

4.6.8 Soil Investigation

Soil investigation was performed at Songkhla port and Bang Ra Pha area in the feasibility stage. The location of borehole points is shown in Figure 4.6.2-5 and items of the soil investigation are as follows:

1. Songkhla Port

Number of Boreholes : 3 points (SK-1 to SK-3)

Coordinate of Boreholes

No. SK-1 : 799,217.47 N, 674,202.06 E

No. SK-2 : 798,979.47 N, 674,098.44 E

No. SK-3 : 798,692.77 N, 673,834.33 E

Drilling Depth : totally 89.35 meters (102.25 m below sea level)

No. SK-1 : 30.45 m (39.75 m below sea level)

No. SK-2 : 34.45 m (36.75 m below sea level)

No. SK-3 : 24.45 m (25.75 m below sea level)

In-situ Test : Standard Penetration Test (SPT) at one meter interval

Sampling : Disturbed Samples by Split-barrel Sampler

Undisturbed Samples

Laboratory Tests by ASTM Standards

Grain Size : Sieve Analysis and Hydrometer Test

Water Content

Specific Gravity

Atterberg Limits : Liquid Limit and Plastic Limit

Mechanical Tests for Undisturbed Samples

Consolidation Test

Unconfined Compression Test

2. Bang Ra Pha Area

Number of Boreholes : 1 points (BRH-1)

Drilling Depth : 17.15 meters (18.75 m below sea level)

In-situ Test : same as above

Sampling : same as above

Laboratory Tests : same as above

1) Songkhla Port

Boring logs obtained at No. SK-1 (water depth 10.0 m), No. SK-2 (water depth 3.0 m) and No. SK-3 (water depth 2.0 m) in Songkhla port are shown in Figures 4.6.8-1 to 4.6.8-3 with results of laboratory tests.

Figure 4.6.8-4 shows a longitudinal geological profile along the three boreholes in Songkhla port.

2) Bang Ra Pha Area

Boring logs obtained at No. BR-1 (water depth 2.3 m) in Bang Ra Pha area are shown in Figure 4.6.8-5 with the results of laboratory tests.

