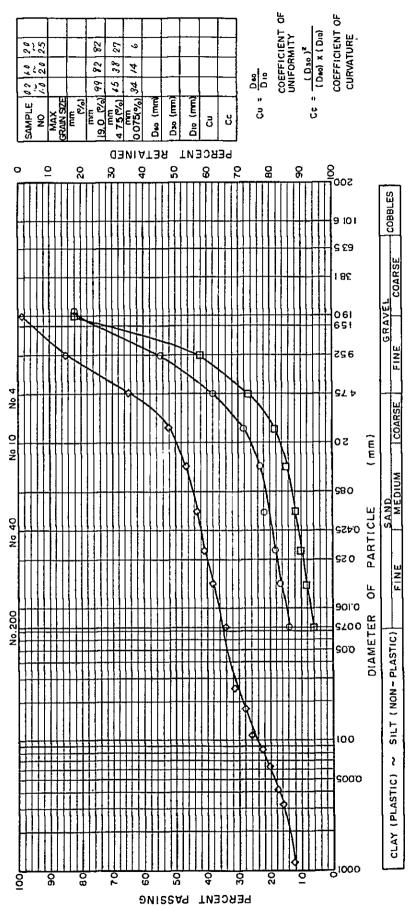
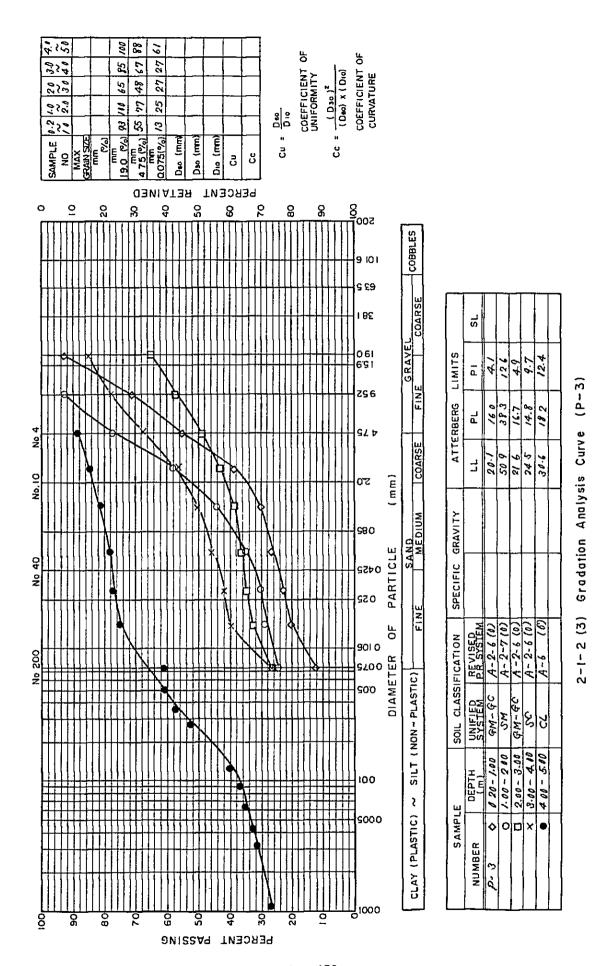


3 - 171

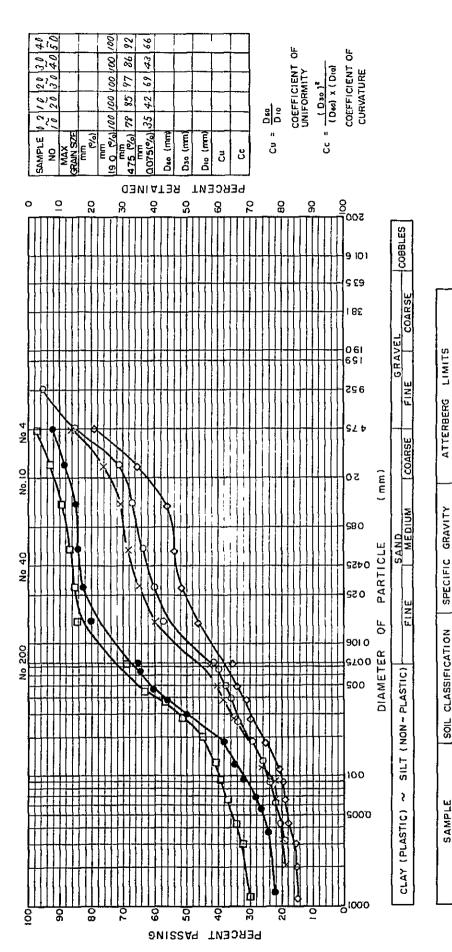


SAMPLE		SOIL CLASSI	SOIL CLASSIFICATION	SPECIFIC GRAVITY	GRAVITY	ATTE	ATTERBERG LIMITS	LIMITS	
NUMBER	OEPTH (m)	UNIFIED	REVISED P.R. SYSTEM			TF	PL	рı	S
<b>♦</b> 8-d	020-100	23	(1) 9.5 · V			8 98	2/5	153	
0	1.00 - 200		A-1-a (0)			-	ļ	í	
	200-250	200- 250 GW-GC	A-2-6 (0)			8.18	19.0	128	

2-1-2(2) Gradation Analysis Curve (P-2)



3 - 173



2-1-2(4) Gradation Analysis Curve (P-4)

S

ū.

