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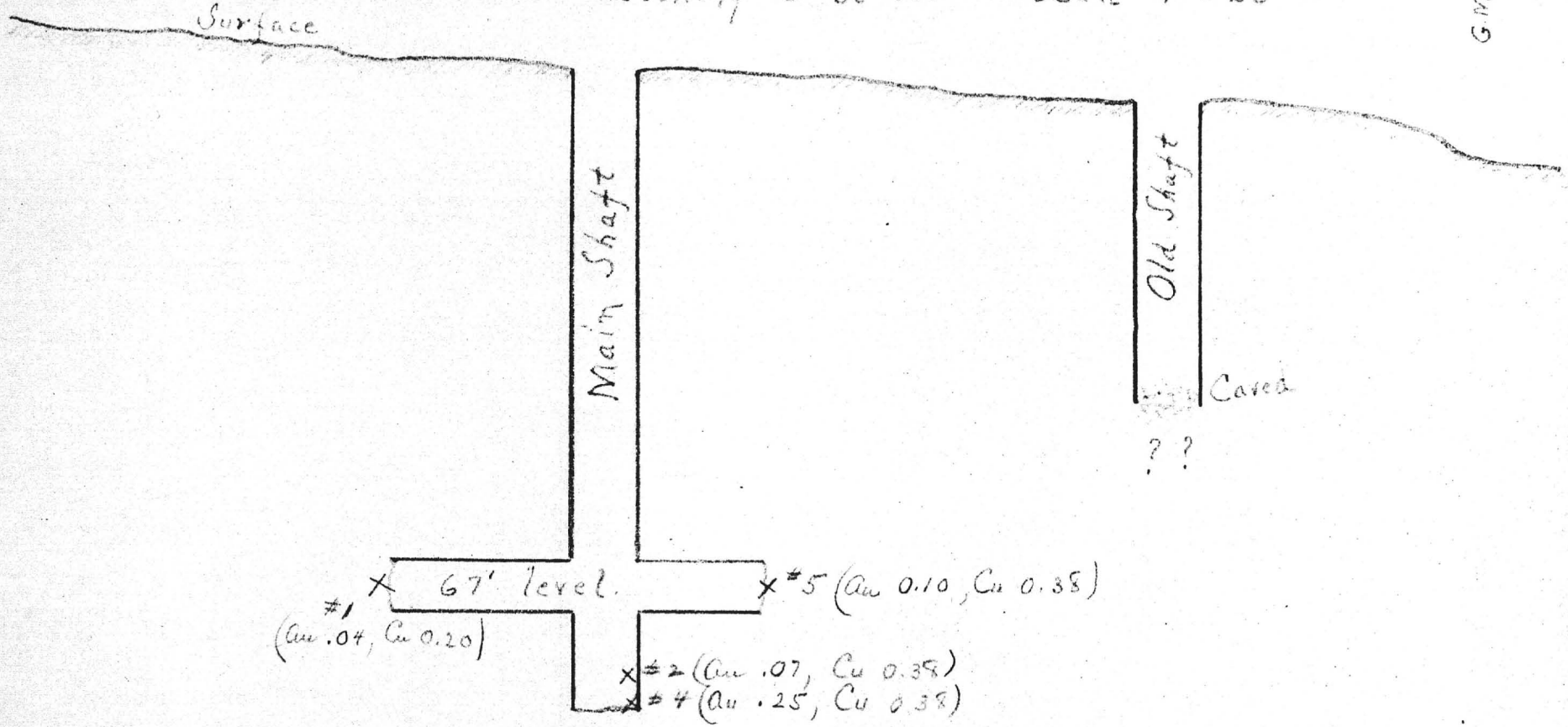
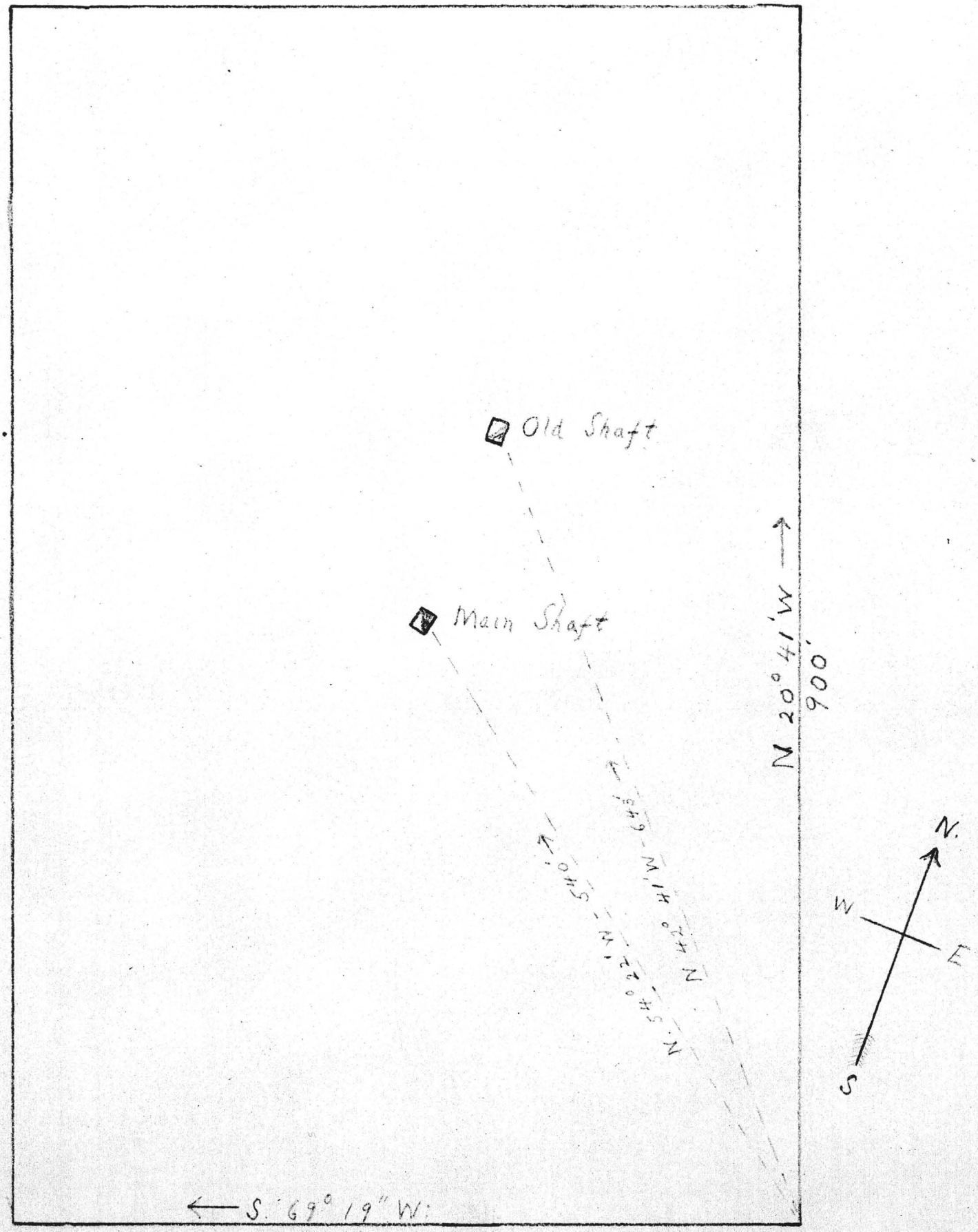
Section of Summit Mine Workings. July 11, 1944

