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(240)

Item 11

HARRY H. HUGHES  
MINING ENGINEER  
TONOPAH, NEVADA

STATE WATER RIGHT SURVEYOR  
NYE COUNTY SURVEYOR  
REGISTERED PROFESSIONAL ENGINEER  
NEVADA NO. 599, MISSOURI NO. E-5754

September 17  
1960

TELEPHONE 2042  
POST OFFICE BOX 827

To: The Board of Directors  
White Caps Gold Mining Company  
Reno, Nevada

Gentlemen:

Since you will within a short time, have the 1200 foot level of the White Caps Gold mine ready to diamond drill in the south cross cut; this will review your operations to date and discuss the prospects for outlining the two known orebodies above and below this 1200 foot level.

Since the start of your operation there has been spent at the White Caps \$330,000. This has consisted of putting in working condition the surface plant and buildings, including the hoist, compressor, transformer station, headframe, ore bins and roads. Repair and some retimbering of the 800-foot vertical shaft, including the water line and power cable. And unwatering (with sinking pump) to the 800 level. Cleaning out and prospecting on the 310, 400 and 565 levels, as well as the 800 foot level. At the winze on the 800 level an electric hoist was installed and some repairing of the station timbers was done. In the winze itself first an air sinking pump was installed which, when it did not perform very satisfactorily, was replaced by one electrically driven.

The winze was found to be in surprisingly good shape to a point below the 1120 level - only mucking out and replacing of a few timbers being required.

At a short distance above the 1200, some caving was encountered, and the 1200 station had caved. This was apparently due to previous mining having been carried on virtually right up to the winze; and would indicate that the ore extracted was high grade. Otherwise, good mining practice would have made the operators leave substantial pillars around the winze.

At my visit to the property last week the 1200 station had been safely repaired and the south cross cut from it had been advanced about 40 feet. According to the old maps this cross cut extends about 100 feet from the winze; and it is

White Caps Gold Mining Company  
September 17, 1960  
Page two.

proposed to drill from where the west drift leaves the cross cut, which is about 40 feet south of the winze. This is a very advantageous point from which to drill and a considerable number of holes can be drilled by fanning them; and prospecting of both the East and Westerly orebodies above and below the 1200 level, can be done from the one drill set-up.

For a great many years there was published annually a "Mines Handbook" by Walter Harvey Weed, E. M. This was a compilation of all information on every important mine in the country, and was revised each year. It was (and is) considered a standard reference for authentic information on each mine listed.

In the volume for 1918 Weed says the following (page 1178) on Development at the White Caps Gold Mine: "Development: by a 550' vertical shaft with levels at 210', 310', 435' and 500', also an old 225' incline shaft. Two ore shoots, opened in 1916, showed 10' of \$40 ore and 3' of \$124 ore, respectively. Ore below 210' level carries primary sulphides. Work in 1916 was largely on the 310' level, searching for the downward extension of orebodies opened on levels above. Late in February, 1917, the east orebody was cut on the 435' level, assaying up to \$172 per ton. On this level the lens is 195' long, 34' wide, averaging \$36 per ton. This shoot was cut at 550', where it is 24' wide and 200' long, assaying \$24.80 to \$28.40 per ton. Much water has to be pumped."

At that time, it will be noted, the vertical shaft was only 550 feet deep. Later this was deepened to the 800 foot level; and about 400 feet in the hanging wall from the shaft a winze was sunk from the 800 to the 1300 on a 45° incline. However, most of the \$5,000,000 production from the mine has been from above the 670-foot level, and the East orebody.

The structural control of this large orebody appears to be the East Fault, which is known for sure from the surface to at least the 800 level and probably to the 1200 level. It maintains a regular dip of 60° to the south. And since the East orebody held its size and grade to the 670 level one wonders why it was not found as large between this elevation and the 1120 level. There are two possible explanations:

White Caps Gold Mining Company  
September 17, 1960  
Page Three

(1) the 800 level is quite likely too far in the hanging wall when one considers the dip of the fault and the horizontal distance between the 670 level and the 800 east drift; and (2) it is also likely that neither the 910 level or the 1120 were driven far enough to the east. Therefore, some holes should be drilled from the east drift (about 100 feet east of the winze) to prospect for this orebody below the 670 level.

From what can be learned from old reports this East orebody had a cross section (on and below the 565 level) of about 200 x 32 feet, with a grade of approximately 2 oz. gold per ton; and where opened on the 1200 level it held this cross section with an average grade of about these two ounces per ton. If we use this length and width and allow 100 feet above and 100 feet below the 1200 level, there is indicated 100,000 tons in the block; and assigning a grade of 2 ounces there would be 200,000 ounces of gold, or \$7,000,000 in the body.

The East fault, under which this East orebody lies, dips, as stated, about 60° to the south; and with this dip the workings on the 1300 level were too far in the hanging wall to have cut the orebody. This is one reason why I feel sure that this East orebody will extend at least to the 1300 level.

What I will call the Westerly orebody has been cut only on the 1300 foot level; and is considerably in the hanging wall of any of the ore found below the 800 level west of the winze, and, according to Albert Silver and others who know the mine, has a reverse dip; so by all means it should extend not only below the 1300 but also a long distance above.

Opening of this orebody was the last work done on this level and a cross cut through 34 feet was the only opening made in it when heavy ground at the winze forced the miners to retreat. Across the 34 feet the ore averaged 2.73 ounces per ton, or \$95.55.

If we assume, as is known of the East orebody, a length of 200 feet then we have 5,230 tons per vertical foot; or allowing 100 feet above and the same below the 1300, there is indicated 104,600 tons in this block. And with an average

grade of \$95.55 the gross content would be 9,994,530. By projecting the orebody more than the 100 feet above the 1300 level the value is \$49,972.65 per foot, and becomes fantastic even if projected only to the 800 level, and of course it could easily reach this far and above. For each 100 feet above the 1100 level, and using the dimensions for length and width as estimated (as well as the value), the orebody will produce almost \$5,000,000, above the 1120.

Because of the large size and high grade of the orebodies just discussed the diamond drilling program is especially important; and a considerable number of holes from the one set-up can well be afforded.