4

120

236

13.5

32.8 35.8 35.6 30.2

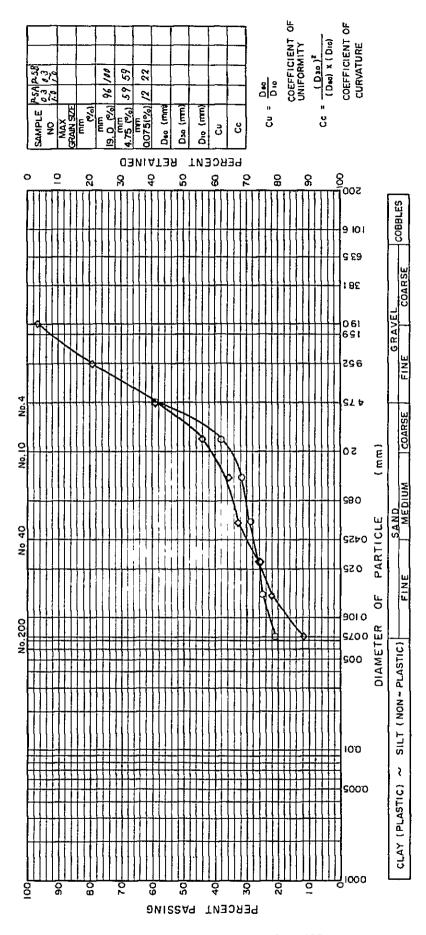
3 2 2

120-100 100-2:00 2:00-3:00 3:00-4:00 4:00-5:00

o

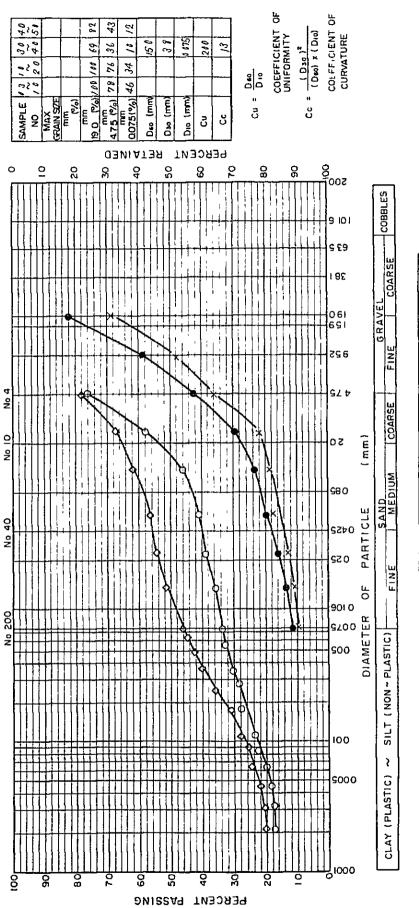
٥

NUMBER P- 4 0



SAMPLE	).E	SOIL CLASSIFICATION	FICATION	SPECIFIC GRAVITY	GRAVITY	ATTE	ATTERBERG LIMITS	LIMITS	
NUMBER	DEPTH (m)	UNIFIED	REVISED P.R. SYSTEM			I L	4	14	SL
♦ 45-4	, "	l	A-2-6(0)			85.3	22.1	13.2	
P-5B 0	001-00-0	24	A-2-6(0)			864	23.3	13.1	

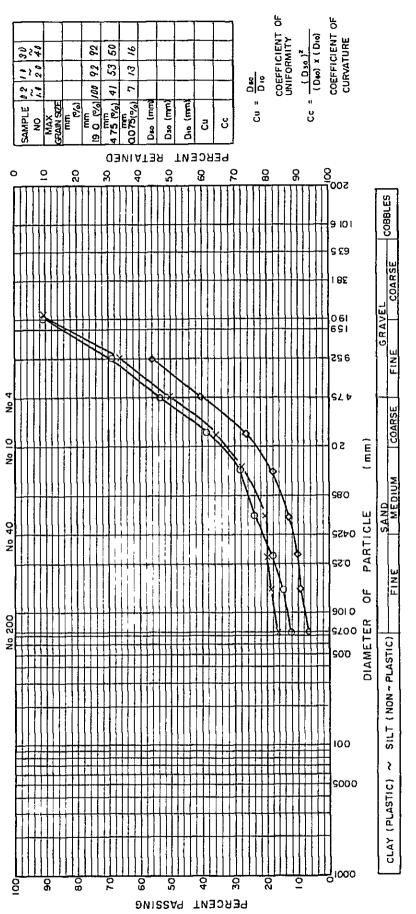
2-1-2(5) Gradation Analysis Curve (P-5)



SAMPLE		SOIL CLASSIFICATION	IFICATION	SPECIFIC GRAVITY	GRAVITY	ATT	ATTERBERG LIMITS	LIMITS	
NUMBER	DEPTH	UNIFIED	REVISED P.R. SYSTEM			רר	PL	ā	SL
P-6	0 30 - 100	и .	(7) 9-Y			370	2//	159	
0	100-200	WS	A-2-6 (0)		890	340	27.2	8 9	
` ``	3 00- 400	GM-FC	A-2-6(0)			368	210	8 81	
	400-500 AP-FC	9 p- 60	A-2-6(1)			389	2/3	17.6	

