

DATA BOOK 1

SOIL LABORATORY TEST

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SOIL LABORATORY TEST
(Remaining Data is undergoing the test by SIAM TONE)

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SIAM TONE CO., LTD.

Water Content & Unit Weight Determination

Project: Land Subsidence Siem Reab
 Location: Cambodia

Tested: THS
 Date: May-97

Sheet No:
1

Test No:		A	B	A	B	A	B	A	B
Borehole No:		WT-3	WT-3	WT-3	WT-3	WT-3	WT-3	WT-3	WT-3
Sample No:		DB-1	DB-1	DB-2	DB-2	DB-3	DB-3	DB-4	DB-4
Soil Type		C+S	C+S	C	C	S	S	S+C	S+C
Colour Code		12	12	12	12	12	12	12	12
Depth (m.)	From	18.30	18.30	24.00	24.00	27.20	27.20	29.00	29.00
	To	18.80	18.80	24.50	24.50	27.50	27.50	29.50	29.50
Tin No:		D-79	D-36	D-2	D-75	D-107	D-28	D-52	D-192
Wt. of Tin	gm.	21.52	16.60	15.03	25.52	23.10	13.28	13.25	24.06
Wt. of Tin + Wet Soil	gm.	983.20	940.75	736.60	938.76	797.44	423.95	869.64	767.35
Wt. of Tin + Dry Soil	gm.	885.67	843.90	637.84	811.81	709.85	381.41	780.27	692.77
Wt. of Water	gm.	97.53	96.85	98.76	126.95	87.59	42.54	89.37	74.58
Wt. of Dry Soil	gm.	864.15	827.30	622.81	786.29	686.75	368.13	767.02	668.71
Water Content	%	11.3	11.7	15.9	16.1	12.8	11.6	11.7	11.2
Avg. Water Content	%	11.5		16.0		12.2		11.4	
Sample Height	cm.	14.68	14.24	11.71	14.26	12.38		13.50	11.32
Sample Diameter	cm.	6.14	6.16	6.04	6.20	6.05		6.07	6.01
Wt. of Wet Soil	gm.	964.55	925.21	722.49	914.54	775.05		857.32	743.94
Volume of Sample	cc.	435.04	424.95	335.52	430.06	355.99		390.76	321.39
Total Unit Weight	ton/m ³	2.22	2.18	2.15	2.13	2.18		2.19	2.31
Avg. Total Unit Weight	ton/m ³	2.2		2.1		2.2		2.3	
Dry Unit Weight	ton/m ³	1.99	1.95	1.86	1.83	1.93		1.97	2.08

Test No:		A	B	A	B	A	B	A	B
Borehole No:		WT-3	WT-3	WT-3	WT-3	WT-4	WT-4	WT-4	WT-4
Sample No:		DB-5	DB-5	DB-6	DB-6	DB-1	DB-1	DB-2	DB-2
Soil Type		S+C	S+C	C	C	C+S	C+S	C+S	C+S
Colour Code		12	12	14	14	14	14	14	14
Depth (m.)	From	33.00	33.00	36.10	36.10	9.40	9.40	18.40	18.40
	To	33.45	33.45	36.60	36.60	9.60	9.60	18.80	18.80
Tin No:		D-18	D-122	D-177	D-91	D-183	D-213	D-66	D-70
Wt. of Tin	gm.	17.09	23.06	21.18	23.05	23.23	22.44	21.79	15.26
Wt. of Tin + Wet Soil	gm.	892.21	827.12	919.50	967.13	300.75	745.96	941.31	932.70
Wt. of Tin + Dry Soil	gm.	788.19	725.60	797.96	847.03	262.38	641.55	847.45	830.26
Wt. of Water	gm.	104.02	101.52	121.54	120.10	38.37	104.41	93.86	102.44
Wt. of Dry Soil	gm.	771.10	702.54	776.78	823.98	239.15	619.11	825.66	815.00
Water Content	%	13.5	14.5	15.6	14.6	16.0	16.9	11.4	12.6
Avg. Water Content	%	14.0		15.1		16.5		12.0	
Sample Height	cm.	13.28	13.64	14.07	14.67		11.74	14.48	14.77
Sample Diameter	cm.	6.07	6.16	6.11	6.14		6.09	6.05	5.95
Wt. of Wet Soil	gm.	876.12	903.15	899.81	945.58		726.12	921.94	921.37
Volume of Sample	cc.	384.62	406.85	412.09	434.94		341.97	415.90	410.77
Total Unit Weight	ton/m ³	2.28	2.22	2.18	2.17		2.12	2.22	2.24
Avg. Total Unit Weight	ton/m ³	2.2		2.2		2.1		2.2	
Dry Unit Weight	ton/m ³	2.01	1.94	1.89	1.90		1.82	1.99	1.99



SIAM TONE CO., LTD.

Water Content & Unit Weight Determination

Project: Land Subsidence Siem Reab
 Location: Cambodia

Tested: THS Sheet No:
 Date: May-97 2

Test No:		A	B	A	B	A	B	A	B
Borehole No:		WT-4	WT-4	WT-4	WT-4	WT-4	WT-4	WT-4	WT-4
Sample No:		DB-3	DB-3	DB-4	DB-4	DB-5	DB-5	DB-6	DB-6
Soil Type		C+S	C+S	C+S	C+S	C+S	C+S	S+C+ST	S+C+ST
Colour Code		14	14	14	14	14	14	20	20
Depth (m.)	From	29.20	29.20	32.50	32.50	36.75	36.75	54.60	54.60
	To	29.50	29.50	32.95	32.95	37.00	37.00	55.00	55.00
Tin No:		D-173	D-14	D-87	D-176	D-227	D-129	D-105	D-22
Wt. of Tin	gm.	22.52	14.25	21.91	21.01	21.28	22.39	23.26	16.18
Wt. of Tin + Wet Soil	gm.	828.70	307.45	947.94	785.40	478.99	916.23	905.43	631.21
Wt. of Tin + Dry Soil	gm.	725.11	268.53	851.63	708.75	418.95	801.21	817.13	571.42
Wt. of Water	gm.	103.59	38.92	96.31	76.65	60.04	115.02	88.30	59.79
Wt. of Dry Soil	gm.	702.59	254.28	829.72	687.74	397.67	778.82	793.87	555.24
Water Content	%	14.7	15.3	11.6	11.1	15.1	14.8	11.1	10.8
Avg. Water Content	%	15.0		11.4		14.9		10.9	
Sample Height	cm.	12.64		14.45	11.77		14.00	13.35	11.54
Sample Diameter	cm.	6.10		6.06	6.05		6.18	6.18	6.16
Wt. of Wet Soil	gm.	807.17		936.44	766.25		900.28	883.36	785.33
Volume of Sample	cc.	369.40		416.78	338.36		419.95	400.45	343.92
Total Unit Weight	ton/m ³	2.19		2.25	2.26		2.14	2.21	2.28
Avg. Total Unit Weight	ton/m ³	2.2		2.3		2.1		2.2	
Dry Unit Weight	ton/m ³	1.90		2.01	2.04		1.87	1.99	2.06

Test No:		A	B	A	B	A	B	A	B
Borehole No:		WT-4	WT-4	WT-6	WT-6	WT-6	WT-6	WT-6	WT-6
Sample No:		DB-7	DB-7	DB-1	DB-1	DB-2	DB-2	DB-3	DB-3
Soil Type		C+S+ST	C+S+ST	S	S	S	S	S	S
Colour Code		49	49	12	12	12	12	12	12
Depth (m.)	From	57.10	57.10	7.20	7.20	16.20	16.20	42.60	42.60
	To	57.45	57.45	7.50	7.50	16.60	16.60	42.90	42.90
Tin No:		D-29	D-193	D-190	D-171	D-222	D-187	D-27	D-112
Wt. of Tin	gm.	15.73	22.40	21.10	20.76	20.49	21.23	16.61	21.92
Wt. of Tin + Wet Soil	gm.	872.02	731.99	863.82	331.77	417.79	917.61	350.35	746.44
Wt. of Tin + Dry Soil	gm.	755.04	637.48	789.20	296.84	379.02	829.02	325.50	705.74
Wt. of Water	gm.	116.98	94.51	74.62	34.93	38.77	88.59	24.85	40.70
Wt. of Dry Soil	gm.	739.31	615.08	768.10	276.08	358.53	807.79	308.89	683.82
Water Content	%	15.8	15.4	9.7	12.7	10.8	11.0	8.0	6.0
Avg. Water Content	%	15.6		11.2		10.9		7.0	
Sample Height	cm.	13.38	11.02	13.10			13.31		14.90
Sample Diameter	cm.	6.16	6.15	6.00			6.12		6.04
Wt. of Wet Soil	gm.	857.61	712.36	843.83			897.40		894.68
Volume of Sample	cc.	398.76	327.36	370.39			391.54		426.92
Total Unit Weight	ton/m ³	2.15	2.18	2.28			2.29		2.10
Avg. Total Unit Weight	ton/m ³	2.2		2.3		2.3		2.1	
Dry Unit Weight	ton/m ³	1.86	1.89	2.08			2.07		1.98



SIAM TONE CO., LTD.

