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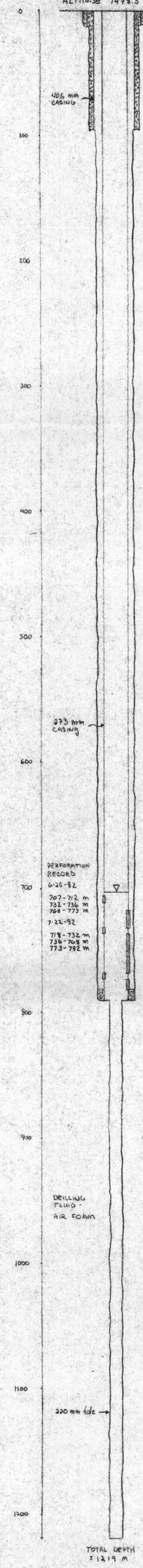
TEST WELL USW H-5

DRILL HOLE DATA USW H-5

ALTITUDE 1478.5 M

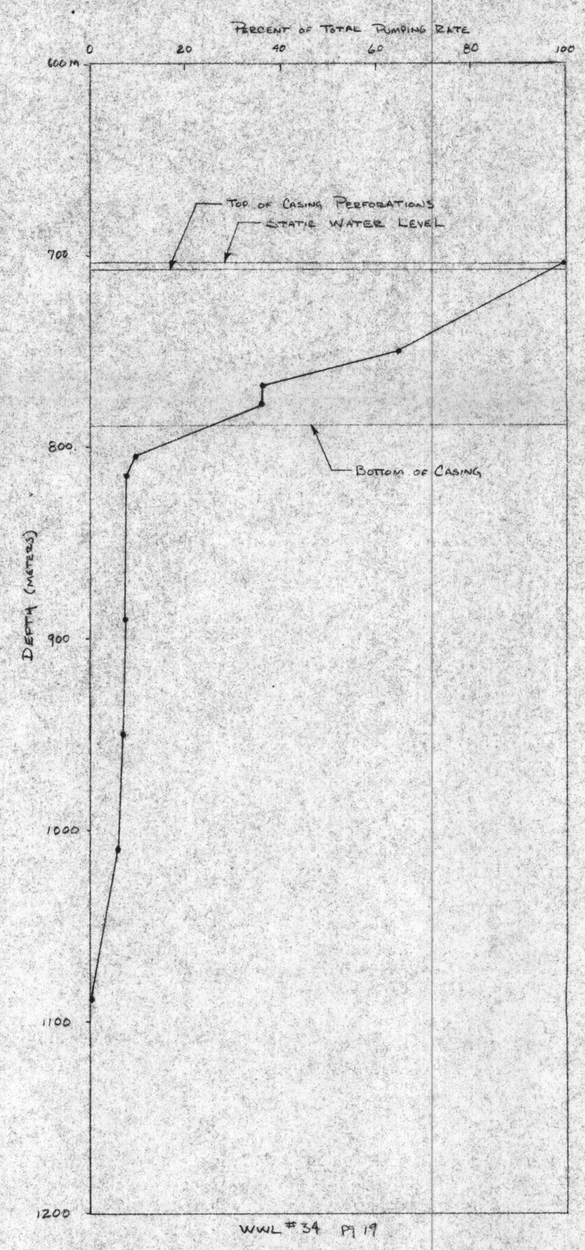


TIVA CANYON MEMBER	TUFF, ASH FLOW, brownish grey, densely welded, devitrified (PROBABLE VAPOR-PHASE CRYSTALLIZATION FROM 10.7 - 12.2 meters.
	TUFF, ASH FLOW, light brownish grey and light grey, densely welded, devitrified (probable lithophysal zone); 5 % phenocrysts of sanidine and plagioclase.
	TUFF, ASH FLOW, light-brownish-grey to brownish grey, densely welded, devitrified; pumice, light grey, devitrified; less than 1 percent phenocrysts.
	TUFF, ASH FLOW, dark-yellowish-brown, moderately welded, devitrified; pumice, dark-yellowish brown, devitrified 2 % phenocrysts, volcanic vitric fragments.
	TUFF, ASH FLOW, PALE-YELLOWISH-BROWN, PARTIALLY WELDED, DEVITRIFIED; PUMICE, PALE-YELLOWISH BROWN and brownish grey; 2% PHENOCRYSTS (SANIDINE AND PLAGIOCLASE
	TUFF, ASH FLOW, grayish-orange, nonwelded, vitric; pumice, light brown, argillic; less than 1 % phenocrysts; abundant black and light-brown glass shards.
PAH CANYON MEMBER	TUFF, BEDDED, BEDDED ASH-FALL (?), MODERATE-REDDISH ORANGE VITRIC, ABUNDANT GREYISH PINK AND
	TUFF, ASH FLOW, MODERATE-ORANGE-PINK, DUSKY YELLOW, NONWELDED WHITE VITRIC PUMICE
	VITROIC PUMICE, SLIGHTLY YELLOW, VITRIC, 5% PHENOCRYSTS (SANIDINE, PLAGIOCLASE, BIOTITE)
	TUFF, BEDDED(?), ASH FALL GREYISH PINK, VITRIC
TOPOPAH SPRING MEMBER	TUFF, ASH FLOW, MODERATE-RED, NONWELDED, VITRIC → DENSELY WELDED (VITROPHYRE)
	TUFF, ASH FLOW, greyish red, densely welded, devitrified, 10% PHENOCRYSTS (CAMPROCK)
	TUFF, ASH FLOW, PALE BROWN, moderately welded, vapor phase; pumice, dominately light grey, vapor phase; 5 to 10 % phenocrysts (sanidine, plagioclase, biotite)
	Tuff, ASH FLOW, greyish red and medium-light grey (mottled), densely welded, devitrified; pumice, very light grey to white, devitrified, some vapor phase crystallization; less than 2 % phenocrysts (SANIDINE AND PLAGIOCLASE) PROBABLE LITHOPHYSAL ZONE.
	TUFF, ASH FLOW, light BROWN and brownish-grey (mottled), densely welded, devitrified; less than 2% phenocrysts.
	TUFF, ASH FLOW, black, densely welded (VITROPHYRE)
	TUFF, ASH FLOW, black and pale yellowish-brown, moderately to partially welded, vitric; pumice, light brown, vitric; less than 3 % phenocrysts, black glass shards.
TUFFACEOUS BEDS OF CALICO HILLS	TUFF, ASH FLOW, very-pale-orange, white, and moderate-orange-pink, non-to-partially welded, vitric; pumice, white, vitric; less than 3 % phenocrysts (sanidine, plagioclase, quartz, biotite); black, glassy lithic fragments are common; in TV log, top of a lithic-rich zone was recognized at 526.2 meters. Bedding planes were recognized at 531.9, 532.8, 534.6, 535.2, 541.0 AND 548.3 meters.
	TUFF, BEDDED, reworked ASH FALL (?), yellowish-grey zeolitic, subequal proportions of phenocrysts and subrounded pumice fragments; bedding planes; 25% phenocrysts of SANIDINE PLAGIOCLASE, QUARTZ, AND BIOTITE in a zeolitic groundmass.
