NATURAL GAMMA LOG

INCREASING RADIATION →

COUNTS PER SECOND

70 90 110 130 150 170 190

MEASURED WATER LEVEL

BASIC SOIL PROPERTIES

PI	minus 200	W/C	δd
			90 100 110 120
			10 20 30
1	81		
	78		
	59		
	24		
	84		
5	82		
	48		
	62		
	95		
8	73		
	96		
	97		
	91		
	93		
	96		
	86		
	62		
	92		
	92		
	82		
27	96		
	97		
	87		
	88		
	100		
	75		
	100		
	75		
	95		
	100		
	33		
	100		

LITHOLOGIC DATA

Depth	Units	Descriptions
0		ELEV. 927'
		SILTY SAND W/ GRAVEL; (SM), mottled brown, nonplastic to low plasticity, angular, loose to medium dense, damp.
20		SANDY SILT W/CLAY; (ML), brown, low plasticity, very stiff, damp, micaceous.
		SILTY GRAVELLY SAND; (SM), brown, low plasticity, medium dense to dense, wet, 1/4" to 1" diameter volcanic and metamorphic clasts.
40		CLAYEY SANDY SILT; (ML), brown, low plasticity, very stiff, damp.
		SILTY SAND; (SM), brown, none to low plasticity, angular, medium dense, saturated, very fine sand.
60		CLAYEY SANDY SILT AND CLAYEY SAND; (ML-SC), brown, low plasticity, very stiff, moist, crudely stratified, micaceous.
80		CLAYEY SILT; (ML), brown, low plasticity, very stiff, moist.
		SILTY SANDY CLAY; (CL), mottled brown, low to medium plasticity, very stiff, moist, scattered caliche nodules.
100		
120		SILTY CLAY - CLAYEY SILT; (CL-ML), brown, red-brown, low to medium plasticity, very stiff, moist, scattered Mn stains and caliche nodules.
140		
		SANDY CLAYEY SILT AND SILTY CLAY; (ML-CL), brown, low to medium plasticity, very stiff, damp, Mn specks, crudely stratified.
160		SILTY CLAY - CLAYEY SILT; (CL-ML), brown with black specks, low to medium plasticity, very stiff, moist.
180		
		SANDY CLAYEY SILT AND SILTY SAND; (ML-SM), red-brown, low plasticity, very stiff or dense, crudely stratified.
200		
220		
		SILTY CLAY WITH OCCASIONAL CLAY SILT WITH SAND; (CL), red-brown, low to moderate plasticity, very stiff to hard, moist to damp.
240		
260		
280		
300		
320		
		CLAYEY SILT AND CLAYEY SILTY SAND; (ML-SM), dark brown, low plasticity, very stiff or dense, moist, roughly stratified.
340		
360		
380		
		FANGLOMERATE; breccia, light brown, angular to subrounded, poorly sorted volcanic lithic clasts in a sandy silt matrix.
400		
420		
440		
460		
		BASALTIC ANDESITE; dark gray, fine grained, vesicular, fractured.
480		
500		
520		
540		ARKOSIC SANDSTONE to PEBBLE CONGROMERATE; gray moderately hard, slightly calcareous, tuffaceous (?) clasts of weathered granite and andesite, local thin siltstone beds.
560		
580		TUFFACEOUS (?) QUARTZ SANDSTONE; red, medium to moderately weathered, thin bedded.
600		
620		Tuffaceous zone
640		Granitic gravel
		ARKOSIC SANDSTONE; red, hard, calcareous, poorly sorted, massive to thin bedded, slightly fractured and weathered.
660		
		Pebble to cobble CONGLOMERATE of granitic clasts
680		
		GRANODIORITE; green-pink, coarse hypidiomorphic granular texture, moderately weathered, slightly to moderately fractured.
700		
720		TD - 721'

CARBONATE CONTENT

5	−
4	∓
3	⊕
2	‡
1	+
0	

PALEO-MAGNETIC POLARITY

⊕ POSITIVE

⊖ NEGATIVE

10 15 21 26 47 57 67 89 99 104 109 R 112 / 10 815 115 136 157 178 199 R 210 / 8 717 220 241 272 295 356

SAMPLE LOCATION

DEPTH (FEET)

SYMBOL EXPLANATION

ENGINEERING PARAMETERS

PI	plasticity index	ASTM: D 422 (1972)
minus 200	percent passing #200 sieve	ASTM: D 423
W/C	percent moisture	ASTM: D 424 (1971)
δd	dry density	ASTM: D 2216-71

SAMPLE TYPE

- Drive Sample
- Pitcher Tube Sample
- 95 — NX Core, Number Indicates % Recovery
- 63 — Standard Penetration Test, "N" value — ASTM: D 1586-67

CARBONATE CONTENT

- − No Reaction
- ∓ Slightly Reactive
- ⊕ Moderately Reactive
- ‡ Highly Reactive

(based on sample reaction to a 10% HCl solution)

UNITS

Units column refers to general stratigraphic divisions identified within the basin sediments.

PALEOMAGNETIC POLARITY

Inclination of remnant magnetic vector in general agreement with (⊕) or opposition to (⊖) the present magnetic field.

- Magnetic vector indeterminate
- Paleomagnetic Reversal — R 126 / 10 827 □ — depth / elevation

DESCRIPTIONS

Lithologic descriptions were compiled from geologists' field logs, laboratory test data, and down-hole geophysics. Field logs were prepared in accordance with ASTM: D2488-69. Classifications based on laboratory test data are in accordance with ASTM: D2487-69. Rock descriptions follow procedures outlined in the QUARTERLY OF THE COLORADO SCHOOL OF MINES; Volume 50, No. 1. Descriptions for rotary borings are based upon cuttings samples, geophysical logs and drillers' comments.

LOG OF BORING PV-28

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