

FINAL BOREHOLE LOG AND SUMMARY OF TEST RESULTS **MRL - 28****PROJECT:** Pasig-Marikina River Channel Imp. Proj.**LOCATION:** R. Bank, Marikina River**BH NO:** BMRL-28 **DATE DRILLED:** 09 - 11 December 2000**GROUND ELEV.**
(MLLW = Zero Datum) + 16.755**STATION NO.:** 9 + 650**WEATHER:** FAIR**COORDINATES:** 1617,161.100 N, 508,656.750 E**DEPTH OF WATER:** 2.80 m.**DATE MEASURED:** 11 Dec. 2000**TIME MEASURED:** 5:00 PM

DEPTH, m	SAMPLE NO.	RECOVERY (%)	LOG SYMBOL	CLASSIFICATION	RQD	DESCRIPTION	BLOWS (SPT)			STANDARD PENETRATION TEST (SPT) (N-VALUE) 10 20 30 40 50	NATURAL MOIST. CONTENT, %	TOTAL UNIT WEIGHT, g/cc	ATTERBERG LIMITS		SPECIFIC GRAVITY	UNCONFINED COMP. TEST		SIEVE ANALYSIS % PASSING SIEVE			
							15 cm	15 cm	15 cm				LIQUID LIMIT, %	PLASTICITY INDEX, %		STRENGTH kg/cm ²	STRAIN %	4	10	40	200
1	SS-1	67		CH		Sandy CLAY; brown; 25% fine sand; 71-75% high plasticity clay; SOFT.	1	1	2		44		52	25	2.61					100	75
2	SS-2	44		CH			1	1	1												
3	SS-3	67		CH			1	1	2		35		50	30	2.61			98	98	95	71
4	SS-4	56		SM		Silty SAND; light brown; 12% sub-angular gravel; 23% non-plastic silt; 14% medium sand; 43% fine sand; traces of coarse sand; MEDIUM DENSE.	10	11	18												
5	SS-5	44		SM			8	7	10												
6	SS-6	56		SM			6	7	7		17				2.64			88	80	65	23
7	SS-7	67		CH		Silty CLAY; dark gray; traces of fine sand; high plasticity; STIFF.	5	6	7												
8	SS-8	67		CH			6	4	5												
9	SS-9	67		CH		Sandy CLAY; grayish brown; 22% sub-angular gravel; 12% medium sand; 11% fine sand; traces of coarse sand; 47% high plasticity clay; VERY STIFF TO HARD.	9	10	9		42		63	44	2.65			78	70	58	47
10	SS-10	56		CH			9	19	21												
11	SS-11	69		CH			3	7	7												
12	SS-12	69		CH		Gravelly CLAY; grayish brown; 10% pea size gravel; traces of coarse to fine sand; 60% high plasticity clay; VERY STIFF.	4	7	8		31		75	48	2.64			90	88	84	60
13	SS-13	69		CH			8	9	11												
14	SS-14	69		CH			11	11	13												
15	SS-15	78		CH		Sandy CLAY; brown; 11% medium sand; 31% fine sand with traces of coarse sand; 50% high plasticity clay; VERY STIFF TO HARD.	22	27	32		37		61	37	2.61			98	92	81	50*
16	SS-16	78		CH			8	7	9												
17	SS-17	78		CH			5	10	11												
18	SS-18	44		GM		Silty GRAVEL; brown; 34% non-plastic silt with traces of coarse to fine sand; 47% sub-angular gravel; MEDIUM DENSE TO DENSE.	9	10	12		30				2.64			53	46	39	34
19	SS-19	78		GM			11	14	16												
20	SS-20	89		GM		End of Borehole (20.00 m)	11	15	16												



BASIC TECHNOLOGY AND MANAGEMENT CORPORATION
2nd Floor Prudential Bank Building,
1377 A. Mabini St., Ermita, Manila

MACHINE: ACKER ACE
DRILLER: I. ANDOYO
SUPERVISOR: M. ESTAURA
M. VILLAFUERTE

LEGEND:

SS - SPLIT SPOON SAMPLE
WS - WASH SAMPLE
UDS - UNDISTURBED SAMPLE
CR - CORE SAMPLE
W/ HYDROMETER ANALYSIS

Figure 5-3-3 (141/221) BORING LOGS (PHASE I)

FINAL BOREHOLE LOG AND SUMMARY OF TEST RESULTS **MRL - 29**

PROJECT: Pasig-Marikina River Channel Imp. Proj.					GROUND ELEV. (MLLW = Zero Datum) <u>+ 16.716</u>		DEPTH OF WATER: <u>2.20</u> m.	
LOCATION: R. Bank, Marikina River, Santolan					STATION NO.: <u>9 + 925</u>		DATE MEASURED: <u>10 Dec. 2000</u>	
BH NO: BMRL-29 DATE DRILLED: 09 - 11 December 2000					WEATHER: <u>FAIR</u>		TIME MEASURED: <u>8:00 AM</u>	
					COORDINATES: <u>1617,423.750</u> N, <u>508,647.250</u> E			

DEPTH, m	SAMPLE NO.	RECOVERY (%)	LOG SYMBOL	CLASSIFICATION	RQD	DESCRIPTION	BLOWS (SPT)			STANDARD PENETRATION TEST (SPT) (N-VALUE)	NATURAL MOIST. CONTENT, %	TOTAL UNIT WEIGHT, g/cc	ATTERBERG LIMITS		SPECIFIC GRAVITY	UNCONFINED COMP. TEST		SIEVE ANALYSIS % PASSING SIEVE			
							15 cm	15 cm	15 cm				LIQUID LIMIT, %	PLASTICITY INDEX, %		STRENGTH kg/cm ²	STRAIN %	4	10	40	200
1	SS-1	67		CH		Silty CLAY; brown; 95% high plasticity silty clay; with little amount of fine sand; FIRM.	2	1	2		40	77	53	2.60							
2	SS-2	67		CH		Sandy CLAY; brown; 25% fine sand; 74% high plasticity clay; FIRM.	3	4	4												
3	SS-3	67					2	3	2		37	54	31	2.61			100	99	74*		
4	SS-4	67		GM		Sandy GRAVEL; light brown; coarse sand; sub-angular gravel; DENSE.	23	24	24												
5	SS-5	56					24	24	25												
6	CR-1	35		ST	0	SANDSTONE; gray to brown; fine grained; highly weathered; SOFT.	CORING														
7	SS-6	67					5	6	9		40	82	45	2.60			100	97	95 92*		
8	SS-7	67					7	5	8												
9	SS-8	56				Silty CLAY; grayish brown to light brown; 92-98% high plasticity silty clay; with little amount of fine sand; STIFF TO VERY STIFF.	4	4	4												
10	SS-9	56					8	7	10		38	80	58	2.60			100	99	98*		
11	SS-10	56					7	8	9												
12	SS-11	56		CH			6	7	8												
13	SS-12	56				Sandy CLAY; light brown; 24% fine sand; with little amount of gravel and coarse to medium sand; 68% high plasticity clay;	8	9	11		35	54	25	2.62			97	94	92 68*		
14	SS-13	100					8	14	15												
15	SS-14	56				Silty CLAY; brown; 96% high plastic silty clay; with little amount of fine sand; FIRM TO HARD.	3	3	4												
16	SS-15	56					14	18	20		44	79	56	2.60			100	99	98 96*		
17	SS-16	56					19	14	14												
18	SS-17	40		SM		Silty SAND; dark brown; 20% non-plastic silt; 51% medium sand; 23% fine sand; with little amount of coarse sand; MEDIUM DENSE TO VERY DENSE.	18	20	25												
19	SS-18	100					14	35	5		20		2.64			99	84	43 20			
20	SS-19	78				End of Borehole (20.00 m)	14	26	21												








 BASIC TECHNOLOGY AND MANAGEMENT CORPORATION 2nd Floor Prudential Bank Building, 1377 A. Mabini St., Ermita, Manila	MACHINE: <u>ACKER ACE</u>	LEGEND:  SS - SPLIT SPOON SAMPLE  WS - WASH SAMPLE  UDS - UNDISTURBED SAMPLE  CR - CORE SAMPLE  W/ HYDROMETER ANALYSIS
	DRILLER: <u>R. ANDO</u>	
	SUPERVISOR: <u>M. ESTAURA</u>	

Figure 5-3-3 (142/221) BORING LOGS (PHASE I)

