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PRINTED: 12/18/2002

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: BUTTERNUT PROPERTY

ALTERNATE NAMES:
CLAIMS MS 1434 AND 3768
GOOD LUCK GROUP

YAVAPAI COUNTY MILS NUMBER: 1036

LOCATION: TOWNSHIP 12 N RANGE 1 E SECTION 8 QUARTER NW
LATITUDE: N 34DEG 26MIN 34SEC LONGITUDE: W 112DEG 17MIN 01SEC
TOPO MAP NAME: POLAND JUNCTION - 7.5 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:
COPPER
LEAD
ZINC
SILVER
GOLD

BIBLIOGRAPHY:
PROD. POSS. OF MARGINAL COPPER MINES,1941,P96
BLM MINING DISTRICT SHEET 14
ADMMR BUTTERNUT MINE FILE
WEED, W.H. THE MINES HANDBOOK VOL 13 1918
P 430-431
ABM BULL. 137, P. 35
USGS BULL. 782, P. 127, 142
ADMMR IRON KING N. PROSPECT FILE-SEE MAP

Poland Junc
Dredge Tailings
Butternut Mine
Butternut Spring
Big Bug
NATIONAL FOREST
PIPELINE
Cem
Well
TRAIL
JEEP
Creek
Grave
USMM 3
BM 4614
OLD
RAILROAD
Dredge Tailings
Grapevine
Hackberry Mine Dump
Little Mesa
Daniels Gulch
Prospect
MERIDIAN
Butternut Property
T14N R1E Sec. 8 NW
Poland Junction 7.5'

BUTTERNUT MINE YAVAPAI COUNTY

Alva Breckenridge wants to sell her Butternut Claims near Iron King. FTJ WR 9-24-65

Examined the Butternut Property NW of Mayer. Collar of shaft caved and workings inaccessible. FTJ WR 5-19-67

P.O. Box 362
Prescott, Arizona.
Sept. 20th. 1958. Phone 1013 W.

RECEIVED
SEP 22 1958
DEPT. MINERAL RESOURCES
PHOENIX, ARIZ.

Mr Frank P. Knight
Mineral Bldg., Fairgrounds
Phoenix, Arizona.

Dear Mr. Knight:

In answer to your letter sent my sister, Ethel Edwards. In the letter there was no reportblank inclosed so am sending this information which will probably be what you want. Mrs. Edwards and I are partners.

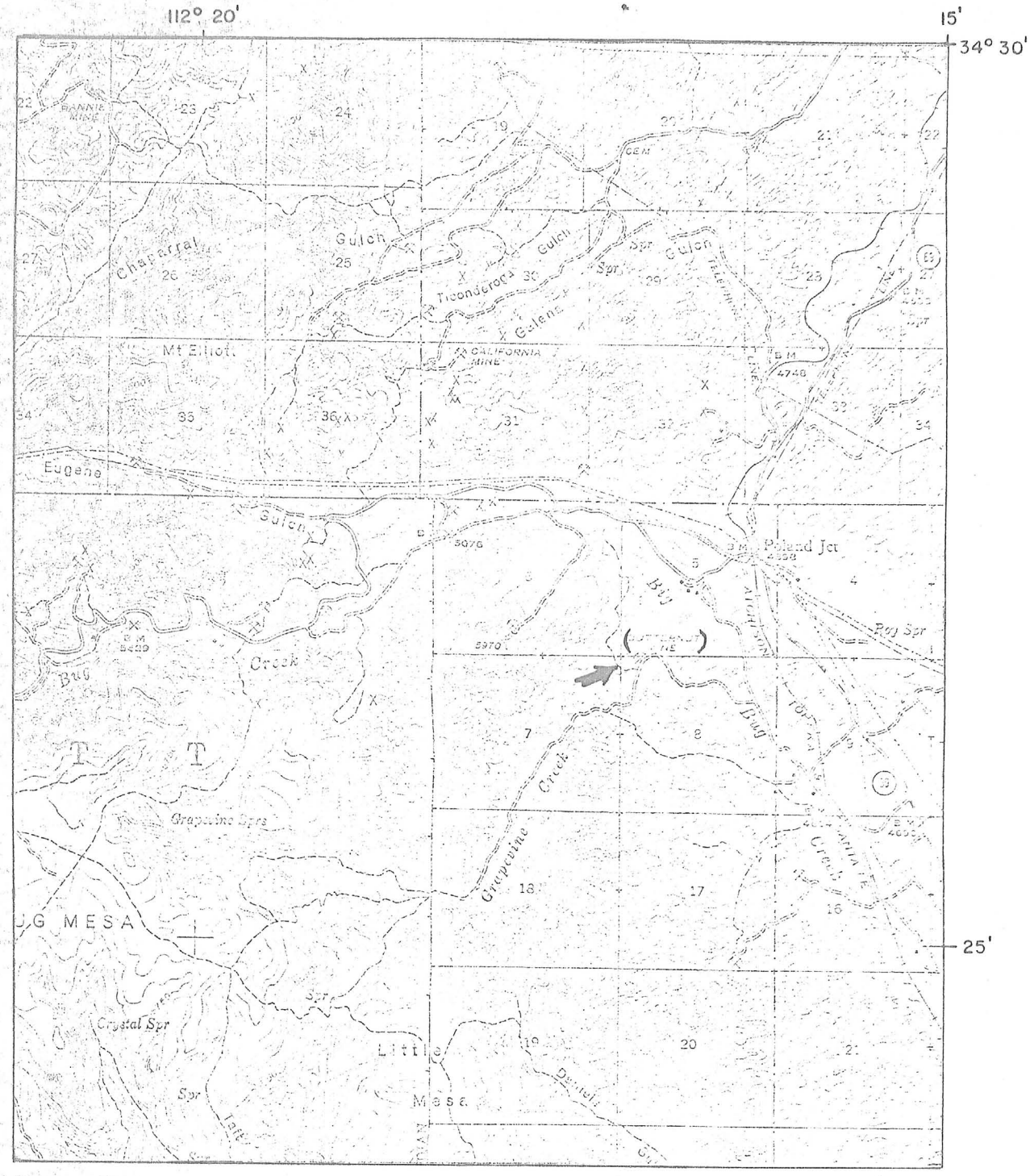
Both properties are for sale, either cash or terms,have assay maps that can be seen here any time, I do not have any copies. These properties are open listing.

You may contact me at the Sharlot Hall Museum any time, I live in the Apt. in the rear. We will pay only one commission.

Yours truly,

Elva V. Breckenridge.

Elva V. Breckenridge.



LOCATION OF BUTTERNUT MINE

1 : 62,500.

315 North Coronado Street
Los Angeles 26, California
January 11, 1944

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

Dear Sam:

Acknowledging yours of January 8th, it's perfectly all right for you to keep the data on the Mount Union in your files until Mr. Baggaley returns from the East.

I am wondering if my application for an access loan on the Butternut Mine was submitted to you? I am just in receipt of a form letter from Washington saying the loan had been declined. I felt very confident that they would grant this loan. I got together some very reliable additional information on the property and I went into detail as you have always suggested that I should in giving them every bit of information that was possible to obtain. This I did. It looks to me like it is very poor business upon their part after they had granted the owner a loan and through his illness he was not able to reach his objective. I agreed to assume this loan and repay them, as I feel confident that under the proper management the property can be made to be one of the best producing copper properties in that area, and I would not have had any trouble whatever in repaying both loans within a reasonable time. I even cited to them that I had all the necessary equipment on hand and I drew their attention to the manpower situation and in my budget the main account was for labor and timbers which were available at a nominal cost. Notwithstanding all of this they declined. Might I suggest that you ask Mr. Gohring (if you have not seen my application) to let you see it and then will you in my behalf write to Mr. Broadgate in Washington and ask Bill if he will please go to the proper one in Washington (Mr. Tully signed the letter) and see if he can't show them the light of day and explain the situation to him.

I have a very equitable contract on the property and if I am not able to get this loan reinstated I am open for a deal with private capital, and I believe sincerely that $5,000 to $7,000 will put the property in excellent condition

so that very handsome profits can be anticipated. Do you have anyone in mind that would join me? As I have stated, I have all theequipment at hand to place on the property and the capital required will be used only for completing the cleaning out of the shaft and the main account will be for labor.

It is very possible that I will be in Phoenix the early part of the coming week and I would like very much to have a visit with you.

With kindest regards, I am

Yours very truly,

R. A. Airheart

RAA:mv

DEPT. MINERAL RESOURCES
RECEIVED
NOV 30 1942
PHOENIX ARIZ

November 28, 1942

MEMORANDUM

Butternut

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

In compliance with your request for information re. Bill O'Brien, 37 W. President St., Tucson, the following information is submitted:

I called on Mr. O'Brien Nov. 26, and he informed me that he had been mine foreman at the Butternut prior to his enlistment in the army in 1917, having worked there for two years. His father, J. E. O'Brien was superintendent for the Big Ledge Copper Co., Dwight Woodbridge of the Bureau of Mines being consulting engineer.

Assays as submitted were run by Frank Jerew and one Roe, company assayer. Mr. O'Brien saw all assays certificates.

Regarding the drill hole, he states that it cut 20ft of copper which assayed 8%.

Mr. O'Brien's mother recalled the names of Andy Powers and Klondyke Bill Belford who worked on the property. Both are now at the Pioneers' home in Prescott. The former was particularly conversant with the property.

My impression of Mr. O'Brien is that he is a thoroughly reliable man, and he is familiar with mine operation. At present he is employed by the Ryan Aircraft Corp. of Tucson.

Geo A Ballam

STATUS OF DORMANT MINES

MINE NAME: Yaeger Mine Black Hills mining District

LOCATION: Butterfruit Mine, Big Bug Mining District

OWNER AND/OR LEASEE: Owner

ADDRESS: 136 1/2 So. Montezuma St. Prescott Arizona

APPROXIMATE PRODUCTION (Year of 1945):

COPPER ✓ Lbs. LEAD _____ Lbs.

ZINC _____ Lbs. (OTHER) Silver & gold.

CHECK THE CHIEF CAUSE OF YOUR DISCONTINUED PRODUCTION:

(A) Easily available ore worked out.
(B) Increased costs, but have quantity similar to past grade of ore.
(C) Too close a margin to develop more ore.
(D) Husband passed away, I have no funds

If you have ore ready to mine please give your estimate of the amount of metal (name each metal) that you could produce in one year (after allowing 60 days to get started) if there were premiums above present market prices. Name amount with a low premium, and amount at a high premium; such as:

Copper at 22½¢ plus 5¢ premium..... 1,000,000 Lbs.
Copper at 22½¢ plus 10¢ premium..... 1,500,000 Lbs.

If you do not have ore ready to mine please discuss the following:

(A) Do you think a reasonable development program would produce a justified tonnage of commercial ore at above mine?

Yes

(B) With a premium price (guaranteed for one year) could you carry out such a development program yourself? What premium?

About the same as World War II

(C) If you could not do this yourself, would a quick drilling program by some government agency (at government expense) be sufficient?

(D) Or would you prefer a loan plan similar to the arrangements during World War II?

Yes

How about a combination plan in two stages such as follows?

Stage 1: Government engineers review project and, if a little drilling appears to be justified and a preliminary key to the situation, such drilling program to be agreed upon by owner and government engineer, paid for by the government, but let by contract.

Stage 2: If results of drilling (or without drilling) justify underground development and/or production equipment, same to be obtainable via a mortgage loan on property.

Please discuss the above: Stage 1

The Yaeger has a 75 000 ton dump that will average 3 per cent about 1½ oz silver also a tailings dump averaging around 2 or more per cent, a little more ~~gold~~ silver than above. The Butternut mine has over 15 ft of ore that gets returns 6 or 7 per cent copper. on the three hundred level. The 425 ft level has ore 6 to 10 ft wide which all shipped when it operated in 1920.

SUGGESTIONS:

A loan for milling equipment to be put on Yaeger dump, There is adequate water for running the mill. A loan for dewatering Butternut shaft and putting it in operation.

Elva V. Breckenridge

DATE _____ SIGNATURE _____

136½ So. Montezuma St
Prescott Arizona

304xxx

February 7, 1944

Mr. R. A. Airheart
350 North Coronado Street
Los Angeles, California (26).

Dear Ralph:

I received your letter of February 4 and was looking for you today. My plans take me to Tucson this evening and I will not be back in the office again until January 14 and 15 and probably leave either the night of the 15th or early on the 16th to be gone for the rest of that week.

Hope to see you when you get over and I am sorry that I will not be here the remainder of this week.

Very truly yours,

J. S. Coupal, Director

JSC:LP

350 North Coronado Street
Los Angeles, California (26)
February 4, 1944

DEPT. MINERAL RESOURCES
RECEIVED
FEB 7 1944
PHOENIX, ARIZONA

Mr. S. J. Coupal
413 Homebuilders Building
Phoenix, Arizona

Dear Sam:

I am leaving early tomorrow morning, Saturday, reaching Phoenix in the evening and will be there through Tuesday. I hope to see you and discuss our little situation and try and remedy the matter of the Butternut R.F.C. loan, if it is possible.

I feel at this time that I have the property financed to go ahead but I would much prefer to renew the application so that I won't have the burden on me of the Breckinridge loan which naturally clouds the title under my bond and lease. Anyway, we will discuss this when I see you.

With kindest regards, I am

Yours very sincerely,

R. A. Airheart

RAA:mv

January 14, 1944

Mr. Ralph A. Airheart
315 North Coronado Street
Los Angeles (26), California

Dear Ralph:

Many thanks for your letter of January 8.

Your application for a loan on the Butternut Mine was submitted to this office for review and I can say that it was recommended for loan. I do know, confidentially, your application was reported with the recommendation that the loan be granted by the Phoenix office to their Washington head office.

I furthermore know that Mr. Gohring was very much incensed at the loan being rejected in Washington. In this connection, I know that aloan which had been rejected or given a "no loan" recommendation by this office and by the Phoenix office was reopened probably after considerable pressure was applied in Washington by the applicant through certain connections and that the loan was granted. Mr. Gohring and Mr. Tweedy discussed both of these cases and are in no way satisfied with the action of Washington.

Please bear in mind that this is entirely off the record and is confidential information for you and for you alone.

I believe that your property and the action of Washington is now being reviewed and I do not think it adviseable to have Mr. Broadgate take any action at this time. I will ask him to look into the subject; and, as I expect to see him toward the end of next week or the following week personally, will further discuss it with him at that time.

Due to the surplus of copper on hand I do know that loan applications are getting more rigid investigation at this time; and, properties that would have been approved two months ago, will now find it difficult to get approval under the policies adopted due to the surplus of the various metals.

If there is any opening for you to take this property up with private capital, I would suggest that you do so.

Yours very truly,

J. S. Coupal, Director

JSC:JES

November 25, 1942

MEMORANDUM

BUTTERNUT MINE
YAVAPAI COUNTY

TO: George A. Ballam

FROM: Earl F. Hastings

Mr. Evert Breckenridge has made application for a "C" loan on this property. The evaluation of it dissolves itself around a letter written to Mr. Breckenridge by one Bill O'Brien, 37 West President Street, Tucson.

Will you please contact Mr. O'Brien, determine when he was last in the Butternut Mine and in what capacity. I am sending you a copy of the letter he wrote to Mr. Breckenridge and I am particularly interested in the drill hole which he mentioned, as well as his source of information relative to the values of the ores he claims.

Ask him if he saw assay certificates or if these values were estimates.

In short, give us a report on the man without letting him know that our recommendation of this application depends upon your estimate of his character. Thanks.

November 25, 1942

MEMORANDUM

BUTTERNUT MINE
YAVAPAI COUNTY

TO: George A. Ballam

FROM: Earl F. Hastings

Mr. Evert Breckenridge has made application for a "C" loan on this property. The evaluation of it resolves itself around a letter written to Mr. Breckenridge by one Bill O'Brien, 37 West President Street, Tucson.

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November 25, 1942

MEMORANDUM

BUTTERNUT MINE
YAVAPAI COUNTY

TO: George A. Ballam

FROM: Earl F. Hastings

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Will you please contact Mr. O'Brien, determine when he was last in the Butternut Mine and in what capacity. I am sending you a copy of the letter he wrote to Mr. Breckenridge and I am particularly interested in the drill hole which he mentioned, as well as his source of information relative to the values of the ores he claims.

Ask him if he saw assay certificates or if these values were estimates.

In short, give us a report on the man without letting him know that our recommendations of this application depends upon your estimate of his character. Thanks.

July 3, 1941

Mr. Evert Breckenridge
Clemenceau, Arizona

Dear Mr. Breckenridge:

I have your letter and questionnaire of recent date regarding the potential copper production from the Butternut property. You state that a 14-cent price is necessary to produce copper from this property, but you do not give us any information as to how much copper could be produced annually at this price, nor how much capital investment would be necessary to equip to produce. Both these figures are necessary for the report and we could not include your property without them. I hope that you can give them to us quickly as we are already late in getting this report into Washington.

We would like to have some additional information regarding your property. We plan on carrying in the report a description of the properties mentioned somewhat along the formula as indicated by the questions asked on the enclosed quest onnaire. I hope that you can give this data to us.

