

2557

1940
A. W. DAVIS
MINING ENGINEER
914 STANLEY STREET
NELSON, B. C.

016064

March 31st '40

Dear Dr Walker:

A few months ago.
Blaylock told me he wasn't very
optimistic re future of Tungsten^{property};
and again the other day (I am told)
Bessuto, the Bialorne manager,
said he did not think Tungsten
prices would hold up.

With the sources of information
open to you, do you think these
people are right?
What do they think about Tungsten
at Ottawa?

With kindest regards
I remain,

Yours sincerely
A. W. Davis.

DEPT. OF MINES
Rec'd. APR 3 - 1940
Referred to *JW*
Ans'd. _____

2557-40.

April 4, 1940.

A.W. Davis, Esq.,
Mining Engineer,
914 Stanley Street,
Nelson, B.C.

Dear Major Davis:

Tungsten is one of the four metals about which Ottawa was concerned at the beginning of the war. Apparently the United Kingdom is obtaining all the necessary supplies of war metals without any difficulty but if the war should spread to the Pacific, it might be a different matter in respect to tungsten, tin, etc.

As you know, China is the chief source of tungsten, with Burma coming 2nd, and the United States, Bolivia and Portugal poor 3rd, 4th and 5th. Tungsten is a fairly valuable material and is shipped in fairly small lots, especially in wartime, as a full cargo representing say a year's output from Burma, would be worth several million dollars. I understand there is some difficulty in getting tungsten out of China and at the moment most of it is going north through Russia, and some through Indo China. Should the Chinese-Japanese situation clear up and the normal flow of tungsten start again, the price would undoubtedly be affected.

Major A.W.Davis.

4/4/40.

I cannot hazard an opinion at the moment as to the future of tungsten except that it appears to be losing its importance to some extent as a ferro-alloy. This may be the angle from which Blaylock and Bosustow have been looking at the matter. Again I doubt if tungsten will cease to be used or discarded as a ferro-alloy for perhaps quite a long time.

It seems to me that so long as the war lasts, tungsten is likely to hold its price but that when it is over the price will drop back to normal. The situation is - how long will the war last, and at the moment it looks like a fairly long affair.

Tungsten seems to me to be about the next best bet to mercury as a profitable war mineral in British Columbia with the possibility of maintaining production when the show is over, if a worthwhile prospect is developed in the meantime.

Yours very truly,

Deputy Minister of Mines.

JF

Personal

A. W. DAVIS
MINING ENGINEER
914 STANLEY STREET
NELSON, B. C.

150
get a final
with W.C. after
- reading
May 3rd., 1940
Nelson, B.C.,

Dr John F. Walker
Deputy Minister of Mines
Victoria, B.C.,

Dear Doctor Walker;-

I am sending you a copy of my report
on the Red Rose Group (Tungsten), located near Hazelton.

With the prices prevailing for tungsten this looks to me like a very attractive proposition. In 1928 it was my opinion one might get by on the price of \$8 a unit then obtaining. The Consolidated Company, however is very look warm. Diamond has just told me that they dont think much of it; but that they will do a little diamond drilling this summer. Like most scheelite deposits the ore is spotty and I presume if the first hole or two are poor, that will end the matter asfar as they are concerned. There is a payment coming due in the fall which it is also very doubtful that this company will meet. Such being the case, I consider that I should get busy hunting up other parties in the event of the present option being dropped.

I approached Blaylock, in the first place re this mine and he was interested; but everybody under him, was distinctly not from the very first. For instance, Telfer their engineer examined the mine last summer and took the samples indicated as the Trail samples. I got to the camp there a couple of days after him and on my asking him what he thought of the showings, he replied that they would not go 1% WO₃, when as a matter of fact ^{his own samples} they went nearly two and a half times this figure. I am also told that, in his report, he does 'nt like the geology and predicts that the ore wont go down. He apparently thinks that overlying Hazelton formation, which is not favourable for ore, will go down. This is not the case as a certain Doctor, I forget his name, who was at the head of a party of Can. Geological Survey, up there last summer, told me then that the Hazelton Formation was superficial and would undoubtedly be replaced by the diorite at depth.

With vigorous action, some drifting, on the Armagosa side and then a cheap two bucket tram down to the timber there and a 40 to 50 ton mill installed there, on present prices a big clean up should be made here. You have apparently a mercury mine up north now and why not a tungsten one as well.

Perhaps you have contacts which I have not. For instance I would like to see a Vancouver group tackle the thing. I am fed up with the big companies.

A while ago I contacted a certain Donald Fraser of Quesnel, who is connected with a New York company operating a tungsten mine in that area, thinking that this would be a logical outfit to get interested in the Red Rose. His people were not; but this man started trying to peddle the thing all over the country, approaching Bralorne and goodness knows whom else. Fraser has no strings on the thing otherwise than that I gave him an opportunity to dig up some people who would be interested in the event of Trail stepping out.

With kindest regards,

I remain,

Yours sincerely,



A. W. DAVIS

P.S. My terms from original owner are \$35,000, with lots of time except for \$5000 next Sept 1st (which could be extended in event of a new deal). \$100 a month being paid owner. Continuation of this monthly payment will in my opinion hold the thing for a long while.

4401

A. W. DAVIS
MINING ENGINEER
97 1/2 STANLEY STREET
NELSON, B. C.

May 17th., 1940
Nelson, B.C.,

Doctor John F. Walker
Deputy Minister of Mines,
Dept. of Mines,
Victoria, B.C.,

Dear Doctor;-

Yours of 14th to hand.

