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PRINTED: 07-16-2012

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: LONE PINE GROUP

ALTERNATE NAMES:

YAVAPAI COUNTY MILS NUMBER: 455

LOCATION: TOWNSHIP 10 N RANGE 3 W SECTION 24 QUARTER C
LATITUDE: N 34DEG 11MIN 39SEC LONGITUDE: W 112DEG 31MIN 40SEC
TOPO MAP NAME: WAGONER - 7.5 MIN

CURRENT STATUS: EXP PROSPECT

COMMODITY:
GOLD PLACER

BIBLIOGRAPHY:
ADMMR LONE PINE GROUP FILE

REPORT ON
CHERRY-MINNEHAHA "LONE PINE"
GROUP OF MINING CLAIMS
WALNUT GROVE MINING DISTRICT
WAGONER, ARIZONA

March 25, 1933

THE CLAIMS:

The "Lone Pine" group of the Cherry-Minnehaha placer claims consists of eight claims of 160 acres each. The claims are held by right of location, and are laid out according to Arizona and United States Mineral Laws conforming in every respect with U. S. G. L. O. Survey extended.

The claims, Cherry-Minnehaha 13, 12, 11, 10, 9, 8, 1, and 6, are located 2 miles South-East of Wagoner, Arizona, the nearest store and Postoffice, and on the lower section of Minnehaha and Cherry Creeks.

ROADS:

The property is crossed by the old Wagoner to Crown King road and is kept in a good state of repair by the county. Operation roads on the property can be maintained and constructed for a minimum figure. A small amount of brush will have to be removed. No leveling of road beds will be required.

The nearest Railroad Station is Kirkland, Arizona, 22 miles North-West of Wagoner on the A. T. & S. F. line from Ashfork to Phoenix. The road from Kirkland to Wagoner and the property is an excellent automobile road.

CLIMATE:

The property has an average elevation of 5500' which assures excellent operation climate for both summer and winter months.

WATER:

Minnehaha and Cherry creeks both empty water the year around into the Hassayampa River. At this time of year Minnehaha has about 400 miners inches flow, and although this flow decreases in the summer there is sufficient water for operation if provisions are made for its recovery.

GENERAL GEOLOGY:

Cherry-Minnehaha Placers are on the two creeks of the same names which flow in a general south-westerly direction from the divide above Minnehaha Flats to the Hassayampa River. The slopes of the Bradshaw Mountains which form this watershed are very steep, and rugged, being deeply eroded from an altitude of 6,769 feet at Tower Ranch to 3,500' at the placers. Bradshaw Granite is the predominating rock, capped in places by Tertiary Andesitic rocks. The mineralization, which is not very pronounced, is in part Pre-Cambrian, and is

partly connected with the extension of the Crown King belt of rhyolite porphyry dikes. The Tertiary flows include volcanic agglomerates, andesitic and rhyolite tuff.

Most of the Pre-Cambrian consists of Yavapai Schist on both sides of which is normal Bradshaw Granite and in places a mixture of Schist, diorite, and granite (Crooks Complex). All through this district and the drainage area of both creeks the Schists and Crooks Complex is spider webbed with multitudes of small quartz stringers, some of them being quite rich in free gold but too small and scattered to be worked as lode claims.

The erosion of several thousand feet of granite and Crooks Complex concentrating these small stringers by heavy precipitation and weathering during and immediately following a period of great volcanic action has gradually concentrated the gold as placer deposits in the draws, washes, gulches and in large alluvial fans where the streams leave the mountains and enter upon more level ground. These fans are found extending from the point where the creeks emerge from the mountains almost to the point where they enter the Hassa yampa River, however, in many instances only part of these fans remain from the effects of erosion which has followed since their deposition. In some places where erosion has been active recently a re-concentration of values has been produced sufficiently high to permit handworking the deposits. Most any part of the mesa left standing will show values in gold.

Water is available for operation, and the general conditions, geologic, climatic and hydraulic are eminently satisfactory for placer operations.

HISTORY:

This district has a record of production on small scale operation covering a period of 40 to 50 years and up to the present time. Last summer, fall and winter gold was taken out of "Marroyas" where the values had concentrated. These concentrations were the results of erosion of lower grade bench gravels.

Dean Butler of the Arizona Bureau of Mines in their bulletin on Arizona Placers gives the district mention and advises that it should be explored for values, and possible old stream channel concentrations.

A RESUME OF RECENT EXPLORATORY WORK:

It is apparent from recent work that during the Tertiary Volcanic period the basin through which the Minnehaha creek now flows was filled to a considerable depth by volcanic material which remains as volcanic agglomerate, tufts, and ash. Following was a period of very heavy precipitation which eroded very rapidly the mountainous area through which most of the creek flows. At the point where the creek leaves the mountains to more level ground a huge alluvial fan was formed on top of the volcanic agglomerates. The material composing the fan is clay mixed with coarse sand and boulders on top of a bed rock of volcanic origin. On top this strata was another which contained many more boulders and coarse sand. There is evidence of more clay than was found in the bottom strata. In the third layer which extended to the surface very few boulders were found, but more clay is in evidence. In about eighteen the clay is very heavy and might prove somewhat troublesome if it extended to the bottom of the ~~mineral~~ deposit, however, in no place were mechanical problems found that wouldn't lend themselves for solution.