Thanking you, and with kindest personal regards, I am

Yours very truly,

Chairman, Board of Governors
Arizona Department of Mineral Resources

CFW:LP
Enc.

NEW JERSEY ZINC COMPANY
Prescott, Arizona.

November 16th. 1953.

SUMMARY OF LOGS
OF
TWO DIAMOND DRILL HOLES
ON
BUTTERNUT PROPERTY,
YAVAPAI COUNTY, ARIZONA.

D.D.H. BN No.1 Collared: June 5, 1953
Completed : June 23, 1953.
Location; Goodluck No.3 Claim.
Coordinates: 18,195 S., 3,640 W. Elevation: 4,990'
Bearing: 55Degrees W. Inclination: -75 degrees.

0-128' Andesite tuff- well bedded with some coarser pyroclastics. Small stringers of epidote cut the core.

128-240 Rhyolite tuff- contains acidic and andesitic fragments. Locally small stringers and patches of epidote.

240- 258 Hornblende granodorite dike.

258- 272' Contact pyrometasmatic zone.

272-447' Andesite tuff- locally very well bedded, relatively unsheared and unaltered.

447- 501' Rhyolite tuff- with minor disseminated pyrite.

501- 526' Andesite tuff.

526-555' Rhyolite tuff; inter bedded chloritic and siliceous tuffs- very minor chalcopyrite and pyrite along severall small fractures.

555-567' Siliceous zone with pyrite, sphalerite chalcopyrite and very fine galena. Unmineralized silicified zone from 557.5- 562.5'. Following are the assay results:

	Footage	Width	Au.	Pb.	Zn.	Cu	ag
3333	555-557.5	2.5'	0.02	0.6	4.7	2.4	2.4
2254	562.5-567'	4.5'	Tr.	3.0	1.0	2.1	0.8

567- 759' Andesite tuff- well beded- relatively unaltered.

759' End of hole.

 November 16th. 1953.

Summary of Logs.

D. .H. BH No.2 Collared: June 25, 1953.
Completed: July 17, 1953.
Location: Goodluck No.3 claim.
Coordinates: 17,995 S., 3,500 W. Elevation: 4,988'.
Bearing: 55 Degrees W. Inclination:-75 degrees.

0- 81' Andesite tuff- bedded tuffs and pyroclastics.

81- 87' Andesite flow?- massive, poorly foliated chloritic andesite.

87- 112' Andesite tuff- sparse pyrite and chlorite occur in veinlets.

112-114' Contact pyrometasomatic zone- mostly epidote and some

114- 170' Andesite tuff- Tremolite-160 contains abundance quartz, epidote and hornblende. Quartz veins at 160-162.5 and 168-170.

170-184' Rhyolite-tuffs- has minor disseminated magnetite.

184-266' Rhyolite tuffs- locally well bedded with some coarser fragmental phases. Contains some epidote.

266-287' Hornblende granodiorite dike.

287-554' Andesite tuff- massive to well banded with small stringers of epidote and quartz. Locally minor disseminated pyrite. Occasional foliation is crumpled.

554-595' Highly sheared sericite zone becoming locally chloritic. Very minor disseminated pyrite and some arsenopyrite through out zone with disseminated chalcopyrite, sphalerite and galena occuring in narrow stringers not exceeding a foot in width. Minor sphalerite and chalcopyrite was noted at the following intervals: 560-560.6, 573(½"), 581(2"), (573 (½"), 590-595. The sphalerite is limited to the stringers noted above, the chalcopyrite mineralizedtion is some what more wide spread, very

Summary of log.

minor disseminated chalcopyrite occurring throughout the zone in the sheared chloritic phases of the altered schist.

595-599' Andesite tuff- contains minor disseminated pyrite.

599- 629' Rhelite tuff- well banded. Minor epidote.

629- 644' Andesite tuff- brecciated zone from 632-634 with epidote, quartz, calcite and clorite.

644- 865' Andesite tuff- massive to well banded, contains -5% epidote. 755-756 fracture with-1% chalcopyrites.

865' End of hole.

Assay data:

Footage	Width	au	ag	Pb.	Zn	Cu
550-550.5'	0.5'	0.03	0.77	0.10	8.2	0.74
592-592.8'	0.8'	0.03	0.67	Tr	5.8	0.99

J.C.Sulmer/dvl

Copied by L.F.W. 10/10/56.

Please return to Edna Bierwirth

Keep in Office

ASSAYS

BUTTERNUT COPPER PROPERTY, BIG BUG MINING DISTRICT.

YAVAPAI COUNTY, ARIZONA.

304' LEVEL

DATE*	Distance-	% Cu.	CU@ 38 cts.	$ AU@ 20.67	$ AG@ ?	Width	Gross Value	Remarks.
2/13/16	43'	9.85	77.36	.60	2.47	2'	77.93	
2/18/16	50'	5.17	39.29	1.80	.81	-	41.90	
2/21/16	52'	8.06	68.09	-	.96	-	69.05	
2/23.16	54'	3.06	23.35	.80	.40	-	24.55	
2/27/16	62'	5.13	38.98	.20	.69	-	39.87	
2/28/16	64'	7.42	56.39	.60	2.00	-	58.99	
3/6/16	80'	9.16	69.61	1.20	2.11	Sulphides	73.92	
3/7/16	82'	6.32	48.03	60	1.53	-	50.16	
3/8/16	83'	4.23	32.14	.60	1.75	42"	34.49	
3/10/16	86'	3.71	28.19	.40	1.36	H.W.	29.95	
3/25.16	110'	2.16	16.41	.40	94		17.75	
3/30/16	118'	.85	4.46	.60	.25		5.21	
	"	1.30	9.88	.40	.60		9.96	Covering 126' S. to Shft #2.
SHAFT #2 NORTH.								
4/11/16	3'	11.11	84.43	T.	1.08		85.51	
4/19/16	15'	4.15	46.74	T.	1.28	6'	48.02	
4/25/16	22'	7.01	53.27	T.	.84	3'	54.11	
4/29/16	30'	6.54	49.70	T.	.92	H.W. Strk.	50.62	
5/4/16	35'	5.55	42.18	T.	.62	F.W. 3'	42.80	
5/7/16	40'	1.51	11.47	.60	.41	F.W. 3'	12.48	
5/8/16	41'	4.79	36.40	.40	1.63	5'	38.43	Across Roof.
	45'	1.17	8.89	.60	1.22	H.W.	10.71	
7/21/16	47'	1.63	12.38	T	1.63		14.01	Point ore in Dft. 6' wide.
8/2/16	56'	5.47	41.57	.40	1.15		43.12	
8/10/16	61'	8.59	65.28	T	1.04		66.32	
8/22/16	64'	6.29	47.80	T	2.65		50.45	Gouge H. W.
8/23/16	66'	3.70	28.12	T	1.38		29.50	Stk. H. W.
8/24/16	69'	15.32	116.43	T	1.52		117.95	F. W. Strk.

9-2-19	76-72'	3.46	26.29	1.03	1.84	5'-	29.16 -	Ave. Breast.
9-7	76-80	4.95	37.62	T	1.49		39.11 -	
	78-81'	1.51	19.07	.80	1.38		21.25 -	
	80-84'	5.45	41.42	10.40	.72		52.54 -	
	84-88	3.81	28.95	5.60	.60		35.15 -	
10/14	96-100'	5.18	39.36	2.40	4.95		46.71 -	
10/25	107-109'	9.46	71.89	.40	1.82		74.11 -	
10/31	112-113'	2.79	21.20	.40	.99		22.59 -	Proven ore both sides of drift.
11/16	117-122'	2.68	20.36	T	.79		21.15 -	C C 26' @ 125.87'
11/16	" "	2.47	18.77	T	1.20	26'	19.97 -	West.
12/4	142'	5.38	40.88	T	1.01	H.W 3'	41.89 -	
12/5	143'	3.07	23.33	T	1.35	Face6'	24.68 -	
12/14	155'	3.12	23.71	T	1.31	5'	25.02 -	
12/16	162'	3.40	25.84	T	21	6'	26.05 -	
12/16		3.98	30.24	T	.53		30.77 -	C C 35' E&W @ 170.67'
1/10/1917		1.49	11.32	T	.53		11.85 -	C.C. 42' E&W 222.47'
2/2	246'	3.67	27.89	T	.38	12" H. W.	28.27	
2/3	250'	8.95	68.02	.40	.86	18" F.W	69.28	
2/7	264'	6.04	45.90	T	.48	5'	46.38	
2/17	291'	6.11	46.33	T	1.02	3'	46.45 -	
2/17	278'	3.52	26.75	.40	1001	3'	28.16 -	East CC 3'
2/14	278'	3.21	24.39	T	1.02	8'	25.41 -	West CC 8'.
2/23	313'	8.85	67.26	T	1.18		68.44	

Face of drift north 313'59" from Number "2" Shaft)

(note) One stope on 304 North about 150 feet n. of shaft # 2. Extends about 45 ft. each way making about 90 feet long and 60 feet high. About 28 feet wide at the top and averages 4% copper. On the hanging wall side there is a vein about 6 feet wide that carries copper and zinc between 5 and 8% zinc. About 90 RR cars of ore were shipped to the Big Ledge Smelter in Mayer and these cars came from this stope and one to the North on the 425. They averages were between 4 and 6% CU.

BUTTERNUT 425 FOOT LEVEL.

1/24/18	214'	5.55	42.10	T	.61	H.W 2'-	42.79 -	
1/4/18	190'	3.63	26.58	.20	95	6'	27.73 -	
12/30/17	167'	1.68	12.76	T	.31	4'	13.07 -	
3/23/17	159'	3.21	24.39	T	.26	4'	24.65 -	
5/16	150'	5.20	39.58	T	.69	8'	40.21 -	
3/7/17	137'	4.26	32.37	T	.62	8'	32.99 -	
4/30/17	127'	7.21	54.79	T	1.03	6'	55.82 -	
3/28/17	113'	8.53	64.82	T	1.48	18"	66.30 -	
3/24/17	106'	3.31	25.15	T	.38	8'	25.53 -	
3/17/17	94'	5.26	39.97	T	.96	5'	40.93 -	
3/14/17	90'	6.75	51.30	T	.60	F.W.	51.90 -	
3/5/17	82'	13.75	104.50	T	3.27		107.87 -	Black oxide.
2/21/17	69'	10.17	77.29	.20	3.08	12"	80.57 -	
2/10/17	52'	11.88	89.28	.60	1.46	30"	91.34 -	
2/10/17	52'	5.58	42.40	1.00	1.23	4'	44.63 -	
2/2/17	32'	9.82	74.63	.60	1.04	8"FW	76.27 -	
1/30/17	24'	5.35	40.66	T	.04	7'	40.70 -	
1/10/17	10'	3.23	24.54	T	.18	5'	24.72 -	
					Shaft #2.			
12/26/16	3'	3.97	30.17	T	.36	6'	30.53	
1/1/17	18'	3.92	29.79	.20	.53	6'	30.52	
1/6/17	22'	2.08	15.70	T	.38	FW2'	16.08 -	
1/10/17	28'	1.69	12.84	T	.29	5'	13.13 -	
1/16/17	44'	2.94	22.34	T	.02	5'	22.36 -	
1/21/17	60'	3.46	26.29	-	.35	3'	26.64 -	
1/30/17	74'	3.67	27.89	T	.43	3'	28.32 -	
2/10/17	97'	3.89	67.56	.40	1.06	FW 2'	69.02 -	
2/19/17	107'	4.45	33.82	T	74	8'	34.56 -	
3/2/17	1[illegible]'	365	27.74	T	1.03	7'	28.77 -	
3/20/17	142'	4.33	36.70	T	.54	3'	37.24 -	
3/25/17	145'	1.53	11.62	T	.36	6'	11.98,-	

[illegible] 425 level continued

4/22/17	157'	1.44	19.58	T	.52	6'	20.10 -	
5/3/17	164'	4.55	34.58	T	.64	6'	35.22 -	
5/20/17	180'	4.55	34.58	T	88	6'	35.46 -	
6/4/17	202'	4.12	31.31	.20	.58	7'	32.09 -	
6/10/17	208'	4.25	32.30	T	.62	8'	32.92 -	
9/4/17	212'	6.20	47.12	T	.46	5'	47.58 -	
9/15/17	219'	6.72	51.07	T	.41	7'	51.48 -	
9/17/17	222'	7.34	55.88	T	.38	5'	56.26 -	
9/20/17	227'	7.71	58.59	T	.48	7'	59.07 -	
	227'	7.48	56.84	.20	.42	10'7"	57.46 -	CC West 10'7"
10/14/17	240'	2.48	18.84	.20	.35	7'	19.39 -	
10/17/17	244'	4.43	33.66	T	.37	6'	34.03 -	
10/20/17	248'	3.82	29.03	T	37	6'	29.40 -	
10/24/17	255'	.96	7.29	T	.31	7'	7.60 -	
11/3/17	272'	2.07	15.73	T	.29	6'	16.02 -	
11/6/17	278'	2.17	16.49	T	.52	6'	17.01 *	
11/19/17	292'	5.57	42.33	###	.48	7'	42.81 -	
11/20/17	297'	5.78	43.92	.20	.42	7'	44.54 -	
12/4/17	300'	2.56	19.45	T	.24	7'	19.69 -	
12/12/17	303	2.72	20.67	T	.38	7'	21.05 -	
12/16/17	307	3.03	23.02	T	.23	8'	23.25 -	Face 329 feet N. Shaft # 2.

The length of the drifts on the 425 foot level amounts to about 608 feet. This consists of 279 feet south of shaft # 2 and 329 feet north. There is a stope to the south of shaft no. 2 about 125 long and 60 feet high. To the North the timbers have been put in and chutes ready to start stoping but no stoping has been done. This information was given me by Mr. Kirkpatrick, who cleaned the shaft out about 1947. These samples were taken from the different streaks on different days from both walls. In other words the vein is filled with schist horses and streaks of ore appear on both walls leaving a horse in the middle. At times the ore would continue across the entire face and samples were then taken across the face or breast.

Copied from original sample sheet September 17 56. by,

L.F.Wilson

BUTTERNUT MINE

One mile southwesterly of Poland Junction, Arizona.
Owner; Mrs. Elva V. Breckenridge; 136½ So. Montezuma; Prescott, Ariz.

No production for many years.
Has produced in the past some high grade copper ore from the oxidized zone.
The Butternut was unwatered and sampled in 1945 but no shipments of ore made. It is thus doubtful if much ore is ready to mine.

The property would require both premiums and an exploratory loan.

October 23, 1950

L. L. Farnham

GIROUX ASSAY OFFICE

MAYER, ARIZONA

October 24, 1942

Mr. E. Breckenridge,
Mayer, Arizona.

Dear Mr. Breckenridge:

Regarding our conversation re Butternut Mine. In November 1904 I had occasion to do some sampling there, and, here is the result of the sample taken;

	Oz. Gold	Oz Silver	% Copper	% Iron	% Silica
Ore on Dump - - -	0.16 -	3.00 -	15.90 -	11.00 -	30.00
Paralell Vein - -	0.20 -	4.00 -	7.00 -	9.90 -	75.00
Ore in Winze (Down about 60')	0.12 -	3.50 -	12.00 -	17.60 -	25.00
General Average of Ore on Dump--About 40 tons	0.08 -	5.20 -	11.28 -	10.00 -	28.00

The Butternut Mine at that time was being operated by Mr. Boggs, who was making regular shipments of ore represented by the last sample ennumerated in the above list of assays.

To the west of the ore conditions showed in in the main shaft, and to the north of the shaft workings, considerable zinc showed; I am of the opinion that this zinc condition should be investigated. I believe that the Butternut Mine, is a very good mining venture.

Yours very truly,

F W Giroux
F. W. Giroux,
Box 177,
Mayer, Arizona

State of Arizona, County of Yavapai--ss:

I, F. C. Bauer, a Notary Public in and for Yavapai County, Arizona, do hereby certify that the foregoing is a true copy of the Original Letter.

Witness my hand and seal this 6th day of Nov. 1942.

My Com expires 1/10/45.

(F. C. Bauer)
Notary Public

copy

Arizona Department of Mineral Resources, Capitol Building, Phoenix, Arizona

QUESTIONNAIRE

Relating to survey of potential copper production from Arizona small and marginal mines for national defense purposes;

Name of mining property.....Butternut.....

Location.....Big Bug Mining District.....

Ownership.....Evert Breckenridge & Ethel Edwards.....

Name of Manager.....Mayer, Arizona.....

Post Office address.....

Copper production (pounds) during each of the past five years:

1936..... 1937..... 1938.....

1939..... 1940.....

1941 rate of copper production based upon first four months.....

How much copper could this property produce annually

on a 14 cent price? .....

on a 16 cent price? .....

on an 18 cent price?.....

on a 20 cent price?.....

What price copper is necessary for this property? .....14..... cents per pound?

What plant facilities would be required and how much is the estimated cost in the event a 14 cent price could be assured? .....

.....

a 16 cent price could be assured? .....

.....

18 cent price? .....

.....

20 cent price? .....

.....

For what length of time would assurance of price and sale of full production be necessary?.....