To prospect first for the East orebody, the first hole should be drilled at a down vertical angle of  $70^{\circ}$  to the south, with a bearing of S  $40^{\circ}$  E; then succeeding holes should be drilled at  $5^{\circ}$  to  $10^{\circ}$  bearing variations, increasing to the east until a bearing of S  $70^{\circ}$  E has been drilled. Then, in order to outline the orebody further the angles of the drill holes should be flattened  $5^{\circ}$  at a time to  $40^{\circ}$ , and the same bearings used as in the first series. Depending on where the ore is cut in the first series the inclination (and bearings) may be varied somewhat in later holes, since it will be simple to plot the foot and hanging walls of the ore. However, there will probably be at least six holes in each plane; and there will be at least three planes to be drilled; but the effort should be very rewarding in results. And since all of the holes should be relatively short (not to exceed 200 feet each), the total footage will not be excessive, even though a similar series of holes are drilled up from the level.

A comparable set of holes should be also drilled into the Westerly orebody from the same set up, except that the first one can be more flat, about  $30^{\circ}$  down, and with a bearing of S  $35^{\circ}$  W. The succeeding ones can be steepened by  $5^{\circ}$  increments in the same plane; and then to check the reverse dip of the orebody some should be drilled flatter than the  $30^{\circ}$  until the horizontal is reached.

Two cross section sketches are included with this to show the approximate drill holes (in one plane); and also the probable hiatus in the East orebody between the 670 and 1120 levels. The one section is transverse through the

White Caps Gold Mining Company  
September 17, 1960  
Page Five

East fault, and although this gives some distortion of the workings and ore, it gives the best picture possible.

The East fault is well known and defined from the 800 level up and maintains the regular dip as noted. However, below the 800 there appears to be some doubt as to whether the fault shown on the 910, 1120 and 1200 level is the East fault, since it is shown with a question mark and no dip angle on the old maps, although the strike is the same. This, of course, could be a parallel fault on the three lower levels; and poses another reason why the footwall on the 1200 level should be thoroughly drilled, for a length of 250 feet, since there can easily be two parallel ore zones.

Once the values in the two orebodies just discussed have been established from the drilling campaign, development work should be rushed so that the ores can be mined economically; and a suitable mill built to handle the tonnage developed.

Very truly yours,

Harry H. Hughes  
Harry H. Hughes, E. M.

