DRILL LOG HOLE NO. AD-3 SHEET NO. 1 OF 2

PROJECT	Study on Water Re	sources Dev	elop	ment for Metro Manila	DEPTH	50.00m	ELE/	/ATION	117.92m
SITE	Agos Damsite	COODINA	TE	N 1,624,633; E 557,376	INCLINATION	Vertical	DRII	LL RIG	TFM
CASING DEPTH	10.00m	DATE			DRILLED	M.Mabit	azan		

				lio		Core Recovery				SPT-T	est			
	E Elevation	E Depth	Column Section	Type of Rock or Soil	Description	Rock Classificat	G.W.L	N-Value		10 2	l-Valu	e 40	50	WPT-Test (Lugeon Value)
1 2 3 4 5 6 7 8		100000			0.00-11.00m Brown sandy silt, loose. Extremely weathered zone. 11.00-24.70m Brown sandy silt with slightly soft fragments of sandstone.	(95) 100 — (95) 5 — (7 8 11 15 17 26 28 31 33 38 50 25	3.00 3.70 4.00 4.70 5.00 5.70 6.00 6.70 7.00 7.70 8.00 8.70 9.00 9.70	(17/30) (8/30) (11/30) (16/30) (17/3	(28/3	0)	50	
- 15 - 16 - 17 - 18 - 19 - 20 - 21 - 22				Sandy Silt with cobble		(40) (40) (40)	18.5	600						Lu'=7.5 (Pc=5.2) Lu'=6.2 (Pc=6.1)
- 23 - 24 9 - 25 26 - 27 28 - 29	93.22	24.70		Sand Stone	24.70-33.40m Gray sandstone, cracky rock and fragments.	(109) (100) (100) (100) (100) (100) (100)								Lu'=5.6 (Pc=7.8)

DRILL LOG HOLE NO. AD-3 SHEET NO. 2 OF 2

PROJECT	Study on Water Re	sources De	evelop	ment for Metro Manila	DEPTH	50.00m	ELEV	/ATION	117.92m
SITE	Agos Damsite	COODIN	IATE	N 1,624,633; E 557,376	INCLINATION	Vertical	DRII	LL RIG	TFM
CASING DEPTH	10.00m	DATE			DRILLED	M.Mabit	azan		

			u	lios		Core Recovery		_		SPT-T	est		
Scale	Elevation	E Depth	Column Section	Type of Rock or Soil	Description	cat	G.W.L	in-value	0 1	0 2	V-Value	40	WPT-Test (Lugeon Value)
31 32 33 34					33.40-35.00m Gray sandstone, medium grained.	(24) (64) (24) (65) (25) (25) (25) (25) (25) (25)					30	40	Lu'=12
35 36 37 38 39				Stone	Some vertical cracks in which surface is brownish, with thin calcite veins. 35.00-45.50m Gray sandstone, medium to coarse grained and stiff. In 35.00-37.60m, crack with	[165] [165] [165] [165] [160]							Lu'=6.5 (Pc=7.8
40 41 42 43 44				Sand Stone	brownish surface.	(CM) (CM) (CM) (CM) (CM) (CM) (CM) (CM)							Lu'=5.8 (Pc=6.8
45 46 47 48 49	67.93	50.00			45.50-50.00m Poor core recovery. Fragments of hard sandstone which is medium to coarse grained. In 47.15-47.40m, sharp crack dipping 80°.	(57) 4(10) (57) 4(10) (57) 5(10) (57) 5(10)							Lu'=14

DRILL LOG HOLE NO. AD-4 SHEET NO. 1 OF 2

PROJECT	Study on Water Re	sources D	evelop	ment for Metro Manila	DEPTH	50.00m	ELEV	ATION	98.00m
SITE	Agos Alternative Damsite	COODIN	NATE	N 1,625,310; E 558,038	INCLINATION	Vertical	DRII	LL RIG	TFM
CASING DEPTH	9.00m	DATE			DRILLED	M.Mabit	azan		

