place the Hillside-Panamint vein was 15 feet wide and that he would have liked to have sunk a winze 50 ft. deep on the ore, since he thought the ore streak would be much wider than 6 to 7 feet at 50 feet more depth. I do hope the engineer will think as we do about this. The quartz monzonite formation, together with the combination of silver, lead, copper, zinc, composing thereon in the primary zone in the Equity ground not only convinces me of values going to great depth, but that some of the veins will come together and form large bodies of ore.

If I do not sell the property before long I shall have to sink some winzes and make some upraises on the ore in Equity tunnel, in order to make the property more attractive to large operators.

June 5, 1929.

In order to be prepared in case I should decide that I will have to sink a winze or two and make a few upraises, I am writing as to where it seems best to do the work in order to develop the best ore with a minimum of work.

On account of seepage water it is best to go only to a depth of 8 or 10 feet in each winze. They will soon fill with water and in case of other examinations it would take considerable time to clear them of water. Furthermore 8 to 10 feet should demonstrate whether the ore and size of streak improve with depth. The more places we can show the ore going down the better it will suit an engineer.

The best ore in #6 East Drift was in the bottom of drift under #2 Raise where the first drift sets are, in about 140 ft. according to the map. I saw this ore in the drift at about the point described above. The ore streak was 30 in. wide, well-peppered with gray copper and some lead. I took a sample of some of the best of the gray copper; it assayed 223.5 ozs. silver. I did not have it assayed for the other metals. While, as you say, it would be expensive to sink at this point on account of timbering, I think the chances are better for higher grade ore than elsewhere in #6 East. And it is the high grade that appeals to the buyer, unless large ore bodies can be shown.

The next best ore in #6 East was in the bottom of the drift under the first raise, in, about 50 feet. There was more gray copper at this point than elsewhere. Every piece showed copper, some very good. The ore streak was 20 inches wide. This is where I think the two veins come together.

The best ore in #2 Raise in #6 East might improve in going up a few feet. As I remember, the quartz streak is 2 ft. wide but not much copper or lead in it. In the drift the ore showed gray copper and iodide of silver, but it did not hold in going up in the raise.

When you cleaned the dirt off in #6 West you wrote that there was 2 feet of fine looking ore in the bottom of drift 18 feet east from the winze. This is about the point where I thought the present winze should have been located. So I imagine you will think this the best place for a winze in #6 West, in case I decide to do the work later on.

I want to open that gray copper ore beyond the drift in #6 West. That is 175 to 180 feet in from the main crosscut. At the time I saw it the ore streak was 19 inches. Some of it, as I wrote you, assayed 520 ozs. An upraise a few feet, no doubt, would improve the showing. It would be a good thing to sink 5 or 6 feet below the level in order to show it there. This is the ore shoot that throws so much float in the draw east of your claims.

I might upraise a few feet on the ore shoot in #1 East where the heavy sulphide ore is. According to my record in 160 feet from the main crosscut. But it seems to me that this ore shows plain enough as it is. I had only one sample of this ore. It assayed 96.1 ozs. silver, 1.7% copper and 12.9% lead.

If I do this work I do not want to start until July 1st. I hardly expect the engineer there before August. I would rather have the work going on while he is there. If the ore looks good and strong it might be just as well to go down 6 or 8 feet in each winze; If so it might be best to sink a few feet further in where you found the ore streak to be 40 to 44 inches wide, 300 to 316 feet in. Unless there is some gray copper and considerable lead the ore will not assay high enough to suit the engineer. If it carries considerable lead, however, even without the copper it will assay high enough for them to consider it worth while. I do not recall seeing this ore although Mr. Madden wrote me it was 4 feet wide in bottom of drift, but no ore in the back of it.

P. S. This is a tentative plan only. In case a certain place shows richer ore and a larger streak with indications that it will increase in size in going deeper, then it would be best to go down a few feet more. What I have in mind is to avoid putting up a windlass, going as deep as we can by throwing the muck out with a shovel. In this way we might prove up the #6 ore shoot better for examination than to sink one or two winzes 25 feet deep. We have time to think this plan over before doing anything.

November 18th, 1929.

It is best for Myles to strengthen the weak places in the timbering as you suggest.

I wrote to him about storing the ore from the winzes in #1 West Drift and the waste in #3 and #5 Drifts. Some time can be saved in tramming in this way. Besides I do not like anyone to see either of these drifts, #3 particularly. It is simply disgraceful mining.

December 4th, 1929.

I had Myles send me samples from 300 and 316 feet in from #6 East Drift where the ore streak is 40 inches and 44 inches. They are not good. I shall not do any work at these places as I expected to do before getting the samples.

December 26th, 1929.

I am going to have him do some more work on #1 East. I am inclined to hold to my original opinion that they are all on a lean ore elevation. Evidently I was wrong about the place 50 feet in on East 6. It looked to me, standing on the level and looking up in the little raise, that there were two veins coming together. Instead it seems to have been a horse, split in the vein. The sample Myles sent me where he sank a few feet did not show any indication of two veins. Usually when two veins intersect each holds its individual characteristics, regardless of intersecting.

It is much better for me to have performed this work than to have had a prospective buyer do it. I shall now be able to correct some of the statements I have made as being in error, though I think I now see where a winze should be sunk in order to prove my views, but I shall not attempt the work now.

When through prospecting #1 East I want to drive the Hillside 250 ft. level east ten or fifteen feet, or more if there is room to store the muck. If this drift shows the ore I expect I may put a hoist on next summer and drive it farther, also drive the 300 ft. west drift at the same time. - - - - - I am sorry I did not have you take a number of samples when you timbered the stope in 300 west. I saw only about 20 feet of this stope on account of caved ground. If the entire length of the stope is one half as good as was the 20 feet it should be sufficient to attract a buyer. What I am afraid of is that it is mostly quartz, without containing lead, copper and zinc. In this case I would not expect it to carry values of consequence. If it did it could not be concentrated."

NEVADA EQUITY MINING COMPANY,

R. W. Hernlund, Gen. Supt.