Looking S-35°W. Scale 1" = 20'



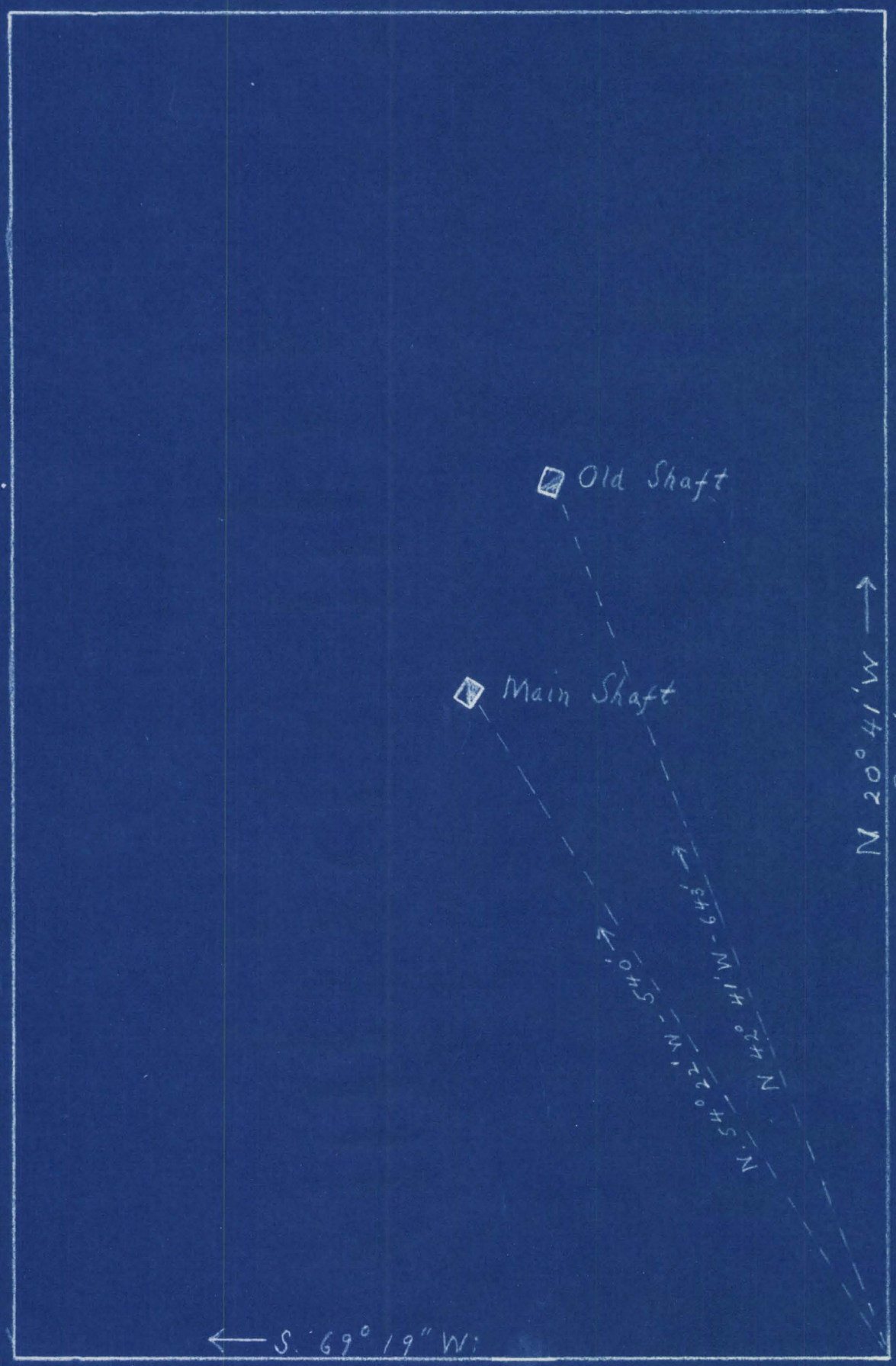
GMC

Summit Claim from Survey Map.
Scale 1" = 100'



G.M.C.