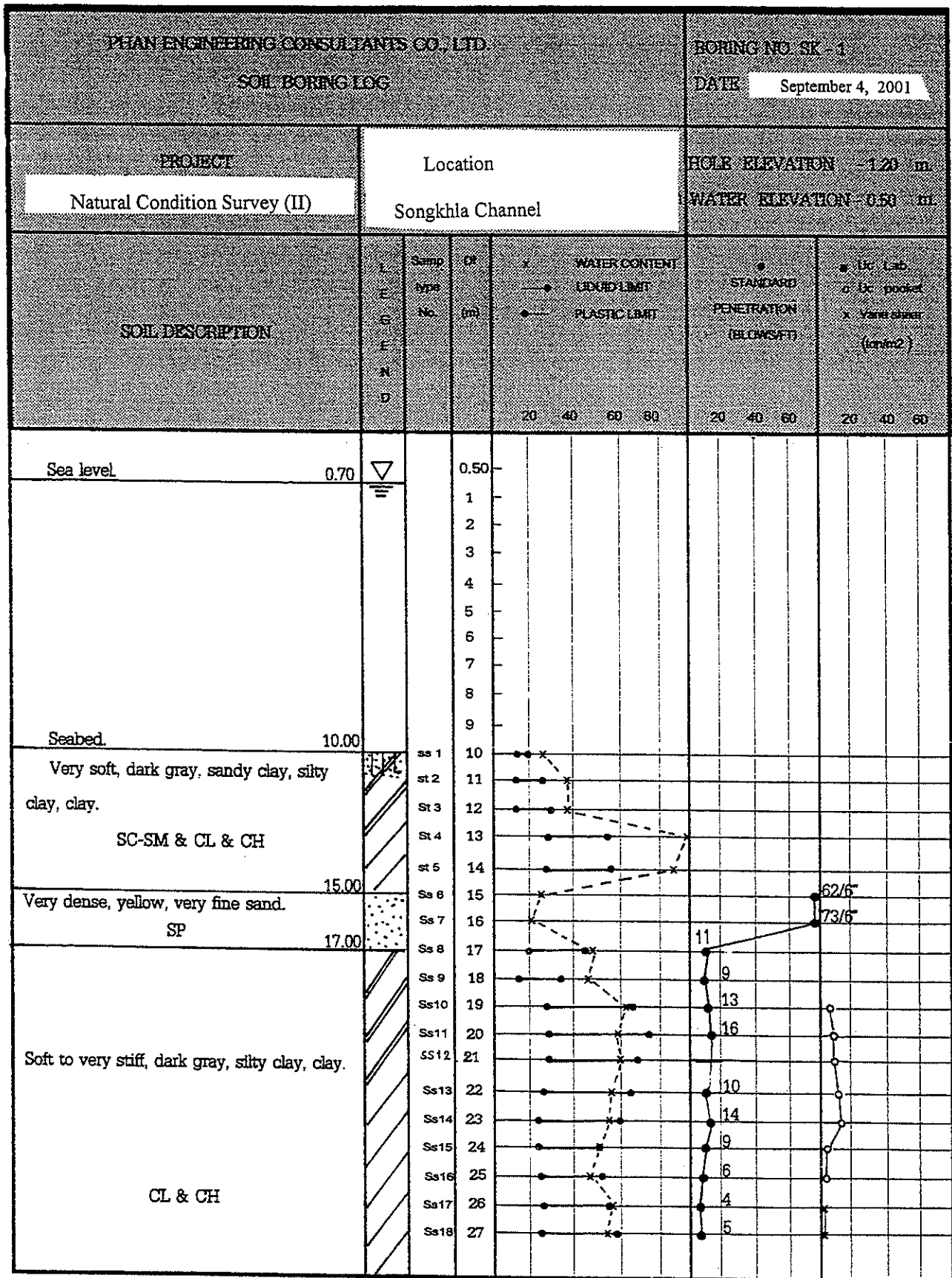


Figure 4.6.8-1 Boring Log at Songkhla Port (No. SK-1)

