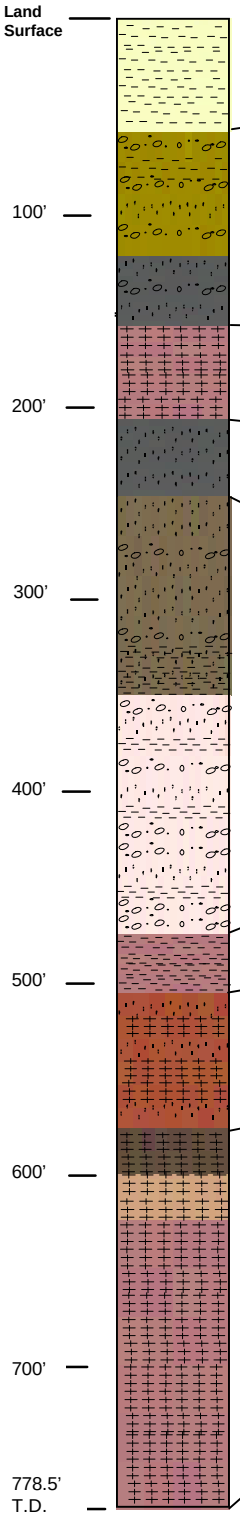

0 – 58' SPRING DEPOSITS: loose deposits of fine to coarse sand with interbeds of gravel; becomes clay rich and dense at 55 ft.

58 – 163' VALLEY FILL—ALLUVIUM: silty sand with gravel; sand is grayish orange (10YR 7/4), poorly graded, medium to coarse grained, well rounded, and comprises 85 –95% of material; gravels are predominately fine grained (1/2") and with colors ranging from pale yellowish orange (10YR 8/6) to grayish orange pink (5YR 7/2) to light gray (N6) and very light gray (N8); sand with minor gravel 125 – 163 ft; gravels are dark gray (N3) and medium light gray (N6), fine to coarse grained, predominantly carbonate and contains brecciated clasts**.**

163 – 210' ASHFALL TUFF: pale red (10R 6/2), moderately welded, crystalline texture and mineralogy composed of feldspar, quartz, and biotite.

210 –250' TERTIARY VALLEY FILL: sand, color ranges from medium light gray (N6) to medium gray (N5), to grayish orange pink (5YR 7/2), lithology is mixed volcanic and carbonate; sand size grains are phenocryst-rich and predominantly felsic, pumice is present and displays 1:10 flattening

250 – 480' TERTIARY VALLEY FILL: silty sandy clay with minor gravel 250-355 ft; ; clay is pale brown (5YR 5/2) and comprises 85% of the material; sand content ranges from 15 to 50%, sand is fine to coarse grained and well graded; gravels are fine grained (1/4-1/2"),constitute from 1 to 10% of material, and composed of vocanic lithologies and dolomite; clayey sandy gravel 355-480 ft; gravels are predominantly moderate orange pink (10R 6/4), fine to coarse grained (up to 1") and comprise 50% of material; sand and clay content varies with depth and unit fines downward overall with decreasing gravel; interval contains minor interbeds of sandy clay

480 – 510' TERTIARY CLAY: pale red (10R 6/2), 95% clay with very minor sand and silt.

510-566' TERTIARY VALLEY FILL: tuffaceous sand 510-530 ft; **:** sand is moderately red (5R 5/6), medium to coarse grained, and contains an abundance of quartz, sandy clayey gravel 530-566 ft; mixed volcanic and dolomite lithology, unit fines downward with absence of clay in the lower half of interval

566 – 778.5' TERTIARY VOLCANIC SEQUENCE: ashfall tuff 566-595 ft; moderate brown (5YR 4/4), crystalline texture, contains 40% pumice fragments, reworked ashfall tuff 595-627 ft; light brown (5YR 6/4) to brown (5YR 5/4), tuffaceous fine to coarse grained sand, 50% of unit displays clay alteration; ashfall tuf 627-778.5; pale red (10R 6/2), mixed volcanic lithology, contains medium dark gray and moderate orange (10R 6/6) fragments with phenocrysts of sanidine and other feldspars, quartz, and bronze biotite; fragments are 1/8 –1/4" in diameter; unit contains an abundance of soft altered pumice

NC-EWDP-7SC

SUMMARY LITHOLOGIC LOG