Water Content & Unit Weight Determination

Project: Land Subsidence Siem Reab
 Location: Cambodia

Tested: THS Sheet No:
 Date: May-97 3

Test No:		A	B	A	B	A	B	A	B
Borehole No:		WT-6	WT-6	WT-7	WT-7	WT-7	WT-7	WT-7	WT-7
Sample No:		DB-4	DB-4	DB-1	DB-1	DB-2	DB-2	DB-3	DB-3
Soil Type		C	C	S+C	S+C	S+C	S+C	S+C	S+C
Colour Code		14	14	49	49	49	49	49	49
Depth (m.)	From	56.50	56.50	13.60	13.60	19.00	19.00	23.00	23.00
	To	56.80	56.80	14.00	14.00	19.60	19.60	23.40	23.40
Tin No:		D-11	D-100	D-69	D-141	D-45	D-1	D-16	D-13
Wt. of Tin	gm.	15.00	23.66	22.90	23.45	14.81	13.69	15.87	16.71
Wt. of Tin + Wet Soil	gm.	348.65	661.97	951.95	961.32	786.55	854.26	733.12	385.62
Wt. of Tin + Dry Soil	gm.	279.71	524.71	851.96	859.16	697.79	759.53	644.49	340.60
Wt. of Water	gm.	68.94	137.26	99.99	102.16	88.76	94.73	88.63	45.02
Wt. of Dry Soil	gm.	264.71	501.05	829.06	835.71	682.98	745.84	628.62	323.89
Water Content	%	26.0	27.4	12.1	12.2	13.0	12.7	14.1	13.9
Avg. Water Content	%	26.7		12.1		12.8		14.0	
Sample Height	cm.		10.60	13.99	14.12	13.14	13.95	12.20	
Sample Diameter	cm.		6.25	6.12	6.12	5.70	5.71	5.85	
Wt. of Wet Soil	gm.		640.06	930.25	938.40	774.22	841.89	717.85	
Volume of Sample	cc.		325.20	411.54	415.36	335.30	357.22	327.92	
Total Unit Weight	ton/m ³		1.97	2.26	2.26	2.31	2.36	2.19	
Avg. Total Unit Weight	ton/m ³	2.0		2.3		2.3		2.2	
Dry Unit Weight	ton/m ³		1.54	2.02	2.01	2.04	2.09	1.92	

Test No:		A	B	A	B	A	B	A	B
Borehole No:		WT-7	WT-7	WT-7	WT-7	WT-7	WT-7	WT-7	WT-7
Sample No:		DB-4	DB-4	DB-5	DB-5	DB-6	DB-6	DB-7	DB-7
Soil Type		S	S	C	C	C	C	C	C
Colour Code		49	49	12	12	12	12	12	12
Depth (m.)	From	27.15	27.15	35.50	35.50	46.20	46.20	48.25	48.25
	To	27.50	27.50	35.80	35.80	46.75	46.75	48.50	48.50
Tin No:		D-172	D-54	D-15	D-56	D-108	D-201	D-175	D-223
Wt. of Tin	gm.	22.57	14.56	15.75	17.28	22.48	22.27	22.92	22.13
Wt. of Tin + Wet Soil	gm.	853.67	747.56	945.16	930.26	948.99	992.74	836.72	389.18
Wt. of Tin + Dry Soil	gm.	768.04	677.06	834.15	827.16	852.18	893.59	754.46	354.68
Wt. of Water	gm.	85.63	70.50	111.01	103.10	96.81	99.15	82.26	34.50
Wt. of Dry Soil	gm.	745.47	662.50	818.40	809.88	829.70	871.32	731.54	332.55
Water Content	%	11.5	10.6	13.6	12.7	11.7	11.4	11.2	10.4
Avg. Water Content	%	11.1		13.1		11.5		10.8	
Sample Height	cm.	13.55	12.16	13.72	13.97	13.60	14.20	11.59	
Sample Diameter	cm.	5.93	5.93	6.19	6.11	6.20	6.14	6.23	
Wt. of Wet Soil	gm.	834.73	739.72	930.53	914.29	927.63	972.85	814.57	
Volume of Sample	cc.	374.23	335.84	412.88	409.61	410.59	420.45	353.30	
Total Unit Weight	ton/m ³	2.23	2.20	2.25	2.23	2.26	2.31	2.31	
Avg. Total Unit Weight	ton/m ³	2.2		2.2		2.3		2.3	
Dry Unit Weight	ton/m ³	2.00	1.99	1.98	1.98	2.02	2.08	2.07	



SIAM TONE CO., LTD.

Specific Gravity

Borehole No.	WT-3	WT-3	WT-3	WT-3	WT-3	WT-3	WT-4	WT-4	WT-4	WT-4
Sample No.	DB-1	DB-2	DB-3	DB-4	DB-5	DB-6	DB-1	DB-2	DB-3	DB-4
Depth (m) From	18.30	24.00	27.20	29.00	33.00	36.10	9.40	18.40	29.20	32.50
To	18.80	24.50	27.50	29.50	33.45	36.60	9.60	18.80	29.50	32.95
Container No.	D-79	D-2	D-107	D-52	D-18	D-177	D-183	D-66	D-173	D-87
Wt of Container	21.52	15.03	23.10	13.25	17.09	21.18	23.23	21.79	22.52	21.91
Wt. of Cont+Dry Soil	71.52	65.03	73.10	63.25	67.09	71.18	73.23	71.79	72.52	71.91
Wt. of Dry Soil	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
Flask No.	B	C	E	B	C	E	B	C	E	C
Temperature, C	27.0	27.0	27.0	27.0	27.0	27.0	27	27	27	27
Wt. of Water + Flask + Soil	685.16	687.61	693.4	685.28	688.16	692.73	685.58	687.97	693.26	687.82
Specific Gravity, Gs	2.57	2.52	2.63	2.59	2.59	2.54	2.63	2.56	2.61	2.54
Borehole No.	WT-4	WT-4	WT-4	WT-6	WT-6	WT-6	WT-6	WT-7	WT-7	WT-7
Sample No.	DB-5	DB-6	DB-7	DB-1	DB-2	DB-3	DB-4	DB-1	DB-2	DB-3
Depth (m) From	36.75	54.60	57.10	7.20	16.20	42.60	56.50	13.60	19.00	23.00
To	37.00	55.00	57.45	7.50	16.60	42.90	56.80	14.00	19.60	23.40
Container No.	D-227	D-105	D-29	D-109	D-222	D-27	D-11	D-141	D-1	D-16
Wt of Container	21.28	23.26	15.73	21.1	20.49	16.61	15.00	23.45	13.69	15.87
Wt. of Cont+Dry Soil	71.28	73.26	65.73	71.10	70.49	66.61	65.00	73.45	63.69	65.87
Wt. of Dry Soil	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
Flask No.	E	B	C	E	B	C	E	B	C	E
Temperature, C	27	27	27	27	27	27	27	27.0	27.0	27.0
Wt. of Water + Flask + Soil	693.14	685.47	687.84	693.52	685.2	687.88	693.63	685.08	687.94	693.35
Specific Gravity, Gs	2.59	2.62	2.55	2.65	2.58	2.55	2.66	2.56	2.56	2.62
Borehole No.	WT-7	WT-7	WT-7	WT-7						
Sample No.	DB-4	DB-5	DB-6	DB-7						
Depth (m) From	27.15	35.50	46.20	48.25						
To	27.50	35.80	46.75	48.50						
Container No.	D-172	D-15	D-108	D-175						
Wt of Container	22.57	15.75	22.48	22.92						
Wt. of Cont+Dry Soil	72.57	65.75	72.48	72.92						
Wt. of Dry Soil	50.00	50.00	50.00	50.00						
Flask No.	B	C	E	B						
Temperature, C	27.0	27.0	27.0	27.0						
Wt. of Water + Flask + Soil	685.24	688.45	693.19	685.35						
Specific Gravity, Gs	2.58	2.63	2.60	2.60						



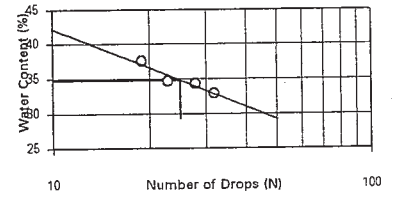
SIAM TONE CO., LTD.

