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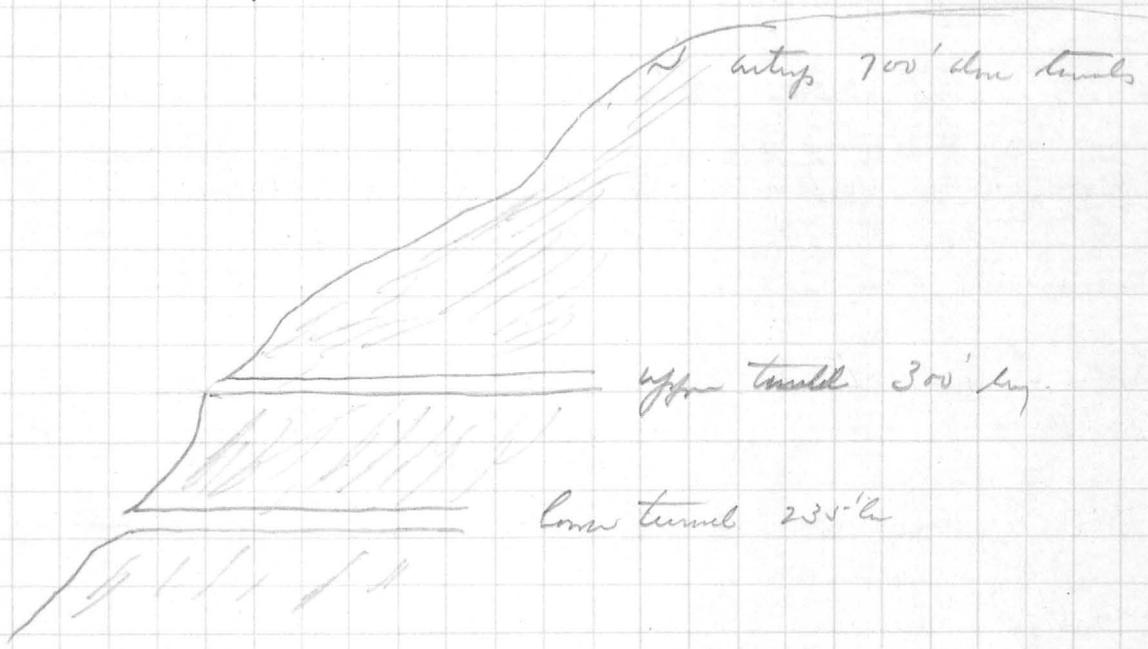
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Rich Hill. ^{Group} 1/13. 34

John Sloan mine patented by John J Russell of
Breckenbury, who is associated with Buck beam in the
Kaltun Extension.

This mine & the Enlick mine are on the north side
of Rich Hill & connected by roadway with the Capt
White mill which I visited with Gene Lester.



7 claims of which 4 are in line running across Rich
Hill to Leo Myers property on the south side & giving
length of about 600' in the vein. End outcrop on hill
Vein is from 6" to 30" wide, area 20" & Russell says
that he has sampled every 5" in the tunnels & is able to

(over)

estimate an average grade of 1 g. au ($\$35.00$) + a tonnage of
15-20,000 (all of which sounds very improbable)