Summit Claim from Survey Map.
Scale 1" = 100'

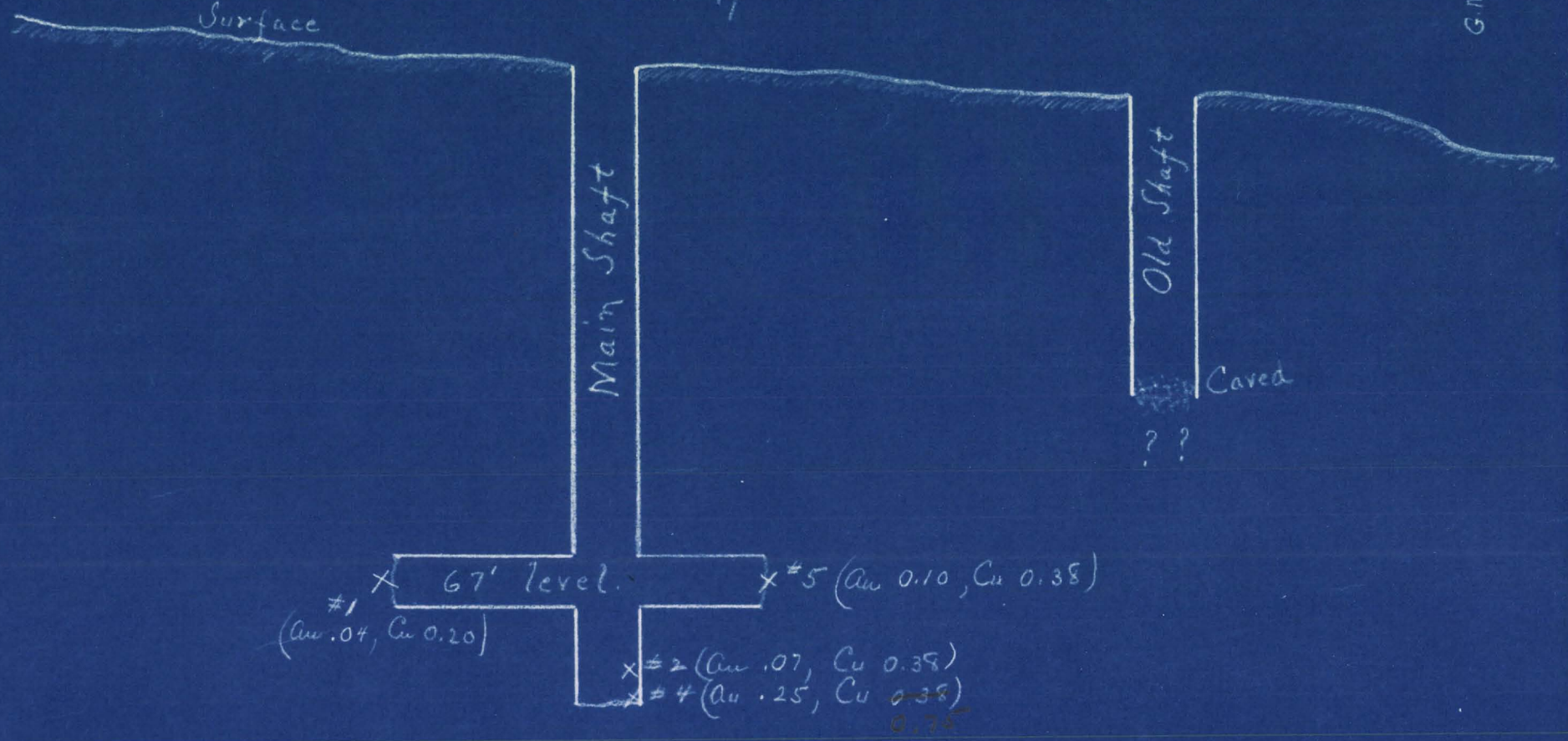


G.M.C.

Section of Summit Mine Workings. July 11, 1944

Looking S-35°W. Scale 1" = 20'

G.M.C.



G. M. C. Copy.

SUMMIT MINE REPORT EXHIBIT B

DESCRIPTION OF SAMPLES TAKEN BY G. M. C. -- 7/10 & 7/11, 1944

No. 1 At southwest end of drift on level, width 14"

Gold 0.04 oz.

Copper 0.20 %

} tal $1.40

Sample taken at same point by Buel ran.
Au = 0.68 oz
Ag = 1.10 "
Cu = 1.95 %
tal. = $27.00

No. 2 From bottom of shaft, 7/10,--8' below level

Gold 0.07 oz.

Copper 0.38 %

No. 3 From small pile of picked ore on dump

Gold 0.36 oz.

Copper 1.09 %

No. 4 From bottom of shaft, 11' below level, width 2'

Gold 0.25 oz.

Copper 0.75 %

No. 5 From face of northeast drift, width 18"

Gold 0.10 oz.

Copper 0.38 %

Silver content was not determined since previous sampling had determined this to be very small even in the higher grade material originally found on the dump.

Assays by Arizona Assay Office.

No. 338 Co

Phoenix, Arizona,

July 12, 1944.

CHAS. A. DIEHL

ARIZONA ASSAY OFFICE

Phone 3-4001 — 815 North First Street — P. O. Box 1148

This Certifies That samples submitted for assay by Mr. G. M. Colvocoresses, contain as follows per ton of 2000 lbs. Avoir.

MARKS	SILVER Ounces	SILVER Tenths	VALUE (Oz.)	GOLD Ounces	GOLD Hundths	VALUE (Oz.)	TOTAL VALUE Of Gold and Silver	% PERCENTAGE COPPER	REMARKS
S-1				.04		$1.40		.20	
S-2				.07		$2.45		.38	
S-3				.36		$12.60		1.09	
S-4				.25		$8.75		.75	
S-5				.10		$3.50		.38	

Charges $ 7.50

Assayer ARIZONA ASSAY OFFICE

Summit Sect 36, Tp. 11 N.
R-9 E

Exte. Reports
C. W. Butsfield Aug, 25
Wk 1880 - 97. Prod pd $300,000 - 400,000

Pre Camb Granite &
Air line dist of Summit N - 2½ m N.W of Payson
Exten Wkings now cased. Consid ⅞ sd to be [illegible]
& large dump over $7.00
F. C. Smith (no date
Rept of J. R. McDonald
1932

Lime contact of porphyry & granite 6' wide, Ship
of 2 cars ⅞ by J. T. Coleman - 95 for sorting 1 ⅞
of dump

Samples -- pub	fine pulled	# 2
Ag	= 0.60	0.50
Au	= 2.264	0.50
Cu	= 9.79	4.22%

Shelby Lime

Says to 0 ~ 600 t of 5 sorted material on 1
1 dump x - bomb

Title still - Verde Falls Gold Mine Co &

lease & option to Summit Copper Mn

Verde Falls

Claims 1 Pat. = Summit. = #783
925 x 600'

Title to Summit Co!