Atterberg Limits

Project : Land Subsidence Siem ReabLocation : CambodiaBorehole No. WT-3 Sample No. DB-1 Depth (m) 18.30 - 18.80

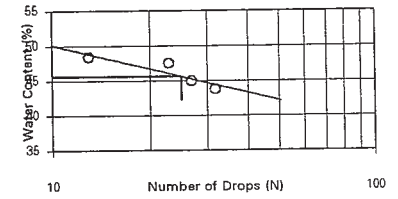
FLOW CURVE

Test No./Blows	ω_L				ω_p		
	32	28	23	19	Test 1	Test 2	
Container, gm.	21.77	21.87	20.76	25.52	22.27	21.61	
Wet soil + cont., gm.	34.33	39.58	36.79	39.85	31.37	32.15	
Dry soil + cont., gm.	31.22	35.06	32.67	35.94	30.53	31.7	
ω_c %	32.91	34.27	34.59	37.52	10.17	4.46	
$\omega_L = 34.8$ %				$\omega_p = 7.3$		USCS	
PI = 27.5 %						CL	

Borehole No. WT-3 Sample No. DB-2 Depth (m) 24.00 - 24.50

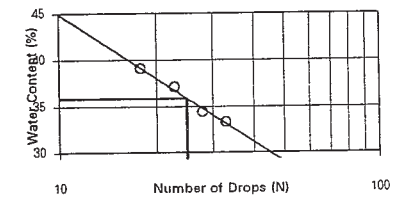
FLOW CURVE

Test No./Blows	ω_L				ω_p		
	32	27	23	13	Test 1	Test 2	
Container, gm.	21.69	22.28	21.28	21.33	21.30	21.17	
Wet soil + cont., gm.	35.32	34.58	35.44	33.38	31.97	32.06	
Dry soil + cont., gm.	31.31	30.77	30.88	29.45	30.57	30.67	
ω_c %	43.76	44.88	47.50	48.40	15.10	14.63	
$\omega_L = 45.6$ %				$\omega_p = 14.9$		USCS	
PI = 30.8 %						CL	

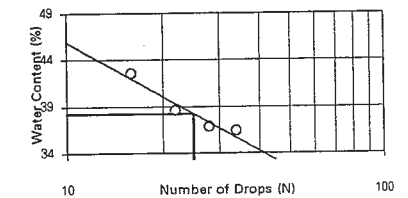
Borehole No. WT-3 Sample No. DB-3 Depth (m) 27.20 - 27.50

FLOW CURVE

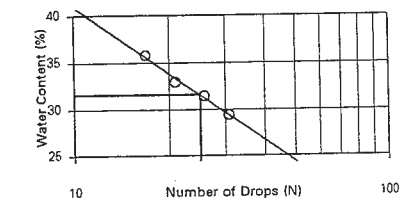
Test No./Blows	ω_L				ω_p		
	33	28	23	18	Test 1	Test 2	
Container, gm.	25.69	21.85	25.65	21.36	21.86	25.67	
Wet soil + cont., gm.	40.03	32.49	38	35.18	37.41	42.42	
Dry soil + cont., gm.	36.45	29.77	34.66	31.3	35.42	40.52	
ω_c %	33.27	34.34	37.07	39.03	14.68	12.79	
$\omega_L = 35.9$ %				$\omega_p = 13.7$		USCS	
PI = 22.1 %						CL	

Borehole No. WT-3 Sample No. DB-4 Depth (m) 29.00 - 29.50

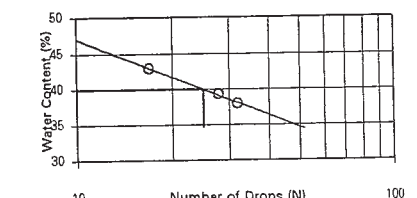
Test No./Blows	ω_L				ω_p		
	34	28	22	16	Test 1	Test 2	
Container, gm.	22.13	21.72	25.27	22.08	21.69	25.7	
Wet soil + cont., gm.	34.8	34.07	37.23	35.55	34.53	39.94	
Dry soil + cont., gm.	31.42	30.75	33.9	31.53	33.04	38.26	
ω_c %	36.38	36.77	38.59	42.54	13.13	13.38	
$\omega_L = 38.2$ %				$\omega_p = 13.3$		USCS	
PI = 25.0 %						CL	

Borehole No. WT-3 Sample No. DB-5 Depth (m) 33.00 - 33.45

Test No./Blows	ω_L				ω_p		
	31	26	21	17	Test 1	Test 2	
Container, gm.	25.54	22.19	21.26	21.62	22.13	21.47	
Wet soil + cont., gm.	39.59	36.20	33.10	35.77	34.44	34.36	
Dry soil + cont., gm.	36.40	32.85	30.17	32.04	33.04	32.84	
ω_c %	29.37	31.43	32.88	35.80	12.83	13.37	
$\omega_L = 31.6$ %				$\omega_p = 13.1$		USCS	
PI = 18.5 %						CL	

Borehole No. WT-3 Sample No. DB-6 Depth (m) 36.10 - 36.60

Test No./Blows	ω_L				ω_p		
	32	28	28	17	Test 1	Test 2	
Container, gm.	25.75	21.3	21.3	21.39	21.61	22.26	
Wet soil + cont., gm.	36.92	35.24	35.24	33.41	33.66	35.42	
Dry soil + cont., gm.	33.85	31.31	31.31	29.8	32.21	34.02	
ω_c %	37.90	39.26	39.26	42.93	13.68	11.90	
$\omega_L = 40.0$ %				$\omega_p = 12.8$		USCS	
PI = 27.2 %						CL	



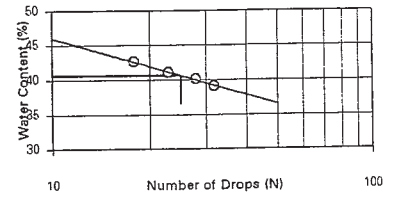


SIAM TONE CO., LTD.

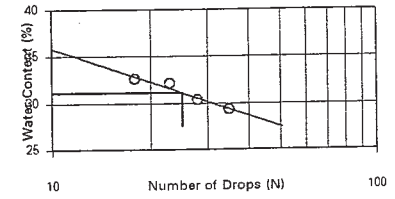
Atterberg Limits

Project : Land Subsidence Siem ReabLocation : CambodiaBorehole No. WT-4 Sample No. DB-1 Depth (m) 9.40 - 9.60

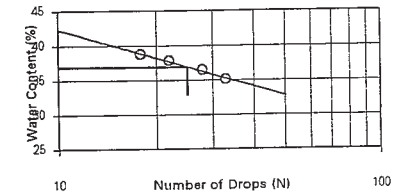
	ω_L				ω_p	
	Test 1	Test 2	Test 1	Test 2	Test 1	Test 2
Test No./Blows	32	28	23	18	Test 1	Test 2
Container, gm.	21.77	21.13	21.65	22.24	20.67	21.76
Wet soil + cont., gm.	32.91	33.77	34.26	37.01	32.45	32.45
Dry soil + cont., gm.	29.78	30.15	30.59	32.6	30.54	30.71
ω_c %	39.08	40.13	41.05	42.57	19.35	19.44
	$\omega_L = 40.6$ %				$\omega_p = 19.4$	
	PI = 21.2 %				USCS	CL

FLOW CURVEBorehole No. WT-4 Sample No. DB-2 Depth (m) 33.00 - 33.45

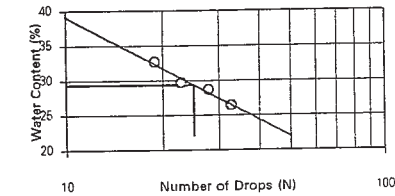
	ω_L				ω_p	
	Test 1	Test 2	Test 1	Test 2	Test 1	Test 2
Test No./Blows	35	28	23	18	Test 1	Test 2
Container, gm.	25.4	21.62	22.07	21.16	21.72	21.25
Wet soil + cont., gm.	39.07	36.37	36.72	34.59	36.96	35.2
Dry soil + cont., gm.	35.97	32.94	33.16	31.29	35.15	33.64
ω_c %	29.33	30.30	32.10	32.58	13.48	12.59
	$\omega_L = 31.1$ %				$\omega_p = 13.0$	
	PI = 18.1 %				USCS	CL