FINAL BOREHOLE LOG AND SUMMARY OF TEST RESULTS **MRL - 30**

PROJECT: Pasig-Marikina River Channel Imp. Proj.					GROUND ELEV. (MLLW = Zero Datum) + 14.888					DEPTH OF WATER: 4.50 m.				
LOCATION: R. Bank, Pasig - Marikina					STATION NO.: 10 + 250					DATE MEASURED: 14 Dec. 2000				
BH NO: BMRL-30 DATE DRILLED: 12 - 13 December 2000					WEATHER: FAIR					TIME MEASURED: 7:00 AM				
COORDINATES: 1617,762.500 N, 508,689.500 E														

DEPTH, m	SAMPLE NO.	RECOVERY (%)	LOG SYMBOL	CLASSIFICATION	RQD	DESCRIPTION	BLOWS (SPT)			STANDARD PENETRATION TEST (SPT)					NATURAL MOIST. CONTENT, %	TOTAL UNIT WEIGHT, g/cc	ATTERBERG LIMITS		SPECIFIC GRAVITY	UNCONFINED COMP. TEST		SIEVE ANALYSIS % PASSING SIEVE			
							15 cm	15 cm	15 cm	(N-VALUE)							LIQUID LIMIT, %	PLASTICITY INDEX, %		STRENGTH kg/cm ²	STRAIN %, %	4	10	40	200
										10	20	30	40	50											
1	SS-1	44		ML		Sandy SILT; dark brown; 10% coarse sand; 11% medium sand; 15% fine sand; 15% sub-angular gravel; 49% non-plastic silt; FIRM.	4	4	4						29				2.63		85	75	84	49	
2	SS-2	56					2	2	2																
3	SS-3	87		SM		Silty SAND; brown; 32% sub-angular gravel; 33% non-plastic silt; 9% coarse sand; 15% medium sand; 11% fine sand; MEDIUM DENSE.	7	8	8						18				2.64		88	59	44	33	
4	SS-4	78					5	5	16																
5	SS-5	67		SW		Gravelly SAND; grayish brown; 13% non-plastic silt; 41% angular gravel; 16% coarse sand; 20% medium sand; 10% fine sand; MEDIUM DENSE TO DENSE.	15	18	20																
6	SS-6	67					17	15	12						10				2.64		59	43	23	13	
7	SS-7	78					9	9	16																
8	SS-8	100		CL		Sandy CLAY; grayish brown; 10% sub-angular gravel; 10% coarse sand; 26% fine sand; with little amount of medium sand; 48% medium plasticity clay; STIFF TO VERY STIFF.	8	9	12																
9	SS-9	100					4	5	5						24	49	28	2.64		80	80	74	48		
10	SS-10	100					9	12	16																
11	SS-11	44					10	18	32																
12	SS-12	100		SM		Silty SAND; grayish brown to brown; 18-27% non-plastic silt; 48-54% medium sand; 22-27 fine sand; MEDIUM DENSE TO VERY DENSE.	8	10	12						29				2.63		88	97	49	27	
13	SS-13	100					4	10	12																
14	SS-14	44					22	24	27																
15	SS-15	44					20	24	29						28				2.63		100	99	45	18	
16						End of Borehole (15.00 m)																			
17																									
18																									
19																									
20																									



BASIC TECHNOLOGY AND MANAGEMENT CORPORATION
2nd Floor Prudential Bank Building,
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MACHINE: ACKER ACE

DRILLER: J. DAWI

SUPERVISOR: M. ESTAURA

LEGEND:






-  SS - SPLIT SPOON SAMPLE
-  WS - WASH SAMPLE
-  UDS - UNDISTURBED SAMPLE
-  CR - CORE SAMPLE
-  W/ HYDROMETER ANALYSIS

Figure 5-3-3 (143/221) BORING LOGS (PHASE I)

FINAL BOREHOLE LOG AND SUMMARY OF TEST RESULTS **MRL - 31**

PROJECT: Pasig-Marikina River Channel Imp. Proj.						GROUND ELEV. (MLLW = Zero Datum) + 17.751			DEPTH OF WATER: 4.20 m.												
LOCATION: R. Bank, Marikina						STATION NO.: 10 + 460			DATE MEASURED: 14 Dec. 2000												
BH NO: BMRL-31 DATE DRILLED: 12 - 13 December 2000						WEATHER: FAIR			TIME MEASURED: 7:00 AM												
						COORDINATES: 1617,965.100 N, 508,770.500 E															
DEPTH, m	SAMPLE NO.	RECOVERY (%)	LOG SYMBOL	CLASSIFICATION	ROD	DESCRIPTION	BLOWS (SPT)			STANDARD PENETRATION TEST (SPT) (N-VALUE) 10 20 30 40 50	NATURAL MOIST. CONTENT, %	TOTAL UNIT WEIGHT, g/cc	ATTERBERG LIMITS		SPECIFIC GRAVITY	UNCONFINED COMP. TEST		SIEVE ANALYSIS % PASSING SIEVE			
							15 cm	15 cm	15 cm				LIQUID LIMIT, %	PLASTICITY INDEX, %		STRENGTH kg/cm ²	STRAIN %	4	10	40	200
1	SS-1	22		SW		Gravelly SAND; brown; 24% sub-angular gravel; 11% coarse sand; 18% medium sand; 17% fine sand; 30% non-plastic silt; LOOSE	4	2	2		1				2.64			76	65	47	30
2	SS-2	22					3	3	3												
3	SS-3	33		GM		Sandy GRAVEL; dark gray; 16% non-plastic silt; 11% medium sand; 11% fine sand with traces of coarse sand; 53% sub-angular gravel; VERY LOOSE TO MEDIUM DENSE.	3	1	2		39				2.65			47	38	27	16
4	SS-4	33					5	1	1												
5	SS-5	27					8	10	11												
6	SS-6	33		ML		Sandy SILT; gray; 12% fine sand with little amount of medium sand; 79% non-plastic silt; HARD	40	50	10		51				2.62			98	98	91	79
7				ST		Tuffaceous SANDSTONE; creamy brown; highly weathered; HARD.															
8	CR-1	17			18		CORING														
9	CR-2	38			25		CORING														
10																					
11	CR-3	47			25		CORING														
12	CR-4	44		SS	18	Tuffaceous SILTSTONE; creamy brown; highly weathered; HARD.					37	1.58					10.192	0.693			
13																					
14	CR-5	30			16		CORING														
15	CR-6	29			23		CORING				34	1.56					16.191	0.720			
16						End of Borehole (15.00 m)															
17																					
18																					
19																					
20																					



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MACHINE: ACKER ACE
DRILLER: R. ANDO
SUPERVISOR: M. ESTAURA

LEGEND:



SS - SPLIT SPOON SAMPLE
WS - WASH SAMPLE
UDS - UNDISTURBED SAMPLE
CR - CORE SAMPLE
W - HYDROMETER ANALYSIS

Figure 5-3-3 (144/221) BORING LOGS (PHASE I)

Figure 5-3-3 (145/221) BORING LOGS (PHASE I)

FINAL BOREHOLE LOG AND SUMMARY OF TEST RESULTS **MRL - 33****PROJECT:** Pasig-Marikina River Channel Imp. Proj.**GROUND ELEV.**
(MLLW = Zero Datum) + 16.029**DEPTH OF WATER:** 1.00 m.**LOCATION:** R. Bank, Marikina**STATION NO.:** 11 + 150**DATE MEASURED:** 04 Jan. 2001**BH NO:** BMRL-33 **DATE DRILLED:** 04 - 05 January 2001**WEATHER:** FAIR**TIME MEASURED:** 5:30 PM**COORDINATES:** 1617,731.100 N, 509,322.650 E