& 6 wipes called Flying Mine # 1, 2, 3, 4, 5, 6
x Summit 1 Surface. ✓ B.P

Johnson Wheel S prop for Apl '41 until Sept '43 when

Summit Co came into picture.

→ Flagg first visited S m 2 Aug '36.

At X time 1 shafts are indicating by depression & tree grass 2 1 holes.

Shaft c appr 6' x 8' = 50
7000
13500
300 t

26
19
45

40

7 x 5
35
40
1400
100

Phoenix & Payson via Bush Hwy
111 miles

July 13th, 1944

STATEMENT OF ACCOUNT

Summit Copper Mines, Inc.
601 Luhrs Tower
Phoenix, Arizona

to

G. M. Colvocoresses
1102 Luhrs Tower
Phoenix, Arizona

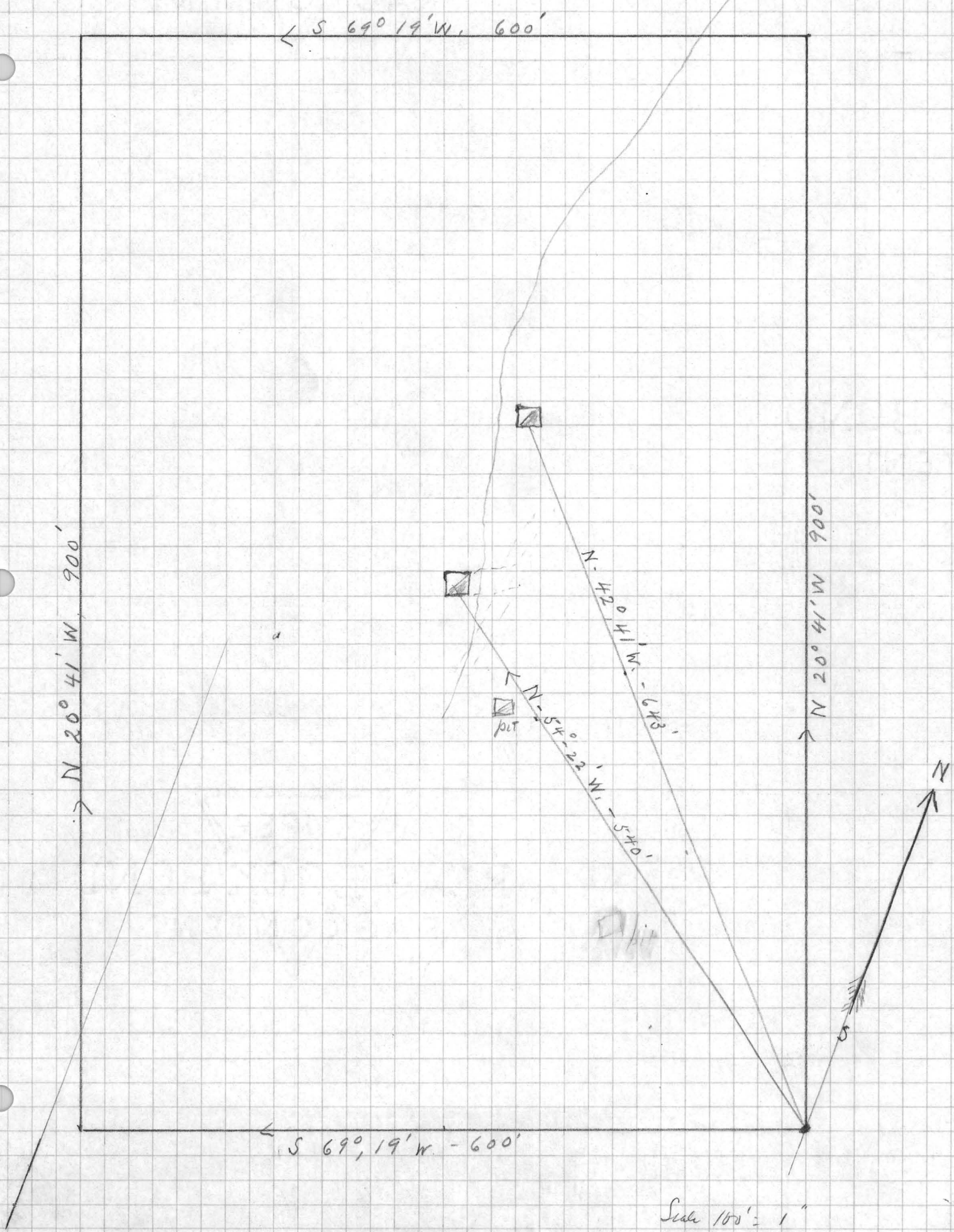
To examination and report on property

as per agreement	$ 250.00
Credit by Check, July 7th	125.00
Balance due	$ 125.00

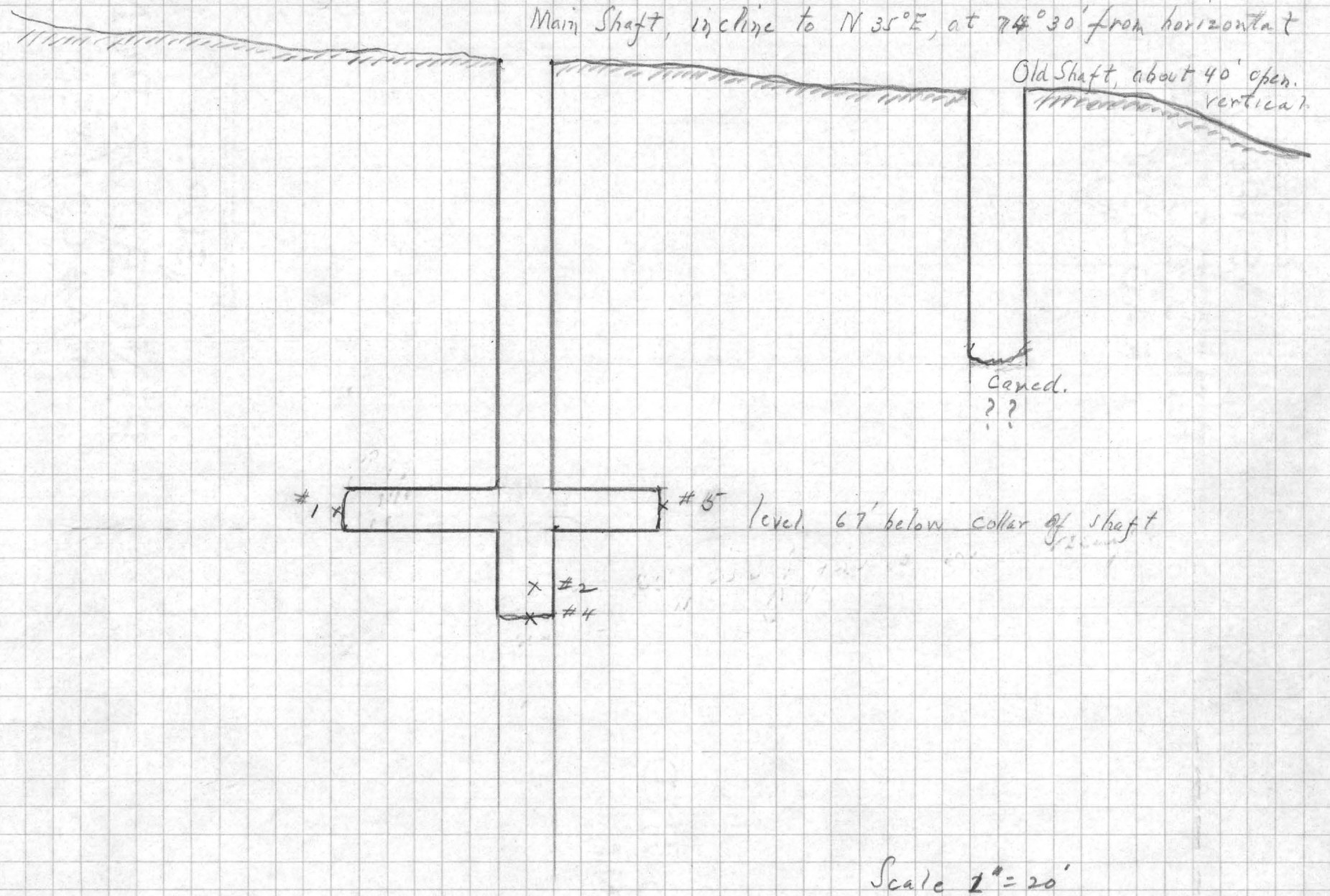
Received Payment _____

Pd in full 7/17/44

Summit Claim, from Survey Map



Section of Summit Mine Workings, looking S-35°W.



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Charges $ 7.50

Assayer ARIZONA ASSAY OFFICE

B. M. C. Co.

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No. 5 From face of northeast drift, width 18"

Gold 0.10 oz.

Copper 0.38 %

Silver content was not determined since previous sampling had determined this to be very small even in the higher grade material originally found on the dump.

Assays by Arizona Assay Office.

July 7th, 1944

601, Lubes Tower,

Received from Summit Copper ~~Mining Company~~ Mines, Incorporated, the sum of One Hundred Twenty-Five Dollars ($125.00) part payment on account of fee of Two Hundred and Fifty Dollars ($250.00) including services and expenses as agreed upon for examination and report on mine of the above company located near Payson, Arizona. Examination to be made July 10th and 11th if possible.

S. M. C.

Also Mr. B E Tade, has same office

Make 4 copies

PAYSON DISTRICT