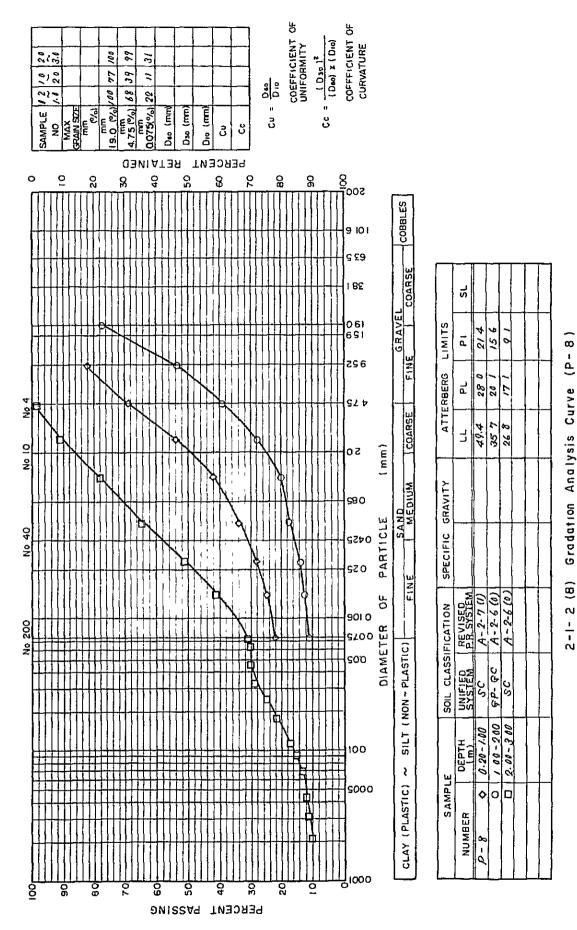
2-1-2(6) Gradation Analysis Curve (P-6)

3 - 176

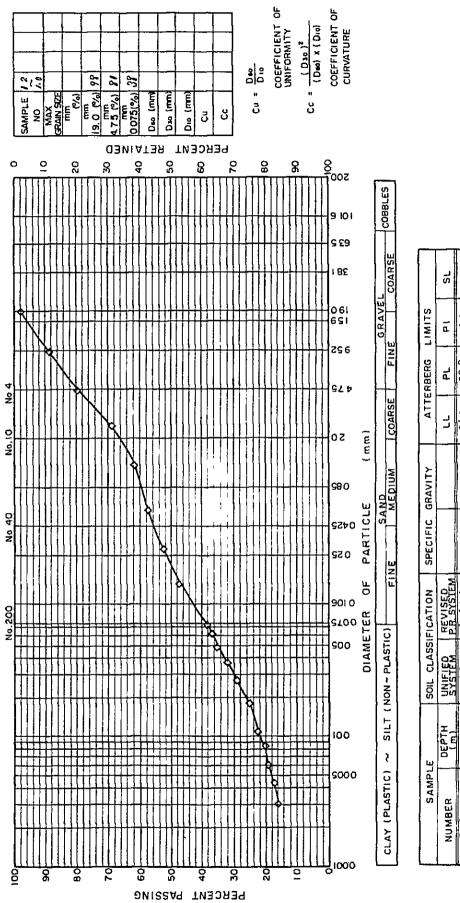


SAMPLE	PLE	SOIL CLASSIFICATION	IFICATION	SPECIFIC GRAVITY	RAVITY	ATTE	ATTERBERG LIMITS	LIMITS	
NUMBER	DEPTH UNIFIED	UNIFIED	REVISED P.R. SYSTEM			ב	PL	Ы	SL
	\$ 120 -1.00	PW-FC	A-2-6(0)			402	22 /	181	
0	1 1.00 - 200	သင	A-2-6(b)			37.7	240	13.7	
	2.00-300	1				-		I	
×	× 3.00 - 4.00	Z &	A-2-7(0)			414	29.4	120	

2-1-2 (7) Gradation Analysis Curve (P-7)