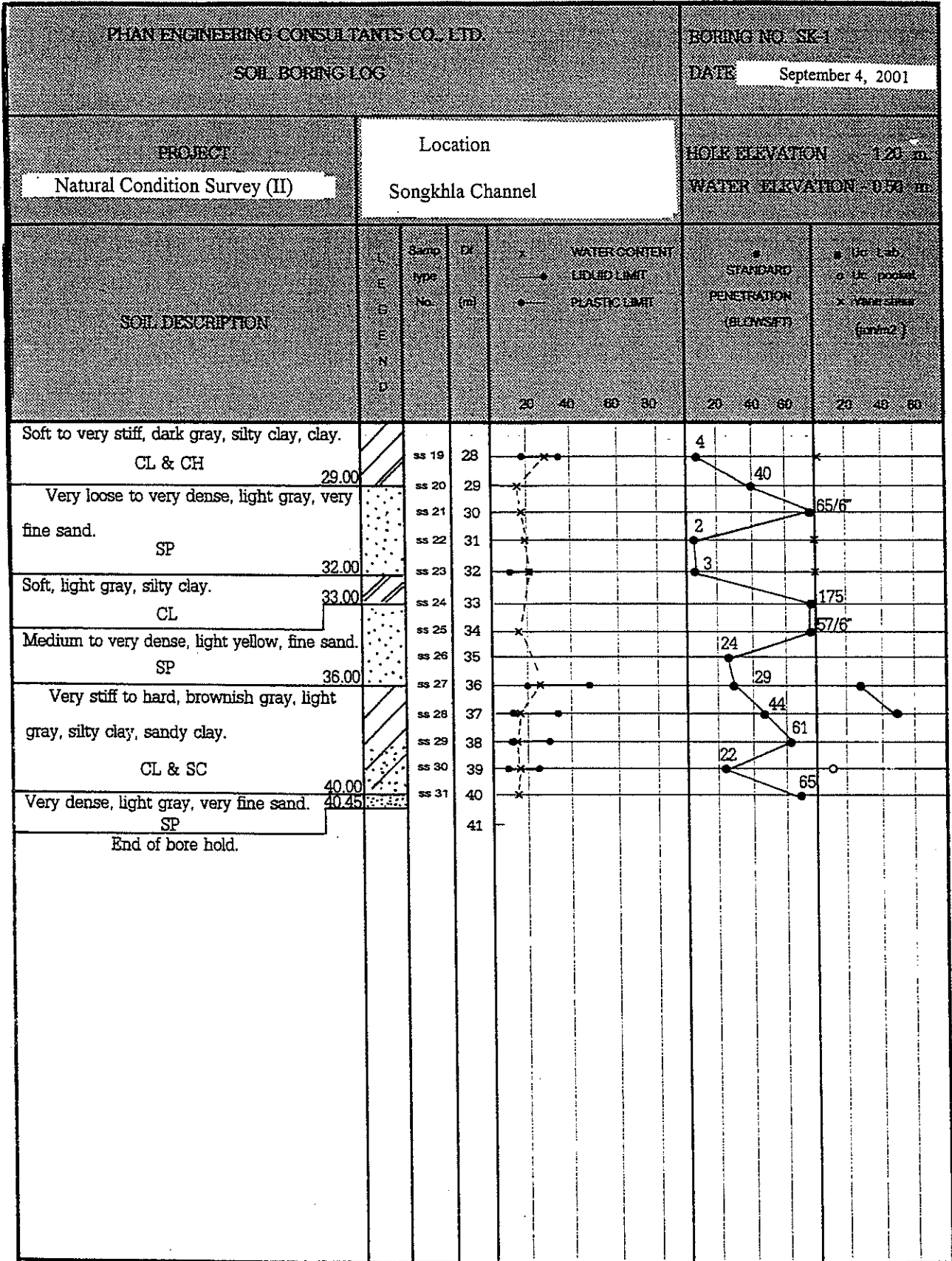


Figure 4.6.8-1 Boring Log at Songkhla Port (No. SK-1)---cont'd