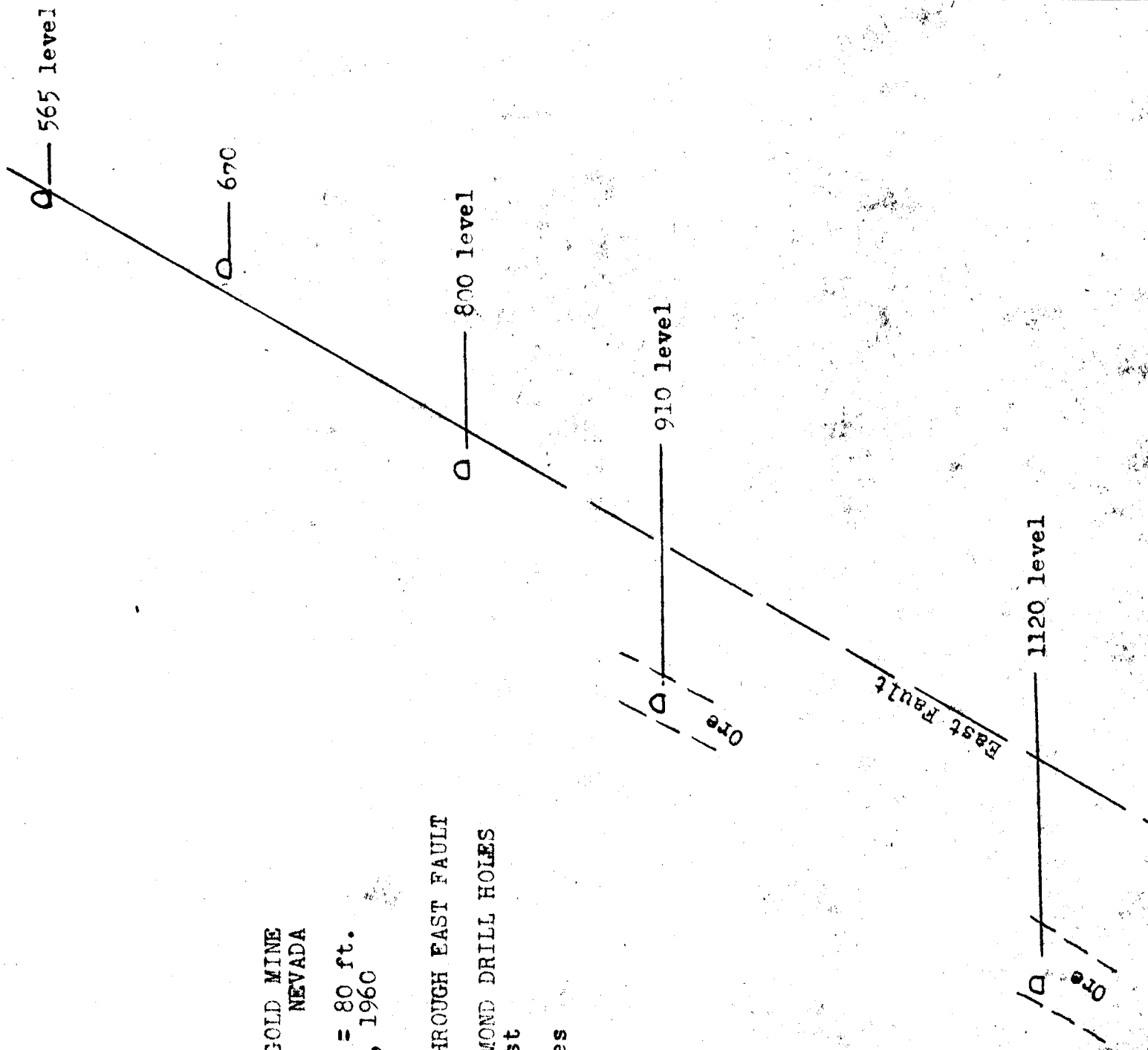
jh

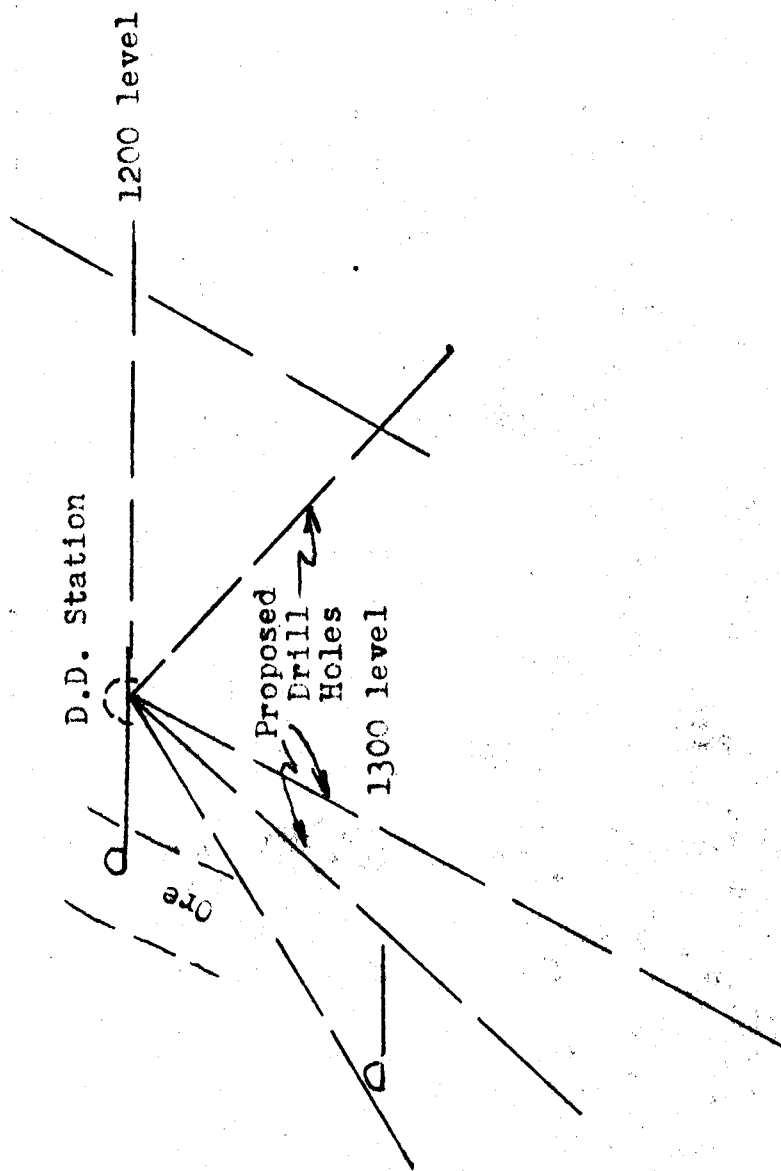
WHITE CAPS GOLD MINE  
MANHATTAN NEVADA

Scale 1 in. = 80 ft.  
September, 1960

TRANSVERSE SECTION THROUGH EAST FAULT  
SHOWING PROPOSED DIAMOND DRILL HOLES  
Looking West

Harry Hughes





WHITE CAPS GOLD MINE  
MANHATTAN NEVADA

Scale 1" = 80 feet

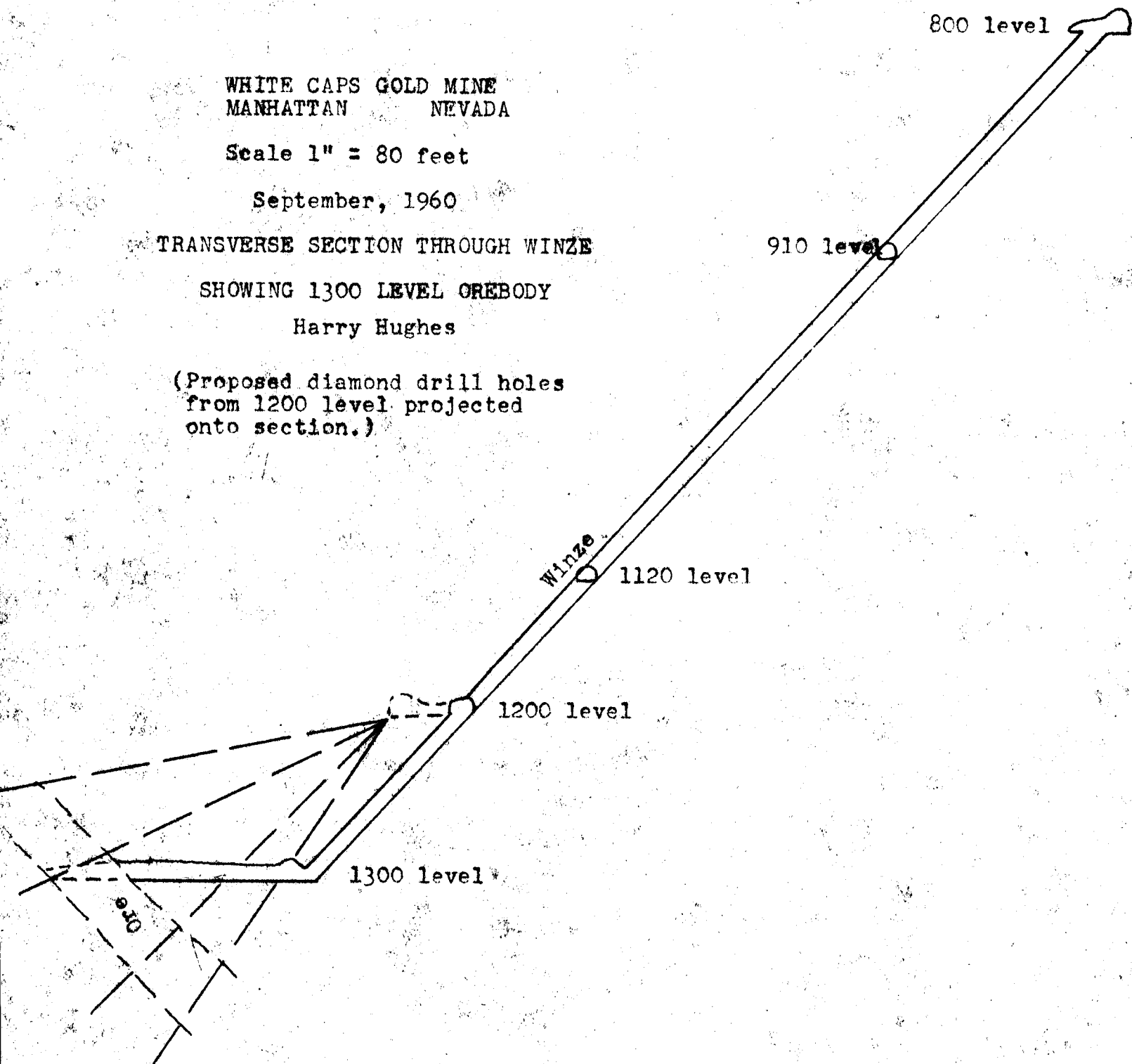
September, 1960

TRANSVERSE SECTION THROUGH WINZE

SHOWING 1300 LEVEL OREBODY

Harry Hughes

(Proposed diamond drill holes  
from 1200 level projected  
onto section.)