FLOW CURVEBorehole No. WT-4 Sample No. DB-3 Depth (m) 29.20 - 29.50

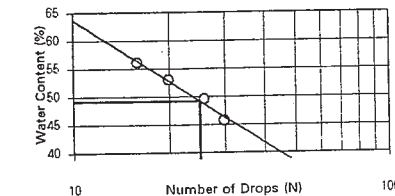
	ω_L				ω_p	
	Test 1	Test 2	Test 1	Test 2	Test 1	Test 2
Test No./Blows	33	28	22	18	Test 1	Test 2
Container, gm.	25.62	21.70	24.46	20.62	22.26	25.52
Wet soil + cont., gm.	41.07	32.25	37.75	32.23	34.01	36.61
Dry soil + cont., gm.	37.06	29.43	34.10	28.99	32.42	35.30
ω_c %	35.05	36.48	37.86	38.71	15.65	13.39
	$\omega_L = 36.9$ %				$\omega_p = 14.5$	
	PI = 22.4 %				USCS	CL

FLOW CURVEBorehole No. WT-4 Sample No. DB-4 Depth (m) 32.50 - 32.95

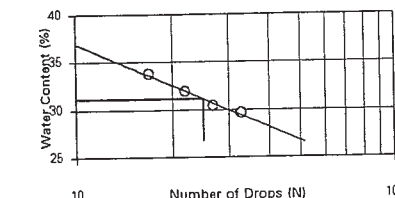
	ω_L				ω_p	
	Test 1	Test 2	Test 1	Test 2	Test 1	Test 2
Test No./Blows	33	28	23	19	Test 1	Test 2
Container, gm.	21.85	21.15	20.76	21.71	21.69	22.26
Wet soil + cont., gm.	34.03	35.08	31.95	34.85	31.82	32.55
Dry soil + cont., gm.	31.49	31.98	29.39	31.62	30.72	31.45
ω_c %	26.35	28.62	29.66	32.59	12.18	11.97
check	$\omega_L = 29.4$ %				$\omega_p = 12.1$	
	PI = 17.3 %				USCS	CL

FLOW CURVEBorehole No. WT-4 Sample No. DB-5 Depth (m) 36.75 - 37.00

	ω_L				ω_p	
	Test 1	Test 2	Test 1	Test 2	Test 1	Test 2
Test No./Blows	30	26	20	16	Test 1	Test 2
Container, gm.	21.77	21.87	21.27	22.03	21.61	25.26
Wet soil + cont., gm.	32.46	32.11	31.84	32.78	32.10	36.45
Dry soil + cont., gm.	29.11	28.72	28.18	28.92	30.73	35.12
ω_c %	45.64	49.49	52.97	56.02	15.02	13.49
check	$\omega_L = 49.3$ %				$\omega_p = 14.3$	
	PI = 35.0 %				USCS	CL

FLOW CURVEBorehole No. WT-4 Sample No. DB-6 Depth (m) 54.60 - 55.00

	ω_L				ω_p	
	Test 1	Test 2	Test 1	Test 2	Test 1	Test 2
Test No./Blows	33	27	22	17	Test 1	Test 2
Container, gm.	21.88	21.67	22.26	22.03	6.23	5.14
Wet soil + cont., gm.	35.40	34.41	36.45	35.00	18.32	19.07
Dry soil + cont., gm.	32.31	31.44	33.02	31.73	16.81	17.54
ω_c %	29.63	30.40	31.88	33.71	14.27	12.34
	$\omega_L = 31.2$ %				$\omega_p = 13.3$	
	PI = 17.8 %				USCS	CL

FLOW CURVE



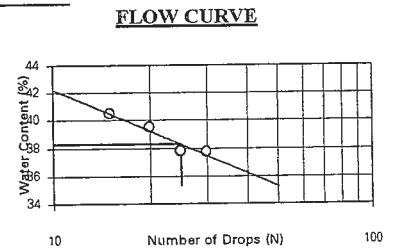
Atterberg Limits

Project : Land Subsidence Siem Reab

Location : Cambodia

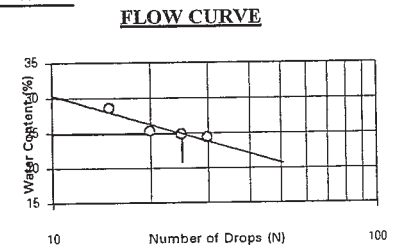
Borehole No. WT-4 Sample No. DB-7 Depth (m) 57.10 - 57.45

Test No./Blows	ω_L				ω_p	
	30	25	20	15	Test 1	Test 2
Container, gm.	22.19	21.16	21.68	21.16	25.45	21.62
Wet soil + cont., gm.	34.78	32.39	35.80	33.38	37.39	32.81
Dry soil + cont., gm.	31.33	29.31	31.80	29.86	35.37	31.13
ω_c %	37.75	37.79	39.53	40.46	20.36	17.67
	$\omega_L = 38.3$ %				$\omega_p = 19.0$	
	PI = 19.3 %				USCS	CL



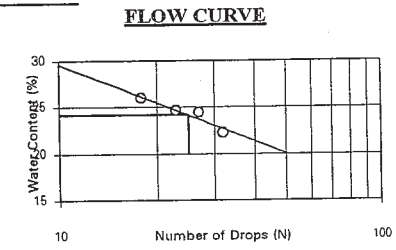
Borehole No. WT-6 Sample No. DB-1 Depth (m) 7.20 - 7.50

Test No./Blows	ω_L				ω_p	
	30	25	20	15	Test 1	Test 2
Container, gm.	22.05	20.68	25.64	22.07	22.20	25.71
Wet soil + cont., gm.	37.64	37.74	41.20	39.67	37.70	35.33
Dry soil + cont., gm.	34.59	34.35	38.06	35.76	35.98	34.09
ω_c %	24.32	24.80	25.28	28.56	12.48	14.80
	$\omega_L = 24.9$ %				$\omega_p = 13.6$	
	PI = 11.3 %				USCS	CL



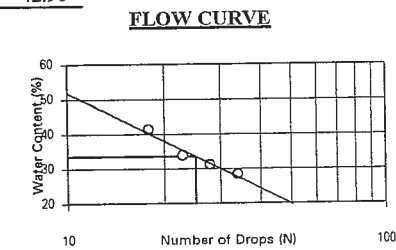
Borehole No. WT-6 Sample No. DB-2 Depth (m) 16.20 - 16.60

Test No./Blows	ω_L				ω_p	
	32	27	23	18	Test 1	Test 2
Container, gm.	21.27	21.86	21.37	22.26	20.79	25.53
Wet soil + cont., gm.	34.73	34.71	34.53	37.01	33.30	37.04
Dry soil + cont., gm.	32.28	32.19	31.93	33.97	32.11	36.11
ω_c %	22.25	24.39	24.62	25.96	10.51	8.79
check	$\omega_L = 24.2$ %				$\omega_p = 9.7$	
	PI = 14.5 %				USCS	CL



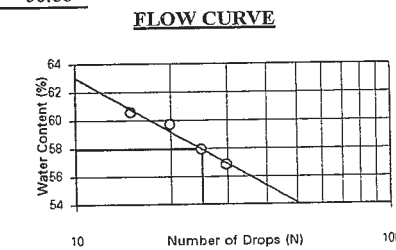
Borehole No. WT-6 Sample No. DB-3 Depth (m) 42.60 - 42.90

Test No./Blows	ω_L				ω_p	
	34	28	23	18	Test 1	Test 2
Container, gm.	21.41	21.68	22.02	21.73	21.76	25.45
Wet soil + cont., gm.	32.13	34.62	34.27	33.23	36.1	40.86
Dry soil + cont., gm.	29.76	31.55	31.17	29.87	34.47	39.04
ω_c %	28.38	31.10	33.88	41.28	12.82	13.39
check	$\omega_L = 33.7$ %				$\omega_p = 13.1$	
	PI = 20.6 %				USCS	CL



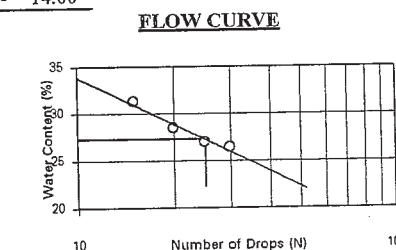
Borehole No. WT-6 Sample No. DB-4 Depth (m) 56.50 - 56.88

Test No./Blows	ω_L				ω_p	
	30	25	20	15	Test 1	Test 2
Container, gm.	21.72	21.88	21.34	21.32	22.12	21.72
Wet soil + cont., gm.	32.90	37.37	35.28	34.21	33.00	32.40
Dry soil + cont., gm.	28.85	31.69	30.07	29.35	30.49	29.89
ω_c %	56.80	57.90	59.68	60.52	29.99	30.72
	$\omega_L = 58.0$ %				$\omega_p = 30.4$	
	PI = 27.6 %				USCS	MH