History: The earliest mineral locations in this vicinity were made in 1875. Within three years, practically all the prominent quartz veins were located, and, by 1881, more than three hundred men were attracted to the district. The cream of production was harvested by 1886, since which time operations have been generally intermittent. Considerable development work has been done on the Ox Box vein. During 1933-1934, the Zulu was being actively worked, the Golden Wonder was reopened, work was done on the Wilbanks-Callahan and De Ford properties, and plans for reopening a few other properties in the district were under way.

Topography and Geology: At Payson broad valleys floored with pre-Cambrian granitic rocks alternate with mesas capped by lower Palezoic sandstone which, farther north, continues under the Palezoic rocks of the Plateau. South and west of the town, dissected slopes descend steeply to the valleys of Tonto Creek and East Verde River. These slopes, which are floored with a faulted complex of schist and diorite, contain the principal gold-bearing quartz veins of the district.

Gold-bearing Veins: The gold-bearing quartz veins of the Payson District occur within fault zones that generally range in strike from N. 15° W. to N. 65° W. and dip northeastward. Most of the veins, especially the Zulu, Golden Wonder, and Single Standard, are less than 2 feet wide, but the Ox Box and Gowan attain considerably greater widths. The oxidized portions of the veins consist of rather cellular quartz with considerable hematite and limonite. At least part of these cavities were originally filled with pyrite. Where the veins consist of rather massive quartz with only a small amount of hematite and limonite, they are or lower grade. Locally, bunches of oxidized copper minerals, accompanied by free gold, are present. Most of the workings are within

the oxidized zone. Typical vein material from below the water table consists of rather massive quartz with considerable pyrite and a little chalcopyrite. It is reported to carry less than an ounce of gold per ton.