On the basis of assays and widths, this tungsten is good. The location is tough; but no worse than many a mine in the Slocan for instance. A cheap 2 bucket tram down to the timber, on the Armagosa Creek slope, when conditions warranted it, which would be soon after tackling the thing, is the proper line to take. I say this, as the tram would 'nt cost much and would speed up development. I operated the Molly Gibson Mine once near Nelson, which is in a considerably worse location. At the Red Rose the workings would be up near top of Mountain, with no slides to menace the camp there, while at the Molly Gibson, although the workings were higher up than at the Red Rose, there were a couple of thousand feet of bluffs and menacing snow slides hanging over them.

I turned over the Red Rose to Trail, advancing the price I had from the original owner; but only getting paid out of returns from shipments. In future I would consider turning my option over to responsible people for a stock interest in a company to be formed.

Mrs Sargent thinks well of me and appreciates the efforts I have made to get the property going and I am sure that, if I and a representative of whatever group was tackling the thing, were to visit her next summer, a new deal could be arranged, eliminating this payment due next Sept 1st.

I used to have good judgement and still have in my opinion and with the price one would get for these concentrates, I say this is a good proposition.

By the way, I am told that W.M. Archibald is operating a tungsten mine in Cuba, with a 100 ton mill installed.

Please use my report, when you so desire to show anybody interested.

Yours very truly,

A. W. DAVIS

A. W. Davis

May 14th, 1940.

Major A.W. Davis,
Mining Engineer,
914 Stanley Street,
Nelson, B.C.

Dear Major:

Your letter of the 3rd and copy of your report on the Red Rose, received some time ago. Stevenson has read it carefully and expects to be on the ground early in July.

I may say I have mentioned this property to several people as one of the most promising tungsten deposits in British Columbia. With your permission I would like to show your report to anyone who may be interested as it will be some time before Stevenson's report will be available.

It is too bad that Fraser tried to peddle the property for, though he is quite a decent chap, he is not very well known at the Coast.

Let me know if you have any objections to people seeing your report. In the meantime, kind regards.

Yours very truly,

Deputy Minister of Mines.

JP

5714/40

July 19, 1940

A. W. Davis, Esq.,
Mining Engineer,
914 Stanley Street,
NELSON, B. C.

Dear Mr. Davis:

In the absence of Dr. Walker, who will be away until about the 29th of July, this will acknowledge yours of the 17th regarding the Hazelton Tungsten property.

Dr. Stevenson is in the north and will probably examine this property, but a report will not be available until later on.

Your letter will be put before Dr. Walker as soon as he returns and no doubt he will communicate with you further in this matter.

Yours very truly,

Chief Mining Engineer.

PHF/NS.

2314-40.

March 26th, 1940.

A.W. Davis, Esq.,
Mining Engineer,
914 Stanley Street,
Nelson, B.C.

Dear Major Davis:

Thanks for your letter of the 23rd, enclosing assay plan of the Red Rose Group, near Hazelton, which you promised me some time ago. I am glad to have the plan as I expect we shall be making an examination of the property this coming season.

There is quite a little interest being shown in tungsten, and if the smelters are not going ahead with the property, I do not think you will have much trouble in getting somebody into it this year.

Kind regards.

Yours very truly,

Deputy Minister of Mines.

JP

5714

A. W. DAVIS
MINING ENGINEER

914 STANLEY STREET
NELSON, B. C.

July 17th., 1940
Nelson, B.C.,

Dr John F. Walker,
Deputy Minister of Mines,
Victoria, B.C.,

DEPT. OF MINES
Rec'd. JUL 19 1940
Referred to <u>P. B. F.</u>
Ans'd

Dear Doctor Walker;

I presume ~~your engineer has~~ been or will shortly be at the Hazelton tungsten property, and i will be interested in learning about what he thinks of it.

If Trail continues indifferent and your engineer likes the thing, some other arrangement might be made for carrying on there. Personally I think it is good and would like to make some money out of it. You cannot get around the high price tungsten concentrates are bringing, that is if there be nothing phoney about marketing them. The war is going to last a long time according to Churchill, another favourable factor.

My idea of developing this thing would be to stick in a cheap two bucket tram down to the timber from a point below the north end of the showings. This would speed up development immensely. It might be considered putting the cart before the horse; but the total cost of the operation would be no greater after a reasonable amount of development work had been done and it would, moreover have been done faster.

DEPT. OF MINES
Office of Chief Mining Engineer
Rec'd. JUL 19 1940
Referred to _____
Ans'd. _____

With kindest regards,

i remain,

Yours very truly,

A. W. Davis

A. W. DAVIS

AWD/HL

July 26, 1940.

5714-40

A. W. Davis, Esq.,
Mining Engineer,
914 Stanley Street,
Nelson, B. C.

Dear Major Davis:

Your letter of the 17th has been held for me and there is nothing I can add, at the moment, to Mr. Freeland's reply. Stevenson is busy in the field and we have not heard from him regarding your tungsten property at Hazelton although he has been there.

So far as I know tungsten is one of the ferro-alloy minerals that can be marketed. One of the possible hindrances may be high freight charges, and I am writing to Bateman regarding freight rates, etc., in connection with the development of war minerals in this Province. Bateman, as you know, is Controller of Metals at Ottawa.

In the meantime, kind regards.

Yours very truly,

Deputy Minister of Mines.

DB

0701

**THE CONSOLIDATED MINING AND SMELTING COMPANY
OF CANADA LIMITED**

CABLE ADDRESS
"COMINCO"

7560

DEPT. OF MINES
Office of Chief Mining Engineer

Rec'd. SEP 28 1940

Referred to.....
Ans'd.

Trail, B. C.,
September 25, 1940.

Dr. John S. Stephenson,
Office of Chief Mining Engineer,
Victoria, B. C.

Re: Red Rose Group
Rocher de Boule Mt.

DEPT. OF MINES

Rec'd SEP 28 1940

Referred to *MBF*
Ans'd.....

Dear Sir:

We drilled twelve holes on this property, totalling about 1800 feet. These holes were drilled to cut the vein at depths of 100 and 200 feet.

