

PRINTED: 11/19/2001

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: LITTLE FANNY EXT. GROUP

ALTERNATE NAMES:

ALVERA
EXTENSION
LAST CHANCE
NEW YEAR MINING CLAIMS

COCHISE COUNTY MILS NUMBER: 52

LOCATION: TOWNSHIP 16 S RANGE 22 E SECTION 9 QUARTER C
LATITUDE: N 32DEG 03MIN 31SEC LONGITUDE: W 110DEG 06MIN 02SEC
TOPO MAP NAME: DRAGOON - 7.5 MIN

CURRENT STATUS: RAW PROSPECT

COMMODITY:

FLUORINE FLUORSPAR
TUNGSTEN
COPPER SEE BIBLIO
BERYLLIUM

BIBLIOGRAPHY:

COOPER & SILVER, 1964, DRAGOON QUAD, USGS
PROF PAPER 416, P. 142
USBM RI 5650, P. 48 & 51
AZBM BULL. 148, P. 42
AZBM BULL. 187, P. 18, 57
ADMMR LITTLE FANNY EXTENSION GROUP FILE

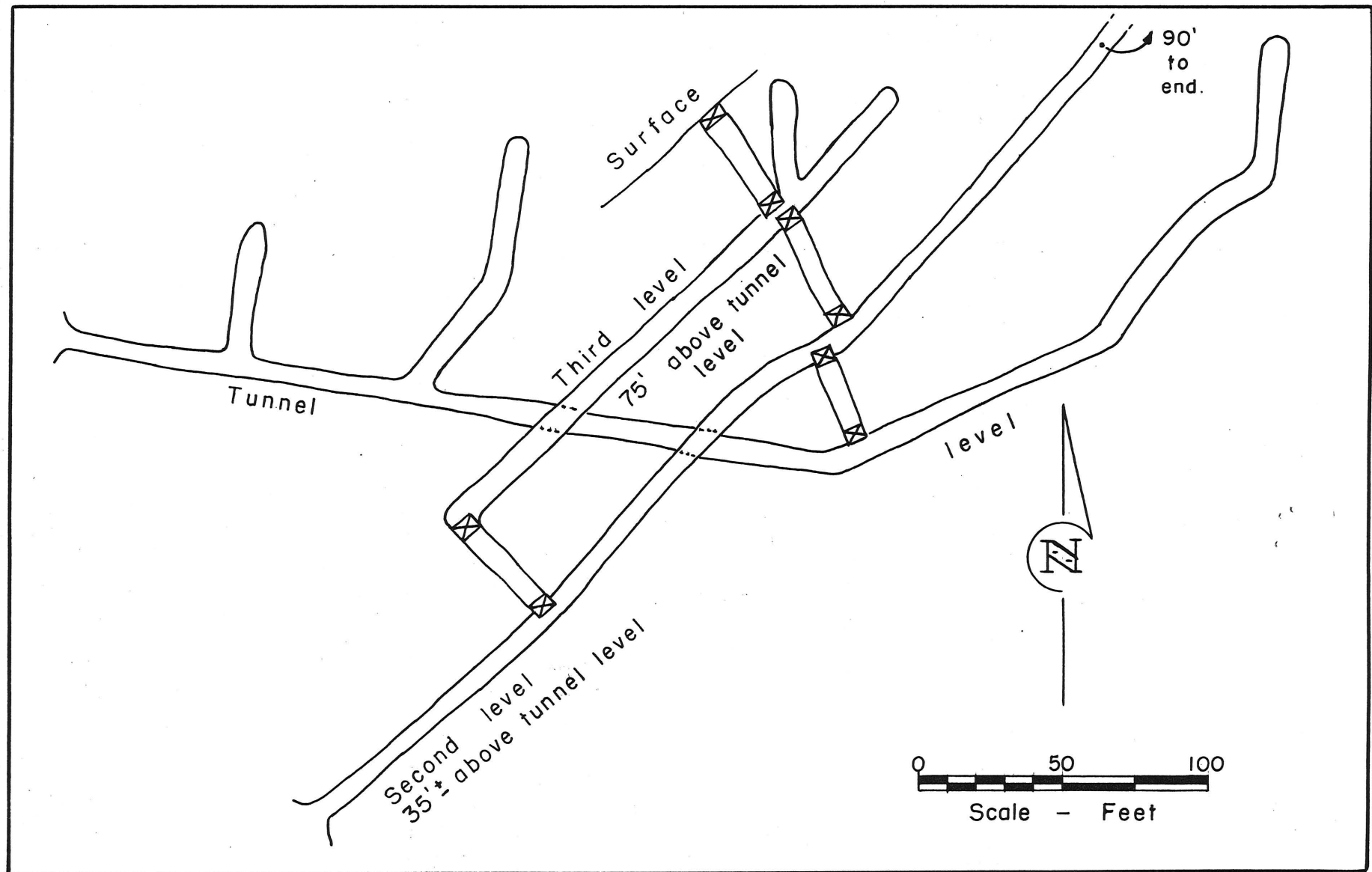


Fig. 18 - Sketch map of Little Fanny Mine

LITTLE FANNY GROUP

COCHISE COUNTY

USBM Ri 5650 p. 51 (Homestake Group)
p. 48 (Little Fanny Group)

USGS P.P. #416, p. 185, 142, 138, 155, 156

ABM # 148p. 42

ABM Bull. 187, p. 18

MILS Sheet sequence number 0040030036 9 p. 300)

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES

INFORMATION FROM MINE CARDS IN MUSEUM

ARIZONA

COCHISE COUNTY

New Year Mining Claims (formerly Little Fanney Mine

Little Dragoon Mtns.

MM-9424 Huebnerite

↓
Little Fanny Ext. Group (F) Mills # 52

3-AKA'c

ADAMS, Alvis
Rail X. Ranch,
Patagonia, Ariz.

10-9-1941

Advises that he has taken over the

LUCKY STRIKE CLAIMS NOS. 1 to 11, incl. and the
HOMESTAKE CLAIMS NOS. 1 to 4, Incl., in the
Cochise Mining District, Cochise County

ASKED FOR M. O. REPORTS.

(Information given to J.H., but said it was not yet NEWS)

POST OFFICE RECEIPTS

RECEIVED

AUG 21 1942

PHOENIX,

THIS STAMP IS FOR ADDRESS



Mr. Jan Conhal

Dept of Mineral Resources

Ellis Bldg Home Building Bldg 87
Ellis Bldg Phoenix Ariz.

Aug 19 - 42
Mr Sam Campbell:-

Your answer to my
letter of the 17th arrived
in Tucson O.K. but
was lost before I had
a chance to read it.

Will you please have
your secretary send me
a copy and oblige. ✓

R. J. Schaefer ⁸⁻²⁵⁻⁴²

Box 2771 Tucson

We have much other equip.
for sale also - crush-tank, drills &

LITTLE FANNY EXTENSION GROUP

COCHISE COUNTY

MG WR 3/7/80: Drove to Portal, Arizona. There is no activity at the Grade, Homestake or Savage Mines (Cochise County).

KAP WR 1/29/82: Warren Croyle, 480 N. Delaware, Chandler, has located a group of New Years claims on a tungsten occurrence in the E $\frac{1}{2}$, Sec. 9 and W $\frac{1}{2}$ Sec. 10 T16S R22E. He believes some of the claims cover an old property known as the Fanny.

NJN WR 6/7/85: Warren Croyle, (c) visited and reported that his new address is 239 W. Boston, Chandler, Arizona 85224, phone 963-7645. He continues to have claims that cover the Tungsten King (f) and Little Fanny Extension (f) both in Cochise County. From one of these areas he has recovered a 6 lb huebnerite crystal specimen. He is interested in locating some custom mills to process some of his ore. He is also interested in joint venturing or taking on a partner to assist in developing the claims.

Card

9 October 1941

Mr. Alvie A. Adams,
Rail X. Ranch,
Patagonia, Arizona.