Feb'y 4th, 1915.

Mr. J. E. Spurr,  
Vice-President, The Tenopah Mining Co.,  
Tenopah, Nev.

Dear Mr. Spurr:-

In re White Caps deal:-

The annual meeting of the White Caps stockholders was held 2nd instant. I wired the result to Mr. Whiteman on the night of the 2nd instant, and reported to you yesterday by 'phone. The purpose of this letter is to confirm my communications.

734,901 shares, of the total issue of 800,000 shares, were represented in person and by proxy.

Mr. Kirchen and his associates, present in person, cast 202,754 shares against the proposition. 533,147 shares were cast in favor of the proposition. The South Dakota Statute requires 3/4 of the total issue in order to validate a conveyance of the whole corporate assets. Therefore the proposition was lost.

The large representation, present in person and by proxy will indicate to you that there was a lively campaign, prior to the date of the meeting, for the purpose of securing the full representation. It was a large task to round up 600,000 shares. It was a comparatively easy task, in view of Mr. Kirchen's large personal holding, to round up 200,000 shares.

Mr. Kirchen has again opened negotiations to deal with the Company along the lines of his proposition of a year ago, but on terms more favorable to the White Caps Company than his earlier proposition. His proposition involves an increase in the Capital Stock of the White Caps Company to two million shares;

2/4/15.

the issuance of share for share to the present stockholders; upwards of 500,000 shares to Kirchen and his associates for their holdings in the Associated Milling Company, and for Kirchen's guaranteed process ~~for~~ handling the refractory ores of the White Caps; and a guarantee to dispose of a sufficient amount of the Treasury Stock to finance the operations of the Company.

The South Dakota Statute authorizes an increase of capitalization by a vote of two-thirds of the total issued stock, and a 60 days' notice of the stockholders' meeting to act on such proposition of increase of capital.

There is a feeling among sundry stockholders that it is impossible to swing The Tenopah Mining Company deal, in view of the South Dakota statute, and in view of Kirchen's opposition, and that in this situation there seems a strong likelihood that Kirchen's proposition may be favorably acted upon.

In your 'phone conference with me yesterday, you suggested that I confer with Mr. Kirchen for the purpose of sounding him in a tentative way, as to whether he would consent to The Tenopah Mining Company deal if the terms of paragraph 10 ~~be~~ modified.

I will approach Mr. Kirchen on my own responsibility on that proposition, and will report to you. I will make it plain to him that I am acting on my own responsibility.

Copy hereof to Mr. Whiteman for his information.

Faithfully,

HUGH H. BROWN,

Per *H.*

# THE GENERAL ENGINEERING COMPANY

(INCORPORATED)

## CONSULTING ENGINEERS

NO. 159 PIERPONT AVENUE

PHONE WABATCH 3655

J. M. CALLOW, PRES.  
JAS. W. NEILL, VICE-PRES.  
GEO. M. BACON, TREAS.  
ERNEST GAYFORD, SECY  
KARL BERNSON

SALT LAKE CITY, UTAH, February 1st, 1915.

J. E. Spurr, Vice President,  
Tonopah Mining Company of Nevada,  
703 Bullitt Bldg.,  
Philadelphia, Pa.

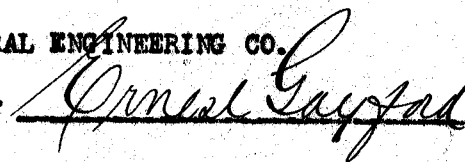
Dear Sir:-

Some time since you notified us that you had instructed your Nevada office to send us two sacks of ore for test work. This sample has not at present reached us. Could you give us any further information in the matter.

Yours truly,

THE GENERAL ENGINEERING CO.

Per



EG/M



*Referred to  
Mr. Spurr for reply*

HUGH H. BROWN

ATTORNEY-AT-LAW

312-316 STATE BANK & TRUST CO. BUILDING  
TONOPAH, NEVADA

January 29th, 1915.

Mr. J. E. Spurr,  
c/o The Tonopah Mining Co.,  
Tonopah, Nevada.

Dear Mr. Spurr:-

In re White Caps -- Tonopah Mg. Co. deal:-

The South Dakota Statute (under which the White Caps is incorporated) requires the vote of three-fourths of the outstanding stock in order to validate a conveyance of the whole corporate assets. 800,000 shares of White Caps are outstanding. It will require 600,000 shares to swing the deal. 200,000 shares, - or a little over that amount, - will defeat the deal. Today some of the principal stockholders of the White Caps Company, who have been campaigning for proxies in support of the deal, have expressed to me their fear that we will not be able to round up 600,000 shares. If Kirchen persists in his opposition to the deal, it is believed that he has enough stock, in addition to his own holdings to aggregate something over 200,000 shares.

Yesterday I received a letter from Mr. Kirchen, which I quote to you in full, as follows:-

"Your letter of the 2nd inst., enclosing copy of proposed deal between the Dexter White Caps Mining Company and the Tonopah Mining Co. is received.

I have looked over this contract very carefully, and if the tenth clause in this contract is eliminated, I will consider it a very good contract for the Dexter White Caps Mining Co., provided the rest of the contract is clarified as to the amount of money that will be spent by the Tonopah Mining Co. both for developing the property and the erection of a mill or reduction plant."

