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Fig.2.1.1-1 Topographic Survey Area



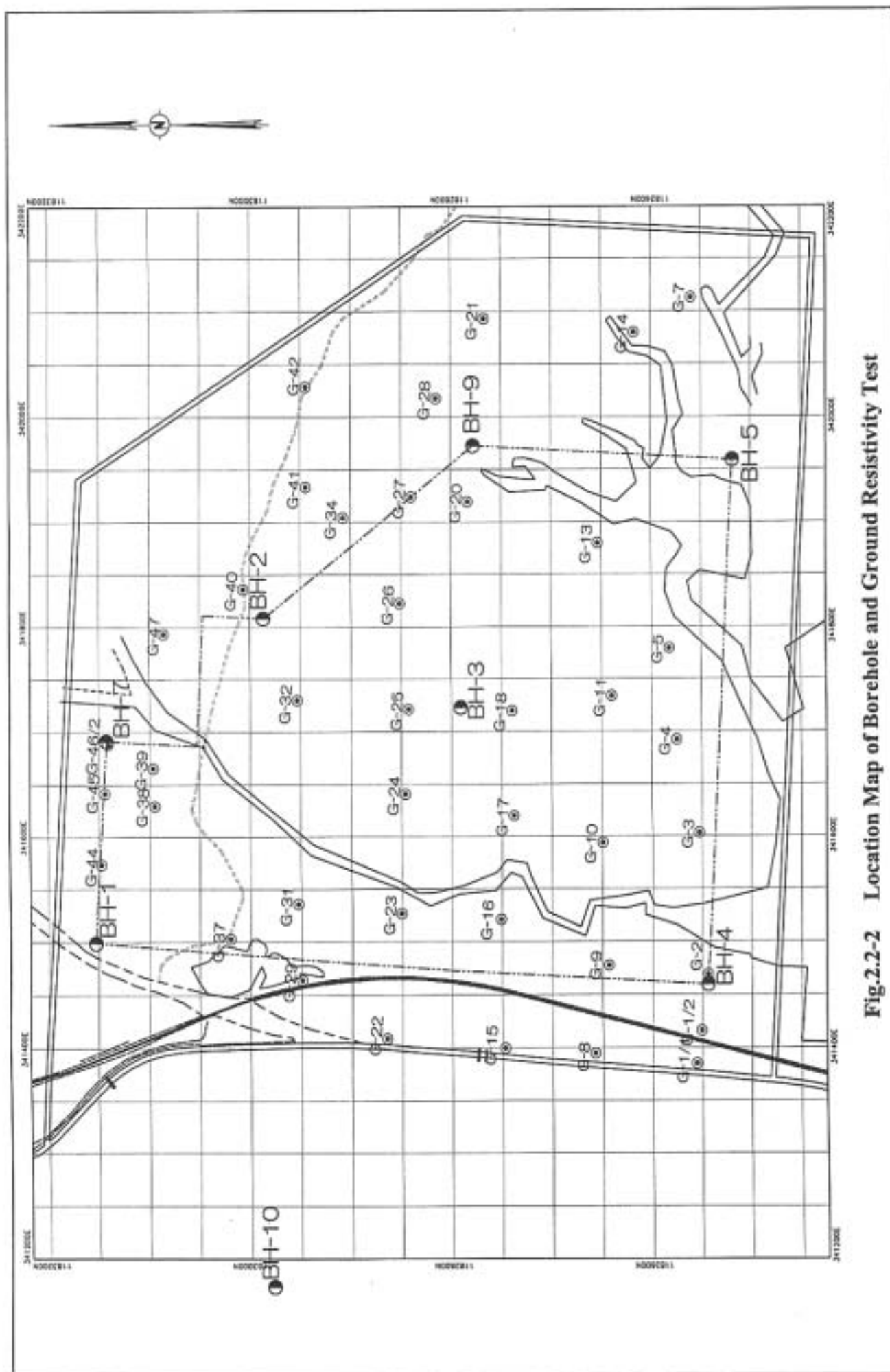


Fig.2.2.2-2 Location Map of Borehole and Ground Resistivity Test

UD-SAMPLING

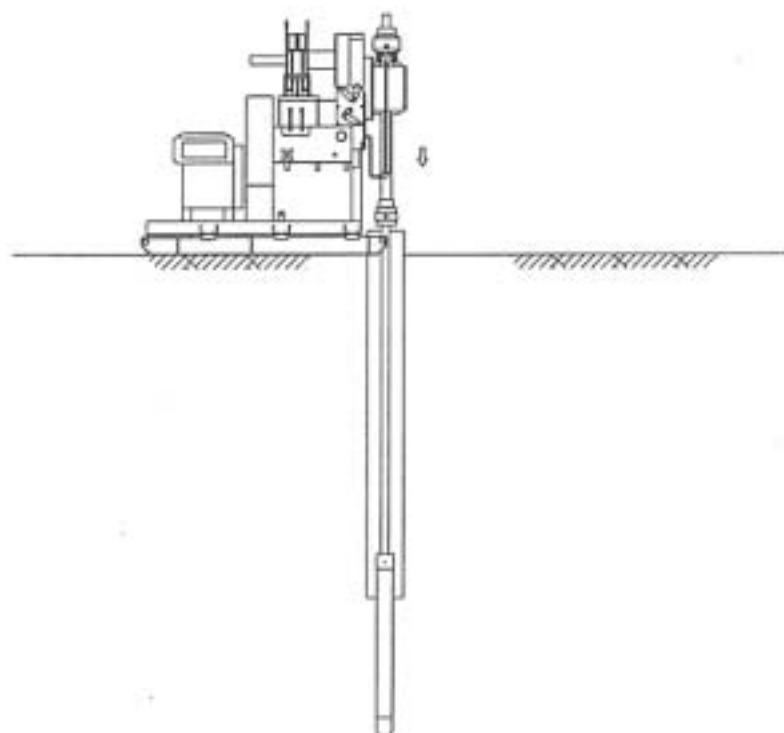
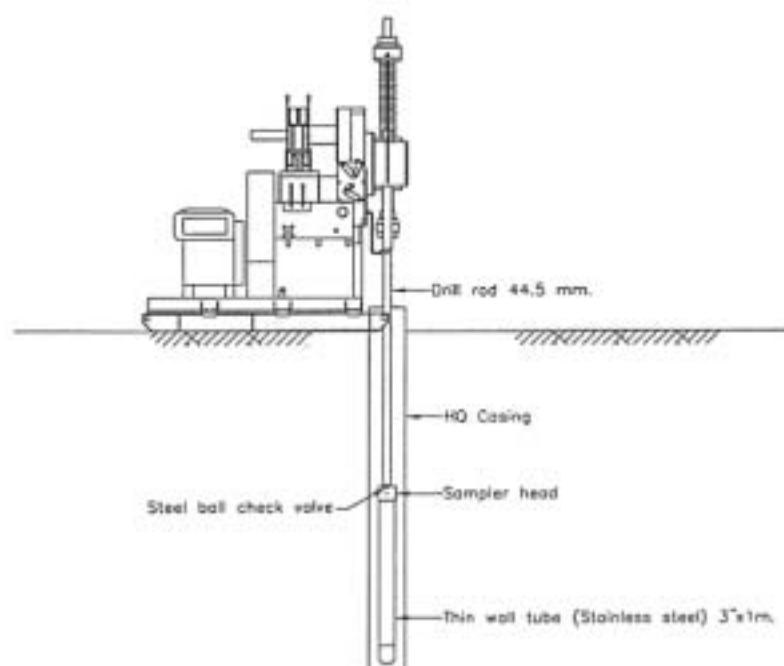