My dear Mr. Adams:

I thank you for your letter of October 7,
and I am glad to learn that you have taken over the Lucky
Strike Claims, Nos. 1 to 11, Inc. and the Homestake
Claims Nos. 1 to 4, Inc., in the Cochise Mining District,
Cochise County.

I am enclosing herewith blank mine owners
reports, which I should suggest that you fill out in detail
and return to this office so that information may be
available concerning your scheelite properties.

I shall also be glad to have a report on the
Hubnerite Claims No. 1 to 14, Incl., as a soon as you are
free to give me this information.

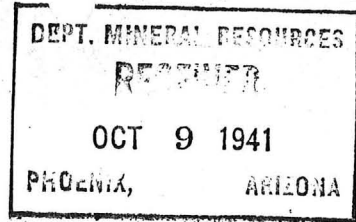
With best wishes, and trusting to hear from
you further regarding these properties, I am

Yours very truly,

Charles F. Willis
Chairman, Board of Governors.

CFW-jrf
encls.

cc-M.M. Carpenter



Rail X Ranch
Patagonia, Arizona
October 7, 1941

Department of Mineral Resources
518 Title & Trust Building
Phoenix, Arizona

Gentlemen,

Mr. Miles Carpenter, Mining engineer of Tucson, suggested that I write and advise you that I am now owner of, the following mining property, formerly held by A. H. Yeagley who died in September, 1940.

On Nov. 27, 1940, I received the deed to the following property. All unpatented lode and placer mining claims in the Cochise Mining District, Cochise Co., Arizona; designated as follows: Lucky Strike Claims, Nos. 1 to 11 Inc., and Homestake Claims, Nos. 1 to 4 Inc., all of which are scheelite claims.

On the 15th. of this month, or shortly thereafter, I expect to receive the deed to hubnerite claims, Nos. 1 to 14 Inc. This property has been in possession of the Dragoon Mining Corporation who have until Oct. 10th. to make their payment. However, I do not expect them to make it in which case the property will be deeded to me. I will advise you.

Very truly yours,

Alvie A. Adams

M. Attwater

UNIVERSITY OF ARIZONA
ARIZONA BUREAU OF MINES
ORE TESTING SERVICE

COPY

COPY

December 16, 1941.

METALLURGICAL TEST
ore No. 759

The sample of this ore was submitted by Mr. H. C. Lankford of Phoenix, Arizona, with the request that we determine a method for its treatment. The sample was stated to be representative of the ore in the Dragoon Tungsten Mine, in the Dragoon district of Arizona.

The Arizona Bureau of Mines has no knowledge of the tonnage of ore in this deposit or the average grade of the ore.

The sample as received contained 8.4% of WO_3 . Most of the Tungsten was contained as hubnerite disseminated through a quartz gangue; a small portion of scheelite was also present. Most of the hubnerite was free at 10-mesh size, but the majority of the scheelite required crushing to 20-mesh for liberation.

The entire sample as received was crushed in a jaw crusher and rolls to one-fourth inch. One-fourth of the sample was then riffled out and crushed in rolls to 10-mesh. From this portion, samples for head analysis and for testing were obtained.

The test sample was passed twice over a Denver Laboratory mineral jig using steel shot as bedding material. The concentrates from each pass were combined as representative of a two cell jig in practice. The jig tails were ground to 20-mesh and passed over a Wilfley laboratory table, producing a table concentrate and a table tailing. The results of this test are presented on the following page.

CONCLUSIONS

The test on this ore shows that jigging after crushing to 10-mesh can be expected to recover 79.4 per cent of the Tungsten in a jig concentrate assaying 61.2% WO_3 . Grinding of the jig tails to 20-mesh followed by tabling will recover an additional 15.5 per cent of the Tungsten in a table concentrate assaying 47.8% WO_3 .

UNIVERSITY OF ARIZONA
ARIZONA BUREAU OF MINES
ORE TESTING SERVICE

The combination of the two operations recover 94.9% of the total Tungsten in a combined jig concentrate-table concentrate assaying 58.5% WO_3 .

In commercial practice on ore of a Tungsten content even approaching the grade of the sample upon which this work was done, a concentrate averaging better than 60% WO_3 and a recovery of better than 90% may be expected.

E. H. Crabtree, Jr.,
Metallurgist.

UNIVERSITY OF ARIZONA
ARIZONA BUREAU OF MINES
ORE TESTING SERVICE

Ore No. 759

Test No. 759A

Conditions and Reagents

Point of Addition	Conditions		pH	Reagents Pounds Per Ton
	Time Mins.	% Solids		

Remarks: Ore crushed thru 10-mesh and jigged; jig tails crushed to 20-mesh and tabled.

Metallurgical Products

Product	Tons in 100 Tons Feed	Assays		% of Total
		%WO ₃	WO ₃	
Assayed Heads		8.40		
Calculated Heads	100.0	8.78		100.0
Jig Concent.	11.40	61.20		79.4
Table "	2.84	47.80		15.5
Table Tails	85.76	0.52		5.1
Combined Conc.	14.24	58.50		94.9

Remarks: Tails from Jigging operation assayed 2.3% WO₃

Washington, D.C.
Oct. 8, 1942

SUBJECT: Mine Loan, Class B
B-ND-4409
R. F. Schaefer, Tucson.



The field report on this property was evidently unsatisfactory
and the application was declined Sept. 30th.

Bill Broadgate

Little Harry

October 5, 1942

[Handwritten initials]

Mr. R. F. Schaefer
Box 2771
Tucson, Arizona

Dear Mr. Schaefer:

Many thanks for your letter of October 2 and
I have asked W. C. Broadgate to investigate and see
what is holding up action on your application docket
No. B-ND-4409.

Yours very truly,

J. S. Coupal, Director

JSC:LP

Phoenix, Oct. 4, 1942.

To W. C. Broadgate.

SUBJECT.

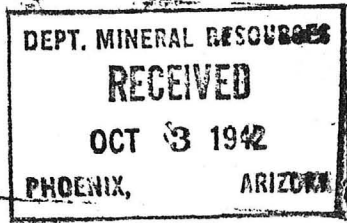
RFC Loan.
Docket No. ~~1000~~
R. F. Schaefer
Tucson, Arizona.

Schaefer who has been active in the Tucson Council writes as follows:

Our property was examined a month ago by Wm Gohring and todate we have heard nothing. This delay is working a hardship on us for if we are not going to get it we want to know and egt busy on something else. I wonder if Mr. Broadgate can help us by getting after a decision on this loan.

Use your own good judgement. I know some of the operators get impatient but aalso that their is a limit to which you can hound the RFC.

②



Box 2771

GOLD BAR MINING COMPANY
~~VALLEY NATIONAL BUILDING~~
 TUCSON, ARIZONA

Oct 2nd 1942

Dept of Mineral Resources
 413 Home Builders Bldg.
 Phoenix Ariz

Packet No
 TB-ND-4409

Attention Mr Sam Coupal
 Dear Mr Coupal:

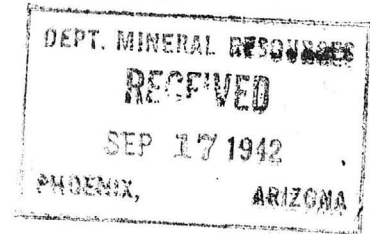
A month ago Mr Wm Goring examined my
 Tungsten Mine and recommended a loan of \$11,000.
 He outlined how the work was to be done and
 said he would notify Washington.

To date I have heard nothing. This delay is
 working a hardship on me and my associates
 for if we are not going to get this loan we
 want to know it and get busy at something else.
 We can do nothing while this application is
 pending so wonder if Mr Broadgate can not
 help us by getting behind this application.

Sincerely
 T. F. Schaefer

GOLD BAR MINING COMPANY

VALLEY NATIONAL BUILDING

TUCSON, ARIZONA
Sept. 15, 1942

Dept. of Mineral Resources
413 Home Builders Building
Phoenix, Arizona

Attention: Mr. Sam Coupal

Dear Mr. Coupal:

Received the report you returned also letter containing memorandum from Mr. W. C. Broadgate.