DEPTH, m	SAMPLE NO.	RECOVERY (%)	LOG SYMBOL	CLASSIFICATION	RQD	DESCRIPTION	BLOWS (SPT)			STANDARD PENETRATION TEST (SPT) (N-VALUE) 10 20 30 40 50	NATURAL MOIST. CONTENT, %	TOTAL UNIT WEIGHT, g/cc	ATTERBERG LIMITS		SPECIFIC GRAVITY	UNCONFINED COMP. TEST		SIEVE ANALYSIS % PASSING SIEVE			
							15 cm	15 cm	15 cm				LIQUID LIMIT, %	PLASTICITY INDEX, %		STRENGTH kg/cm ²	STRAIN %, %	4	10	40	200
1	SS-1	100		CH		Sandy CLAY; brown to grayish brown; 12% medium sand; 35% fine sand; traces of gravel and coarse sand; 53% high plasticity clay; SOFT.	2	2	2		26	80	34	2.62			94	88	78	53	
2	SS-2	67				1	1	2													
3	SS-3	67				5	5	5		24	57	32	2.62			87	80	71	49		
4	SS-4	86				4	5	5													
5	SS-5	100		GM		Sandy GRAVEL; brown; 17% coarse sand; 16% medium sand; traces of fine sand; 54% sub-rounded gravel; 5% non-plastic silt; LOOSE TO MEDIUM DENSE.	4	4	5												
6	SS-6	100				5	6	6		7			2.65			48	29	13	5		
7	SS-7	100				8	8	9													
8	SS-8	100		CH		Silty CLAY; brown; 96% high plasticity silty clay; with little amount of fine sand; VERY STIFF.	7	9	10												
9	SS-9	100				11	12	12		33	71	40	2.60			99	99	99	98		
10	SS-10	100				18	19	22													
11	SS-11	100				23	25	25													
12	SS-12	100				28	29	21		30	81	37	2.62			100	91	90	57		
13	SS-13	100				13	14	16													
14	SS-14	89				8	12	14													
15	SS-15	67		ML		Sandy SILT; brown to dark brown; 28% sub-angular gravel; 20% fine sand; traces of coarse to medium sand; 36% non-plastic silt; HARD.	15	16	23		14			2.65			72	63	56	36	
16	SS-16	100				30	30	20/10													
17						End of Borehole (15.95 m)															
18																					
19																					
20																					



BASIC TECHNOLOGY AND MANAGEMENT CORPORATION
2nd Floor Prudential Bank Building,
1377 A. Mabini St., Ermita, Manila

MACHINE: ACKER ACE
DRILLER: R. CASCAYAN
JIMENEZ
SUPERVISOR: M. ESTAURA
M. VILLAFUERTE

LEGEND:

SS - SPLIT SPOON SAMPLE
WS - WASH SAMPLE
UDS - UNDISTURBED SAMPLE
CR - CORE SAMPLE
W/ HYDROMETER ANALYSIS

Figure 5-3-3 (146/221) BORING LOGS (PHASE I)

FINAL BOREHOLE LOG AND SUMMARY OF TEST RESULTS **MRL - 34**

PROJECT: Pasig-Marikina River Channel Imp. Proj.					GROUND ELEV. (MLLW = Zero Datum) + 13.526					DEPTH OF WATER: 1.50 m.															
LOCATION: R. Bank, Calumpang Marikina					STATION NO.: 11 + 450					DATE MEASURED: 02 Jan. 2001															
BH NO: BMRL-34 DATE DRILLED: 02 - 03 January 2001					WEATHER: FAIR					TIME MEASURED: 1:30 PM															
					COORDINATES: 1617,520.000 N, 509,518.255 E																				
DEPTH, m	SAMPLE NO.	RECOVERY (%)	LOG SYMBOL	CLASSIFICATION	RQD	DESCRIPTION	BLOWS (SPT)			STANDARD PENETRATION TEST (SPT)					NATURAL MOIST. CONTENT, %	TOTAL UNIT WEIGHT, g/cc	ATTERBERG LIMITS		SPECIFIC GRAVITY	UNCONFINED COMP. TEST		SIEVE ANALYSIS % PASSING SIEVE			
							15 cm	15 cm	15 cm	(N-VALUE)							LIQUID LIMIT, %	PLASTICITY INDEX, %		STRENGTH kg/cm ²	STRAIN %,	4	10	40	200
1	SS-1	87		SM		Silty SAND; brown; 28% non-plastic silt; 71% fine sand; VERY LOOSE.	2	2	1						18				2.83				100	99	28
2	SS-2	100					1	2	3																
3	SS-3	100		CH		Sandy CLAY; brown; 43% fine sand; 57% high plasticity clay; FIRM.	2	3	2						37		55	31	2.82				100		57
4	SS-4	100					4	4	4																
5	SS-5	100					2	1	1																
6	SS-6	89		SM		Silty SAND; brown; 11-26% sub-angular gravel; 24-30% non-plastic silt; 9-14% coarse sand; 17-31% medium sand; 13-25% fine sand; VERY LOOSE TO MEDIUM DENSE.	4	4	4						38				2.84			89	80	49	24
7	SS-7	88					12	10	8																
8	SS-8	87					8	8	10																
9	SS-9	89					14	13	10						15				2.85			74	60	43	30
10	SS-10	89					9	9	10																
11	SS-11	100		CH		Sandy CLAY; brown; 11% fine sand; traces medium sand; little amount of gravel and coarse sand; 74% high plasticity clay; VERY STIFF TO HARD.	18	18	26																
12	SS-12	100					15	18	21						21		60	37	2.81			96	92	85	74
13	SS-13	100					20	22	19																
14	SS-14	100		ML		Sandy SILT; brown; 10% sub-angular gravel; 31% fine sand; with little amount of coarse to medium sand; 52% low plasticity silt; VERY STIFF TO HARD.	10	12	12																
15	SS-15	89					8	8	12						29				2.62			90	86	83	52
16	SS-16	85					34	32	18																
17						End of Borehole (15.92 m)																			
18																									
19																									
20																									



**BASIC TECHNOLOGY AND
MANAGEMENT CORPORATION**
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MACHINE: ACKER ACE
DRILLER: R. CASCAYAN
I. LUENGAS
SUPERVISOR: M. ESTAURA
M. VILLAFUERTE

LEGEND:



SS - SPLIT SPOON SAMPLE
WS - WASH SAMPLE
UDS - UNDISTURBED SAMPLE
CR - CORE SAMPLE
W - HYDROMETER ANALYSIS

Figure 5-3-3 (147/221) BORING LOGS (PHASE I)

FINAL BOREHOLE LOG AND SUMMARY OF TEST RESULTS **MRL - 35**PROJECT: **Passig-Marikina River Channel Imp. Proj.**GROUND ELEV.
(MLLW = Zero Datum) **+ 15.493**DEPTH OF WATER: **2.00** m.LOCATION: **R. Bank, Calumpang Marikina**STATION NO.: **11 + 750**DATE MEASURED: **28 Dec. 2000**BH NO: **BMRL-35** DATE DRILLED: **26 Dec. - 04 Jan. 2001**WEATHER: **FAIR**TIME MEASURED: **7:00 AM**COORDINATES: **1617,421.500** N, **509,761.651** E

DEPTH, m	SAMPLE NO.	RECOVERY (%)	LOG SYMBOL	CLASSIFICATION	RQD	DESCRIPTION	BLOWS (SPT)			STANDARD PENETRATION TEST (SPT) (N-VALUE) 10 20 30 40 50	NATURAL MOIST. CONTENT, %	TOTAL UNIT WEIGHT, g/cc	ATTERBERG LIMITS		SPECIFIC GRAVITY	UNCONFINED COMP. TEST		SIEVE ANALYSIS % PASSING SIEVE			
							15 cm	15 cm	15 cm				LIQUID LIMIT, %	PLASTICITY INDEX, %		STRENGTH kg/cm ²	STRAIN %	4	10	40	200
1	SS-1	67		SM		Silty SAND; brown; 41-47% non-plastic silt; 52-59% fine sand; LOOSE.	2	2	2		27				2.83			100	99	47	
2	SS-2	100		SM			2	2	4												
3	SS-3	89		SM			5	5	5		27				2.63			100		41	
4	SS-4	89		SM		Silty SAND; brown; 30% non-plastic silt; 13% coarse sand; 14% medium sand; 19% fine sand with 24% sub-rounded gravel; MEDIUM DENSE.	7	7	8												
5	SS-5	100		SM			5	12	13												
6	SS-6	100		SM			7	10	13		33				2.84			76	63	48	30
7	SS-7	100		CH			22	18	19												
8	SS-8	100		CH		Silty CLAY; creamy brown to brown; 96% high plasticity silty clay; with little amount of fine sand; VERY STIFF TO HARD.	10	12	12												
9	SS-9	100		CH			12	14	15		33		68	44	2.60			100	99	98	96*
10	SS-10	100		CH			9	11	21												
11	SS-11	100		CH			14	18	19												
12	SS-12	100		CH		Sandy CLAY; brown; 11% fine sand; 86% high plasticity clay; VERY STIFF.	12	10	12		22		57	35	2.60			100	98	97	85*
13	SS-13	89		CH			12	10	12												
14	SS-14	89		SM		Silty SAND; brown; 37% non-plastic silt; 18% medium sand; 44% fine sand; VERY DENSE.	24	29	21/7												
15	SS-15	100		SM			28	30	20/10		21				2.63			100	99	81	37
16						End of Borehole (14.95 m)															
17																					
18																					
19																					
20																					



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DRILLER: **R. CASCAYAN**
I. LUENGAS
SUPERVISOR: **M. ESTAURA**
M. VILLAFUERTE