			T	lio		Core Recovery				SPT-Tes	st		
3 Scale	Elevation	E Depth	Colu	Type of Rock or Soil	Description	R Q D R S Cock Classification	I M O	N-Value		0 N-1	Value	40 50	WPT-Test (Lugeon Value)
1 2 3 4 5	92.50	5.50		Sandy Silt with cobble	0.00-5.50m Brown sandy silt with rock fragments. Extremely weathered zone.	(94)-5- (98)-6- (98)-6- (98)-6- (98)-6- (98)-6- (98)-6-		8 100 12 31 39 50	2.15 2.45 3.15 3.45 4.15 4.45 5.30		(31/30)	9/30)	
6 7 8	89.80	8.20		Sand with cobble	5.50-8.20m Light brown fine grained sand with rock fragments.	(98)		25	5.55				
9 - 10 - 11 - 12 - 13 - 14	83.40			Sandy Silt with boulder	8.20-14.60m Brown sandy silt with boulders of 10-40cm in diameter. Moderately weathered zone.	(100) (100)							
15 16 17 18 19	83.40	14.60			14.60-21.50m Gray sandstone, medium to coarse grained. In 15.60-21.50m, several cracks in which surface is brownish. In 19.20m and 19.30m, sharp brownish cracks dipping 55-70°.	(14) CL (15) (15) (15) (15) (15) (15) (15) (15)							Lu'=4.4 (Pc=4.5)
21 22 23 24				Sand Stone	21.50-25.70m Same as 8.20-14.60m. Possibly fault zone.	0,000 1,000 1,000 1,000 1,000 1,000 1,000	22	50					Lu'=5.7 (Pc=7.8)
25 26 27 28 29					25.70-45.70m Gray to dark gray sandstone, coarse to medium grained.	1221 1221 1221 1221 1221 1221 1221 122							Lu'=5.6

DRILL LOG HOLE NO. AD-4 SHEET NO. 2 OF 2

PROJECT	Study on Water Re	sources Dev	elop	ment for Metro Manila	DEPTH	50.00m	ELEV	'ATION	98.00m
SITE	Agos Alternative Damsite	COODINA	TE	N 1,625,310; E 558,038	INCLINATION	Vertical	DRII	LL RIG	TFM
CASING DEPTH	9.00m	DATE			DRILLED	M.Mabit	azan		

				oil		Core Recovery				5	SPT-T	est		
Scale	Elevation	E Depth	Column Section	Type of Rock or Soil	Description	Rock Classification 0 2 0 100	G.W.L	N-Value	0	10) N	-Value	40	WPT-Test (Lugeon Value)
31 32 33 34					In 30.50m and 43.80m, sharp cracks dipping 60-90°. Around 35.60m and 36.50m, calcite	(100) (92) (100) (100) (100) (100) (100) (100)								Lu'=5.2
- 35 - 36 - 37 - 38 - 39 - 40				Sand Stone	veins dipping 50°. In 35.50-45.70m, some conglomerate layers of 0.2-0.8m in thickness are alternated with sandstone.	(100) (100) (100) (100) (100) (100) (100) (100)								Lu'=3.1
41 42 43 44 45						(100) (100) (100) (100) (100) (100) (100) (100)								Lu'=4.0
46 47 48 49	52.30	45.70		Conglomerate	45.70-50.00m Gray conglomerate with bedding plane of 45°dip.	(1904 1100) (1904 1100) (1908 1100) (1908 (100) (1909 1100)								Lu'=2.3 (Pc=8.4

DRILL LOG HOLE NO. AD-5 SHEET NO. 1 OF 2

PROJECT	Study on Water Re	sources De	evelop	ment for Metro Manila	DEPTH	50.00m	ELEV	ATION	90.00m
SITE	Agos Alternative Damsite	COODIN	IATE	N 1,624,887; E 557,910	INCLINATION	Vertical	DRII	LL RIG	TFM
CASING DEPTH	27.00m	DATE			DRILLED	M.Mabit	azan		