I received acknowledgement of the Report by the R.F.C. at Washington just 14 days after I mailed it and 3 days later they informed me that Mr. Wm. Goring would examine the property as soon as possible; so Broadgate sure worked fast.

Two days later Goring happened to be in the vicinity of the "Little Fanny", and made the examination at once. He recommended a loan of \$11,000, outlined the work and said he would report to Washington.

Thank you and Mr. Broadgate for your assistance.

Yours very truly,

R.F. Schaefer
Box 2771
Tucson, Arizona

RFS/ms

September 11, 1942

Mr. R. F. Schaefer
P. O. Box 2771
Tucson, Arizona

Dear Mr. Schaefer:

I am returning herewith your report on the
LITTLE FANNY.

I will also make note of a memorandum from
Mr. W. C. Broadgate, now in Washington, which was
dated August 28. Broadgate states, "I expect this
application will be recommended for field examination
about the middle of next week, although there are
applications a month ahead of it. Due to your re-
commendation, I asked that it be taken out of turn
and advanced for immediate attention."

With best wishes and kindest regards, I am

Very truly yours,

J. S. Coupal,
Director

JSC:hal

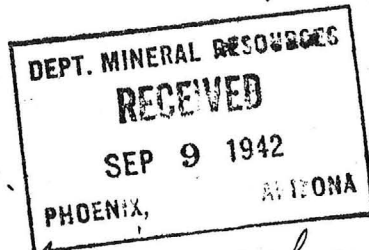
GOLD BAR MINING COMPANY

VALLEY NATIONAL BANKING
TUCSON, ARIZONA

Box 2771

Aug 6th 1942Mr Sam Coupal
Phoenix Ariz.

Dear Mr Coupal:



An enclosing copy of our application for loan on the "Little Fanny" Tungsten Property as you suggested. I believe you expected to send it to Mr Broadgate at Washington.

This is our own copy so when he finishes with it, will he please return it to me.

Thanking you very kindly for past favors and your excellent cooperation in applying for this loan. I am,

Yours very truly

R. F. Schaefer
Tucson Ariz.
Box 2771

P.S.
Our maps, photos reports etc are only in the original.
S.

Washington, D.C.
Sept 5, 1942

SUBJECT: Mine Loans, Class B
Little Fanny Mine Extension

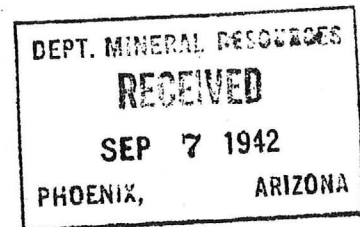
This has gone to the Field for examination.

They got it out sooner than we expected.

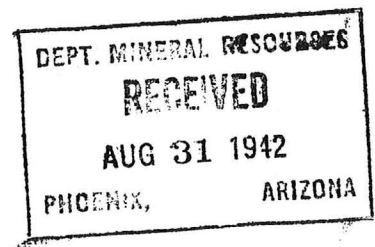
I hope that this turns out OK as I got it shoved up about a month on the schedule because of Sam's request to expedite.

I am returning the report under separate cover.

Bill
Bill Broadgate



Washington, D.C.
Aug. 28, 1942



SUBJECT: Mine Loans, Class B
' Little Fanny Mine Extension

I expect that this application will be recommended for field examination about the middle of next week.

Although there are applications a month ahead of it, due to your recommendation I asked that it be taken out of turn, as per my memo of Aug. 17.

Bill

Bill Broadgate

Sattle Army

August 19, 1942

Mr. R. F. Schaefer
Box 2771
Tucson, Arizona

Dear Mr. Schaefer:

I hope you will pardon the error made in the letter you received as I did not look up the address. The letter written you was regarding another Mr. Shafer who is operating out of Winslow.

I have heard nothing further from your R.F.C. mine loan application, but believe we can expect it any time now as the whole R.F.C. program has been streamlined for action.

I am listing the equipment mentioned on the Gold Bar and hope we may get some results from it.

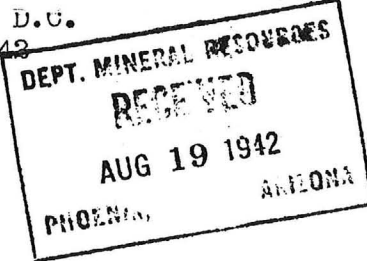
Yours very truly,

J. S. Coupal, Director

JSC:LP

Washington, D.C.

Aug. 17, 1942



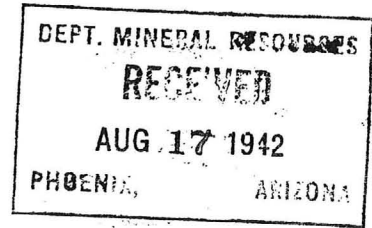
Subject: Mine Loans,
Class B.
• Little Fanny Mine Extension.

This application was only received here on the 13th and has not yet gotten to the Engineer Examiners.

I have requested special treatment for it on the basis of the reports sent me and the recommendation in the memo from the office.

Bill
Bill Broadgate

Washington, D.C.
Aug. 14, 1942



SUBJECT: Mine Loan, "B"
Little Fanny Extension Group
R. F. Schaefer.

Your memo of Aug. 8th.

I have today received the data on this property and it looks good. I believe I shall be able to get a field authorization for this rapidly.

I should appreciate it if in future, you would make a point of informing me the date the application was mailed in and in what manner (air mail?), as the date on the applications, I find, is no insurance that the papers were mailed the same day.

*Earl
note* →

Bill Broadgate

MEMORANDUM

August 8, 1942

To: Bill Broadgate

Subject: Little Fanny Mine
Extension Group,
R. F. Schaefer
Correspondence

From: E. F. Hastings

An application for class "B" Development Loan for the amount of \$20,000.00 has been asked for this property. All indications are that such a loan should be seriously considered.

Enclosed herewith is a copy of the major portion of the evidence, and Mr. Coupal suggests that you render any assistance possible to consummate this loan.

E. F. Hastings

July 31, 1942

Little Fanon

Mr. R. F. Schaefer
Box 2771
Tucson, Arizona

Dear Mr. Schaefer:

I am sending you the latest Metals
Reserve Company release on tungsten.

Yours very truly,

J. S. Coupal, Director

JSC:LP

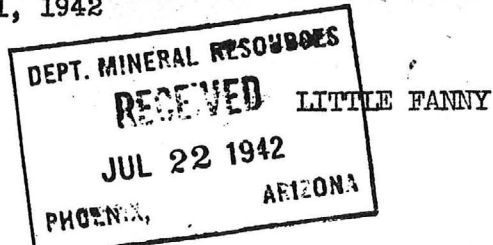
July 21, 1942

em

W

MEMORANDUM

To: Director, Dept. Mineral Resources
From: George A. Ballam



This property is located about 7 miles NW Dragoon, and 3 miles north of Highway 86. It is leased by Vreeland, Lankford and Schaefer of Tucson. Values are in huebnerite. It is situated near the eastern border of the pegmatites, ending on the Primos Chemical group and adjoining the Wien claims.

There are seven parallel quartz veins in the pegmatite 25 to 35 feet apart. Two tunnels have been driven cutting these veins at different levels, with some drifting on one of the larger veins. They vary in thickness up to nearly 24" for the main vein upon which a shaft has been sunk about 40 ft. and worked out to the surface on either side.

The operators are applying for a \$20,000 development loan with which they propose to complete the lower tunnel and cross cut elsewhere, clean out and deepen the shaft, install a small mill to make a rough concentrate, etc.

There is a well on the property which it is expected will furnish sufficient water for the operation. There are also two rock fill dams on a canyon which when sealed with clay will back up considerable run-off water. A good road gives access from the highway.

During the last War, some \$300,000 in WO3 was produced from the Little Fanny, and considerable amounts were produced which were not reported. It has been worked by Mexican leasers and others since, a great deal of placer having been recovered along the sides of the ridge. The present operators have been producing concentrates with the aid of a small crusher and jig, marketing the product in Tucson, Jacobs and Fernstrom. On this account I advised them to apply for a serial number, in addition to rating as new producers of Tungsten.