(Over)

How long would it take, after financing has been provided for, before production on the above basis could be reached? .....

Does your organization have the facilities for raising the necessary capital to increase production to the amount stated? ....No....

If not, do you believe that your company would be amenable and agreeable to government financing? ....Yes....

Do you believe that you could finance the capital investment yourself on some such basis as a guarantee of sale of output at a fixed price and for a definite period, with damages to cover unamortized portion of capital investment in the event the government failed to take the output for the agreed upon time - or some similar arrangement? ....No....

Please let us have your comments on the probability or possibility of your organization participating in such a program for national defense purposes .....

The collar of shaft is caved in out side. The rest of shaft is good, the ledge is 40 ft. wide on 425 level, has an average of 3-5/8 per cent copper. The mine at present is full of string copper water. This is the best information I can give but will either lease or sell as I haven't the money to open collar of shaft. There has been about $260,000 worth of copper shipped according to the report from the University of Arizona

~~What would be your ideas on financing and carrying out such a plan as is indicated by these questions?~~

Kindly list names and addresses of other potential copper producers in Arizona whose operations should be included within this survey.....

Date ..... Signed.....

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

DEPT. MINERAL RESOURCES
RECEIVED
JAN 30 1943
PHOENIX, ARIZONA

Mine Butternut

Date Jan 28th, 1943.

District Big Bug, Yavapai CO.

Engineer A. C. Nebeker

Subject: Progress since loan.

The Butternut mine is being operated by Mr Evert Breckenridge on the $5000 loan.

He has now working five men and has the caved material removed from the shaft for forty feet dow n and is timbering for two compartment s haft. He has a headframe bought, a hoist and a pile of new timber.

He has working with him two first class shaftmen, so I think he will get along O.K.

In cleaning out the muck, the vein has been exposed on both ends of the shaft and it shows some nice copper ore.

A C Nebeker

Intra-Company Correspondence

SHATTUCK DENN MINING CORPORATION
and
SUBSIDIARIES

Humboldt Office

Date December 13, 1965

TO: C. R. Sundeen

FROM: J. Olaf Sund

SUBJECT: BUTTERNUT MINE
% Mrs. Elva Breckenridge
Prescott, Arizona
445-3122

TYPE: Copper, Gold, Silver

TERMS: Not discussed.

LOCATION:

In the Big Bug Mining district, some $3\frac{1}{2}$ miles northwest from the town of Mayer, namely along section line 5 and 8, T-12-N and R-1-E.

HISTORY AND DEVELOPMENT:

The "Butternut" is another old mine that was first developed during 1916-'17 and later reopened briefly during the mid 1940's. It was again re-examined, optioned and diamond-drilled by New Jersey Zinc during 1953. About 90 car loads of ore were mined from two principal stopes, one on the 300 foot level, which is the most southerly, and is some 90' x 28' x 60'; and the other on the 425 foot level is some 125' x ? x 60'. (in 1916-17).

The shaft was inclined at 70 degrees southwest at the collar and gradually flattened with depth. The two levels at 304 and 425 feet had 460 and 608 feet of lateral development respectively. The shaft is presently caved and filled and thus the levels are inaccessible.

GEOLOGY:

The local geology is summarized on the enclosed 400 foot geological plan. The rocks in the immediate vicinity of the mine are highly sheared and strike north 50 degrees east and dip 70 degrees southeast. For the most part they are schistose acid and intermediate lavas with sedimentary interbeds and intrusive dikes.

There is a set of more intensly sheared zones along which there is considerable sericitization and silicification etc. Presumably it is along such sheared zones that the mineralized parts are restricted. Although it is not clear from the limited information available, both the sheared altered zones and the mineralized parts may correspond to the upper parts of the rhyolitic flows or at least at the contacts between the individual flow units.

MINERALIZATION:

The ore minerals are lenticular streaks of pyrite, sphalerite and chalcopyrite as well as a little arsenopyrite with a gangue of quartz and chlorite. Apparently the "ore-type" mineral zones are in two distinct shoots from which all mining took place.

Note that original mining was all within the oxidized and enriched parts. The values obtained from the 1916-17 work are plotted on the enclosed 20 foot to 1 inch level plans. For simplicity, the values and widths are also listed separately on the enclosed sheets. It can be seen immediately that the gold and silver values are generally of low tenor with only erratic gold values of a half ounce etc. The copper values range between 3 and 7 percent with occasional erratic highs above this.

RECENT ACTIVITY:

The shaft was cleaned out in 1943, but no production was attempted. During the early 1950's, New Jersey Zinc studied this area and decided to drill under the two ore shoots in order to investigate the downward extension of the mineral zones into the primary sulphides. The following are their results:

DDH BN-1 Under southerly shoot (stoped on 304 level).

Footage	Width	Au	Ag	Pb	Zn	Cu
555-557.5	2.5	.02	2.4	0.3	4.7	2.4
562.5-567.0	4.5	Tr	0.8	3.0	1.0	2.1

DDH BN-2 Under northerly shoot (stoped on 425 level)

560-560.5	0.5	.03	.77	.10	8.2	.74
592-592.8	0.8	.03	.67	Tr	5.8	.99

Samples collected from the mine dump by the writer gave insignificant assays.

CONCLUSIONS:

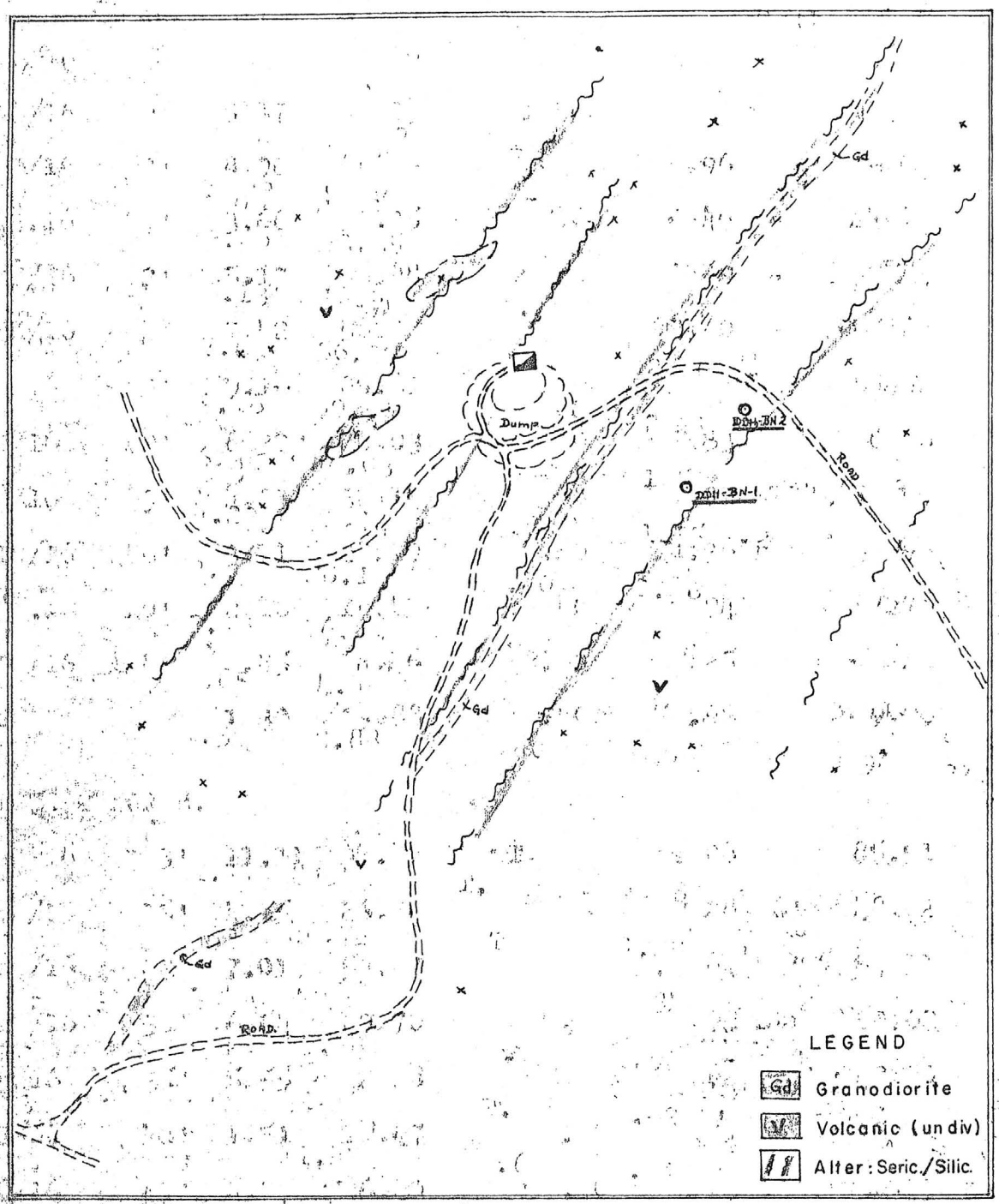
The recent diamond drilling by New Jersey Zinc under each of the mineralized shoots gave relatively low values except for the moderate zinc assays. This in itself would suggest that the copper values from the original mining were from a relatively enriched oxidized zone and which do not persist into the primary sulphide zone.

The original lateral development work extended well beyond the stoped limits and would thus tend to rule out an immediate repeat of the sulphide rich zone on strike or its oxidized equivalent.

RECOMMENDATIONS:

No action should be taken on this property at this time.

JOS/db



GEOLOGY OF THE BUTTERNUT MINE AREA

1" = 400'

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

DEPT. MINERAL RESOURCES
RECEIVED
NOV 4 1942
PHOENIX, ARIZONA

Date Nov, 2nd, 1942

Mine Butternut

Engineer A. C. Nebeker

District Big Bug, Yavapai County, Ariz.

Location Prescott, Ariz

Former name same

Owner Evert Breckenridge and Ethel Edwards deceased Mayer, Arizona

Address Mayer, Ariz.

Operator now idle

Address

President

Gen. Mgr.

Mine Supt.

Mill Supt.

Principal Metals Copper- Gold-Silver

Men Employed

Production Rate None now

Mill: Type & Cap.

Power: Amt. & Type

Operations: Present The present operations consists only of digging around and getting samples to see if a loan would be justified.

Operations Planned If Loan can be had it is planned to retimber the collar of the shaft and dewater the shaft, so the ore reported to be in the 40 ft. vein in bottom of the shaft can be checked up, if ore is found to be as reported then developement and production is planned.

Number Claims, Title, etc. 5 claims and title is reported to be in first class shape and belong to the above mentioned owners.

Description: Topog. & Geog. This property is about 4 miles northwest of Mayer on the southsid of the big hill and property can be seen from the road going between Mayer and Humboldt. The slope of the hill to the mine is very gentle and a good road grade can be maintained.

Mine Workings: Amt. & Condition This property has two shafts, one an incline 425 feet deep and several hundred feet drifted reported also in the bottom of this shaft it is reported there is a 40 feet vein carrying 3.5 % copper. The collar of the shaft is caved and water is within 100 feet of the surface.
South of the above shaft is another shaft with caved collar depth unknown.

(over)

Geology & Mineralization

Formation is mostly the Yavapai Shist, with some quartz veins and just south of the mainm shaft near the second shaft is a decomposed granite. The strike of the formation and the vein is N 35 degrees E with a 70 degree dip to the west. Ores are the carbonate and sulphides of copper.

Ore: Positive & Probable, Ore Dumps, Tailings

The 40 foot vein of 3.5% copper in the bottom of the 425 foot shaft is the only reported probable ore. On the dump one sees both carbonate and sulphide copper ores in small pile, but it appears that leasers have been hauling out some of the dump which shows some values in copper. Ore on dump assays .16 ozs gold, 3 Ozs silver, 15.9% copper, and 60 ft winze, Au.12 Oz, Copper 17.6% (vein .20 Au, 4 Oz Ag. 9.99% copper. is reported.)

Mine, Mill Equipment & Flow Sheet

No equipment

Road Conditions, Route

Road is fair, only about 3 miles off main highway.

Water Supply

Out of the mine, or water can be had from the creek a short distance away.

Brief History

It is reported that this property has produced 1,200,000 lbs of copper, $60,000 gold and $10,000 silver.

Special Problems, Reports Filed

The owners want to work the property but need money to put the shaft in a saft condition, and get the water out.

Remarks

The formation is that type, which could furnish room for large lenses of ore.

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

Signed A. C. Nebeker

A. C. Nebeker

Use additional sheets if necessary. Separate sheets on each problem.

NAME OF MINE: BUTTERNUT

COUNTY: YAVAPAI
DISTRICT: big bug
METALS: CU

OPERATOR AND ADDRESS: DATE:		MINE STATUS DATE:	
5/1/44	R.Airheart,Prescott (lease)	5/1/44	Financing
			Idle
		2/45	Operations Planned
		4/45	Financing
11/45	W.H.Kirkpatrick, St.Michael Hotel, Prescott		Idle
		11/45	Placing machinery
		1/46	Pumping & cleaning shaft
		7/46	Idle

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
OWNERS MINE REPORT

Dec, 2nd, 1942

A. C. Nebeker

1. Mine
Buttermut

2. Mining District & County
Big Bug, Yavapai County, Ariz.

3. Former name
same

4. Location
Prescott, Ariz

5. Owner
Evert Breckenridge and Ethel Edwards

6. Address (Owner)
Mayer, Ariz.

7. Operator
now idle

8. Address (Operator)

9. President

10. Gen. Mgr.

11. Mine Supt.

12. Mill Supt.

13. Principal Metals
Copper- Gold-Silver

14. Men Employed

15. Production Rate
None now

16. Mill: Type & Cap.

17. Power: Amt. & Type

18. Operations: Present
The present operations consists only of digging around and getting samples to see if a loan would be justified.

19. Operations Planned
If Loan can be had it is planned to retimber the collar of the shaft and dewater the shaft, so the ore reported to be in the 40 ft. vein in bottom of the shaft can be checked up, if ore is found to be as reported then developement and production is planned.

20. Number Claims, Title, etc.
5 claims and title is reported to be in first class shape and belong to the above mentioned owners.

21. Description: Topography & Geography
This property is about 4 miles northwest of Mayer on the southsid of the big hill and property can be seen from the road going between Mayer and Humboldt.
The slope of the hill to the mine is very gentle and a good road grade can be maintained.

22. Mine Workings: Amt. & Condition
This property has two shafts, one an incline 425 feet deep and several hundred feet drift~~s~~ reported also in the bottom of this shaft it is reported there is a 40 feet vein carrying 3.5 % copper. The collar of the shaft is caved and water is within 100 feet of the surface.
South of the above shaft is another shaft with caved collar depth unknown.

(over)

23. Geology & Mineralization

Fo. tion is mostly the Yavapai Shis., with some quartz veins and just south of the mainm shaft near the second shaft is a decomposed granite. The strike of the formation and the vein is N 55 degrees E with a 70 degree dip to the west. Ores are the carbonate and sulphides of copper.

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

The 40 foot vein of 3.5% copper in the bottom of the 425 foot shaft is the only reported probable ore. On the dump one sees both carbonate and sulphide copper ores in small pile, but it appears that leasers have been hauling out some of the dump which shows some values in copper. Ore on dump assays .16 ozs gold, 3 Ozs silver, 15.9% copper, and 60 ft winze, Au.12 Oz, Copper 17.6

24-A Vein Width, Length, Value, etc(vein .20 Au, 4 Oz Ag. 9.99% copper. is reported.)

No equipment

25. Mine, Mill Equipment & Flow Sheet

Road is fair only about 3 miles off main highway.

26. Road Conditions, Route

Out of the mine, or water can be had from the creek a short distance away.

27. Water Supply

It is reported that this property has produced 1,200,000 lbs of copper $60,000 gold and $10,000 silver.

28. Brief History

The owners want to work the property but need money to put the shaft in a saft condition, and get the water out.

29. Special Problems, Reports Filed

The formation is that type which could furnish room for large lenses of ore.

30. Remarks

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

32. Signed.....
A . C. Nebeker

33. Use additional sheets if necessary.

May 27, 1957

BUTTERNUT Yavapai Co.

This property idle.

MARK GEMMILL

See: De SOTO MINE (file) Yavapai Co.

Re Information on ICC Hearing to abandon Mayer Railroad - 8-6-57

Tucson, Arizona.
August 6, 1942.

Mr. E. Breckenridge,
Jerome Route,
Prescott, Arizona.

Dear Mr. Breckenridge:

I am a little slow in answering your letter, but i thought I would be up there before now. Was going to take my mother up but she had another sick spell and could not stand the trip.

Well about the Butternut. I still think it is the best prospect in that part. On the three hundred there is some high grade copper on the south side, it is from a foot to eighteen inches wide but it goes over 40%. On the north side, there is over fifteen feet of ore and it went over 6%. On the four twenty-five, the ore was from six to ten feet wide and it all shipped. As I have told you the four twenty-five is just at water level and the sulphide was just coming in. We stopped it on both sides and I am sure it went from six to eight per-cent copper with some gold. That drill hole that cut the ore at the seven hundred went about 8%, it figured out around twenty feet wide.