The following intersections carried tungsten values:

Hole	Depth	Width	ASSAY Gold oz.	WO3 %
6	154 - 155	1.0 Ft.	Tr.	0.9
7	127.5 - 129.5	2.0 "	0.53	1.15
8	112 - 116	4.0 "	Tr.	1.23

I am enclosing herewith plan showing location of the various holes.

I do not think that any specific information regarding the drilling should be published without the consent of the owner, Mrs. Barbara Sargent, South Hazelton, B. C.

We are abandoning our option on the property.

Yours truly,

Geoff. Kilburn

G. H. Kilburn
MINES DEPARTMENT

GHK/MA
Enc.

20
2 20
23.02

1941

767. DAVIS
MINING ENGINEER
914 STANLEY STREET
NELSON, B. C.

Jany 14th., 1941
Nelson, B.C.,

Dr John F. Walker
Deputy Minister of Mines for B.C.,
Ottawa,

Dear Doctor Walker;-

I was told today that the Dominion Government was putting up \$10,000 to help Regal Silver Mines Ltd at Revelstoke, develop it's tungsten deposit there. This is probably an exaggeration; but, if tungsten is in great demand, I dont see why this Red Rose property at Hazelton should not receive some more attention. As you know the surface showing is good, 2.4% ^{W03} across 4 ft indicated for 400 feet along the vein. Trail drilled 12 holes last summer, only six of them in the main diorite formation. The other six are in the quartzites (Hazelton Series) and a mixture of them and diorite dykes. These last six dont count. On the surface the tungsten values, ^{play out} once the vein leaves the diorite and gets into the Hazelton rocks, and no doubt will, underground.

Of the six holes in the diorite, two prospect the vein at the 100 ft horizon below the surface. One of them shows a trace of W03 for 19 ft.; the other, 5 ft of sludge going 0.33% W03. On the 300 ft horizon, the four remaining holes go as follows;- 1 ft 0.9% W03; 2 ft 1.15% W03; 4 ft 1.23% W03; 2 ft 0.20% W03. About 2 inches of the vein are cross-cut on the 100 ft horizon and 4 inches on the 300. Tungsten ores are notoriously erratic and I will wager that there is a good chance of a drift on the 300 level showing as good values as those exposed on the surface.

The head of a Canadian Geological Survey party at Hazelton, two years ago, told me that the Hazelton Series of rocks was a roof pendant, with diorite the prevailing rock as depth was attained. Therefore one can expect the length of the ore shoot to increase as you go down on it.

A 200 ft crosscut and then say 400 ft of drifting on the 300 ft horizon will test out this property thoroughly. The mouth of this crosscut on the 300 ft level would be on a hog back extending to the timber below, safe from snow slides and, with ore enough developed to justify it, putting this property in the producing class would be easy, with less than a mile of aerial tramway involved.

I have cross sections, assay map and a report going into some detail on the situation, available if necessary. Can you get any action back there

Yours very truly,

AWD/MD

A.W. DAVIS

A.W. Davis

July 5th 1941
914 Stanley St.
Nelson B.C.

Dear Doctor Walker,

You never answered
my letter of July 14th last
addressed to you at Ottawa,
re that Hazelton tungsten.

Mrs Sargent of
Hazelton, the owner, is prepared
to go ahead at her own
expense with the formation
of a public company & sell
stock, if she can, to raise
money enough to do the
fairly limited amount

This, if she cannot get
any action elsewhere →

²
if underground work
needed to either make or
break the thing.

she should get a good deal
from the Government, if she
has to go to this length to
get the property tried out.

Do they really want
tungsten very badly? I see
articles in the papers occasion-
ally saying its production
is vital to the country.

With kindest regards,

I remain
Yours very truly

All Davis.

February 7, 1941.

Major A.W. Davis,
Mining Engineer,
914 Stanley Street,
Nelson, B.C.

Dear Major:

I received your letter of January 14th when in Ottawa but did not reply to you at the time as I was extremely busy and was only able to check up on Regal Silver the last day I was there. No one around the Department of Mines and Resources in Ottawa knows of any assistance having been granted to the Regal Silver property other than that granted to any mining company through experimenting with their ores in the Ore Dressing Laboratories.

To date the Government has not gone into the mining business and I do not see any immediate possibility of it doing so. Both the Federal and Provincial Governments are averse to entering the mining game except through providing fundamental scientific information.

Our report on tungsten will be coming out shortly and it may create some interest in the Red Rose, which we look upon as one of the most promising tungsten showings in the Province. Stevenson I believe is still of the opinion that the property has chances and that the work done last summer was inconclusive.

Yours very truly,

Deputy Minister of Mines.

JP

THE RED ROSE MINE (TUNGSTEN)

HAZELTON, B.C.

March 17, 1941
Nelson, B.C.

The Red Rose Group (Tungsten) near Hazelton, B.C. was staked in early days. Considered originally as a gold property, several hundred feet of drifting was done; but the values, while high, were extremely erratic. Only in recent years have the tungsten possibilities of the property been taken into consideration.

The vein crosses a summit, with an elevation of a little over 6,000 feet above sea level and in this area, for a distance of about 400 feet along the strike and considerably to the north of where the old workings are located, some outstanding exposures of tungsten ore can be seen. Where the ore shoot occurs, the country rock is diorite. It is therefore a typical scheelite deposit, such as have been opened up in several of the western States, with good chances for going down. Where the vein, leaving the diorite, penetrates the adjoining Hazelton sedimentaries, the values play out. This latter formation is a roof pendant (on the best of authority, the Canadian Geological Survey) and will disappear at depth. At the most northerly cut about 50 feet or more vertically below the main outcrop exposed at the summit and not 100 feet away, horizontally, the vein assays 3.6% WO₃ across 5 feet. Further to the north, slide rock prevents an examination of the surface. At the summit where the vein is exposed for about 45 feet along the strike, the following assays were obtained :-

4.3 feet	-	3.28% WO ₃	5.1 feet	-	1.26% WO ₃
4.0 feet	-	1.46% WO ₃	5.0 feet	-	2.15% WO ₃
3 feet	-	5.30% WO ₃	6 feet	-	trace WO ₃

Still further to the south at a cut, 4 feet ran 1.2% WO₃.