If the loan is granted there will be a donation to the Wash. fund. There is no scrap metal on the premises.

George A. Ballam

JAC - Went over this & checked it with their "B" application which seems to be in good shape.

3 February 1942

Mr. Alvie A. Adams,
Rail X Ranch,
Patagonia, Arizona.

My dear Mr. Adams:

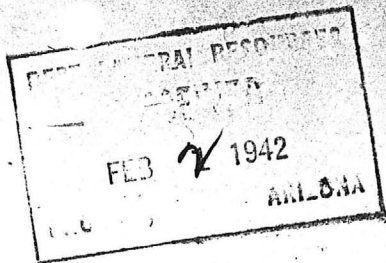
Complying with request contained in your letter of January 31, I am enclosing herewith the two sketch maps attached to mine owner's report covering the LITTLE FANNY EXTENSION GROUP in the Cochise Mining District.

With best wishes, I am

Yours very truly,

Charles F. Willis
Chairman, Board of Governors

CFW-jrf
encls.



Rail X Ranch

Patagonia, Arizona

January 31, 1942

Mr. Charles F. Willis
Department of Mineral Resources
Phoenix, Arizona

Dear Mr. Willis,

Will you please send me the two sketch maps that accompanied the report I sent you on the Extension Group (Little Fanny) in the Cochise Mining District?

A party to whom I loaned the originals has misplaced them and I need the maps badly. I will make copies of them and send you a set to keep with the report.

Very truly yours,

Alvie A. Adams

Bill Broadgate

Washington, D.C.
Oct. 23, 1942

H
DEPT. MINERAL RESOURCES
RECEIVED
OCT 26 1942
PHOENIX, ARIZONA

SUBJECT: Mine Loans
Class B
R. F. Schaefer, Gold Bar Mining Co.
B-ND-4409

CL

I referred a letter to you on this subject.

For your information this mine was examined for the Dragoon Mining Corp by the RFC in Feb. 1941 and again in Sept of this year. Neither examination gave satisfactory reports, in the usual contradiction to the applicants claims to us.

How these lads all seem to get the impression from the field engineer that he is enthusiastic about their mine I don't know. But I suppose it is an alibi to get off the property all in one piece.

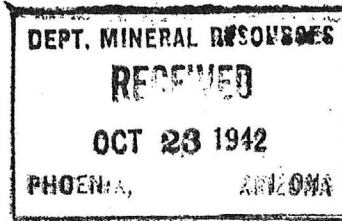
It certainly causes trouble at this end, though.

Bill Broadgate

The name of this
company is against it.

Bill

This is a good one!
Co. which has shut
down gold mining
making an excellent mine
An interesting Bill that
shows how to get amount.
W.C.



W

Oct. 21, 1942

Hotel Harrington,
Washington, D.C.

Mr. R. F. Schaefer,
Gold Bar Mining Company,
Box 2771,
Tucson, Ariz.

Dear Mr. Schaefer,

Your letter of Oct. 20 relating to your loan, Docket B-ND-4409 is at hand.

I have been instructed not to take any matters up excepting they clear through our Phoenix office, for obvious reasons. I am therefore sending your letter with a copy of this letter, to Phoenix.

It has been our experience that the Engineer Examiners act on a loan accordingly with the optimism of the report received from the field office. At the same time, they are always willing to reopen a case if sufficient additional evidence is presented to warrant this action. This may take the form of additional work which creates new showings, a report by an independent engineer of standing which controverts the report of the field office or other satisfactory data, and when such representations are made they frequently call for a review of the field examination by the field engineers, which may extend to resampling.

You state that the rejection letter from the RFC stated that the loan was rejected due to the "absence of proven ore". This is most unusual as proven or blocked out ore is not required for a B loan, merely sufficient indication that additional development will warrant the expenditure. There must, of course, be exposures which give this indication, but this is much different than "proven ore".

I advise you to immediately get in touch with Mr. Coupal at Phoenix and ask him to review this matter with you and determine the proper course to take.

Naturally I shall be glad to assist in any way Mr. Coupal indicates.

Very truly yours,

W. C. Broadgate,
Asst. Director

Gold Bar
 TOMBESTONE MINING COMPANY

1007 VALLEY NATIONAL BUILDING

TUCSON, ARIZONA 7308 2771

is running at this time, particularly after being turned down on a Gov. loan.

We have a very good Tungsten Mine, one with a good record of production in a good district. They say we have no ore that can be sampled. Granted, but this is Hubnerite worth a dollar a pound and one would hardly expect \$2000 gold ore left in an open face so it could be sampled.

It is our opinion that 15 to 20 feet on 3 different veins now open and exposed will give us ore, and plenty of it.

We have a cross cut over 500 ft long cutting under all the old workings which will give us 75 to 100 ft backs on veins which on the surface produced over \$300,000 worth of Tungsten and made over \$7,500 while putting in the cross cut.

If we can get this loan we will produce 4 tons of concen. per month as long as the work lasts, and mining is our business and about all we can do to help the war situation.

We operated the "Allison" Mine near Sells until the Gov. recalled our priority number in Dec. The last 12 months operations produce over \$70,000 Gold & Silver to the U.S. Mint. (Cyanide).

Now Mr Broadgate, it will help us and also the Gov. war effort if you can help us get this loan. We know we have a good property and will make good. Thank you Yours truly P. F. Schaefer

Little Army

October 9, 1942

JSC

Mr. R. F. Schaefer
Box 2771
Tucson, Arizona

Dear Mr. Schaefer:

I have received your letters of October 5 and 7 and I am sorry to hear your loan has not been allowed. I believe Senator Hayden takes up most of the mining matters with Mr. Broadgate and your letter will get his attention.

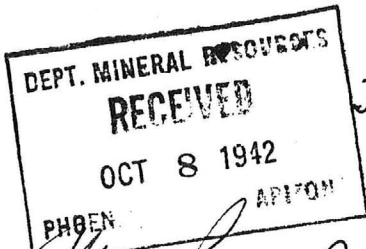
There are some R.F.C. loans which get ready consideration at Washington and it is very difficult to predict just what will happen when an application is submitted. It does call for a complete set of details so that the man at the desk in Washington can get a true picture of the property. If this picture is not properly presented he may turn it down. It does call for a lot of assaying and the proper presentation of the results of sampling and assaying and when this is done it is all that anyone can do toward presenting his property for consideration for a loan.

With best wishes and kindest regards, I am

Yours very truly,

J. S. Coupal, Director

JSC:LP



Gold Bar

TOMBSTONE MINING COMPANY

~~1807 VALLEY NATIONAL BUILDING~~

TUCSON, ARIZONA

Box 2771

Oct 7-1942

Mr Sam Coupal
 Phoenix Ariz.
 Dear Mr Coupal:-

Am enclosing copy of letter
 sent to Sen. Carl Hayden Washington D.C.

If you think it will help our cause
 you might forward it to Mr Broadgate
 he undoubtedly could be of help, but
 use your own judgement.

Thanks for past favors.

Yours very truly
 R. F. Schaefer

DEPT. MINERAL RESOURCES
RECEIVED
OCT 7 1942
PHOENIX, ARIZONA

TELEPHONE 4241

GOLD BAR MINING COMPANY
VALLEY NATIONAL BUILDING
TUCSON, ARIZONA
Box 2771

Oct 5 - 1942

Mr Sam Coupal
Director Dept Mineral Resources
Phoenix Ariz.

Dear Mr Coupal:-

Received your letter of 5th inst in
which you wrote that you had written Mr Broadgate
to investigate our loan application.

I am very sorry to report that the same mail
brought a letter from the P.F.C. stating that our loan
had not been allowed.

It seems that in order to get a loan from P.F.C. you
must be an ex Lawyer or Theater Owner or promoter
from California or the like in order to get a loan.
Anything except a mining man with experience.

I and my partners want to thank you and Mr
Broadgate for your efforts in trying to get this
loan for us.