Values in gold were found from "grass roots" to the volcanic "false" bedrock. And no hole on the property showed a blank result. Bedrock is an average depth of 10' below the surface; It is soft, and practically level, having no natural depressions or physical characteristics making it a suitable riffle for the concentration of gold on its surface. Geology of the ground indicates that very little opportunity for concentration of values was possible during the deposition of the area. This fact is proven by sampling results which shows a remarkable even distribution in values throughout the auriferous deposit.

Method of sampling employed.

Thirty-two test holes were sunk to bedrock 200 feet apart. The boulder and clay contents of the pits were calculated and the entire amount of dirt recovered from the pit was packed down to a specially designed set of sluice boxes. The dirt and clay was very carefully broken down, then washed through the boxes. Numerous checks on the tailings and heads indicated that the recovery made with the boxes was about 65%. The concentrates from the sluice box was then carefully panned down to a very fine point by an experienced and careful placer panner. The gold was amalgamated from the resulting pan concentrate and was then recovered from amalgam by a diluted solution of HNO_3 (Nitric Acid) which dissolved the mercury and left a residual of free gold. The gold was then weighed and the value of the gravels from which it was taken calculated after the volume was carefully measured.

The volume of the samples ranged from one half yard to as high as three or four yards per test pit, the size in each instance depending largely on the depth of bedrock.

RESULTS OF SAMPLING.

<u>Test No.</u>	<u>Dirt Moved</u> <u>Cub.yds.</u>	<u>Gold Recovered</u> <u>Mg's.</u>	<u>Average value</u> <u>per yard</u>
0	4.05	191.7	.0538¢
EX 1	2.7	50.54	1.855¢
1	3.121	113.9	0.572¢
2	1.65	46.7	.028¢
3			
4	2.22	68.2	.03¢
EX 2	.73	23.6	.032¢
EX 3	1.67	28.72	.018¢
5	5.45	24.3	.0442¢
6	1.47	34.8	.0211¢
7	.576	34.8	.0599¢
7a	.89	9.67	.1075¢
6a	.518	20.73	.0386¢
5a	.53	27.0	.0505¢
4a	.904	26.5	.029¢
3a	1.035	16.1	.0154¢
2a	1.04	22.1	.0211¢
1a	1.00	21.3	.0211¢
0a	1.17	21.2	.018¢
1b	.650	29.2	.0445¢
2b	.511	19.8	.0383¢
3b	.55	20.54	.0369¢

<u>Test No.</u>	<u>Dirt moved</u> <u>cub.yds.</u>	<u>Gold Recovered</u> <u>Mg's.</u>	<u>Average value</u> <u>per yd.</u>
5b	.74	61.71	.0825¢
7b	.292	13.1	.0445¢
6c	.92	7.12	.0768¢
5c	1.21	30.82	.0252¢
4c	1.12	1.19	.0105¢
3c	.76	19.12	.0249¢
2c	.51	31.92	.043¢
3z	1.045	68.71	.087¢
2z	.86	181.2	.0255¢
1z	.86	120.7	13.139¢

Results of the sampling of 32 holes on the property show an average value of .038 cents per cubic yard, and that there are no concentrated areas of sufficient value to prove of interest to an operation for the recovery of the gold content. Numerous tests were made on Black sands found which indicated a value of \$1.00 per ton after all the free gold had been removed. The proportion of black sand to dirt in place probably will not exceed 3% by volume; hence no commercial value can be placed on the product.

In conclusion, I will say that although climatic, hydraulic, mechanical, operation and geologic conditions are very favorable on the property, that gold in commercial quantities does not exist at the present cost of recovery on any of the area sampled.

OPERATORS & DEVELOPERS INC.,

Prescott, Arizona,
March 25, 1933.

By _____
Clyde Matthews
In charge of sampling.

Approved:

President.

*Cost of Sampling
\$9.49 per yd
\$16.14 per hole*

LONE PINE GROUP-YAVAPAI CO. 1)

This group of gold-bearing claims is situated about 9 miles south of Prescott, in the Hassayampa mining district. There are eleven claims, named Robert Emmett, Parnell, White Hawk, Black Hawk, Lone Pine, Greyhound, Polar Star, Reindeer, Blue Bird, Red Bird, and Black Oak. In connection with these a mill site was located on the Hassayampa River. The veins on these claims are described as formed chiefly of quartz carrying free gold above the water line and auriferous sulphides below. The most prominent outcrop is upon the Blue Bird and the Red Bird claims. The principal development work has been upon the Greyhound, and consists of the main tunnel, 250 feet in length. This tunnel follows the vein out of the Greyhound into the Red Bird claim. At 30 feet from the mouth of the tunnel there is a crosscut 30 feet to the westward and 20 feet to the eastward. It is claimed that this crosscut shows vein matter for a distance of 50 feet. Another crosscut, 85 feet beyond the first, also shows vein matter 40 feet thick. The last 100 feet of the tunnel is in broken ground. On the Parnell claim there is an open cut showing a $2\frac{1}{2}$ foot vein. On the Black Hawk a tunnel follows the veins for 130 feet. Many of the open cuts and pits along the several veins indicate their extent and value.