2190 0004

(30)
Item 4

Goodsprings Nevada
March 21 1934

Prof. Jay A. Carpenter
Reno Nevada

Dear Mr. Carpenter:- Your letter came last week. I have not heard from Mr. Richardson yet. I have done the necessary little work upon the "Trenton" Claim and will attend to the "Lee" soon. Unless there are some improvements developments I do not think it worth while to do the work upon either the "Thomas" or the "Cumberland". They will "Keep" however. I have not been doing much upon the "Swansea" since Mr. Richardson was

here but I hope to be able to work there pretty steady, after the middle of next week. I have 12 to 16 ft. yet to go, to reach the ore zone.

About three weeks ago, I sent Prof. Palmer a sample of a certain "spotted" ore that is fairly prevalent in the ore body. It assayed 2½ oz. which is considered real good. I can see now that a certain black stuff which occurs in places is cobalt. It can be easily assorted out in actual mining. I am sending another "Swansea" ore sample to Prof. Palmer, for assay.

The sample from the "Lee" assayed 87/100 %, which is not bad, but Prof. Blum writes me that he had trouble with iron oxide in this sample when he applied the magnetic test. Not all the "Lee" ore has this iron however.

In this connection I have received an encouraging report through Mr. Leavy, from Rolla Missouri. Prof. Cowgill, of that place, had a sack of "Lee" ore to test by flotation. He reports success, making an 80% saving and a 30% Cobalt product. He states that

the agents which he used
work quite expensive and
want another reach
on to see if he can find
cheaper agents that will
do the work. Depend it
to him soon. Where iron
oxide occurs in quantity,
flotation might be better
than P. N. Palmer's process.
though ordinarily, I
believe that the Palmer
process is preferable.
~~Where~~ any work, it is well
to have both processes
available. It will help
in attracting capital.
Cowgill did not give the
assay of the heads of my
samples, but it must have

pretty low.
From what you write, I suppose that Mr. Richardson, and yourself, too, are looking for someone who will consider buying the Swansea group (three claims) I am willing to let them go at a reasonable price, and I will allow you 20% Commission. If no deal is made, I'll continue development work, as I am able, and seek some way to get the ore worked.
In the meantime, your interest in the "Trenton" cannot fail to be of value, if the Swansea turns

out well. The failure of the "spotted ore" sample from "Trenton" doesn't condemn the whole claim. There are other ores showing similar to the "Swansea". The Lee promises to be rather low grade but there is likelihood of good sized ore bodies. There have been no developments upon our Vanadium. The Molybdenum mill has failed to make good. They are now installing three tables. I hear that flotation saved one type of Molybdenum but not the other types. No news from the gold properties around the Keystone, except continued development.

I regret to say that we have not installed the Radio yet. I must get a wet battery. This I will do, soon. I am hoping to see Mr. Richardson, soon. Hope that he can take time to look over all the claims. I suppose that the investigating Committee from Washington will drop in upon us, soon. Wish I could get my tunnel to the ore body, before they come. I'll send a sample from the "Trenton" to Prof. Palmer, soon.

With kindest regards for yourself and family I am sincerely yours

Frank Williams

apart. I know of another locality, south east of the Shenandoah, where there is some cobalt, but as I remember, giving little promise of permanency. I'll look it over soon. There are other parts of the district where cobalt is possible. It will take prospecting to find out. Just now I am having some road work thrust upon me. Not exactly "thrust" either, for I asked for it some time ago. It will take most of this month. I intend to come home and I have Sundays off. Can take a week day off at any time, if I need to. The two claims which I have located won't need any

further attention, except
a little monumenting, until
we do the title work. This must
be within 90 days of location.
Have you looked up the details
of that law allowing a six
month's option upon
tax reverted patented claims?
As for undertaking some
further prospecting in
partnership with you and
others, I think that I could
undertake it in February.
In the meantime, I'll take a
day or so, pretty soon, and look over the
ground east of the
Shenandoah for you and me.
By February we shall know
more about what we
already have. As the
second location (named the

Trenton) turns out as I hope, we may feel like concentrating our efforts upon it.

There is a Cincinnati man, named Conners, who has been "nibbling" upon my "Swansea" location, from which the previous samples has been taken. I am writing him tonight with a request that he give a definite answer to my offer to bond it to him for $12,000. Do you know any market for cobalt upon the Pacific Coast. This would be better for us than an eastern market.

In a few days I shall send Prof Blake about 60# of Swansea cobalt ore for

further experiments.
I have not received the U. S. G. S.
bulletin which you mention.
If convenient, I would like to have
you secure a copy for me.
This is about all for this time. We
have been having some fine rains
lately. I feel certain that we
have two worth while claims,
particularly the second located,
the "Trenton."
With kind regards, I am
sincerely yours.

Frank C. Williams

P. S. Tuesday morning. Have just tried
that first sample which I sent you
with the magnet. It takes up some
particles, but I don't think the kitchen
stove made it hot enough.

Frank

seem to be the most
available stations.
I am hoping that your
gold mining ventures
will develope properly
during your vacation
My family join me
in my best wishes.
sincerely yours
Frank Williams

Goodsprings Nevada
January 1, 1934

Prof Jay Carpenter
Reno, Nevada

Dear Mr. Carpenter:- I have your letter of Dec 27. Possibly I will have a letter from you in tomorrow's mail. We get mail on Tuesday, Thursday and Saturday. I regret that you are delayed in getting returns upon those two samples. In the future, I will, as you suggested, send them direct to Prof. Palmer. Last Thursday I sent you samples of what I consider our big strike. In my anxiety to find out if the "No. 2" contains cobalt, I put some of it in a crude crucible, with

powdered coal, and heated it upon my forge. I didn't get it very hot but my little red magnet picks up lots of dark particles, which seem to be cobalt. Sir Bruce careful not to be fooled by iron particles from my mortar and pestle.

This encourages me greatly, for we have a big boundary that stuff in sight. I did not try the "No. 1" of that box of samples. Tonight I am trying some of the first sample which I sent you, in our kitchen stove. I doubt if it is hot enough. If that "No. 2" sample will go it, we can back ourselves for a real mine. I have located two claims for us, about ¼ mile

Goodsprings, Nevada
May 22 / 1934

Prof. Jay Carpenter
Reno, Nevada

Dear Jay:- When in Los Angeles, I saw Julian Boyd and presented your letter. In addition to the sale of my high grade cobalt, he thought that he might make a deal upon the Swansea mine. He suggested a report from Mr. Richardson and you made a printed list of questions to be answered. Unfortunately I have lost this list and must write them for another. I left with Mr. Richardson a

day or two. Have resumed work upon the cobalt since my return and am getting some nice looking high grade in addition to considerable low grade (probably 3%)
Those Los Angeles men plan to get started upon our Vanadinite mill next month.
It is very hot down this way. I secured a "hot shot" battery and am getting pretty good reception from the radio which you so kindly sent us. Salt Lake and San Francisco

Min Engineering - p 557 - 1922 (30)
Item 4

[illegible] heterogenite (cobalt oxide)
[illegible] Goodsprings in 1921.
[illegible] Shaft by [illegible] Hardy
and [illegible]

Utah Zinc - Frank Williams
Columbia - Frank Miller
Blue Jay - Al [illegible]

21 Tons - [illegible] 5% to 29% Co -
2 ton Co [illegible] all.
[illegible] $1419.00

370 [illegible]
[illegible]

300 [illegible] 5%
44 - 1 29.