The dump here, representing everything taken out of the cut, ran 0.54% WO₃. At another cut, some 100 feet further to the south the vein across 2.5 feet ran 1.6% WO₃. The whole dump from this cut ran 5.5% WO₃. The distance between this last cut and the first mentioned is nearly 400 feet. Loose slide rock makes it impossible to sample elsewhere than at the points specified above, which were not picked out as being where the best showing occurred.

Last year the property was drilled. Two holes penetrated the vein within the limits of the 400 ft. ore shoot at about the 100 ft. horizon, below the outcrop. One showed a trace of WO₃ for 19 feet. The other showed nothing in the core; but 0.33% WO₃ in the sludge where the vein was encountered. At a deeper horizon, over 250 feet from the surface, 4 holes prospected the vein. They ran: 1.0 feet, 0.9% WO₃, 2 ft. 1.1% WO₃, 4 feet, 1.23% WO₃, 2 feet 0.2% WO₃.

The vein with a dip of about 60 degrees, as traced by these holes approximates in strike that showing on the surface. 6 other holes, prospecting the vein beyond the area, described here were in the Hazelton Formation, and showed no values.

In the writer's opinion, owing to the erratic nature of the ore, if, say, a drift were in existence where these 4 holes cut the vein in this lower horizon, channel samples every 3 feet apart, or around 130 samples in all, supplemented by sampling of the broken ore as it came out, would be necessary in order to arrive at some idea as to values. Assuming the above to be correct, all the drilling tells you, is that there is tungsten as far down as the prospecting has gone.

To develop the mine a 200 feet crosscut is necessary at about the elevation these four holes are on. The mouth of this working will be on a hog back from which an aerial tram can reach the timber safely. This is the speediest way to open up the mine. With more limited funds a drift can be started on the vein somewhere below the most northerly cut, with the idea of making the thing look so good that it would get the attention it would then deserve.

According to Ottawa the Atlas Steel company of Welland, Ontario is paying \$1,200.00 a ton for 70% WO₃ concentrate. (Pure scheelite is 80.5% WO₃.) There is only a limited consumption here so far. The main market would appear to be in the United States where \$25.00 a unit is paid for 60% concentrates. This means \$1500.00 a ton. Taking off the duty of \$7.93 a unit brings the returns to a Canadian shipper about what they are, shipping to Welland.

The Department of Mines, Ottawa, estimates that, for a large deposit, well situated, a grade of 0.5% WO₃ ore is commercial and that 1.0% ore is needed where the occurrence is small and hard to get at. The Red Rose is in a tough location, above timberline and with some snow slides to consider. If, however, preliminary development were successful, an aerial tramway less than a mile long would connect the mine with a mill site in the timber. This point would be about 13 miles by road (mostly constructed now) from Skeena Crossing Station, a few miles west of Hazelton, on the Canadian National Railway.

It is the opinion of the writer, that, properly developed, and with a mill on the ground, this property, could still be operated profitably, when post war prices for Tungsten prevail.

The mainsource of supply of Tungsten for the United States is China, now in the throes of war. Troubled sea communications complicate things still further. It would there-

Later information would indicate not necessary to ship to States

fore appear sound to increase the domestic supply. One reads in the papers of how vital these war metals are, and prospectors are urged to hunt for them. Here is one deposit of tungsten already found, which would seem worthy of considerable attention.

Alv. Dawson

1941

Office of Chief Mining Engineer

Rec'd. MAR 27 1941

A. W. DAVIS
MINING ENGINEER
914 STANLEY STREET
NELSON, B. C.

Referred to.....
Ans'd.

1793

Dr J.F.Walker
Deputy Minister of Mines
Victoria, B.C.,

DEPT. OF MINES
March 24th., 1941
Nelson, B.C.,

Rec'd. MAR 27 1941
Referred to *6037-1990*
Ans'd.

Dear Sir;-

I have just received the "TUNGSTEN Bulletin, and am greatly surprised at, what I consider, the unfair way the Red Rose property at Hazelton is treated. In fact it may work seriously against my plans there.

Mr Stevenson, in a paragraph starting at the bottom of page 46, in describing the rib like outcrop exposed for 45 feet in this area ~~six six six six six six six six six six~~ states that a few scattered blades of ferberite were seen at the south east end of this outcrop, with width 1/2 an inch to 2 inches and traced for 3 feet before dying out. I enclose copy of the Trail assy map covering this same particular area, which tells an altogether different story, with seven samples averaging over 2.5% WO3, across good mining widths. I enclose copy of the Trail map and you can no doubt get original print if you want to. Again in the second paragraph, page 47 he dismisses No 5 working, the last to the north west, with the fact that the cut was full of snow driven presumedly along the vein. Here the Consolidated got 3.6% WO3 across 5.1 feet. This cut is about 50 feet to the north of the 45 ft exposure described above. A little snow shoveling, involving a slight pause in his scamper over the mountain, would have been a good thing here.

My original sampling in 1928 was checked by Trail in no uncertain way, 11 years later. With findings such as those of Mr Stevenson it is obvious that the diamond drill campaign, afterwards carried through with, would never have been started.

I have started out to get some action on this property and in spite of all rebuffs propose going ahead. Will you publish a supplementary sheet to this tungsten bulletin, giving the Trail assays? By your engineer taking no average samples; but simply depending on his eye as to whether tungsten was in existance in certain cuts or not, he has given this property an unjustifiable black eye and one which should be corrected.

