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ITEM 74

REPORT ON THE

GOLDFIELD BELMONT MINE

DIAMONDFIELD, NEVADA

1911

SPURR & COX
INCORPORATED
CONSULTING SPECIALISTS IN MINING
165 BROADWAY, NEW YORK
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SUMMARY

The Goldfield Belmont Mine is located in the Diamondfield section of the Goldfield District, some four miles northeast of the center of the town of Goldfield. The main underground workings have been driven in various phases of the "Milltown andesite" formation, which is also the chief surface rock over most of the property. Dacite, which is of later origin than, and intrusive into, the andesite, is the surface rock on the extreme southeast end of the Belmont ground. A small outcrop of coarse alaskite or granite also occurs on surface. This is probably the oldest rock on the claims and is undoubtedly a boulder or projecting pinnacle from the old alaskite mass which probably underlies the more recent igneous rocks over most of the Goldfield District.

A number of strong vein leads occur on the property and several of them still remain unprospected. Study of the developed veins indicates that there are at least two periods of vein formation, an earlier low grade quartz period, and a later ore bearing quartz period which is also associated with a concentration of ore values from the earlier period along fracture lines which had developed in these earlier veins.

The Belmont vein, which is undoubtedly an extension of the "Graham or Fault" vein of the Daisy Mining Co., is the

only one so far developed on the property which has proved productive. Along this vein a couple of small ore shoots have been opened up, which have possibly had a gross production of over $40,000.00. The main one of these shoots, the Burke-O'Connell shoot, starts near surface and pitches about 50° southwest and has been developed to below the 153 foot level.

The ores in the Belmont mine and also throughout the whole Goldfield District vary greatly in nature and appearance from place to place and this combined with their erratic occurrence, necessitates very careful sampling and the taking of numerous short interval samples.

The geological examination of the property has led to the conclusion that several undeveloped vein leads still exist on the property which warrant enough development work to determine whether they are ore bearing or not, and that, although there is no ore in sight in the Belmont workings, yet the Belmont vein justifies further exploration at certain points as indicated in the accompanying recommendations.

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GOLDFIELD BELMONT MINE, GOLDFIELD, NEVADA

LOCATION

The Goldfield Belmont Mine is located in the Diamondfield section of the Goldfield, Nevada, Mining District, some four miles northeast of the center of the town of Goldfield. The main shaft is situated about 1/2 mile N 54° W from the summit of Black Butte, although the Company's property bounds the properties of the Daisy and Black Butte mines on their north and northeast sides.

AREAL EXTENT

The mining property consists of two full claims: "Quartzite No. 1", and "Quartzite No. 2", and of the three fractional claims "Black Butte No. 4", "Vernal No. 2" and "Vernal Fraction".

DEVELOPMENT AND EQUIPMENT

THE BELMONT SHAFT WORKINGS

These main workings consist of a shaft somewhat over 300 feet in depth and of three main levels and a couple of intermediate levels aggregating some 3600 feet or more of drifts.

OTHER WORKINGS

Besides the Belmont workings there are a number of prospect shafts varying from 20 to 200 feet in depth, sunk by lessees, which have from 100 to several hundred feet of drifts and cross-cuts. The chief prospect workings are those connected with the McKane and Rock shafts, with the shaft at S 675 - E 3830, and with shafts Nos. 1 to 4. The workings in these prospects aggregate approximately 1800 to 2000 feet.

EQUIPMENT

The main shaft is equipped with a good hoist and with an electric pump which is at present installed on the 300-foot level of the No. 1 or Belmont shaft. The prospect shafts have no equipment whatever.

PRODUCTION

In the early days of the property a little ore was taken by lessees from the McKane lease on the "Vernal Fraction" claim and also from the Vernal claim at a point about 100 to 150 feet southeast of the main Belmont shaft. Both of these deposits, though producing some rich ore proved to be very superficial. The main ore-body, so far exposed in the property, is that developed by the Burke-O'Connell stope which extends from within a couple of feet of surface to the 153-foot level and which produced a net profit of some $20,000.00 from a gross production of roughly $35,000.00 worth of ore.

GENERAL GEOLOGY

GEOLOGICAL FORMATIONS

Andesite

The only rocks noted in the mine workings were phases of the "Milltown andesite" formation. The principal phase was a fine-grained andesite, which except at one or two points was highly altered and rather soft. The chief phenocrysts of the rock are plagioclase feldspar, biotite and possibly hornblende or pyroxene.