Goodsprings Report

Heterogenite Uncommon. $CoO - 2Co_2O_3 - 6H_2O$
hydrous oxide Co -

[illegible] 21.
Found [illegible]
[illegible]
[illegible] [illegible] stibbe [illegible]
Blue Jay, [illegible] Chief [illegible]

More common [illegible] that [illegible]
[illegible] growths of hydrous
cobalt [illegible]
[illegible] in masses 2 to 3" in diam.
Columbia, Bose, Blue Jay, Copperside -
[illegible] Galena, Contact

p 86+ [illegible] from [illegible]
Columbia mine in the west shaft -

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Lincoln - Min. dist. of Nevada

p31 - Stringers of high grade cobalt ore have been found on several properties, and shipments have recently been made from the Copper Chief, High Line and Columbia Mines

Mineral Industry 1921 - p - 207
Carload of heterogenite mined by Harvey Hardy (Mine ?) near Goodsprings
Unusual mineral - occurring as irregular black masses filling cracks or replacing the carbonates in impure limestone and in less frequently in mammillary masses. Deposits found so far are not very large - Carload estimated at 8% Cobalt
Shipped to Princeton... for driers for paint - as the Goodsprings ore is very desirable for this purpose as it is comparatively free from S, As, Sb, Fe or other impurities -

Cobalt Blooming McCormick

Blue Jay + Contact Claims.

Commonly amorph. pale pink coloured-

due to $CoCO_3$. - as thin films.

Light pink - from Contact claims. .43% of Co oxide.

219 [illegible] 8.

P. 92. Even the [illegible] of Co. are widespread but [illegible] presently in the [illegible] district as not large + Probably 200 tons of 2% or more Co. as could be [illegible] from existing explorations.

1930. Cobalt metal 97-98 - 2.50 a lb

Black oxide. 2.10 a lb.

(30)
Item 4

Reno, March 13, 1934.

Mr. Frank Williams,
Goodsprings, Nevada.

Dear Mr. Williams;

Well at last Mr. Richardson has reached Reno and found time to talk over your cobalt prospects with me.

His idea is that if any people optioned the Swansea they would not run a short tunnel in as you propose but would diamond drill if for depth, and if favorable they would then start in a long tunnel. Thus a short tunnel would be lost labor.

He and I are both taking it up with prominent engineers in Los Angeles to find out if any of the industries there would be interested in finding a source of cobalt of their own. If so, and you named your terms to include us, Mr. Richardson would meet their engineers and take them out to see you and your properties.

I have my teaching work and cannot get involved in too many mining ventures, and too much expense. I think you would do well to follow Mr. Richardson's advice on the Swansea.

You must get in touch with the geologist that comes over to Goodsprings to study the rare mineral deposits. He might help you to find a large one of cobalt. Mr. Richardson leaves tomorrow for Las Vegas and he will try to contact the geologists and put in a good word toward getting co-operation for you on cobalt.

How goes the radio? I hope you are getting good results and all the good things over the air.

In haste as usual. I presume you will be up again before long. I know Walter Palmer has been testing some ores for you.

March 13, 1934.

Mr. Julian Boyd,
Los Angeles, Calif.

Dear Friend;

I was pleased to open the Mining Journal of Feb. 28th on page 7,and see there your face and note your reelection as president of the Southwest Mining Association . Since that is the case,I enclose my check for $1.50 for another years membership.

On page 6 of the same issue please note about our Prof. Walter Palmer's process for treating cobalt oxide ores. This is important because cobalt is a high price metal ($2.00 a pound) and a one percent ore carries a lot of potential value if the cobalt can be separated but water concentratinn or flotation will not turn the trick. Prof. Palmer found that a low roast with extra carbon makes the cobalt oxide very magnetic and easily separated.

With this advance knowledge I teamed up with our Univ. of Nevada regent at Goodsprings, Frank Williams, to search the district for the best deposits of cobalt oxide, and I think we have it. Over quite an area he has sampled he gets from 1.0 to 1.5 % cobalt in the form of the oxide. This area probaly needs diamond drilling,and if it proved up,a long tunnel would make glory hole mining with easy belt sorting a method to get a cheap but good grade cobalt ore for reduction practically on the highway near Goodsprings.

Since Las Vegas is a long way from Reno and my University work I took in as my engineering partner an old true friend of mine, Mr. Warren Richardson. He is well impressed with the showing and the big question now is whether there is a market on the Coast for the cobalt. The oxide is used in ceramic work for the cobalt blue color, while the metal is use for alloy metals such as stellite, etc.

Here is achance for a new industry on the Coast! I hope you can make a few inquiries for me as to the use of cobalt on the Coast and if the users would be interested in developing a source of their own or contract to buy it if you produced it for them. If you are not too busy it might be an excellent venture for you.

Mr. Richardson says that he knows you and holds you in very high esteem. He is leaving Reno tomorrow for his business in Las Vegas ,the National Ice Co. there. He will be there a few days. If you are interested get in touch with him there and he will ppobably call on you in Los Angeles if you can interest anyone in cobalt.

Yours sincerely,

JULIAN BOYD
CONSULTING MINING ENGINEER
XXXXXXXXXXXXXXXXXXXXXX
LOS ANGELES, CALIFORNIA
U. S. A.

510 West Sixth St.

March 15, 1934.

Professor Jay A. Carpenter,
MacKay School of Mines,
University of Nevada,
Reno, Nevada.

Dear Jay:

Thank you very much for your letter of March 13th. and your check for $1.50 for the Mining Assn. which I am passing on to the Secretary.

I am very interested indeed to hear about the Cobalt, and also that my old friend Warren Richardson is in with you. (He sold me a few Dodges, when I was at Ryan).

I have got to work on the Cobalt business at once. I called up Bob Linton, asking him how much was used on the Coast. Bob says that only a few pounds a month is used in the Ceramic industry; and that I might get the total used from the Chamber of Commerce. Well, I called them up, and they have not any information on the subject, and suggested that I call up the Mining Association of the Southwest about it. So I said "Well, this is that Association and you can't pass us the buck this time !!"

I have written a letter to a friend in the Steel industry here, and expect will get some particulars from him.

I have also put in a long distance call for another fellow in the Chemical trade, who will know all about it; and who by the way might be interested in starting a new industry here, in that line. They wanted me to get them a deposit of Chromium once; and they might easily be interested in Cobalt.

I hope Warren will come in to see me about this, and as he is a partenr of yours, I will feel free to tell him all, I know, and also arrange where I might come in on the business. I will drop Warren a line to Las Vegas.

By the way the So.Calif.Sect.A.I.M.E.is having a jaunt to the Hoover Dam, next week. Could you join us at a dinner or banquet arranged by the Ch.of Commerce at the Apache Hotel, next Friday (March 23rd). ?

Best regards,

Will keep in touch with you.

Sincerely, Julian

UNIVERSITY OF NEVADA
~~RENO~~, NEVADA

Goodsprings

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FRANK WILLIAMS

February 24, 1934

Prof. Jay A. Carpenter
Reno, Nevada

Dear Partner:- I infer that this letter will reach Reno about the time that you return from New York. Mr. Richardson was here last Sunday and we looked over the "Swansea" and the "Trenton". In the afternoon we planned to go to the patented claims but the time was too short. He took the names of the two that we can buy and plans to apply for them when the County Commissioners meet on March 5. Or, rather, he will leave an application in the office of County Treasurer. I was quite favorably impressed with Mr. Richardson. He is an agreeable common sense man who will make a good partner. He brought the Radio but there is one piece that he must get from Tonopah. Many thanks for it. We look forward to much entertainment from it.