On the question of time I would prefer a newspaper article as well

I remain,

Yours very truly,

AWDOM

A.W.DAVIS

The Train (Stevenson gets nothing here)
assays
all



Other cuts beyond here showing good values
all

covered with slide rock

outcrops
the vein outcrops here for somewhat longer distance than the 40' Stevenson Specimen
all.

North

Red Rose

1" = 30'

SAMPLING RECORD

<u>CUT</u>	<u>DAVIS</u> <u>1928 sampling</u>	<u>STEVENSON</u> in his Bulletin No. 10 <u>Tungsten Deposits of B.C.</u>	<u>C. M. & S. Company</u> <u>1939 Sampling.</u>																
1	Whole dump everything excavated. 4.2% W03.	18" width of vein quartz to be seen. Study of vein matter in dump shows considerable scheelite and ferberite. A selected sample ran 22.2% W03.	Across 4 ft. ^{1.60%} 1.45% W03 Dump 5.6% W03																
2 & 3	Not in existence in 1928.	Only dirt to be seen, did not reach solid rock.	This company made these cuts, but did not reach bed rock.																
4	Across 3.5 feet 8.3% W03.	Vein 3 feet wide. No mineralization other than quartz to be seen.	Across 4 feet. 1.2% W03 Dump ^{0.54%} 0.4% W03																
The 45' exposure	At southerly end, face sample, vein badly broken up. 1.9% W03. Near north end of exposure, 4.0 ft. 4.6% W03	The vein matter 6 to 10 ft in width and consists of quartz with small amounts of chalcopryite, ferberite and scheelite. A few scattered blades of ferberite only were seen at the south east end of this outcrop. Scheelite was observed only at the north west end of the outcrop, where it occurred as an indefinite streak of 1/2 inch crystals in solid vein matter, lying close to and paralleling the footwall of the vein. This streak ranged from 1/2 inch to 2 inches in width and could be traced for approximately 3 ft before dying out.	Samples along exposure from south to north in 3 cross sections. <table border="1"> <thead> <tr> <th><u>Width</u></th> <th><u>Value</u></th> </tr> </thead> <tbody> <tr> <td>Across 6 ft.</td> <td>Trace</td> </tr> <tr> <td>" 4 ft.</td> <td>3.4% W03</td> </tr> <tr> <td>" 5 ft.</td> <td>3.4% W03</td> </tr> <tr> <td>" 3 ft.</td> <td>5.3% W03</td> </tr> <tr> <td>" 5 ft.</td> <td>1.5% W03</td> </tr> <tr> <td>" 4 ft.</td> <td>4.6% W03</td> </tr> <tr> <td>" 5.1 ft.</td> <td>2.6% W03</td> </tr> </tbody> </table>	<u>Width</u>	<u>Value</u>	Across 6 ft.	Trace	" 4 ft.	3.4% W03	" 5 ft.	3.4% W03	" 3 ft.	5.3% W03	" 5 ft.	1.5% W03	" 4 ft.	4.6% W03	" 5.1 ft.	2.6% W03
<u>Width</u>	<u>Value</u>																		
Across 6 ft.	Trace																		
" 4 ft.	3.4% W03																		
" 5 ft.	3.4% W03																		
" 3 ft.	5.3% W03																		
" 5 ft.	1.5% W03																		
" 4 ft.	4.6% W03																		
" 5.1 ft.	2.6% W03																		
5.	Not in existence in 1928.	Stevenson could not see owing to snow.	Across 5 ft. 3.6% W03																

NOTES: That the only points where vein can be examined are where the samples were taken, loose rock and debris everywhere else. There is no question about the cuts as indicated by Stevenson being the same as those sampled by the C. M. & S. Company and myself.
From U.S. Geol. Survey data to hand, deposits of this type show erratic distribution of the ore. In a drift the face is good one day and poor the next. Dump or bulk sampling is the best.

Nelson, B. C.

March 25th., 1941.

Al Davis

1793-41.

March 28, 1941.

A.W. Davis, Esq.,
Mining Engineer,
914 Stanley St.,
Nelson, B.C.

Dear Sir:

In reply to your letter of the 24th, I have only this to say: that anyone familiar with the habit of scheelite and ferberite will place more confidence in an adequate geological description of the occurrence than in the quotation of a few high-grade assays.

Stevenson's report deals generously with the property and certainly anyone who can intelligently read a geological report does not damn it.

I am sorry to see you take such an attitude regarding this matter, in which we have gone out of our way to interest people.

Yours very truly,

Deputy Minister of Mines.

JP

1941

1880

A. W. DAVIS
MINING ENGINEER
914 STANLEY STREET
NELSON, B. C.

March 28th., 1941
Nelson, B.C.,

Dr John F. Walker,
Deputy Minister of Mines,
Department of Mines,
Victoria, B.C.,

Dear Dr Walker,

DEPT. OF MINES
Rec'd. MAR 31 1941
Referred to ROSE, TUNGSTEN,
Ans'd.

Herewith enclosed is sheet showing comparison of sampling results at the Red Rose. I also enclose copies of two letters from the Dept. of Mines, Ottawa, one from the Atlas Steel Company, Welland and a brief report on the mine by me.

Indicated is a strong tungsten showing, along with every evidence of being able to dispose of the concentrates in Canada, at a high figure. According to Ottawa, the Atlas Company must be buying practically all of it's tungsten in the States; so here would be a chance for the country to conserve foreign exchange, equally well with that obtained by producing more gold.

Our aims are the formation of a public company. With enough money raised, vigorous development work might make the mine ready for a mill before very long. Without only a small amount raised however it might be necessary to drive a shallow drift first in order to demonstrate possibilities of the property first. At the back of my head has been the idea that, at any time, with the development favourable, we might turn over the thing to some strong financial group or company, who would step on the development and get into production quickly. You can realize then how this bulletin effects us, a publication which would undoubtedly be read by any interested parties.

