

Bedrock is shale - tight - and rolls, much more uneven near hills. Pay streaks run \$2.00 to \$40.00 a cu. yd. In places bedrock values high - others low; often bedrock has high values on ridges - may have been bottom of old channels? \$125,000 spent on sampling 2000 acres; 500 to 600 acres of pay dirt. Casing generally run ahead of drilling.

Natomas Dredging Co., and S. F. business went 50% each on option from Greenan. Greenan's sampling slightly higher than Natomas - Natomas did not refuse property due to lack of gravel values.

June 24 TURQUOISE MINE IN COPPER CANYON BASIN

Small stringers in rhyolite (?) 1/16" to 3/4" wide. Rhyolite (?) is partially metamorphosed sandstone which is very similar to rhyolite; this grades into distinctive quartzite. Shale, phyllites and slates also seen in area. Small mine - turquoise taken out in sacks.

June 24 COPPER BASIN - 15 miles from Battle Mountain

Small leasing operations owned largely by Copper Canyon Mining Company. Veins in a quartzite breccia with copper, gold, silver.

June 25 MARIGOLD GOLD MINE  
Frank Horton, Manager

Mine 5 miles southwest of Valmy. Flat deposit in brecciated quartzite. Foot-wall is quartzite with shale above and quartzite also in hangingwall. Gold is mainly alone with few other minerals; occurs in cementing material - reddish iron oxide and calcerous-looking white-gray material. Frank Horton, Jr., claims there is very little offset to ore bed but is limited by faults which place barren quartzite in face. Much solution quartz or chalcedony on fractures. Ore is pinched out in one place by quartzite floor rising - H.W. fairly flat so far. Mining follows ore and floor irregular - cars pulled out of low spots with air tugger. 90% extraction made in leaching tests on 1/4" material. 150-ton cyanide plant to be installed; some ore trucked to Dayton - ran \$100 per ton - good tonnage of \$2.00 - \$5.00 - \$9.00 rock in sight.

June 25 GOLCONDA TUNGSTEN MILL  
Ott F. Heizer, U.N., General Mgr. Nevada-Mass. Tungsten  
S. Power (pi) Warren, (Colorado) Superintendent

The process of recovering tungsten from ore developed at this plant is unique. Process is still in experimental stage. Tungsten occurs in gouge probably in form of tungstic acid - no tungsten mineral identifiable. Ore is dry ground in ball mill and added to soda ash, salt (NaCl) and coal on conveyor belt, then moistened, mixed and fed to Dwight-Lloyd sintering machine oil-fired. Cake hits ball mill in wet grind and is cool by this time after being fused at 800 deg. C (?) Ball mill