LEGEND:



SS - SPLIT SPOON SAMPLE
WS - WASH SAMPLE
UDS - UNDISTURBED SAMPLE
CR - CORE SAMPLE
W/ HYDROMETER ANALYSIS

Figure 5-3-3 (148/221) BORING LOGS (PHASE I)

FINAL BOREHOLE LOG AND SUMMARY OF TEST RESULTS **MRL - 36**

PROJECT: Pasig-Marikina River Channel Imp. Proj.					GROUND ELEV. (MLLW = Zero Datum) + 15.391					DEPTH OF WATER: 0.50 m.				
LOCATION: R. Bank, Calumpang Marikina					STATION NO.: 12 + 112.60					DATE MEASURED: 28 Dec. 2000				
BH NO: BMRL-36 DATE DRILLED: 26 - 28 December 2000					WEATHER: FAIR					TIME MEASURED: 2:30 PM				
					COORDINATES: 1617,671.750 N, 509,918.750 E									

DEPTH, m	SAMPLE NO.	RECOVERY (%)	LOG SYMBOL	CLASSIFICATION	RQD	DESCRIPTION	BLOWS (SPT)			STANDARD PENETRATION TEST (SPT) (N-VALUE) 10 20 30 40 50	NATURAL MOIST. CONTENT, %	TOTAL UNIT WEIGHT, g/cc	ATTERBERG LIMITS		SPECIFIC GRAVITY	UNCONFINED COMP. TEST		SIEVE ANALYSIS % PASSING SIEVE			
							15 cm	15 cm	15 cm				LIQUID LIMIT, %	PLASTICITY INDEX, %		STRENGTH kg/cm ²	STRAIN %	4	10	40	200
1	SS-1	100		CH		Sandy Silty CLAY; brown; 49% high plasticity clay; 49% fine sand; VERY LOOSE.	1	0	1		42		50	26	2.82			100	98	49*	
2	UDS-1	100		SM		Sandy CLAY; brown; 27% fine sand; 72% high plasticity clay; PRESSED					43	1.60	55	35	2.81	Cc 0.420 Pc 1.180		100	99	72*	
3	SS-2	100				Silty SAND; grayish brown; fine sand; non-plastic silt; LOOSE.	3	4	3												
4	SS-3	100				Silty CLAY; brown; 90% high plasticity silty clay; traces of fine sand; VERY STIFF.	4	6	10		25		62	40	2.60			100	99	87	90*
5	SS-4	100					6	8	9												
6	SS-5	100					7	8	9												
7	SS-6	100				Sandy CLAY; brown; 11% fine sand; traces of fine sand and gravel; 77% high plasticity clay; VERY STIFF.	10	10	11		20		54	34	2.81			94	93	88	77*
8	SS-7	100					10	11	11												
9	SS-8	100					11	11	12												
10	SS-9	100		CH		Silty CLAY; brown; 91-94% high plasticity silty clay- traces of fine sand; VERY STIFF TO HARD.	12	12	12		28		54	34	2.80			100	99	98	84*
11	SS-10	100					13	14	14												
12	SS-11	100					15	15	16												
13	SS-12	100				Sandy CLAY; brown; 11% fine sand; 86% high plasticity clay; HARD.	20	18	19		34		55	28	2.60			100	99	91*	
14	SS-13	100					19	20	21												
15	SS-14	100					14	17	29												
16	SS-15	67					19	23	24		30		56	32	2.80			100	99	97	86*
17	SS-16	58					20	22	28												
18	SS-17	44					21	23	29												
19						End of Borehole (18.00 m)															
20																					



BASIC TECHNOLOGY AND MANAGEMENT CORPORATION
2nd Floor Prudential Bank Building,
1377 A. Mabini St., Ermita, Manila

MACHINE: ACKER ACE
DRILLER: J. MOGOL
M. ESTAURA
SUPERVISOR: M. VILLAFUERTE

LEGEND:




SS - SPLIT SPOON SAMPLE
WS - WASH SAMPLE
UDS - UNDISTURBED SAMPLE
CR - CORE SAMPLE
W/ HYDROMETER ANALYSIS

Figure 5-3-3 (149/221) BORING LOGS (PHASE I)

FINAL BOREHOLE LOG AND SUMMARY OF TEST RESULTS **MRL - 37**

PROJECT: Pasig-Marikina River Channel Imp. Proj.					GROUND ELEV. (MLLW = Zero Datum) <u>+ 14.683</u>					DEPTH OF WATER: <u>FREE FLOWING</u> m.																
LOCATION: R. Bank, Butiki Park, Marikina					STATION NO.: <u>12 + 350</u>					DATE MEASURED: <u>04 Jan. 2001</u>																
BH NO: BMRL-37 DATE DRILLED: 29 Dec. - 04 Jan. 2001					WEATHER: <u>FAIR</u>					TIME MEASURED: <u>5:00 PM</u>																
					COORDINATES: <u>1617,891.500</u> N, <u>509,932.500</u> E																					
DEPTH, m	SAMPLE NO.	RECOVERY (%)	LOG SYMBOL	CLASSIFICATION	RQD	DESCRIPTION	BLOWS (SPT)			STANDARD PENETRATION TEST (SPT)					NATURAL MOIST. CONTENT, %	TOTAL UNIT WEIGHT, g/cc	ATTERBERG LIMITS		SPECIFIC GRAVITY	UNCONFINED COMP. TEST		SIEVE ANALYSIS % PASSING SIEVE				
							15 cm	15 cm	15 cm	(N-VALUE)							LIQUID LIMIT, %	PLASTICITY INDEX, %		STRENGTH, kg/cm ²	STRAIN, %	4	10	40	200	
1	SS-1	100		ML		Sandy SILT; grayish brown; 44% fine sand; 54% non-plastic silt; FIRM.	1	3	3						42				2.83			99	88	98	54	
2	SS-2	100					2	4	7																	
3	SS-3	100					10	7	7						28	60	31	2.61			98	97	95	91		
4	SS-4	100					3	4	5																	
5	SS-5	100					8	13	17																	
6	SS-6	100		CH		Silty CLAY; grayish brown to brown; 91-97% high plasticity silty clay; little amount of fine sand; STIFF TO VERY STIFF.	8	9	11						27	59	34	2.60				100	99	97		
7	SS-7	100					9	8	10																	
8	SS-8	100					11	11	10																	
9	SS-9	100					10	9	10						23	62	42	2.60				100	99	97		
10	SS-10	100					8	11	12																	
11	SS-11	100					12	12	11																	
12	SS-12	100					13	12	13						39	61	40	2.60				100	99	95		
13	SS-13	89					15	15	25																	
14	SS-14	89		CH		Sandy CLAY; brown; 14% fine sand with little amount of coarse to medium sand; 82% high plasticity clay; HARD.	18	22	25																	
15	SS-15	67					19	21	22						31	54	30	2.61				100	98	98	82	
16	SS-16	67					19	23	24																	
17	SS-17	100					21	27	10																	
18						End of Borehole (16.95 m)																				
19																										
20																										



BASIC TECHNOLOGY AND MANAGEMENT CORPORATION
2nd Floor Prudential Bank Building,
1377 A. Mabini St., Ermita, Manila

MACHINE: ACKER ACE
DRILLER: J. MOGOL
SUPERVISOR: M. ESTAURA
M. VILLAFUERTE

LEGEND:






-  SS - SPLIT SPOON SAMPLE
-  WS - WASH SAMPLE
-  UDS - UNDISTURBED SAMPLE
-  CR - CORE SAMPLE
-  WI - HYDROMETER ANALYSIS

Figure 5-3-3 (150/221) BORING LOGS (PHASE I)