I am informed that if the Tonopah Mining Company deal falls through, Kirchen intends to resume negotiations with the White Caps Company along the lines of the deals he proposed late in 1913 and early in 1914, and which were rejected by the White Caps stockholders at that time. Two days ago an associate of Mr. Kirchen's approached me in a tentative way, and also approached two other heavy stockholders of the White Caps along the lines last-mentioned. Each and all of us declined to consider or discuss such negotiations until the stockholders of the White Caps have had an opportunity to pass upon the Tonopah Mining Company deal.

We are bending every energy these last few days to aggregate 600,000 shares in support of the deal, and we are hopeful that we may yet be able to win out.

Copy hereof to Mr. Whiteman for his information,  
Faithfully,

HHB:K

HUGH H. BROWN,  
Per

• White Caps Ore:

Send 20-30 lbs to

Dorr Cyanide Machinery Co

First National Bank Bldg

Denver,

Colo.



*White Cap*

Salt Lake City, Utah,  
January Twenty One,  
Nineteen Fifteen.

Mr. J. E. Spurr,  
Tonopah, Nevada.

Dear Sir;-

I have your letter of January 14th. and note that the arsenic-antimony-gold ore is somewhat similar to the Mercur ores. The difference seems to be that the oxidized ores of the Mercur district were amenable to simple cyanidation and the ore under discussion is not. In the Mercur district the sulphide ores, containing pyrite, realgar and orpiment were roasted in a modification of the Brown straight line furnace known as the Jackling furnace or simply a mechanically rabbled reverberatory. The calcine was mixed with the oxidized ore and after a separation of sand and slime was made, the former was leached and the latter filtered. It was found that it was not advisable to agitate the slime as reprecipitation of the gold seemed to occur in so doing. The extraction apparently was completed in the act of classifying and thickening and the quicker the filtering operation could be applied and completed, the better the result.

The roaster, to which I have called your attention in previous letters, may be said to have been developed at the plant of the Consolidated Mercur Mill. Extensive tests were carried on there and the results were so satisfactory that had the property not been on its last legs, Mr. Dern informs me that they would have installed it as a permanent fixture.

However, if tests have shown that the oxidized ore under consideration does not yield its gold to cyanide, some such plan of attack as the following might be advisable;- roast a suitable mixture of the *sulfide* ~~base~~ and oxidized ores using sufficient salt to chloridize the base metals and then extract the gold with chlorine gas, generated by the action of sulfuric acid on bleaching powder. The acid would be generated in the roast if the ore contains pyrite. Bleaching powder could probably be laid down on the property for about three cents per pound and the probable consumption would be in the neighborhood of ten pounds per ton of ore.



Among others who are having experimental work done along these lines is The Buckhorn Mines Co. at Buckhorn, Nevada, and in fact Mr. Holt of The Mines Operating Co. has built and is operating a small roaster there so that it would be possible for you to see the affair in actual operation if you should care to go there. Mr Holt is the inventor of the machine.

I still feel confident that the problem may be solved and will be pleased to go into the matter further. It is safe to say, I think, that your ore will require roasting and I am certain that the Holt-Dern Roaster will perform this operation with greater uniformity and economy than any other. The thing to determine is what nature of roast the ore requires and what the net effect of such a roast would be in regard to costs.

I trust that the above will shed some additional light on the subject and hoping to hear from you further, remain

Yours very truly,

Geo H. Scoville

White Caps  
Form 2289 B

# WESTERN UNION NIGHT LETTER

GEORGE W. E. ATKINS, VICE-PRESIDENT

NEWCOMB CARLTON, PRESIDENT

BELVIDERE BROOKS, VICE-PRESIDENT

RECEIVED AT N. W. Corner 15th and Chestnut Streets, Philadelphia

119CH SZ 26NL

TONOPAH NEV FEB 28 1915

JOHN E SPURR

1143  
CARE TONOPAH MINING CO BULLITT BLDG PHILADA

WE CANNOT GET KIRCHEN TO SUPPORT ANY PROPOSITION THAT WOULD  
BE ACCEPTABLE TO YOUR COMPANY THEREFORE WE THINK IT ADVISABLE  
TO TERMINATE FURTHER NEGOTIATIONS WITH YOU

A G RAYCROFT

915PM

TONOPAH MINING CO, OF NEVADA	
ALWAYS	OPEN
MINING AND EXPLORATION DEPARTMENTS	
REC'D MAR -1 1915	
SEEN	
ANS'D	



# WESTERN UNION

Form 2589

RECEIVERS NO.

TIME FILED

CHECK



## DAY LETTER

THEO. N. VAIL, PRESIDENT

**SEND** the following Day Letter, subject to the terms  
on back hereof, which are hereby agreed to

Phila., Jany. 16, 1915.

W. H. Sirdevan,  
c/o Tonopah Mining Co. of Nevada,  
Tonopah, Nevada.

Referring to my letter of January eleventh, regarding White  
Caps, please do not take samples until further notice.

J. E. Spurr

Chge: Tonopah Mining Co. of Nevada  
Exploration Dept.

## THE GENERAL ENGINEERING COMPANY

(INCORPORATED)

## CONSULTING ENGINEERS

NO. 159 PIERPONT AVENUE

PHONE WASATCH 3656

J. M. CALLOW, PRES.  
JAS. W. NEILL, VICE-PRES.  
GEO. M. BASON, TREAS.  
ERNEST GAYFORD, SECY  
KARL BERNSON

SALT LAKE CITY, UTAH, January 15th, 1915.

Tonopah Mining Company of Nevada,  
J. E. Spurr, Vice President,  
Bullitt Bldg.,  
Philadelphia, Pa.

TONOPAH MINING CO. OF NEVADA	
MINING AND EXPLORATION DEPARTMENTS	
REC'D JAN 20 1915	
SEEN	
ANS'D	

Gentlemen:-

We are pleased to note by your favor of January 11th that you have instructed your Tonopah office to send us two sacks of sulphide ore for test purposes. We note that this is the ore that Mr. Spurr mentioned to us when he was here, and that the two sacks comprise one sample.

We will give this matter our close attention upon receipt of the ore.

Yours truly,

THE GENERAL ENGINEERING CO.

Per

Ernest Gayford

# DESERT POWER AND MILL COMPANY

EASTERN OFFICE  
572 BULLITT BUILDING, PHILADELPHIA, PA.

PLEASE ADDRESS ALL COMMUNICATIONS  
TO THE COMPANY TONOPAH, NEVADA

Millers,  
~~TONOPAH~~, NEVADA, January 13, 1915.