Dacite

Dacite also occurs on the Company's claims on surface to the east of Black Butte but the boundaries between this and the andesite were not mapped. The dacite is of more recent origin than and intrusive into the andesite. This rock resembles the andesite to some extent but in general is more coarsely porphyritic and has quartz phenocrysts in addition to the feldspars, hornblendes, biotites and augites.

Alaskite

About 600 feet S 60 E of No. 1 shaft was a small outcrop of coarsely crystalline "alaskite". The small extent of the outcrop and the lack of contact phenomena did not allow of determining whether the alaskite was a large boulder included within the andesite flow or whether it was a projecting pinnacle from the older underlying body of alaskite.

THE VEIN LEADS

The Belmont Vein

The main Belmont vein is in reality a very irregular vein zone varying from one to 55 feet or thereabouts in width. This vein zone in places is composed partly of porous to dense porcelainic or opalescent quartz; partly of sheeted silicified andesite with rare quartz stringers, and partly of silicified andesite with numerous quartz veinlets which form a network of stringers up to 3 or 4 inches in diameter.

Subsequent to the deposition of the main mass of earliest low-grade quartz, a series of movements parallel to the main vein undoubtedly took place. As a result of these movements the original material of the vein was highly brecciated, sheeted and fissured. Possibly two periods of quartz deposition took place at still later dates, one of which partly cemented the old vein breccia, and the other, the chief ore-bearing one, which filled fissures within the partly cemented breccia.

Associated with the vein breccia in places are fragments of rock resembling highly silicified rhyolite in which the original groundmass has been almost entirely replaced by silica although phenocryst-like specks resembling quartz and altered feldspars still remain.

Earlier Period Low Grade Vein Material

The bulk of the quartz so far developed on the property appears to belong to an earlier period of quartz deposition. This carries but low values, so far as developed.

The general mass of this low-grade quartz has a dark or light gray to white mottled appearance, and a peculiar vitreous to glassy lustre and in places shows faint wavy banding of light and dark quartz. Some of the quartz is characterized by the presence of minute shiny sericite flakes. Pyrite and iron oxide specks derived from the pyrite also occur scattered through the mass in places.

The Ores

In general the ores so far developed on the property have occurred along shear zones which lie either entirely within or along one wall or the other of the large low-grade breccia veins. The ore in part probably represents simply a secondary concentration of values along shear zones in the earlier low-grade veins as a result of the action of surface waters upon the ore bearing minerals.

A considerable portion of the ore also seems to be more or less intimately associated with a more recent sacoharoidal or sugary quartz, though the pay ore for the most part is a mixture of fine-grained quartz and kaolinite or of crushed quartz with stringers of kaolinite and possibly some alunite, and with occasional nodule-like masses of

higher grade massive quartz with minute films or specks of famatinite and other gray metallic sulfides, pyrite, or gold tellurides. Considerable colorless gypsum (= selenite) is present as a vein mineral in places both in the oxidized and sulfide zones.

The ore shipped varied from $15.00 to $650.00 per ton. The highest grade ($600.00 plus) ore occurred within a short distance of surface and consisted of a dark gray, or brown iron-stained, dense porcelainic quartz with specks of sulfides or tellurides rare or absent and with free gold rarely visible either in the specimen or in concentrates from panning.

In driving the workings on the 300-foot level a few rare bunches or nodules of quartz ore of good grade were encountered; these showed dark gray sulfide and telluride specks and streaks as well as abundant pyrite.

ORE SHOOTS

The ore produced by the mine for the most part occurred as a comparatively narrow sheeted zone within or along the hanging wall side of the main low-grade "Belmont breccia vein" and extended as a fairly continuous body or ore-shoot, from near surface to the 153-foot level as shown by the Burke-O'Connell stope.

Between the 153-foot level and the 300-foot level practically no development work has been done along the real pitch of the ore shoot, although the rather spotty distribution

of values near the 153-foot level tends to discourage one from thinking that this ore shoot is likely to prove strong in depth.

This main ore shoot, which has a thickness of only a few inches to 3 or 4 feet at different points and varies in width from 20 to 100 feet, pitches about 50° to the westward in going down.

Another small ore shoot starts from surface at a point about 110 feet S 70° E of the main shaft but so far has been developed to a depth of only 25 to 40 feet below surface where it seemed to pinch out or become lost. Other small bunches of ore have been found on the property but their occurrence was very spotty and erratic.