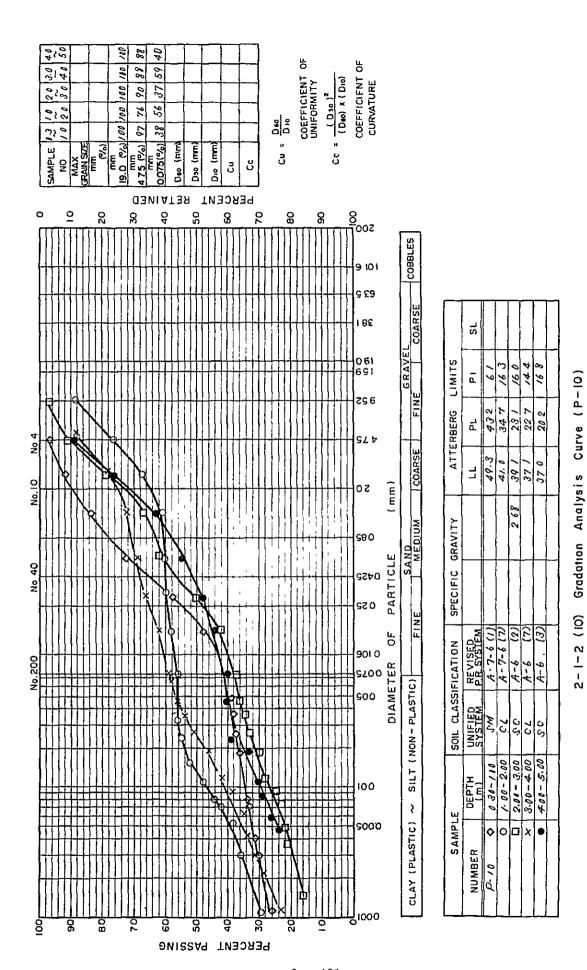
3 - 178



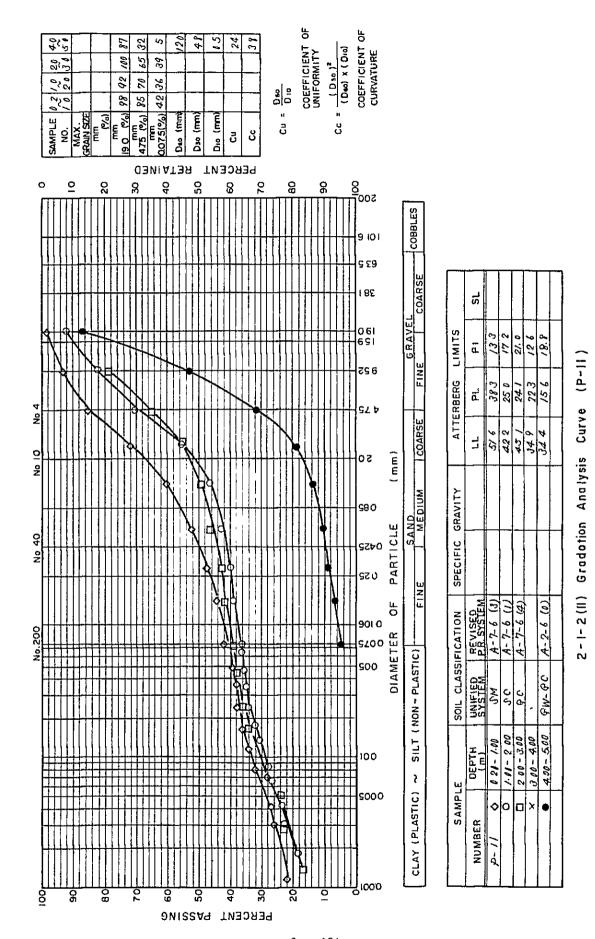
SL							
1 d	0.6	8.9					
٦d	223	14.9					
רר	3/.3	8 62					
						[	
		İ					
REVISED P.R. SYSTEM	(1)9-Y						
UNIFIED		İ					
DEPTH	0 20- 1.00	1.00- 2.00					
NUMBER		0					
	ER DEPTH UNFIED REVISED	DEPTH UNIFIED REVISED (m) SYSTEM P.R. SYSTEM P.R. SYSTEM P.R. SYSTEM 9.0	IER         DEPTH (m)         UNIFIED SYSTEM         REVISED PR SYSTEM         PR SYSTEM         PI         PI           O 020-1.00         \$C         \$A-6(1)         \$3.3         \$23.9         \$4.9         \$9.9           O 1.00-2.00         \$C         \$A-6(1)         \$23.8         \$4.9         \$9.9	IER         DEPTH UNIFIED REVISED PR. SYSTEM         REVISED PR. SYSTEM         P. S.	ER         DEPTH (m)         UNIFIED REVISED PR SYSTEM         LL         PL         PI           O 0 20- 1.00         \$C         A-6(1)         37.3         22.3         \$0           O .00- 2.00         \$C         A-6(1)         \$23.8         14.9         8.9	ER         DEPTH LUNFIED REVISED PR SYSTEM         LL         PL         PI           \$\oldsymbol{0} \text{ 20} \cdot \cdot \cdot 0 \text{ 20} \text{ 30} \text{ 223 } \text{ 8.0 } \text{ 20}         \$\oldsymbol{0} \cdot 3.0 \text{ 223 } \text{ 8.0 } \text{ 8.9 } \text{ 20 } \text{ 20 } \text{ 8.9 } \text{ 20 }  2	IER         DEPTH LUNFIED REVISED         LL         PL         P1           O 0 20-7.00 0C         A-6(1) 398 7.43 8.9         P.0         P.0           O 7.00-2.00 0C         A-6(1) 398 7.43 8.9         P.0

2-1-2 (9) Gradation Analysis Curve (P-9)