The wall rock, which is generally diorite, shows alteration for several feet on either side of the veins to chlorite, sericite, and secondary quartz. In places kaolin, probably derived from sericite, is abundant. Such alteration, together with the mineralogy, texture, and structure of the veins, points to deposition in the mesothermal zone.

Economic possibilities of Payson District: Although the quartz veins of the Payson district carry some gold and silver throughout, only certain portions of them are right enough to constitute ore under present economic conditions. Because most of the old workings were inaccessible when the district was studied, most of the factors governing the occurrence of these ore shoots remain unknown. In general, the quartz veins are richest where they widen or where they carry notable amounts of oxidized iron or copper minerals. Below water level, the gold is probably contained in pyrite.

G. M. C. Copy

July 13, 1944

REPORT FOR SUMMIT COPPER MINES, INC.

Summit Copper Mines, Inc. — Henry Costa - Asst Secty
601 Luhrs Tower
Phoenix, Arizona
Offering B. E. Tade - Real Estate

Gentlemen:

As per arrangement with your officials I have examined your mining property and operations near Payson, Arizona and beg to submit the following report with print of claim map and section of underground workings. In making my examination on the 10th and 11th instant I was accompanied by your associate and Superintendent, Robert W. Thompson and also by Arthur L. Flagg, Director and Consulting Engineer for the Verde Falls Gold Mining Company, owner of the Summit Claim. My thanks are due to both of them for much helpful information and assistance.

PROPERTY AND LOCATION: --

I am informed that your company holds a bond and lease on the Summit Patented Lode Mining Claim (Patent Survey #783) and that by virtue of an agreement with Robert W. Thompson of Payson you have also possessory title to six unpatented claims adjoining the Summit, known as the Flying Wings No. 1 - 6 (incl.). These claims, as shown on a map recently prepared by Mr. Yost, are located in Section 36 of Township 10 N Range 9 E, Gila and Salt River Base and Meridian. They are about 2 1/2 miles in air line north-west of the town of Payson, Gila County, Arizona from which they are reached by 6 1/2

miles of road; the last 3 1/2 miles being rough and difficult to travel in wet weather. The elevation is about 5200' above sea level and the excellent climate is suitable for work at all seasons excepting during the infrequent winter storms. The surface is rough and rocky but not precipitous. In places there is a heavy growth of native grasses and brush including scrub-oak and manzanita, with many juniper-cedars and small pines, but few large trees.

HISTORY: --

The Summit is reported to be one of the oldest locations in this district where gold discoveries were made in the 70's and several small mining operations were active from 1880 to 1897.

According to the best available information the early day work on the Summit consisted of two shafts, said to be 130' and 80' in depth, also some pits and open cuts on the surface. Small shipments may have been made by the first operators, but the relatively high content of copper was a handicap under the conditions which then existed, and it appears that nearly all of the ore was left on the dumps until 1895 when J. I. Coleman leased the claim from its owner (H. H. Logan) and according to his statement shipped two cars (perhaps 80 tons) of hand-picked ore to the Old Dominion Smelter from which the returns aggregated some $16,000.

Some years later an Engineer named F. C. Smith picked two samples from the dumps which assayed as follows:--

	No. 1	No. 2
Gold	2.264 oz.	0.50 oz.
Silver	0.60 oz.	0.50 oz.
Copper	9.79 %	4.22 %

Smith states in his report that his first sample was representative of over 600 tons of dump ore but there is good reason to doubt this assertion.

In about 1909 this mine was acquired by the Verde Falls Gold Mining Company, its present owner, but practically nothing had been done there until Robert W. Thompson took it over in April, 1941 under a lease which in September, 1943 was assigned to your Company.

GEOLOGY: --

There has never been any detailed geological survey or study of this district, but those geologists who have published their findings seem to agree that the basal formation is Pre Cambrian granite, often intruded by diorite, grandiorite and porphyry,--probably in the form of dikes,--and overlain by sandstone and limestone which has been classed as Devonian and from which the more recent sedimentary and volcanic rocks are assumed to have been removed by erosion. The very limited mining work, all of which is comparatively close to the surface, does not afford any definite evidence that underlying magmas are responsible for the

ore deposition, although some geologists favor the theory that the intrusion of diorite dikes into the granite was the last phase of igneous activity preceding the formation of veins and that these dikes may have acted as channels thru which hot ascending water rose from deep seated sources to alter the diorite and deposit metallic minerals from solution. In any event no sizable ore deposits have yet been discovered or developed.

The surface of the Summit and adjacent claims is largely covered with sandstone and limestone except for scattered outcrops of granite and diorite. However, the mining work had all been done near to a shallow gulch and in a dike of the diorite that appears to strike northwest-southeast and to have a width of about 300' lying between walls of granite. The location of the principal shaft is shown on the accompanying map, and about 60' nearly due north another shaft had been sunk supposedly to a depth of 80', but it is now caved full of muck less than 40' below the collar and I made no attempt to descend it. As far as can be determined this shaft like the other was sunk in altered diorite rock and no showing of ore was to be seen at or near the collar nor could any vein or pocket of ore be found in any of the other small surface pits and cuts which are wholly or partially caved.

RECENT WORK: --

From the dump at the main shaft Thompson picked and sorted in 1942 about 2 cars of ore which netted around $10.00 per ton in

gold and copper values and about 3.5 tons which carried $17.00 per ton, and it was assumed that a vein or deposit of similar ore would be found in place if the main shaft (erroneously reported as being 130' deep) were reopened; with a chance that some of the ore might be of much higher grade and approach the values supposed to have been realized by Coleman.

Therefore, the work conducted by Thompson and subsequently by your Company appears to have been entirely based upon this belief. Accordingly the said shaft was equipped for operation and cleaned out and retimbered to the level which was found at 67' below the collar and the muck was cleaned out of the north drift which extends 19' from the center of the shaft, bearing N. 70° W. and from the south drift which has a length of 26' bearing S 50° E. The accompanying sketch shows a section of these openings, also a plan of the claim.