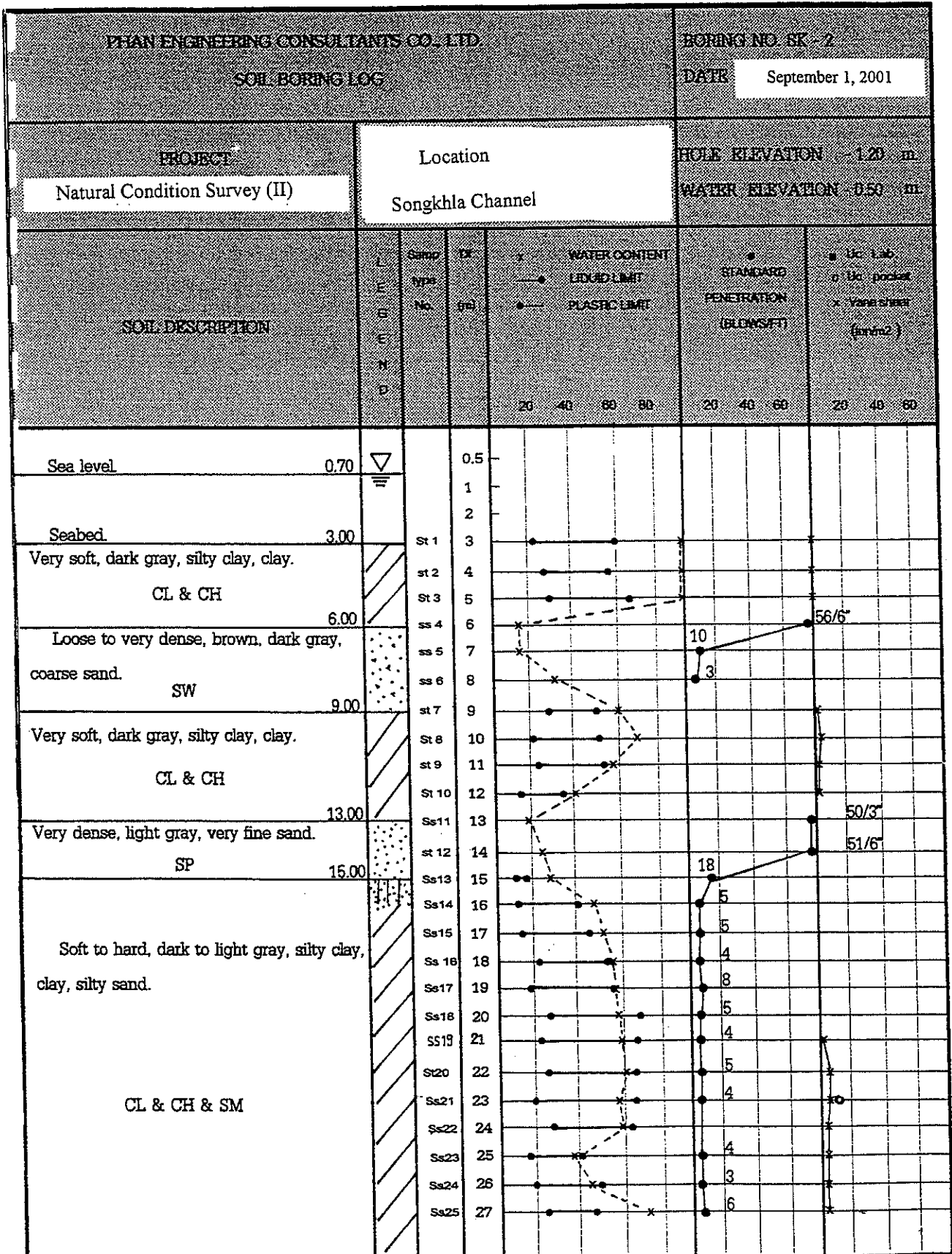


Figure 4.6.8-2 Boring Log at Songkhla Port (No. SK-2)