My opinion is that if the north shaft were sunk a hundred feet more, it would be a real mine, as good as the Iron King.

The only reason the Butternut shut down, Le Duc and Batre were trying to freeze out the rest of the stock holders and when Le Duc did it was a mess.

With best regards to you and the family,

Sincerely,

Bill O'Brien,
37 west president St.,
Tucson, Arizona.

(Copy.)

Mr. O'Brien was mine foreman at this time.

G..OUX ASSAY OFFICE
Mayer, Arizona.
Oct. 24, 1942.

Mr. E. Breckenridge,
Mayer, Arizona./

Dear Mr. Breckenridge:

Regarding our conversation re Butternut Mine. In Nov. 1904 I had ocassion to do some sampling there, and, here is the result of the sample taken;

	Oz Gold	Oz Silver	% Copper	% Iron	% Silica
Ore on dump --- -	0.16 ---	3.00 --	15.90 --	11.00--	30.00
Paralell Vein ---	0.20 ---	4.00 --	7.00 --	9.90 --	75.00
Ore in Winze(down 60')	0.12 ---	3.50 --	12.00 --	17.60 --	25.00
General Average of Ore on Dump About 40 Tons	0.08 ---	5.20 ---	11.28 --	10.00 --	28.00

The Butternut Mine at that time was being operated by Mr. Boggs, who was making regular shipments of ore represented by the last sample ennumerated in the above list of assays.

To the west of the ore conditions showed in the main shaft, and to the north of the shaft workings, considerable zinc showed; I am of the opinion that this zinc condition should be investigated. I believe that the Butternut Mine, is a very good mining venture.

Yours very truly,

F.W. Giroux,
Box 177,
Mayer, Arizona.

(Copy)

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Granted

Mine BUTTERNUT, Cu., Zn. Date December 1, 1942

District Big Bug Engineer Earl F. Hastings

Subject: Reconstruction Finance Corporation
Preliminary Development Loan

C

Docket No. C-ND-Phx. 93.
Date Application Received November 12, 1942
Date of Field Examination November 2, 1942
Date of Report December 1, 1942

1. Name and address of applicant (correspondent):
Evert Breckenridge, Box 137, Mayer, Arizona.

2. Character of project and estimated cost thereof:
Cu., Zn. Unwater and repair #2 shaft to 425 feet, $5000.00.

3. Location of property:
Big Bug District, near Mayer, Yavapai County, Arizona.

4. Applicant's interest in or ownership of property:
Applicant is partner (2/3) in owning partnership.

5. Loan requested:
$5000.00.

6. Loan recommended:
$5000.00.

7. Comments:
(A) The mine is well developed and has an appreciable shipping record.

(B) The O'Brien letter, included in the docket, indicates that known shoots have not completely been removed. The metallic content he cites, and the widths reported, can absorb a considerable deduction in the way of a safety factor and still maintain a commercial aspect. The "low-grade" reserves referred to by Lindegren can no doubt be considered, under current price and emergency conditions, as commercial.

(C) The assays presented by the applicant are of little value in that they do not represent mineable sections of the mine, and the Giroux samples of 1904 represents ores which no doubt have since been removed. They confirm mineralization and ore of importance only when coupled with the shipping record of past operation.

(D) A nticipation of probable future production resolves itself into a question of acceptance of the facts stated in the O'Brien letter. Upon the acceptance of these statements, or a conservative modification of them, the project assumes a favorable complexion. A report on Mr. O'Brien by George A. Ballam, Field

Engineer for the Department of Mineral Resources is included in the docket. This report favors acceptance of Mr. O'Brien's description of underground conditions as of 1917.

(E) Added to the docket is the report above referred to and a report on the property by A. C. Nebeker, Field Engineer, Department of Mineral Resources.

ARIZONA DEPARTMENT OF MINERAL RESOURCES

Earl F. Hastings
Assistant Director and
Projects Engineer.

Yavapai Magaz of April 1916 - 1919. Copied from Yavapai Magazine - on file at Sharlot Hall Museum

Butternut Mine.

Thirty men are now employed. The kernel of the Butternut is copper, intermingled with gold & silver, 8% copper, $1.20 gold and $1.70 silver as revealed by smelter returns from five carloads recently shipped . The mine is about 2 miles southerly from the Henrietta camp and is a more recent aquisition of the Big Ledge Development Co. It had been idle for many ~~for many year yers~~ . ~~Years. It's~~ years. Its workings were waterlogged. The unwatering of the mine revealed the fact that nature had been working to enrich the owners in a small degree even while they were idle. By precipitation from the impregnated water, tools, car trucks, rails everything which was originally iron had become copper. In the office o of the Co.at the Henrietta are a pair of car trucks and the connecting axle, all turned to the most beautiful native copperby the water in the workings of the old Butternut.
The mine is being worked thru two shafts and drifts ~~therefrom~~ ~~The mine is being worked~~ The old shaft is 300 ft.deep, and is in ore. A level driven from the bottom of the shaft is in ore. The other shaft which is 150 ft. deep is all in ore, and a drift from it is also in ore. THe five car loads of ore just shipped came from thestraight development done in these shafts and drifts during the short time the mine has been in operation. Thepractical work at the mine is conducted under directions of Lloyd E. Le Duc, engineer and John Trebilcock Sup.
The management is opening the property.With a view to the future. rather than to gutting it for present gain. The comparatively small shipments of ore are merely an incident it is the ore obtained while blocking out the orewhich later will come in great volume.
For the above data we are indebted to an interesting article written by minning expert of Courier.

Nov. 1916.

Big Ledge Development Co. have purchased the old Treadwell smelter at Mayer and are dismantling the old plant with the idea of installing a comlete modern smelting plant with a daily capacity of 150 tons. The smelter will handle ores of Butternut & Henrietta Mines.

Yavapai Magazine March 15th. 1918.

At the Butternut Mine on the 425 ft. level the ~~South~~ north drift is in 418 ft. and ore here is 2 ft. wide and of good ~~value~~. The drift south from the shaft in the Butternut was carrying a 5ft. face of ore running 3½% copper and 2oz. silver to the ton. Interstate - Callahan Mining Co.

The Butternut Mine.

The Butternut mine is located about one mile from Poland Junction, about one mile off the new Black Canyon Highway and about 5 miles from the Iron King Mine , owned and operated by Shaddock Denn mining Co. It consists of 6 patented claims.
The shaft is 425 feet deep and on the 425 level the south drift ran around 6 or 7 per cent copper, gold 3/10 oz. about 6½ ft. wide with a horse 3 ft. wide in the middle. In the north drift the big stope wascaved, samples from caved stope ran about 6% copper, sample taken from bottom of the drift ran around 7% copper and is about 30 inches wide. The collar of the shaft is caved, but feel reasonably sure the timbers are alright below the cave, it was timbered in 1947, with good Oregon Fir. In report made by Frank Giroux in 1904 says consideable zinc was showing. The power is within a quarter of a mile of the property, water rights cross the Big Bug Creek. Will give a long term lease on this property with option to purchase for sixty thousand dollars, would like a guaranteed royalty of $300.00 per month paid in advance, or a 10% royalty which ever would be the greater after you start operation. Will sell for less for cash.

Arizona Department of Mi Resources, Capitol Building enix, Arizona

QUESTIONNAIRE

Relating to survey of potential copper production from Arizona small and marginal mines for national defense purposes;

Name of mining property.....Butternut.....

Location.....Big Bug Mining District.....

Ownership..Ernest Buckenridge & Ethel Edwards

Name of Manager..Ernest Buckenridge.....

Post Office address.....Mayer Arizona.....

Copper production (pounds) during each of the past five years:

1936..... — 1937..... — 1938..... —

1939..... — 1940..... —

1941 rate of copper production based upon first four months.....

How much copper could this property produce annually

on a 14 cent price? .....

on a 16 cent price? .....

on an 18 cent price?.....

on a 20 cent price?.....

What price copper is necessary for this property? .....14..... cents per pound?

What plant facilities would be required and how much is the estimated cost in the event a 14 cent price could be assured? .....

.....

a 16 cent price could be assured? .....

.....

18 cent price? .....

.....

20 cent price? .....

.....

For what length of time would assurance of price and sale of full production be necessary?.....

(Over)

How long would it take, after financing has been provided for, before production on the above basis could be reached? .....

Does your organization have the facilities for raising the necessary capital to increase production to the amount stated? .....no.....

If not, do you believe that your company would be amenable and agreeable to government financing? .....Yes.....

Do you believe that you could finance the capital investment yourself on some such basis as a guarantee of sale of output at a fixed price and for a definite period, with damages to cover unamortized portion of capital investment in the event the government failed to take the output for the agreed upon time - or some similar arrangement? ..no.....

Please let us have your comments on the probability or possibility of your organization participating in such a program for national defense purposes .The Collar of shaft is cased it out side the rest of shaft is good, The ledge is 4.0 ft wide on 4.25 level has an average of 3 1/8 per cent Copper, The mine at present is full of slung Copper water.

~~What would be your ideas on financing and carrying out such a plan as is indicated by these questions?~~

This is the best information I can give But will either lease or sell as I have the money to open Collar of shaft. There has been about $2.60 worth of Copper shipped according to the report from the ~~Univ~~ University of Ariz.

~~Kindly list names and addresses of other potential copper producers in Arizona whose operations should be included within this survey.~~

BUTTERNUT MINE YAVAPAI COUNTY

Alva Breckenridge wants to sell her Butternut Claims near Iron King. FTJ WR 9-24-65

Examined the Butternut Property NW of Mayer. Collar of shaft caved and workings inaccessible. FTJ WR 5-19-67

P.O. Box 362
Prescott, Arizona.
Sept. 20th. 1958. Phone 1013 W.

RECEIVED
SEP 22 1958
DEPT. MINERAL RESOURCES
PHOENIX, ARIZONA

Mr Frank P. Knight
Mineral Bldg., Fairgrounds
Phoenix, Arizona.

Dear Mr. Knight:

In answer to your letter sent my sister, Ethel Edwards. In the letter there was no reportblank inclosed so am sending this information which will probably be what you want. Mrs. Edwards and I are partners.

Both properties are for sale, either cash or terms, have assay maps that can be seen here any time, I do not have any copies. These properties are open listing.

You may contact me at the Sharlot Hall Museum any time, I live in the Apt. in the rear. We will pay only one commission.

Yours truly,

Elva V. Breckenridge.

Elva V. Breckenridge.

DEPT. MINERAL RESOURCES
RECEIVED
NOV 30 1942
PHOENIX ARIZ

November 28, 1942

MEMORANDUM

Butternut

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

In compliance with your request for information re. Bill O'Brien, 37 W. President St., Tucson, the following information is submitted:

I called on Mr. O'Brien Nov. 26, and he informed me that he had been mine foreman at the Butternut prior to his enlistment in the army in 1917, having worked there for two years. His father, J. E. O'Brien was superintendent for the Big Ledge Copper Co., Dwight Woodbridge of the Bureau of Mines being consulting engineer.

Assays as submitted were run by Frank Jerew and one Roe, company assayer. Mr. O'Brien saw all assays certificates.

Regarding the drill hole, he states that it cut 20ft of copper which assayed 8%.

Mr. O'Brien's mother recalled the names of Andy Powers and Klondyke Bill Belford who worked on the property. Both are now at the Pioneers' home in Prescott. The former was particularly conversant with the property.

My impression of Mr. O'Brien is that he is a thoroughly reliable man, and he is familiar with mine operation. At present he is employed by the Ryan Aircraft Corp. of Tucson.

Geo A Ballam

STATUS OF DORMANT MINES

MINE NAME: Yaeger Mine Black Hills Mining District

LOCATION: Butterfruit Mine, Big Bug Mining District.

OWNER AND/OR LEASEE: Owner

ADDRESS: 136 1/2 So. Montezuma St. Prescott Arizona

APPROXIMATE PRODUCTION (Year of 1945):

COPPER ✓ Lbs. LEAD _____ Lbs.

ZINC _____ Lbs. (OTHER) Silver & gold.

CHECK THE CHIEF CAUSE OF YOUR DISCONTINUED PRODUCTION:

(A) Easily available ore worked out.
(B) Increased costs, but have quantity similar to past grade of ore.
(C) Too close a margin to develop more ore.
(D) Husband passed away, I have no funds

If you have ore ready to mine please give your estimate of the amount of metal (name each metal) that you could produce in one year (after allowing 60 days to get started) if there were premiums above present market prices. Name amount with a low premium, and amount at a high premium; such as:

Copper at 22½¢ plus 5¢ premium..... 1,000,000 Lbs.
Copper at 22½¢ plus 10¢ premium..... 1,500,000 Lbs.

If you do not have ore ready to mine please discuss the following:

(A) Do you think a reasonable development program would produce a justified tonnage of commercial ore at above mine?

Yes

(B) With a premium price (guaranteed for one year) could you carry out such a development program yourself? What premium?

About the same as World War II

(C) If you could not do this yourself, would a quick drilling program by some government agency (at government expense) be sufficient?

_____

_____

(D) Or would you prefer a loan plan similar to the arrangements during World War II?

Yes

_____

How about a combination plan in two stages such as follows?

Stage 1: Government engineers review project and, if a little drilling appears to be justified and a preliminary key to the situation, such drilling program to be agreed upon by owner and government engineer, paid for by the government, but let by contract.

Stage 2: If results of drilling (or without drilling) justify underground development and/or production equipment, same to be obtainable via a mortgage loan on property.

Please discuss the above: Stage 1

The Yaeger has a 75 000 ton dump that will average 3 per cent & about 1½ oz silver also a tailings dump averaging around 2 or more per cent, a little more ~~gold~~ silver than above. The Butternut mine has over 15 ft of ore that gets returns 6 or 7 per cent copper. on the three hundred level. The 425 ft level has one 6 to 10 ft wide which all shipped when it operated in 1920.

SUGGESTIONS

A loan for milling equipment to be put on Yaeger dump. There is adequate water for running the mill. A loan for dewatering Butternut shaft and putting it in operation.

DATE _____

SIGNATURE Elva V. Breckenridge

136½ So. Montezuma St
Prescott Arizona

304xxx

February 7, 1944

Mr. R. A. Airheart
350 North Coronado Street
Los Angeles, California (26).

Dear Ralph:

I received your letter of February 4 and was looking for you today. My plans take me to Tucson this evening and I will not be back in the office again until January 14 and 15 and probably leave either the night of the 15th or early on the 16th to be gone for the rest of that week.

Hope to see you when you get over and I am sorry that I will not be here the remainder of this week.

Very truly yours,

J. S. Coupal, Director

JSC:LP

January 14, 1944

Mr. Ralph A. Airheart
315 North Coronado Street
Los Angeles (26), California

Dear Ralph:

Many thanks for your letter of January 8.

Your application for a loan on the Butternut Mine was submitted to this office for review and I can say that it was recommended for loan. I do know, confidentially, your application was reported with the recommendation that the loan be granted by the Phoenix office to their Washington head office.

I furthermore know that Mr. Gohring was very much incensed at the loan being rejected in Washington. In this connection, I know that aloan which had been rejected or given a "no loan" recommendation by this office and by the Phoenix office was reopened probably after considerable pressure was applied in Washington by the applicant through certain connections and that the loan was granted. Mr. Gohring and Mr. Tweedy discussed both of these cases and are in no way satisfied with the action of Washington.

Please bear in mind that this is entirely off the record and is confidential information for you and for you alone.

I believe that your property and the action of Washington is now being reviewed and I do not think it adviseable to have Mr. Broadgate take any action at this time. I will ask him to look into the subject; and, as I expect to see him toward the end of next week or the following week personally, will further discuss it with him at that time.

Due to the surplus of copper on hand I do know that loan applications are getting more rigid investigation at this time; and, properties that would have been approved two months ago, will now find it difficult to get approval under the policies adopted due to the surplus of the various metals.

If there is any opening for you to take this property up with private capital, I would suggest that you do so.

Yours very truly,

J. S. Coupal, Director

JSC:JES

November 25, 1942

MEMORANDUM

BUTTERNUT MINE
YAVAPAI COUNTY

TO: George A. Ballam

FROM: Earl F. Hastings

Mr. Evert Breckenridge has made application for a "C" loan on this property. The evaluation of it dissolves itself around a letter written to Mr. Breckenridge by one Bill O'Brien, 37 West President Street, Tucson.

Will you please contact Mr. O'Brien, determine when he was last in the Butternut Mine and in what capacity. I am sending you a copy of the letter he wrote to Mr. Breckenridge and I am particularly interested in the drill hole which he mentioned, as well as his source of information relative to the values of the ores he claims.

Ask him if he saw assay certificates or if these values were estimates.

In short, give us a report on the man without letting him know that our recommendation of this application depends upon your estimate of his character. Thanks.

November 25, 1942

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NEW JERSEY ZINC COMPANY
Prescott, Arizona.

November 16th. 1953.

SUMMARY OF LOGS
OF
TWO DIAMOND DRILL HOLES
on
BUTTERNUT PROPERTY,
YAVAPAI COUNTY, ARIZONA.