PROW PASS MEMBER	TUFF, ASH FLOW, grayish-orange, nonwelded, vitric; pumice, very pale orange, vitric; TUFF, ASH FLOW 7-10 % phenocrysts (quartz, sanidine, plagioclase, biotite, pyroxene); yellowish gray and light-brownish grey partially welded, devitrified and vapor phase crystallization; pumice, yellowish-grey to white, vapor phase; 10 to 12 % phenocrysts (quartz, sanidine, plagioclase, biotite, orthopyroxene(?)); rare mudstone lithic fragments; probable pale-yellow-brown bedded interval between 600.5 - 603.5 meters
	TUFF, ASH FLOW, grayish-orange and yellowish-gray, nonwelded, zeolitized; pumice, grayish-yellow, yellowish-grey, dusky yellow, zeolitized; 10 % phenocrysts (quartz, sanidine, plagioclase, biotite); rare, mudstone lithic fragments; upper 3-2 meters of interval may be slightly silicified; analysis of bit-cutting samples from interval indicate a clinoptilolite/hordenite content of more than 100 percent.
	TUFF, BEDDED, LIGHT BROWN, POORLY SORTED; PUMICE VERY PALE-ORANGE; ZEOLITIC (?)
BULLFROG MEMBER	TUFF, ASH FLOW, LIGHT-olive-gray and greenish-gray, partially welded (?) VAPOR PHASE; pumice, yellowish gray, light grey, vapor-phase crystallization; 10-15 % PHENOCRYSTS (quartz, plagioclase, sanidine, abundant biotite); bit cuttings from 788.9 - 792.5 meters ARE VERY FINE grained and difficult to analyze.
	TUFF, ASH FLOW VERY-PALE-ORANGE TO GRAYISH ORANGE, PARTIALLY WELDED (?) DEVITRIFIED; VERY FINE GRAINED BIT CUTTINGS.
	TUFF, ASH FLOW, YELLOWISH GRAY AND LIGHT-BROWNISH GRAY, PARTIALLY TO MODERATELY WELDED, DEVITRIFIED AND ZEOLITIC; PUMICE, YELLOWISH-GRAY AND LIGHT BROWN, DEVITRIFIED AND ZEOLITIC; 7% PHENOCRYSTS (QUARTZ, PLAGIOCLASE, SANIDINE, BIOTITE)
	TUFF, ASH FLOW, LIGHT BROWN AND GRAYISH ORANGE, MODERATELY TO DENSELY WELDED, DEVITRIFIED; PUMICE, LIGHT BROWN, DEVITRIFIED, 15 TO 20 % PHENOCRYSTS.
	TUFF, BEDDED, REWORKED, MODERATE-REDDISH-BROWN, WHITE PALE OLIVE, MODERATELY INDURATED; ABUNDANT WHITE PUMICE FRAGMENTS
TRAM MEMBER	TUFF, ASH FLOW, PALE RED, MODERATE-ORANGE-PINK, MODERATELY WELDED(?), DEVITRIFIED PUMICE, WHITE TO GRAYISH-ORANGE-PINK, DEVITRIFIED; 15 TO 20% PHENOCRYSTS (QUARTZ, SANIDINE, PLAGIOCLASE, BIOTITE; RARE GRAYISH-RED RHYOLITIC LITHIC FRAGMENTS)
	TUFF, ASH FLOW, LIGHT-BROWN, LIGHT-OLIVE-GRAY, LIGHT-BROWNISH-GRAY, PARTIALLY WELDED, DEVITRIFIED; PUMICE, LIGHT-BROWN, VERY-PALE-BROWN, VERY-PALE-ORANGE, DEVITRIFIED; 10 % PHENOCRYSTS; GRAYISH-RED AND MEDIUM-GRAY VOLCANIC LITHIC FRAGMENTS.
	TUFF, ASH FLOW, GRAYISH-RED, PARTIALLY WELDED, ZEOLITIC; PUMICE, MODERATE-ORANGE-PINK AND GRAYISH-RED, ZEOLITIC; 10 % PHENOCRYSTS (QUARTZ, PLAGIOCLASE, SANIDINE, BIOTITE), ABUNDANT GRAYISH-RED AND MEDIUM-GRAY VOLCANIC LITHIC FRAGMENTS; 50 % CLINOPTILOLITE.
	TUFF, BEDDED, REWORKED, BROWNISH-GRAY AND OLIVE GRAY, ZEOLITIC
LAVA	LAVA, GRAYISH-GREEN, MODERATE-YELLOW-GREEN, DARK GREENISH-GRAY, ALTERED TO ZEOLITES (?), ABUNDANT BIOTITE AND HORNBLENDE (?)
	LAVA, DUSKY-yellow AND LIGHT-OLIVE, GRAYISH-RED, DARK-REDDISH-BROWN, PALE-RED, GREENISH-GRAY, DACITIC, ZEOLITIC, 25 TO 30 % PHENOCRYSTS, (SANIDINE, PLAGIOCLASE, ABUNDANT BIOTITE, HORNBLENDE)