TONOPAH MINING CO. OF NEVADA	
MINING AND EXPLORATION DEPARTMENTS	
REC'D JAN 26 1915	
SEEN	
ANS'D	

J. E. Spurr, Vice Pres.,  
572 Bullitt Building,  
Philadelphia, Pa.

Dear Sir:

Your letter of January the 6th, making inquiry regarding shipment of sample of our tailings to the General Engineering Company, received.

Beg to advise that these were forwarded by express and on January the 5th, the General Engineering Company forwarded to me a copy of their letter to you of that date, The original of which you have no doubt received by this time.

I do not think it would be worth while for us to go to the expense of forwarding another sample of fresh made tailings, in that the ore we are treating is highly oxidized and practically all of the values remaining in the residues are either tied up in the quartz or physically combined with manganese dioxide, neither of which could be recovered by the flotation process.

I believe Mr. Stannard made tests on an average sample of our dump as well as a sample of pulp taken off the filter leaves which would be the same as "freshly made tailings", however, if you wish them to go any further in the matter, we will be very glad to forward another sample.

If the reports circulated about Tonopah, to the effect that the Tonopah Mining Company has taken option on the ~~Manhattan~~ White Caps Company at Manhattan is true, I suggest that some of the White Caps ore be forwarded to the General Engineering Company and flotation tests made upon it.

J.E.S.--2--1/13/15

the purpose of determining whether a high recovery can be made by this method of concentration. If a high recovery can be made, the concentrates could be roasted and a good cyanide extraction made upon the roasted concentrates, I think. My reasons for making this statement is that I have seen the results of some tests made upon the crude ore as follows: roasting and straight cyanidation, giving better than 90 % extraction. The cost of roasting the entire ore would make rather an expensive treatment with the present conditions, but by concentrating the values into a small quantity of concentrates, a roasting plant might be operated very economically, figuring costs against values recovered.

Yours very truly,

*J. F. Snyderfeldt*  
Act'g. Superintendent.

FFH:H

Philadelphia, January 13, 1915.

Mr. F. F. Heydenfeldt, Acting Supt.,  
Desert Power & Mill Company,  
Millers, Nevada.

Dear Sir:

Referring to my letter of January 11th, concerning tests on the White Caps ores from Manhattan, will you please have a complete analysis of the ore made for me, either by your chemist at Millers or by the assayer at Tonopah, whichever is capable. On reflection I doubt if the Tonopah man is able to make such an assay.

Yours very truly,

ORIGINAL SIGNED  
J. E. SPURN

Vice President

JES-C

Philadelphia, January 11, 1915.

General Engineering Company,  
159 Pierpont Street,  
Salt Lake City, Utah.

Dear Sirs:

We are instructing our office at Tonopah to ship you from there two (2) sacks of sulfide ore on which we should like to have you make tests to see what would be the best method of treatment. This is the ore that I talked with you about when I was in Salt Lake City. It is a gold ore, supposed to carry arsenic and antimony, and, therefore, somewhat refractory to ordinary cyaniding.

According to the instructions I have given, the material in the two sacks will be approximately the same, and the same may be mixed if desired before experimenting is begun.

Yours very truly,

ORIGINAL SIGNED  
J. E. SPURR

Vice President

JES-C

Philadelphia, January 11, 1915.

Mr. F. F. Heydenfeldt, Acting Supt.,  
Desert Power & Mill Company,  
Millers, Nevada.

Dear Sir:

I am requesting Mr. Sirdevan to get you some samples of sulfide ore from the White Caps Mine at Manhattan, and would like you to make tests with a view of determining the treatment.

According to the instructions I have given, the material in the two sacks will be approximately the same, and the same may be mixed if desired before the experimenting is begun.

Yours very truly,

ORIGINAL SIGNED  
J. E. SPURS

Vice President

JES-C

Philadelphia, January 11, 1915.

Mr. W. H. Sirdevan,  
c/o Tonopah Mining Co. of Nevada,  
Tonopah, Nevada.

Dear Sir:

Will you please go to the White Caps Mine at Manhattan and take some samples of sulfide ore for ore-testing purposes. Samples should be taken from the lower levels of the average grade of pure sulfide ore. Please take four 50-lb sacks of this ore, bringing it to Tonopah before marking, and dispatch it as follows: 2 sacks to Heydenfeldt at Millers, and two sacks to the General Engineering Company, 159 Pierpont Street, Salt Lake City, Utah. Please do not advise anyone outside the company as to where these samples are going.

No further examination of the property is desired at present.

If you will communicate with Mr. Hugh Brown before leaving, he will see that you get the necessary authority from the superintendent at Manhattan.

Yours very truly,

ORIGINAL SIGNED  
J. E. SPURR

Vice President

JES-C



Salt Lake City, January 10, 1915.

Mr. J. E. Spurr,  
Bullitt Building,  
Philadelphia, Pa.

*White  
Cops*

TONOPAH MINING CO. OF NEVADA	
MINING AND EXPLORATION DEPARTMENTS	
REC'D JAN 13 1915	
SEEN	
ANS'D	

Dear Sir;-

The gold ore mentioned in your letter of January 6th might possibly be reduced by the following process:- an oxidizing roast to take care of the arsenic and antimony, followed by a suitable application of solvent for the gold. Some very satisfactory experiments have been made along these lines, good results being obtained. Your letter states that the ore is a sulphide and it is absolutely known that if an ore contains approximately 6 % of pyrite it may be roasted in the modern furnace without the use of additional fuel. Of course, if the ore you refer to could be handled in this manner the cost of roasting would be insignificant. In explanation of the operation of this roaster, its performance being rather out of the ordinary, the following statements will be of interest. The ore is roasted en masse rather than in a bed, the volume being treated occupying a chamber 7' x 10' x 4' deep, the necessary air being forced through the the mass in considerable volume. The fuel which supplies the heat is mixed intimately with the ore and consequently a much smaller amount of fuel is needed than is the case in the usual type of roaster because of the smaller losses, or rather because of poor absorption of heat by the ore in the ordinary machine. The operation of the modern roaster is continuous in the sense that the combustion, once started, is not allowed to stop, but the discharge of finished product is intermittent.

It is probable that a saving could be made on the antimony by the use of the Cottrell apparatus which is being used by the smelters. However the roaster does not seem to volatilize the metals to any considerable extent so this supposition is not of great value.

