## BOREHOLE VELOCITY

Velocity (fps)

0 5000 10000 15000

Vs

Vp

Depth (feet, BGS)

Elevation (feet, MSL)

0 589.3
20 569.3
40 549.3
60 529.3
80 509.3
100 489.3
120 469.3
140 449.3
160 429.3
180 409.3
200 389.3
220 369.3

0 5000 10000 15000

Velocity (fps)

Compressional (Vp) and Shear (Vs) wave velocity (fps) from P-S velocity survey (receiver to receiver values)

## LITHOLOGY

Fill, residual soil, saprolite

Undifferentiated sound rock

Meta-granodiorite

Meta-quartz diorite

Meta-granodiorite

## BORING PROFILE

Refer to B-1037 for unit descriptions

BOH 96.6'

0 SPT

0 Recovery (%) 100

0 RQD (%) 100

## LAB/IN-SITU TESTS

● 19,400 psi

● 18,900 psi

## COMPARATIVE SHEAR WAVE VELOCITY PROFILE

Velocity (fps)

0 5000 10000 15000

Depth (feet, BGS)

Elevation (feet, MSL)

0 589.3
20 569.3
40 549.3
60 529.3
80 509.3
100 489.3
120 469.3
140 449.3
160 429.3
180 409.3
200 389.3
220 369.3

0 5000 10000 15000

Velocity (fps)

Vs suspension

Vs downhole

SASW S-1507

Vs suspension layer model

WLS COL 2.5-1

Notes:
1. Borehole geophysics performed by R. Stellar of GEOVision Geophysical Services
2. Surface geophysics performed by Dr. K. Stokoe, U. Texas
3. SPT field blows determined with a 140 lb. hammer, 30" drop - uncorrected
4. RQD (Rock Quality Designation) - a percentage of solid core segments larger than 0.33 feet relative to core run length, excluding mechanical breaks

WILLIAM STATES LEE III NUCLEAR STATION UNITS 1 & 2

Boring Summary Sheet, Boring B-1037A

Figure 2.5.4-227 Rev 0