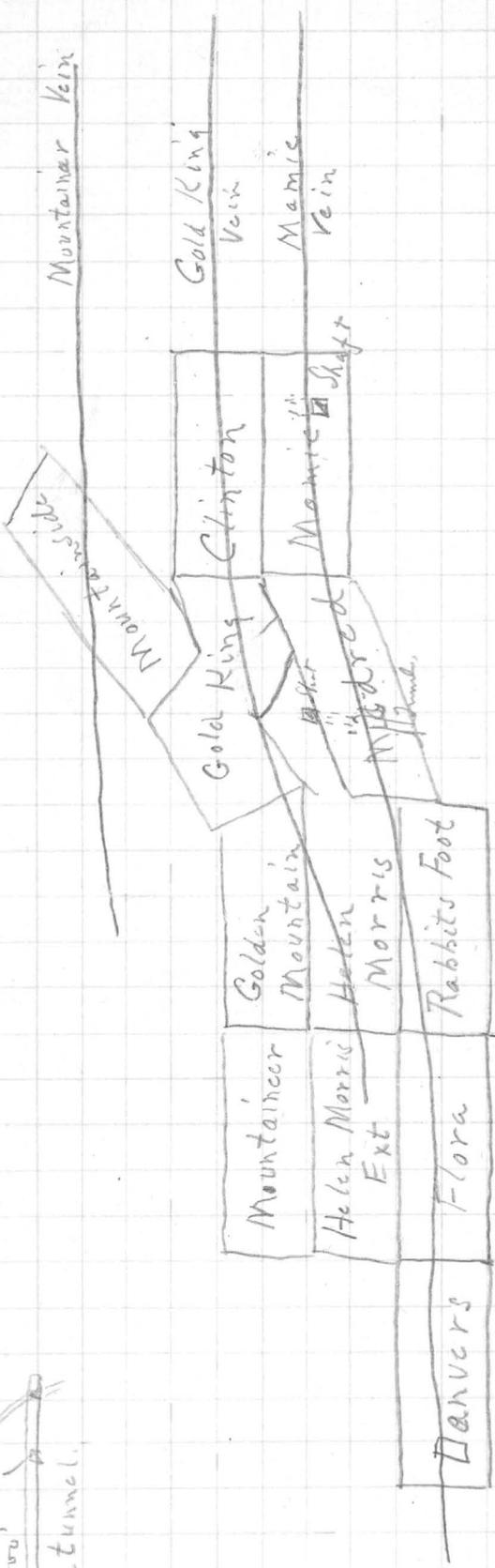
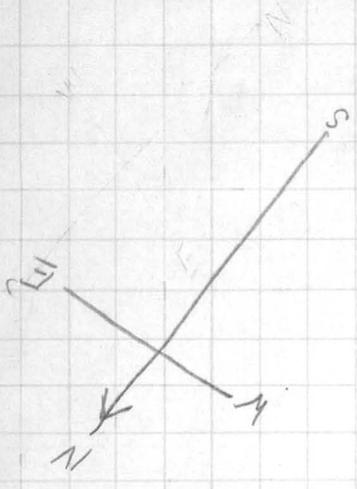
Sloan owns water rights on Antelope Creek &
has water in a shaft on the hill. He also owns the
Coyd White Mill except for liens of $\$2500.$ on the
machinery, - held by the Bryant Co. Sloan wants
 $\$40,000$ for the property but would be satisfied with
small cash payments to clear the debt on the mill
& balance in royalty.

Russell will call again with more data. He
has no interest in the Ulick mine but has some
prospects near Ryals' mine & is shipping gold - silver
ore from them. This might be worth further
investigation & might make an appeal to J. G. Brown &
friends. Looking Rich Hill for

Dec 5 '34

Property of Danvers a farm on west side of
 Park Hill.

dip of veins 35° to N.E.



Upper level 7. Pgs Claim: - Main, Clinton, Gold King, Helen Morris,
 Mountain Sp, Mountain side, Mountain -
 a 5. lower claim: - Danvers, Salem Mountain Ext,
 Golden Hill, Golden Pough.

NOTES RE RICH HILL GOLD PROPERTIES

Visited 1/24, '34

Claims - of E. S. Upton and others, ^{by S. H. C.} including the Mamie Mine, Mildred, Mountaine^s, Eulick, Myers, Upton Mill and Captain White Mill.

The office and camp is at Stanton (7 miles from Congress Junction) O. J. Aubin (Curley) is in charge for Upton and Paul Hart for Capt. White who has an interest in the Euling and other claims.

White (no relative of the Capt. and now a cripple) lives at Stanton and was formerly in charge of the Mildred and of the Red Metals which is further up Antelope Creek that runs thru Stanton.

Rich Hill is a great granite intrusion thru schist and contains several quartz veins carrying gold, iron oxide and iron and lead sulphide. Much of the quartz is stained red and some of it, in which the best values are said to occur, is honeycombed. The galena carried gold but very little or no silver. No copper is found. The gold is rarely visible.

Two small mills have been built.

(A) The Upton or Mamie Mill in 1896 on Antelope Creek and supplied with water from wells nearby. This contains a steam boiler (oil fired) small crusher, 2 steam stamps, apron plates and table. Capacity about 12 tons per day and on last run of Mamie selected ore ran about \$30.00 per ton and plated about \$5.00. The crushing was coarse and the table concentrates ran \$150 to \$200 per ton and the tailings over \$8.00. By adding classifying and regrinding and flotation equipment a much better recovery should be made with a high grade lead-iron concentrate which might run some \$600 per ton.