You have a new mercury producer in the Province and I gather that the Pioneer is working on an antimony property; how nicely then would the production of tungsten fit into the picture of the development of new minerals in the Province of British Columbia.

I remain,

Yours very truly,

A.W.DAVIS

DEPT. OF MINES
Office of Chief Mining Engineer
Rec'd. MAR 31 1941
Referred to.....
Ans'd.

1880/41.

March 31st, 1941.

A.W. Davis, Esq.,
Mining Engineer,
914 Stanley Street,
Nelson, B.C.

Dear Mr. Davis:

This will acknowledge and thank you for yours of the 28th, enclosing a sheet showing comparative sampling results of the Red Rose, and also your suggestions regarding the development of the property.

No doubt you have received my communication of recent date.

Yours very truly,

Deputy Minister of Mines.

PBF/HG.

1941

A. W. DAVIS
MINING ENGINEER

March 31st., 1941

914 STANLEY STREET
NELSON, B.C.

Nelson, B.C.,

1950

DEPT. OF MINES

Dr John F. Walker,
Deputy Minister of Mines,
Department of Mines,
Victoria, B.C.,
Chief Mining Engineer

Rec'd. APR 3 1941

Referred to

Ans'd.

Rec'd. APR 3 1941

Referred to

Ans'd.

Dear Sir:-

I have done a lot of scouting and looking for property in my time, being employed for years by the C.M. & S.Co., along those lines. I was also engaged for two years, not so long ago, by the Whitney Interests of New York, on the same class of work. I have also operated many mines. I therefore consider that my opinion is worth something in regard to the matter we are discussing.

If, for example, I were sent out by some company to look for tungsten, in this Province, I would, as a preliminary, secure this widely advertised Tungsten Bulletin. I would read that part of it pertaining to the Red Rose Mine and, unless I had other evidence to hand, would never dream of going near the place. I don't question the accuracy of the geological information conveyed therein; but the average operator (or company) is not satisfied with that alone. He wants to know if there are any decent exposures of tungsten to be seen and the Stevenson report says that there are not, whereas there most definitely are.

Using Stevenson's numbering of the cuts, he says: "18 inches of vein quartz to be seen at cut 1. He apparently saw no other mineral in place. Here Trail got 1.5% WO3 across 4 feet. He concedes considerable tungsten in the dump from this cut (Trail shows this dump running 5.5% WO3 and I, 4.2% WO3). At the next cut where the vein can be seen, cut 4, he says "vein 8 ft wide, no other mineralization than quartz to be seen". At this point I got 8.3% WO3 across 3.5 ft and Trail 1.2% across 4 ft. Coming next to the point where the vein outcrops and is exposed along the surface for 45 ft or more, Stevenson says that a few scattered blades of ferberite can be seen at the south east end of this outcrop and that scheelite was observed only at the north west end of the outcrop, where an inch and a half streak can be traced for 3 feet before playing out. In this same 45 ft length of vein, Trail took seven samples, all across good mining widths and all showing tungsten. Averaging them all up gives 2.9% WO3 across 4.5 feet, an altogether different picture from that given in the Bulletin.

The "few high grade samples" you refer to as not meaning anything, were not picked specimens of high grade ore to make the thing look good; but average samples, taken

mostly by Trail to satisfy themselves that the showings were good enough to justify a drilling campaign.

The geology of a property may be wonderful; but, if at the same time you say that there is practically no tungsten along the outcrop, who is going to be interested to the extent of even making an examination? The finest geological situation in the world does not interest hard boiled operators or companies, unless connected with a decent showing of ore as well, especially in a new country with no other developed properties around from which to draw inferences.

Your angle and mine are apparently poles apart and I have expressed my opinions exactly as see them, but at the same time I must thank you for having, as you see it, gone out of your way to create interest in the property.

I remain,

Yours very truly,



A.W.DAVIS

AWD/OM

Memorandum and Estimate of Cost
of Development Campaign
RED ROSE MINE, HAZELTON
B.C.,

April 14th., 1941
Nelson, B.C.

With very limited funds, a drift south from near the most northerly cut would be in ore from the start and would probably make the thing look good enough to permit of the raising of further funds. However, with a view to speeding up matters and sidestepping this preliminary campaign, a 200 ft crosscut from the hog back shown on the map, would reach the vein at about the horizon prospected by the lower row of four diamond drill holes; that is nearly 300 feet down the dip of the vein from the outcrop. With no diamond drilling done, this would be too big a jump; but with the tungsten definitely indicated along with the vein at this level, it is sound enough.

The work recommended then is 200 feet of crosscutting, around 400 feet of drifting, a 250 ft raise and, say, 250 feet of intermediate drifting. 1100 feet of work in all would therefore open up this ground sufficiently to start construction of tram and mill if the vein underground, even approximated the surface showings in tungsten values.