FINAL BOREHOLE LOG AND SUMMARY OF TEST RESULTS **MRL - 39**

PROJECT: Pasig-Marikina River Channel Imp. Proj.				GROUND ELEV. (MLLW = Zero Datum) + 14.241				DEPTH OF WATER: 1.20 m.													
LOCATION: R. Bank, Dela Peña, Marikina				STATION NO.: 12 + 950				DATE MEASURED: 18 Dec. 2000													
BH NO: BMRL-39 DATE DRILLED: 15 - 18 December 2001				WEATHER: FAIR				TIME MEASURED: 5:00 PM													
				COORDINATES: 1618,472.500 N, 509,890.400 E																	
DEPTH, m	SAMPLE NO.	RECOVERY (%)	LOG SYMBOL	CLASSIFICATION	RQD	DESCRIPTION	BLOWS (SPT)			STANDARD PENETRATION TEST (SPT) (N-VALUE) 10 20 30 40 50	NATURAL MOIST. CONTENT, %	TOTAL UNIT WEIGHT, g/cc	ATTERBERG LIMITS		SPECIFIC GRAVITY	UNCONFINED COMP. TEST		SIEVE ANALYSIS % PASSING SIEVE			
							15 cm	15 cm	15 cm				LIQUID LIMIT, %	PLASTICITY INDEX, %		STRENGTH kg/cm ²	STRAIN %	4	10	40	200
1	SS-1	89		ML		Sandy SILT; brown; 28% fine sand; 72% non-plastic silt; STIFF.	5	5	4		25				2.60					100	72
2	SS-2	87					4	5	7												
3	SS-3	87				Silty SAND; grayish brown; 16% sub-rounded gravel; 40% non-plastic silt; 30% fine sand; traces of coarse to medium sand; MEDIUM DENSE.	5	7	8		17				2.63			84	77	70	40
4	SS-4	56					27	15	7												
5	SS-5	56				Silty SAND; gray; 15% sub-rounded gravel; 25% coarse sand; 25% medium sand; 34% non-plastic silt; VERY LOOSE.	4	2	2												
6	SS-6	87		SM			2	1	2		21				2.63			85	80	35	34
7	SS-7	44					5	8	9												
8	SS-8	89				Silty SAND; gray; 21% non-plastic silt; 41% medium fine sand; 26% fine sand with traces of coarse sand; little amount of gravel; MEDIUM DENSE.	6	4	8												
9	SS-9	44					7	8	10		20				2.63			95	88	47	21
10	SS-10	56					8	7	10												
11	SS-11	67					7	6	7												
12	SS-12	100		CH		Sandy CLAY; gray; 10% fine sand; with little amount of medium sand; 86% high plasticity clay; FIRM TO VERY STIFF.	1	3	4		39	54	34	2.60				100	98	88	
13	SS-13	87					7	7	10												
14	SS-14	56					7	8	11												
15	SS-15	89		SM		Silty SAND; gray; 19% non-plastic silt; 12% medium fine sand; 58% fine sand; traces of coarse sand and gravel; MEDIUM DENSE.	12	12	16		22				2.63			96	89	77	19
						End of Borehole (15.00 m)															
16																					
17																					
18																					
19																					
20																					



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MACHINE: ACKER ACE
DRILLER: R. ANDO
SUPERVISOR: M. ESTAURA
M. VILLAFUERTE

LEGEND:




SS - SPLIT SPOON SAMPLE
WS - WASH SAMPLE
UDS - UNDISTURBED SAMPLE
CR - CORE SAMPLE
W - HYDROMETER ANALYSIS

Figure 5-3-3 (151/221) BORING LOGS (PHASE I)

FINAL BOREHOLE LOG AND SUMMARY OF TEST RESULTS *MRL - 40*

PROJECT: Pasig-Marikina River Channel Imp. Proj.					GROUND ELEV. (MLLW = Zero Datum) + 14.935					DEPTH OF WATER: 2.20 m.											
LOCATION: R. Bank, Dela Peña, Marikina					STATION NO.: 13 + 220					DATE MEASURED: 18 Dec. 2000											
BH NO: BMRL-40 DATE DRILLED: 18 December 2000					WEATHER: FAIR					TIME MEASURED: 5:00 PM											
					COORDINATES: 1618,738.100 N, 509,821.250 E																
DEPTH, m	SAMPLE NO.	RECOVERY (%)	LOG SYMBOL	CLASSIFICATION	RQD	DESCRIPTION	BLOWS (SPT)			STANDARD PENETRATION TEST (SPT) (N-VALUE) 10 20 30 40 50	NATURAL MOIST. CONTENT, %	TOTAL UNIT WEIGHT, g/cc	ATTERBERG LIMITS		SPECIFIC GRAVITY	UNCONFINED COMP. TEST		SIEVE ANALYSIS % PASSING SIEVE			
							15 cm	15 cm	15 cm				LIQUID LIMIT, %	PLASTICITY INDEX, %		STRENGTH kg/cm ²	STRAIN %	4	10	40	200
1	SS-1	44		ML		Sandy SILT; brown; 38% fine sand; 62% non-plastic silt; FIRM.	2	2	3		17			2.81						100	62
2	SS-2	56					2	2	2												
3	SS-3	67		CH		Sandy CLAY; gray to grayish brown; 20% fine sand; 79% high plasticity clay; SOFT.	2	1	1		45	60	42	2.61				100	99	79*	
4	SS-4	44					2	2	2												
5	SS-5	78		ML		Sandy SILT; gray; 24% fine sand; 76% non-plastic silt; FIRM TO STIFF.	3	2	2												
6	SS-6	44					5	5	5		39			2.80					100	78	
7	SS-7	56					4	4	5												
8	SS-8	67					2	2	2												
9	SS-9	67				Silty CLAY; dark gray; 97% high plasticity silty clay; with little amount of fine sand; SOFT TO STIFF.	3	2	2		121	70	47	2.60					100	97*	
10	SS-10	78		CH			5	4	5												
11	SS-11	78				Sandy CLAY; gray; 20% medium sand; 22% fine sand; traces of coarse sand and gravel; 52% high plasticity clay; FIRM TO VERY STIFF.	6	3	5												
12	SS-12	33					9	10	8		29	75	56	2.60				92	84	64	52*
13	SS-13	22					10	10	11												
14	SS-14	33					9	15	13												
15	SS-15	33		SW		Gravelly SAND; gray; 26% sub-rounded gravel; 19% coarse sand; 27% medium sand; 10% fine sand; 18% non-plastic silt; VERY STIFF TO HARD.	9	15	18		13			2.64				74	55	28	18
16	SS-16	44					17	18	22												
17						End of Borehole (16.00 m)															
18																					
19																					
20																					



BASIC TECHNOLOGY AND MANAGEMENT CORPORATION
2nd Floor Prudential Bank Building,
1377 A. Mabini St., Ermita, Manila

MACHINE: ACKER ACE
DRILLER: I. ANDOYO
SUPERVISOR: M. ESTAURA

LEGEND:

SS - SPLIT SPOON SAMPLE
WS - WASH SAMPLE
UDS - UNDISTURBED SAMPLE
CR - CORE SAMPLE

*

W/ HYDROMETER ANALYSIS

Figure 5-3-3 (152/221) BORING LOGS (PHASE I)

FINAL BOREHOLE LOG AND SUMMARY OF TEST RESULTS **MRL - 41**

PROJECT: Pasig-Marikina River Channel Imp. Proj.					GROUND ELEV. (MLLW = Zero Datum) + 17.131					DEPTH OF WATER: 3.00 m.				
LOCATION: R. Bank, Manila Bay Side, Mkna Youth Camp					STATION NO.: 13 + 550					DATE MEASURED: 20 Dec. 2000				
BH NO: BMRL-41 DATE DRILLED: 19 - 20 December 2000					WEATHER: FAIR					TIME MEASURED: 5:00 PM				
					COORDINATES: 1619,066.750 N, 509,721.500 E									

DEPTH, m	SAMPLE NO.	RECOVERY (%)	LOG SYMBOL	CLASSIFICATION	ROD	DESCRIPTION	BLOWS (SPT)			STANDARD PENETRATION TEST (SPT)					NATURAL MOIST. CONTENT, %	TOTAL UNIT WEIGHT, g/cc	ATTERBERG LIMITS		SPECIFIC GRAVITY	UNCONFINED COMP. TEST		SIEVE ANALYSIS % PASSING SIEVE					
							15 cm	15 cm	15 cm	(N-VALUE)							LIQUID LIMIT, %	PLASTICITY INDEX, %		STRENGTH kg/cm ²	STRAIN %	4	10	40	200		
										10	20	30	40	50													
1	SS-1	67		CH		Sandy CLAY; brown; 20-28% fine sand; 68-80% high plasticity clay; SOFT.	1	2	2						32	55	32	2.61			98	97	96	98*			
2	SS-2	78					2	2	2																		
3	SS-3	67					2	1	1								34	63	42	2.61						100	80*
4	SS-4	71					1	1	2																		
5	SS-5	44		SM		Silty SAND; brown; 35% medium sand; 31% fine sand-traces of gravel and coarse sand; MEDIUM DENSE.	6	3	7																		
6	SS-6	62					7	7	7							20			2.63			91	83	48	17		
7	SS-7	56					7	7	9																		
8	SS-8	56					5	7	6																		
9	SS-9	18					8	11	15							23			2.63			99	89	89	21		
10	SS-10	44					10	13	17																		
11	SS-11	44		SW		Gravelly SAND; gray; 7-16% non-plastic silt; 12-23% sub-rounded gravel; 21-26% coarse sand; 24-42% medium fine sand; 13-16% fine sand; MEDIUM DENSE TO DENSE.	13	20	25																		
12	SS-12	33					10	10	11							13			2.63			86	62	20	7		
13	SS-13	56					11	9	10																		
14	SS-14	56					10	15	15																		
15	SS-15	44					9	15	16							9			2.63			77	56	32	16		
16						End of Borehole (15.00 m)																					
17																											
18																											
19																											
20																											