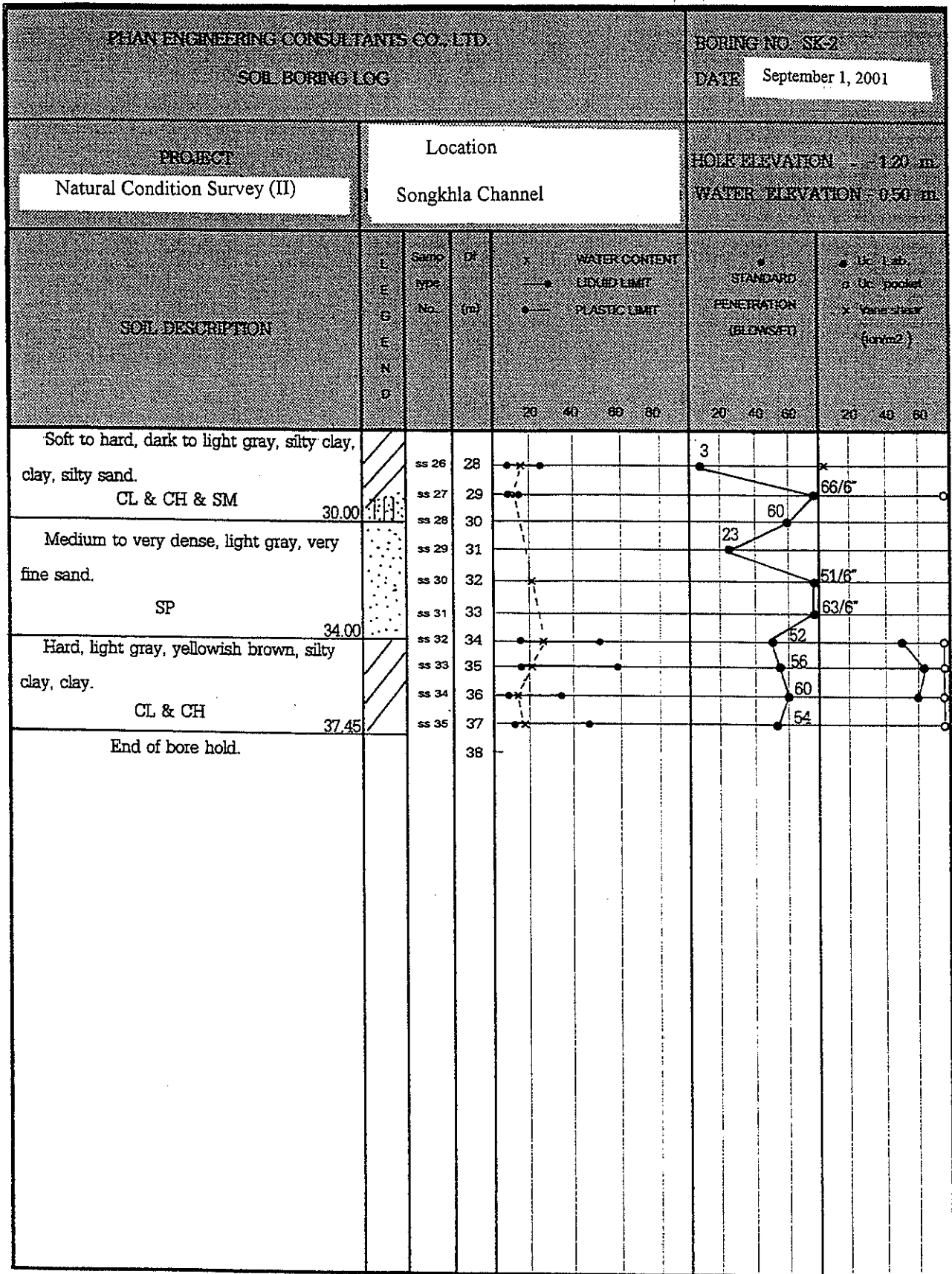


Figure 4.6.8-2 Boring Log at Songkhla Port (No. SK-2)----cont'd