The main shaft was found to be inclined about 75° from the horizontal heading N. 35° E. and the sump extended only seven feet below the level so that the original depth was less than 75'. During my visit two more rounds were shot in the bottom giving the shaft a depth of almost 80' and samples were taken from both of the last rounds.

In retimbering this shaft an unusual practice was followed, in that the manway has been carried down along the hanging wall side of the hoisting compartment instead of at one end of it, but the timbering has been done in a substantial manner and the shaft with head-

frame, etc. is thoroughly serviceable.

The condition of the shaft walls above the level are now largely masked by the lagging, but I was told that some small pockets of ore were found as the work proceeded and Thompson in November, 1942, at a depth of some 18' below the collar, mined and shipped 6763# dry weight which assayed at the smelter 0.865 oz. gold, 0.34 oz. silver and 2.41% copper, with net value $26.25 per ton.

The truck freight on this ore was $5.00 per ton to Miami, smelter toll $5.14, and sampling charge $1.00 per ton.

The shaft is sunk entirely in the dike or intrusion of much altered and shattered diorite ~~on~~ in which there are many fractures and bedding planes while the most extensively altered, decomposed and mineralized section of the rock varying from 2 to 4' in width might be termed a vein, although it did not appear to me to have any true vein-filling or well defined foot and hanging walls.

CAMP AND EQUIPMENT

Your property has been well and suitably equipped for small scale operations. The buildings of wooden frame comprise two bunk houses, sheds over the hoist and blacksmith shop, tool house and head frame at the shaft. You have a 15 H. P. Fairbanks-Morse gas hoist and a 105 cu. ft. portable Ingersoll Rand Compressor (this last being rented), ore cars, buckets, drills and various small tools, a dump truck and a pick-up, also some mill machinery brought

in from another property.

I was informed that the total expenditure made by your Company to date has amounted to about $10,500, including the road and other surface work, camps construction, cost of equipment and a considerable stock of supplies as well as the underground work. Three men were employed at the mine under the direction of Mr. Thompson, and both the crew and the machinery seemed to be working very efficiently.

UNPATENTED CLAIMS, FLYING WING GROUP: --

No examination of these was attempted since I was informed that there had been but little work done on them and that no showings or ore had been discovered. The surface was largely overgrown with heavy brush. Prospecting would be difficult and would not seem justified unless the work on the Summit Claim should indicate that pay ore was likely to extend across its lines.

Some quartz veins were noted and one of these about 4' in width was said to have assayed $5.20 in gold, but neither this showing nor any others which I observed on the surface of the claims appeared at all promising.

CONCLUSION AND RECOMMENDATION: --

All of my samples (as noted on the attached description Exhibit B) were taken in what appeared to be the best mineralized sections of the vein or ore-zone and yet only the sample of fragments picked up on the dump can be classed as ore.

From my two careful inspections of all of the rock exposures in the shaft and drifts I noted the existence of small quantities of copper carbonates and sulfides, also iron oxide and sulfide and stringers of quartz with which some gold may be associated; but the samples show that no pay ore has so far been exposed in the old workings and only the slight improvement in values noted in the two samples taken in the bottom of the shaft give any encouragement to continue the present program of development.

Since it is obvious that the result of your past work has been wholly negative from a commercial standpoint it appears that you should now decide to either discontinue operations or appropriate a fund to carry on the exploration in the hope of finding something far better than has yet been found or indicated.

Messrs. Thompson and Flagg have had the advantage of observing the conditions which prevailed before the shaft was cleaned out and while that work was in progress, particularly the indications that some good ore had been stoped out near the surface on the west side of the shaft.

They are of the opinion that there is still a good chance that a pay shoot of copper-gold ore may be found either as a replacement in the diorite dike or along the west contact between the diorite and the granite, which would appear to lie not more than 50' from the bottom of the shaft.

To test this theory it is my understanding that they would like to continue sinking the shaft, with merely skeleton timbers, for another 25 - 30' and then to crosscut both east and west for a total of at least 50' in each direction. The cost of the sinking they estimate at about $15.00 per foot and of the cross-cutting at $8.00 per foot, or say a total expense of not more than $1200. In my personal opinion those estimates are too low and if their program is approved I think that at least $2000 should be provided to make sure that it can be carried out.

As to the choice of the alternatives with which you are now confronted it seems obvious that any money which may be spent for additional work must be considered purely and simply as a mining gamble, and one which I can not conscientously advise you to make, for with all due respect to the opinion of these gentlemen I do not think that it can be classed as a good gamble.

It is always very regrettable to abandon any project of this nature as long as there is any reasonable chance that some additional expenditures might convert the loss into a profit but in this particular instance it is my opinion that the ore shipped from the dumps at the Summit Mine must have come from one or more small pockets

which were stoped out from or near to the surface, and otherwise the sinking of the two shafts and all of the other development work on the claim seems to have been entirely futile.

