KMT - 22

ACTIVITY REPORT

MT. DIABLO MINE: Visited Zurr re-complaint on well going sour. Zurr family not at home so left card and note. Took sample of water from tap at corner of house. Marsh Creek dry above and below well except for small flow from Dunn Creek which disappears on Marsh Creek bed. Dunn Creek water clear. Water Sample to U.S.G.S. for complete chemical. Water from tap was clear and odorless. No sediment after standing overnight and shaking in car on return trip. pH by paper indicates about neutral.

Contacted Gill at his Marsh Creek Springs Resort. No trouble here as water from springs reaching his property is clear and suitable for his swimming pool. He expressed concern over possible chemical pollution of seepage area used by mine for waste disposal when winter rains begin to fill the upper ground water basin which they depend upon for fresh water in this area.

Contacted Vic Blomberg at the mine and visited the disposal system now operating. Drainage from the mine tunnels is pumped to a sump and then pumped to two disposal sites on the side of Mt. Diablo. One site receives 1/3 to 1/2 of the waste water which is sprayed over the hillside. Disposal is by evaporation and seepage. Water escaping down the hillside is clear and apparently chemically stable. The other site receives 1/2 to 2/3 of the waste which flows into holding ponds on a flat area. Disposal is by percolation and evaporation. The mine drainage floculates readily upon aeration without addition of lime. Metal objects, (sheet iron and iron pipe) associated with the discharge show no effects of acid drainage. Precipitate from the drainage in the ponds and sump is quite heavy. Blomberg states that pumping is now just beginning to catch up with the water flow in the mine and will soon exceed the rate of inflow to the workings. The drainage contains considerable salt - looks like Magnesium Sulphate (Epson salts). Heavy deposits are noticed along edges of ponds and where evaporation is active. The percolating drainage waters are appearing in Dunn Creek which has quite a good flow at the mine (probably 20 - 30 gallon per minute) for this time of the year. Dunn Creek is usually dry by now. Had no jugs to collect sample of mine drainage and Dunn Creek water.. Samples should have been taken from both places in view of the heavy saline content of the mine drainage. Waters in long contact with the ore bodies in the mine have not yet been reached according to Blomberg. Flow in Dunn Creek was clear and odorless. No drainage was entering the pond at the foot of the hill and there was no overflow from the pond to Dunn Creek below the mine. Present waste disposal methods are not causing nuisance downstream from the mine. The effects on the chemical quality of Dunn Creek waters should be watched.

Except for the small flow below Marsh Creek Springs to the vicinity of Marsh Creek Lodge, the entire creek was dry from above Dunn Creek to Brentwood.

7/18/55 CTC

Permanent Record Card: Meeting requirements.