PRELIMINARY LITHOLOGIC LOG

Project: <u>Topaz</u>

Hole: 1198-128 49401 Date Drilled: 2/28/82 Elevation: Location: NE 1/4 SE 1/4 38, T13S, R12W Method: rotary air - mud Geologist: Avery - Deymonaz N/A Gamma: Depth (m) Description 0- 23 Sand & Gravel - Subrounded gravels of rhyolite and minor limestone in a sand to sandy-clay matrix. Dry. 23 - 76Rhyolite (Tsp) - Pink to gray, hard to moderately hard, porphyritic fractured and altered. 5-15% phenocrysts of quartz, plagioclase, sanidine with rare biotite, magnetite and hornblende. Tuffs - Tan to med. brown, dry to 160m. Some interbedded 76-230 Tatitic flow rocks, possibly Tdr. 2-5% crystals of quartz and plagioclase, altered mostly to clays. Flow of water increased to approximately 20 gpm at 230m. 230-245 Clay - Brick red clay with dk. gray dolomite fragments. 245-250 Dolomite - Dark to medium-gray, hard, dense, fractured, water flow increased to 40-60 gpm. 250-256 Clay - Red clay and dolomite as in 230-245m interval. 256-459 Dolomite - Dark gray, hard, fractured changed to mud at 280m and had l.c. problems below that depth; very poor returns. Rock in this interval appears to be dolomites with minor

cherts, silicic siltstones and quartzites.