I had some ore from the "Lee" claim which

I gave to Mr. Richardson about three weeks ago I got an assay from Prof. Palmer upon this ore. It goes $\frac{87}{100}$ % which is rather low but I believe it is worth while to hold it as there seems to be considerable ore showing in different places. I proposed to Mr. Richardson that if you and he would put up $1000. for development, I would put both of you in this claim & each, the same as the other claims. It looks to me as if the "Swanee" is the most dependable of all the claims and $1000 worth of work will pretty thoroughly open up the ore body there. I am working here now when not employed upon the road and have started the tunnel. Mr. Richardson plans to be in Reno early next month and will describe it to you. It looks to me as if we have a big ore body. About 60 ft of tunnelling will show what we have. $1000 should do about 120 to 150 ft of work. Did you hear anything new about Cobalt while in New York? I received that bulletin upon sponge iron furnaces. It describes several, and the

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RENO, NEVADA

methods of treating them. A type recently developed at Tintic, Utah, seems to me the most practical. Of course the treatment was for iron, which would be somewhat different from Cobalt. Apparently the cost is about $6. per ton. The U. S. Commission to study mineral possibilities in the Boulder Dam Basin is about to begin work. Ive written to the Las Vegas Chamber of Commerce about our Vanadium and Cobalt and have been assured that both will be brought to the attention of the Committee. By the way, D. F. Hewitt who prepared the Geological report upon this district, is one of the Committee

We are having some rain lately. It has been a warm winter. Our Peach apricot trees will blossom in a day or two. When you see Mr Richardson he will tell you how the Swansea looked to him. I hope that you can join me in ~~a deal~~ development of this property as its possibilities appear great

With best wishes to yourself and family

Sincerely yours
Frank Williams

UNIVERSITY OF NEVADA
~~RENO~~, NEVADA
Goodsprings, February 3, 1934

Prof. Jay Carpenter
Reno, Nevada

Dear partner:- Since my return from Reno I've been working upon the road but I will go up to the Swansea today. Tomorrow, I plan to finish monumenting our claim the Lee and do some further prospecting for cobalt in that neighborhood.

I sent a night wire from Los Angeles to Mr. Richardson but he wired me to Jean that he could not meet me but would try to get over in about a week. I can show him over the claims at any time, though it may take an extra day to examine those patented claims that can be bought for back taxes.

Since my return I've heard from the Cumberland sample which I sent to Shepherd and Sons of Cincinnati. It goes practically nothing, ~~.1~~ $\frac{18}{100}$% cobalt and $\frac{27}{100}$% nickel. It runs over 3% manganese however, which I

Pink accounts from the black color.
I am developing a theory regarding this
Manganese in this district. Apparently,
in the Northeastern part, for instance in
those patented claims, there is no
Manganese. There "black stuff" means
Cobalt and from that locality we
shipped high grade Cobalt in 1921.
As one goes southeast across this
district, manganese butts in, and the
black color does not necessarily mean
Cobalt. Apparently there is considerable
Manganese in the Swansea, but there
is almost Cobalt left for good low
grade ore. In our Thomas claim, still
further southeast, it's all manganese.
Our Trenton men is further assaying, as
I believe there is fair Cobalt ore there
even though our big ore body was
disappointing. The Cumberland seems
worthless unless I found other claims
upon it.
I believe that the Lee, being in the

UNIVERSITY OF NEVADA
RENO, NEVADA

Northwestern Sector, will assay better. I'll bring in a sample tomorrow and hold for Mr. Richardson. If the Lee can go 1% or a little better, it will be worth while as there seems to be good sized deposits there - Formally this claim has produced several carloads of good copper ore. [illegible]
Its nearly mail time so must close
I'll write again soon
with very best wishes
Sam

sincerely yours

Frank Williams

Fri. Jan. 26,1934.

Dear Warren;

Mr. Williams arrived today for a regents meeting taking place tomorrow. He states that he will arrive back at Jean on the 7.AM train on Tuesday morning, January 30th, and if you could arrange to meet him there, you could go out directly to the cobalt showings with him and spend the day together. (This would also save him stage fare to Goodsprings and Sandy). If for any unexpected reason he fails to make the train at L.A. he will wire you Monday that he will not arrive Tues. I told him to expect you at Jean, but if you did not show up to continue homeward.

As to the radio he tells me that he has one that has been out of commission for a long time. Our big one is probably a much better set with new batteries, but I think it is necessary to add the auto battery if he is to get any use out of the set as he says his car battery was too weak for his old set.

His new locations for us have so far been duds, yet his Swansea locations of last fall have merit. A sample across 30 ft or more on the surface sent to Leaver at the U.S.Bof Mines., averaged ½% Cobalt. Another sample taken later across this width for Prof. Palmer averaged ½% Co. He brought up another large 30 lb. sample today, also a smaller sample of "black bunches" that hexpects to run miuch higher. Prof. Palmer is making the analyses immediately for him.

I told him that we would not be interested in evandoing the location work on the poor showings, and that any work should be done on the Swansea. He suggested that we might throw them all together as a group, and do the work on the Swansea. Evidently if we put up more money we would be part partners in the Swansea, therefore you had best investigate its possibilities, and if favorable ascertain his best proposition, and suggest to him the best plan of development.

Also on another day you should see the patent claims he wishes to take up and there possibility for high grade co per and cobalt. If you dont get to see these claims he should file his application to lease as that costs so little and you could see them later.

Of course if the cobalt showings do not look good to you the best thing is to spend nothing more on them but turn them back to him with no strings attached, but to tell him to spread the news of the search for cobalt and to bring the samples to him. He will be shown how to make tests while up here. If anything of value is bought to him, he could send word to you to come and look it over.

The weather stays beautiful. The golden stream is going into our tailings pond. I had the boys raise the dam to the lower pnds about 2 to 3 ft. for the taling at night to avoid freezing.

Best wishes,

Sat. Afternoon, Jan 13, '34

Mr. Frank Williams,
Good Springs, Nevada.

Dear Partner;

Now that college has started I must use Sat. afternoon for my mining ventures. I enjoyed your letter of the 8th. I hope you find a good body of cobalt oxides but from what I overhear Prof. Palmer say, his process is alright if you could find ore of sufficient grade to make it worth while. I will await with interest a copy of his analyses.

As to the number of claims a man make take, the restriction as to the number was repealed, and you can locate to your hearts content.

As to the law as to leasing and buying patented claims owned by the County- * When any person shall present to and file with the Co. Commissioners an affadavit and petition (a) showing that he is a citizen of the U.S., (b) and that is patented claims owned by the County for taxes as shown by the records with the amount of taxes and penalties, and (c) that it is his intention to explore and develop the same : the County Commissioners may(have refused in a few cases) contract as follows- By an order give permission to the applicant to enter the same(but not over two claims to the individual) and explore for 6 months for valuable mineral , provided that not over 500 lbs. of ore be removed until the claims are purchased, and at the end of 6 months or sooner if the petitioner so desires, the County Commissioners shall make and execute a deed conveying the title to the petitioner for not overtwo claims for the sum for which property become the property of the Co.

In Tonopah I understand where there was also buildings and equipment on the claims assessed separately , they were to be sold to the highest bidder and didnot go with the claims, while at A.A.Codd's mine north of Gerlack I under stand the buyers of the claims stsrted tosell off the buildings and machinery!

Mr. Richardson returns to Reno tomorrow, and will probably leave for Las Vegas the last of next week, around the 18th ot 19th and will see you before you attend the regents meeting of the 27th. I will be glad to see you then and talk over out cobalt venture.

With my best wishes,

and followed the "marker" about 60 ft down. At this point they drifted about 40 ft each way the ore did not open up but the marker continued all the way and to the end of each drift. I think it very probable that more sinking will open up another body of high grade copper, with the cobalt that always ~~follows~~ accompanies it. In 1921, I took a lease upon this ground for cobalt. In digging around where they had their body of copper, I struck a pocket of cobalt in the hanging wall and took out three tons that ran about 10% cobalt. I tried assorting the dump but they had been torn by floods, and the cobalt was very friable so that I couldn't do much with it. I had to keep the grade to 8 or 10%. Possibly some lower grade stuff could be screened out in place.

A tunnel taps the shaft at 120 ft depth where they had the big ore body and it is here that the little engine is placed. Being

underground and perfectly dry. It is in good condition. I was up there about six weeks ago. The location is so rugged and out of the way that nothing has been stolen. It's about one mile due north of the Shenandoah. I don't think that there is anything especially urged about it but these claims can be had for about $25 each. Only two of them (there are four) are of vital importance. The last legislature passed a law by which such claims can be optioned for six months and bought. Maybe you could get these statutes and see just what the law is. I do not have them. It's nearly mail time and I must close. I'll send Prof Palmer a 4 oz. #2 sack of the cobalt for further experiments. Thanks for your letter. The prices quoted are certainly fine. Maybe we can frame up some way to get a plant for the ore later on.