Fig.2.2-3 Arrangement of UD-Sampling Equipment

UD-PISTON SAMPLING

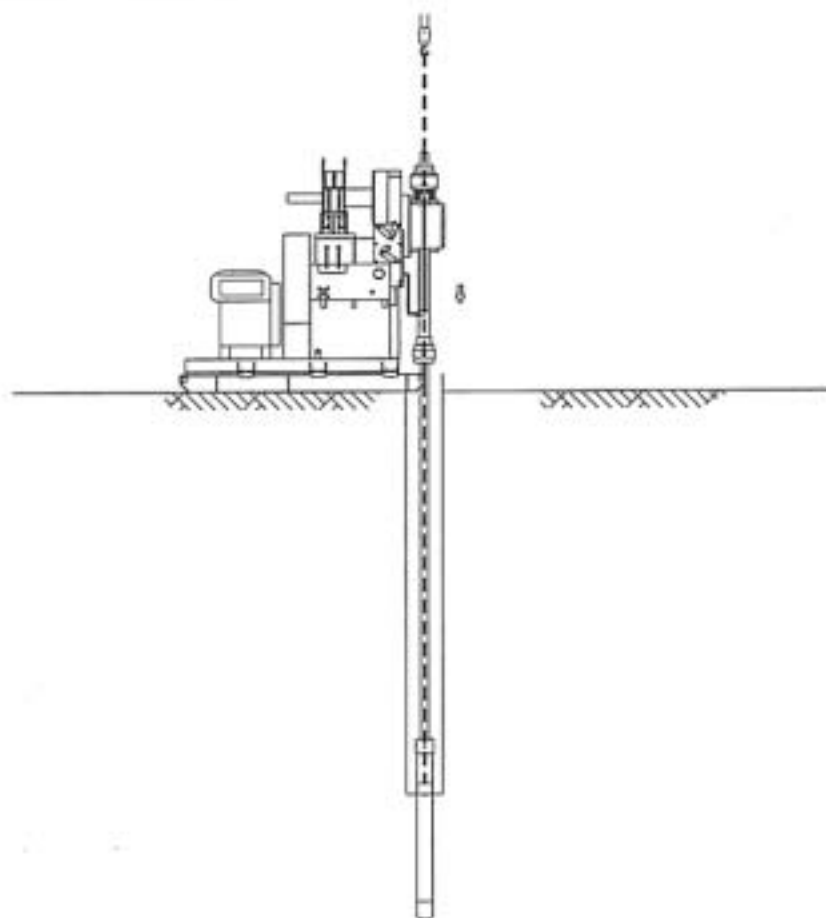
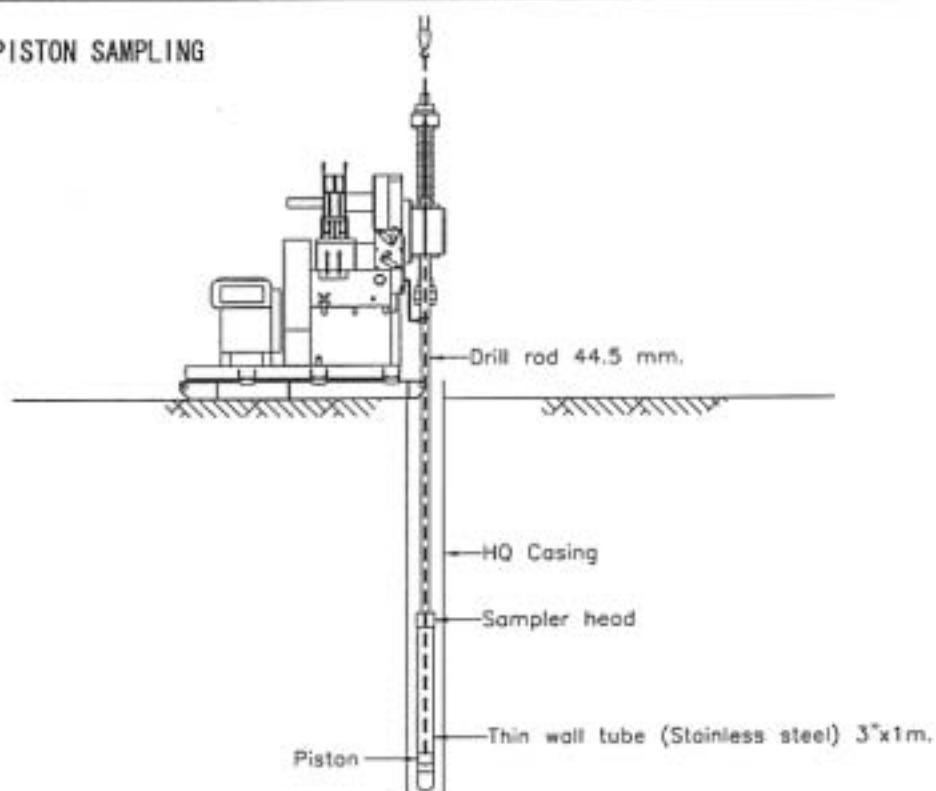
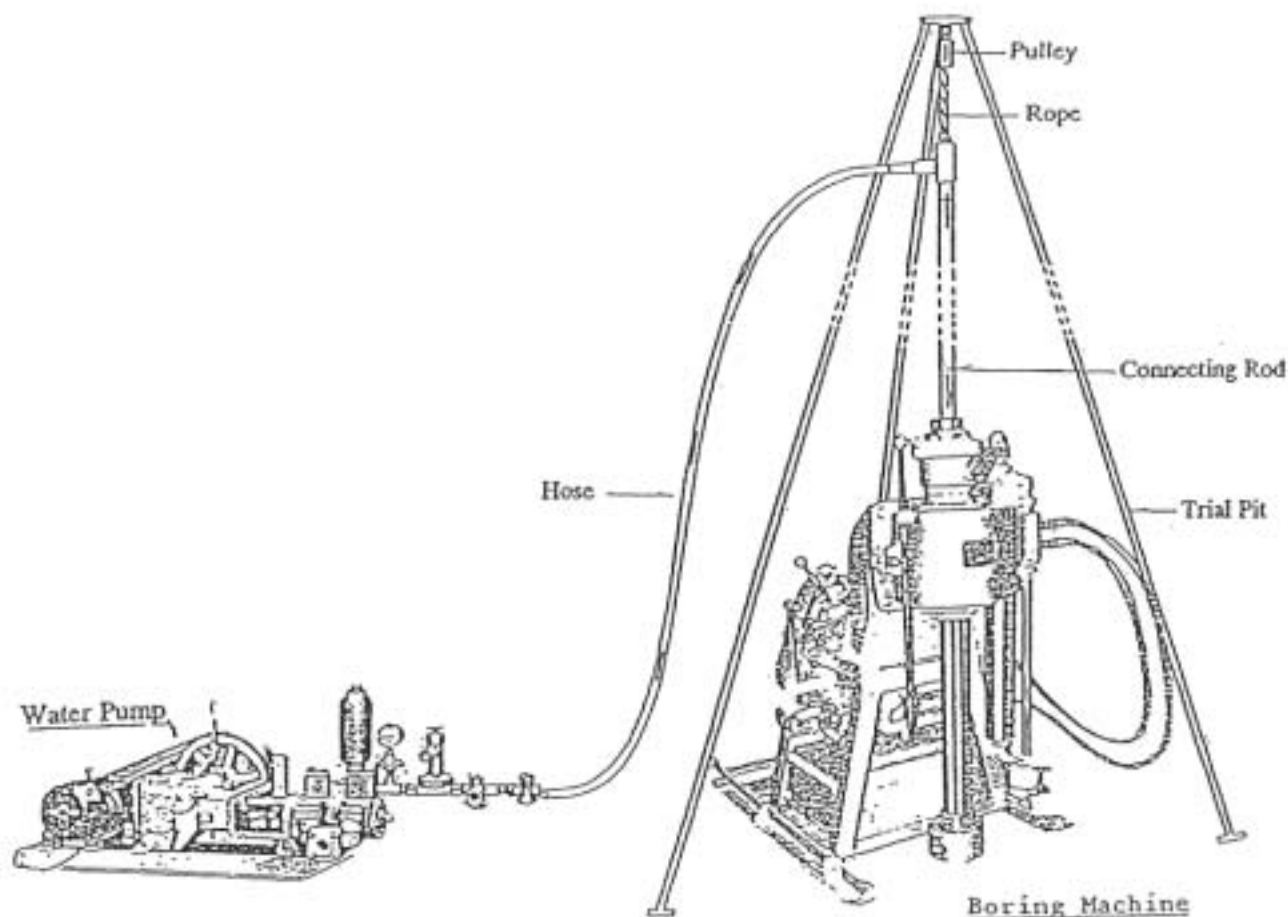
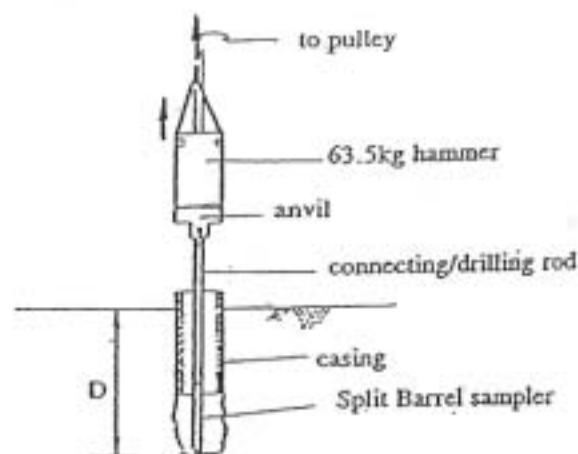


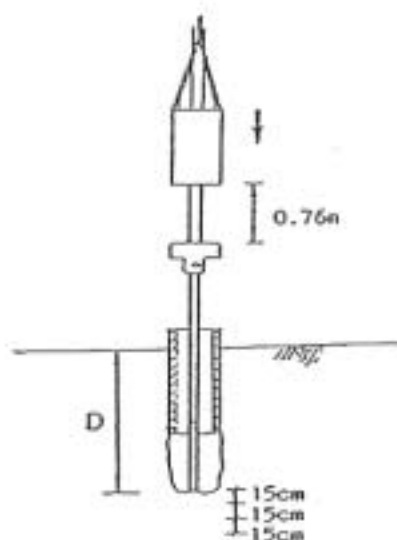
Fig.2.2-4 Arrangement of UD-Piston Sampling Equipment



