

LITHOLOGIC LOG

Project: Livermore

620-47

Elevation: _____

Date Drilled: 7/19/79

Depth (m)	Description
0- 2	<u>Weathered Tuff and Clay</u> - Dark brown to light gray, grading into soft, fractured lithic crystal-tuff.
2- 60	<u>Crystal-Lithic Tuff</u> - Mottled light gray, orange and light brown with ≈5% subhedral crystals of clear quartz, 5-10% feldspars altered to white kaolinite (?) and traces of hornblende, biotite and magnetite. Matrix of soft tuffaceous material. Tuff pervasively fractured and commonly iron stained (Fe_2O_3) along fractures.
60-120	<u>Crystal-Lithic Tuff</u> - As above but color change to predominately light gray, variable increase in quartz 5-30%, tuff becoming slightly better indurated with depth. Angular frags of chert or chalcedony 0-30%.
120-130	<u>Vitrophyre</u> - Black, partly devitrified. Base of tuffaceous unit. Comprises ≈50% of sample. Remainder of sample is tuff as in previous interval.
130-180	<u>Crystal-Lithic Tuff</u> - Light gray with 10-20% clear subhedral quartz. 5-15% of clear to white k-spar. Minor biotite, trace of magnetite. Light purple angular frags of chert or chalcedony 0-10%.
180- 320' 98m	<u>Serpentinite</u> - Light green to dark green and black mottled. Highly sheared, serpentized and soft. Less serpentized and harder between 209-212, and 230-245.