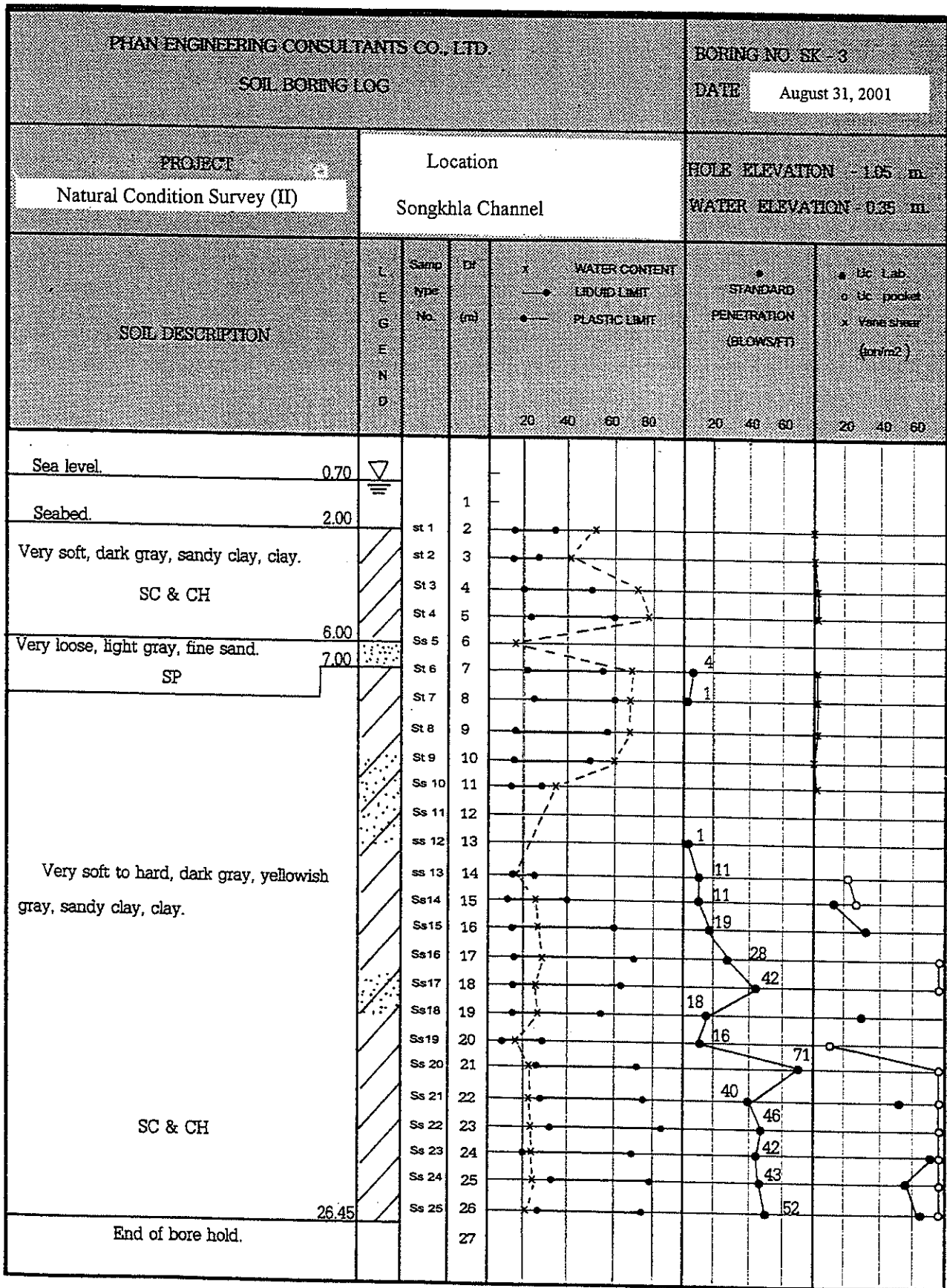
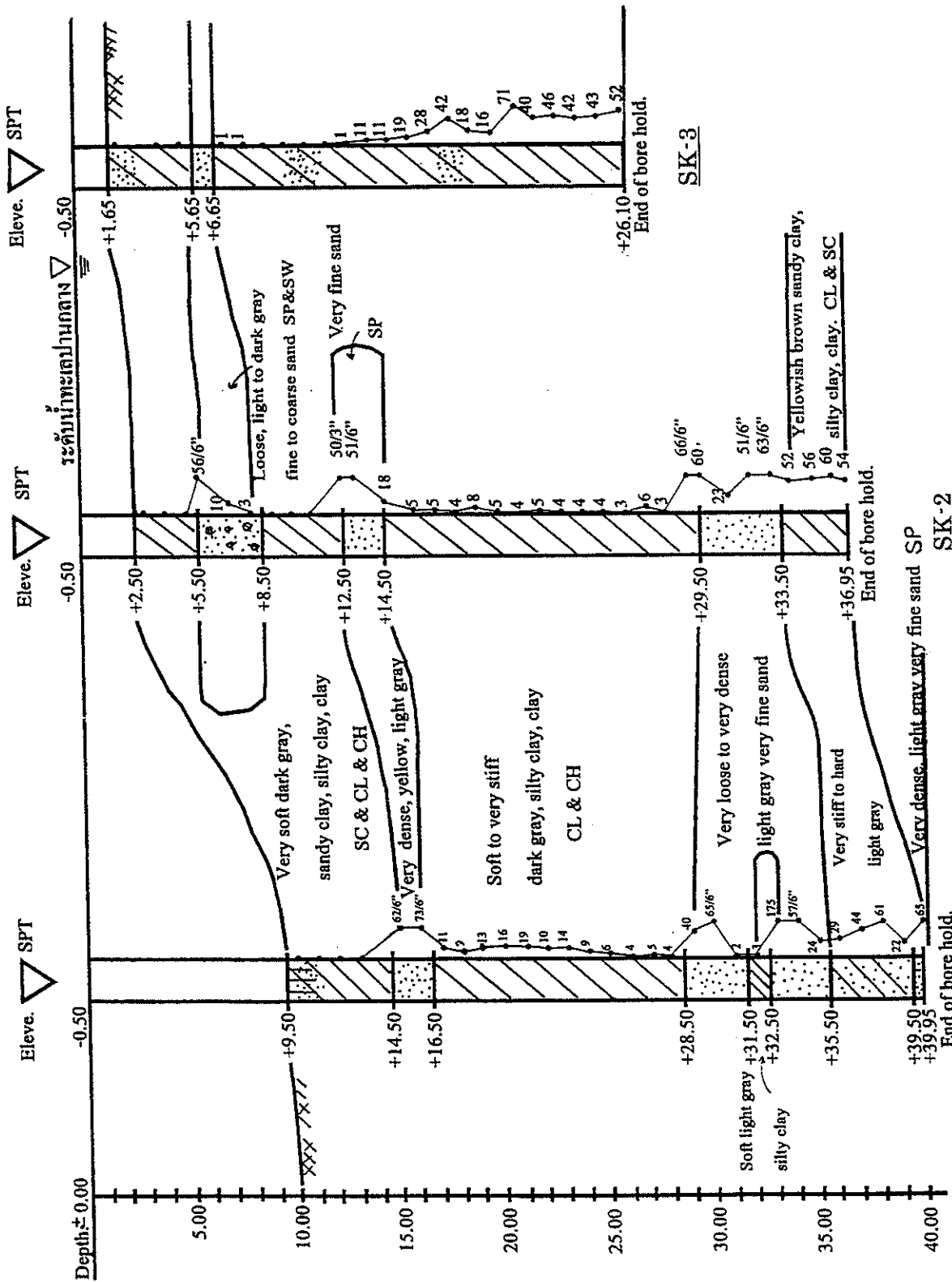