The cost of this campaign I estimate below; -

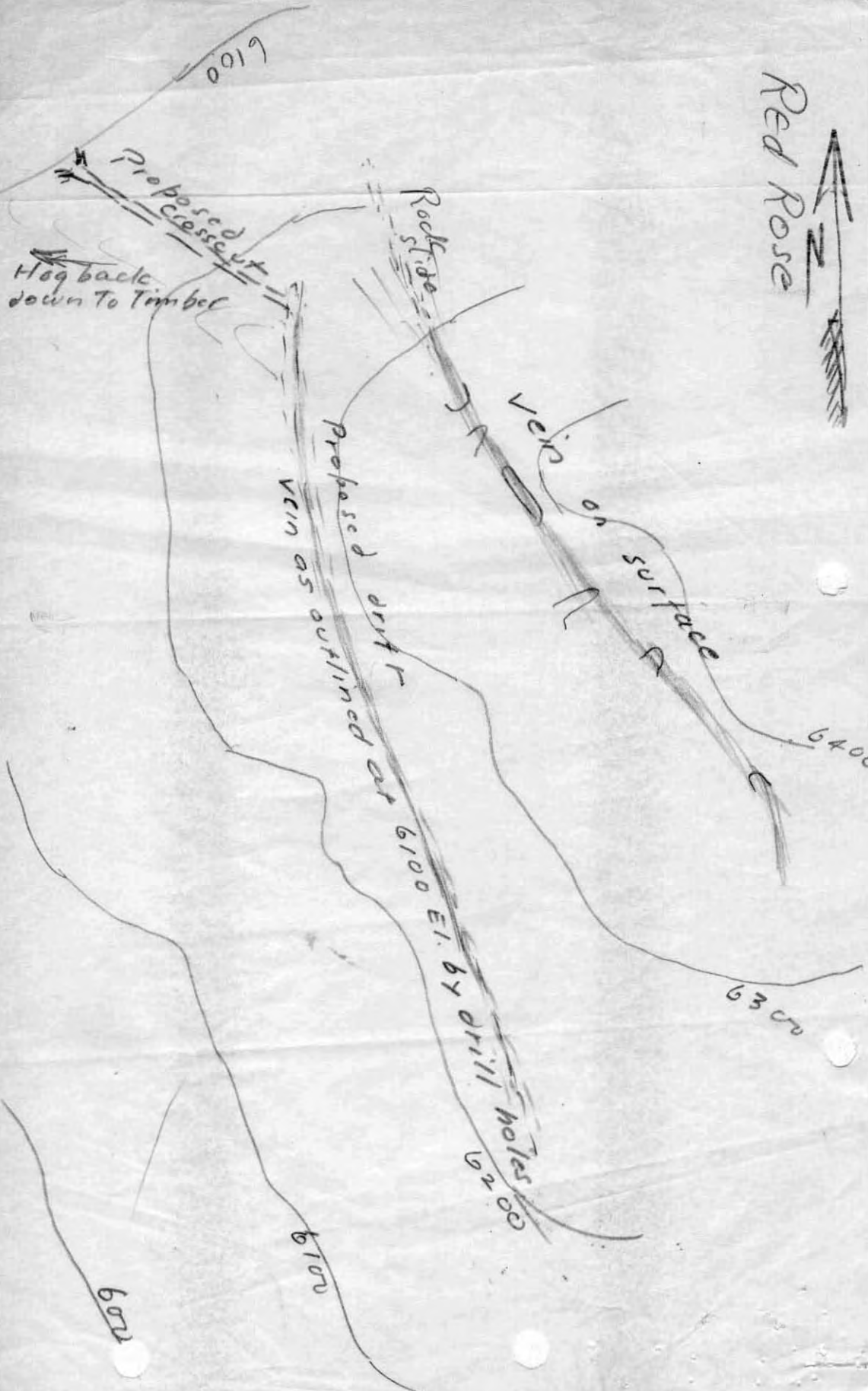
Trail construction	\$500-
Camp (semi permanent) and camp equipment	1000
6 months rent portable compressor	500
Steel, pipe, steel sharpening outfit (No sharpener bought)	
car, rails, drill, bar, tank, and some spare parts	1600
1100 feet of work at \$12	13200
Contingencies	1000
Total amount	\$17800

If compressor purchased, total cost would be around \$20,000.

ix The total area of vein opened up by this campaign would be say 400 ft by 250 ft, or 100,000 square feet. Figuring on an average width of 4 feet and on 12 cubic feet to the ton, about 35,000 tons are indicated above the tunnel level. This is all conjecture of course; but leaving out, say, possible poorer areas in the vein and assuming 20,000 tons of ore in this area and that the grade is 1.5% WO₃, or considerably less than where exposed on the surface, the following estimate can be made; To produce 65% concentrates from 1.5% ore the ratio of concentration is about 44 to 1 and something over a 50 ton mill would be needed to produce 1 ton a day of concentrates. These concentrates would be worth about \$1200 a ton. In one month the returns would approximate \$36,000. The cost of the operation for the same time would be about \$15,000. The operating profit around \$20,000. The operation would be good for a year. If conditions were favourable in the bottom level, a still lower level would have been started simultaneously with the mill. The actual picture might be better than that given above or, on the other hand, worse; but the initial campaign, as indicated above, would not be expensive and look at the prize in view if it succeeded. Atlas Steel of Welland can and would take the whole mine production and there is a good market in the States for good measure. The cry now is "conserve foreign exchange". Atlas Steel is now buying it's tungsten in the States and, if it met it's requirements in Canada, what a saving there would be there.

Al Davis

Red Rose



6100

Proposed crosscut

Hog back down to timber

Rock slide

Proposed drift vein as outlined at 6100 E.L. by drill holes 00' and 6200

Proposed surface vein

6200

6400

6300

6100

6000

1941

2245 COPY

DEPT. OF MINES
Rec'd. APR 15 1941
Referred to... <i>J.F.C.</i>
Ans'd.
April 4th., 1941

ATLAS STEEL LTD.,

Welland, Ont.,

Mr A.W. Davis, Mining Engineer,
914 Stanley Street,
Nelson, B.C.,

Dear Sir;

We have to acknowledge your letter of March 24th in regard to the progress you are making on your tungsten property and trust that you are successful in developing this further.

We regret to advise you that we would not be interested in receiving a sample of the ore as it would be of no use to us, but when you are in a position to supply us with concentrates containing not less than 65% WO3 and reasonably free from other impurities, we would be glad to receive samples from you.

Thanking you, we are

Yours very truly,

ATLAS STEEL LTD.