 BASIC TECHNOLOGY AND MANAGEMENT CORPORATION 2nd Floor Prudential Bank Building, 1377 A. Mabini St., Ermita, Manila	MACHINE: ACKER ACE	LEGEND:  SS - SPLIT SPOON SAMPLE  WS - WASH SAMPLE  UDS - UNDISTURBED SAMPLE  CR - CORE SAMPLE  W/ - HYDROMETER ANALYSIS
	DRILLER: I. ANDOYO	
	SUPERVISOR: M. ESTAURA	

Figure 5-3-3 (153/221) BORING LOGS (PHASE I)

FINAL BOREHOLE LOG AND SUMMARY OF TEST RESULTS **MRL - 42****PROJECT:** Pasig-Marikina River Channel Imp. Proj.**LOCATION:** R. Bank, Youth Camp, Marikina**BH NO:** BMRL-42 **DATE DRILLED:** 21 - 23 December 2000**GROUND ELEV.**
(MLLW = Zero Datum) + 14.301**STATION NO.:** 13 + 850**WEATHER:** FAIR**COORDINATES:** 1619,328.200 N, 509,632.500 E**DEPTH OF WATER:** 4.00 m.**DATE MEASURED:** 22 Dec. 2000**TIME MEASURED:** 5:00 PM

DEPTH, m	SAMPLE NO.	RECOVERY (%)	LOG SYMBOL	CLASSIFICATION	ROD	DESCRIPTION	BLOWS (SPT)			STANDARD PENETRATION TEST (SPT) (N-VALUE) 10 20 30 40 50	NATURAL MOIST. CONTENT, %	TOTAL UNIT WEIGHT, g/cc	ATTERBERG LIMITS		SPECIFIC GRAVITY	UNCONFINED COMP. TEST		SIEVE ANALYSIS % PASSING SIEVE			
							15 cm	15 cm	15 cm				LIQUID LIMIT, %	PLASTICITY INDEX, %		STRENGTH kg/cm ²	STRAIN %	4	10	40	200
1	SS-1	67		CH		Sandy CLAY; brown; 11-43% fine sand; 55-81% high plasticity clay; with little amount of medium fine sand; SOFT TO FIRM.	1	1	1		31				2.62				100	98	55
2	SS-2	78					2	1	1												
3	SS-3	78					1	0	1		36		57	35	2.61			100	99	98	80
4	SS-4	67					1	1	1												
5	SS-5	78					1	1	2												
6	SS-6	71		SM		Silty SAND; gray; 44% non-plastic silt; 16% coarse sand; 40% fine sand; LOOSE.	12	3	4		41		62	42	2.61			99	96	92	81
7	SS-7	89					3	3	4												
8	SS-8	67					3	2	4												
9	SS-9	78					2	2	2		26				2.63			100	84	84	44
10	SS-10	82					3	3	2												
11	SS-11	44		GM		Silty SAND; gray; 26% non-plastic silt; 12% sub-angular gravel; 13% coarse sand; 31% medium sand; 18% fine sand; MEDIUM DENSE TO DENSE.	7	9	8												
12	SS-12	33					8	8	9		18				2.63			88	75	44	28
13	SS-13	33					15	16	16												
14	SS-14	27					14	16	18												
15	SS-15	40					19	20	20		10				2.65			49	36	14	3
16	SS-16	44				Sandy GRAVEL; gray; 13% coarse; 22% medium sand; 11% fine sand; with little amount of non-plastic silt; 51% sub-angular gravel; DENSE TO VERY DENSE.	21	20	22												
17	SS-17	67					21	30	35												
18						End of Borehole (17.00 m)															
19																					
20																					



BASIC TECHNOLOGY AND MANAGEMENT CORPORATION
2nd Floor Prudential Bank Building,
1377 A. Mabini St., Ermita, Manila

MACHINE: ACKER ACE
DRILLER: D. ANDOYO
SUPERVISOR: M. ESTAURA

LEGEND:

SS - SPLIT SPOON SAMPLE
WS - WASH SAMPLE
UDS - UNDISTURBED SAMPLE
CR - CORE SAMPLE
W/ - HYDROMETER ANALYSIS

Figure 5-3-3 (154/221) BORING LOGS (PHASE I)

FINAL BOREHOLE LOG AND SUMMARY OF TEST RESULTS **MRL - 43**

PROJECT: Pasig-Marikina River Channel Imp. Proj.					GROUND ELEV. (MLLW = Zero Datum) + 12.933					DEPTH OF WATER: 1.50 m.				
LOCATION: R. Bank, Sto. Niño, Marikina					STATION NO.: 14 + 115					DATE MEASURED: 06 Jan. 2001				
BH NO: BMRL-43 DATE DRILLED: 05 - 06 January 2001					WEATHER: FAIR					TIME MEASURED: 3:00 PM				
					COORDINATES: 1619,595.500 N, 509,560.750 E									

DEPTH, m	SAMPLE NO.	RECOVERY (%)	LOG SYMBOL	CLASSIFICATION	RQD	DESCRIPTION	BLOWS (SPT)			STANDARD PENETRATION TEST (SPT) (N-VALUE)	NATURAL MOIST. CONTENT, %	TOTAL UNIT WEIGHT, g/cc	ATTERBERG LIMITS		SPECIFIC GRAVITY	UNCONFINED COMP. TEST		SIEVE ANALYSIS % PASSING SIEVE			
							15 cm	15 cm	15 cm				LIQUID LIMIT, %	PLASTICITY INDEX, %		STRENGTH kg/cm ²	STRAIN %	4	10	40	200
1	SS-1	100		CH		Sandy CLAY; brown to grayish brown; high plasticity; 39% fine sand; STIFF.	4	4	6		39	57	33	2.81			100	99	80		
2	SS-2	100		SM		Silty SAND; brown; 30% fine sand; 19% medium sand; 6% rounded to sub-rounded lithic gravels; medium to high plasticity; moderately graded; MEDIUM DENSE TO VERY DENSE.	4	12	12												
3	SS-3	100					4	13	28		31	54	28	2.83			94	88	69	39	
4	SS-4	73					19	28	22												
5	CR-1	25		ST		Tuffaceous SANDSTONE; cream; very fine grained; broken; HARD.	CORING														
6	CR-2	30					CORING														
7	SS-5	75		SC		Clayey Silty SAND; light brown to brown; well graded sand component; low to non-plasticity; with few sub-angular gravel particles; VERY DENSE.	18	22	28												
8	SS-6	77					20	25	25		38	54	27	2.62			96	88	69	49	
9	SS-7	75					20	26	24												
10	CR-3	30		ST	0	Tuffaceous SANDSTONE; grayish cream; medium to very coarse grained; generally broken; HARD.	CORING														
11	SS-8	75		SC		Clayey Silty SAND; light brown well graded; low to non-plasticity; VERY DENSE.	18	22	28												
12	CR-4	25			0		CORING														
13	CR-5	55		ST	0	Tuffaceous SANDSTONE; grayish cream; highly weathered; medium to very coarse grained; layered; poorly sorted; generally broken; HARD.	CORING														
14	CR-6	38			17		CORING			18	1.45			48.65	1.397						
15	CR-7	41			15		CORING			25	1.58			81.28	2.81						
16	CR-8	53			0		CORING														
17						End of Borehole (16.00 m)															
18																					
19																					
20																					







 BASIC TECHNOLOGY AND MANAGEMENT CORPORATION 2nd Floor Prudential Bank Building, 1377 A. Mabini St., Ermita, Manila	MACHINE: ACKER AGE DRILLER: J. MOGOL SUPERVISOR: M. ESTAURA M. VILLAFUERTE	LEGEND:  SS - SPLIT SPOON SAMPLE  WS - WASH SAMPLE  UDS - UNDISTURBED SAMPLE  CR - CORE SAMPLE  W/H - HYDROMETER ANALYSIS
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Figure 5-3-3 (155/221) BORING LOGS (PHASE I)