II Standard Penetration Test

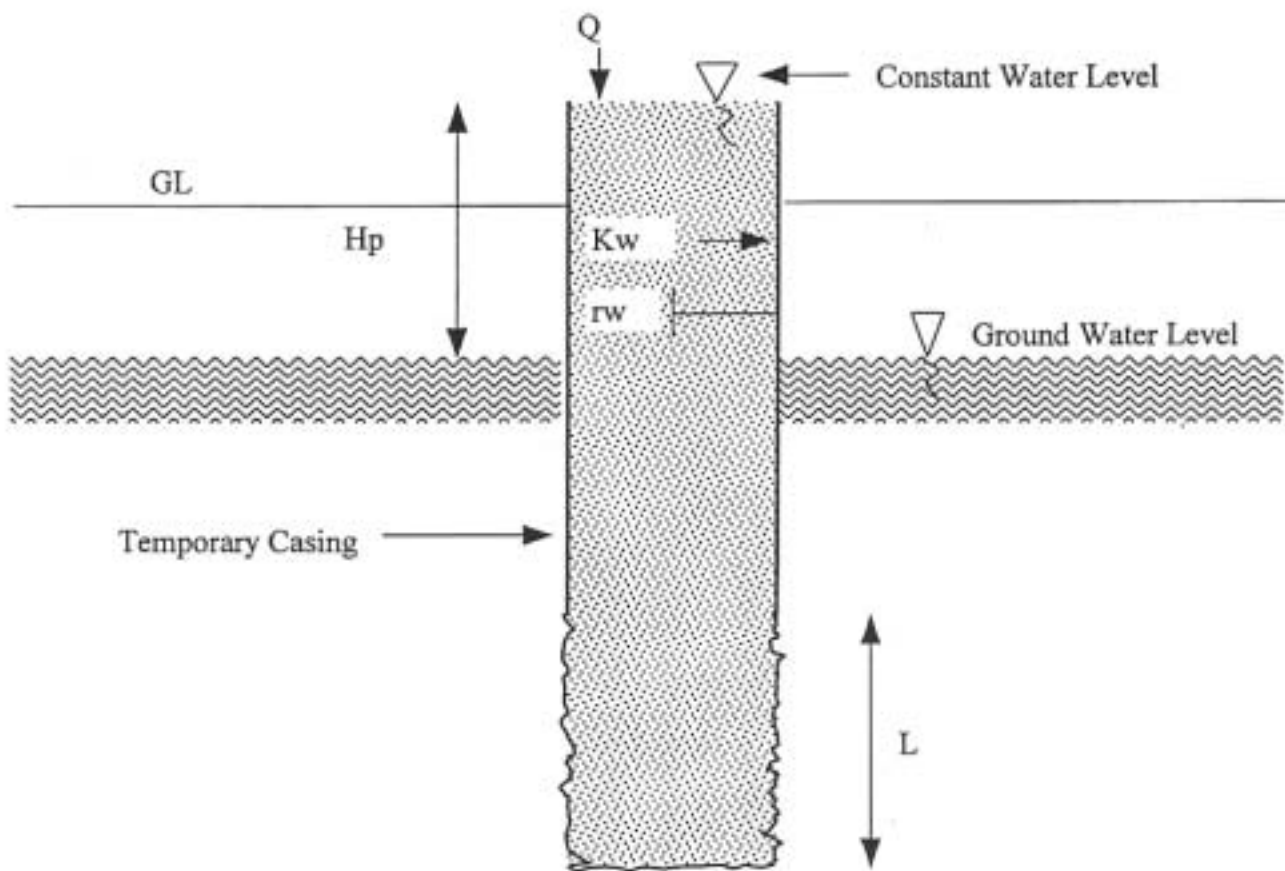


- a) The drilling bit is replaced by a Split Barrel Sampler and a hammer and anvil arrangement is mounted on top of the connecting/drilling rod.



- b) The test begins by elevating the hammer to 0.76m above the anvil. This distance is ensured by a trip mechanism that releases the hammer automatically upon reaching that height. The energy from the impact forces the rod, hence the sampler, into the soil. The N values are thus the sum of the number of blows by the hammer to drive the sampler 15cm-45cm from depth D .

Fig.2.2-5 Standard Penetration Test



Formula for Calculation

$$K = \frac{2.3 Q}{2 \pi H_p L} \log (L/rw)$$

Where ; K = Permeability of tested section (cm/sec)
 Q = Flow rate (cm³/sec)
 L = Length of tested section (cm.)
 rw = Radius of hole (cm.)
 Hp = Distance from Constant water level to Ground water level (cm.)

Fig.2.2-6 Schematic Drawing of Field Permeability Test (Constant Head)

