

Summary of Test Results (page 1 of 2)

Sample		Depth		W _n	Atterberg Limits			Sieve Analysis					USCS	Soil Strength			Unit ^d	SPT-N ^e	Land mark
No.	From	To	(%)	LL	(%)		% Passing (US Standard Sieve)					Group ^a	(kN/m ²)		Weight (kN/m ³)	(Blows/ 300 mm)			
					PL	PI	1"	3/4"	1/2"	3/8"	#4		#10	#40			#100	#200	
ST- 1	1.50	2.00	-	-	-	-	-	No Recovery								-	-		
ST- 2	3.00	3.50	-	-	-	-	-	No Recovery								-	-		
ST- 3	4.50	5.00	-	-	-	-	-	No Recovery								-	-		
ST- 4	6.00	6.50	-	-	-	-	-	No Recovery								-	-		
ST- 5	7.50	8.00	74.3	78.4	30.8	47.6						100			0.0	24.0	20.6		
ST- 6	9.00	9.50	76.1	71.2	29.1	42.1						100	99		0.0	24.0	18.8		
ST- 7	10.50	11.00	-	-	-	-		No Recovery											
ST- 8	12.00	12.50	67.8	72.7	25.9	46.8						100	99		0.0	24.0	25.0		
ST- 9	13.50	14.00	37.7	51.4	27.5	23.9						100			12.5	34.0	44.7		
ST- 10	15.00	15.50	48.6	59.1	25.4	33.7						100			12.5	35.0	47.6		
SS- 1	15.50	15.95	31.3	58.7	25.5	33.2					100	99	97	94				18	
SS- 2	16.50	16.95	27.9	-	-	-		No Recovery								-	-	21	
SS- 3	18.00	18.45	19.2	30.5	17.2	13.3					100	99	86	67		-	-	24	
SS- 4	19.50	19.95	19.3	Non Plastic								100	75	43		-	-	48	
SS- 5	21.00	21.45	20.2	Non Plastic								100	76	42		-	-	52	
SS- 6	22.50	22.95	13.5	Non Plastic						100	99	74	22	15		-	-	66	
SS- 7	24.00	24.45	14.9	Non Plastic						100	99	53	29	20		-	-	69	
SS- 8	25.50	25.95	15.8	Non Plastic						100	98	42	24	18		-	-	28,50/25, -	
SS- 9	27.00	27.45	13.4	Non Plastic						100	98	48	24	18		-	-	30,50/50, -	
SS- 10	28.50	28.95	14.4	Non Plastic						100	99	57	21	13		-	-	69	
SS- 11	30.00	30.45	15.5	Non Plastic						100	100	61	20	13		-	-	70	
SS- 12	31.50	31.95	21.0	Non Plastic						100	100	86	22	14		-	-	68	
SS- 13	33.00	33.45	23.6	Non Plastic						100	100	92	17	11		-	-	50/75, -, -	
SS- 14	34.50	34.95	15.7	Non Plastic						100	100	92	33	22		-	-	50/125, -, -	
SS- 15	36.00	36.45	14.8	Non Plastic						100	100	95	27	20		-	-	50/125, -, -	
SS- 16	37.30	37.75	16.8	34.4	17.3	17.1				100	100	99	95	91		-	-	28	
SS- 17	39.00	39.45	26.4	-	-	-		No Recovery								-	-	59	

Notes:

^a USCS groups provided in parenthesis are from visual classification

^b P_{uc} = Pocket Penetrometer Resistance

^c S_{uc} = q_u/2; where q_u is Unconfined Compressive Strength from Unconfined Compression Test

^d Unit Weight provided for split spoon samples (SS) are for disturbed samples from SPT tests.

^e If the sampler is driven less than 450 mm, the number of blows per each complete and partial (less than or equal to 150 mm) increments were recorded.

Summary of Test Results (page 2 of 2)