Yours very truly
H. J. Schaefer

CARTER GLASS, VA., CHAIRMAN

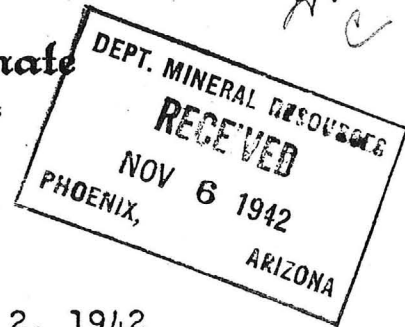
KENNETH MC KELLAR, TENN.
CARL HAYDEN, ARIZ.
ELMER THOMAS, OKLA.
MILLARD E. TYDINGS, MD.
RICHARD B. RUSSELL, GA.
PAT MC CARRAN, NEV.
JOHN H. OVERTON, LA.
JOHN H. BANKHEAD, ALA.
JOSEPH C. O'MAHONEY, WYO.
HARRY S. TRUMAN, MO.
THEODORE FRANCIS GREEN, R. I.
FRANCIS MALONEY, CONN.
DENNIS CHAVEZ, N. MEX.
JAMES M. MEAD, N. Y.
WALL DOXEY, MISS.
BURNET R. MAYBANK, S. C.

GERALD P. NYE, N. DAK.
STYLES BRIDGES, N. H.
HENRY CABOT LODGE, JR., MASS.
RUFUS C. HOLMAN, OREG.
WALLACE H. WHITE, JR., MAINE
CHAN GURNEY, S. DAK.
C. WAYLAND BROOKS, ILL.

EVERARD H. SMITH, CLERK
JOHN W. R. SMITH, ASST. CLERK

United States Senate

COMMITTEE ON APPROPRIATIONS



November 2, 1942

Little Larry

Mr. J. S. Coupal, Director
Arizona State Department of Mineral Resources
413 Home Builders Building
Phoenix, Arizona

My dear Mr. Coupal:

In the absence of Senator Hayden, who is now on his way to Arizona, I am taking the liberty of transmitting to you herewith a copy of an original letter addressed to the Senator by Mr. R. F. Schaefer, a resident of 701 North 2nd Avenue, Tucson, Arizona; a copy of Bill Broadgate's letter to Mr. Schaefer of October 21; a copy of Senator Hayden's letter to Mr. Schaefer of October 20; a copy of Honorable Charles B. Henderson's reply to Senator Hayden of October 21; a copy of Dr. R. S. Dean's reply to Senator Hayden of October 28, and a copy of a communication I have just addressed to Mr. Schaefer.

Apparently this particular property is hopeless insofar as an RFC Class C or B loan is concerned.

With kindest regards, I am,

Yours very sincerely,

Don A. Gustin

Don A. Gustin
Secretary to Senator Hayden

P. S. No acknowledgement is necessary.

D. G.

GOLD BAR MINING COMPANY
VALLEY NATIONAL BUILDING
TUCSON, ARIZONA

October 7, 1942

Hon. Carl Hayden
United States Senator
Washington, D. C.

Dear Senator:

In June 1938 the Gold Bar Mining Company took a lease on the Allison Mine near Sells, Pima County, from the Tom Reed Gold Mining Company of Oatman, Arizona.

The Tom Reed Company spent over \$200,000 in developing this mine and attempting to work out the metallurgy but without success.

We, my associates and I, after six months of development work started shipping ore to ~~Hayden~~. In six months we shipped over \$41,000 worth of ore, gold and silver.

We then stopped shipping and proceeded with the development work and installed a cyanide process for the recovery of the gold and silver, milling the ore on the property. In December of 1941 the Government took up our priority number forcing us to shut down. In the fourteen months preceding the shut down we shipped to the U. S. mint at San Francisco over \$61,000 worth of bullion. This \$61,000 together with the \$41,000 for the crude ore and \$38,000 in cash furnished by my associates and me, was put back into the property in the form of labor, supplies, machinery and equipment, to develop the mine and permit the production of gold and silver over a long period of time and according to good mining practices.

When the Government forced us to close down due to the fact that we were producing no strategic metals, (and which is o.k. by us), we owed \$5000 on the equipment worth about \$30,000. Last month this equipment was bid in at a sheriff's sale for the amount of money against it and is now the property of the Tom Reed Gold Mining Company who have also canceled our lease.

I neglected to state that at the time we closed down we were employing 32 men in the mine and mill, and that I am President of the Gold Bar Mining Company.

My associates and I are mining men. We understand that business and have made a success at it, particularly in that we took over the Allison Mine and made it pay. We think we know a mine when we see one and expect to continue in the mining business which we have followed for many years.

When the Government closed us down they told us to help them in the production of strategic metals such as copper, lead, zinc, tungsten, etc. Several of our partners that furnished the money to develop the Allison mine are now in the U. S. armed service, and as you know it is impossible to interest private capital in developing or operating a metal mine in Arizona at this time. The Government, through the RFC, intends to take the place in this situation of what has heretofore been done by private capital.

On August 6, 1942, I, for myself and associates, submitted an application to the RFC for a \$20,000 loan on a tungsten property near Dragoon, Arizona. In due time their engineer Mr. Wm. Gohring, examined the property and recommended a loan of \$11,000 to develop it. Yesterday I received the letter, which I am enclosing, from the RFC, stating that the loan will not be allowed.

Since the government wants tungsten and knowing the property as I do, and the fact that we cannot get the money to put it on production from private sources, I feel that the RFC should reconsider this application and allow this loan. We have the equipment and labor lined up and can start production in a very short time and produce about 4 tons of concentrates per month for the duration of the war, and repay the loan as fast as the government wishes. All we need is the finances to get started and we feel that we are entitled to this in view of our past record. My partners and I expect to take personal charge of operation and we know how. We also know that we have the mine, and can be producing tungsten within three days from the time we start drilling.

No, I am not presuming to dictate to the RFC nor tell them how to run their business, but I am wondering if they are familiar with the nature of a tungsten (hubernite) mine in Arizona. Of course there is no ore in sight to sample, if there

was it would be taken out the same as free hi-grade gold as this ore runs around .50 to .60 cents per pound in the chutes when exposed and is readily processed and marketed.

Now Senator, if it is not asking too much and in your opinion it will help me to get a reconsideration of my application, will you please present this proposition to the proper persons in Washington because I feel that if they knew the situation they would not hesitate to make this loan.

I am, Thanking you for your assistance in this matter,

Yours very truly,

(signed)

R. F. Schaefer
701 N. 2nd Avenue.
Tucson, Arizona

Box 2771

COPY

For Your Information

Oct. 21, 1942

Hotel Harrington,
Washington, D. C.

Mr. R. F. Schaefer,
Gold Bar Mining Company,
Box 2771,
Tucson, Ariz.

Dear Mr. Schaefer,

Your letter of Oct. 20 relating to your loan, Docket B-ND-4409 is at hand.

I have been instructed not to take any matters up excepting they clear through our Phoenix office, for obvious reasons. I am therefore sending your letter with a copy of this letter, to Phoenix.

It has been our experience that the Engineer Examiners act on a loan accordingly with the optimism of the report received from the field office. At the same time, they are always willing to reopen a case if sufficient additional evidence is presented to warrant this action. This may take the form of additional work which creates new showings, a report by an independent engineer of standing which controverts the report of the field office or other satisfactory data, and when such representations are made they frequently call for a review of the field examination by the field engineers, which may extend to resampling.

Your state that the rejection letter from the RFC stated that the loan was rejected due to the "absence of proven ore". This is most unusual as proven or blocked out ore is not required for a B loan, merely sufficient indication that additional development will warrant the expenditure. There must, of course, be exposures which give this indication, but this is much different than "proven ore".

I advise you to immediately get in touch with Mr. Coupal at Phoenix and ask him to review this matter with you and determine the proper course to take.

Naturally I shall be glad to assist in any way Mr. Coupal indicates.