In view of the results that have been obtained along the lines mentioned above I might suggest that you send us a sample of about 100 pounds which we could test in our Park City Laboratory. We are completely equipped for testing and we might possibly be able to suggest a method of treatment

which would solve the difficulty. If you should decide to have us do this work I will be pleased to submit an estimate of cost. If you have an analysis of the ore which I could examine I could be more specific in stating what, in my opinion, could be done with the proposition but from the data at hand I think that there is a possibility of working out a satisfactory process.

Yours very truly,

Geo. H. Scibird

# WESTERN UNION TELEGRAM

Form 1864



*White Caps*

GEORGE W. E. ATKINS, VICE-PRESIDENT

NEWCOMB CARLTON, PRESIDENT

BELVIDERE BROOKS, VICE-PRESIDENT

RECEIVED AT

59P KS 26 4EXTRA KB

*Money transmitted by Telegram & Cable*

TONOPAH NEV JAN 9 15

J H WHITEMAN

572 BULLITT BLD G PHILA

AUTHORITY IS HEREBY GIVEN FOR YOUR REPRESENTATIVES TO GO ON OUR  
PROPERTY IMMEDIATELY TO TAKE ORE SPECIMENS FOR TESTS OF  
TREATMENT PROCESS

DEXTER WHITE CAPS MINING COOF MANHATTAN

BU ARTHUR RAY-CRAFT PREST

216P



Nov. 28th, 1914.

Mr. J. S. Austin,  
President, The Tonopah Mining Co. of Nevada,  
#572 Bullitt Bldg.,  
Philadelphia, Pa.

TONOPAH MINING CO. OF NEVADA	
MINING AND EXPLORATION DEPARTMENTS	
REC'D DEC -5 1914	
SEEN	
ANS'D	

Dear Mr. Austin:-

In re negotiations to investigate White Caps property at Manhattan:-

Herewith I send you, in triplicate, a proposed draft of agreement between The Tonopah Mining Company of Nevada and the Dexter White Caps Mining Company of Manhattan.

At a recent meeting of the Board of Directors of the White Caps Company, I presented a draft of agreement. The directors modified the draft in several particulars, the particular modification being a proposed requirement to sink an additional 300 feet on the property. I am a member of the White Caps Directorate. I narrated to Mr. Spurr, on the day of his departure from Tonopah recently, the debate our directors had on that proposition, and the reason why the directors urged that clause; namely, that if The Tonopah Mining Company should reject the White Caps property, it would be a black eye to the White Caps property; and the directors felt that in that situation the property ought to have some substantial benefit out of the transaction to offset the disadvantage of an unfavorable opinion on the part of The Tonopah Mining Company. My draft did not contain any such stipulation. I was willing that The Tonopah Mining Company should practically go on the White Caps property carte blanche, - to approve the property if it saw fit, or to reject the property, if it saw fit. However, I was overruled in the White Caps Directorate by a vote of four to one.

The White Caps Company is a South Dakota corporation with a capitalization of one million dollars, divided into one million shares, of the par value of one dollar each, - non-assessable. There are about 780,000 shares issued and outstanding. The balance is in the treasury.

In this situation, the White Caps directors felt that a capitalization of Two Million Dollars, for the proposed new company, would facilitate the proposed deal, that is to say, the transfer of the title from the White Caps Company to the new company. The specific point in that connection is this: the proposed contract gives 40% of the new capitalization to the White Caps Company, to-wit: 800,000 shares of the stock of the new company. Said 800,000 shares would enable us to publish in our notices, to the White Caps stockholders, that under the terms of the proposed deal, they are to receive one share of new stock for one share of old stock. This is merely a strategic point. Stockholders seem to prefer to receive share for share, rather than to receive less than share for share.



## THE TONOPAH MINING COMPANY OF NEVADA

572 BULLITT BUILDING, PHILADELPHIA, PA.

PLEASE ADDRESS ALL COMMUNICATIONS  
TO THE COMPANY

TONOPAH, NEVADA.

November 5, 1914

Mr. J. S. Austin, President,  
Tonopah Mining Co. of Nevada,  
Philadelphia, Penn'a.

Dear Sir:

SUBJECT: - Dexter White Caps Mine,  
Manhattan, Nevada.

Referring to yours of October 20th, concerning the Dexter White Caps Mine, Manhattan, Nevada, I spoke to Mr. Brown about the matter on his return and find that he overlooked taking up this matter with you while in Philadelphia. I advised him that, in my opinion, if the White Caps Company would give us a satisfactory option, with sufficient time for careful examination, mill testing, etc., then I believed that you would authorize me to go ahead with the mine examination and mill testing. As the latter should be carefully conducted, I think the White Caps Company should agree to give us ninety days time, or as much as may be required. It is Mr. Brown's opinion that this can easily be done, but it will be necessary to call a stockholders meeting and, under the circumstances, it will be twenty to thirty days before the option can be executed. I advised Mr. Brown that it would be necessary for our Company to acquire more than a bare control of the property and suggested sixty per cent.

Mr. J. S. Austin.

11/28/14.

- 2 -

I am instructed to say that the directors of the White Caps Company do not insist upon a capitalization of Two Million Dollars, if you should have good reasons for favoring a different capitalization but the directors feel that it would help the deal for the reasons above stated.

The enclosed draft, in triplicate, is sent to you for your consideration. If you should approve it in its present form, the White Caps Directors would be pleased; but if you should see fit to change the terms, we are hopeful that your views will meet with the concurrence of the White Caps directors.

I suggest that whether you accept the draft in its present form, or whether you prepare a new draft, you will then sign two copies and forward them to me for action at this end of the line by the White Caps Company, - the White Caps Company to retain one executed original and to return the other executed original to you.

As soon as the agreement is in form for execution by the directors of the White Caps Company, we will then call a meeting of the White Caps stockholders to approve the transaction.

Awaiting your further advices, I am,

Faithfully,

HUGH H. BROWN.

Per

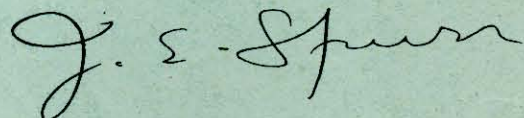
HHB:K



He asked me to dictate a short statement outlining to him the details of a plan that would be satisfactory to our Company, but in view of the length of time, above stated, which it will take for the stockholders meeting to be called, I have informed him that I should prefer he would take up the details of the option with you direct and he has informed me that he will write to you on the subject.