Best wishes for yourself and family

sincerely yours

Frank Williams

UNIVERSITY OF NEVADA
~~RENO~~, NEVADA

Goodspring Dec 18, 1933

Mr. Jay Carpenter
Reno Nevada

Dear Mr. Carpenter:— The weather has been rather bad, but I've done some prospecting since I returned from Reno. I am sending you a sample from a claim which I have located for me. It comes upon one of my claims from which the sample which is in the Mackay building was taken. The streak from which this sample was taken is from one to two inches wide but it is in a likely locality, being apparently upon a contact between lime and a dyke of sandstone. I am a little uneasy about it being cobalt, but, if it is, I shall feel encouraged. In several other places upon this claim I saw showings of cobalt that I feel certain of, but of a lower grade.

One day I went up to the Green Monster neighborhood, ten miles north where I had heard rumors of cobalt, but it looks like manganese to me. There is a place about 1½ miles north of your home that I shall look at in a day or

and I have some other places in mind near the Columbia Summit.

Regarding those patented mines that have gone delinquent, I think that they are worth acquiring, though at present there is no definite cobalt tonnage in sight. The ledge was originally worked for copper and two carloads of high grade ore were shipped 33 years ago last spring. It seemed to pinch out to a mere marker. During the war some leasers sunk upon this marker, to a depth of 100 ft where it opened out into a fine body of very high grade copper ore. They shipped a second carload that run over 30%. Accompaning this copper was quite a tonnage of fine cobalt, but they didn't know what it was and threw most of it over the dump. They may have shipped part of it under the theory that it was black oxide of copper. These men were strangers and left camp soon afterward. After exhausting this ore body they put in a 2 h.p. gasoline hoist

Goodsprings, Nevada.
DEC. 27 1933

Prof. Jay A. Carpenter
Reno Nevada

Dear Mr. Carpenter:- Yesterday I located for me another claim. This is our second. Ere this you have received a sample from our first location, and also a sample from a claim near the Green Monster, and belonging to a man named Nelson Noon. I think it quite probable that the Nelson Noon sample is manganese, and I rather fear that the other sample, from our first location is manganese, too. I take the claim located yesterday down by this mail sending you two samples in a square tin box. The sample at the top consisting of three pieces, comes from near the west end of the claim (which I have named "Treptow") and represents a fair sized cropping. The lower sample under the cellophane and marked No. 2. Consists of a dozen or more small pieces.

This sample No. 2 represents a very large cropping and if it carries cobalt, even as low as ½ of one per cent, we have a real mine. At this place there is a dyke over 50 ft wide of which at least ¼ is the type represented in this sample. I am nervous lest those black specks are manganese, but if they are really cobalt, it will cost ordinary mortals two bits to speak to us." This claim is an easterly extension of my Swansea location, from which came the sample tested by Prof. Palmer. This dyke is not far from the main Goodsprings-Sandy road and lays convenient for tunnelling. It is near the Columbia summit, about 3 miles southwest from Goodsprings.

For the next 4 or 5 days I will be doing some work at our school house, after which I can start in upon the little work of our two claims, providing the ore assays properly. There have been no

developements upon our Vanadium since my return from Reno. The Shenandoah Molybdenum mill is about ready to start. It will depend upon flotation exclusively for concentration. The rise in silver does not effect this district much, but there are places due to 30 miles distant they may expect from it. Do not be discouraged if all these samples fail. I have some other possibilities in view and there remains those two patented claims that have gone delinquent for taxes.

Hoping that I shall hear from you soon I am

sincerely yours
Frank Williams

Wed. Jan.3,1934.

Mr. Frank Williams,
Goodsprings, Nevada.

Dear Partner;

Yours letter of December 27th quite excited me and I have been waiting for the samples to arrive . They came today. I took them up to Prof. Palmer and told him that you sent them to me and that I was turning them over to him and for him to send you the results direct.

The other two you sent in I gave also to him numbering the first one, No. 1. and the second sample you sent No.2,and he told Mr. Couch that he had reported direct to you so I do not know about the results except that he told Mr. Couch that one of them tested for cobalt and the other did not and that he expected you to write in asking for a determination of the amount of cobalt. A cobalt determination costs at custom assay offices about $3 to $5. each! I hope that the cobalt one is from the larger deposit on the Nelson Noon! Instead of asking Mr. Palmer to run a cobalt on the small sample it might be much better for you to try to get an average sample over certain widths and ask him to run a cobalt on it as a representative sample.

About these samples received today. Prof. Palmer opened up the tin box and was not much impressed with sample No. 1 on top, but when he saw the sample"of a dozen or more pieces-of a large cropping" he became very much interested and immediately tested for cobalt and pronounced that there was cobalt in it so "it will cost ordinary mortals two bits to speak to us"! He was not sure whether it was from the pink dolomite or from the black-I hope it was from the black as there is so much more of the balck in the sample. However Hewett says that some of that pink dolomite from the Contact Claim will carry as high as 0.43% of Cobalt oxide! So dont overlook the large areas of pink dolomite.

I would like to be down with you. Your better prospecting ability and knowledge of the district combined with my more technical knowledge would make a great combination. However Iam going to do the next best thing in getting us another first class mining engineer to work with us. His name is Warren V. Richardson , a close friend of mine - we worked for the same company in Tonopah and leased together in Tonopah. He is a delighful fellow and willing to take a chance. He owns a fuel business here in Reno, one in Tonppah, and the National Ice Co. in Las Vegas and he has to go to Las Vegas quite often,and will be so convenient there to run out to go over the ground with you and to carry out anything you wish done in Las Vegas. I sold him today on this cobalt venture and he is going in as my partner to help you and he gave me his check for $50.00 that Iam endorsing over to you. You can cash it in Goodsprings, or Las Vegas or take it to his National Ice Co. in Las Vegas. He is going down in a few days time and will come over to see you,and then he can tend to the lease on any patent claims you wish to take up. We are off to a fine start and if we work quietly and get all the best ground then we can let Congressman Scrugham tell the world about it!

We are to be congratulated upon our energy in getting started so far. The fact that Warren joined me so quickly shows that it sounds good to an experienced engineer.

8PM Wednesday Evening.
Dec. 27,1933.

Mr. Frank Williams.
Goodsprings, Nevada.

Dear Mr. Williams;

We all have been so busy with the heavy work at the end of the semester. I have been particularly rushed or I would have answered your letter before receiving a second one,and a second sample.

I regret that I cannot report on the first sample you sent. You overlooked my telling you that if you wanted results that you should send all samples to Prof Walter Palmer direct and not to me. I turned both samples in but nothing has been done on them as yet. He also has been too busy but I suspect that if you had sent them direct you would have had results by now. So keep this in mind.

I presume you have a copy of the recent large U.S.G.S. bulletin issued on the Goodsprings District and have looked up all the references on cobalt including page 92 and also the reference to Cobalt bearing dolomite. Of course what you hope to find is a broad surface area of the cobalt oxide ore-that will make tonnage and cheap mining,and that may have been passed over for manganese.

What is your reaction to my proposal to organizing among my ffriends a prospecting club to which we contribute to supply funds to keep such a good man as you in the field looking for cobalt for a month or two, and then,with luck, developing any promising showing you may find.

In haste-leaving tomorrow on a two day trip- will write you on the week end again.

Sincerely yours,

4 P.M.
Dec. 31,1933.

Mr. Frank Williams,
Goodsprings, Nevada.

Dear Mr. Williams,

I returned late last night from a 3 day trip to Tonopah and other points. Today has been a busy day on letters and tomorrow on New Years Day I will make an early start for 6 Mile Canyon below Va. City where I must run a line of levels for flume boxes that I have built to catch tailing on ground that I have optioned.

Your letter of Dec. 27th greeted me here and I will look forward to the sample you are sending, and if Mr. Palmer's test shows it has cobalt I will pay for an accurate determination. I beleive that he is working on the other samples now. If you send more please send them direct to him with a letter asking him personally to do you the favor of testing for cobalt. According to the strict interpetation of the law ,you are allowed but two samples a month and you must fill out a blank telling where the samples come from,so it will pay you to write nicely to Mr. Palmer as I know he is greatly interested in your cobalt work.