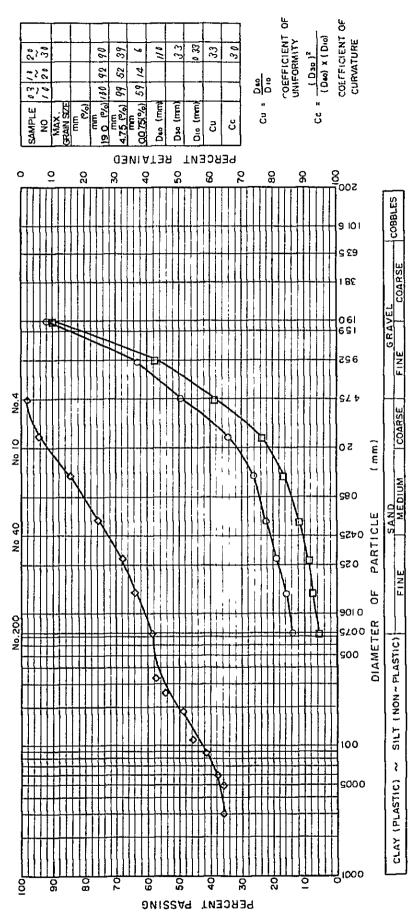
3 - 179



3 - 180

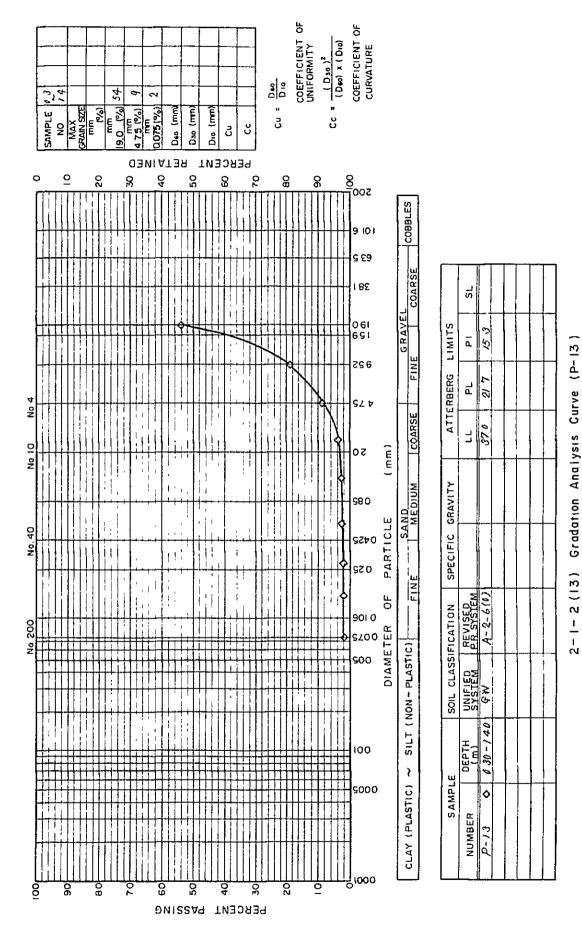


3 - 181

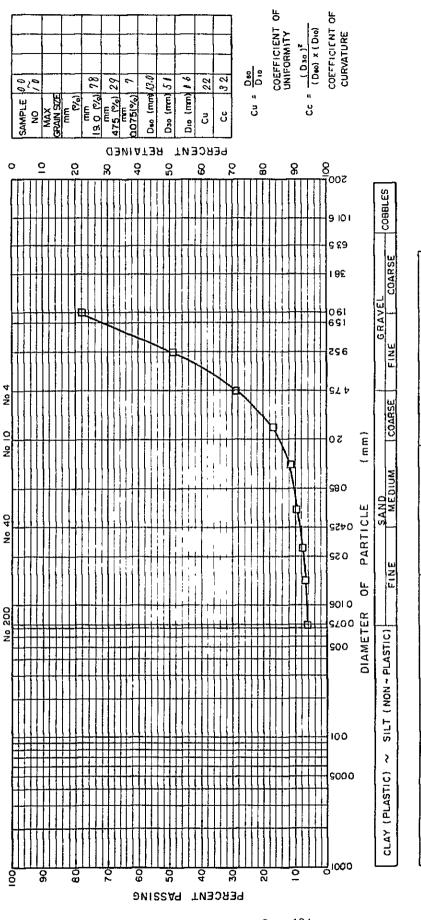


SAMPLE	PLE	SOIL CLASS	SOIL CLASSIFICATION	SPECIFIC GRAVITY	GRAVITY	ATT	ATTERBERG LIMITS	LIMITS	
NUMBER	DEPTH	UNIFIED	P.P. SYSTEM			רו	PL	P1	SL
p-12 0	030-1.00	WF	(L) 9-L-4		2.67	418	268	150	
0	1.00-200	PC	A-2-6 (0)			328	183	14.5	
ت	2.00- 3.00	9W- GC	A-1-a(0)			1	1	1	

2-1-2 (12) Gradation Analysis Curve (P-12)

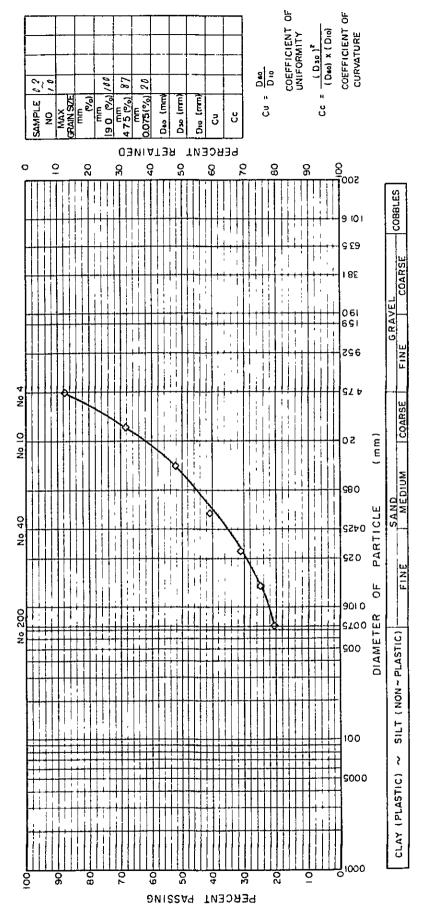


3 - 183



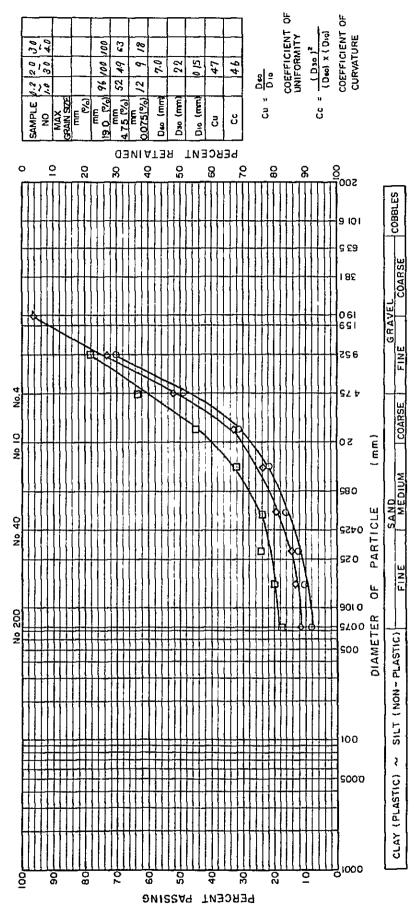
SAMPLE		SOIL CLASSIFICATION	FICATION	SPECIFIC GRAVITY	GRAVITY	ATTE	ATTERBERG LIMITS	LIMITS	
NUMBER	DEPTH (m)	UNIFIED	REVISED P.R. SYSTEM			I L	P.	ā	St
D-14 0	001-000	PW-FM	A-2-7(0)			480	283	197	
0	100-200					30.4	226	7.8	
	210-210				14.5	31. 7	2/6	101	

2-1-2 (14) Gradation Analysis Curve (P-14)