The general tenor of the suggestion made me by Mr. Percival Nash, the Secretary of the Company, and by Mr. Brown, was that they felt sure that the White Caps Company would be willing to turn over a control of the property to the Tonopah Mining Company if the latter would undertake to finance, develop, equip and operate the property up to a dividend paying basis, - the present owners to have a non-assessable minority interest in the new Company.

Yours very truly,



Vice President.

JBS-S.

CC - H.H.B.

# THE TONOPAH MINING COMPANY OF NEVADA

572 BULLITT BUILDING

PLEASE ADDRESS ALL COMMUNICATIONS  
TO THE COMPANY

PHILADELPHIA, PA. Oct. 20th, 1914.

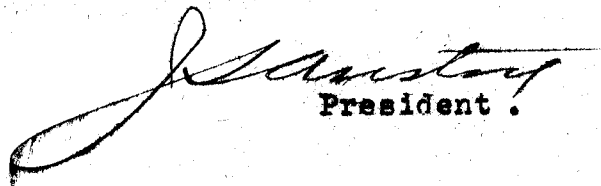
Mr. J.E.Spurr, Vice-President,  
Tonopah, Nevada.

Dear Mr.Spurr:

In regard to the Dexter Mine at Manhattan, referred to in yours of the 15th inst., Mr.Brown did not mention this when he was here.

I do not think it would be worth while to make a careful examination of this property until we have a contract satisfactory to us, as is customary. Would it not be well to have some of this ore sent to Mr.Heydenfeldt for a test? This might influence us in getting an option on that property.

Yours very truly,

  
President.



## THE TONOPAH MINING COMPANY OF NEVADA

572 BULLITT BUILDING, PHILADELPHIA, PA.

PLEASE ADDRESS ALL COMMUNICATIONS  
TO THE COMPANY

TONOPAH, NEVADA.

October 15, 1914

Mr. J. S. Austin, President,  
Tonopah Mining Co. of Nevada,  
Philadelphia, Pennsylvania..

Dear Sir:

SUBJECT:- DEXTER WHITE CAPS MINE, MANHATTAN, NEVADA.

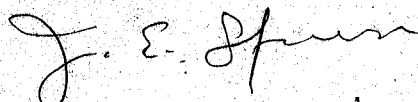
The Dexter White Caps mine at Manhattan, Nevada, has been suggested to me as an investment for the Tonopah Mining Company by Percival Nash, the Secretary, and in accordance with his suggestion I talked the matter over with Mr. Hugh Brown, attorney for the White Caps Company, before he left for the east, also with Mr. John M. Fox, who has made an examination of the mine.

I requested Mr. Brown to discuss the matter with you when he was east. He was of the opinion, when talking with me, that a control of the property would be turned over to the Tonopah Mining Company if the latter would undertake to finance and manage it up to a dividend paying basis. If that arrangement can be made, I am of the opinion that it would be worth my while to make a careful examination of the property. I made a preliminary visit to the property some two or three years ago.

One of the principal difficulties concerning the property is the refractory character of the ore and in case of an examination, we should have to make a careful metallurgical research to see if we can find a process by which the ore can be treated profitably, as otherwise there would be no use in our considering taking over the mine.

Mr. Brown stated that it was contrary to his practice to propose investments to his clients, but stated that he would do so, inasmuch as I had specially requested him.

Yours very truly,



JES-S.

Vice President.

Notes on White Caps from John Fox. Sept 28  
1918

3 ore shoots aggregating about 250 feet  
in length & average width say 10 feet.  
Average gold values in sulfide zone  
about \$20. Ore high in arsenic and  
antimony. On this basis 25,000 sq. feet  
on level.  $\times 100' = 2,500,000$  cu feet =  
about 20,000 tons per lift  $\times 20 = 400,000$   
arsenic costs \$10 - profits 10. = 200,000 per  
lift. Process of treatment must be  
devised. Cf. experiments on Hillside ore.  
Then mill - say 50 ton mill - built - cost  
\$50,000; also powerplant & development  
Total cost say \$75,000 to \$100,000. a  
50 ton mill = 18,000 tons a year. present  
or reserves according to Nash 18,000 tons.  
In a lift would last a year. Profits \$180,000.  
a year. Should be easy to repay investment  
on basis of securing 5% for financing. &  
all money advanced to be repaid out  
of earnings first

JSS.

## THE TONOPAH MINING COMPANY OF NEVADA

572 BULLITT BUILDING, PHILADELPHIA, PA.

PLEASE ADDRESS ALL COMMUNICATIONS  
TO THE COMPANY

TONOPAH, NEVADA,

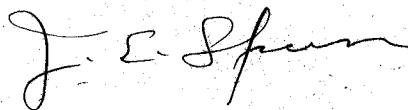
Sept. 29, 1914

Mr. Percival Nash,  
Dexter White Caps Mining Co.,  
Manhattan, Nevada.

Dear Sir:

I have yours of September 26th, and have considered the matter carefully. I have also conferred, as you advised, with Mr. John M. Fox and with Mr. Hugh H. Brown. As the latter started East today, I asked him to talk on this subject with our Directors while in Philadelphia. If they are interested in making such an arrangement as Mr. Brown thinks can be made, then I shall be willing to make a preliminary examination of the property. I should like first, if possible, to discuss the matter with our Directors thoroughly.

Yours very truly,



JES-S.

Vice President.



White Caps Notes from President Raycraft Feb 21, 1915

(240)

Owe 17,000

~~Item 11~~

\* 4000 on mtge to be cleared up at once.

about 1/2 of 13,000 needs to be taken care of right away, balance say in one year.

Clause 10. according to Kirchen }  
if not eliminated - Kirchen would vote }  
for the proposition.

800,000 ~~st~~ out

200,000 st in treasury  
of which 120,000 up as collateral on  
\* 4000. mtg before.

534,000 shares voted by majority  
~~634,000~~ at last ~~majority~~ meeting

205 by minority at last  
742,000 voting altogether

534,000  
200,000 Treasury  

---

734,000

~~534,000~~  
~~1,000,000~~  

---

634,000

3 | 800,000  
266,666  

---

533,332

533,000 2/3 of 800,000  
needed for selling stock or  
increasing capitalization