In Tonopah I asked about the law passed at the last legislature concerning about buying patented claims owned by the County for ytaxes. As I understand it the first one to apply has purchase is given 6 months time as a sampling and lease time in which to see if he wishes to pay the money and no definite number of shifts are required to be worked in that 6 months. I unde stand the proceedure is to go to the County seat and file two papers with County officials,and that is all for 6 months. I suggest that if you find someone going over to Las Vegas for the day that you go over with the patent numbers of your claims and find out if they are open for lease under that law and that nobody else has filed on them, and if in the clear that you file the necessary papers in your name,checking up on the amount that it will take to buy the claims at the end of the 6 months. Your County officers will explain these details better than I have and I may not have it all correct. I will go theJudge Brown and see a copy of the law.

Keep track of your expenses and let me know when you need more. I do not think it best to start any location work on any claim until we know about the cobalt. It wouldbe better to scout all possible surface showings to know that we have the best before settling down to any definite claims,except of course to get the lease from the County on the patented claims that you know have been good cobalt claims. Iam going to see this week if I can raise a little fund among my friends so that you will be well provided for to do a thorough job of looking for cobalt! I will hear your idea on this in your next letter.

As New Year is but a few hours away I wish you and your a Happy New Year and one that will be filled with new hopes and expectattions and that many of them will materialize!

Yours sincerely,

UNIVERSITY OF NEVADA

~~RENO~~, NEVADA

Goodsprings

DEC. 23rd 1933

Prof Jay Carpenter

Reno, Nevada

Dear Mr. Carpenter:- I am today sending you a sample of a black colored ore from a claim near the "Green Monster" mine. I strongly suspect that it is principally Manganese but it is possible that there is some cobalt in it. The old claim with a shaft probably 100 ft deep. The ore seems quite plentiful. It is owned by a man who has a band of horses in the Potosi mountains. If the ore proves to be of any interest to us I am sure that I can secure an option from him. The weather has been rather stormy for prospecting since my return but it is getting settled now and I shall look over certain places during the next few days. My brief experience in the past that one must be careful not to take Manganese for Cobalt, but if there is Cobalt a

well as ~~Mangan~~ Manganese here.
Mr. Scrugham writes me for information regarding Cobalt and Vanadium and I've written him to his Reno address. As I explained to him the Vanadium deposits are much more developed than the cobalt. I am hoping to hear from you soon regarding a sample which I sent you a few days ago. Don't be discouraged if both of these samples are Manganese. There is real cobalt here and I will get some of it located.

With kind regards I am

sincerely yours

Frank Williams

(30)
Item 4

R. H. Officer & Co.
ASSAYERS.
SALT LAKE CITY.

July 25th, 1913

Mr. C. J. Peterson,
Philadelphia, Pa.

Dear Sir:-

Nevada Keystone Mine

We are sending you results on 41 samples received from you. While it was hardly necessary, as the results ran so low, we checked 12 of them including such numbers as 1,27 Ect. as also some of them running but traces.

We never throw any part of the samples we receive away for six months so that unless you want them kept longer than t that it is never necessary to notify us to hold them.

Thanking you for your favor and trusting that we may hear from you again, we remain,

Very truly yours,

P. S. We always have on hand a good many sacks which while they have been used still are used again by most of our customers on examinations which we would gladly send to you any place you might designate, if at any time you need them out this way.

R H Officer & Co
Wm R Black
Mgr

30

item 4

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CERTIFICATE OF ASSAY

R. H. OFFICER & CO.

169 S. WEST TEMPLE ST. SALT LAKE CITY, UTAH

C. J. Peterson, E. M. July 23rd, 1913

ASSAY PER TON OF 2000 POUNDS:

NAME	NO.	GOLD OUNCES	SILVER OUNCES	LEAD Gold %	COPPER %	IRON Total %	INSOLUBLE %	ZINC %	%	%	%
	1	0.10	0.1	2.00	.06	2.06					
	2	0.02	Trace	.40		40					
	3	0.02	Trace	.40		40					
	4	0.01	Trace	.20							
	5	0.02	Trace	.40							
	6	Trace	Trace	—							
	7	Trace	Trace	—							
	8	0.02	Trace	.40							
	9	Trace	Trace	—							
	10	Trace	Trace	—							
	11	Trace	Trace	—							
	12	Trace	Trace	—							
	#####										
	13	0.01	Trace	— .20							
	14	0.02	Trace	— .40							
	15	Trace	Trace	—							
	16	Trace	Trace	—							
	17	0.01	Trace	— .20							
	18	Trace	Trace	—							
	19	Trace	Trace	—							
	20	0.03	Trace	.60							
	21	Trace	Trace	—							
	22	Trace	Trace	—							
	23	Trace	Trace	—							
	24	Trace	Trace	—							
	25	Trace	Trace	—							
	26	Trace	Trace	—							
	27	0.26	0.1	5.20	— .06	5.26					
	28	0.03	Trace	.60							
	29	0.04	Trace	.80							
	30	0.07	Trace	1.40							
	31	0.03	Trace	.60							
	32	Trace	Trace	—							
	33	Trace	Trace	—							
	34	0.01	Trace	— .20							
	35	Trace	Trace	—							
	36	0.01	Trace	— .20							
	37	0.08	0.1	1.60	— .06	1.66					
	38	0.06	Trace	1.20							
	39	0.06	Trace	1.20							
	40	Trace	Trace	—							
	41	Trace	Trace	—							

CHARGES, $

R. H. Officer
Mar 8

May 12, 1934.

Mr. Julian Boyd,
510 Associated Realty Bldg.
Los Angeles, California

Dear Mr. Boyd;

This will introduce to you my highly respected friend of many years standing, Mr. Frank Williams of Goodsprings, Nevada. He is the gentleman that Warren Richardson and I are associated with in his search for cobalt prpperties in the Goodsprings district. I believe that in the Swansea group of claims he has a property of merit worthy of development by capital interested in the alloying metals.

Mr. Williams is a regent of our University and is here for Commencement and I have asked him to call upon you as he returns home through LosAngeles so that you two can also become friends, and possibly make a connection that will be profitable to you both.

Sincerely yours

P.S. Our daughter, Elizabeth, is to be graduated Monday from the University.

(30) Item 4

PRELIMINARY REPORT ON PROPERTY OF NEVADA KEYSTONE MINING COMPANY, YELLOW PINE MINING DISTRICT, LINCOLN COUNTY, NEVADA.

The property is controlled by F. A. Schrader and T. A. Johnson, c/o Provident Investment Co., 615 S.Hill Street, Los Angeles, Calif. It is situated eight miles west of Goodsprings, Nevada about 1000 feet in altitude above Goodsprings. It consists of the following patented mining claims, map showing relative location of which is appended hereto. viz: Keystone, Honduras, What not, Oversite, Bellvue, Empire,, Barefoot, Barefoot Annex, Barefoot No.2 and Mary Anna also a 40 acre millsite at Sandy, Nevada, eight miles west of the mine.

History. In 1892 the property was worked and about $300,000.00 in ore produced. From 1901 to 1907 it was leased by one Carl Anderson on a royalty basis of 25%. He is supposed to have taken out about $250,000.- The ore was sorted out in the stopes by the leasers and the waste porphyry left there. This in many cases ran down into the drifts, and this together with sluffing porphyry and the use of practically no timber is responsible for the present obstructed condition of the workings

Accessible Workings. Tunnels Nos. 1 and 2, about 65 feet vertically above the main tunnel level, are caved, Tunnel No.1 stoped up to from the main tunnel level and timbers in the stopes supporting the track rotted out. The main tunnel level is entirely accesible,906 feet of tunnel.

The Old Incline is badly filled with waste above and below the 300 foot level.