Very truly yours,

W. C. Broadgate,
Asst. Director

CARTER GLASS, VA., CHAIRMAN

KENNETH MC KELLAR, TENN.
CARL HAYDEN, ARIZ.
ELMER THOMAS, OKLA.
MILLARD E. TYDINGS, MD.
RICHARD B. RUSSELL, GA.
PAT MCCARRAN, NEV.
JOHN H. OVERTON, LA.
JOHN H. BANKHEAD, ALA.
JOSEPH C. O'MAHONEY, WYO.
HARRY S. TRUMAN, MO.
THEODORE FRANCIS GREEN, R. I.
FRANCIS MALONEY, CONN.
DENNIS CHAVEZ, N. MEX.
JAMES M. MEAD, N. Y.
WALL DOXEY, MISS.
BURNET R. MAYBANK, S. C.

GERALD P. NYE, N. DAK.
STYLES BRIDGES, N. H.
HENRY CABOT LODGE, JR., MASS.
RUFUS C. HOLMAN, OREG.
WALLACE H. WHITE, JR., MAINE
CHAN GURNEY, S. DAK.
C. WAYLAND BROOKS, ILL.

United States Senate

COMMITTEE ON APPROPRIATIONS

October 20, 1942

EVERARD H. SMITH, CLERK
JOHN W. R. SMITH, ASST. CLERK

Mr. R. F. Schaefer
701 North 2nd Avenue
Tucson, Arizona

My dear Mr. Schaefer:

I am sorry that I have not sooner acknowledged your letter of October 7th, which I have read with considerable interest. I regret that the Reconstruction Finance Corporation could not see its way clear to approve your application for a Class B mine loan, submitted under Docket No. B-ND-4409.

Over a period of five or six years I have received numerous complaints with regard to the inability of mine owners and operators to obtain loans from the Reconstruction Finance Corporation for the development of the mineral resources of our State. This has been due to a number of different reasons. Up to the present time the loan procedure has been so slow and so tied up with red tape that it has required anywhere from nine months to a year for a loan application to be finally acted upon by the Board of Directors of the RFC. However, in the past six months considerable progress has been made in eliminating delays, and at the present time a Class C application may require no more than two weeks while a Class B application can generally be decided upon by the Board of Directors within two months from the date of original submission.

One of the stumbling blocks insofar as the approval of loan applications is concerned has been the fact that the present legislation which authorizes the Reconstruction Finance Corporation to make such

loans requires that such loans shall only be made on properties that can be determined to be of sufficient value to pay a profit upon mining operations. This is still an obstacle to favorable consideration of many applications. However, on September 17th Senator McCarran of Nevada introduced a bill to suspend this requirement. I am attaching a copy of S. 2783, since I feel it will be of interest to you. The Senate Banking and Currency Committee has held hearings on this bill, and I believe that the Committee may soon report it to the Senate.

I have found that it is generally helpful to applicants if they will discuss their case first with Mr. William C. Gohring, Field Engineer and State Representative for the Reconstruction Finance Corporation, who has his office at 405 Heard Building, Phoenix, or with Mr. J. S. Coupal, Director of the Arizona State Department of Mineral Resources at 413 Home Builders Building, Phoenix.

With specific reference to your own case, I have asked Honorable Charles B. Henderson, Chairman of the Board of Directors of the Reconstruction Finance Corporation, to reopen your file for further consideration, and I have also requested that he send me any advice that might be helpful to you in submitting a new application that might be given more favorable attention. I shall let you know what I learn from the RFC.

With every good wish, I am,

Yours very sincerely,

Carl Hayden

COPY

For Your Information

RECONSTRUCTION FINANCE CORPORATION

WASHINGTON

October 21, 1942

Honorable Carl Hayden,
Senate Office Building,
Washington, D. C.

My dear Senator Hayden:

I am in receipt of your letter of October 20th enclosing copy of Mr. Schaefer's October 7th letter to you, and a copy of our Mr. Tully's letter to him, dated September 30th. You speak of sending the original of the Shaefer letter but the one actually sent is a copy, which I am retaining unless you ask again for it.

The property in question has twice been examined by our Engineers, in February 1941 under an application from the Dragoon Mining Corporation, and early this last September, by the same Supervising Engineer.

As the result of neither examination did he recommend a loan, as Mr. Schaefer's letter assumes.

You ask whether Mr. Schaefer would have better success if applying for a so-called "Class C" loan in place of the "Class B" loan recently declined. From the showings and engineering information we have it is not felt that any net advantage to tungsten production would result from any loan on this property.

With kind personal regards,

Sincerely yours,

(SIGNED)

Charles B. Henderson

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON

October 28, 1942

Hon. Carl Hayden,

United States Senate.

My dear Senator Hayden:

The Bureau of Mines acknowledges your letter of October 20, with which you enclose copies of correspondence with Mr. R. F. Schaefer, of Tucson, respecting a tungsten mine near Dagoon, Arizona, for which the Reconstruction Finance Corporation has declined to advance a development loan.

It must be admitted that a projected output of four tons a concentrate a month is not a very substantial contribution to the present needs. Nevertheless, copies of Mr. Schaefer's communication will be forwarded to the Regional Engineer, Mr. S. R. Zimmerley, at Salt Lake City, for such action as he considers warranted in the circumstances.

Cordially yours,

(signed)

R. S. DEAN, ACTING DIRECTOR,
for R. R. SAYERS, DIRECTOR

CARTER GLASS, VA., CHAIRMAN

KENNETH MC KELLAR, TENN.
CARL HAYDEN, ARIZ.
ELMER THOMAS, OKLA.
MILLARD E. TYDINGS, MD.
RICHARD B. RUSSELL, GA.
PAT MC CARRAN, NEV.
JOHN H. OVERTON, LA.
JOHN H. BANKHEAD, ALA.
JOSEPH C. O'MAHONEY, WYO.
HARRY S. TRUMAN, MO.
THEODORE FRANCIS GREEN, R. I.
FRANCIS MALONEY, CONN.
DENNIS CHAVEZ, N. MEX.
JAMES M. MEAD, N. Y.
WALL DOXEY, MISS.
BURNET R. MAYBANK, S. C.

GERALD P. NYE, N. DAK.
STYLES BRIDGES, N. H.
HENRY CABOT LODGE, JR., MASS.
RUFUS C. HOLMAN, OREG.
WALLACE H. WHITE, JR., MAINE
CHAN GURNEY, S. DAK.
C. WAYLAND BROOKS, ILL.

United States Senate

COMMITTEE ON APPROPRIATIONS

EVERARD H. SMITH, CLERK
JOHN W. R. SMITH, ASST. CLERK

November 2, 1942

Mr. R. F. Schaefer
701 North 2nd Avenue
Tucson, Arizona

My dear Mr. Schaefer:

In the absence of Senator Hayden, who is now on his way to Arizona, and with specific reference to his letter to you of October 20, I am taking the liberty of transmitting a reply from Honorable Charles B. Henderson, Chairman of the Board of Directors of the Reconstruction Finance Corporation, and a reply from Dr. R. S. Dean, Acting Director of the Bureau of Mines, with regard to your Class B mine loan application.

I am sorry to observe that it is Mr. Henderson's opinion that the Reconstruction Finance Corporation would be unable to give favorable consideration to a Class C application on the basis of the unfavorable reports of field engineers who made investigations of the land in February of 1941, and against in September, 1942.

Regretting that I cannot send you some more favorable word, I am, with best wishes,

Yours very sincerely,

Don A. Gustin

Don A. Gustin
Secretary to Senator Hayden

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
OWNERS MINE REPORT

Report by
A. Brodie Campbell

Date May 12, 1942

1. Mine Little Fanny
2. Mining District & County Dragoon Dist., Cochise Co.
3. Former name Dragoon Mining Corp.
4. Location 5 miles west of Dragoon in Little Dragoon Mts.
5. Owner
6. Address (Owner)
7. Operator J. J. Wien.
8. Address (Operator) Benson, Arizona.
9. President
10. Gen. Mgr.
11. Mine Supt.
12. Mill Supt.
13. Principal Metals Hubnerite, scheelite, copper and iron oxides, secicite.
14. Men Employed
15. Production Rate Hi-grading of indefinite amounts
16. Mill: Type & Cap. Mill equipment on ground for gravity mill. Not set up.
17. Power: Amt. & Type Gas.
18. Operations: Present Mine and develop and mill.