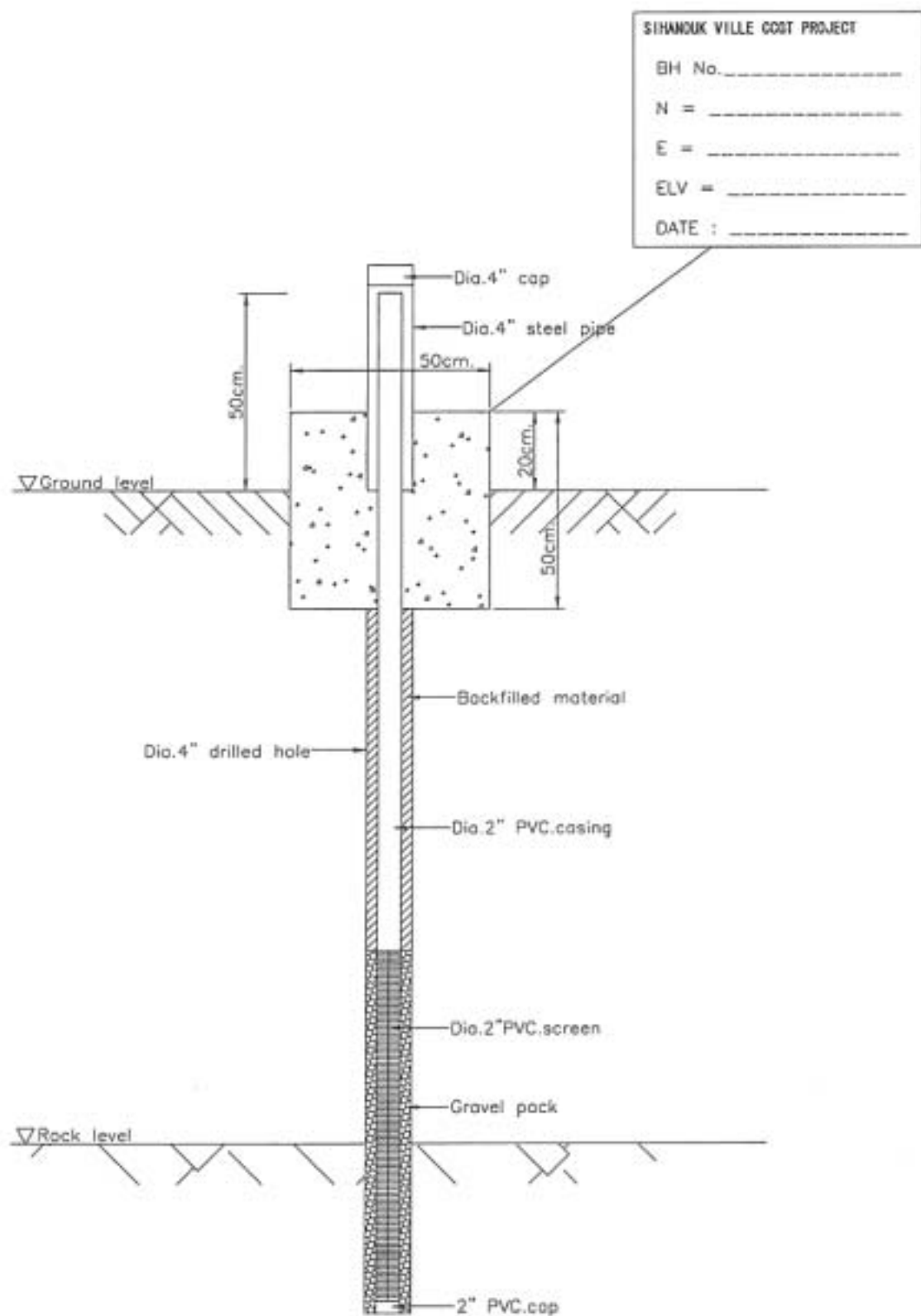


Fig.2.2-7 Schematic Drawing of Observation Well

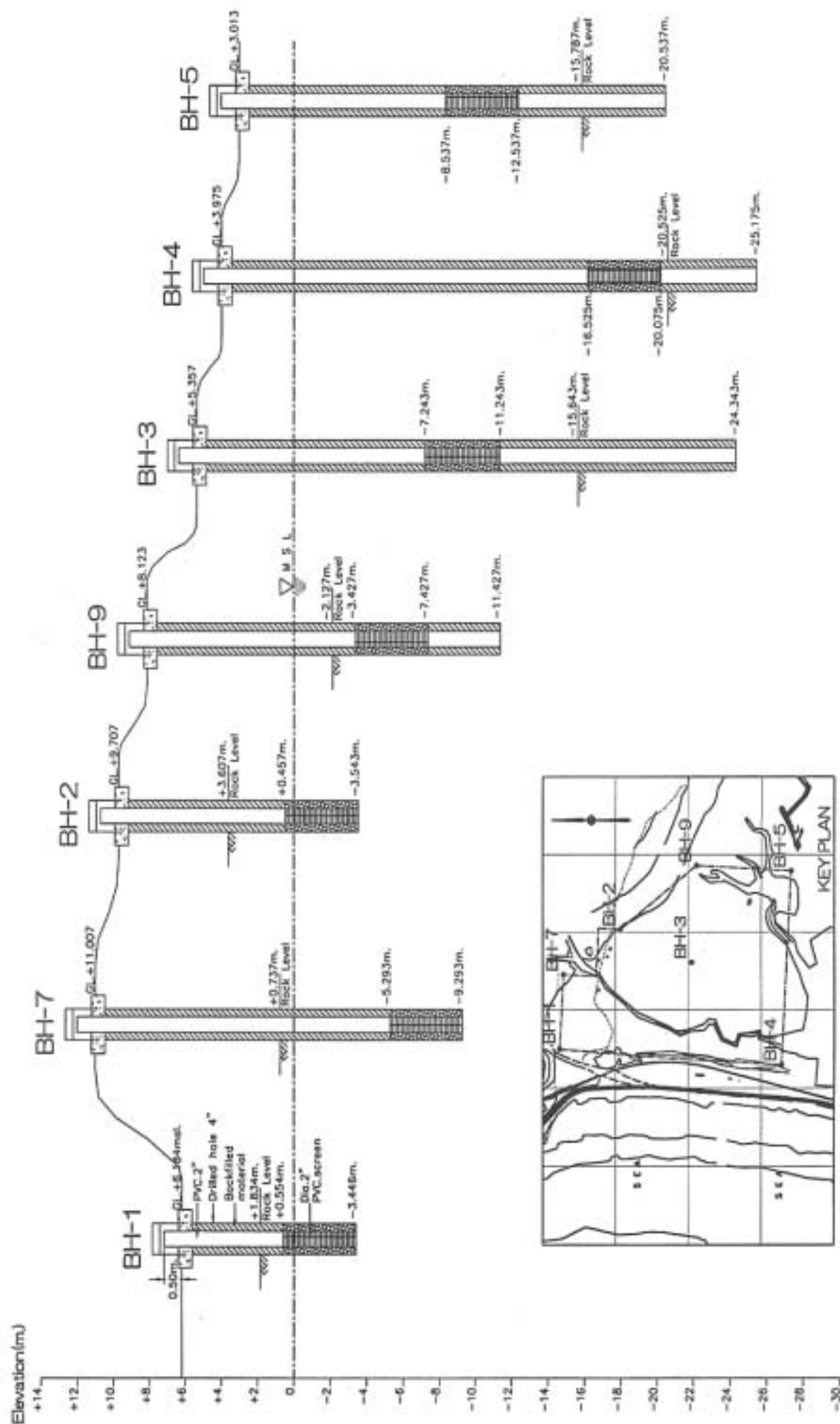
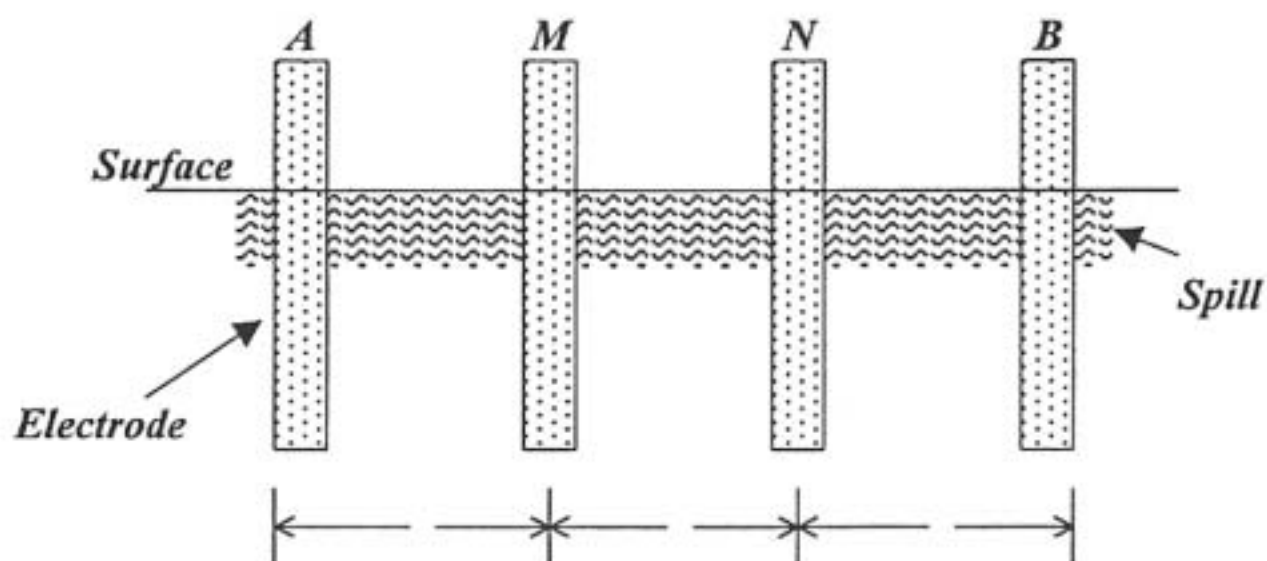



Fig.2.2-8 Cross Section of Observation Well



$a = 1, 5, 10, 20, 30, 40, 50, 70, 90$ and 110 m

Fig.2.2-9 *Wenner Arrangement*

 SIAM TONE CO., LTD.	BORING LOG	BORING NO. <u>1</u>
		SHEET <u>1</u> OF <u>1</u>
PROJECT : <u>SIHANOUKVILLE CCGT</u>	Coordinates : N <u>1,183,153.434</u>	(Flooding) Water Level: <u>0</u> m
LOCATION : <u>SIHANOUKVILLE CAMBODIA</u>	E <u>341,491.588</u>	Starting Date: <u>19/09/00</u>
CLIENT : <u>NEWJEC INC.</u>	Ground Elevation: <u>7.459 msl.</u>	Finishing Date: <u>20/09/00</u>
	Max.DrillingDepth: <u>13.25</u> m	

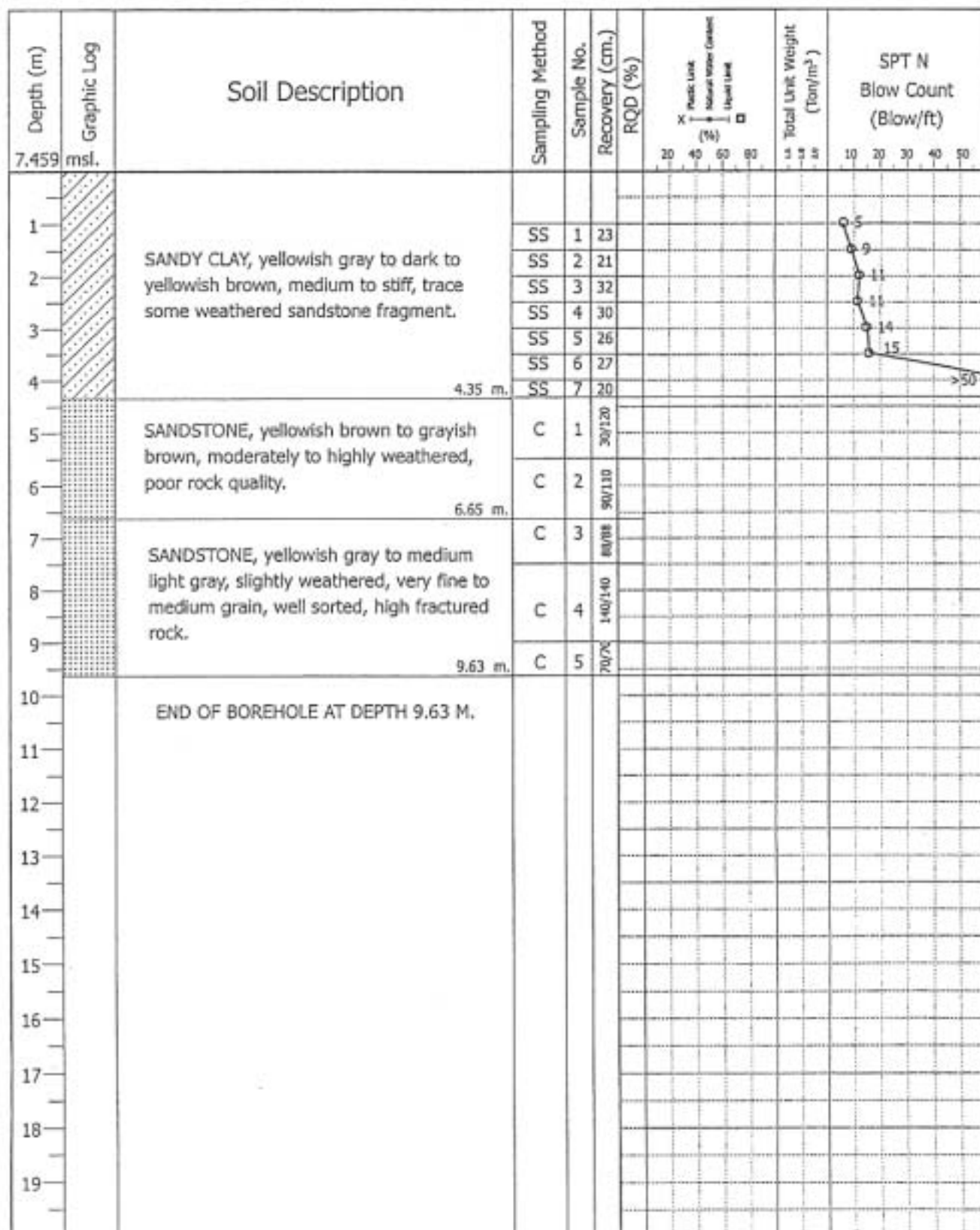



Fig.2.2-10 (1) Boring Log

 SIAM TONE CO., LTD.	BORING LOG		BORING NO. 2
			SHEET 1 OF 1
PROJECT : <u>SIHANOUKVILLE CCGT</u>	Coordinates : N <u>1,182,966.631</u>		(Flooding)
LOCATION : <u>SIHANOUKVILLE CAMBODIA</u>	E <u>341,808.293</u>		Water Level: <u>0</u> m
CLIENT : <u>NEWJEC INC.</u>	Ground Elevation: <u>9.707</u> msl.		Starting Date: <u>30/09/00</u>
	Max.DrillingDepth: <u>13.25</u> m		Finishing Date: <u>02/10/00</u>