The mill is old and in poor shape and it would cost probably \$4000 to provide it with electric power from the near by Monte Christo

RICH HILL

power line and to add the mentioned equipment.

Mill has never treated more than 200 ton of ore, all of which had to be delivered by trucks.

(B) The Capt. White Mill some half mile to the east and near the foot of Rich Hill, was built in 1933 and ran that summer for a very short time treating only about 120 ^{tons} of ore from the ^EDuling and Sloan Mines with which it is connected by a single line ropeway 3000' long.

It is equipped with a good 25 H. P. gas engine, an 8" X 12" jaw crusher and 36" X 14" rolls. Crushed ore is elevated to bins and then goes to 5 Gates Iron Works gravity stamps 1250# with 40 mesh screen on the battery box. Discharge goes over apron and to a large table.

The heads are said to have run about \$7.00 and the tails \$2.20. Capacity 12 tons per day.

To make this mill efficient it would also be necessary to add classifying and regrinding equipment and a flotation machine also another engine and to connect it with the power line. The crushing plant is out of proportion to the rest of the mill. All equipment was bought 2nd hand but it is in good conditions. However the mill is badly located for tailings disposal and water has to be pumped from Antelope Creek (1/2 mile) and is recovered. Present mill might do for sampling and preliminary work and is in better shape than the Upton mill.

The Mamie Mine on the Mamie ^{claim} ~~claim~~ is opened by a very poor shaft sunk 98' in the vein at an incline of 35° with a drift on right side 45' down for a length of about 60' and one small stope above the drift which was worked in 1933. All the work has been poorly done. A ⁴trigger-hoist and portable air compressor are located at the shaft but may soon be repossessed by Pratt Gilbert to whom E. S. Upton owes about \$1300 for their purchase. There is also a ^{blacksmith} shed and rails and cars in the shaft.

Mamie Shaft.

Eulick, Sloan and Mountainnde Mines. These are on an upper vein and opened by adits. Equipment at Euling and Sloan is said to be good and ropeway connects them with the Capt. White Mill.

Some high grade ore has been taken out and the Euling is locally supposed to average \$7.00 but Smith's sampling only showed \$3.00.

GENERAL

These quartz veins are apparently persistent and if they will average 0.5 oz Au (with a little sorting) it might be possible to operate with some profit though adits. For the Mamie vein the Mildred tunnel should be used and the Eulick tunnel for the upper vein.

mining, transportation and sorting might then cost \$5.00

milling (on a large scale) 2.00

Selling, etc. 1.00

Total \$9.00

and a recovery of \$14.00 might be made with proper flotation equipment and present gold prices.

Upton is to find out what terms could be made for the Mildred and with Eulick and Capt. White, after which it may pay to make a further investigation.

*See sketch attached a correspondence with Upton
filed under Ritch Hill (Mamie file).*

The truck road stops some 800' below the shaft and ore was packed to this road on burros.

The quartz vein varies from 8" to 2' in width (average about 1') shows iron stain, honeycomb, iron sulfide and galena in spots. There is a talcy gouge along both walls which are of granite. The vein seems to be persistent ^{as} far as developed and is said to extend along the strike ~~to~~ southeast ^{to} the Myers property which is now operating and northwest to the Mildred and beyond.

These workings have recently been thoroughly sampled by Ed. Smith and an Asst. from Pasadena and the results were not satisfactory. Upton thinks that it will average 1 oz. gold per ton but I would not guess more than half that figure, though it would probably be possible to sort up to that grade.

The costs of developing and working from the Mamie shaft would be excessive. My estimate is that ore at the Mill would cost \$12.00 per ton or sorted ore close to \$20.00. Allow \$3.00 for milling and there would be little or no profit even if a recovery of 90% could be made.

The Mildred mine was worked 10 or 12 years ago and considerable ore was milled which according to White (the former foreman) ran \$7.00 to \$10.00 per ton and a little high grade ore was shipped crude. Operations did not pay and Co. went broke.

At the Mildred there is a shaft 580' deep on the incline and a tunnel 1000 long which cuts the vein at the bottom of the shaft with which it connects. Another vein was also cut some 200' nearer the portal. About 400' of drifting was done on the vein which held strong and was about 1 ft. wide.

The tunnel was in good condition up to 5 years ago and should still be open and it would take about 3000' of drifting to get under the

OLD RICH HILL MINES

4-24-31.