D.D.H. BN No.1 Collared: June 5, 1953
Completed : June 23, 1953.
Location; Goodluck No.3 Claim.
Coordinates: 18,195 S., 3,640 W. Elevation: 4,990'
Bearing: 55 degrees W. Inclination: -75 degrees.

0-128' Andesite tuff- well bedded with some coarser pyroclastics. Small stringers of epidote cut the core.

128-240 Rhyolite tuff- contains acidic and andesitic fragments. Locally small stringers and patches of epidote.

240- 258 Hornblende granodorite dike.

258- 272' Contact pyrometasmatic zone.

272-447' Andesite tuff- locally very well bedded, relatively unsheared and unaltered.

447- 501' Rhyolite tuff- with minor disseminated pyrite.

501- 526' Andesite tuff.

526-555' Rhyolite tuff; inter bedded chloritic and siliceous tuffs- very minor chalcopyrite and pyrite along severall small fractures.

555-567' Siliceous zone with pyrite, sphalerite chalcopyrite and very fine galena. Unmineralized silicified zone from 557.5- 562.5'. Following are the assay results:

	Footage	Width	Au.	Pb.	Zn.	Cu	Ag
3333	555-557.5	2.5'	0.02	0.5	4.7	2.4	2.4
22.54	562.5-567'	4.5'	Tr.	3.0	1.0	2.1	0.8

567- 759' Andesite tuff- well beded- relatively unaltered.

759' End of hole.

Page 2. November 16th. 1953.
Summary of Logs.

D. . .H. BH No.2 Collared: June 25, 1953.
Completed: July 17, 1953.
Location: Goodluck No.3 claim.
Coordinates: 17,995 S., 3,500 W. Elevation: 4,980'.
Bearing: 55 Degrees W. Inclination:-75 degrees.

0- 81' Andesite tuff- bedded tuffs and pyroclastics.

81- 87' Andesite flow?- massive, poorly foliated chloritic andesite.

87- 112' Andesite tuff- sparse pyrite and chlorite occur in veinlets.

112-114' Contact pyrometasomatic zone- mostly epidote and some

114- 170' Andesite tuff- Tremolite-160 contains abundance quartz, epidote and hornblende. Quartz veins at 160-162.5 and 168-170.

170-184' Rhyolite-tuffs- has minor disseminated magnetite.

184-266' Rhyolite tuffs- locally well bedded with some coarser fragmental phases. Contains some epidote.

266-287' Hornblende granodiorite dike.

287- 554' Andesite tuff- massive to well banded with small stringers of epidote and quartz. Locally minor disseminated pyrite. Occasional foliation is crumpled.

554-595' Highly sheared sericite zone becoming locally chloritic. Very minor disseminated pyrite and some arsenopyrite through out zone with disseminated chalcopyrite, sphalerite and galena occuring in narrow stringers not exceeding a foot in width. Minor sphalerite and chalcopyrite was noted at the following intervals: 560-560.6, 573(½"), 581(2"), (573 (½"), 590-595. The sphalerite is limited to the stringers noted above, the chalcopyrite mineralizedtion is some what more wide spread, very

Summary of Log.

minor disseminated chalcopyrite occurring throughout the zone in the sheared chloritic phases of the altered schist.

595-599' Andesite tuff- contains minor disseminated pyrite.

599- 629' Rhyolite tuff- well banded. Minor epidote.

629- 644' Andesite tuff- brecciated zone from 632-634 with epidote, quartz, calcite and clorite.

644- 865' Andesite tuff- massive to well banded, contains -5% epidote. 755-756 fracture with-1% chalcopyrites.

865' End of hole.

Assay data:

Footage	Width	au	ag	Pb.	Zn	Cu
590-590.5'	0.5'	0.03	0.77	0.10	8.2	0.74
592-592.8'	0.8'	0.03	0.67	Tr	5.8	0.99

D.C.Palmer/dvl

Copied by L.F.W. 10/10/56.

July 3, 1941

Mr. Evert Breckenridge
Clemenceau, Arizona

Dear Mr. Breckenridge:

I have your letter and questionnaire of recent date regarding the potential copper production from the Butternut property. You state that a 14-cent price is necessary to produce copper from this property, but you do not give us any information as to how much copper could be produced annually at this price, nor how much capital investment would be necessary to equip to produce. Both these figures are necessary for the report and we could not include your property without them. I hope that you can give them to us quickly as we are already late in getting this report into Washington.

We would like to have some additional information regarding your property. We plan on carrying in the report a description of the properties mentioned somewhat along the formula as indicated by the questions asked on the enclosed quest onnaire. I hope that you can give this data to us.

Thanking you, and with kindest personal regards, I am

Yours very truly,

Chairman, Board of Governors
Arizona Department of Mineral Resources

CFW:LP
Enc.

Please return to Calvin Brewer

Keep this

ASSAYS

BUTTERNUT COPPER PROPERTY, BIG BUG MINING DISTRICT.

YAVAPAI COUNTY, ARIZONA.

304' LEVEL.

DATE#	DIS-tance-	% CU.	CU@ 38 cts.	$ AU@ 20.67	$ AG@ ?	Width	Gross Value	Remarks.
2/18/16	43'	9.85	77.86	.60	2.47	2'	77.93	
2/18/16	50'	5.17	39.29	1.80	.81	-	41.90	
2/21/16	52'	8.96	68.09	-	.96	-	69.05	
2/23.16	54'	3.06	23.35	.80	.40	-	24.55	
2/27/16	62'	5.13	38.98	.20	.69	-	39.87	
2/28/16	64'	7.42	56.39	.60	2.00	-	58.99	
3/6/16	80'	9.16	69.61	1.20	2.11	Sulphides	73.92	
3/7/16	82'	6.32	48.03	60	1.53	-	50.16	
3/8/16	83'	4.23	32.14	.60	1.75	12"	34.49	
3/10/16	86'	3.71	28.19	.40	1.36	H.W.	29.95	
3/25.16	110'	2.16	16.41	.40	94		17.75	
3/30/16	118'	.85	4.46	.60	.25		5.21	
	"	1.30	9.88	.40	.60		9.96	Covering 126' S. to Shft #2.
SHAFT #2 NORTH.								
4/11/16	3'	11.11	84.43	T.	1.08		85.51	
4/19/16	15'	4.15	46.74	T.	1.28	6'	48.02	
4/25/16	22'	7.01	53.27	T.	.84	3'	54.11	
4/29/16	30'	6.54	49.70	T.	.92	H.W. Strk.	50.62	
5/4/16	35'	5.55	42.18	T.	.62	F.W. 3'	42.80	
5/7/16	40'	1.51	11.47	.60	.41	F.W. 3'	12.48	
5/8/16	41'	4.79	36.40	.40	1.63	5'	38.43	Across Roof.
	45'	1.17	8.89	.50	1.22	H.W.	10.71	
7/21/16	47'	1.63	12.38	T	1.63		14.01	Point ore in Dft. 6' wide.
8/2/16	56'	5.47	41.57	.40	1.15		43.12	
8/10/16	61'	8.59	65.28	T	1.04		66.32	
8/22/16	64'	6.29	47.80	T	2.65		50.45	Gouge H. W.
8/23/16	66'	3.70	28.12	T	1.38		29.50	Stk. F. W.
8/24/16	67'	15.32	116.43	T	1.52		117.95	F. W. Strk.

[illegible] MONTHLY.

9/2-19	76-72'	3.46	26.29	1.03	1.84	5'-	29.16 -	Ave. Breast.
9-7	76-80	4.95	37.62	T	1.49		39.11 -	
	78-81'	2.51	19.07	.80	1.38		21.25 -	
	80-84'	5.45	41.42	10.40	.72		52.54 -	
	84-88	3.81	28.95	5.60	.60		35.15 -	
10/14	96-100'	5.18	39.36	2.40	4.95		46.71 -	
10/25	107-109'	9.46	71.89	.40	1.82		74.11 -	
10/31	112-113'	2.79	21.20	.40	.99		22.59 -	Proven ore both sides of drift.
11/16	117-122'	2.68	20.36	T	.79		21.15 -	
11/16	" "	2.47	18.77	T	1.20	26'	19.97 -	C C 26' @ 125.87' West.
12/4	142'	5.38	40.88	T	1.01	H.W 3'	41.89 -	
12/5	143'	3.07	23.33	T	1.35	Face6'	24.68 -	
12/14	155'	3.12	23.71	T	1.31	5'	25.02 -	
12/16	162'	3.40	25.84	T	21	6'	26.05 -	
12/16		3.98	30.24	T	.53		30.77 -	C C 35' E&W @ 170.67'
1#/1#/1917		1.49	11.32	T	.53		11.85 -	C.C. 42' E&W 222.47'
2/2	246'	3.67	27.89	T	.38	12" H. W.	#28.27	
2/3	250'	8.95	68.02	.40	.86	18" F.W	69.28	
2/7	264'	6.04	45.90	T	.48	5'	46.38	
2/17	291'	6.11	46.33	T	1.02	3'	46.45 -	
2/17	278'	3.52	26.75	.40	1001	3'	28.16 -	East CC 3'
2/14	278'	3.21	24.39	T	1.02	8'	25.41 -	West CC 8'.
2/23	313'	8.85	67.26	T	1.18		68.44	

¶ Face of drift north 313'59" from Number "2" Shaft)

(note) One stope on 304 North about 150 feet n. of shaft # 2. Extends about 45 ft. each way making about 90 feet long and 60 feet high. About 28 feet wide at the top and averages 4% copper. On the hangingwall side there is a vein about 6 feet wide that carries copper and zinc between 5 and 8% zinc. About 90 RR cars of ore were shipped to the Big Ledge Smelter in Mayer and these cars came from this stope and one to the North on the 425. They averages were between 4 and 6 % CU.

BUTTERNUT 425 FOOT LEVEL.

						H.W		
1/24/18	214'	5.65	42.18	T	.61	2'-	42.79 -	
1/4/18	190'	3.63	26.58	.20	95	6'	27.73 -	
12/30/17	167'	1.68	12.76	T	.31	7'	13.07 -	
5/23/17	159'	3.21	24.39	T	.26	4'	24.65 -	
5/16	150'	5.20	39.58	T	.69	8'	40.21 -	
5/7/17	137'	4.26	32.37	T	.62	8'	32.99 -	
4/30/17	127'	7.21	54.79	T	1.03	6'	55.82 -	
3/28/17	113'	8.53	64.82	T	1.48	18"	66.30 -	
3/24/17	106'	3.31	25.15	T	.38	8'	25.53 -	
3/17/17	94'	5.26	39.97	T	.96	5'	40.93 -	
3/14/17	90'	6.75	51.30	T	.60	F.W.	51.90 -	
3/5/17	82'	13.75	104.50	T	3.27		107.87 -	Black oxide.
2/21/17	69'	10.17	77.29	.20	3.08	12"	80.57 -	
2/10/17	52'	11.88	89.28	.60	1.46	30"	91.34 -	
2/10/17	52'	5.58	42.40	1.00	1.23	4'	44.63 -	
2/2/17	32'	9.82	74.63	.60	1.04	8"FW	76.27 -	
1/30/17	24'	5.35	40.66	T	.04	7'	40.70 -	
1/10/17	10'	3.23	24.54	T	.18	5'	24.72 -	
				Shaft #2.				
12/26/16	3'	3.97	30.17	T	.36	6'	30.53	
1/1/17	18'	3.92	29.79	.20	.53	6'	30.52	
1/6/17	22'	2.08	15.70	T	.38	FW2'	16.08 -	
1/10/17	28'	1.69	12.84	T	.29	5'	13.13 -	
1/16/17	44'	2.94	22.34	T	.02	5'	22.36 -	
1/21/17	60'	3.46	26.29	-	.35	3'	26.64 -	
1/30/17	74'	3.67	27.89	T	.43	3'	28.32 -	
2/10/17	97'	3.89	67.56	.40	1.06	FW 2'	69.02 -	
2/19/17	107'	4.45	33.82	T	74	8'	34.56 -	
3/2/17	125'	365	27.74	T	1.03	7'	28.77 -	
3/20/17	142'	4.83	36.70	T	.54	3'	37.24 -	
3/25/17	145'	1.53	11.62	T	.36	6'	11.98,-	

BUTTERNUT 425 level continued.

4/22/17	157'	1.44	19.58	T	.52	6'	20.10 -	
5/3/17	164'	4.55	34.58	T	.64	6'	35.88 -	
5/20/17	180'	4.55	34.58	T	88	6'	35.46 -	
6/4/17	202'	4.12	31.31	.20	.58	7'	32.09 -	
6/10/17	208'	4.25	32.30	T	.62	8'	32.98-	
9/4/17	212'	6.20	47.12	T	.46	5'	47.58 -	
9/15/17	219'	6.72	51.07	T	.41	7'	51.48 -	
9/17/17	222'	7.34	55.88	T	.38	5'	56.26 -	
9/20/17	227'	7.71	58.59	T	.48	7'	59.07 -	
	227'	7.48	56.84	.20	.42	10'7"	57.46 -	CC West 10'7"
10/14/17	240'	2.48	18.84	.20	.35	7'	19.39 -	
10/17/17	244'	4.43	33.66	T	.37	6'	34.03 -	
10/20/17	248'	3.82	29.03	T	37	6'	29.40 -	
10/24/17	255'	.96	7.29	T	.31	7'	7.60 -	
11/3/17	272'	2.07	15.73	T	.29	6'	16.02 -	
11/6/17	278'	2.17	16.49	T	.52	6'	17.01 *	
11/19/17	292'	5.57	42.33	###	.48	7'	42.81 -	
11/20/17	297'	5.78	43.92	.20	.42	7'	44.54 -	
12/4/17	300'	2.56	19.45	T	.24	7'	19.69 -	
12/12/17	303	2.72	20.67	T	.38	7'	21.05 -	
12/16/17	307	3.03	23.02	T	.23	8'	23.25 -	Face 329 feet N. Shaft # 2.

The length of the drifts on the 425 foot level amounts to about 608 feet. This consists of 279 feet south of shaft # 2 and 329 feet north. There is a stope to the south of shaft no. 2 about 125 long and 60 feet high. To the North the timbers have been put in and chutes ready to start stoping but no stoping has been done. This information was given me by Mr. Kirkpatrick, who cleaned the shaft out about 1947. These samples were taken from the different streaks on different days from both walls. In other words the vein is filled with schist horses and streaks of ore appear on both walls leaving a horse in the middle. At times the ore would continue across the entire face and samples were then taken across the face or breast.

Copied from original sample sheet September 17 56. by,

L.F.Wilson

BUTTERNUT MINE

One mile southwesterly of Poland Junction, Arizona.
Owner; Mrs. Elva V. Breckenridge; 136½ So. Montezuma; Prescott, Ariz.

No production for many years.
Has produced in the past some high grade copper ore from the oxidized zone.
The Butternut was unwatered and sampled in 1945 but no shipments of ore made. It is thus doubtful if much ore is ready to mine.

The property would require both premiums and an exploratory loan.

October 23, 1950

L. L. Farnham

GIROUX ASSAY OFFICE

MAYER, ARIZONA

October 24, 1942

Mr. E. Breckenridge,
Mayer, Arizona.

Dear Mr. Breckenridge:

Regarding our conversation re Butternut Mine. In November 1904 I had occasion to do some sampling there, and, here is the result of the sample taken;

	Oz. Gold	Oz Silver	% Copper	% Iron	% Silica
Ore on Dump - - -	0.16 -	3.00 -	15.90 -	11.00 -	30.00
Paralell Vein - -	0.20 -	4.00 -	7.00 -	9.90 -	75.00
Ore in Winze (Down about 60')	0.12 -	3.50 -	12.00 -	17.60 -	25.00
General Average of Ore on Dump--About 40 tons	0.08 -	5.20 -	11.28 -	10.00 -	28.00

The Butternut Mine at that time was being operated by Mr. Boggs, who was making regular shipments of ore represented by the last sample ennumerated in the above list of assays.

To the west of the ore conditions showed in in the main shaft, and to the north of the shaft workings, considerable zinc showed; I am of the opinion that this zinc condition should be investigated. I believe that the Butternut Mine, is a very good mining venture.

Yours very truly,

F W Giroux
F. W. Giroux,
Box 177,
Mayer, Arizona

State of Arizona, County of Yavapai--ss:

I, F. C. Bauer, a Notary Public in and for Yavapai County, Arizona, do hereby certify that the foregoing is a true copy of the Original Letter.

Witness my hand and seal this 6th day of Nov. 1942.

My Com expires 1/10/45.

(F. C. Bauer)
Notary Public

COPY

Copy

Arizona Department of Mineral Resources, Capitol Building, Phoenix, Arizona

QUESTIONNAIRE

Relating to survey of potential copper production from Arizona small and marginal mines for national defense purposes;

Name of mining property.....Butternut.....

Location.....Big Bug Mining District.....

Ownership.....Evert Breckenridge & Ethel Edwards.....

Name of Manager.....Mayer, Arizona.....

Post Office address.....

Copper production (pounds) during each of the past five years:

1936..... 1937..... 1938.....

1939..... 1940.....

1941 rate of copper production based upon first four months.....

How much copper could this property produce annually

on a 14 cent price? .....

on a 16 cent price? .....

on an 18 cent price?.....

on a 20 cent price?.....