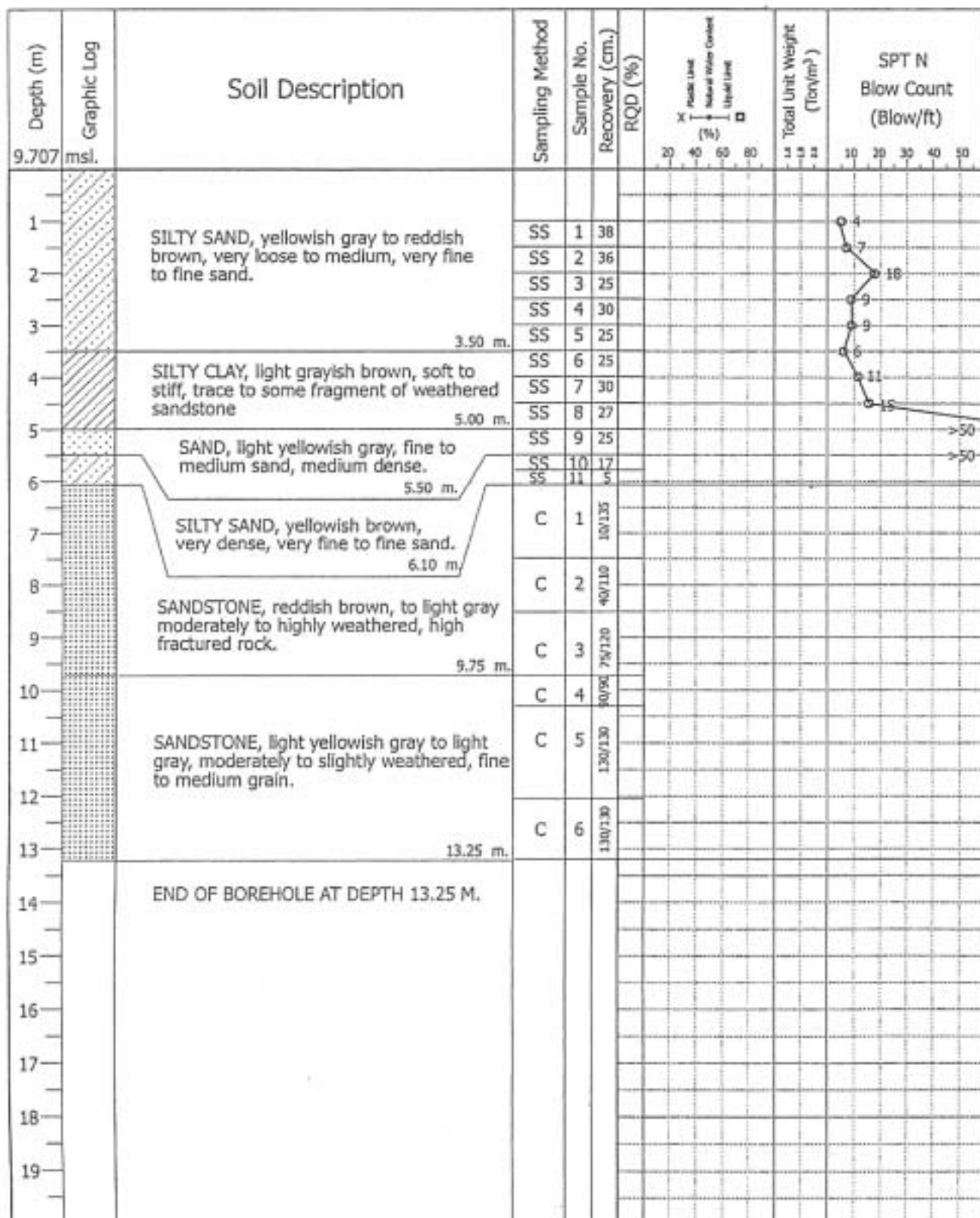



Fig.2.2-10 (2) Boring Log

 SIAM TONE CO., LTD.	BORING LOG		BORING NO. 3
			SHEET 1 OF 2
PROJECT : SIHANOUKVILLE CCGT	Coordinates : N <u>1,182,790.000</u> E <u>341,722.000</u>		Water Level: <u>0</u> m
LOCATION : SIHANOUKVILLE CAMBODIA	Ground Elevation: <u>+5.357 msl.</u>		Starting Date: <u>15/10/00</u>
CLIENT : NEWJEC INC.	Max. Drilling Depth: <u>29.70</u> m		Finishing Date: <u>18/10/00</u>

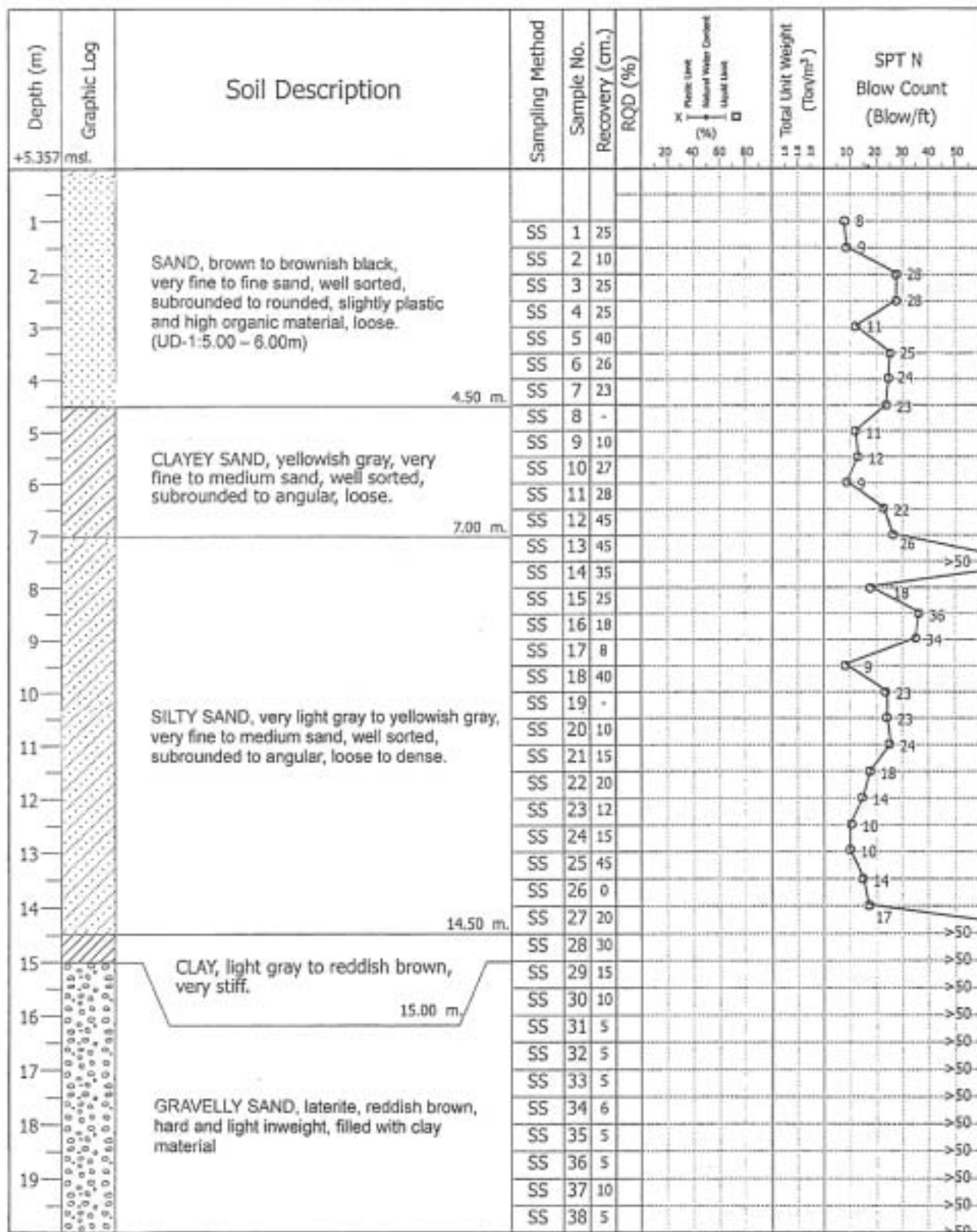



Fig.2.2-10 (3) Boring Log

 SIAM TONE CO., LTD.	BORING LOG		BORING NO. 3
			SHEET 2 OF 2
PROJECT : SIHANOUKVILLE CCGT	Coordinates : N <u>1,182,790.000</u>		Water Level: <u>0</u> m
LOCATION : SIHANOUKVILLE CAMBODIA	E <u>341,722.000</u>		Starting Date: <u>15/10/00</u>
CLIENT : NEWJEC INC.	Ground Elevation: <u>+5.357 msl.</u>		Finishing Date: <u>18/10/00</u>
	Max. Drilling Depth: <u>29.70</u> m		



Depth (m)	Graphic Log	Soil Description	Sampling Method	Sample No.	Recovery (cm.)	RQD (%)	<div> <div>Plastic Limit</div> <div>Natural Water Content</div> <div>Liquid Limit</div> </div>	Total Unit Weight (Ton/m ³)	SPT N Blow Count (Blow/ft)
+5.357 msl.									
21		GRAVELLY SAND, laterite, reddish brown, hard and light inweight, filled with clay material. 21.00 m	SS	39	10				>50
			SS	40	7				>50
			SS	41	10				>50
22		CLAYEY SAND, pale to reddish brown, very fine to fine sand, subangular to angular, dense. 21.80 m	SS	42	10				>50
23		SANDSTONE, light yellowish brown to light brown, very fine to medium grain, compose of quartz, Feldspar and mafic mineral, quartz grain size increasing with depth, well graded, subangular to subrounded, interbedded with light gray clay at 23.00 - 23.10, 23.40 - 24.60, 26.00 - 26.50 and 28.35 - 28.70 m., weathering decrease with depth, high fractured rock in 90°, 85°, 70°, 20°, 10° and subhorizontal to core axis, some fractures are coated by iron oxide. 29.70 m.	C	1	110/150	0			
24			C	2	30/150	0			
25			C	3	40/140	0			
26			C	4	100/150	11.75			
27			C	5	140/150	0			
28			C	6	110/150	0			
29									
30		END OF BOREHOLE AT DEPTH 29.70 M.							
31									
32									
33									
34									
35									
36									
37									
38									
39									