Borehole No. WT-7 Sample No. DB-1 Depth (m) 13.60 - 14.00

Test No./Blows	ω_L				ω_p	
	30	25	20	15	Test 1	Test 2
Container, gm.	21.17	20.67	25.53	25.56	22.13	25.63
Wet soil + cont., gm.	34.14	35.51	39.26	40.98	35.38	37.46
Dry soil + cont., gm.	31.43	32.36	36.22	37.30	34.12	36.29
ω_c %	26.41	26.95	28.44	31.35	10.51	10.98
	$\omega_L = 27.3$ %				$\omega_p = 10.7$	
	PI = 16.5 %				USCS	CL





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Atterberg Limits

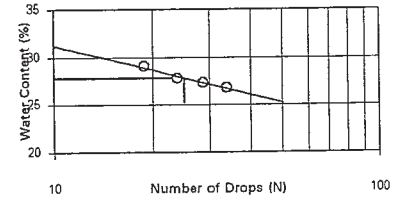
Project : Land Subsidence Siem Reab

Location : Cambodia

Borehole No. WT-7 Sample No. DB-2 Depth (m) 19.00 - 19.60

FLOW CURVE

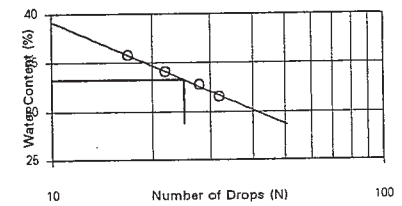
	ω_L				ω_P	
	Test 1	Test 2	Test 1	Test 2	Test 1	Test 2
Test No./Blows	34	29	24	19	Test 1	Test 2
Container, gm.	21.21	21.3	21.61	21.23	21.23	22.27
Wet soil + cont., gm.	34.8	33.29	34.36	34.88	35.60	36.46
Dry soil + cont., gm.	31.93	30.72	31.59	31.81	34.11	35.15
ω_c %	26.77	27.28	27.76	29.02	11.57	10.17
	$\omega_L = 27.8$ %				$\omega_P = 10.9$	
	PI = 17.0 %				USCS	CL



Borehole No. WT-7 Sample No. DB-3 Depth (m) 23.00 - 23.40

FLOW CURVE

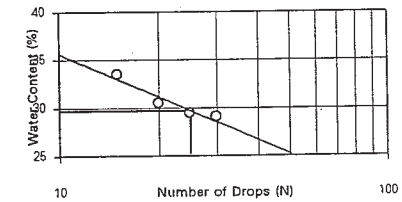
	ω_L				ω_P	
	Test 1	Test 2	Test 1	Test 2	Test 1	Test 2
Test No./Blows	32	28	22	17	Test 1	Test 2
Container, gm.	22.06	25.69	25.61	22.15	21.42	21.66
Wet soil + cont., gm.	35.71	39.55	36.52	33.65	32.81	35.76
Dry soil + cont., gm.	32.44	36.13	33.75	30.62	31.36	34.00
ω_c %	31.50	32.76	34.03	35.77	14.59	14.26
	$\omega_L = 33.3$ %				$\omega_P = 14.4$	
	PI = 18.8 %				USCS	CL



Borehole No. WT-7 Sample No. DB-4 Depth (m) 27.15 - 27.50

FLOW CURVE

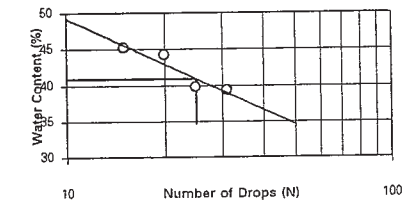
	ω_L				ω_P	
	Test 1	Test 2	Test 1	Test 2	Test 1	Test 2
Test No./Blows	30	25	20	15	Test 1	Test 2
Container, gm.	22.12	21.64	21.17	21.58	25.52	21.47
Wet soil + cont., gm.	35.71	35.84	34.14	33.33	37.44	31.96
Dry soil + cont., gm.	32.65	32.61	31.11	30.38	36.41	30.99
ω_c %	29.06	29.44	30.48	33.52	9.46	10.19
	$\omega_L = 29.7$ %				$\omega_P = 9.8$	
	PI = 19.9 %				USCS	CL



Borehole No. WT-7 Sample No. DB-5 Depth (m) 35.50 - 35.80

FLOW CURVE

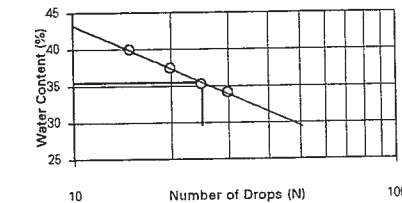
	ω_L				ω_P	
	Test 1	Test 2	Test 1	Test 2	Test 1	Test 2
Test No./Blows	31	25	20	15	Test 1	Test 2
Container, gm.	21.23	20.69	21.62	21.14	21.70	26.17
Wet soil + cont., gm.	34.06	32.57	34.54	33.19	36.35	40.57
Dry soil + cont., gm.	30.44	29.19	30.58	29.44	34.67	38.82
ω_c %	39.31	39.76	44.20	45.18	12.95	13.83
	$\omega_L = 40.9$ %				$\omega_P = 13.4$	
	PI = 27.5 %				USCS	CL



Borehole No. WT-7 Sample No. DB-6 Depth (m) 46.20 - 46.75

FLOW CURVE

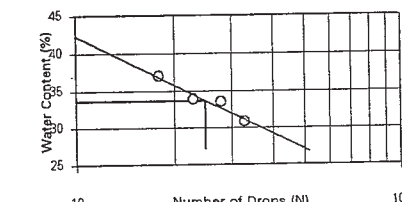
	ω_L				ω_P	
	Test 1	Test 2	Test 1	Test 2	Test 1	Test 2
Test No./Blows	30	25	20	15	Test 1	Test 2
Container, gm.	21.28	21.78	21.34	21.86	21.75	25.64
Wet soil + cont., gm.	33.70	35.10	33.64	34.55	32.25	38.49
Dry soil + cont., gm.	30.54	31.63	30.29	30.93	31.06	36.94
ω_c %	34.13	35.23	37.43	39.91	12.78	13.72
	$\omega_L = 35.5$ %				$\omega_P = 13.2$	
	PI = 22.2 %				USCS	CL



Borehole No. WT-7 Sample No. DB-7 Depth (m) 42.25 - 48.50

FLOW CURVE

	ω_L				ω_P	
	Test 1	Test 2	Test 1	Test 2	Test 1	Test 2
Test No./Blows	33	28	23	18	Test 1	Test 2
Container, gm.	22.23	25.60	21.15	25.26	21.77	22.14
Wet soil + cont., gm.	36.99	37.81	35.05	39.26	39.63	36.42
Dry soil + cont., gm.	33.52	34.75	31.54	35.48	37.61	34.78
ω_c %	30.74	33.44	33.78	36.99	12.75	12.97
	$\omega_L = 33.7$ %				$\omega_P = 12.9$	
check	PI = 20.8 %				USCS	CL

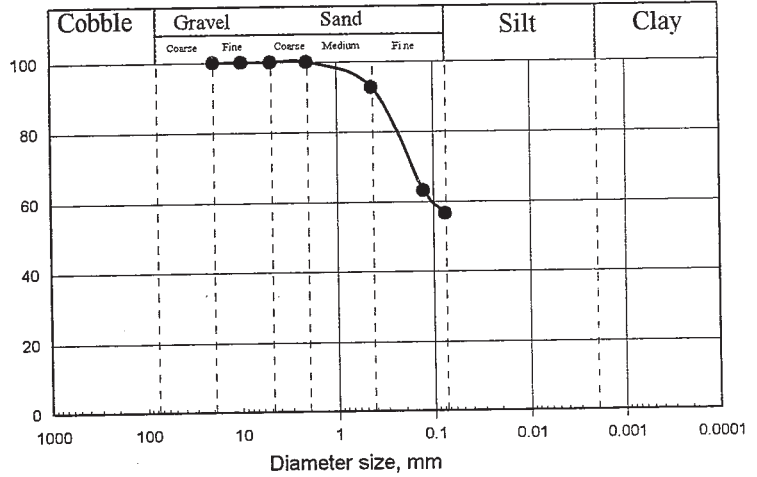




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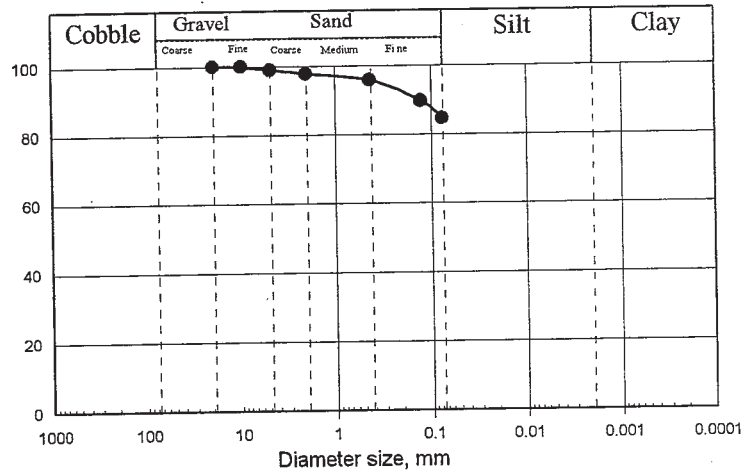
Wet Sieve Analysis