FINAL BOREHOLE LOG AND SUMMARY OF TEST RESULTS **MRL - 44**

PROJECT: Pasig-Marikina River Channel Imp. Proj.					GROUND ELEV. (MLLW = Zero Datum) <u>+ 13.574</u>					DEPTH OF WATER: <u>1.00</u> m.				
LOCATION: R. Bank, Sto. Niño, Marikina					STATION NO.: <u>14 + 420</u>					DATE MEASURED: <u>12 Jan. 2001</u>				
BH NO: BMRL-44 DATE DRILLED: 09 - 11 January 2001					WEATHER: <u>FAIR</u>					TIME MEASURED: <u>7:00 AM</u>				
					COORDINATES: <u>1619,888.750</u> N, <u>509,461.100</u> E									

DEPTH, m	SAMPLE NO.	RECOVERY (%)	LOG SYMBOL	CLASSIFICATION	RQD	DESCRIPTION	BLOWS (SPT)			STANDARD PENETRATION TEST (SPT)					NATURAL MOIST. CONTENT, %	TOTAL UNIT WEIGHT, g/cc	ATTERBERG LIMITS		SPECIFIC GRAVITY	UNCONFINED COMP. TEST		SIEVE ANALYSIS			
							15 cm	15 cm	15 cm	(N-VALUE)							LIQUID LIMIT, %	PLASTICITY INDEX, %		STRENGTH kg/cm ²	STRAIN %	% PASSING SIEVE			
							10	20	30	40	50	4	10	40								200			
1	SS-1	100		CH		Sandy CLAY; brown to grayish brown; 12% sub-angular gravel; 10% fine sand; with little amount of coarse to medium sand; 71% high plasticity clay; STIFF TO VERY STIFF.	3	5	7						28	55	27	2.61		88	86	81	71		
2	SS-2	100				8	6	9																	
3	SS-3	100				11	9	14							28	52	28	2.64		77	66	56	49		
4	SS-4	89				10	10	11																	
5	SS-5	100				18	10	15																	
6	SS-6	100				9	7	9							26	58	31	2.61		85	91	81	60		
7	SS-7	89				7	12	18																	
8	SS-8	100				10	18	20																	
9	SS-9	100				15	24	10							22	56	31	2.63		87	78	61	43		
10	SS-10	52				20	28	8																	
11	SS-11	100				19	25	10																	
12	SS-12	62		SM		Silty SAND; brown to grayish brown; 23% sub-rounded to sub-angular gravel; 17% coarse sand; 20% medium sand and 14% fine sand; 26% non-plastic silt; VERY DENSE.	20	30	10						39			2.64		77	60	40	28		
13	SS-13	36				22	29	12																	
14	SS-14	50				20	30	10																	
15	SS-15	57		OW		GRAVEL; brownish gray to gray; sub-angular gravel with little amount of coarse to fine sand with non-plastic silt; VERY DENSE.	22	35	5						27			2.65		19	13	9	7		
16							End of Borehole (14.90 m)																		
17																									
18																									
19																									
20																									







	BASIC TECHNOLOGY AND MANAGEMENT CORPORATION 2nd Floor Prudential Bank Building, 1377 A. Mabini St., Ermita, Manila	MACHINE: <u>KANO</u>	LEGEND:  SS - SPLIT SPOON SAMPLE  WS - WASH SAMPLE  UDS - UNDISTURBED SAMPLE  CR - CORE SAMPLE  W/ HYDROMETER ANALYSIS
		DRILLER: <u>J. MOGOL</u>	
		SUPERVISOR: <u>M. ESTAURA</u>	
		<u>M. VILLAFUERTE</u>	

Figure 5-3-3 (156/221) BORING LOGS (PHASE I)

FINAL BOREHOLE LOG AND SUMMARY OF TEST RESULTS **MRL - 45**PROJECT: **Pasig-Marikina River Channel Imp. Proj.**GROUND ELEV.
(MLLW = Zero Datum) **+ 14.942**DEPTH OF WATER: **2.50** m.LOCATION: **R. Bank, Sto. Niño, Marikina**STATION NO.: **14 + 650**DATE MEASURED: **12 Jan. 2001**WEATHER: **FAIR**TIME MEASURED: **5:30 PM**BH NO: **BMRL-45** DATE DRILLED: **11 - 12 January 2001**COORDINATES: **1620,258.750** N, **509,485.250** E

DEPTH, m	SAMPLE NO.	RECOVERY (%)	LOG SYMBOL	CLASSIFICATION	ROD	DESCRIPTION	BLOWS (SPT)			STANDARD PENETRATION TEST (SPT) (N-VALUE) 10 20 30 40 50	NATURAL MOIST. CONTENT, %	TOTAL UNIT WEIGHT, g/cc	ATTERBERG LIMITS		SPECIFIC GRAVITY	UNCONFINED COMP. TEST		SIEVE ANALYSIS % PASSING SIEVE			
							15 cm	15 cm	15 cm				LIQUID LIMIT, %	PLASTICITY INDEX, %		STRENGTH kg/cm ²	STRAIN %	4	10	40	200
1	SS-1	100		SM		Silty SAND; brown; 26% non-plastic silt; 17% angular gravel; 11% coarse sand; 37% fine sand; traces of medium sand; LOOSE	2	2	3		22			2.64			83	72	63	26	
2	SS-2	100		SW		Gravelly SAND; brown; 20% non-plastic silt; 37% angular gravel; 16% coarse sand; 19% fine sand; traces of medium sand; MEDIUM DENSE	5	10	5		16			2.65			83	47	39	20	
3	SS-3	100		CH		Silty CLAY; brown to brownish gray; 96-99% high plasticity silty clay; SOFT TO FIRM.	2	2	2		46	57	36	2.60			100	99	98	96*	
4	SS-4	100					4	3	4		43	71	49	2.60			99	99	98	97*	
5	SS-5	100					3	4	3												
6	SS-6	100					2	3	4		45	73	51	2.60						100	99*
7	SS-7	100					3	3	3												
8	SS-8	100					3	4	4		46	61	31	2.61			100	99	95	75*	
9	SS-9	100		CH		Sandy CLAY; gray; 4-10% medium sand; 8-20% fine sand; little amount of coarse sand; 75% high plasticity clay; FIRM TO VERY STIFF.	6	7	9		36	57	27	2.61			98	93	83	75*	
10	SS-10	100					7	8	8												
11	SS-11	100					8	10	10												
12	SS-12	75		SW		Gravelly SAND; gray; 43% angular to sub-rounded gravel; 15% coarse sand; 20% medium sand; 10% fine sand; 12% non-plastic silt; VERY DENSE.	10	25	10		22			2.65			57	42	22	12	
13	SS-13	50		CH		Sandy CLAY; brown; 11% sub-angular to sub-rounded gravel; 29% fine sand; 57% high plasticity clay; HARD.	15	22	10												
14	SS-14	62					16	23	10												
15	SS-15	49					20	28	11		28	45	25	2.61			88	87	86	57*	
16						End of Borehole (14.96 m)															
17																					
18																					
19																					
20																					



BASIC TECHNOLOGY AND MANAGEMENT CORPORATION
2nd Floor Prudential Bank Building,
1377 A. Mabini St., Ermita, Manila

MACHINE: **KANO**
DRILLER: **J. MOGOL**
SUPERVISOR: **M. ESTAURA**
M. VILLAFUERTE

LEGEND:



SS - SPLIT SPOON SAMPLE
WS - WASH SAMPLE
UDS - UNDISTURBED SAMPLE
CR - CORE SAMPLE
W/ HYDROMETER ANALYSIS

Figure 5-3-3 (157/221) BORING LOGS (PHASE I)

FINAL BOREHOLE LOG AND SUMMARY OF TEST RESULTS **MRW-1a**PROJECT: **Pasig-Marikina River Channel Imp. Proj.**GROUND ELEV.
(MLLW = Zero Datum) **+ 10.975**DEPTH OF WATER: **1.22** m.LOCATION: **Napindan Floodgate, Bagong Ilog, Pasig**STATION NO.: **00 + 150**DATE MEASURED: **13 Mar. 2001**BHR NO: **BMRW-1** DATE DRILLED: **13 - 17 March 2001**WEATHER: **FAIR**TIME MEASURED: **7:00 AM**COORDINATES: **1610184.750 N, 507158.500 E**