FAULTING AND CRUSHING

As already stated, subsequent to the original deposition of the earlier large low-grade quartz vein, extensive sheeting, crushing and shattering of the quartz and enclosing rock took place and that period was subsequently followed by one or more but less pronounced periods of fracturing and of quartz deposition.

Subsequent to all the periods of quartz vein formation there have also been extensive movements parallel to the vein as shown by the presence of zones of uncemented crushed rock and quartz or clay gouge which are present either along the walls of the vein zone or as seams cutting through the quartzose vein material.

The great irregularity in width of the quartzose vein material is probably due to faulting which has taken place parallel to the vein during one of these periods of movements, and has resulted in a pinching out of the quartz entirely in places while a double width of vein quartz has resulted in other places as a consequence of overlapping fault segments.

Upon the 300-foot level the vein lead where developed is composed chiefly of clay gouge and crushed rock, and shows only nodules or small lenses of quartz.

The 153-foot level also shows the vein to contain less quartz and more evidence of fault slips parallel to the vein leads than is shown on the 62-foot level.

VEINS ON NEIGHBORING PROPERTIES

Veins on Adjacent Daisy Mine Claims

The "Graham" or "Fault-Vein", which has so far proved to be the most productive of the veins developed on the properties of the Goldfield-Daisy Mining Company, enters the Belmont ground on the Vernal No. 2 claim. This vein is without doubt continuous with the main vein of the Belmont mine, as is shown by the vein as mapped on the level from the North Beesley shaft on Daisy ground. The location of the "Graham stope" at the junction of the east-west "Middle Vein" with the N E-S W "Fault Vein", indicates that vein junctions are especially favorable points for ore deposition in this area. Investigation of the adjacent Daisy ground revealed no vein leads, except the "Graham or Fault Vein" heading for Belmont ground.

Veins on Adjacent Black Butte Mine Claims

At least two of the veins developed on the property of the Black Butte Mining Company enter the Belmont ground to the north and east of Black Butte mountain. One of these, the "Flat Vein", which has a strike of about N 65° E and a dip of 10° to 18° to the north, has in times past yielded splendid returns to leasers. The extension of this vein enters Belmont ground near the southwest corner of Quartzite No. 1 claim. (For development of "Flat Vein" see Recommendations Nos. 26 and 27).

The other vein is the one developed in the "Butte or Austrians" shaft on Black Butte ground, which is probably to be correlated with the vein exposed in the east drift of the No. 3 shaft workings. This vein has so far produced but little ore and does not show sufficient strength to warrant any great amount of exploration work.

It is possible that the faulted extension of the main "Quartzite vein" to the north may enter Belmont territory, but no data regarding the location of this was obtained.

The geological map of the 100-foot level of the Black Butte Mine shows the large "Quartzite Stope" vein to be cut off and faulted on the north by at least two faults. At S 267 - E 3075 a N 40° W - 54° south-dipping fault slip cuts off the large stope and causes a reverse fault which offsets the north extension of the two branch vein leads some 13 or 14 feet to the southeast. At S 275 E 3100 a second fault

slip which strikes about N 30° to 35° W and dips 57° to the southwest again cuts off the vein extension to the northeast.

The mass of vein material seems to have contracted in size greatly in the two north branches of the Quartzite Vein at the point where the N 30° W slip cuts them off. This weakness suggests that possibly the vein extensions to the northeast of the N 30° W fault slip might not be very productive on account of the smallness of the leads. This point combined with the fact that workings from Shaft No. 3 on Belmont ground and also the east cross-cut from the Bijou shaft show no veins which can be definitely correlated with the Quartzite vein, makes it appear inadvisable to undertake any work tending toward finding the extension of the Quartzite vein on Belmont property until after the extension is found on the Black Butte Company's ground, or until some definite data regarding the approximate location of the vein is discovered. The large "Quartzite ore-body" was located at the junction of two leads which diverge going northward, but while the ore occurred at the junction it is not certain that it also occurred along the branch leads to any considerable distance from the junction.

(It might be well to call attention here to the bare possibility that the vein developed in the Butte shaft at S 400 - E 3325 and in the east workings from Shaft No. 3 might represent the faulted extension of the Quartzite vein as a result of displacement by the N 30° to 35° W fault slip which cuts off the vein).