BOREHOLE FLOW SURVEY 1 -

PERCENT OF TOTAL PUMPING RATE PRODUCED BY INTERVALS

PUMPING RATE = 10 LITERS / SECOND



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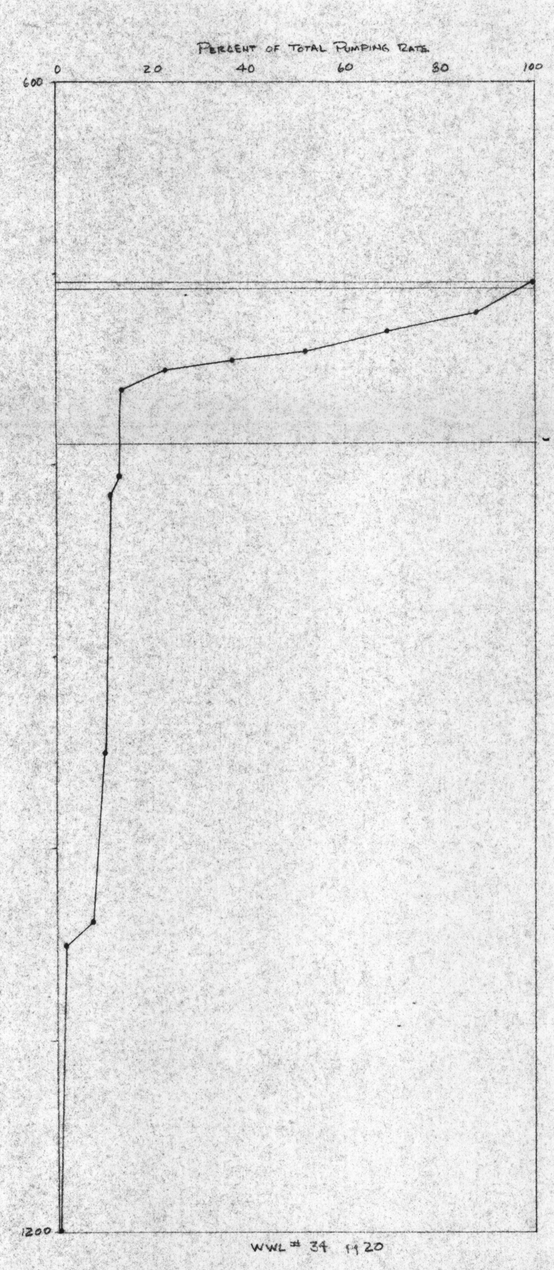
BOREHOLE FLOW SURVEY 2

PUMPING RATE 7.6 LITERS/SECOND



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