What price copper is necessary for this property? .....14..... cents per pound?

What plant facilities would be required and how much is the estimated cost in the event a 14 cent price could be assured? .....

.....

a 16 cent price could be assured? .....

.....

18 cent price? .....

.....

20 cent price? .....

.....

For what length of time would assurance of price and sale of full production be necessary?.....

.....

(Over)

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

DEPT. MINERAL RESOURCES
RECEIVED
JAN 30 1943
PHOENIX ARIZONA

Date Jan 28th, 1943.

Mine Butternut

Engineer A. C. Nebeker

District Big Bug, Yavapai CO.

Subject: Progress since loan.

The Butternut mine is being operated by Mr Evert Breckenridge on the $5000 loan.

He has now working five men and has the caved material removed from the shaft for forty feet dow n and is timbering for two compartment s haft. He has a headframe bought, a hoist and a pile of new timber.

He has working with him two first class shaftmen, so I think he will get along O.K.

In cleaning out the muck, the vein has been exposed on both ends of the shaft and it shows some nice copper ore.

A C Nebeker

Intra-Company Correspondence

SHATTUCK DENN MINING CORPORATION
and
SUBSIDIARIES

S-D [illegible] @ Humboldt

Humboldt Office

Date December 13, 1965

TO: C. R. Sundeen

FROM: J. Olaf Sund

SUBJECT: BUTTERNUT MINE
% Mrs. Elva Breckenridge
Prescott, Arizona
445-3122

TYPE: Copper, Gold, Silver

TERMS: Not discussed.

LOCATION:

In the Big Bug Mining district, some 3½ miles northwest from the town of Mayer, namely along section line 5 and 8, T-12-N and R-1-E.

HISTORY AND DEVELOPMENT:

The "Butternut" is another old mine that was first developed during 1916-'17 and later reopened briefly during the mid 1940's. It was again re-examined, optioned and diamond-drilled by New Jersey Zinc during 1953. About 90 car loads of ore were mined from two principal stopes, one on the 300 foot level, which is the most southerly, and is some 90' x 28' x 60'; and the other on the 425 foot level is some 125' x ? x 60'. (in 1916-17)

The shaft was inclined at 70 degrees southwest at the collar and gradually flattened with depth. The two levels at 304 and 425 feet had 460 and 608 feet of lateral development respectively. The shaft is presently caved and filled and thus the levels are inaccessible.

GEOLOGY:

The local geology is summarized on the enclosed 400 foot geological plan. The rocks in the immediate vicinity of the mine are highly sheared and strike north 50 degrees east and dip 70 degrees southeast. For the most part they are schistose acid and intermediate lavas with sedimentary interbeds and intrusive dikes.

There is a set of more intensly sheared zones along which there is considerable sericitization and silicification etc. Presumably it is along such sheared zones that the mineralized parts are restricted. Although it is not clear from the limited information available, both the sheared altered zones and the mineralized parts may correspond to the upper parts of the rhyolitic flows or at least at the contacts between the individual flow units.

MINERALIZATION:

The ore minerals are lenticular streaks of pyrite, sphalerite and chalcopyrite as well as a little arsenopyrite with a gangue of quartz and chlorite. Apparently the "ore-type" mineral zones are in two distinct shoots from which all mining took place.

Note that original mining was all within the oxidized and enriched parts. The values obtained from the 1916-17 work are plotted on the enclosed 20 foot to 1 inch level plans. For simplicity, the values and widths are also listed separately on the enclosed sheets. It can be seen immediately that the gold and silver values are generally of low tenor with only erratic gold values of a half ounce etc. The copper values range between 3 and 7 percent with occasional erratic highs above this.

RECENT ACTIVITY:

The shaft was cleaned out in 1943, but no production was attempted. During the early 1950's, New Jersey Zinc studied this area and decided to drill under the two ore shoots in order to investigate the downward extension of the mineral zones into the primary sulphides. The following are their results:

DDH BN-1 Under southerly shoot (stoped on 304 level).

Footage	Width	Au	Ag	Pb	Zn	Cu
555-557.5	2.5	.02	2.4	0.3	4.7	2.4
562.5-567.0	4.5	Tr	0.8	3.0	1.0	2.1

DDH BN-2 Under northerly shoot (stoped on 425 level)

560-560.5	0.5	.03	.77	.10	8.2	.74
592-592.8	0.8	.03	.67	Tr	5.8	.99

Samples collected from the mine dump by the writer gave insignificant assays.

CONCLUSIONS:

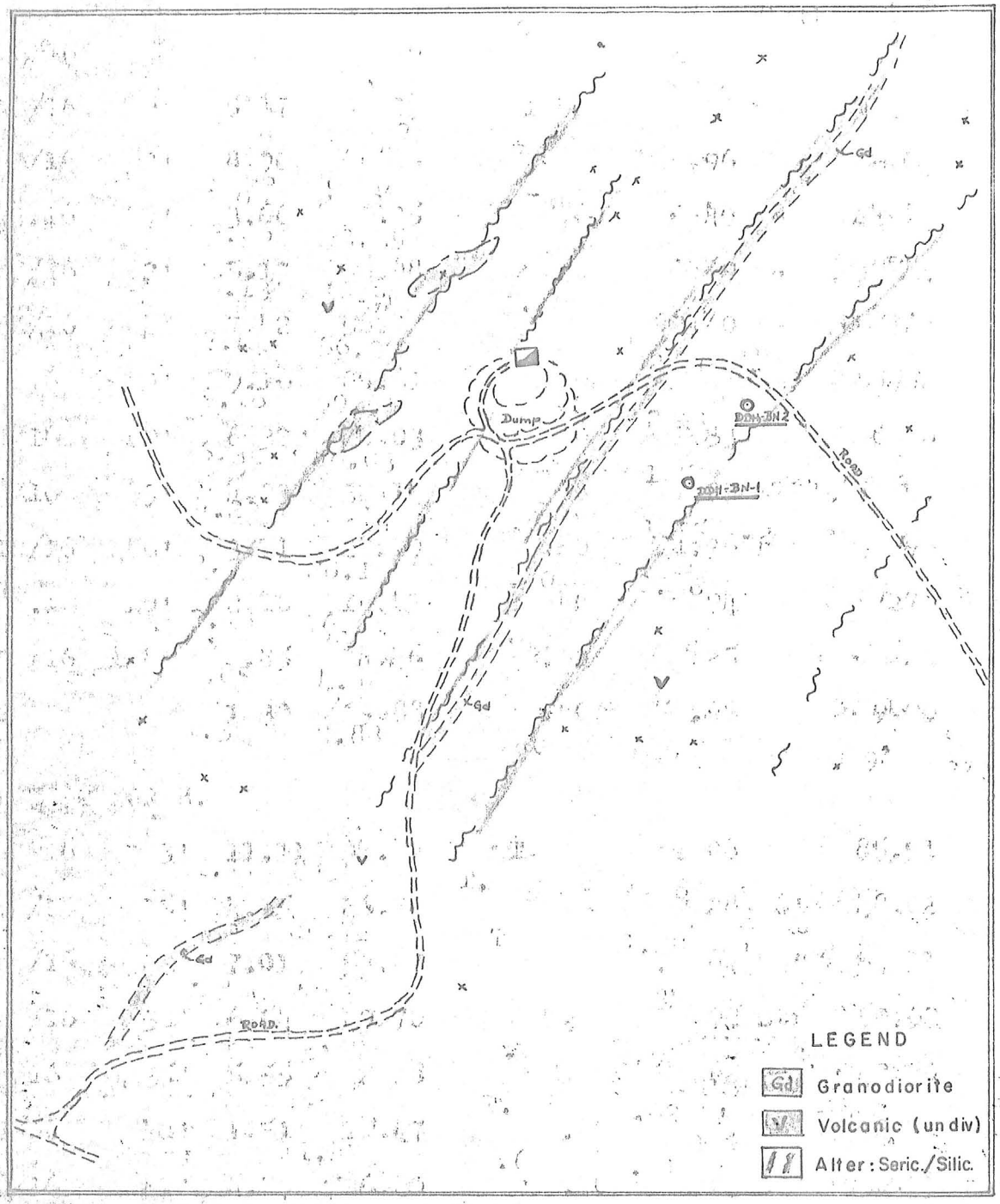
The recent diamond drilling by New Jersey Zinc under each of the mineralized shoots gave relatively low values except for the moderate zinc assays. This in itself would suggest that the copper values from the original mining were from a relatively enriched oxidized zone and which do not persist into the primary sulphide zone.

The original lateral development work extended well beyond the stoped limits and would thus tend to rule out an immediate repeat of the sulphide rich zone on strike or its oxidized equivalent.

RECOMMENDATIONS:

No action should be taken on this property at this time.

JOS/db



GEOLOGY OF THE BUTTERNUT MINE AREA

1" = 400'

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

DEPT. MINERAL RESOURCES
RECEIVED
NOV 4 1942
PHOENIX, ARIZONA

Date Nov, 2nd, 1942

Mine Butternut — Engineer A. C. Nebeker

District Big Bug, Yavapai County, Ariz. — Location Prescott, Ariz

Former name same

Owner Evert Breckenridge and Ethel Edwards — Address Mayer, Ariz.

Operator now idle — Address

President — Gen. Mgr.

Mine Supt. — Mill Supt.

Principal Metals Copper- Gold-Silver — Men Employed

Production Rate None now — Mill: Type & Cap.

Power: Amt. & Type

Operations: Present The present operations consists only of digging around and getting samples to see if a loan would be justified.

Operations Planned If Loan can be had it is planned to retimber the collar of the shaft and dewater the shaft, so the ore reported to be in the 40 ft. vein in bottom of the shaft can be checked up, if ore is found to be as reported then developement and production is planned.

Number Claims, Title, etc. 5 claims and title is reported to be in first class shape and belong to the above mentioned owners.

Description: Topog. & Geog. This property is about 4 miles northwest of Mayer on the southsid of the big hill and property can be seen from the road going between Mayer and Humboldt. The slope of the hill to the mine is very gentle and a good road grade can be maintained.

Mine Workings: Amt. & Condition This property has two shafts, one an incline 425 feet deep and several hundred feet drifted reported also in the bottom of this shaft it is reported there is a 40 feet vein carrying 3.5 % copper. The collar of the shaft is caved and water is within 100 feet of the surface.
South of the above shaft is another shaft with caved collar depth unknown.

(over)

Geology & Mineralization Formation is mostly the Yavapai Shist, with some quartz veins and just south of the mainm shaft near the second shaft is a decomposed granite. The strike of the formation and the vein is N 35 degrees E with a 70 degree dip to the west. Ores are the carbonate and sulphides of copper.

Ore: Positive & Probable, Ore Dumps, Tailings The 40 foot vein of 3.5% copper in the bottom of the 425 foot shaft is the only reported probable ore. On the dump one sees both carbonate and sulphide copper ores in small pile, but it appears that leasers have been hauling out some of the dump which shows some values in copper. Ore on dump assays .16 ozs gold, 3 Ozs silver, 15.9% copper, and 60 ft winze, Au.12 Oz, Copper 17.6% (vein .20 Au, 4 Oz Ag. 9.99% copper. is reported.)

Mine, Mill Equipment & Flow Sheet

No equipment

Road Conditions, Route Road is fair, only about 3 miles off main highway.

Water Supply Out of the mine, or water can be had from the creek a short distance away.

Brief History It is reported that this property has produced 1,200,000 lbs of copper, $60,000 gold and $10,000 silver.

Special Problems, Reports Filed The owners want to work the property but need money to put the shaft in a saft condition, and get the water out.

Remarks

The formation is that type, which could furnish room for large lenses of ore.

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

Signed A. C. Nebeker

A. C. Nebeker

Use additional sheets if necessary. Separate sheets on each problem.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
OWNERS MINE REPORT

Date May, 2nd, 1942

1. Mine
Butternut

A. C. Nebeker

2. Mining District & County
Big Bug, Yavapai County, Ariz.

4. Location
Prescott, Ariz

3. Former name
same

5. Owner
Evert Breckenridge and Ethel Edwards

6. Address (Owner)
Mayer, Ariz.

7. Operator
now idle

8. Address (Operator)

9. President

10. Gen. Mgr.

11. Mine Supt.

12. Mill Supt.

13. Principal Metals
Copper- Gold-Silver

14. Men Employed

15. Production Rate
None now

16. Mill: Type & Cap.

17. Power: Amt. & Type

18. Operations: Present
The present operations consists only of digging around and getting samples to see if a loan would be justified.

19. Operations Planned
If Loan can be had it is planned to retimber the collar of the shaft and dewater the shaft, so the ore reported to be in the 40 ft. vein in bottom of the shaft can be checked up, if ore is found to be as reported then developement and production is planned.

20. Number Claims, Title, etc.
5 claims and title is reported to be in first class shape and belong to the above mentioned owners.

21. Description: Topography & Geography
This property is about 4 miles northwest of Mayer on the southsid of the big hill and property can be seen from the road going between Mayer and Humboldt.
The slope of the hill to the mine is very gentle and a good road grade can be maintained.

22. Mine Workings: Amt. & Condition
This property has two shafts, one an incline 425 feet deep and several hundred feet drift~~ed~~ reported also in the bottom of this shaft it is reported there is a 40 feet vein carrying 3.5 % copper. The collar of the shaft is caved and water is within 100 feet of the surface.
South of the above shaft is another shaft with caved collar depth unknown.

(over)

23. Geology & Mineralization

Formation is mostly the Yavapai Shist, with some quartz veins and just south of the mainm shaft near the second shaft is a decomposed granite. The strike of the formation and the vein is N 35 degrees E with a 70 degree dip to the west. Ores are the carbonate and sulphides of copper.

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

The 40 foot vein of 3.5% copper in the bottom of the 425 foot shaft is the only reported probable ore. On the dump one sees both carbonate and sulphide copper ores in small pile, but it appears that leasers have been hauling out some of the dump which shows some values in copper. Ore on dump assays .16 ozs gold, 3 Ozs silver, 15.9% copper, and 60 ft winze, Au.12 Oz, Copper 17.6

24-A Vein Width, Length, Value, etc(vein .20 Au, 4 Oz Ag. 0.09% copper. is reported.)

No equipment

25. Mine, Mill Equipment & Flow Sheet

Road is fair only about 3 miles off main highway.

26. Road Conditions, Route

Out of the mine, or water can be had from the creek a short distance away.

27. Water Supply

It is reported that this property has produced 1,200,000 lbs of copper $60,000 gold and $10,000 silver.

28. Brief History

The owners want to work the property but need money to put the shaft in a saft condition, and get the water out.

29. Special Problems, Reports Filed

The formation is that type which could furnish room for large lenses of ore.

30. Remarks

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

32. Signed.....
A . C. Nebeker

33. Use additional sheets if necessary.

Tucson, Arizona.
August 6, 1942.

Mr. E. Breckenridge,
Jerome Route,
Prescott, Arizona.

Dear Mr. Breckenridge:

I am a little slow in answering your letter, but i thought I would be up there before now. Was going to take my mother up but she had another sick spell and could not stand the trip.

Well about the Butternut. I still think it is the best prospect in that part. On the three hundred there is some high grade copper on the south side, it is from a foot to eighteen inches wide but it goes over 40%. On the north side, there is over fifteen feet of ore and it went over 6%. On the four twenty-five, the ore was from six to ten feet wide and it all shipped. As I have told you the four twenty-five is just at water level and the sulphide was just coming in. We stopped it on both sides and I am sure it went from six to eight per-cent copper with some gold. That drill hole that cut the ore at the seven hundred went about 8%, it figured out around twenty feet wide.

My opinion is that if the north shaft were sunk a hundred feet more, it would be a real mine, as good as the Iron King.

The only reason the Butternut shut down, Le Duc and Batre were trying to freeze out the rest of the stock holders and when Le Duc did it was a mess.

With best regards to you and the family,

Sincerely,

Bill O'Brien,
37 west president St.,
Tucson, Arizona.

(Copy.)

Mr. O'Brien was mine foreman at this time.

G..OUX ASSAY OFFICE
Mayer, Arizona.
Oct. 24, 1942.

Mr. E. Breckenridge,
Mayer, Arizona./

Dear Mr. Breckenridge:

Regarding our conversation re Butternut Mine. In Nov. 1904 I had ocassion to do some sampling there, and, here is the result of the sample taken;

	Oz Gold	Oz Silver	% Copper	% Iron	% Silica
Ore on dump --- -	0.16 ---	3.00 --	15.90 --	11.00--	30.00
Paralell Vein ---	0.20 ---	4.00 --	7.00 --	9.90 --	75.00
Ore in Winze(down 60')	0.12 ---	3.50 --	12.00 --	17.60 --	25.00
General Average of Ore on Dump About 40 Tons	0.08 ---	5.20 ---	11.28 --	10.00 --	28.00

The Butternut Mine at that time was being operated by Mr. Boggs, who was making regular shipments of ore represented by the last sample ennumerated in the above list list of assays.

To the west of the ore conditions showed in the main shaft, and to the north of the shaft workings, considerable zinc showed; I am of the opinion that this zinc condition should be investigated. I believe that the Butternut Mine, is a very good mining venture.