Location: CAMBODIA
 Borehole No. WT-3
 Sample No. DB-1
 Depth (m): 18.30-18.80
 Wt. of Dry Sample 179.07 g



	Gravel	Sand			Silt + Clay
		Coarse	Medium	Fine	
%	0	0	7	36	57

Location: CAMBODIA
 Borehole No. WT-3
 Sample No. DB-2
 Depth (m): 24.00-24.50
 Wt. of Dry Sample 148.32 g



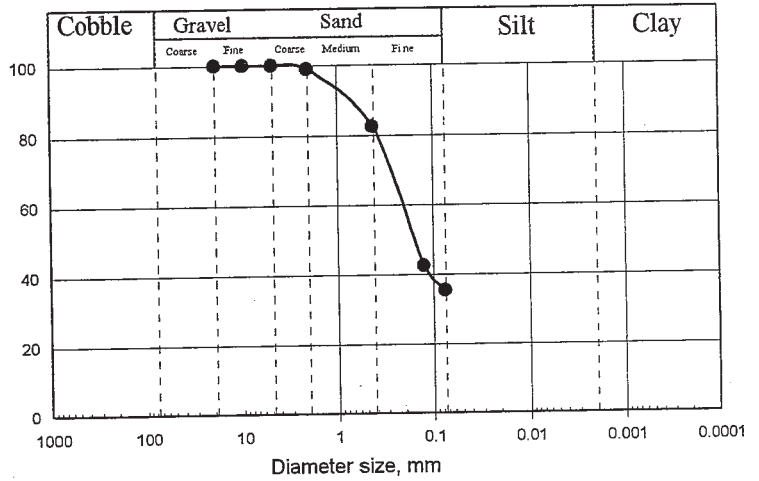
	Gravel	Sand			Silt + Clay
		Coarse	Medium	Fine	
%	1	1	2	11	85



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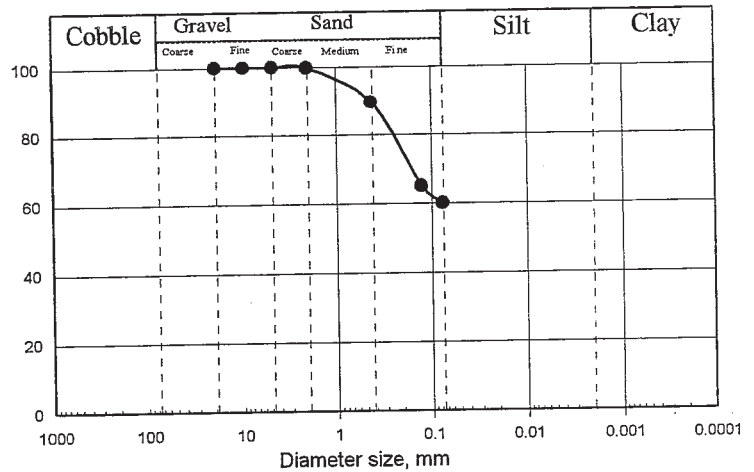
Wet Sieve Analysis

Location: CAMBODIA
 Borehole No. WT-3
 Sample No. DB-3
 Depth (m): 27.20-27.50
 Wt. of Dry Sample 140.77 g



	Gravel	Sand			Silt + Clay
		Coarse	Medium	Fine	
%	0	1	16	47	35

Location: CAMBODIA
 Borehole No. WT-3
 Sample No. DB-4
 Depth (m): 29.00-29.50
 Wt. of Dry Sample 179.41 g



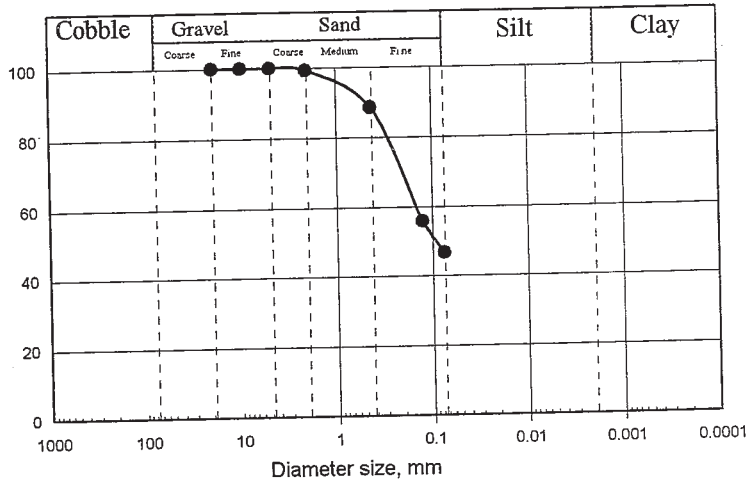
	Gravel	Sand			Silt + Clay
		Coarse	Medium	Fine	
%	0	0	10	30	60



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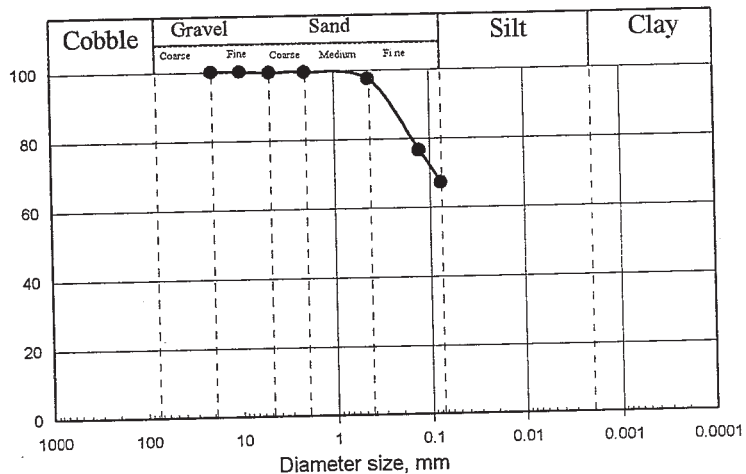
Wet Sieve Analysis

Location: CAMBODIA
 Borehole No. WT-3
 Sample No. DB-5
 Depth (m): 33.00-33.45
 Wt. of Dry Sample 174.10 g



	Gravel	Sand			Silt + Clay
		Coarse	Medium	Fine	
%	0	1	11	42	47

Location: CAMBODIA
 Borehole No. WT-3
 Sample No. DB-6
 Depth (m): 36.10-36.60
 Wt. of Dry Sample 202.05 g



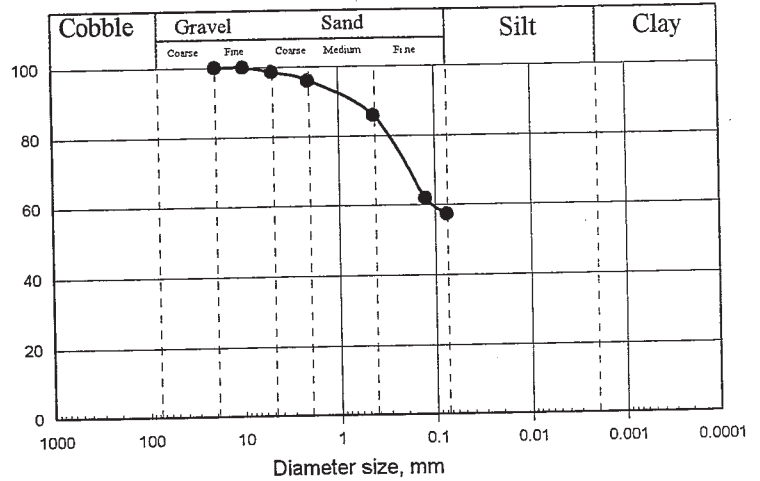
	Gravel	Sand			Silt + Clay
		Coarse	Medium	Fine	
%	0	0	2	30	67