The New Incline is accessible to the 740 foot level, a distance down the incline of 735 feet and a vertical distance of 442 feet. The Station timbers at 600 foot level are rotted away and also at the 670 and 740 foot levels. There is considerable debris, timbers and boulders of sluffed porphyry hung up just below the 740 foot station , making it impossible to go below until this is cleaned up.

100 Foot Level is accesible 460 feet South of the incline shaft and 160 feet north of the shaft.

On the 200 Foot level about 120 feet of drift are accessible North of the shaft. The level South of the shaft is filled and caved.

On the 300 Foot level there is accessible 125 feet of drift South of the shaft and 360 feet of drifts :orth of the shaft.

On the 400 Foot level there is accesible 290 feet of drift South of the shaft and 225 feet north of the shaft.

On the 500 Foot Level 165 feet South of the shaft and 72 feet North of the shaft.

On the 600 Foot Level, 95 feet south of the shaft and 100 feet North of the shaft.

On the 670 Foot Level 190 Feet North of the shaft and 40 feet south.

On the 740 Foot Level 27 feet South of the shaft and 73 feet north.

Geology. The country rock is limestone which has been intruded by a couple of Alaskite dykes on this property. The main dyke has a general strike of N 10 degrees W and general dip to the West of 40 degrees and can be traced about 800 feet North of the Keystone Endline (North Endline) South of the main workings it seems to swing a little to the Southeast and can be traced for a little over 1200 feet. Here it has been explored to a slight extent by a number of pits and open cuts, which however produced no ore. A spur dyke runs out from this dyke with a general strike of S 65 degrees West and heads toward the Barefoot Workings and is probably the dyke involved there although it cannot be traced on the surface as it goes under a lime capping. Where this spur dyke intersects the main dyke at the surface is the glory hole where the largest amount of ore was taken out in the Keystone workings.

The ore was a hematite occurring always on the contact of the dyke and the limestone, where it occurred, but it was very erratic in occurence. The ore bodies were lenticular in shape and varied in width from a few inches to 2 feet, most of them being under a foot in width. All ore has been gouged out and none is now in sight. Values ran from $20.00 to $300.00 a ton.

The Main Tunnel Level and 500 Foot levels seem to have been well explored for ore. More ore might possibly be found by running the following crosscuts:

West and East to each contact on the North end of the 100 Foot level.
West to the Hanging Wall on the North end of the 300 Foot level.
West to the Hanging Wall on the North end of the 400 Foot Level.
West to the Hanging Wall on the South end of the 400 Foot level.
West to the Hanging Wall on the North end of the 600 Foot Level.
West to the Hanging Wall on the North end of the 670 Foot Level.
East and West to each contact at the North and South ends of the 740 Foot level.

These are merely possibilities and cannot be figured on.

The only rock left to consider in the workings is the dyke rock said to carry around $6.0 per ton. This dyke is very irregular varying from 2' to 40' in width and lenticular in occurrence. On the 500 and 600 Foot Levels it pinches down to less than a foot in width at the south ends as also on the 670 Foot Level, but on the 740 Foot Level it comes in strong again being about 30 feet wide here.

Estimate of Porphyryin Sight. Geologic maps showing the occurrence of the porphyry on the accessible levels are a part of this report. To estimate the tonnage of porphyry in sight these maps were used and the following method pursued. The area of porphyry exposed in the dyke on each level was estimated. To find the tonnage between two levels, the average area was multiplied by the distance in the dyke between levels. This gave the result in cubic feet. 13 cubic feet per ton were assumed as porphyry in place. Following are the results on the accessible levels.

Between Surface and Main Tunnel level.....	14500 Tons.
Between main Tunnel Level and 100' Level.	18750 Tons.
Between 100' level and 200' Level.....	20877
Between 200' level and 300' level.....	41212
Between 300' level and 400' level.....	62199
Between 400' level and 500' level.....	31077
Between 500' level and 600' level.....	8484
Between 600' level and 670' level.....	8807
Between 670 and 740' Level.....	4615
Total.....	210521 Tons.

This gives an average per foot of workings of 5.6 Tons

Taking the length of the 300 Foot level as an average length of level, the estimated length of the inaccessible workings is 1107 Feet. At 5.6 tons per foot the estimated amount of porphyry in the inaccessible workings would be 6199 tons. This would make the total estimated tonnage of porphyry 216,720 tons.

Main Dump. Using 16 cubic feet per ton as dump material in place, the dump contains 38,000 tons. It is a mixture of limestone and porphyry with a little ore mixed in it. Assay of a general average grab sample taken from it gave its value as $1.66 per ton.

Tailings Dump at Mill. Using 14 cubic feet per ton as tailings material in place, at the mill there is about 10,000 tons of tailings. Assay of a general average grab sample taken from the dump gave its value as $2.06 per ton.

Costs. Under present conditions timber laid down at the mine will

cost about $29.- per 1000 ' B.M. Freighting costs about $10.- per ton from mine to Jean or from Jean to Mine. To freight from the mine to the mill, a distance of eight miles down hill costs $2.- per ton. There is no timber, fuel or water available at the mine except a little water in a couple of springs on the 100 and 300 Foot levels. A good supply of water can be obtained at the mill at Sandy by sinking 50 feet and pumping.

Barefoot Workings. The main workings just described are on the Keystone Claim. There are about one quarter as many workings on the Barefoot claim. The porphyry has the same appearance here although the dyke is lying flat. The ore was of the same character and has all been gouged out.

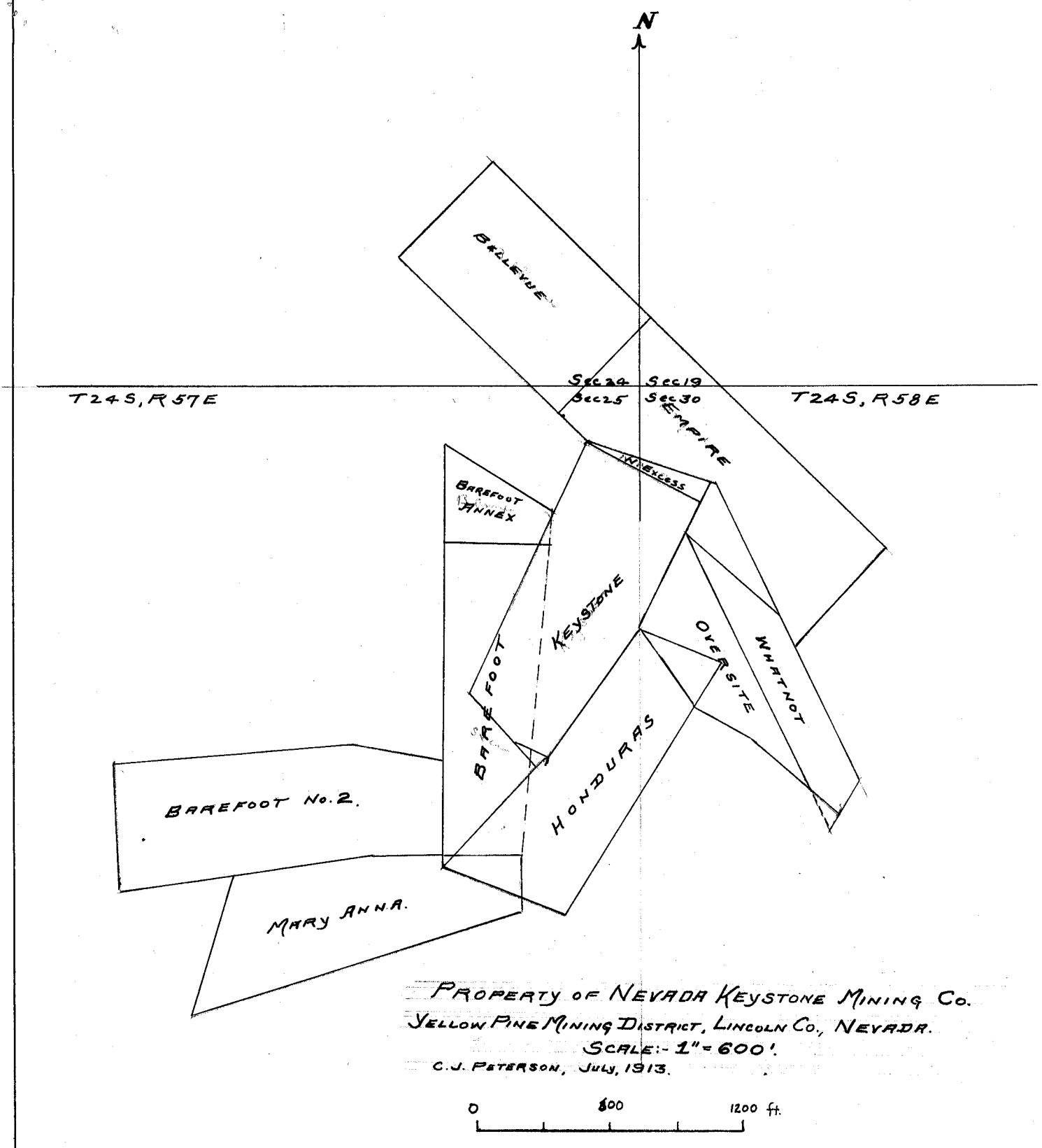
Honduras Claim. Messrs. A. Bias and N. Kuntz at present hold a years lease on the Honduras Claim. Here there is a break in the limestone running about North and South. Here they found a lens containing about 25 tons of lead silver ore. This was from 1' to 2' wide while it lasted. Some of this ore is said to have run $200.- a ton This cleaned out the ore in sight, and they were prospecting in hopes of finding another lens along this break, when the writer left the property.