19. Operations Planned Mine, develop and mill

20. Number Claims, Title, etc. 14 claims held by location.

21. Description: Topography & Geography Fairly rugged mountainous country. Fair amount of precipitation. Some small timber. 4500' elev.

22. Mine Workings: Amt. & Condition Surface trenches, opencut stopes, shaft about 50' deep.

Quartz veins in coarse grained granite. Local faultings, but
23. Geology & Mineralization Some general structural features. Rubne te main mineral. Scheelite
occurs when considerable seritization is present. Some bead, copper and iron minerals
present. High grade pockets of fair size occur at irregular intervals.

24. Ore: Positive & Probable, Ore Dumps, Tailings No positive ore present. Considerable possible
ore. Grade questionable. Should be considered with Primos.

24-A Vein Width, Length, Value, etc.

25. Mine, Mill Equipment & Flow Sheet Gravity mill partly on ground but not set up.

26. Road Conditions, Route Good to within 1 mile of mine. Fair from there on. Turn off
main Benson-Willcox highway at Triangle T ranch road. Go towards Ranch (E)
about 100 yds. Take road that goes under bridge on highway to west 1 mile.

27. Water Supply Fair.
Should be able to develop sufficient.

28. Brief History Worked during War I. Said to have produced approximately 3000 units
from '34 to '38. Possible total production of 7500 units.

29. Special Problems, Reports Filed Tungsten Deposits of Ariz. Wilson, 1942.

30. Remarks Should become fair sized producer. Should be considered with Primos
and Hawk groups.

31. If property for sale: Price, terms and address to negotiate. No one on property when visited.

32. Signed.....

33. Use additional sheets if necessary.

23. Geology & Mineralization

See accompanying report

24. Ore: Positive & Probable, Ore Dumps, Tailings

See accompanying report

24A. Dimensions and Value of Ore body

See accompanying report

25. Mine, Mill Equipment & Flow-Sheet

None

26. Road Conditions, Route High and second gear road, passable the year around by low clearance cars. Junction of paved highway 81 and road to mine is about 16 miles NW of Benson and 4 miles W. of Dragoon.

27. Water Supply

See accompanying report

28. Brief History Discovered and first worked, probably about 1910; from then, until the price dropped in 1918, was worked profitably. Recent owners-- A. H. Yeagley and the Dragoon Lining Corporation.

29. Special Problems, Reports Filed

30. Remarks

See accompanying report

31. If property for sale: Price, terms and address to negotiate.

Property is for sale.	Total price	\$50,000.00
	Down payment	5,000.00
	Quarterly payment	2,500.00

To negotiate
Contact
Alvie A. Adams
Rail X Ranch
Patagonia, Arizona

32. Signature.....

33. Use additional sheets if necessary.

ML-54

DEPARTMENT OF MINERAL RESOURCES
State of Arizona
MINE OWNER'S REPORT

Date: November 19, 1941.

1. Mine: LITTLE FANNY EXTENSION GROUP
2. Location: 6 mi. W. of Dragoon, Arizona, 16 mi. N.E. of Benson; 2 mil. W. & N. of Highway 81.
3. Mining District & County: Cochise Mining District, Cochise County, Arizona.
4. Former Name: A. H. Yeagley property.
5. Owner: Alvie A. Adams
6. Address (Owner): Rail X Ranch, Patagonia, Arizona.
7. Operator: None
8. Address (Operator):
9. President, Owning Co: None
- 9A. President, Operating Co:
10. Gen. Mgr: None.
14. Principal Minerals: Hubnerite
Scheelite.
11. Mine Supt: None.
15. Production Rate: Not known.
12. Mill Supt: None.
16. Mill - Type & Cap. None.
13. Men Employed: 5 leasers.
17. Power - Amt & Type: None.
18. Operations - Present: Leasers, placer mining.
19. Operations - Planned: No operations planned at present. Property for sale.
20. Number Claims, Title, etc: 14 unpatented claims
Extension Nos. 1-14, incl.
21. Description - Topography & Geography: See accompanying report.
22. Mine Workings - Amt. & Condition: See accompanying report.

23. Geology & Mineraliation: See accompanying report.
24. Ore - Positive & Probable, Ore Dumps, Tailings: See accompanying report.
- 24A. Dimensions and Value of Ore body: See accompanying report.
25. Mine, Mill Equipment & Flow Sheet: None.
26. Road Conditions, Route: High and second gear road, passable the year around by low clearance cars. Junction of paved highway 81 and road to mine is about 16 miles NW of Benson and 4 miles W. of Dragoon.
27. Water Supply: See accompanying report.
28. Brief History: Discovered and first worked, probably about 1910; from then, until the price dropped in 1918, was worked profitably. Recent owners -- A. H. Yeagley and the Dragoon Mining Corporation.
29. Special Probalems, Reports Filed:
30. Remarks: See accompanying report.

31. If property for sale - Price, terms and address to negotiate:

Property is for sale. Total Price	\$50,000.00
Down Payment	5,000.00
Quarterly Payment	2,500.00

To negotiate - Contact: Alvic A. Adams,
 Rail X Ranch,
 Putagonia, Arizona

32. Signature:

REPORT ON EXTENSION GROUP

The vein system, which follows a wide shear zone cutting coarsely crystalline granite, is well defined and extensive. The individual veins are intimately associated with pegmatite dikes into which they merge. The quartz is, in general, not typical vein quartz and is intergrown with mica and feldspar. The metallic minerals associated with the veins are hubnerite (iron manganese tungstate), scheelite (calcium tungstate), a little pyrite (iron sulphide) and occasional galena (lead sulphide). There is also quite abundant fluorite (sodium fluoride). With the exception of the occurrence of galena, the veins are typical of vein roots exposed by profound erosion. To the north and south of the large area of granite in which the veins are found are areas of quartzites, shales and limestones, several thousand feet thick, also profoundly eroded. It is probable that in the granite area, at least 10,000 feet of erosion has taken place since the placement of the veins. These veins as all others, were formed by the expulsion from a large magmatic mass of its more volatile constituents following the slow differential crystallization of the magma on cooling. The metallic compounds carried by the expelled volatile constituents of the magma (water, fluorite, silica, etc.) crystallize in the veins in reverse ratio to their solubility. The first to be dropped are the compounds of tin, tungsten and molybdenum. As the solutions reach higher and cooler portions of the vein opening, these less soluble constituents no longer appear, but are replaced by the compounds of iron, copper, lead and zinc, together with gold and silver. The presence of a little galena in the veins associated with the deep-seated minerals probably indicates a late dying phase of the cooling magma and a feeble resurgence of volatile matter expelled along the older channels.

For a length of over 9,000 feet on the strike of the vein system, and concentrated especially in a length of 1200 feet, pockets of hubnerite-bearing quartz and pegmatite have been superficially mined by local Mexican miners in the past thirty years. In the one area, 1200 feet long, the outcrop has been very extensively worked with openings spaced, on the average, less than fifty feet apart along a zone about 150 feet wide. Depths of not over 50 feet were reached in this work and the hubnerite was won by crude hand methods. In general, only the larger crystals were recovered. As hubnerite is not affected by surface waters, there is no reason why changes in metallic content should occur with depth. The only change to be expected would be the appearance of pyrite and occasional galena below the oxidizing effects of surface waters. On the surface these sulphides have been oxidized and left as the oxidant of the metals. The surface exposures are stained brown and red with limonite (hydrrous oxide of iron).

Without an extensive sampling of the surface, the metallic tenor of the pockets cannot be determined with absolute assurance. The fact that the work was done at a known profit by extremely crude hand methods indicates the probability that the grade mined was fair and returned at least enough to furnish a living wage--say \$8. a ton in recovered hubnerite. As extractions probably did not exceed 50%, it is safe to assume a grade of at least \$16. or between 1% and 2% Tungstic acid. It is safe to assume that with 80% or better recovery in a suitable concentrating plant, that the pockets as mined on a large scale would yield at least 20 pounds of tungstic acid per ton.