SAMPLING

Throughout the whole Goldfield District the erratic occurrence of values and the great variation in appearance and nature of the ore at different places are characteristics. At one point the ore may consist of solid quartz with specks of auriferous sulfides or tellurides, or of altered fractured country rock with stringers of quartz, while again it may look like simply slightly altered or crushed country rock which has been sheeted and seamed with kaolinite or alunite stringers. The latter varieties of ore strongly resemble the unmineralized shear zones in the wall rocks and can usually only be distinguished from these by very careful sampling.

As a result of inability to tell ore either by looks or by "panning", instances of leasers having opened up ore and then overlooked same because they depended on panning instead of on careful sampling and assaying, are common in the Goldfield District. Accordingly one cannot sample and assay too carefully all material which has even the slightest resemblance to vein material.

Short interval samples, transverse to the fracturing or the dip of the vein, should be taken in abundance. In some mines in the district a one-foot sample interval is adopted and in the opinion of the writer this is not too large for parts of the vein which show any indications of carrying ore values.

Moreover the taking of differential samples of all the various phases of vein material is also recommended.

CONCLUSIONS

While at present there is no known ore in sight in the Goldfield Belmont mine workings, yet the uniformly good grade of the ore taken from the Burke-O'Connell stope warrants one in risking expenditure, of a not too excessive amount, in the development work necessary to explore certain more favorable points for the possible location of ore deposits.

The points which warrant most investigation are:

(1) The development underground of the prominent quartz vein which outcrops on surface and runs S 80° E from a point about 25 feet east of the manway from surface to the Burke-O'Connell stope.

(2) The extension of the 300-foot level to the southwestward to determine whether or not the Burke-O'Connell ore-shoot retains its continuity in depth. It is estimated that if this shoot continues with the same pitch it had between surface and the 153-foot level that its undeveloped extension should still lie 80 or 100 feet southwest of the present breast of the 300-foot level.

(3) The thorough development both laterally and in depth of the vein material exposed at N 915 - E 1082 on 25-foot level of Belmont workings.

(4) The exploration of the at present entirely undeveloped but strong quartz vein outcropping at S 530 - E 3580 about 350 feet N 67° E of the summit of Black Butte.

(5) Exploration for the extension of the "Flat Vein" of the

"Black Butte" Mining Company, which vein enters the property in the vicinity of S 680 - E 3660.

(6) The junctions of the N W - S E veins with the N E - S W cross-vein near N 560 - E 3150 which is only a short distance from the Bulldog Mine.

In addition to the above development work the different underground workings should be carefully sampled in the vicinity of the vein leads with short interval samples and a careful assay map made of all vein material. In this work it is not advisable to sample the highly altered wall-rocks which are seamed with minute white chalk-like stringers of kaolinite (and possibly some alunite), as well as to sample the quartzose vein material, for in some of the best producing veins of the Goldfield District these small white kaolinite (and alunite) stringers often carry higher values than the quartzose vein material.

RECOMMENDATIONS

From a detailed study of the property and the accompanying geologic maps, the writer is of the opinion that the following recommendations for exploration work cover the main points which seem to offer possibilities for the greatest amount of ore development, therefore these detailed recommendations and suggestions are respectfully submitted in addition to the general recommendations enumerated under "General Conclusions".

Some of the specific recommendations given below are marked by a star (*), to denote special importance; others are marked by two stars (**), or even three stars (***), to denote still greater importance.

25-foot Level:

(1) N 915 - E 1082: Sample vein material at bend of drift and drift S 45° E on best streak until N 54° E - 55° NW dipping slip-vein is encountered. Sample all vein material carefully and prospect any point which shows good values.

(2) N 931 - E 1043: From this point drift S 22° W to determine whether vein lead continues into wall instead of turning. The distance to be drifted should depend upon developments.

(3) N 938 - E 1047: Cross-cut N 85° E from this point for 6 or 7 feet to determine if ore streak occurs in vein material behind wall where bend occurs. Sample all streaks encountered.

37-foot Level:

(4) N 969 - E 1060: From the south end of downward extension of stope from 25-foot level, extend level S 25° W in an endeavor to determine if 25-foot level ore shoot does not continue downward with a pitch to S W similar to Burke-O'Connell shoot.

Intermediate Level (5659):

(5) N 750 - E 815: Cross-cut 20 feet or so due north into north wall. Assay carefully all vein material encountered as parallel streaks probably lie behind wall of drift and may carry values.