A. V. Moore, Box #359, Willcox, Arizona now owns the claims on top hill and thinks that he has found the source of the old bonanza float and surrounding placers.

Claims to have a pipe of soft clay (kaolin) with boulders and fragments which he thinks is the filled in vent of an ancient volcano coming up thru the Granite.

Proposes to run cross cut tunnels from steep hill side, especially one tunnel about 300' long. Has no gold on surface but is confident that he would get it at 100' or less depth.

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NOTES RE RICH HILL GOLD PROPERTIES

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(Notes by G. M. Colvocoresses)

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Selling, etc.	<u>1.00</u>
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* * * * *

(Note by G. M. Colvocoresses - Nov. 1937)

Upton and others have continued to work these mines on a very small scale and with no profit so far as I can learn.

A third mill was built in 1936, on Antelope Creek and treated ore from several of these mines on a custom basis but soon went broke.

The George Myers Mine shipped a little high grade ore but could find no continuous shoot.

Moore finally succeeded in advancing his tunnel near the top of Rich Hill to the location where the clay pipe should have been found but, (as was to be expected) no such pipe was found and he got no values.

I revisited this camp in 1936 and was less favorably impressed than before since although the veins are strong the best values all seem to be confined to small pockets and shoots. I understand that all of the Rich Hill mines have been thoroughly investigated by Engineers of the A. S. and R. who are operating at the Octave Mine near by and that they have reached a similar conclusion.

RICH HILL GOLD MINE

(Report by George A. Kurlinde 1930)

PROPERTY: Seven claims, about 140 acres, unpatented, nine miles from Congress Junction, east. Good road. Located in Weaver Mining District, Yavapai County, Arizona.

OWNERSHIP: Owned by Rich Hill Consolidated Mining & Development Company, an Arizona Corporation. 1,000,000 shares, in Treasury 500,000, outstanding 500,000 shares.

VEIN: Quartz fissure veining typical to the locality, and similar to Octave vein about 4,000 feet distant, and Congress Mine vein, about ten miles distant. Strike approximately East-West. Dip 35 degrees northerly. Vein continuous vein developed to 150 feet, shaft clearly defined, separation from waste easy. Foot and hanging walls grano-diorite.

DEVELOPMENT: Incline shaft 150 feet on vein. Short drifts at 85 feet down, one 25 feet other 20 feet. Small holes along surface indicate positive continuity. One tunnel (inaccessible) supposed to be on vein, the tunnel mouth located about 300 feet from shaft, and vertically below about 100 feet.

ORE: GOLD. Average \$17.60 to the ton.
SILVER. Approximately \$1.00 to the ton.
Gold is associated with fine grained mixed sulphides of lead and iron, with much free gold, all in quartz. Vein closely parallels Octave vein. Octave mine produced until 1907 nearly \$3,000,000. to the 2300 feet level. Octave has blocked \$800,000 worth of gold ore. The Congress was profitably productive to 4800 feet.

The average width of the vein as exposed in shaft, in two feet. This can be expected to be much greater in places. The vein in the Octave widened in many places to average eight feet, and attained widths of milling ore up to 15 feet. Five Dollar ore used to be profitably handled at Octave. Also the Congress worked about \$3.00 ore profitably. The ores of the district were treated in stamp mills with plates, tables and cyanidation. Water available near property for small mill. The ground in the mine holds very well, requiring little timber.

The Weaver district has been credited gold production variously estimated around \$18,000,000. from placers and lodes.

This property has proven thru the small amount of development work done, to be very attractive, and warrants the recommendation of further development work, with a view of operating a 60 ton mill after sinking to the 400 or 500 foot level. It possesses every indication to indicate profitable production of gold from its ores over a long period of time.

AVERAGE GRADE OF ORE

The averages given below are the results of ground samples taken by B. W. Vallat, E.M., and also by Theo. H. M. Crampton, E.M., who both made sampling at frequent intervals of the vein as exposed in the shaft, upon the Rich Hill Mine.

Average of 35 samples, composite of both Vallat's and Crampton's results:

\$19.24 Gold.

AVERAGE SEVENTEEN VALLAT SAMPLES	\$18.40	GOLD
AVERAGE EIGHTEEN CRAMPTON SAMPLES	17.60	GOLD
COMPOSITE AVERAGE CRAMPTON SAMPLES	20.00	GOLD

To be added to the above is the silver content in the ore which averages about \$1.00 to the ton.

