CALIFORNIA STATE MINING BUREAU;

J. J. CRAWFORD, State Mineralogist.

THIRTEENTH REPORT

(THIRD BIENNIAL)

OF THE

STATE MINERALOGIST

FOR THE

CALIFORNIA STATE LIBRARY FEB 4 1954

TWO YEARS ENDING SEPTÉMBER 15, 1896.



SACRAMENTO:

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Lucky Marion (Shepherd) Mine (Quartz).—It is ½ mile W. of Greenwood, at 1,830' elevation, and comprises 73 acres. The vein strikes N. 30° W., and dips 56° N.E., between serpentine hanging-wall and slate footwall, 31' apart, and includes a talcose schist casing. The main $3\frac{1}{2}$ 'x $5\frac{1}{2}$ ' incline is 107' deep, and is timbered with 6"x 8" posts and 6"x 10" caps, and closely lagged with 3" planking. At 85' it cuts through a greenish quartz stringer, 18" to 24" wide, carrying coarse gold, resting along a gray quartzitic rock, which carries 2% of gold-bearing pyrite of a high

gray quartzitic rock, which carries 2% of gold-bearing pyrite of a high grade. The shaft has a steam hoist, capable of raising 1,000 lbs. and skip from a 500' depth. A 60-gal. Hooker sinking and a 30-gal. Deanpump, with a 25 H.P. boiler, complete the outfit. Seven men are employed. An incorporated company, No. 619 St. Charles Street, St. Louis, Mo., owner; J. W. Nier, of Greenwood, manager.

Mammoth Mine (Quartz).—It is 8 miles N.W. of Shingle Springs, at 1,100' elevation, and comprises 22½ acres. The vein, from 3' to 4' wide, strikes N.E. and S.W., and dips W., in grano-diorite. A pay-shoot has been traced along 200' of the surface, carrying 1½% to 2% sulphurets, but the general appearance of the vein is "hungry" looking. A 10-stamp mill placed near Weber Creek, run by water-power, belongs to stamp mill placed near Weber Creek, run by water-power, belongs to the mine; it has free water from Weber Creek through 4 mile of ditch, using 200 miner's inches under 42' head. Temporarily idle. Jaspar

Jurgens, of Lotus, owner.

Manzanita Queen (Quartz).—See our VIIIth and Xth Reports, pp. 189 and 172. It is 1½ miles S.E. of Diamond Springs. A 2-stamp Briggs mill has been crushing, it is said, 8 tons of quartz per day. It is run by a 3' Knight wheel under 280' head, with 18 miner's inches of water from the Diamond Ridge Ditch Co. Below the mill is a Seymour's centrifugal concentrator. Since our last Report the tunnels and shafts have been extended. Eight men are employed. C. F. Bryant et al., of Diamond Springs, owners.

Mathenas Creek (Schneider) Mine (Quartz).—See our VIIIth, Xth, and XIIth Reports, pp. 190, 172, and 117. It is 2 miles S. of Diamond Springs. Idle. Sacramento Development Co., owner; R. T. Morrison, of El Dorado, manager.

McCall Gravel Mine (Drift).—See our XIIth Report, p. 116, and also

Channel Bend Mine.

McNulty (Oakland) Mine (Quartz).—See our XIIth Report, p. 117.
Dismantled. J. B. Drury, of St. Louis, Mo., owner.

Melton Mine (Quartz).—See our VIIIth and XIIth Reports, pp. 177 and 117. It is 2½ miles N.E. of Grizzly Flat. Idle. A Cleveland, Ohio, company, owner.

Miller (Ribbon Rock) Mine (Quartz).—See our VIIIth, Xth, and XIIth Reports, pp. 189, 177, and 117 and 122. It is $2\frac{1}{2}$ miles S. of Placerville, and adjoins the Superior Mine. Idle. Moses Miller, of Placerville, owner.

Mississippi Mine (Drift).—See our XIIth Report, p. 117. It is 1½ miles E. of Volcanoville. Idle. C. F. Lloyd, of Georgetown, owner.

Molkey Mine (Hydraulic).—It is 1 mile S.E. from Fairplay, at 2,870' elevation, and comprises 160 acres. The course of the main channel is N.E., running apparently with the ridge and under it; the present bank in the cut is on an outbreak from the channel proper. The gravel lies both above and below a 10' strata of pipe-clay, on granite bedrock, and is capped with 4' of soil; it contains lava bowlders and considerable clay, and Hale dit miner's 1,200' of The wat wide, an there ar employe owners; Monta

canoville and has develope which w 900 lbs. the tunn of George Montez $\frac{1}{2}$ mile N.

E. of Pl Fyffe, ow Morey 178, 178, famous N company owner.

Mooner

Mountat 3,200' channel. carrying been wor inches of 95' pressu nozzle. and 26' l behind tw men are e

Mount 1 the south Grizzly F mill idle. Mount

Reports, p. J. D. Hag MurzoBuckeye owner.

Nashvilp. 119. I mine has fifth and steam-pov