Fig.2.2-10 (4) Boring Log

STC	SIAM TONE CO., LTD.	BORING LOG	BORING NO. 4
PROJECT : SIHANOUKVILLE CCGT	LOCATION : SIHANOUKVILLE CAMBODIA	CLIENT : NEWJEC INC.	SHEET 1 OF 2
Coordinates : N <u>1,182,544.000</u>		Water Level: <u>2.40</u> m	
E <u>341,459.000</u>		Starting Date: <u>21/10/00</u>	
Ground Elevation: <u>+3.975</u> msl.		Finishing Date: <u>24/10/00</u>	
Max.DrillingDepth: <u>29.15</u> m			

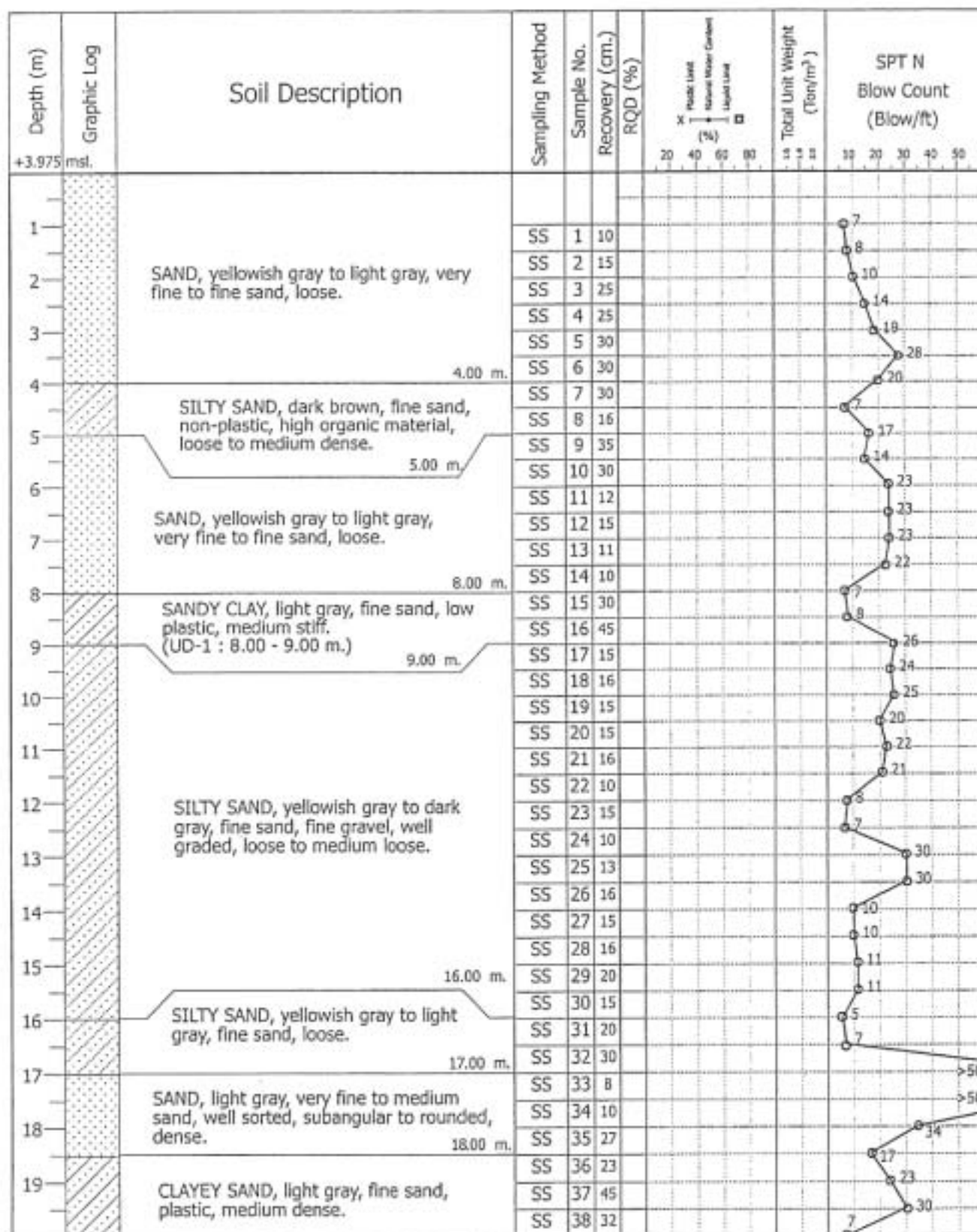



Fig.2.2-10 (5) Boring Log

 SIAM TONE CO., LTD.	BORING LOG	BORING NO. 4
		SHEET 1 OF 2
PROJECT : SIHANOUKVILLE CCGT	Coordinates : N <u>1,182,544.000</u> E <u>341,459.000</u>	Water Level: <u>2.40</u> m
LOCATION : SIHANOUKVILLE CAMBODIA	Ground Elevation: <u>+3.975</u> msl.	Starting Date: <u>21/10/00</u>
CLIENT : NEWJEC INC.	Max.DrillingDepth: <u>29.15</u> m	Finishing Date: <u>24/10/00</u>

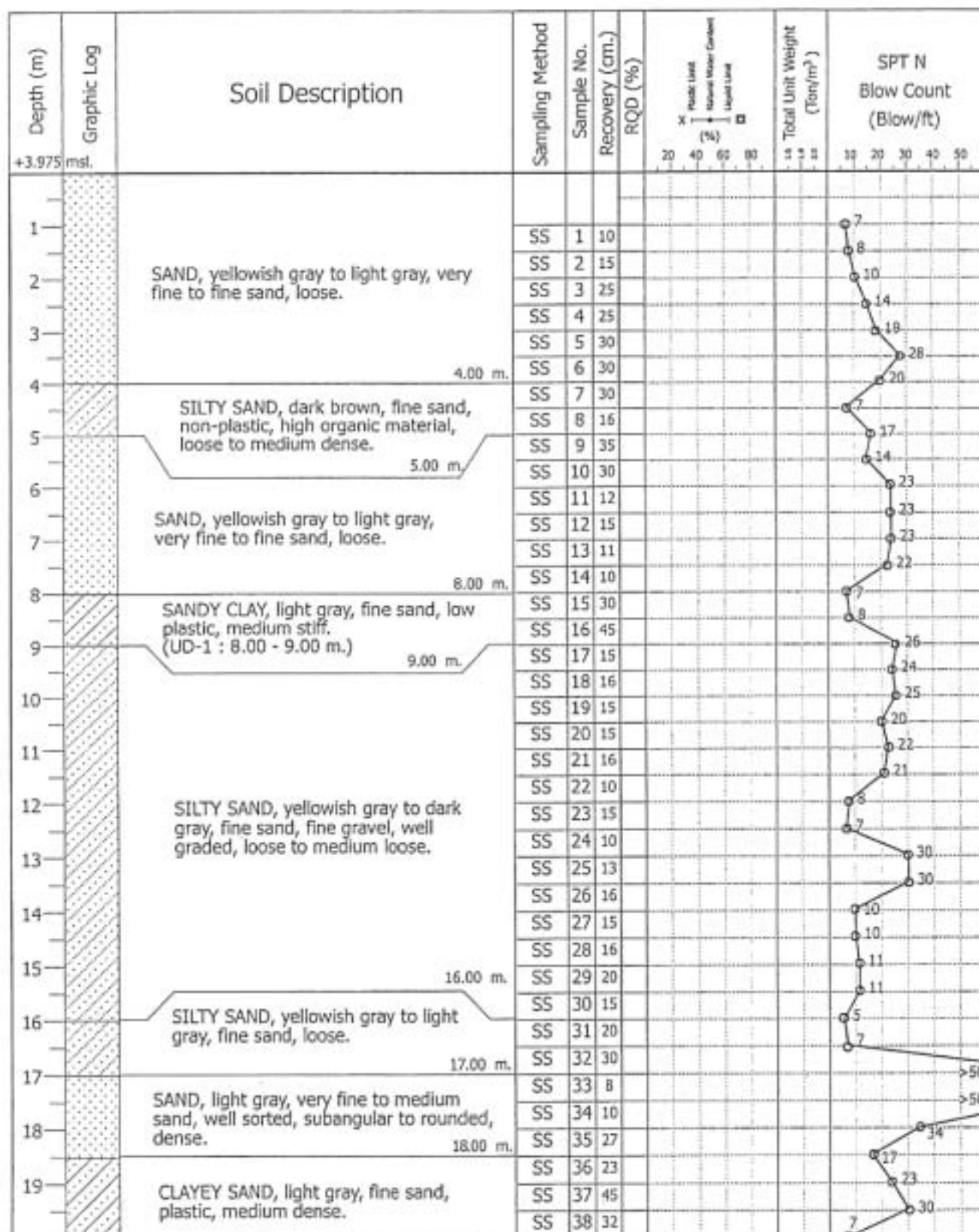



Fig.2.2-10 (5) Boring Log

 SIAM TONE CO., LTD.	BORING LOG	BORING NO. 4
		SHEET 2 OF 2
PROJECT : <u>SIHANOUKVILLE CCGT</u>	Coordinates : N <u>1,182,544.000</u> E <u>341,459.000</u>	Water Level: <u>2.40</u> m
LOCATION : <u>SIHANOUKVILLE CAMBODIA</u>	Ground Elevation: <u>+3.975</u> msl.	Starting Date: <u>21/10/00</u>
CLIENT : <u>NEWJEC INC.</u>	Max.DrillingDepth: <u>29.15</u> m	Finishing Date: <u>24/10/00</u>