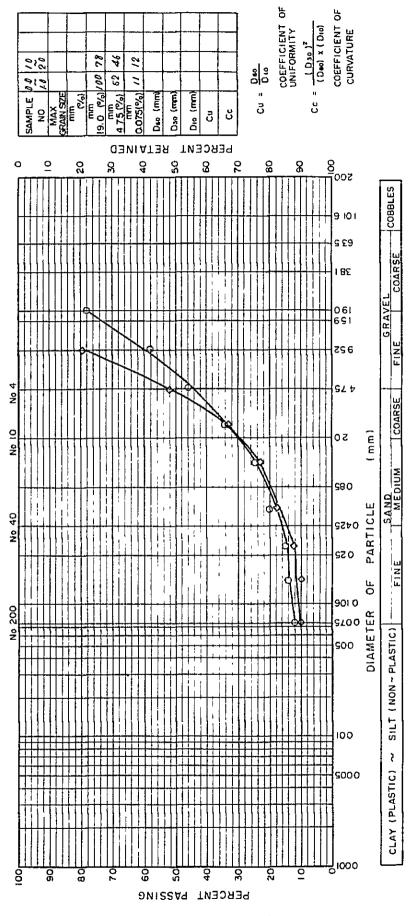
SAMPLE	T E	SOIL CLASS	SOIL CLASSIFICATION SPECIFIC GRAVITY	SPECIFIC	SRAVITY	ATTE	ATTERBERG LIMITS	LIMITS	
NUMBER	DEPTH	UNIFIED	REVISED PR. SYSTEM			11	! 1	<u>Ф</u>	SL
p-15 0 020-1.00	0 20-1.00	11	A-2-7(1)		271	271 587	33.1 25.6	25.6	

2-1-2 (15) Gradation Analysis Curve (P-15)



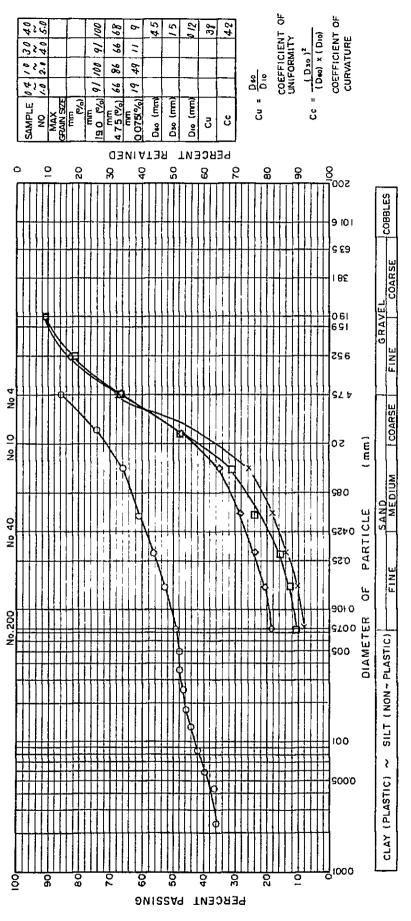
SAS	SAMPLE		SOIL CLASSIFICATION		SPECIFIC GRAVITY	GRAVITY	ATT	ATTERBERG LIMITS	LIMITS	į
NUMBER		DEPTH (m)	UNIFIED	REVISED PR.SYSTEM			רר	P.	١d	SL
91-d	0	0.20-1.00	ЬM	A-2.7 (V)			524	32.0	20.4	
	0	2.00-3 00	& <i>p−&amp;</i> €	A-2-6 (0)			404	23.3	17.1	
	0	8.00-400	SC	A-2-6 (0)		2,75	39 3	220	8 41	
	Γ									

2-1-2(16) Gradation Analysis Curve (P-16)



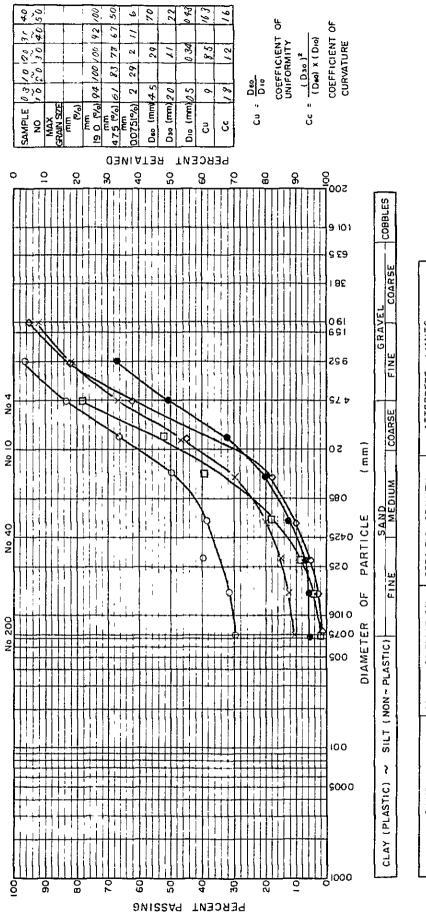
SAMPLE		SOIL CLASS	SOIL CLASSIFICATION	SPECIFIC GRAVITY	GRAVITY	ATTE	ATTERBERG LIMITS	LIMITS	
NUMBER	S OEPTH UNIFIED	UNIFIED	PEVISED P.R. SYSTEM			11	ЪГ	ā.	SL
Þ-17 💠	007-000	PW- GC	A-2-6(0)			365	23 7	128	
0	1.00-2.00	FW- FM	A-2-6(0)			346	24.6	001	

2-1-2 (17) Gradation Analysis Curve (P-17)