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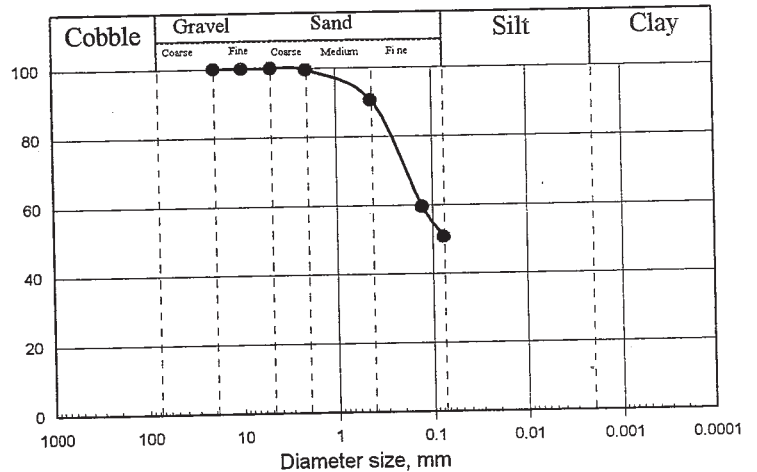
Wet Sieve Analysis

Location: CAMBODIA
 Borehole No. WT-4
 Sample No. DB-1
 Depth (m): 9.40-9.60
 Wt. of Dry Sample 171.02 g



	Gravel	Sand			Silt + Clay
		Coarse	Medium	Fine	
%	1	3	10	29	57

Location: CAMBODIA
 Borehole No. WT-4
 Sample No. DB-2
 Depth (m): 18.40-18.80
 Wt. of Dry Sample 199.13 g



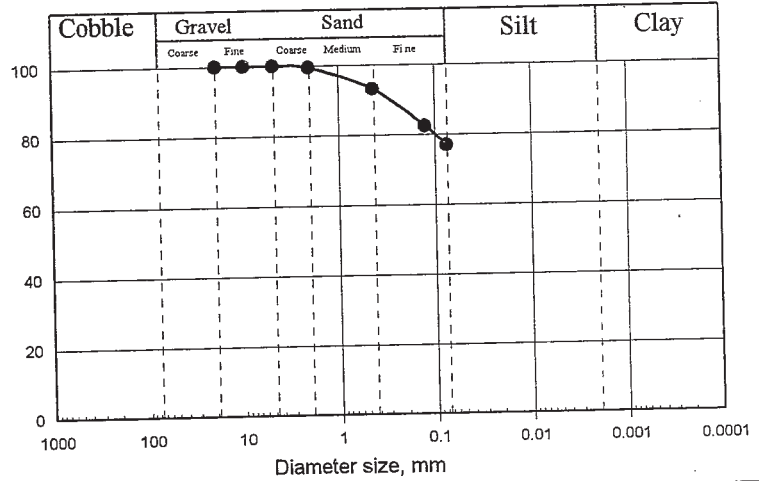
	Gravel	Sand			Silt + Clay
		Coarse	Medium	Fine	
%	0	1	9	40	51



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Wet Sieve Analysis

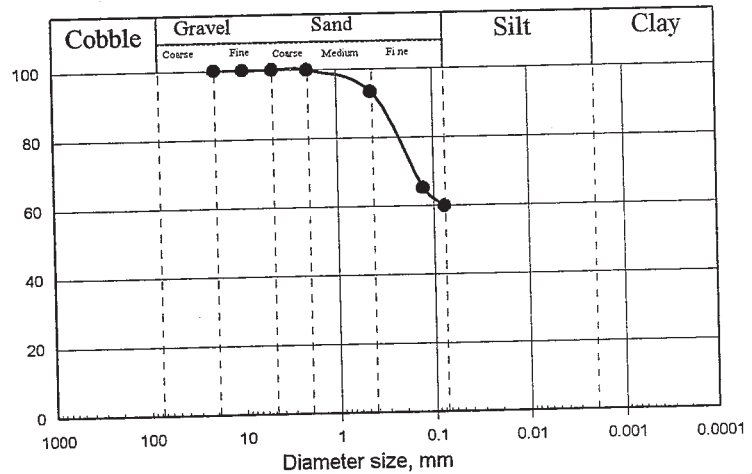
Location: CAMBODIA
 Borehole No. WT-4
 Sample No. DB-3
 Depth (m): 29.20-29.50
 Wt. of Dry Sample 188.15 g



Sieve No.	Sieve Size	Soil Mass Retained (g)	Passing %
3/4"	19 mm	0.00	100.0
3/8"	9.5 mm	0.00	100.0
# 4	4.75 mm	0.83	99.6
#10	2.00 mm	0.83	99.6
#40	425 μm	11.93	93.2
#120	125 μm	20.51	82.3
#200	75 μm	10.38	76.8

	Gravel	Sand			Silt + Clay
		Coarse	Medium	Fine	
%	0	0	6	16	77

Location: CAMBODIA
 Borehole No. WT-4
 Sample No. DB-4
 Depth (m): 32.50-32.95
 Wt. of Dry Sample 226.73 g



Sieve No.	Sieve Size	Soil Mass Retained (g)	Passing %
3/4"	19 mm	0.00	100.0
3/8"	9.5 mm	0.00	100.0
# 4	4.75 mm	0.34	99.9
#10	2.00 mm	0.34	99.9
#40	425 μm	15.19	93.2
#120	125 μm	63.46	65.2
#200	75 μm	12.01	59.9

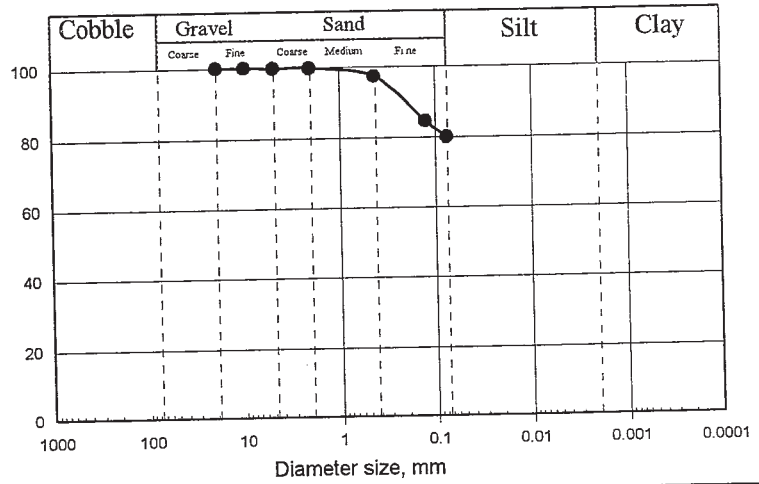
	Gravel	Sand			Silt + Clay
		Coarse	Medium	Fine	
%	0	0	7	33	60



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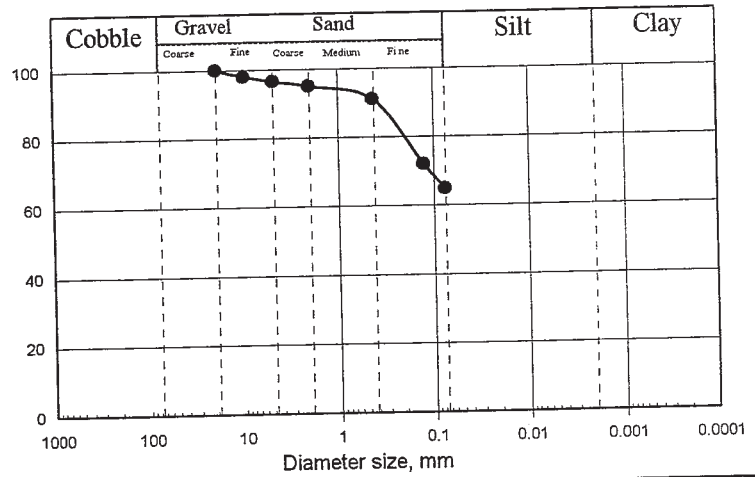
Wet Sieve Analysis

Location: CAMBODIA
 Borehole No. WT-4
 Sample No. DB-5
 Depth (m): 36.75-37.00
 Wt. of Dry Sample 192.67 g



	Gravel	Sand			Silt + Clay
		Coarse	Medium	Fine	
%	0	0	2	17	80

Location: CAMBODIA
 Borehole No. WT-4
 Sample No. DB-6
 Depth (m): 54.60-55.00
 Wt. of Dry Sample 162.00 g