Yours very truly,

F.W. Giroux,
Box 177,
Mayer, Arizona.

(Copy)

NAME OF MINE: BUTTERNUT

COUNTY: YAVAPAI
DISTRICT: big bug
METALS: CU

OPERATOR AND ADDRESS:		MINE STATUS	
DATE:		DATE:	
5/1/44	R.Airheart,Prescott (lease)	5/1/44	Financing
			Idle
		2/45	Operations Planned
		4/45	Financing
11/45	W.H.Kirkpatrick, St.Michael Hotel, Prescott		Idle
		11/45	Placing machinery
		1/46	Pumping & cleaning shaft
		7/46	Idle

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Granted

Mine BUTTERNUT, Cu., Zn. Date December 1, 1942

District Big Bug Engineer Earl F. Hastings

Subject: Reconstruction Finance Corporation
Preliminary Development Loan

C

Docket No.	C-ND-Phx. 93.
Date Application Received	November 12, 1942
Date of Field Examination	November 2, 1942
Date of Report	December 1, 1942

1. Name and address of applicant (correspondent):
   Evert Breckenridge, Box 137, Mayer, Arizona.

2. Character of project and estimated cost thereof:
   Cu., Zn. Unwater and repair #2 shaft to 425 feet, $5000.00.

3. Location of property:
   Big Bug District, near Mayer, Yavapai County, Arizona.

4. Applicant's interest in or ownership of property:
   Applicant is partner (2/3) in owning partnership.

5. Loan requested:
   $5000.00.

6. Loan recommended:
   $5000.00.

7. Comments:
   (A) The mine is well developed and has an appreciable shipping record.

   (B) The O'Brien letter, included in the docket, indicates that known shoots have not completely been removed. The metallic content he cites, and the widths reported, can absorb a considerable deduction in the way of a safety factor and still maintain a commercial aspect. The "low-grade" reserves referred to by Lindegren can no doubt be considered, under current price and emergency conditions, as commercial.

   (C) The assays presented by the applicant are of little value in that they do not represent mineable sections of the mine, and the Giroux samples of 1904 represents ores which no doubt have since been removed. They confirm mineralization and ore of importance only when coupled with the shipping record of past operation.

   (D) A nticipation of probable future production resolves itself into a question of acceptance of the facts stated in the O'Brien letter. Upon the acceptance of these statements, or a conservative modification of them, the project assumes a favorable complexion. A report on Mr. O'Brien by George A. Ballam, Field

Engineer for the Department of Mineral Resources is included in the docket. This report favors acceptance of Mr. O'Brien's description of underground conditions as of 1917.

(E) Added to the docket is the report above referred to and a report on the property by A. C. Nebeker, Field Engineer, Department of Mineral Resources.

ARIZONA DEPARTMENT OF MINERAL RESOURCES

Earl F. Hastings
Assistant Director and
Projects Engineer.

Yavapai Magazi[illegible] of April 1916 - 1919. Copied from Yavapai Magazine. on file at Shadlot Hall Museum

Butternut Mine.

Thirty men are now employed. The kernel of the Butternut is copper, intermingled with gold & silver, 8% copper, $1.20 gold and $1.70 silver as revealed by smelter returns from five carloads recently shipped . The mine is about 2 miles southerly from the Henrietta camp and is a more recent aquisition of the Big Ledge Development Co. It had been idle for many ~~for many year yers~~ . ~~Years. It's~~ years. Its workings were waterlogged. The unwatering of the mine revealed the fact that nature had been working to enrich the owners in a small degree even while they were idle. By precipitation from the impregnated water, tools, car trucks, rails everything which was originally iron had become copper. In the office o of the Co.at the Henrietta are a pair of car trucks and the connecting axle, all turned to the most beautiful native copperby the water in the workings of the old Butternut.
The mine is being worked thru two shafts and drifts ~~therefrom The mine is being worked~~ The old shaft is 300 ft.deep, and is in ore. A level driven from the bottom of the shaft is in ore. The other shaft which is 150 ft. deep is all in ore, and a drift from it is also in ore. THe five car loads of ore just shipped came from thestraight development done in these shafts and drifts during the short time the mine has been in operation. Thepractical work at the mine is conducted under directions of Lloyd E. Le Duc, engineer and John Trebilcock Sup.
The management is opening the property.With a view to the future. rather than to gutting it for present gain. The comparatively small shipments of ore are merely an incident it is the ore obtained while blocking out the orewhich later will come in great volume.
For the above data we are indebted to an interesting article written by minning expert of Courier.

Nov. 1916.

Big Ledge Development Co. have purchased the old Treadwell smelter at Mayer and are dismantling the old plant with the idea of installing a comlete modern smelting plant with a daily capacity of 150 tons. The smelter will handle ores of Butternut & Henrietta Mines.

Yavapai Magazine March 15th. 1918.

At the Butternut Mine on the 425 ft. level the ~~south~~ north drift is in 418 ft. and ore here is 2 ft. wide and of good value. The drift south from the shaft in the Butternut was carrying a 5ft. face of ore running 3½% copper and 2oz. silver to the ton. Interstate - Callahan Mining Co.

The Butternut Mine.

The Butternut mine is located about one mile from Poland Junction, about one mile off the new Black Canyon Highway and about 5 miles from the Iron King Mine , owned and operated by Shaddock Denn mining Co. It consists of 6 patented claims.
The shaft is 425 feet deep and on the 425 level the south drift ran around 6 or 7 per cent copper, gold 3/10 oz. about 6½ ft. wide with a horse 3 ft. wide in the middle. In the north drift the big stope wascaved, samples from caved stope ran about 6% copper, sample taken from bottom of the drift ran around 7% copper and is about 30 inches wide. The collar of the shaft is caved, but feel reasonably sure the timbers are alright below the cave, it was timbered in 1947, with good Oregon Fir. In report made by Frank Giroux in 1904 says consideable zinc was showing. The power is within a quarter of a mile of the property, water rights cross the Big Bug Creek. Will give a long term lease on this property with option to purchase for sixty thousand dollars, would like a guaranteed royalty of $300.00 per month paid in advance, or a 10% royalty which ever would be the greater after you start operation. Will sell for less for cash.

Arizona Department of Mi[illegible] Resources, Capitol Building, [illegible]enix, Arizona

QUESTIONNAIRE

Relating to survey of potential copper production from Arizona small and marginal mines for national defense purposes;

Name of mining property.....Butternut.....

Location.....Big Bug Mining District.....

Ownership..Ernest Buckenridge & Ethel Edwards

Name of Manager..Ernest Buckenridge.....

Post Office address.....Mayer, Arizona.....

Copper production (pounds) during each of the past five years:

1936.....—..... 1937.....—..... 1938.....—.....

1939.....—..... 1940.....—.....

1941 rate of copper production based upon first four months.....

How much copper could this property produce annually

on a 14 cent price? .....

on a 16 cent price? .....

on an 18 cent price?.....

on a 20 cent price?.....

What price copper is necessary for this property? .....14..... cents per pound?

What plant facilities would be required and how much is the estimated cost in the event a 14 cent price could be assured? .....

.....

a 16 cent price could be assured?.....

.....

18 cent price? .....

.....

20 cent price? .....

.....

For what length of time would assurance of price and sale of full production be necessary?.....

.....

(Over)

.....

.....

How long would it take, after financing has been provided for, before production on the above basis could be reached? .....

Does your organization have the facilities for raising the necessary capital to increase production to the amount stated? .....no.....

If not, do you believe that your company would be amenable and agreeable to government financing? .....Yes.....

Do you believe that you could finance the capital investment yourself on some such basis as a guarantee of sale of output at a fixed price and for a definite period, with damages to cover unamortized portion of capital investment in the event the government failed to take the output for the agreed upon time - or some similar arrangement? ..no.....

Please let us have your comments on the probability or possibility of your organization participating in such a program for national defense purposes .The Collar of shaft is cared it out side the rest of shaft is good, The ledge is 4.0 ft wide on 4.25 level has an average of 3 1/8 per cent Copper, The mine at present is full of

~~What would be your ideas on financing and carrying out such a plan as is indicated by these questions?~~ ....string Copper water.....

This is the best information I can give But will either leake or sell as I have the money to open Collar of shaft. There has been about $2.60 worth of Copper

~~Kindly list names and addresses of other potential copper producers in Arizona whose operations should be included within this survey.~~ shipped according to the report from the ~~mint~~ University of Ariz.....

Big Ledge Copper Company

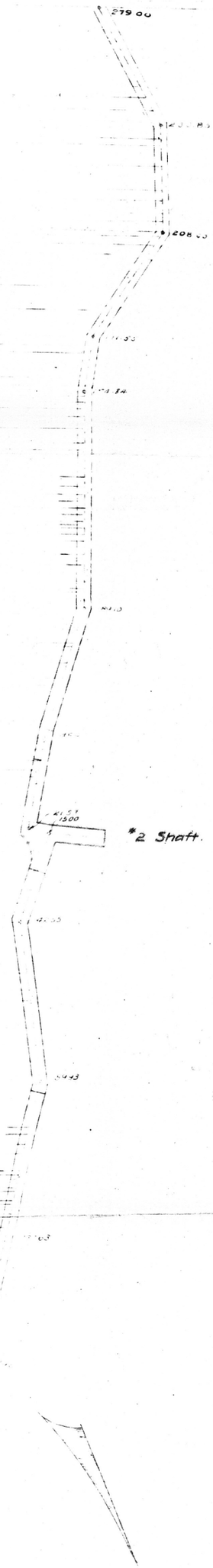
ASSAY MAP

of the

425' Level

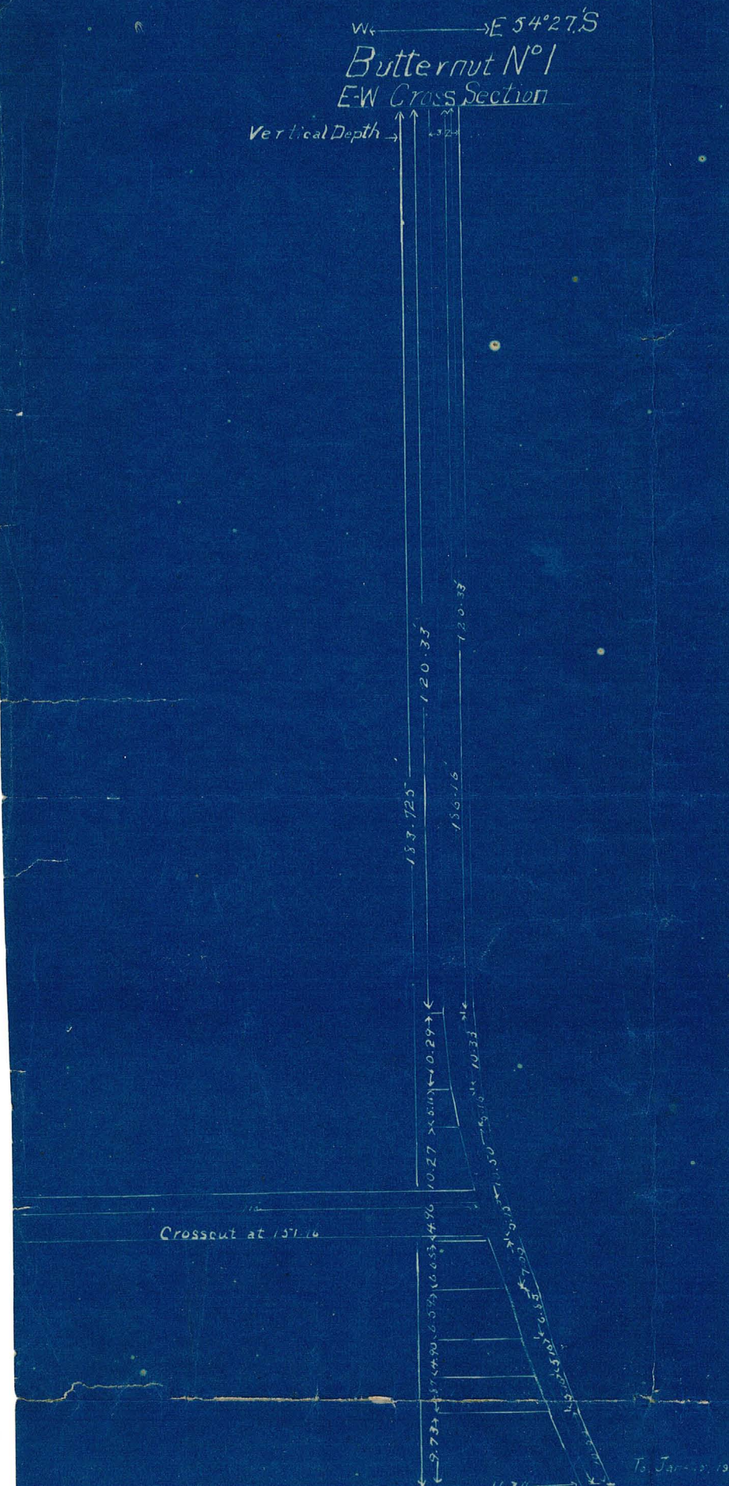
Scale 20 = 1 inch Butternut Mine

DATE	FOOTAGE	COPPER %	GOLD $	SILVER $	REMARKS
	262	27	T	[illegible]	Face average [illegible]
	241	2.03	T	63	Face Average [illegible]
	231	1.19	T	51	
Jan. 30	227	1.83	T	22	30 [illegible]
28	223	2.74	T	14	3
26	218	3.10	T	44	
24	214	0.55	T	61	
23	212	2.13	T	63	
18	200	.89	T	7	2
13	195	1.14	T	61	Face average of
10	196	1.60	40	71	
6	192	2.4	T	41	
4	190	0.63	20	95	
Dec. 30	187	1.68	T	31	
28	182	1.85	T	32	
28	182	4.79	T	64	
June 10	180	2.21	T	52	Face Average [illegible] wide
[illegible]	170	1.05	[illegible]	48	Block Stoping Footwall 6' wide
[illegible]	165	2.45	[illegible]	130	
May 29	163	3.41	T	26	
22	160	2.47	T	4	
22	154	3.52	T	31	Stream [illegible] hanging
20	152	2.7	T	60	Average of face
10	142	7.6	T	1.02	Face off
9	141	2.1	T	91	Drift in the [illegible]
7	139	2.10	T	60	Average of face
Apr. 30	131	2.2	T	39	
26	127	1.96		7	
20	121	7.21	—	1.13	
4	120	2.03	—	1.1	
2	117	0.43		.45	
Mar. 28	116	8.51		21	[illegible]
26	114	1.21	T	21	
25	108	1.04	T	24	
24	106	.51	T	24	
23	104	.24	T	23	
22	102	3.02	.20	23	
21	100	1.43	T	14	
19	98	3.20	T	14	
18	96	3.41	T	14	
17	94	3.41	T	14	
14	90	6.57	T	60	
9	87	2.57	T	60	
7	82	1.7	T	32	
5	82	3.24	T	13	
1	76	3.51	T	13	
Feb. 26	72	1.17	.40	13	
21	69	3.17	T	13	
18	66	3.29	T	12	Hanging wall 25 [illegible]
12	62	5.75	T	85	Hanging wall [illegible]
7	57	1.46	T	12	[illegible]
6	57	1.51	T	12	Hanging wall [illegible]
9	54	1.88	.80	12	[illegible]
3	50	2.58	.100	12	Face [illegible]
	50	3.63	T	12	Hanging wall [illegible]
	48	3.4	T	10	[illegible]
	44	3.1	T	12	[illegible]
	42	3.1	T	12	[illegible]
	40	3.1	T	12	[illegible]
	38	3.1	T	12	Face [illegible]
	36	3.1	T	12	Hanging wall [illegible]
	34	3.1	T	12	Foot wall [illegible]
	32	3.1	T	12	[illegible]
Jan. 25	30	3.23	T	12	Average of face [illegible]
Dec. 20	3	3.47	T	10	[illegible]
27	11	2.01	T	16	[illegible]
30	10	2.44	T	57	Face [illegible]
Jan. 1, 17	12	2.92	.20	53	[illegible]
3	18	[illegible]	T	[illegible]	Face [illegible]
5	22	2.51	T	[illegible]	Face [illegible]
6	23	2.04	T	30	[illegible]
9	28	.34	T	134	Face [illegible]
10		.69	T	49	
11	32	.53	T	11	
16	44	2.94	T	02	Face [illegible]
17	49	1.69	T	37	Side of face 30 [illegible]
18	52	.16	T	04	20 [illegible]
20	55	.31	60	86	24 [illegible]
21	60	3.46	T	35	3 [illegible]
23	63	1.46	T	19	Hanging wall 2 [illegible]
24	65	2.08	T	41	Foot wall 12 [illegible]
27	70	1.61	.20	16	Face [illegible]
30	74	3.67	T	13	Face [illegible]
Feb. 6	89	.31	T	[illegible]	Face [illegible]
7	91	.16	T	[illegible]	[illegible]
9	94	.92	T	[illegible]	[illegible]
10		3.99	[illegible]	[illegible]	[illegible]
12	103	2.93	.40	33	[illegible]
15	105	1.23	T	33	[illegible]
18	108	[illegible]	T	33	[illegible]
25	115	1.55	T	64	Face [illegible]
28	118	3.05	T	18	Average face [illegible]
Mar. 1	119	3.1	T	5	
1	120	3.1	T	5	Face [illegible]
2	122	3.1	T	5	
3	123	3.1	T	5	
4	124	3.1	T	5	
6	126	3.1	T	5	
10	130	3.1	T	5	
15	135	3.1	T	5	
20	140	3.1	T	5	Average [illegible]
Apr. 1		2.[illegible]	.40	[illegible]	Average of face [illegible]
11	155	3.31	T	12	[illegible]
1	157	4.55	T	7	Face [illegible]
2	159	3.15	T	7	
3	161	2.20	T	7	
4	163	2.14	T	7	
5	165	4.10	T	7	
	165	1.51	T	7	
10	170	[illegible]	T	[illegible]	[illegible]
June 1	198	1.85	T	[illegible]	Face Average
5	202	4.12	[illegible]	14	
7	204	3.[illegible]	T	[illegible]	[illegible]
9	206	3.[illegible]	T	[illegible]	
Sept. 4	212	[illegible]	T	[illegible]	
13	215	7.10	T	[illegible]	
15	215	0.70	T	[illegible]	
17	222	7.31	T	[illegible]	
[illegible]	[illegible]	1.7		46	