Assays. Cutting out the two dump samples and sample number 27 which was taken near a stope in addition to containing some ore in the porphyry the average of 37 samples taken is $0.27 Taking the average foot value for samples Nos. 2,3,4,5,13,14,17,31 and 36 which were not in proximity to stopes we have $0.32 Taking the average foot value of Samples Nos.8,, 20, 27, 28, 29, 30,34, and 41 which were in proximity to stopes we have $1.39 per ton.

As can be seen by consulting the maps tonnage in proximity to stopes is a very small proportion of the whole porphyry tonnage. Even if all the porphyry ran $1.39 per ton the value is too low to treat under the conditions. There is no ore in sight on the property and the porphyry is not worthy of consideration.

Clarence J. Peterson

Philadelphia, Pa., July 30, 1913.



PROPERTY OF NEVADA KEYSTONE MINING CO.
YELLOW PINE MINING DISTRICT, LINCOLN CO., NEVADA.
SCALE:- 1" = 600'.
C.J. PETERSON, JULY, 1913.

0 600 1200 ft.

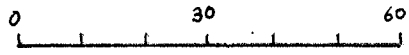
Cross Sections - Main Dump.

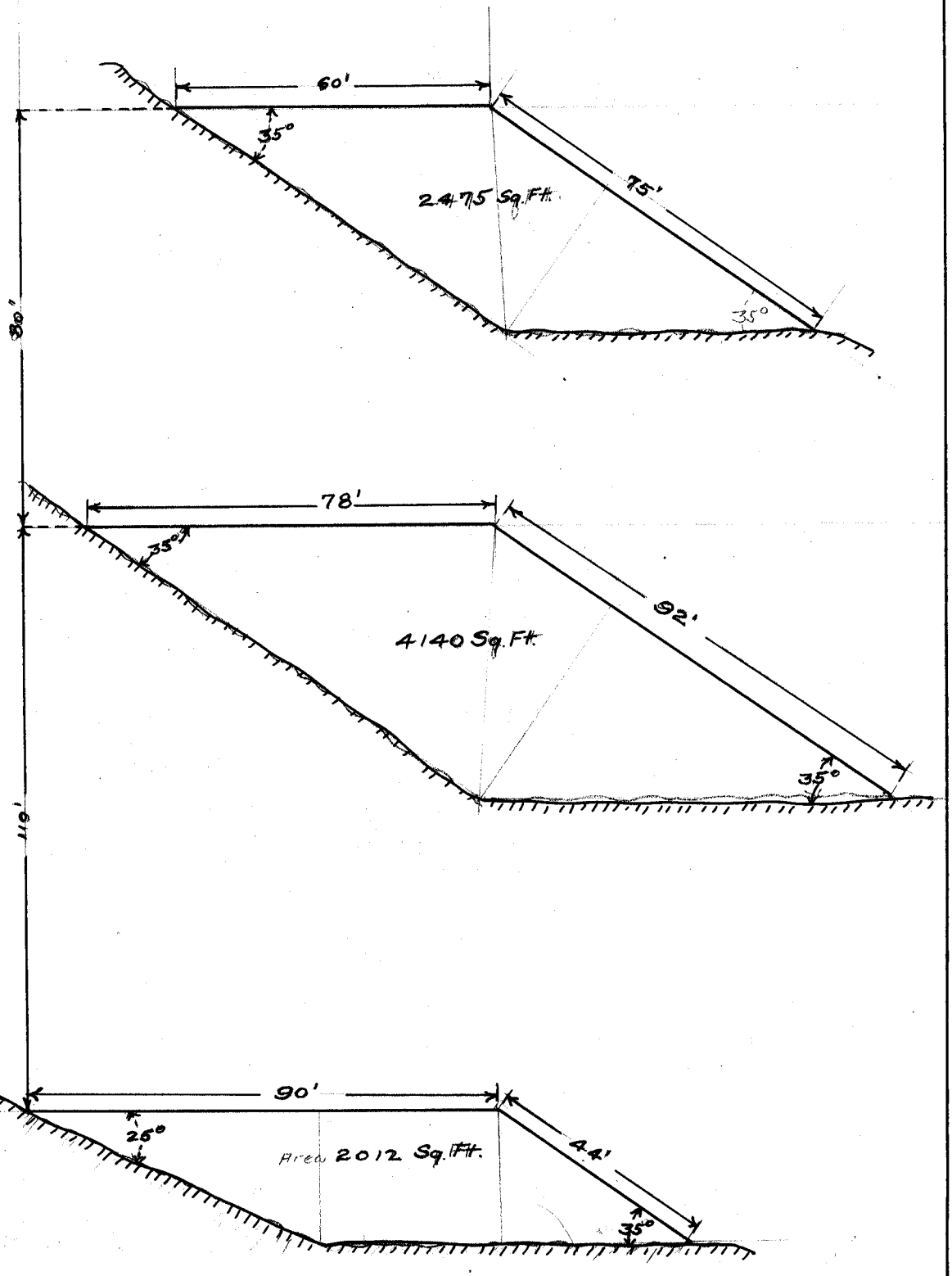
Nevada Keystone Mining Company.

Yellow Pine Mining District, Lincoln Co., Nevada.

Scale:- 1" = 30'.

C. J. Peterson, July - 1913.





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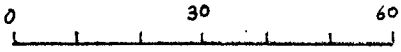