The Dragoon Mining Co. made a good start towards the deeper development of the more concentrated part of the vein system, at an elevation which will average about 300 feet below the outcrops on their dips. The work has reached the southern end of the area to be prospected and was started with good intentions, but not completed. Another 1000 or 1200 feet would be in the mineralized zone which grows progressively richer in the northerly direction.

Concentration The tungsten minerals are all extremely heavy and are very easily and cheaply concentrated by water concentration.

The dissemination of the minerals, as far as can be observed superficially, is quite coarse. Grinding to not greater than 30 mesh is probable. All indications point to a simple, relatively inexpensive plant.

Water Supply The water supply sufficient for a plant large enough to yield a fair return (100 to 200 tons a day) would have to be developed. If the tonnage of ore is developed, water can be found somewhere within reasonable distance and depth. At the camp is a shallow well (30 feet) which yields an intermittent supply for camp use. It is quite probable that if it was sunk an additional 50 feet and a drift was run to the east, that a water trap would be encountered at the western edge of the vein system. This work should be done to assure a cheap supply for camp use and for drilling. The cost of hauling water from nearby wells is not prohibitive. The entrapment of water by dams has been done during the rainy seasons.

Recommendations Referring to the accompanying sketch maps, it is seen that the tunnel driven in 1938 and 1939 has just reached the western edge of the mineralized zone at its southern end. A cross-cut, not over 150 feet long to the east, should be driven first to cut all the veins in the zone. This should be followed by a drift on the best vein cut to be driven to the end of the zone (1000 to 1200). According to the ore found on the surface, this region should be highly mineralized.

The property is very attractive in that the possibilities for a long-lived profitable mine far outweigh the mining risk involved.

Possible Profits If a mine of 200 tons a day is developed and the mine is properly equipped, the results should be about as follows, assuming mining and treating ore of about 20 pounds of tungstic acid per ton:

Mining - - - - -	\$3.50
Milling- - - - -	1.50
Taxes & Misc.- - - - -	.50
	<u>\$5.50</u>
20 lbs. Tungstic acid- - - - -	<u>10.00</u>
Possible Profit	4.50

If 200 tons a day were treated for 300 working days a year, the yearly profit would be \$135,000.00 and the production would be 1,200,000 pounds of Tungstic acid.

The assays of the ores marketed from this property have averaged about 66% WO₃.

Report on Extension Group

The vein system, which follows a wide shear zone cutting coarsely crystalline granite, is well-defined and extensive. The individual veins are intimately associated with pegmatite dikes into which they merge. The quartz is, in general, not typical vein quartz and is intergrown with mica and feldspar. The metallic minerals associated with the veins are hubnerite (iron manganese tungstate), scheelite (calcium tungstate), a little pyrite (iron sulphide) and occasional galena (lead sulphide). There is also quite abundant fluorite (sodium fluoride). With the exception of the occurrence of galena, the veins are typical of vein roots exposed by profound erosion. To the North and South of the large area of granite in which the veins are found are areas of quartzites, shales and limestones, several thousand feet thick, also profoundly eroded. It is probable that in the granite area, at least 10,000 feet of erosion has taken place since the placement of the veins. These veins, as all others, were formed by the expulsion from a large magmatic mass of its more volatile constituents following the slow differential crystallization of the magma on cooling. The metallic compounds carried by the expelled volatile constituents of the magma (water, fluorite, silica, etc.) crystallize in the veins in reverse ratio to their solubility. The first to be dropped are the compounds of tin, tungsten and molybdenum. As the solutions reach higher and cooler portions of the vein opening, these less soluble constituents no longer appear, but are replaced by the compounds of iron, copper, lead and zinc, together with gold and silver. The presence of a little galena in the veins associated with the deep-seated minerals probably indicates a late dying phase of the cooling magma and a feeble resurgence of volatile matter expelled along the older channels.

For a length of over 9000 feet on the strike of the vein system, and concentrated especially in a length of 1200 feet, pockets of hubnerite-bearing quartz and pegmatite have been superficially mined by local Mexican miners in the past thirty years. In the one area, 1200 feet long, the outcrop has been very extensively worked with openings spaced, on the average, less than fifty feet apart along a zone about 150 feet wide. Depths of not over 50 feet were reached in this work and the hubnerite was won by crude hand methods. In general, only the larger crystals were recovered. As hubnerite is not affected by surface waters, there is no reason why changes in metallic

content should occur with depth. The only change to be expected would be the appearance of pyrite and occasional galena below the oxidising effects of surface waters. On the surface these sulphides have been oxidized and left as the oxidant of the metals. The surface exposures are stained brown and red with limonite (hydrrous oxide of iron).

Without an extensive sampling of the surface, the metallic tenor of the pockets cannot be determined with absolute assurance. The fact that the work was done at a known profit by extremely crude hand methods indicates the probability that the grade mined was fair and returned at least enough to furnish a living wage--say \$8. a ton in recovered hubnerite. As extractions probably did not exceed 50%, it is safe to assume a grade of at least \$16. or between 1% and 2% Tungstic acid. It is safe to assume that with 80% or better recovery in a suitable concentrating plant, that the pockets as mined on a large scale would yield at least 20 pounds of tungstic acid per ton.

The Dragoon Mining Co. made a good start towards the deeper development of the more concentrated part of the vein system, at an elevation which will average about 300 feet below the out-crops on their dips. The work has reached the southern end of the area to be prospected and was started with good intentions, but not completed. Another 1000 or 1200 feet would be in the mineralized zone which grows progressively richer in the North-erly direction.

Concentration The tungsten minerals are all extremely heavy and are very easily and cheaply concentrated by water concentration.

The dissemination of the minerals, as far as can be observed superficially, is quite coarse. Grinding to not greater than 30 mesh is probable. All indications point to a simple, relatively inexpensive plant.

Water Supply The water supply sufficient for a plant large enough to yield a fair return (100 to 200 tons a day) would have to be developed. If the tonnage of ore is developed, water can be found somewhere within reasonable distance and depth. At the camp is a shallow well (30 feet) which yields an intermittent supply for camp use. It is quite probable that if it was sunk an additional 50 feet and a drift was run to the East, that a water trap would be encountered at the Western edge of the vein system. This work should be done to assure a cheap supply for camp use and for drilling. The cost of hauling water from nearby wells is not prohibitive. The entrapment of water by dams has been done during the rainy seasons.

Recommendations Referring to the accompanying sketch maps, it is seen that the tunnel driven in 1938 and 1939 has just reached the Western edge of the mineralized zone at its Southern end. A cross-cut, not over 150 long to the East, should be driven first to cut all the veins in the zone. This should be followed by a drift on the best vein cut to be driven to the end of the zone (1000 to 1200). According to the ore found on the surface, this region should be highly mineralized.

Long-lived

The property is very attractive in that the possibilities for a long-lived profitable mine far outweigh the mining risk involved.

Possible Profits If a mine of 200 tons a day is developed and the mine is properly equipped, the results should be about as follows, assuming mining and treating ore of about 20 pounds of tungstic acid per ton:

Mining.....	\$3.50
Milling.....	1.50
Taxes & Misc.....	.50
	<u>5.50</u>

20 lbs. Tungstic acid	<u>10.00</u>
Possible profit	4.50

If 200 tons a day were treated for 300 working days a year, the yearly profit would be \$135,000.00 and the production would be 1,200,000 pounds of Tungstic acid.

The assays of the ores marketed from this property have averaged about 66% WO₃.

26 November 1941

Mr. Alvie A. Adams,
Rail X Ranch,
Patagonia, Arizona.

My dear Mr. Adams:

I am enclosing herewith a copy of mine owners report filed with this department covering the LITTLE FANNY GROUP in the Cochise Mining District, Cochise County.

I shall be glad to submit a copy of this report to anyone making inquiry for a property such as yours.

Assuring you of my desire to be helpful, and with best wishes, I am

Yours very truly,

Charles F. Willis
Chairman, Board of Governors

CFW-jrf

encl.