			_	lio		Core Recovery				SPT-T	est			
Scale Flevation		E Depth	Column Section	Type of Rock or Soil	Description	Rock Classification	G.W.L	N-Value	0	10 2	I-Valu 0 30	e 46) 50	WPT-Test (Lugeon Value)
1 2 3 4 5	5.00	5.00		Sandy Silt	0.00-5.00m Brown sandy silt with high plasticity. Extremely weathered zone.	[D5] [D7] [D7] [D7] [D7] [D7] [D7] [D7] [D7		8 28 15 18	0.70 1.00 1.70 2.00 2.70 3.00 3.70 4.00 4.70 5.00 5.70	(15/30)	(28/ 30) 22/30)			
6 7 8 9 80	0.70	9.30		Silty Sand	5.00-9.30m Brown silty sand. Extremely weathered zone.	(5) (5) (5)		17 21 25 50 25	6.00 6.70 7.00 7.70 8.00 8.70 8.95		(25/30) (25/30)		
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29		30.00		Silty Sand with cobble and boulder	9.30-30.00m Brown silty sand with pebbles and boulders of 20-40cm in average and 1.5m in maximum diameter. Moderately weathered zone.	[50] [54] [50] [50] [50] [50] [50] [50] [50] [50								

DRILL LOG HOLE NO. AD-5 SHEET NO. 2 OF 2

PROJECT	Study on Water Re	sources Develo	pment for Metro Manila	DEPTH	50.00m	ELEV	ATION	90.00m
SITE	Agos Alternative Damsite	COODINATE	N 1,624,887; E 557,910	INCLINATION	Vertical	DRII	L RIG	TFM
CASING DEPTH	27.00m	DATE		DRILLED	Ribill	la		

				lio		Core Recovery				SPT	-Test				
E Scale		E Depth	Column Section	Type of Rock or Soil	Description	Rock Classification 0 00 00 00	G.W.L	N-Value	0	10	N-Val	ue 30	40	50	WPT-Test (Lugeon Value)
31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48				Sand Stone	30.00-50.00m Gray to dark gray sandstone, medium to coarse grained. Almost firm, while cracky zones are observed in 30.00-31.30m and 38.20-39.90m. In 30.00-31.30m, brownish surface of vertical crack. In 36.10m, 36.80m, 39.90m, sharp cracks dipping 60-90°.	[62] CL	34,5	5							Lu'=6.2 (Pc=8.8)
49	0.00 5	50.00				juboj									

DRILL LOG HOLE NO. AD-6 SHEET NO. 1 OF 3

PROJECT	Study on Water Res	sources D	evelop	ment for Metro Manila	DEPTH	70.00m	ELEV	ATION	39.80m
SITE	Agos Alternative Damsite	COODIN	NATE	N 1,625,060; E 557,973	INCLINATION	Vertical	DRII	LL RIG	LY 34
CASING DEPTH	41.35m	DATE			DRILLED	D.Mago	dua		

				lic		Core Recovery			SPT	-Test			
3 Scale	Elevation	E Depth	Column Section	Type of Rock or Soil	Description	Core Recovery R Q D D Soc C G Ssilication Cock C G Ssilication R Q D D Soc C G Ssilication	G.W.L	N-Value	10	N-Value 20 30			WPT-Test (Lugeon Value)
1 2 3 4 4 5 6 6 7 7 8 8 9 10 11 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 20				Sand and Gravel	O.00-38.50m Grayish sand and gravel, river deposit. Consisting mainly of very firm gravels of sandstone. Diameter o gravel is 1-30cm in average and 40cm in maximum.	0 50 100 — 1 (50) — 1 (50) — 1 (55) — 1 (55) — 1 (50) — 1 (5	1.80				70	50	

DRILL LOG HOLE NO. AD-6 SHEET NO. 2 OF 3

PROJECT	Study on Water Res	sources Develop	ment for Metro Manila	DEPTH	70.00m	ELEV	ATION	39.80m
SITE	Agos Alternative Damsite	COODINATE	N 1,625,060; E 557,973	INCLINATION	Vertical	DRII	LL RIG	LY 34
CASING DEPTH	41.35m	DATE		DRILLED	D.Mago	dua		