Signed C.H. Randall,
Purchasing Agent

CRR:MS

1941

A. W. DAVIS
MINING ENGINEER
914 STANLEY STREET
NELSON, B. C.

April 7th., 1941
Nelson, B.C.,

2216

Dr John F. Walker,
Deputy Minister of Mines,
Victoria, B.C.,

DEP'T. OF MINES
Rec'd. APR 10 1941
Referred to <u>JWD</u>
Ans'd. _____

X

Dear Sir;-

I enclose letter just received from Philipp Bros Inc. of New York the big buyers of tungsten and other metals.

No matter how quickly we clean up on the Germans this big U.S., British construction campaign will be going on for several years and it will be a great pity if we cannot get some quick action on this Red Rose tungsten.

With money enough I would drag a portable compressor up there and probably have enough underground work done before next winter to justify a small mill.

Atlas Steel at Welland must be spending around half a million a year in importing tungsten and with this material produced in the country, what a lot of foreign exchange would be saved.

Although you and I don't see alike on certain matters, there is no reason why there should be any hard feeling about the matter. You have been very candid and so have I. The main thing, as I take it is to help out our war effort and I am sure the Department of Mines is doing all it can in that respect as it sees things.

I don't care what you say about the showings as long as I got the money. That is the main idea.

Yours very truly,

A. W. Davis

A.W. DAVIS

AWD/OM

COPY

Philipp Bros Inc.,

April 3rd., 1941

70 Pine Street,
New York

A.W. Davis, Mining Engineer,
914 Stanley Street,
Nelson, B.C.,

X

Dear Sir;-

Replying to your letter of March 26th, we wish to advise that we certainly are interested in purchasing scheelite concentrates, but, before quoting any price to you, we would have to know the quantities involved as well as the assay of this material.

Please let us know either the point of shipment or else your price on a delivered New York basis.

Yours very truly,

Philipp Bros Inc.,

M.R.F.:MB

AIRMAIL

April 22, 1941.

1950-41.
2216-41.
2245-41.
2338-41.

A.W. Davis, Esq.,
914 Stanley St.,
Nelson, B.C.

Dear Sir:

In the absence of Dr. J.F. Walker, Deputy Minister of Mines, I beg to acknowledge receipt of your letters of March 31st, April 7th, 14th, and copy of letter to you from the Atlas Steels Ltd., dated the 4th, regarding your tungsten property. Same will be placed before Dr. Walker on his return to the City, in about one week's time.

Yours faithfully,

Chief Gold Commissioner.

JP

May 1, 1941.

A.W. Davis, Esq.,
914 Stanley St.,
Nelson, B.C.

Dear Major Davis:

I regret the delay in replying to your letters of March 31, April 7th and 14th, but have been away from the office a good deal of late and consequently am behind in my correspondence.

I have discussed your scheme of development with Dr. Stevenson and he agrees it is the only way to tackle the property. The only question he raises is whether or not one wants to take as big a bite down the dip or to take a smaller bite with shorter crosscut.

If funds are available I rather think the bigger bite is the better gamble, though the smaller one might be safer.

Stevenson suggests if you get started on the property you either purchase an ultra-violet lamp or borrow one from Smelters, who have a number of them. We have done enough work with the ultra-violet lamp to feel that it is indispensable in any development or mining work on a scheelite property.

I am aware that Atlas Steel Limited will buy clean scheelite concentrates but will not help finance any mining venture. We approached them over a year ago for information in that respect.

Travis's correspondence:

The projected plan of development is perhaps a little ambitious.

Other than this, no further comments about the letter other than those already made in my memo to Mr. Freeman dated

Mar 27/41

J. H.

December 17, 1942.

TUNGSTEN

The Red Rose tungsten property, near Hazelton, has been in production for about a year and recently capacity has been increased.

The Emerald tungsten property will be in production next spring. It is the most important tungsten property in North America. The presence of tungsten in this property was discovered by the Department and we have been instrumental in furthering its development. The Dominion Government has taken over and is operating this property.

The Department has discovered tungsten in a number of properties, and this autumn an important discovery was made by a prospector who had been employed as a packer on one of our parties. This discovery would not have been made had we not had a party in the area as the presence of tungsten was previously unknown.

There are about three or four really interesting tungsten prospects, two of which perhaps may become producers.

WESTERN TUNGSTEN COPPER MINES LTD. (N.P.L.)

SUITE 2, 505 DUNSMUIR STREET
VANCOUVER 2, B. C.

February 10th, 1955.

DEPT. OF MINE		
REC'D. FEB 11 1955		
LAT. & LONG.		
TOP. MAP REF.		
FILE DESIGNATION		
X-REF.		

Mr. A. Sutherland Brown,
B.C. Department of Mines,
VICTORIA, B.C.

2341

Dear Atholl,

In answer to your letter, I am enclosing a sketch of the geology of the lower levels. No doubt the major portion of this is your work, but Ted continued on from where you left off.

My principles feel they cannot disclose ore reserves or assay plans, so unfortunately I cannot send them. You will be able to see the picture fairly clearly from the geology anyway.

Mining methods are straight shrinkage stopes, timbered where necessary when being mined, with further timbering when the ore is drawn.

The production during 1954 was:
29,642 tons milled.

1.45% WO₃ Assayed Head
1.34% " Calculated Head
0.48% " Tails

Concentrates

High Grade -	272 tons 75.5% WO ₃
Magnetic Rejects -	97 tons 31.4% WO ₃
Copper -	180 tons 21.8% WO ₃

Trusting this is the information you require, and hoping you are both well.

Yours truly,

WESTERN TUNGSTEN COPPER MINES LTD. (NPL)

Bob.
W.N. Taylor

WNT/s

REFERRED TO	DATE	INITIAL
D. M.		
C. C.		
D.C.C.		
G. C.		
P.&H.G.		
Accts.		
C.M.B.	12/6	HS
C. I.		
C. A.		
F. G. T.		
C. C. E.		
A SIB		
WRITING CLERK		