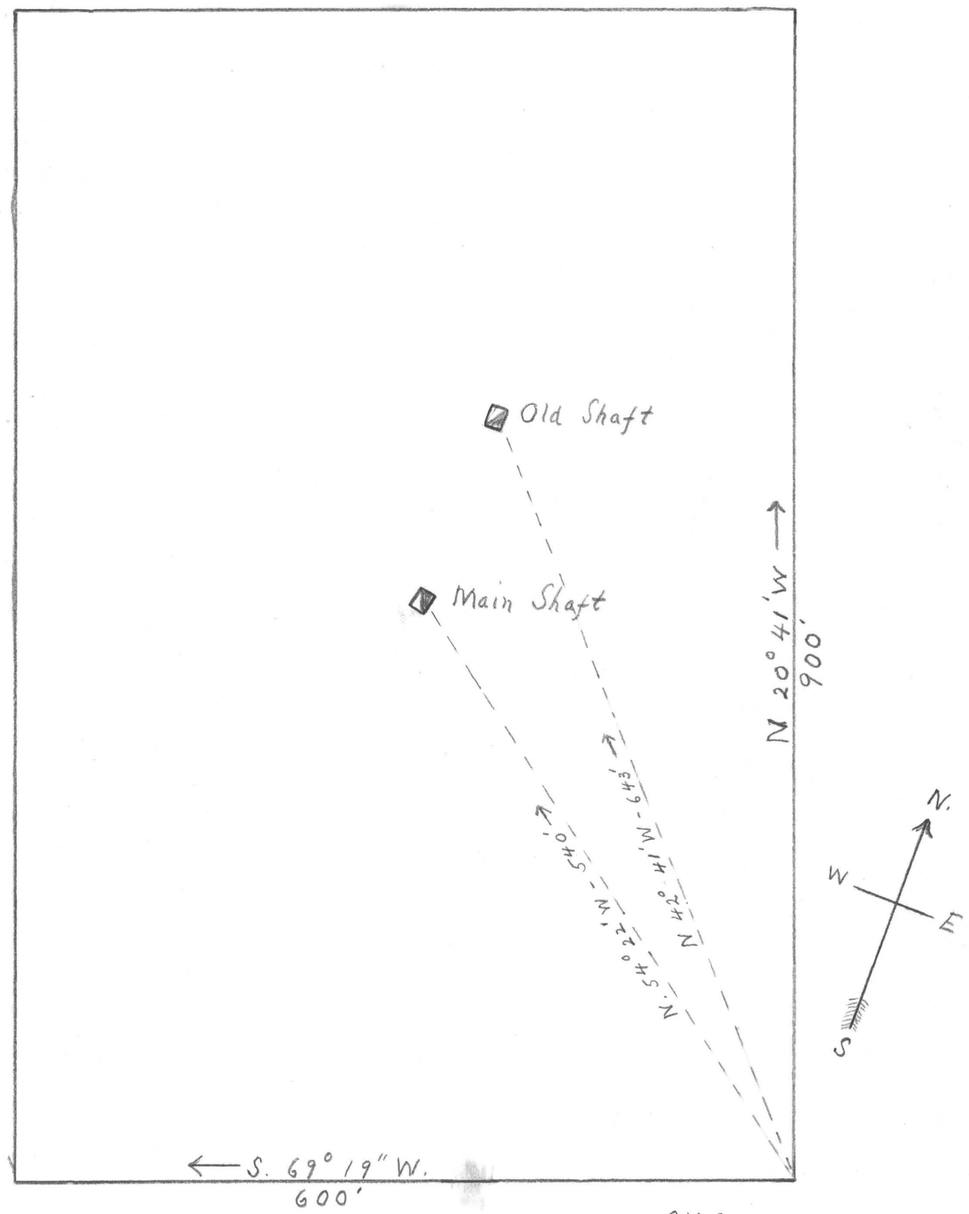
I do not personally feel that either the geological conditions, the past record, or present showing justify the belief that any mining operations which may be conducted on this property are ever likely to find any body of copper ore or gold ore or to repay your present and future investment, for aside from the high grade pockets of oxidized gold ore mined by the old-timers, the Payson District is not well mineralized and even if the showing at the Summit were found in any one of the best camps in the State I should class it as a very unpromising prospect.

Unless the next two or three rounds in your shaft should serve to greatly alter and improve the situation by breaking into pay ore, I must regretfully advise you to abandon this project and to salvage your equipment in the manner which may seem most advantageous.

Yours very truly,

Registered Professional Engineer in Arizona #761.

Summit Claim from Survey Map.
Scale 1" = 100'.



G.M.C.

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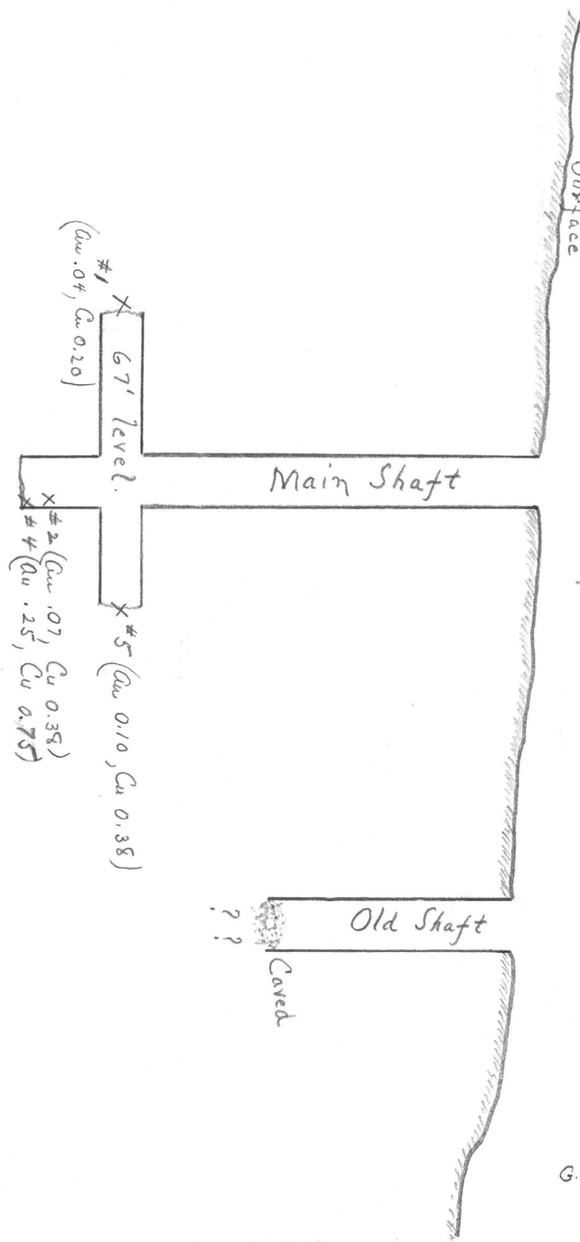

G.M.C.