				oil		Core Recovery					SPT	-Test		=0		
Scale	E Elevation	E Depth	Column Section	Type of Rock or Soil	Description	Core Recovery R Q D D Cock Classification Cock Classification R Q D D Cock Classification	G.W.L	N-Value	0		10	N-V:	alue	40	50	WPT-Test (Lugeon Value)
50						0 30 100			U			20	30	40	30	
- 31 - 32 - 33 - 34 - 35				Sand and Gravel		↓ (40) ↓ (40) ↓ (25) ↓ (28)										
- 36 - 37 - 38				S		- d (20) - d (20) - d (20)										
- 39	1.30	38.50			38.50-41.20m	3(30)					-		_			
- 40 - 41 - 42 - 43 - 44					Gray sandstone with several cracks. Slightly weathered rock zone. 41.20-70.00m Gray to dark gray sandstone, medium to coarse grained.	(90) (100) (100) (100) (100) (100)										Lu'=6.7 (Pc=4.0)
- 45 - 46 - 47 - 48 - 49				tone		(160), (100) (100) (100), (100), (100), (100), (100), (100),										Lu'=3.6 (Pc=4.2)
- 50				Sand Stone		1100] 					1					
- 51				Š									1			
- 52						(100) (100) (100)										Lu=5.0
- 53						[100]										
- 54 - 55					Below 54.30m, thin calcite vein rich	(los).										
- 56					dipping 30-45° and vertical.	(190) (100)	3				_	-				
- 57						(100) (100)				-	-	+	-			Lu'=3.5 (Pc=4.2)
- 58						(1,600s 1,821				-	-	-	+			
- 59						(90) à				-	-	+	+		-	
60						(9a) A [10a]				-						

DRILL LOG HOLE NO. AD-6 SHEET NO. 3 OF 3

PROJECT	Study on Water Re	sources Devel	opment for Metr	o Manila	DEPTH	70.00m	ELEV	ATION	39.80m
SITE	Agos Alternative Damsite	COODINAT	TE N 1,625,060;	E 557,973	INCLINATION	Vertical	DRII	LL RIG	LY 34
CASING DEPTH	41.35m	DATE			DRILLED	D.Mago	dua		

Scale Scale	Elevation	E Depth	Column Section	Type of Rock or Soil	Description	0 50 100	G.W.L	Onlea	SPT-Test N-Value 10 20 30	40 50	WPT-Test (Lugeon Value)
- 61 - 62 - 63 - 64				Sand Stone	In 59.80-61.40m, low core recovery, possibly fault zone.	(50) (100) CL (110) (185) (100) (100) (100) (100) (110) (189) (189)					Lu'=3.3 (Pc=4.2)
66 67 68 69		70.00		Sanc		(160) (193) (104) (194) (196) (186) (186) (194) (194)					Lu=5.3
	-30.20	70.00				tios					

DRILL LOG HOLE NO. AD-7 SHEET NO. 1 OF 1

	PROJECT	Study on Water Res	sources De	evelop	ment for Metro Manila	DEPTH	30.00m	ELEV	/ATION	175.15m
ſ	SITE	Agos Quary Site	COODIN	NATE	N 1,624,623; E 556,318	INCLINATION	Vertical	DRII	LL RIG	TS-50
ſ	CASING DEPTH	10.00m	DATE			DRILLED	S.Ecle	era		

				lio		Core Recovery				SPT-T	est			
Scale	E Elevation	E Depth	Column Section	Type of Rock or Soil	Description	R Q D D SO 100	G.W.L	N-Value	0	10 20	-Value	40	50	WPT-Test (Lugeon Value)
	174.95	0.20		Humic Soil	0.00-0.20m Humic soil.	4(70)		12	0.70	(12/30)	30	10	00	
3	170.95	4.20		Sandy Silt	0.20-4.20m Brown sandy silt. Extremely weathered zone.	4(70)- D	4.50	13 26 50	1.00 1.70 2.00 2.70 3.00 3.73 4.00	1	(26/30)		/,	
5 6 7 8					4.20-9.00m Gray to brownish gray sandstone, medium to coarse grained. Partly weathered moderately, brownish and comparatively soft.	(30) (30) (7) (30) (7) (30)	÷							
10 11 11 12					9.00-30.00m Gray to dark gray sandstone, medium to coarse grained. Firm and stable rock zone.	(409) (100) (100) (400) (100) (100)								
- 13 - 14 - 15 - 16				Sand Stone	In 9.00-13.30m, 18.10-18.20m and 19.70-19.90m, thin calcite vein rich dipping 45-80°.	(100) (50) (100) (73] (100) (23) (100) (14)								
18 - 19 - 20 - 21				Sar	Above 18.20m, surface of crack indicates brownish color.	(100) (100) (100) (100) (100) (100) (100)								
- 22 - 23 - 24						(100) (100) (100) (400) (195)								
- 25 - 26 - 27 - 28 - 29	145.15	30.00			In 26.40m and 26.90m, sharp cracks with 80-90° of dip.	[94] (160) (160) (183] (160) [93] (100) (100) (100)								