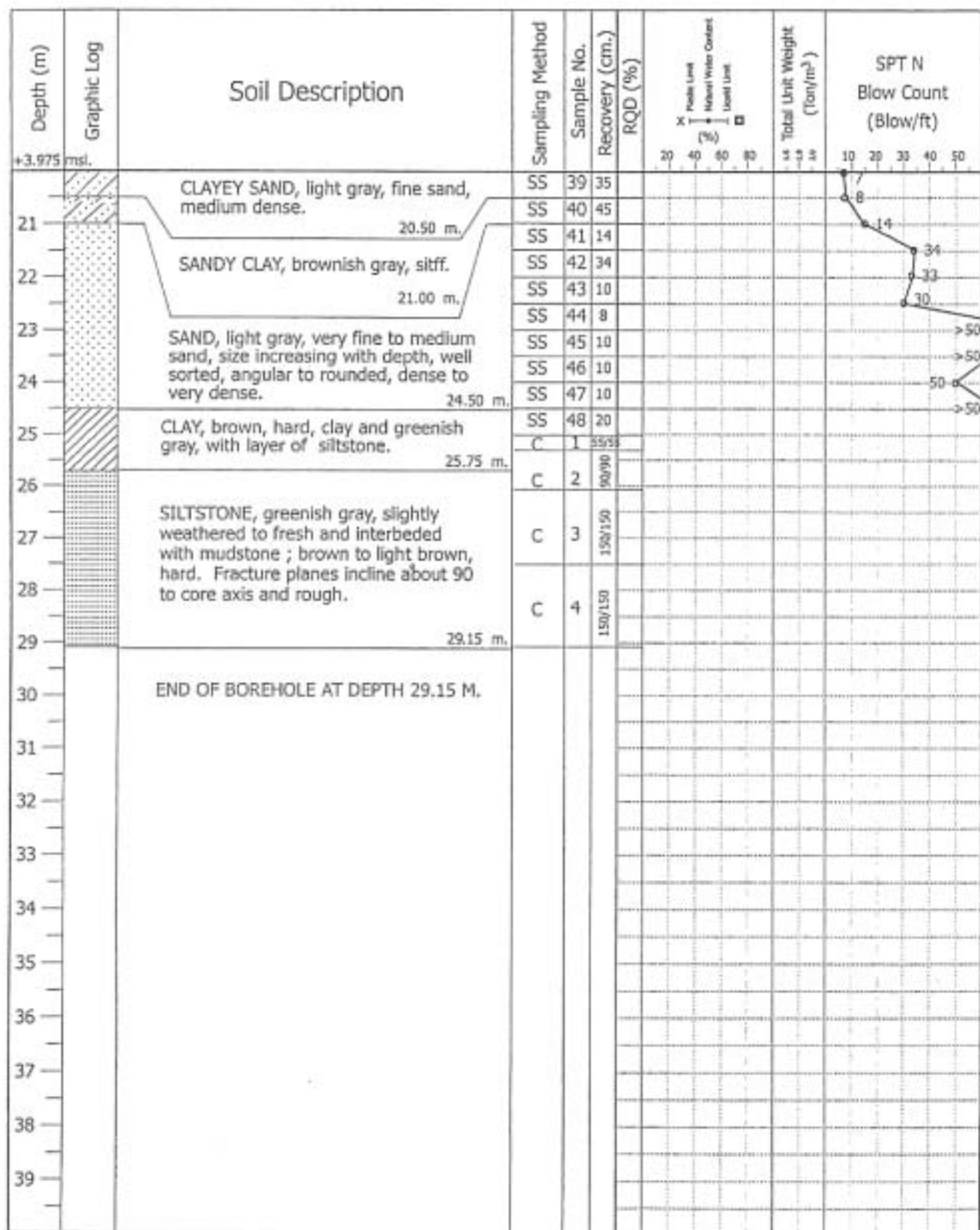


Fig.2.2-10 (6) Boring Log



SIAM TONE CO., LTD.

BORING LOG

BORING NO.

5

SHEET 1

OF 2

PROJECT : SIHANOUKVILLE CCGT

LOCATION : SIHANOUKVILLE CAMBODIA

CLIENT : NEWJEC INC.

Coordinates : N 1,182,518.102

E 341,958.978

Ground Elevation: +3.013 msl.

Max. Drilling Depth: 23.55 m

Water Level: 1.50 m

Starting Date: 09/10/00

Finishing Date: 12/10/00

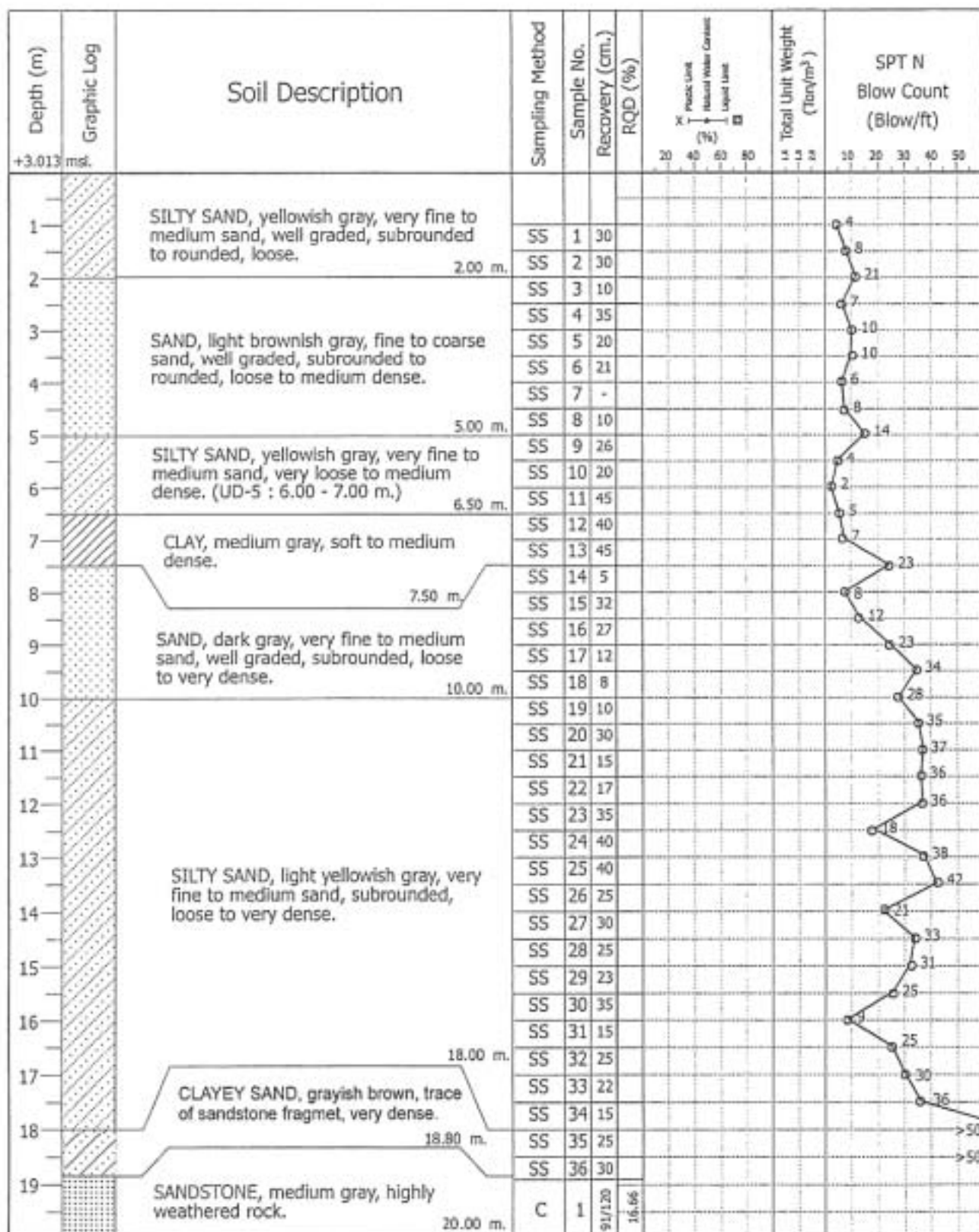



Fig.2.2-10 (7) Boring Log

 SIAM TONE CO., LTD.		BORING LOG		BORING NO. 5
PROJECT : SIHANOUKVILLE CCGT		Coordinates : N <u>1,182,518.102</u>		Water Level: <u>1.50</u> m
LOCATION : SIHANOUKVILLE CAMBODIA		E <u>341,958.978</u>		Starting Date: <u>09/10/00</u>
CLIENT : NEWJEC INC.		Ground Elevation: <u>+3.013 msl.</u>		Finishing Date: <u>12/10/00</u>
		Max.DrillingDepth: <u>23.55</u> m		