Figure 4.6.8-3 Boring Log at Songkhla Port (No. SK-3)



Retaining wall for seaport, Songkhla Remarks: Elev. -0.50 is 1.85 m lower than the bridge on the Songkhla Bank

Figure 4.6.8-4 Geological Profile along Boreholes in Songkhla Port

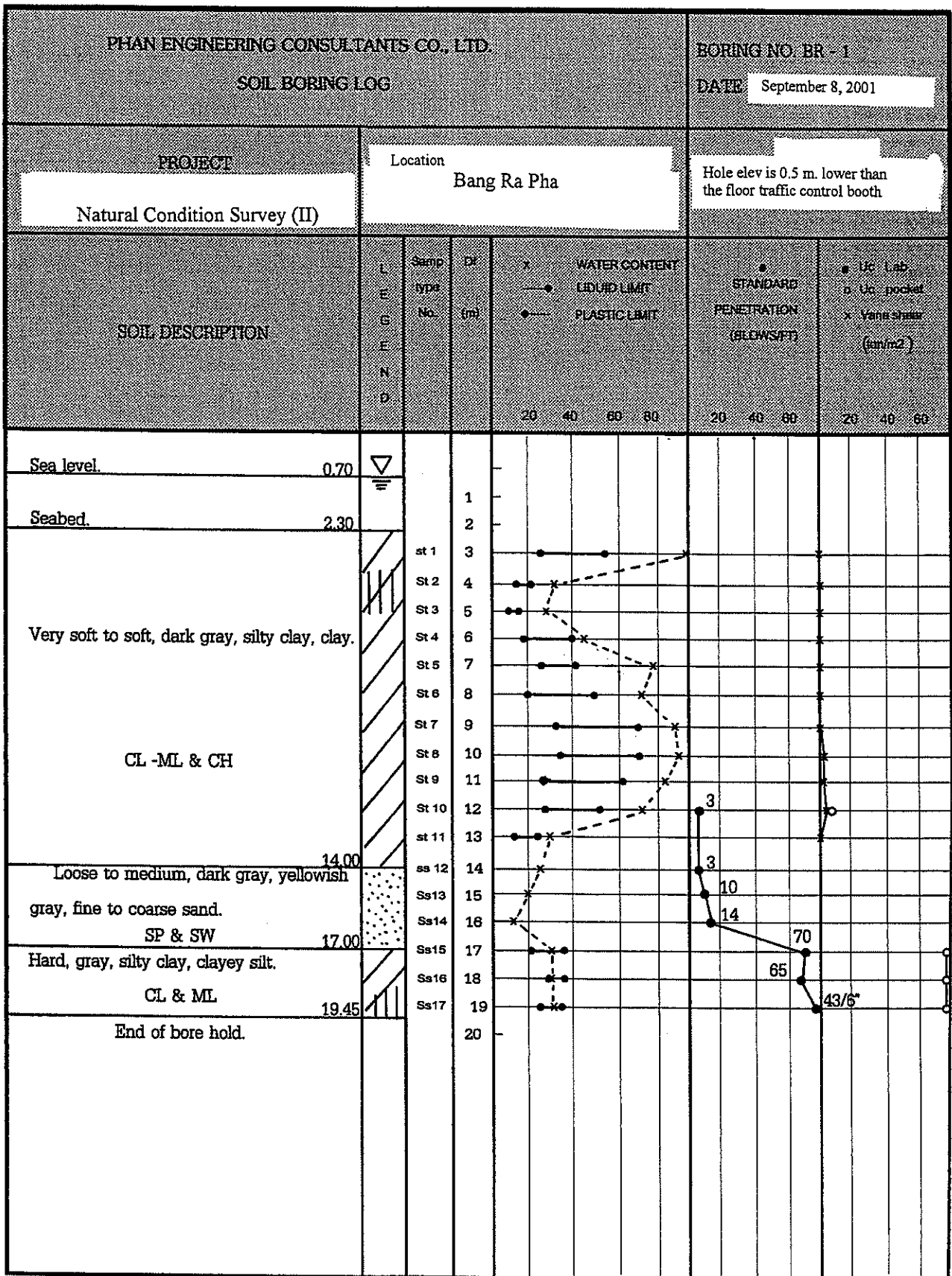


Figure 4.6.8-5 Boring Log at Bang Ra Pha Area (No. BR-1)