DRILL LOG HOLE NO. AD-8 SHEET NO. 1 OF 1

PROJECT	Study on Water Res	sources De	evelop	ment for Metro Manila	DEPTH	30.00m	ELEV	/ATION	187.08m
SITE	Agos Quary Site	COODIN	NATE	N 1,624,203; E 556,060	INCLINATION	Vertical	DRII	LL RIG	TS-50
CASING DEPTH	0.50m	DATE			DRILLED	S.Ecle	era		

				oil		Core Recovery		SPT	-Test		
3 Scale	E Elevation	E Depth	Column Section	Type of Rock or Soil	Description	R Q D D SS Ilication	G.W.L N-Value	0 10	N-Value 20 30	40 50	WPT-Test (Lugeon Value)
	196.89	0.20	V. V. V	Humic Soil	0.00-0.20m Humic soil.						
1 2 2 3 3 4 5 6 6 7 7 8 9 - 10 11 12 - 13 14 14 - 15 16 - 17 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19				Sand Stone	0.20-3.00m Gray to dark gray sandstone, fine to medium grained. Cracky, slightly to moderately weathered zone. 3.00-30.00m Gray to dark gray sandstone, fine to medium grained, and slightly soft. In whole section, thin calcite veins of 45-50° and 80-90° in dip are observed. In 16.30-18.90m and 29.40-30.00m, cracky with 50° dipping planes.	[54] [54] [59] [69] [69] [69] [69] [69] [74] [74] [72] [74] [75] [38] [38] [38] [38] [62] [54] [74] [77] [62]					
29	157.08					[62]					

DRILL LOG HOLE NO. BD-1 SHEET NO. 1 OF 2

PROJECT	Study on Water Res	sources Dev	velop	ment for Metro Manila	DEPTH	50.00m	ELEV	ATION	24.12m
SITE	Agos After Weir Site	COODINA	ATE	N 1,626,053; E 562,060	INCLINATION	Vertical	DRII	LL RIG	LY-24
CASING DEPTH	13.00m	DATE			DRILLED	S.Ecle	era		

			_	lio		Core Recovery		:	SPT-Test		
Scale	E Elevation	E Depth	Column Section	Type of Rock or Soil	Description	R Q D D Sock Classification	G.W.L) 10	N-Value 0 20 30		WPT-Test (Lugeon Value)
1 2 2 3 4 4 5 6 7 8 9 10 11 12 13 13 13 14 15 15 16 17 17 18 18 17 19 17 17 18 17 17 18 17 17 17 17 17 17 17 17 17 17 17 17 17		29.30	• • • • •	Sand and Gravel	O.00-29.30m Grayish sand and gravel, riverbed deposit. Consisting mainly of very firm gravels of andesite and sandstone. Diameter of gravel is 1-10cm in average and 15cm in maximum.	0 50 100				40 50	

DRILL LOG HOLE NO. BD-1 SHEET NO. 2 OF 2

PROJECT	Study on Water Res	sources De	evelop	ment for Metro Manila	DEPTH	50.00m	ELEV	ATION	24.12m
SITE	Agos After Weir Site	COODIN	IATE	N 1,626,053; E 562,060	INCLINATION	Vertical	DRII	LL RIG	LY-24
CASING DEPTH	13.00m	DATE			DRILLED	S.Ecle	era		

1	3 Scale	E Elevation	e Depth	Column Section	Type of Rock or Soil	Description	Core Recovery R Q D D Core R Q D R Q D O T O O O O O O O O O O O O O O O O O	G.W.L	N-Value	SPT-Test M-Value 0 10 20 30 40 50
39	32 33 34 - 35 - 36				erate		(83) (83) (83) (83) (83) (83) (83) (83)			Lu'=3.3 (Pc=4.0)
44.50-50.00m Gray sandstone, medium to coarse	38 39 40 41 42 43	-20.38	44.50		Conglom	cracks with brownish surface and	(78) (Lu'=3.5 (Pc=4.0)
- 49 (40) - 45 88 50 00	- 46 - 47 - 48	25 88	50.00		Sand Stone	Gray sandstone, medium to coarse grained, stiff and with bedding planes of 40° in dip.	(100)			Lu'=3.3 (Pc=4.0)