Land mark

BH-12

Sample No.	Depth (m)	W _n (%)	Atterberg Limits			Sieve Analysis							USCS Group ^a	Soil Strength		Unit Weight (kN/m ³)	SPT-N ^e (Blows/ 300 mm)	
			(%)			% Passing (US Standard Sieve)								P _{uc} ^b	Torvane			S _{uc} ^c
			LL	PL	PI	1"	3/4"	1/2"	3/8"	#4	#10	#40						
SS- 18	40.50	40.95	25.1	38.5	17.9	20.6				100	98	97	95	92		-	63	
SS- 19	42.00	42.45	20.7	Non Plastic						100	95	95	33	22		-	50/100, -, -	
SS- 20	43.50	43.95	17.2	Non Plastic						100	98	98	39	23		-	50/150, -, -	
SS- 21	45.00	45.45	16.5	Non Plastic						100	97	94	50	41		-	50/50, -, -	
SS- 22	46.50	46.95	30.2	Non Plastic						100	96	94	92	53	42		50/75, -, -	
SS- 23	48.00	48.45	21.0	32.7	16.6	16.1				100	99	99	94	84		-	50/100, -, -	
SS- 24	49.50	49.95	17.5	38.0	18.7	19.3					100	98	89	89		20.9	50/50, -, -	
SS- 25	51.00	51.45	25.2	Non Plastic						100	96	96	38	22		-	35,45,26/75	
SS- 26	52.50	52.95	13.7	Non Plastic						100	63	63	29	19		-	42,40,18/50	
SS- 27	54.00	54.45	19.0	Non Plastic						100	59	59	23	15		-	50/150, -, -	
SS- 28	55.50	55.95	17.1	Non Plastic						100	99	40	21	14		-	63	
SS- 29	57.00	57.45	15.9	Non Plastic						100	71	71	26	18		-	50/100, -, -	
SS- 30	58.50	58.95	19.2	Non Plastic						100	76	76	23	16		-	50/100, -, -	
SS- 31	60.00	60.45	19.0	Non Plastic						100	74	74	23	15		-	50/50, -, -	

Notes:

- USCS groups provided in parenthesis are from visual classification
- P_{uc} = Pocket Penetrometer Resistance
- S_{uc} = q_u/2; where q_u is Unconfined Compressive Strength from Unconfined Compression Test
- Unit Weight provided for split spoon samples (SS) are for disturbed samples from SPT tests.
- If the sampler is driven less than 450 mm, the number of blows per each complete and partial (less than or equal to 150 mm) increments were recorded.

Borehole Number : BH-12

Page 1 of 2

Project : โครงการสำรวจออกแบบและจัดทำแผนแม่บทเพื่อพัฒนาริมฝั่งแม่น้ำเจ้าพระยา

Site Location : ท่าเรือเขียวไก่อก

Latitude (N) : 13.79091

Ground Elevation (m) :

Longitude (E) : 100.51199

G.W.L (m) : 3.00

Date Started : 18/5/2559

Total Depth (m) : 60.45

Date Finished : 21/5/2559

Depth	SAMPLE			SUBSURFACE PROFILE		Atterberg Limits (%) 20 40 60 80 100	Unit Weight 5 15	Suc (kN/m ²) ▲ 20 40 60 80 ▲					
	Symbol	Type	Number	Description	Symbol			SPT-N □ (Blows/300mm) □ 20 40 60 80					
0				Ground Surface									
1				Fill Material, concrete debris (No Recovery)	0.00								
2	■	ST	1										
3	■	ST	2										
4	■	ST	3										
5	■	ST	4										
6	■	ST	5	Soft CLAY, grey, high plasticity (CH)	7.00								
7	■	ST	6										
8	■	ST	7										
9	■	ST	8										
10	■	ST	9	Medium stiff CLAY, grey, high plasticity (CH)	13.00								
11	■	ST	10										
12	■	ST	11	Very stiff silty CLAY, grey, low and high plasticity (CL, CH)	15.50								
13	■	ST	12										
14	■	ST	13										
15	■	ST	14										
16	■	ST	15										
17	■	ST	16										
18	■	ST	17										
19	■	ST	18										
20	■	ST	19										
21	■	ST	20	Dense to very dense silty SAND, grey and brown, fine to medium grained (SM, SP-SM)	19.00								
22	■	ST	21										
23	■	ST	22										
24	■	ST	23										
25	■	ST	24										
26	■	ST	25										
27	■	ST	26										
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167	■	ST	166										
168	■	ST	167										
169	■	ST	168										
170	■	ST	169										

Thin wall tube
Split spoon
Rock core
Wash
Auger

Atterberg Limits : PL Wn LL
Suc : Undrained shear strength from UC test

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Borehole Number : BH-12

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Project : โครงการสำรวจออกแบบและจัดทำแผนแม่บทเพื่อพัฒนาริมฝั่งแม่น้ำเจ้าพระยา

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32	SS	12	Dense to very dense silty SAND, grey and brown, fine to medium grained (SM, SP-SM)	37.00	Very stiff to hard silty CLAY, grey, low plasticity (CL)	37.00		28	59												
33	SS	13								Very dense silty SAND, grey and brown, very fine to fine grained (SM)	41.50	47.50	50.50	71/75							
34	SS	14													Hard silty CLAY, grey, low plasticity (CL)	50.50	60.45	End of Borehole			
35	SS	15																	Very dense silty SAND, brown, fine to medium grained (SM)	60.45	
36	SS	16																			
37	SS	17																			
38	SS	18																			
39	SS	19																			
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Thin wall tube

Split spoon

Rock core

Wash

Auger

PL

Wn

LL

Atterberg Limits : |-----|

Suc : Undrained shear strength from UC test

Thin wall tube
Split spoon
Rock core
Wash
Auger

Atterberg Limits : PL Wn LL

Suc : Undrained shear strength from UC test

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