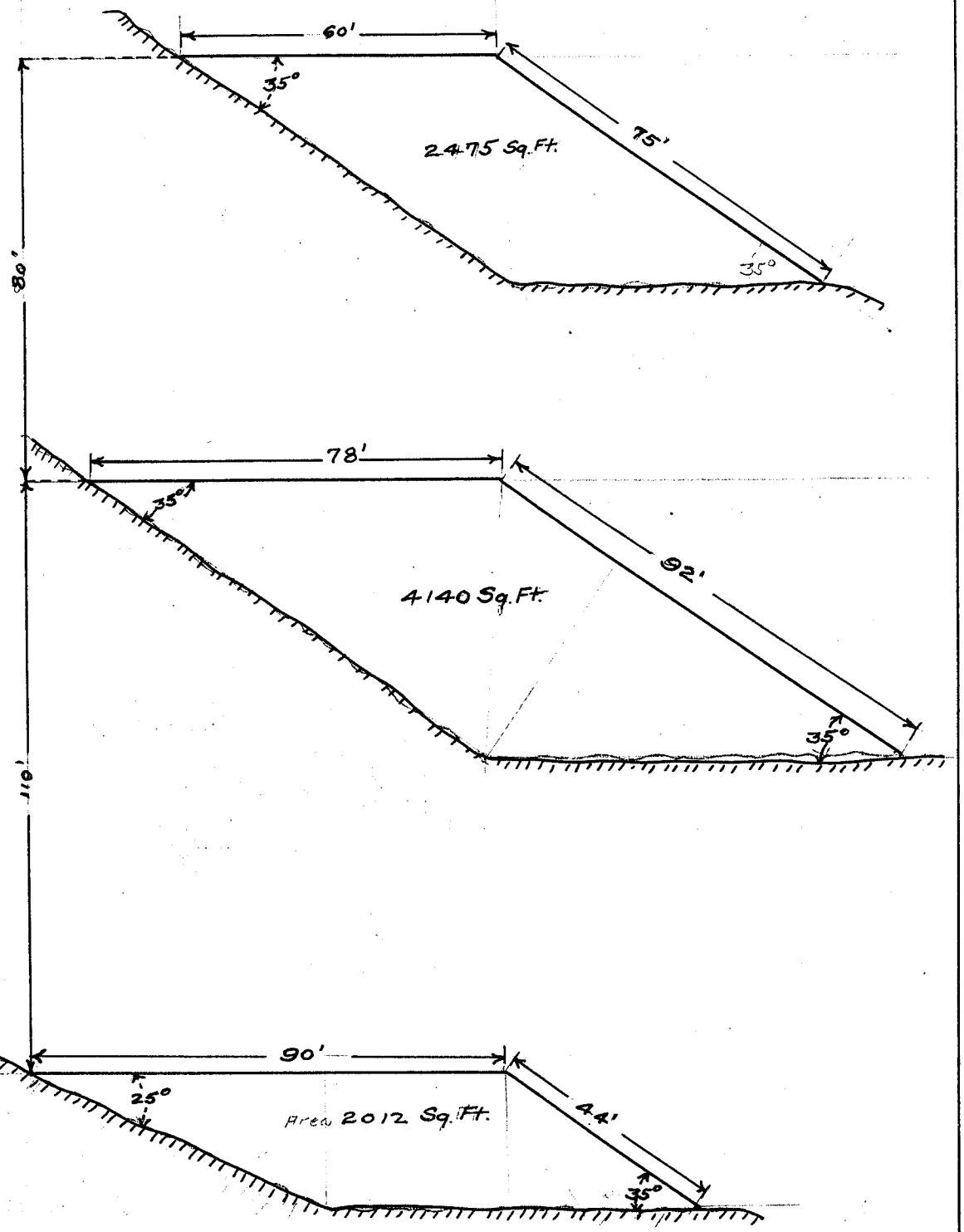

SAMPLES TAKEN BY Clarence J. Peterson.

YELLOW PINE MINING DISTRICT, LINCOLN COUNTY, NEVADA.

NEVADA KEYSTONE MINING COMPANY MINE

DATE July-1913.

Sample No.	Length of Cut. Horiz.	Vert.	Across Slope	Location	Description	Oz. Au.	Oz. Ag.	Value Au.	Value Ag. $	Total Value $
1.				Tailings Dump at Sandy.	General Grab Sample.	0.10	0.1	2.00	.06	2.06
2.	5.0'			670' Level N.- Running W from contact	Dike Porphyry Oxid.	0.02	Tr.	0.40	—	0.40
3			2.0'	S. Face of 600' Level.	" " "	0.02	Tr.	0.40	—	0.40
4.			2.7'	N Wall 1st E-x-cut on 600' Level N.	" " Coarse grained	0.01	Tr.	0.20	—	0.20
5.			4.7'	N. Side Shaft at 600' Level.	" "	0.02	Tr.	0.40	—	0.40
6.			4.8'	Corner 1st E. Raise. 500' Level S.	" "	Tr.	Tr.	—	—	—
7.			3.7'	At 500' Station - S Side Shaft.	" "	Tr.	Tr.	—	—	—
8		6.2'		57' N of Shaft. W side drift at Stope - 500 level	" "	0.02	Tr.	0.40	—	0.40
9.			5.2'	1st W x-c - 5' from face - 400' level N.	" "	Tr.	Tr.	—	—	—
10.		4.2		N End 400' level N. - W Side.	" "	Tr.	Tr.	—	—	—
11.			5.0	1st W x-c S of face - 400' level N.	" "	Tr.	Tr.	—	—	—
12.		5.7		E. Side Main Dft 50' N of Shaft - 400 level N.	" "	Tr.	Tr.	—	—	—
13.			3.2	" " " " 10' " " " " "	" "	0.01	Tr.	0.20	—	0.20
14	2.5			x-c S end 400' Level South. (See Map)	" "	0.02	Tr.	0.40	—	0.40
15.		6.3		Main dft. W. Side - 400 level S 63' S of Shaft	" " Some Fe o.	Tr.	Tr.	—	—	—
16.		7.1		" " E. " 740' level N. at branch x-cs	" " Reddish.	Tr.	Tr.	—	—	—
17.		5.6		" " S. " " " 5' from face	" " "	0.01	Tr.	0.20	—	0.20
18.	10.0			400' level S - S. Side 1st W. x-c (See Map)	" " Grey Silic.	Tr.	Tr.	—	—	—
19	10.0			" " " " " " Running E from face	" " Some Fe o.	Tr.	Tr.	—	—	—
20.			4.0	300' level N - See Sketch.	" " Grey.	0.03	Tr.	0.60	—	0.60
21		4.2		" " " 1st E x-c No. of Old Incline	" Reddish Grey	Tr.	Tr.	—	—	—
22		5.7		" " " " " 18' W of face	" " "	Tr.	Tr.	—	—	—
23.		6.7.		" " " Corner near contact. See Sketch	" " Grey.	Tr.	Tr.	—	—	—
24		5.4		" " " (See Map.)	" " Colored pink by Fe o	Tr.	Tr.	—	—	—
25		4.8		" " S 72' S of Shaft - E side.	" " Grey Sl. Fe stained Seam included.	Tr.	Tr.	—	—	—
26.		6.3		" " " 15' " " " W. "	" " "	Tr.	Tr.	—	—	—
27.	10.0			200' level N. - 1st E x-c (See Map.)	" " Near Stope. Some Fe o in porf.	0.26	0.1	5.20	0.06	5.26
28	10.0			" " " " " (" ")	" No Fe o.	0.03	Tr.	0.60	—	0.60
29.	20.0			" " " " " (" ")	" " " Grey.	0.04	Tr.	0.80	—	0.80
30.	20.0			" " " " " (" ")	" " " (Some Fe o)	0.07	Tr.	1.40	—	1.40
31.	6.5			100' " " N end level - E side.	" Grey.	0.03	Tr.	0.60	—	0.60
32.	6.5			" " " 39' N of Shaft.	" "	Tr.	Tr.	—	—	—
33	10.0			" " S (See Sketch.)	" "	Tr.	Tr.	—	—	—
34			4.3	Main Tunnel Level - S end Near Stope.	" " Oxid.	0.01	Tr.	0.20	—	0.20
35	10.0			" " " x-c W of Shaft. 24' N of Shaft	" " Silic.	Tr.	Tr.	—	—	—
36.			9.2	" " " 207' S of Main x-c (See map)	" " "	0.01	Tr.	0.20	—	0.20
37.				General G.S. - Main Dump.	Lime Stone + Porf. Some Fe o.	0.08	0.1	1.60	0.06	1.66
38.				Duplicate of No. 29.		0.06	Tr.	1.20	—	1.20
39.			3.7.	400' level N. - Near Stope (See Sketch.)	Dike Firphyry - Grey.	0.06	Tr.	1.20	—	1.20
40	10.0			400' " S (" ")	" " " Silic	Tr.	Tr.	—	—	—
41.			3.0.	100' " " (" ")	" " Near Stope.	Tr.	Tr.	—	—	—

NOTE:- In above values

Silver at 60¢ per ounce

Gold " $20.00 " "