(6) N 750 - E 815: From this same point on the intermediate level near chute, put a cross-cut into south wall for 25 feet to prospect possible junction with the south dipping branch vein shown on surface. All vein material encountered should be sampled carefully with short interval samples.

62-foot Level:

(7) N 630 - E 662: From the breast of the cross-cut spur at this point drift S 60° E until certain the cross-cut is completely through the vein material. Sample. Also sample carefully all quartzose vein material exposed along south wall of present drift between N 630 - E 662 and N 670 - E 667.

(8) N 717 - E 730: Drift a short distance N 37° E on "lively looking" quartz lenses at this point on N W wall. Prospect the quartz streak in clay gouge which here enters north wall.

(9) N 752 - E 763: Cross-cut N 50° E from this point for 12 or 15 feet. Assay carefully any vein leads or streaks encountered.

(10) N 707 - E 763: Drift eastward from this point along quartz streak a sufficient distance to determine relations of this quartz streak to the other vein leads.

(11) N 783 - E 793: Sample vein material in this cross-cut and if any encouraging values are obtained drift N 65° E on quartzose vein material adjacent to 85° south dipping slip plane.

(12) N 739 - E 811: From end of cross-cut spur at this point change direction of cross-cut and extend same due south in an endeavor to intercept S 80° E strong quartz lead shown on surface. Surface indications point to a dip of 70° to the south for this vein. If this dip is correct and continues the same, the vein lead should be cut in about 30 feet. If vein is encountered it might be well to extend the cross-cut 20 or 30 feet farther to the south to be sure the whole vein zone has been cut through. If vein is cut, prospect thoroughly by drifting on it, both towards the junction to the westward and also to the eastward.

(13) N 763 - E 824: Good looking quartz was noted along the 65° north dipping footwall quartz streak at this point; sample carefully and if values are shown, drift S 60° W along this footwall streak.

(14) N 763 - E 824: At this same point in back of drift was noted what appeared to be a branch, six inch, 23° east dipping quartz lead. This flat branch lead showed quartz with what seemed to be gray metallic sulfides or tellurides which was probably ore. Drift S 40° E along this flat lead and sample all vein material.

(15) N 900 - E 1015: Drift southeasterly on hanging wall of quartz lead which enters side of drift at this point.

(16) N 1076 - E 1032: Some fairly good looking quartz was noted along the north wall of the quartzose vein material which here dips 65° to 74° to the southwest. Sample and if values revealed drift both N 55° W and S 55° E along the streak.

153-foot Level:

(17) N 753 - E 682: Along north wall of spur at winze is a streak of good looking quartz in clay gouge. Open this streak up more by putting in a couple of shots in N W corner of spur above winze. Sample and if quartz carries good values develop lead between this point and "Winze No. 1".

(18) N 728 - E 660: Put a couple of holes northward into wall of level, at northeast corner of top of winze No. 1, to develop quartz lenses which enter wall. Sample.

(19) N 730 - E 667: Sink a prospect winze a short distance to get extension of ore if possible.

(20) N 732 - E 670: Put in cross-cuts about 10 feet in length both to northwest and southeast of drift at this point. Sample and assay all vein material and quartz.

(21) N 773 - E 720: Behind clay gouge along north wall of spur drift at this point is fair looking quartz which is probably a continuation of streak at N 753 - E 682. Develop if assays show fair values.

(22) N 960 - E 893: If work on 62-foot level on extension of same leads prove up pay values, then drift S S E from this point on 153-foot level following hanging wall quartz streak.

300-foot Level:

(23) Some good values were found by Mr. O'Connell and associates in stringers or very small lenses of quartz in clay gouge at and above the point where the inclined raise was put up at N 775 - E 610. The writer does not believe that this vein material represents the extension of the Burke-O'Connell ore shoot which extended from surface to the 153-foot level. Possibility of some ore being found may warrant the necessary development work to open up the extension of the shoot.

N 765 - E 587: It is estimated from the pitch of the ore body that the extension of the shoot if it exists, should be found between 80 and 100 feet southwest of the present southwest breast of the 300-foot level (at N 765 - E 587). Extend this breast south-

westward approximately this distance and then cross-cut in both directions at right angles to the vein lead to be sure the full width of the vein is exposed. Sample carefully all quartzose vein material and also all banded or streaked sheeted wall rock which shows seams of white chalk-like kaolinite or alunite.