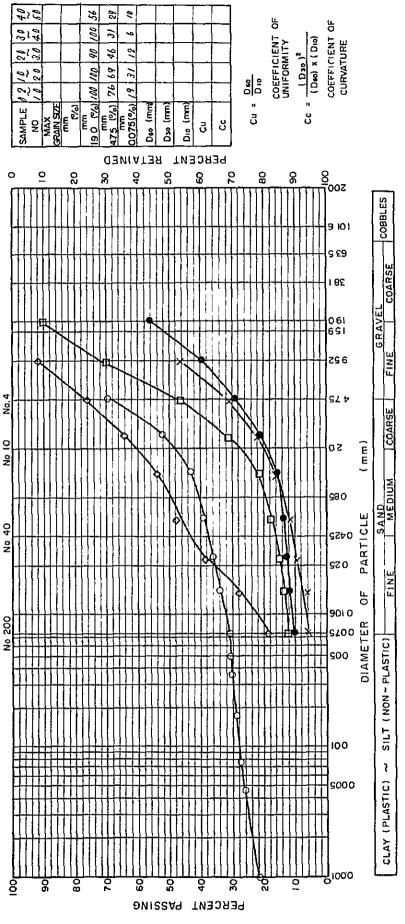
	SL						
LIMITS	14	193	26 4	12.5	11.8		
ATTERBERG LIMITS	PL	25 5	33 4	23 5	228		
ATTE	LL	448	598	0 98	346		
GRAVITY						:	
SPECIFIC GRAVITY							
FICATION	REVISED PR.SYSTEM	A-2-7(0)	A-7-6 (10)	A-2-6 (0)	A-2-6(0)		
SOIL CLASSIFICATION	UNIFIED SYSTEM	ىن	NS	36 - SC	SP-50		
ш	DEPTH (m)	0.40-100	100-200	3 00-400	400-5.00		
SAMPLE	NUMBER	♦ 81-d	0		×		

2-1-2 (18) Gradation Analysis Curve (P-18)



SAMPLE	LE	SOIL CLASSIFICATION	IFICATION	SPECIFIC GRAVITY	SRAVITY	ATT	ATTERBERG LIMITS	LIMITS	
NUMBER	DEPTH (m)	UNIFIED	REVISED P.R. SYSTEM			٦٦	PL	ā	SL
♦ 61-d		MS	A-2-6 (0)			33 8	251	87	
0	1 00-200	05	A-2-7 U)			4/8	23.2	184	
	200-300	NS.	A-2-6 (0)			3/5	193	12.2	
×	300-400	SP-30	A-2-6 (0)			33 9	213	136	
•	400-500	34 ~M€	A-2-6 (0)			33.2	961	136	

2-1-2(19) Gradation Analysis Curve (P-19)



SL 22 2 22 0 78 9 8 51 ā. 36 0 24 5 23 4 22.0 ٦ 5/6 582 465 423 378 ב 992 SPECIFIC A - 2 - 7 (2) A - 2 - 7 (0) A - 2 - 7 (0)PR SYSTEM A-2-7 (0) 3 CLASSIFICATION 2.00 - 3.00 SW-GC 3.00 - 3.00 GW-GC GW- 6C DEPTH (m) 0 20 - 7.00 400- 500 SAMPLE **♦**o□× NUMBER P- 20

LIMITS

ATTERBERG

GRAVITY

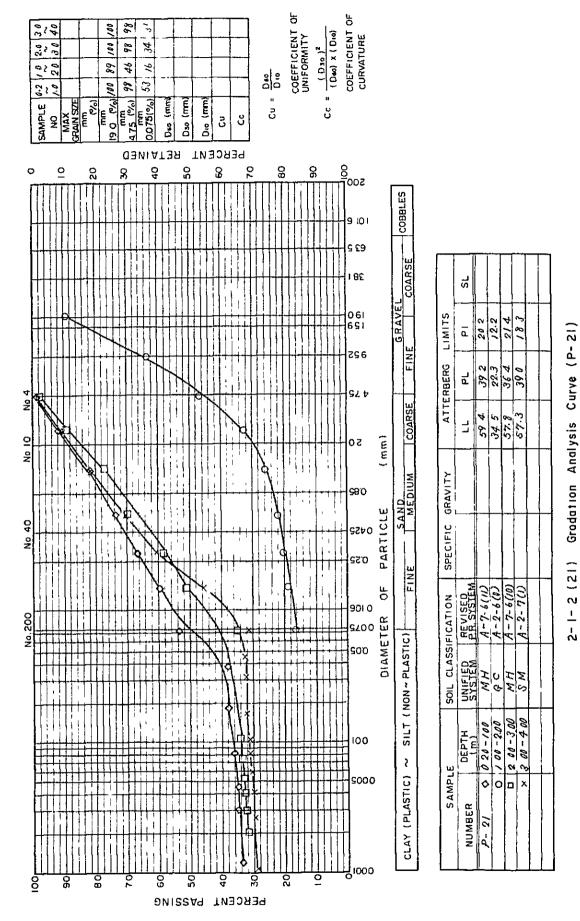
SOIL

Analysis Curvs (P-20

Gradation

-1-2 (20)