Depth (m)	Graphic Log	Soil Description	Sampling Method	Sample No.	Recovery (cm.)	RQD (%)	<div>  </div>	Total Unit Weight (Ton/m ³)	SPT N Blow Count (Blow/ft)
+3.013	msl.								
21		SANDSTONE, medium gray, moderate to slightly weathered rock, very fine to medium in grain, fracture plane incline about 90° to core axis coated by Silica.	C	2	100/100	40			
22			C	3	100/100	100			
23			C	4	155/155	100			
23.55		23.55 m.							
24		END OF BOREHOLE AT DEPTH 23.55 M.							
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									
36									
37									
38									
39									

Fig.2.2-10 (8) Boring Log

 SIAM TONE CO., LTD.	BORING LOG	BORING NO. 7
		SHEET 1 OF 1
PROJECT : SIHANOUKVILLE CCGT	Coordinates : N <u>1,183,142.967</u> E <u>341,691.314</u>	Water Level: <u>2.20</u> m
LOCATION : SIHANOUKVILLE CAMBODIA	Ground Elevation: <u>11.007</u> msl.	Starting Date: <u>22/09/00</u>
CLIENT : NEWJEC INC.	Max.DrillingDepth: <u>20.30</u> m	Finishing Date: <u>27/09/00</u>

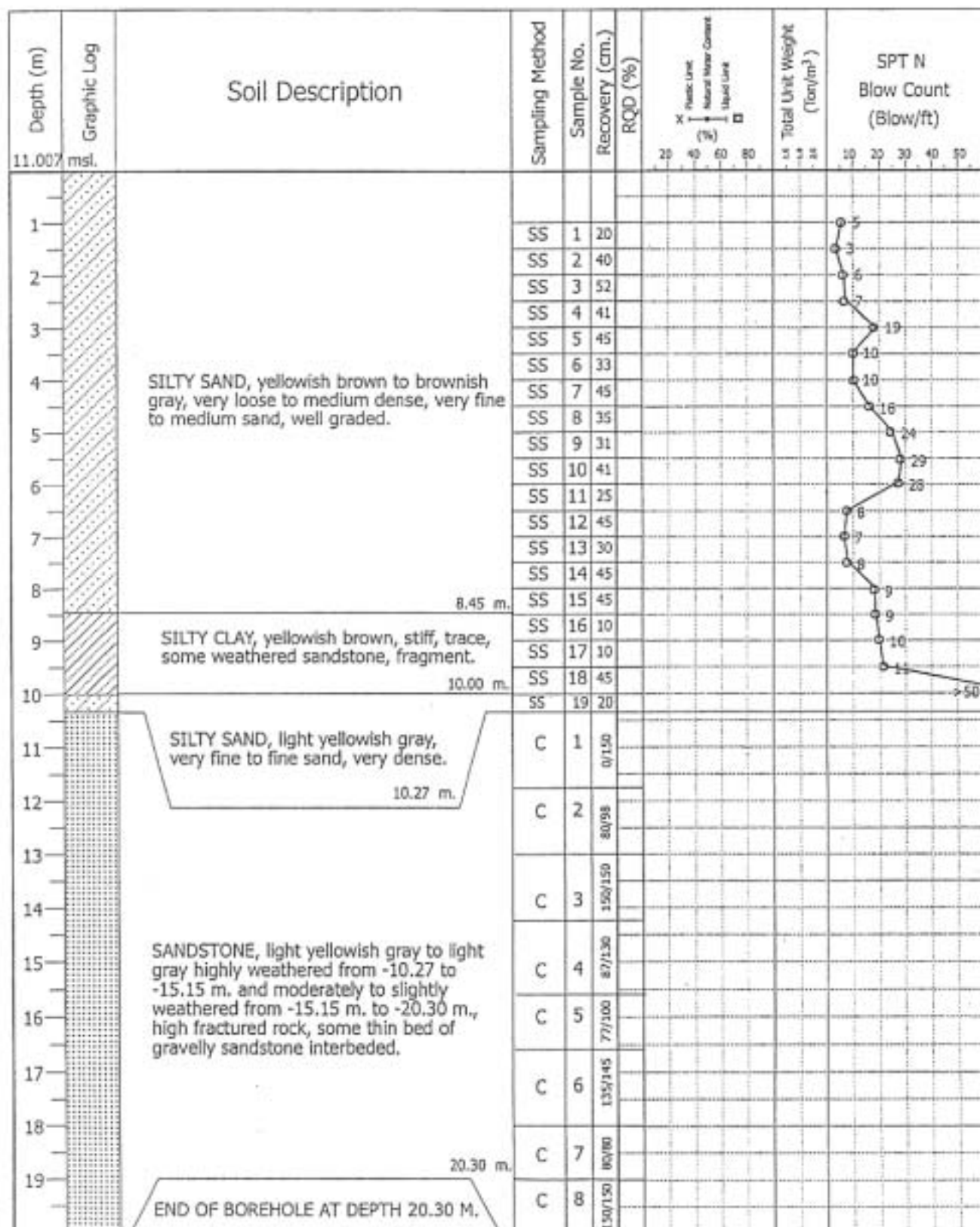



Fig.2.2-10 (9) Boring Log

 SIAM TONE CO., LTD.	BORING LOG	BORING NO. 9
		SHEET 1 OF 1
PROJECT : <u>SIHANOUKVILLE CCGT</u>	Coordinates : N <u>1,182,777.746</u>	Water Level: <u>1.00</u> m
LOCATION : <u>SIHANOUKVILLE CAMBODIA</u>	E <u>341,972.666</u>	Starting Date: <u>04/10/00</u>
CLIENT : <u>NEWJEC INC.</u>	Ground Elevation: <u>8.123</u> msl.	Finishing Date: <u>06/10/00</u>
	Max.DrillingDepth: <u>19.55</u> m	

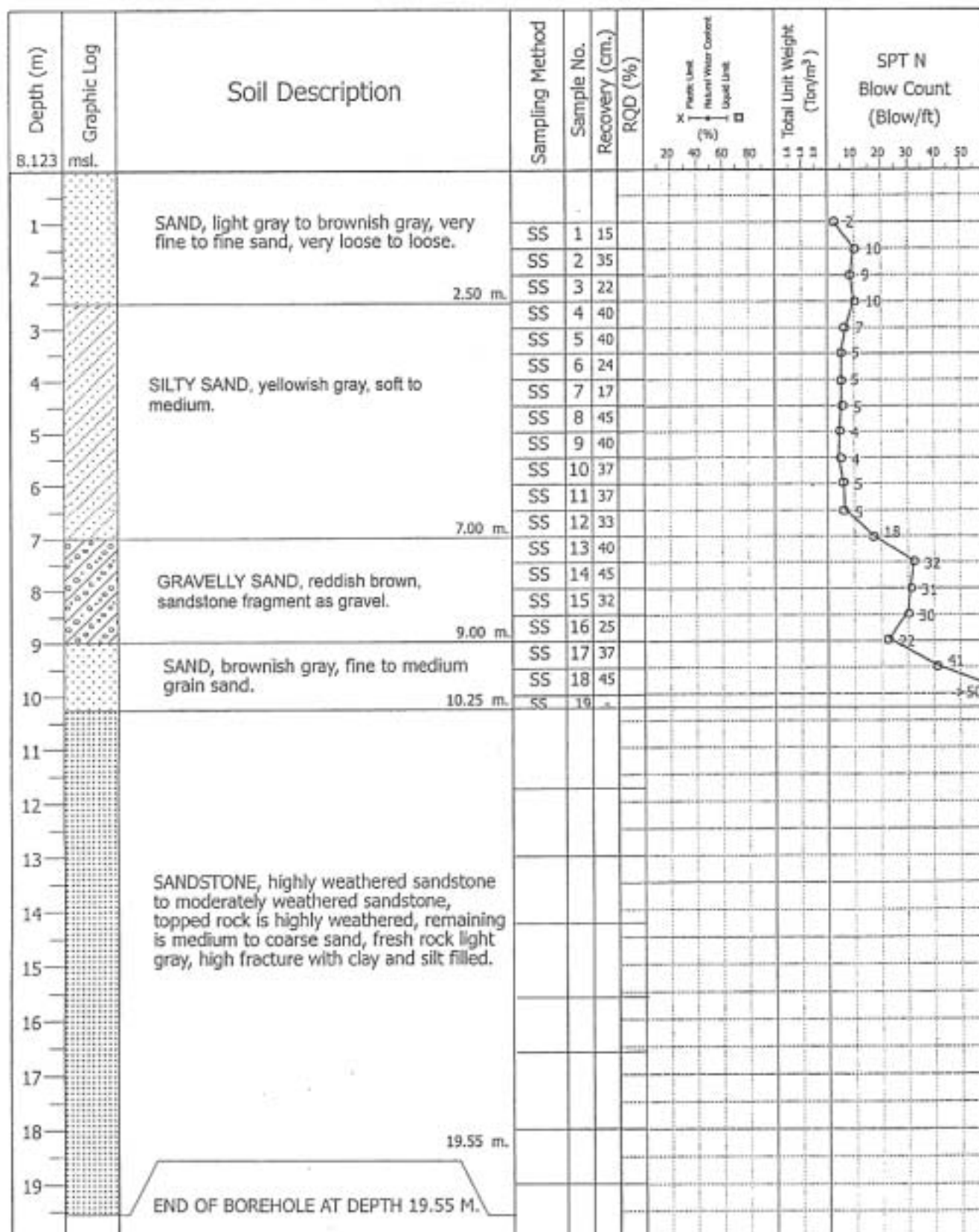


Fig.2.2-10 (10) Boring Log