DEPTH (m)	SAMPLE NO.	RECOVERY (%)	LOG SYMBOL	CLASSIFICATION	RQD	DESCRIPTION	BLOWS (SPT)			STANDARD PENETRATION TEST (SPT) (N-VALUE)	NATURAL MOIST. CONTENT, %	TOTAL UNIT WEIGHT, g/cc	ATTERBERG LIMITS		SPECIFIC GRAVITY	UNCONFINED COMP. TEST		SIEVE ANALYSIS % PASSING SIEVE			
							15 cm	15 cm	15 cm				LIQUID LIMIT, %	PLASTICITY INDEX, %		STRENGTH kg/cm ²	STRAIN W, %	4	10	40	200
1	SS-1	89		CH		Sandy CLAY; dark gray; 26% fine sand; 72% high plasticity clay; VERY SOFT.	1	0	0		37		62	40	2.61				100	98	72
2	SS-2	100		SP		Fine To Medium SAND; dark gray; 10% coarse sand; 35% medium sand; 52% fine sand; VERY LOOSE.	1	1	1												
3	SS-3	78					1	0	1		38				2.63			99	89	54	2
4	SS-4	78		SC		Clayey SAND; gray; 40% high plasticity clay; 54% fine sand with little amount of coarse to medium sand. VERY LOOSE.	1	1	1												
5	SS-5	89		SP		SAND; gray; 13% medium sand; 76% fine sand with little amount of coarse sand and gravel, LOOSE.	1	2	2		44		56	35	2.63			100	98	94	40
6	SS-6	78					2	3	5		28				2.63			95	90	77	1
7	SS-7	78		SW		Gravelly SAND; brownish gray; 70% well-graded sand w/ little amount of non-plastic silt; 25% gravel; MEDIUM DENSE.	5	14	14		33				2.64			75	54	30	5
8	SS-8	78					10	10	12		22				2.63			96	83	49	1
9	SS-9	78					5	8	8												
10	SS-10	78					11	13	18												
11	SS-11	56					11	12	13		12				2.63			95	73	21	1
12	SS-12	56					11	11	10												
13	SS-13	78					7	9	9												
14	SS-14	89		SP		Medium to coarse SAND; gray to brownish gray; 12-30% coarse sand; 34-52% medium sand; 20-48% fine sand; with little amount of gravel and non plastic silt. MEDIUM DENSE to DENSE.	6	6	7		21				2.63			97	85	46	5
15	SS-15	67					8	9	9												
16	SS-16	56					8	8	10												
17	SS-17	56					5	5	7		16				2.63			95	65	26	5
18	SS-18	78					6	6	8												
19	SS-19	67					6	9	10												
20	SS-20	67		SW		Gravelly SAND; grayish brown to brown; 26% angular to sub angular gravel; 73% well-graded sand; MEDIUM DENSE.	8	11	11		23				2.64			74	55	22	1



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MACHINE: **ACKER ACE**
DRILLER: **A. TENERIFE**
SUPERVISOR: **M. VILLAFUERTE**





LEGEND:



SS - SPLIT SPOON SAMPLE
WS - WASH SAMPLE
UDS - UNDISTURBED SAMPLE
CR - CORE SAMPLE
W/ HYDROMETER ANALYSIS

Figure 5-3-3 (158/221) BORING LOGS (PHASE I)

FINAL BOREHOLE LOG AND SUMMARY OF TEST RESULTS **MRW - 1b**PROJECT: **Pasig-Marikina River Channel Imp. Proj.**GROUND ELEV.
(MLLW = Zero Datum) **+ 10.975**DEPTH OF WATER: **1.22** m.LOCATION: **Napindan Floodgate, Bagong Ilog, Pasig**STATION NO.: **00 + 150**DATE MEASURED: **13 Mar. 2001**WEATHER: **FAIR**TIME MEASURED: **7:00 AM**NO: **BMRW-1** DATE DRILLED: **13 - 17 March 2001**COORDINATES: **1610184.750** N, **507158.500** E

SAMPLE NO.	RECOVERY (%)	SAMPLE	LOG SYMBOL	CLASSIFICATION	RQD	DESCRIPTION	BLOWS (SPT)			STANDARD PENETRATION TEST (SPT)	NATURAL MOIST. CONTENT, %	TOTAL UNIT WEIGHT, g/cc	ATTERBERG LIMITS		SPECIFIC GRAVITY	UNCONFINED COMP. TEST		SIEVE ANALYSIS % PASSING SIEVE						
							15 cm	15 cm	15 cm				(N-VALUE)	LIQUID LIMIT, %		PLASTICITY INDEX, %	STRENGTH kg/cm ²	STRAIN %, %	4	10	40	200		
																							10	20
SS-21	78			SW		Gravelly SAND; grayish brown to brown; 10% angular gravel; 16% coarse sand; 44% medium sand; 28% fine sand with very little amount of non-plastic silt; DENSE.	10	15	25															
SS-22	67					END OF BOREHOLE (22.00 m)	11	18	26						27			2.63			90	74	30	2



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LEGEND:



SS - SPLIT SPOON SAMPLE
WS - WASH SAMPLE
UDS - UNDISTURBED SAMPLE
CR - CORE SAMPLE
W/ HYDROMETER ANALYSIS

Figure 5-3-3 (159/221) BORING LOGS (PHASE I)

FINAL BOREHOLE LOG AND SUMMARY OF TEST RESULTS **MRW - 2a**PROJECT: **Pasig-Marikina River Channel Imp. Proj.**GROUND ELEV.
(MLLW = Zero Datum) **+ 10.940**DEPTH OF WATER: **1.40** m.LOCATION: **Bagong Ilog, Pasig City**STATION NO.: **00 + 450**DATE MEASURED: **13 Mar. 2001**WEATHER: **FAIR**TIME MEASURED: **8:00 AM**NO: **BMRW-2** DATE DRILLED: **09 - 12 March 2001**COORDINATES: **1610246.750** N, **507536.250** E

SAMPLE NO.	RECOVERY (%) SAMPLE	LOG SYMBOL	CLASSIFICATION	RQD	DESCRIPTION	BLOWS (SPT)			STANDARD PENETRATION TEST (SPT) (N-VALUE) 10 20 30 40 50	NATURAL MOIST. CONTENT, %	TOTAL UNIT WEIGHT, g/cc	ATTERBERG LIMITS		SPECIFIC GRAVITY	UNCONFINED COMP. TEST		SIEVE ANALYSIS % PASSING SIEVE			
						15 cm	15 cm	15 cm				LIQUID LIMIT, %	PLASTICITY INDEX, %		STRENGTH kg/cm ²	STRAIN N, %	4	10	40	200
SS-1	100		CH		Sandy CLAY; dark gray; 25% fine sand; 74% high plasticity clay. VERY SOFT.	1	1	0		50	56	37	2.61				100	99	74	
SS-2	100					1	1	1												
SS-3	100		SW		Silty Gravelly SAND; 13% non-plastic silt; 18% sub-angular gravel; 20% coarse sand; 16% medium sand; 33% fine sand, LOOSE.	1	2	1		55			2.64				82	62	46	13
SS-4	100					1	3	4												
SS-5	100				Sandy CLAY; dark brownish gray; 27% fine sand; 72% high plasticity clay; FIRM.	2	3	3		59	65	42	2.61				100	99	99	72
SS-6	100		CH			3	5	4												
SS-7	100				Silty CLAY; dark brownish gray; contains little amount of medium sand; 94% plastic silty clay; STIFF to FIRM.	1	2	3		79	83	62	2.60				99	98	95	94
SS-8	89					5	4	3												
SS-9	78					20	25	35		5			2.66				20	13	6	1
SS-10	44		GW		Sandy GRAVEL; gray; 80% angular to sub-angular gravel with traces of coarse to fine sand and shell fragments; VERY DENSE to MEDIUM DENSE.	15	10	11												
SS-11	89					5	5	5												
SS-12	100					6	8	5												
SS-13	89					6	6	7		7			2.63				97	45	8	1
SS-14	89					5	5	7												
SS-15	89					8	7	6												
SS-16	89		SP		Gravelly SAND; light brown; 3-11% sub-angular gravel and gravel size shell fragments; 52-62% coarse sand; 25-37% medium sand with traces of fine sand; MEDIUM DENSE.	6	5	6												
SS-17	89					4	5	5		7			2.63				89	27	2	1
SS-18	100					8	7	6												
SS-19	89					10	9	9												
SS-20	89					12	11	12												

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DRILLER: **J. MADERA**
SUPERVISOR: **M. VILLAFUERTE**

LEGEND:



SS - SPLIT SPOON SAMPLE
WS - WASH SAMPLE
UDS - UNDISTURBED SAMPLE
CR - CORE SAMPLE
W/ HYDROMETER ANALYSIS

Figure 5-3-3 (160/221) BORING LOGS (PHASE I)