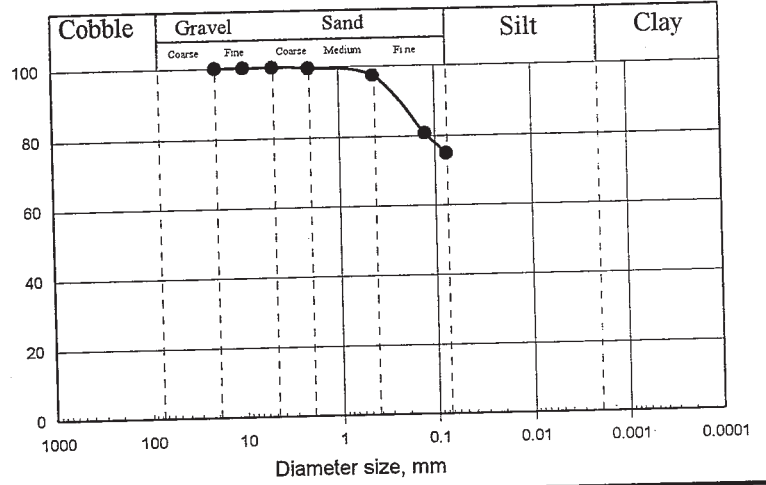
	Gravel	Sand			Silt + Clay
		Coarse	Medium	Fine	
%	4	1	4	26	65



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Wet Sieve Analysis

Location: CAMBODIA
 Borehole No. WT-4
 Sample No. DB-7
 Depth (m): 57.10-57.45
 Wt. of Dry Sample 153.86 g



Sieve No.	Sieve Size	Soil Mass Retained (g)	Passing %
3/4"	19 mm	0.00	100.0
3/8"	9.5 mm	0.00	100.0
# 4	4.75 mm	0.00	100.0
#10	2.00 mm	0.42	99.7
#40	425 μm	3.68	97.3
#120	125 μm	25.54	80.7
#200	75 μm	9.02	74.9

	Gravel	Sand			Silt + Clay
		Coarse	Medium	Fine	
%	0	0	2	22	75



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Wet Sieve Analysis

Location: CAMBODIA

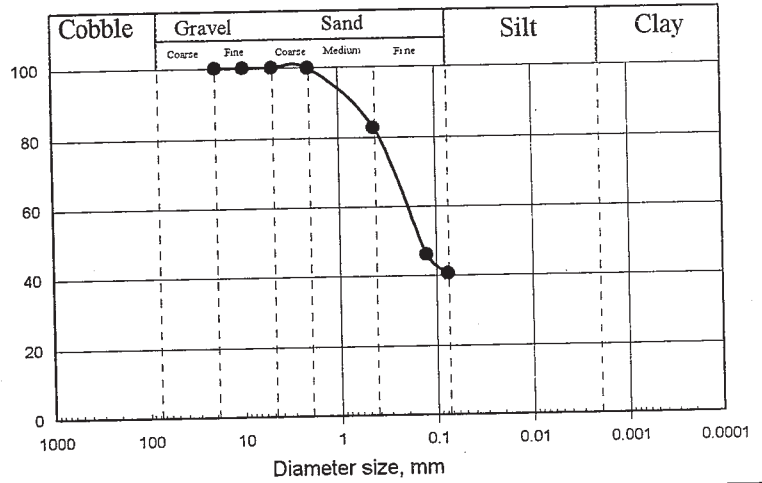
Borehole No. WT-6

Sample No. DB-1

Depth (m): 7.20-7.50

Wt. of Dry Sample 167.09 g

Sieve No.	Sieve Size	Soil Mass Retained (g)	Passing %
3/4"	19 mm	0.00	100.0
3/8"	9.5 mm	0.00	100.0
# 4	4.75 mm	0.00	100.0
#10	2.00 mm	0.31	99.8
#40	425 μm	28.73	82.6
#120	125 μm	61.11	46.0
#200	75 μm	9.00	40.7



%	Gravel	Sand			Silt + Clay
		Coarse	Medium	Fine	
	0	0	17	42	41

Location: CAMBODIA

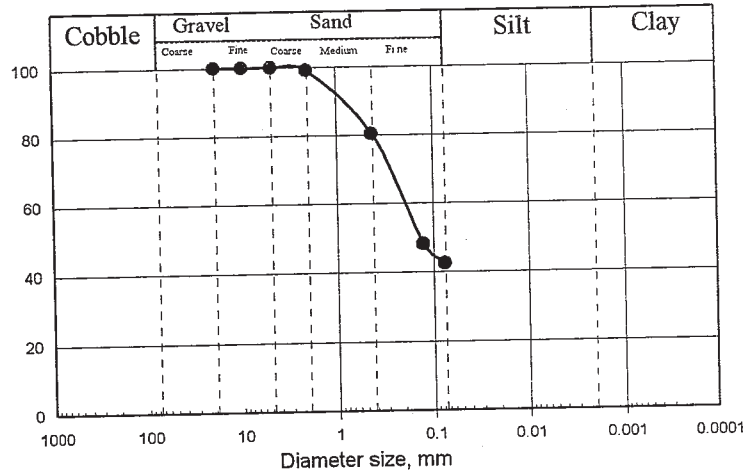
Borehole No. WT-6

Sample No. DB-2

Depth (m): 16.20-16.60

Wt. of Dry Sample 235.85 g

Sieve No.	Sieve Size	Soil Mass Retained (g)	Passing %
3/4"	19 mm	0.00	100.0
3/8"	9.5 mm	0.00	100.0
# 4	4.75 mm	0.00	100.0
#10	2.00 mm	1.97	99.2
#40	425 μm	44.44	80.3
#120	125 μm	76.02	48.1
#200	75 μm	13.36	42.4



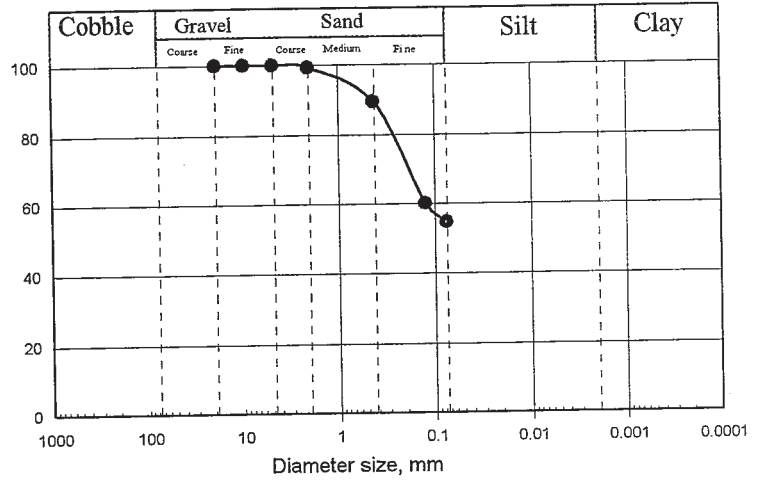
%	Gravel	Sand			Silt + Clay
		Coarse	Medium	Fine	
	0	1	19	38	42



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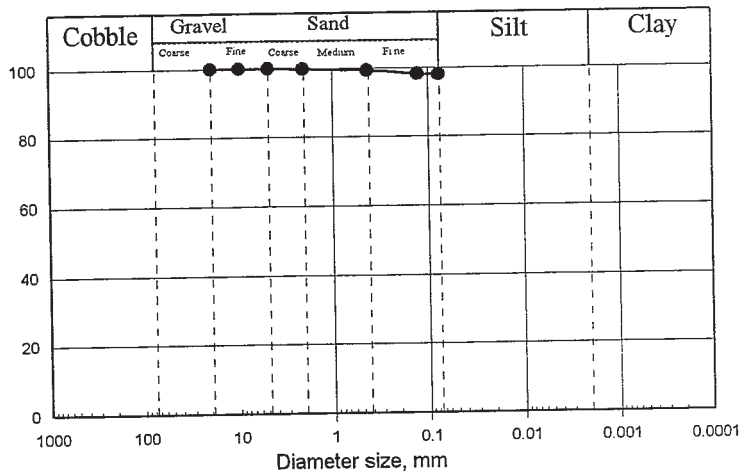
Wet Sieve Analysis

Location: CAMBODIA
 Borehole No. WT-6
 Sample No. DB-3
 Depth (m): 42.60-42.90
 Wt. of Dry Sample 205.44 g



	Gravel	Sand			Silt + Clay
		Coarse	Medium	Fine	
%	0	1	10	35	55

Location: CAMBODIA
 Borehole No. WT-6
 Sample No. DB-4
 Depth (m): 56.50-56.80
 Wt. of Dry Sample 186.57 g



	Gravel	Sand			Silt + Clay
		Coarse	Medium	Fine	
%	0	0	1	1	98