RICH HILL SAMPLES

taken by:

Theo. H. M. Crampton, E.M.,

December, 1920.

Number	Description	Width	Oz Gold	Value Gold
1	Ten feet below surface	15"	3.07	\$ 63.45
2	20 " " "	28	.85	17.56
3	30 " " "	24	.55	11.36
4	40 " " "	18	.01	.20
5	45 " " "	14	1.18	24.39
6	50 " " "	16	.17	3.51
7	60 " " "	18	1.48	30.59
8	70 " " "	22	.78	17.17
9	75 " " "	22	.97	20.08
10	80 " " "	24	.46	9.50
11	90 " " "	26	.06	1.24
12	100 " " "	18	.43	8.88
13	110 " " "	30	.01	.20
14	120 " " "	28	.02	.41
15	122 " " "	26	.70	14.46
16	130 " " "	23	.11	2.27
17	85 " East Drift	24	6.10	126.08
18	85 " West "	25	.18	3.72
19	Surface		Trace	
20	Average ore pile 60 tons		1.56	11.57
21	Ore from shaft		1.62	33.48
22	Composite of all above samples		1.00	20.67
	Silver went \$1.00			

The average of the first 18 samples taken on the vein indicates an average of .88 ounces of gold to the ton, and 1.00 ounce value times the widths sampled, of

\$18.60 to the ton.

J. NELSON NEVINS,
MINING ENGINEER,
formerly Geologist,
New York State.

For years, General Manager Octave Mine, says of THE RICH HILL, "the vein showed ranging from 18 inches to 30 inches wide, identical in characteristics with the Octave vein and carrying considerable sulphides. There was some especially good ore on the dump, in some of which gold was visible. If the vein continues across the hill, which point can be readily determined, I would consider the property well worthy of serious development, as the type of vein is right for this region and the region is a proven gold producer."

C. F. KARNs
MINING ENGINEER.
Quoting,

Report attached.
"the veins cut clear thru the mountain and have developed lenses or shoots of good grade ore."
Reference is made to report.

L. H. DOBSON,
MINING ENGINEER, Reported upon mine and recommended same to his clients for purchase at \$50,000. in October 1917. Quoting: - "The Independence vein shows good possibilities, and in its present stage of development is a first-class prospect, fully justifying investment."

THEO. H. M. CRAMPTON,
MINING ENGINEER.

Examined RICH HILL property, and sampled workings. The average grade of the ore and mine will afford is indicated to be \$17.60 gold and \$1.00 silver to the ton.

B. W. VALLAT,
MINING ENGINEER

Examined the RICH HILL and sampled the workings, and the average of the samples taken from the vein was \$18.40 in gold to the ton.

The RICH HILL vein continues "over the mountain" for over a mile, and is owned by a mining company.

From the above we note the opinions of FIVE mining Engineers, everyone of whom are in accord as to the values in the ore, and the possibilities of the mine as a profitable producer.

RICH HILL SAMPLES
 Taken by
 B. W. VALLAT, MIN. ENGINEER
 August, 1922.

Number	Description	Oz Gold	Oz Ag.	Value
1	5 feet below surface, 2 sides	.12	.0	2.40
2 Sp. 10	" " " special	.42	.0	8.40
3	15 " " " 2 sides	.28	.0	5.60
2 Sp. 28	" " " right, select.	4.54	1.1	90.80
3	25 " " " 2 sides	.40	.0	8.00
4	35 " " " 2 sides	.04		.80
5	43 " " " 2 sides	.44	.2	8.80
6	55 " " " 1 side	.86	.4	17.20
7	65 " " " 2 sides	1.00	2.2	20.00
8	75 " " " 2 sides	.44		8.80
9	85 " face left drift	1.16	.3	23.20
10	85 " face right drift	1.52	.1	30.40
12	95 " below surface 1 side	.06		1.20
13	105 " below surface left side	.04		.80
14	120 " below surface left side	.68		13.60
15	130 " below surface right side	3.60	1.8	72.00
	Bottom of shaft	.08		1.60
	Special galena sample bottom shaft	12.84	11.8	256.80
	Last Chance ore dump, galena	2.32	4.5	46.40
	Ryrite specials	8.20		164.00
	Last Chance, face drift, full height of drift	.16		3.2

The average of the above samples taken on the vein, excluding the four last samples, shows an average of \$18.40 gold to the ton.

B.W. Vallat, E.M.