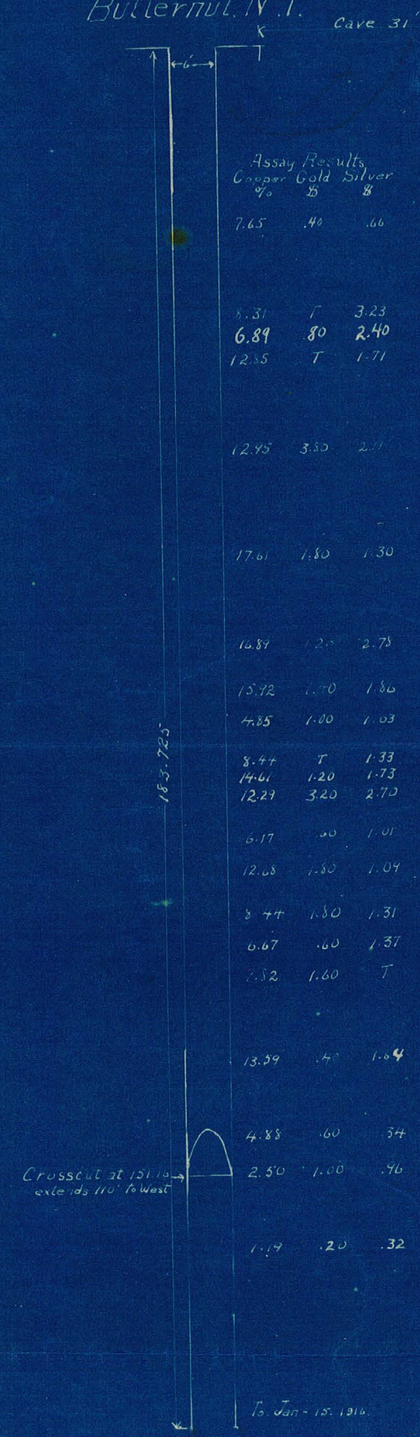


Scale One Inch = 20

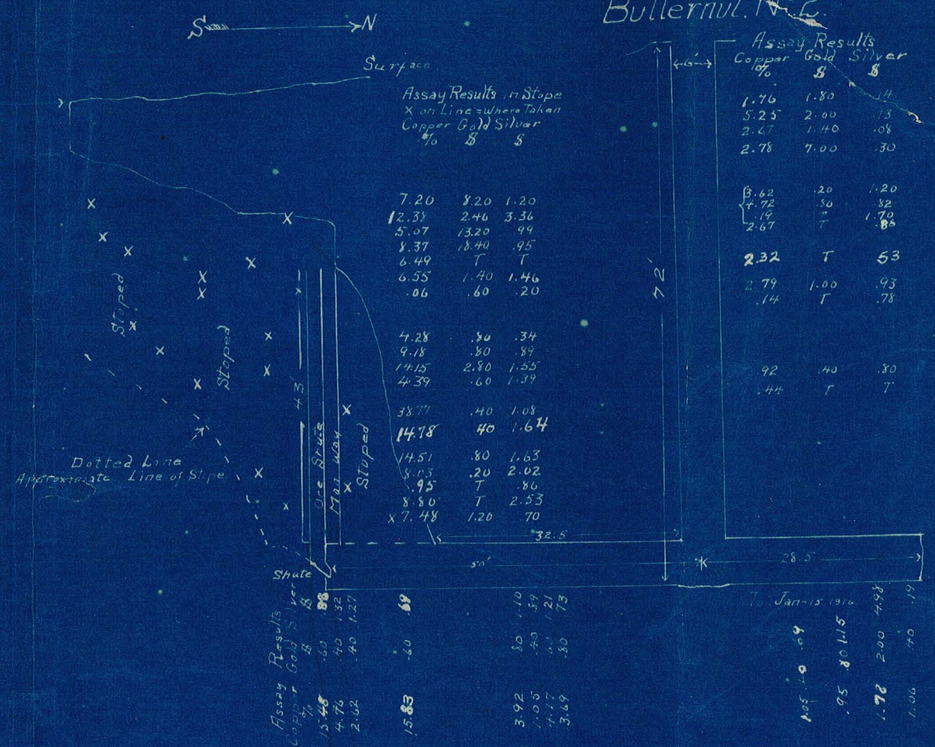
Butternut No 1
E-W Cross Section

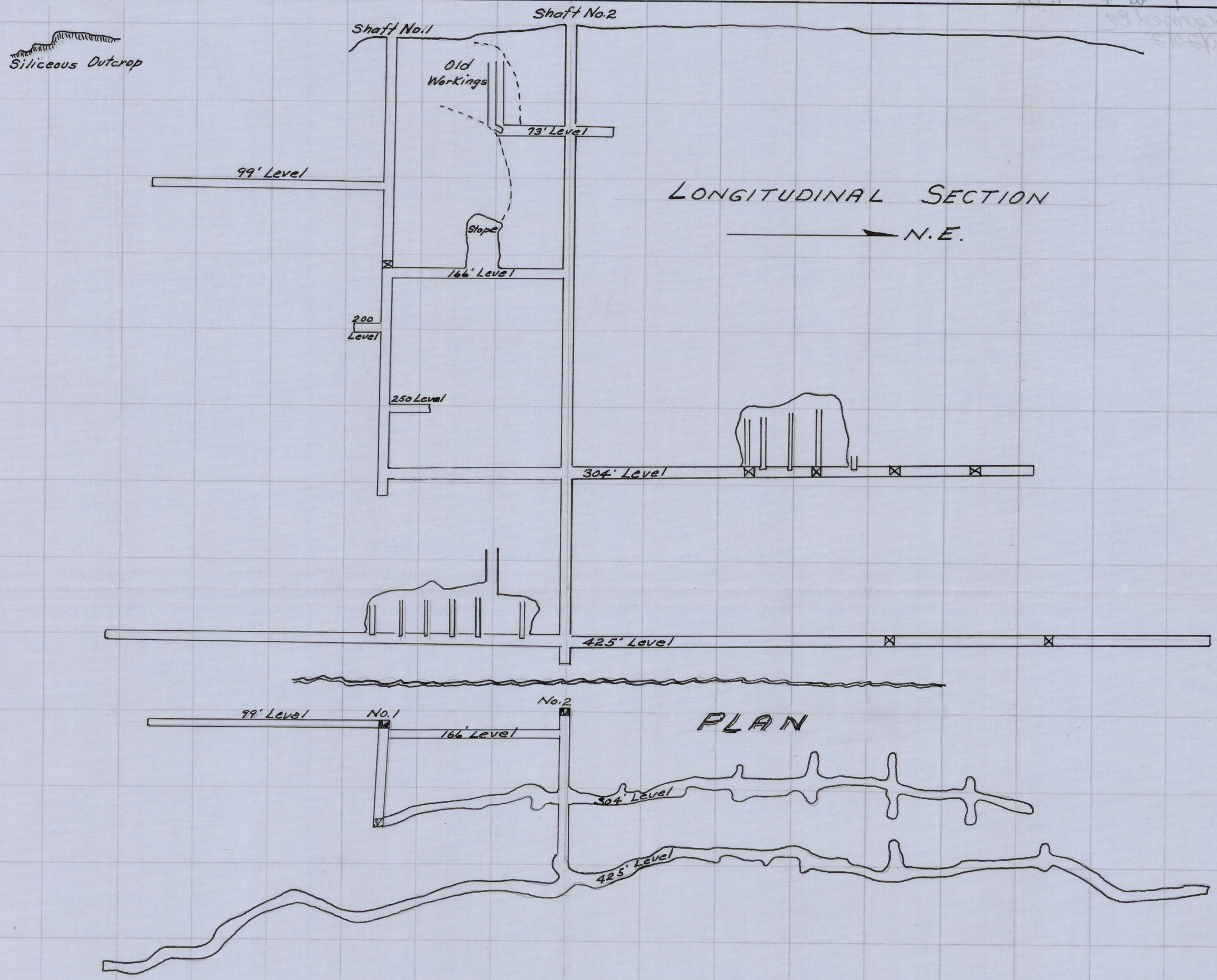


Butternut No 1.



Butternut No 2





BUTTERNUT MINES
HURON, ARIZ.

Scale: 1" = 50' By: G.E. Guild
Jan. 1, 1918

Batre Shaft
60'

- PROFILE MAP -
OF THE
BUTTERNUT MINES.

HURON, ARIZ.

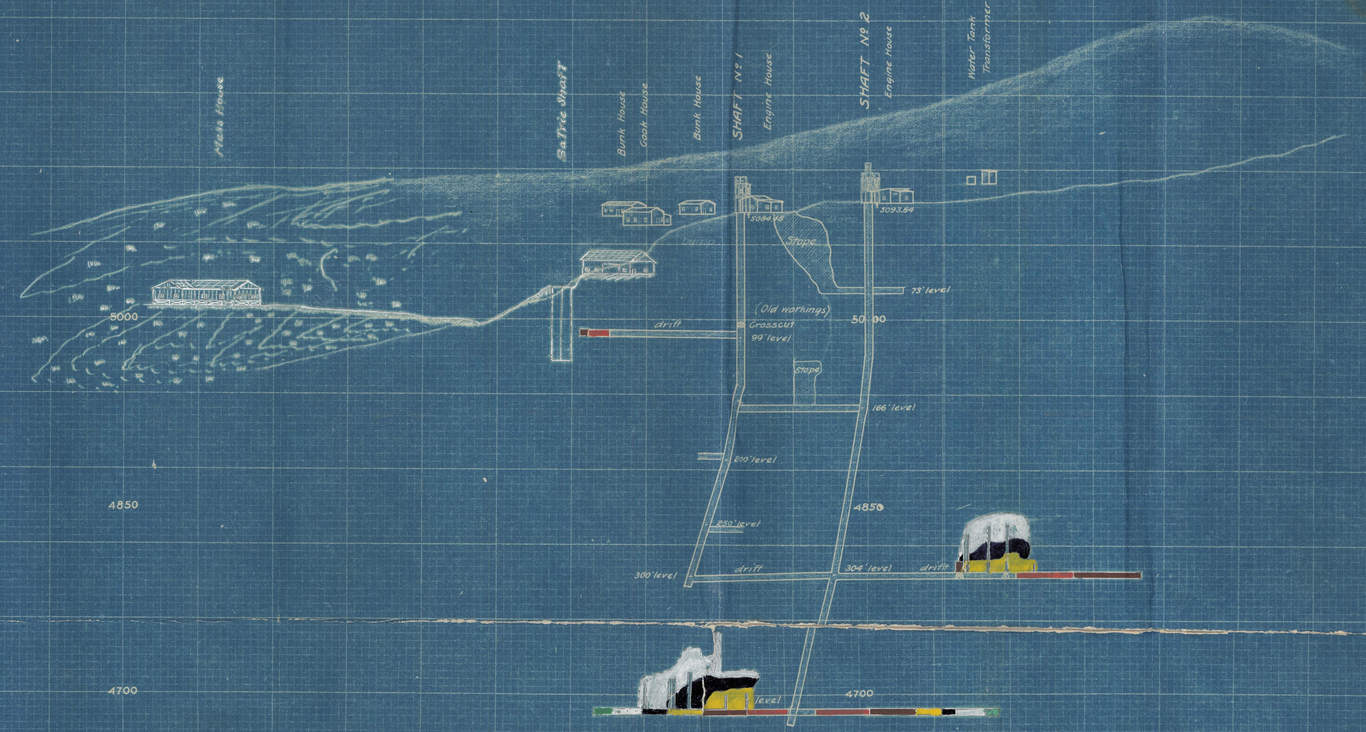
Scales Hor. 1" = 60' Ver. 1" = 60'

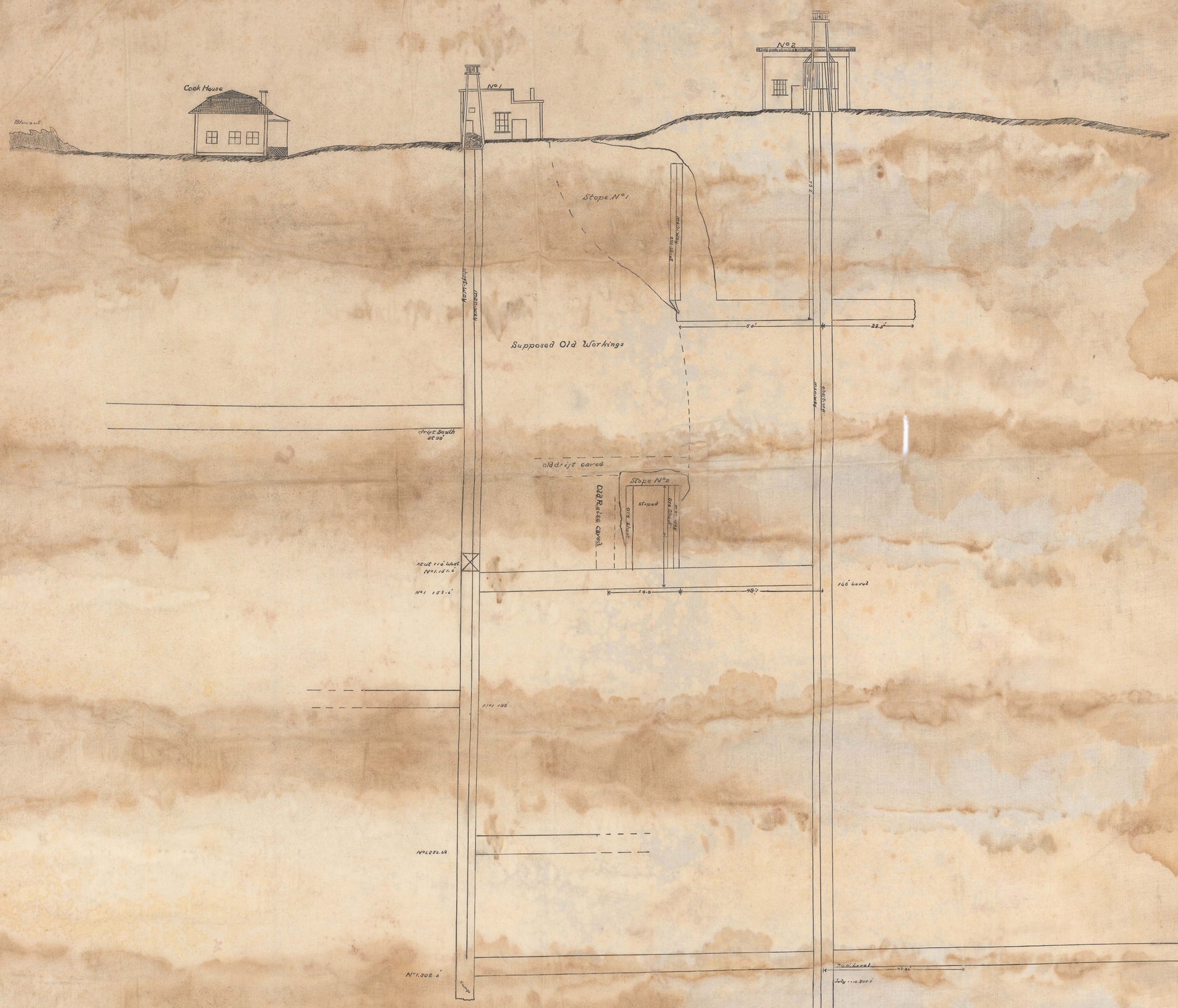
Jan. 12, 1917.

- G. E. Guild -

NOTE: This profile shows all workings projected to a true north and south line and shown on plan map as line "A-A"

January
February
March
April
May
June
July
August
September
October
November
December



PROFILE MAP
OF THE
BUTTERNUT MINE.

Scale – 0 20 40 – E. E. Guild