Surface Outcrops and Prospects:

(24) N 725 - E 845: From somewhere in this neighborhood, on surface, sink a prospect pit along south side of strong S80° E quartz ledge to a depth of 11 or 12 feet and then cross-cut northward from 10 to 15 feet to completely cut all vein material. Sample carefully with short interval samples all streaks of altered country rock as well as all quartz streaks and if values of a few dollars are obtained develop the vein thoroughly.

* *

(25) S 530 - E 3580: At this point to the north of Black Butte, a very strong quartz ledge outcrops, which appears to dip about 65° N from the horizontal. So far this

* * *

ledge has not been prospected. To prospect this ledge for possibly associated ore-bearing streaks, extend the north breast of the 30-foot level from the shaft at S 610 - E 3575 (see accompanying geologic map of underground workings) N 80° W for 30 or 40 feet or more until sure entire ledge has been cut through, then drift both westward and eastward on the vein streaks showing the best values. In this drifting keep a keen lookout for junctions between flat vein leads and the more vertical leads, as "Flat veins" parallel to the "Butte Flat Vein" may be encountered and the junctions may make ore.

(26) S 680 - E 3660: In the northwest end of trench on the Quartzite No. 1 claim at this point near the southwest side line, the Black Butte Company's "Flat Vein", which produced considerable ore for leasers, enters Belmont ground. The "Flat Vein" is here considerably obscured by the fractured condition of the rocks along the sides of the trench. Careful prospecting at this

point will possibly reveal the Flat Vein and this should be thoroughly prospected, even though locally it may prove to be barren of ore due to the erratic distribution of values along the Flat lead. (In the small inclined shaft on Black Butte ground at S 725 - E 3620, the Flat vein is about 12 feet below the collar and strikes N 70° E and dips roughly 18° northward).

(27) S 610 - E 3575: (See Recommendation No. 25)

The fault which cuts off the Flat Vein Stopes underground at S 750 - E 3390 on Black Butte ground, strikes about N 55° E and should cross the Belmont claim line in the neighborhood of the shaft at S 610 - E 3575 although evidently the fault was not observed at this point.

The Flat vein, if it keeps its normal strike (N 65 E) and dips (13° to 18° N) and is not previously faulted, should cut the shaft or its extension at some point between 30 and 60 feet below the surface.

However as the Flat vein might be

barren or hard to recognize where encountered, it seems more advisable to develop the Flat vein as suggested in Recommendation No. 26.

(28) S 645 - E 3627: Prospect more thoroughly the flat vein leads in the 4-foot prospect pit at this point. (See underground geologic map for location).

(29) S 50 - E 3170: (Shaft No. 3 on Quartzite No. 1 Claim). The vein in the east workings from this shaft is said to have carried some values in the vicinity of the winze at S 73 - E 3220. This vein is probably the faulted extension of the vein developed in the "Butte Shaft" workings at S 400 - E 3325 and also shown in the prospect pit on surface at S 320 - E 3330 where the vein is both strong and fairly good looking. If the vein in this prospect carries good values it might be well to extend drift on the vein from point S 120 - E 3223 in breast of the workings from No. 3 shaft, to claim boundary and then put up an inclined raise, on vein, following the boundary line.

An alternative to the work last mentioned might be the extension S 65° W of the cross-cut drift from the shaft at S 200 - E 3340 until the vein was completely intersected. (This work had best be done on a leasing basis if possible).

(30) N 560 - E 3150: (Quartzite No. 1 Claim)

In the 10-foot prospect pit on the Quartzite claim at this point near the Bulldog Shaft, a six-inch quartz lead gave assay returns of about $4.50. This quartz was "lively looking". Prospect this vein lead at a point about 40 or 50 feet N 40° E of this prospect where the cross-lead of the prospect probably makes a junction with one or more of the three N W - S E quartz veins shown on the 1" = 200 feet surface map.

(31) N 830 - E 2830 and N 720 - E 3040:

Prospect the two strong quartz ledges outcropping on Quartzite No. 2 claim at these points, by sinking a prospect pit to a depth of 10 or 12 feet on either the foot or hanging wall of both leads at these points and then

cross-cutting completely through the ledge, sampling and assaying all streaks carefully.

(32) N 1100 - E 1950: Sample and assay carefully the copper stained quartzose vein material cutting across this prospect pit. If fair values are obtained prospect the vein lead further.

Respectfully submitted:

SPURR & COX (INC.)

by ORIGINAL SIGNED GEORGE H. GARREY

New York, March 15, 1911.