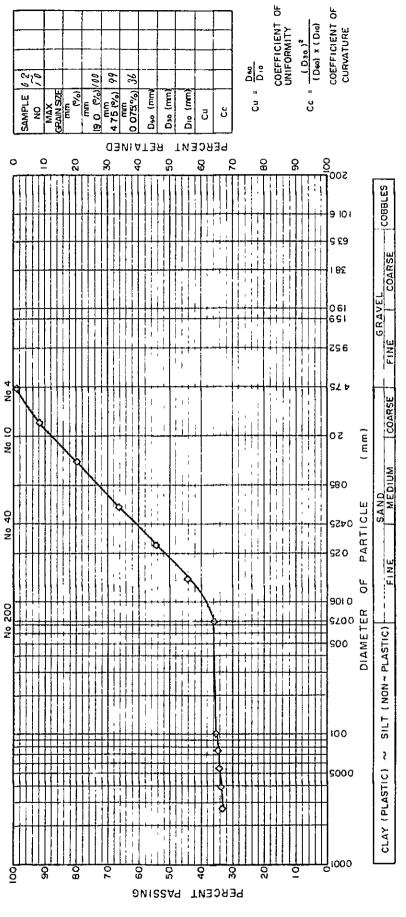
3 - 190



3 - 191

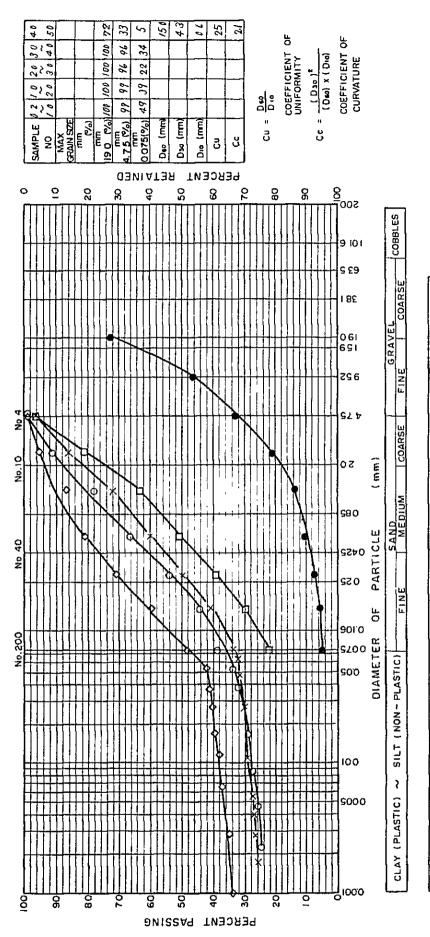
SAMPLE	LE	SOIL CLASS	FICATION	SOIL CLASSIFICATION   SPECIFIC GRAVITY		ATTERBERG LIMITS	LIMITS	
NUMBER	DEPTH (m)	UNIFIED	REVISED P.R. SYSTEM		ר	P.	-G	SL
P- 22 0 020-100	0 20-100	MH	(8) 9-4-Y		0 19	47.3	/3.7	
0	1 00-200	Μø	A-2-6(0)		27 /	22.1	50	

Gradation Analysis Curve (P-22) 2-1-2 (22)



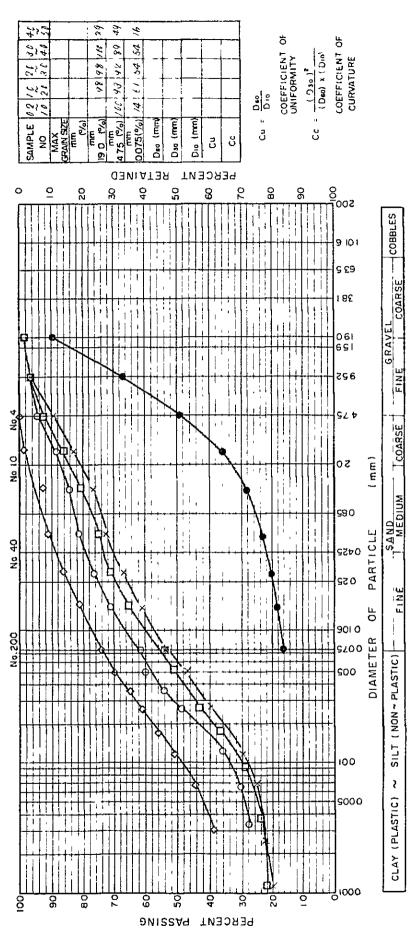
<u> </u>	NUMBER DEPTH UNIFIED REVISED P. 238 \$ 1 20-1 00 JM A-7-6(4) 2.65

2-1-2 (23) Gradation Analysis Curve (P-23B)



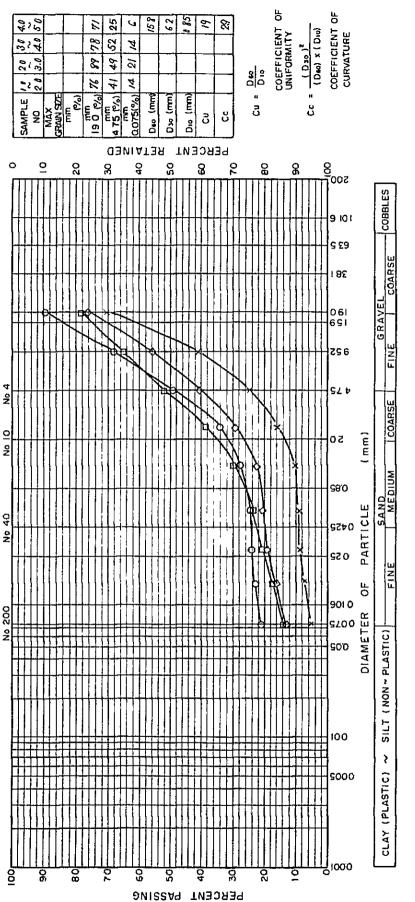
							_
	75						
LIMITS	l d	197	346	193	228	891	
ATTERBERG	PL	435	36 4	33 9	383	8 18	
ATTE	77	632	0 14	288	119	987	
GRAVITY							
SPECIFIC GRAVITY							
FICATION	REVISED PR SYSTEM	(8) 9.L.Y	(L) 9-L-H	A-2-7 (1)	A-2-7 (2)	(a) 4-2-4	
SOIL CLASSIFICATION	UNIFIED	N.S	N S	N.S.	WJ	FW- GM	
пi	DEPTH (m)	001-000	1 00-2 00	9 00-3 00	300-400	400 - 5.00	
SAMPLE	NUMBER	p-24 &	0		×	•	

2-1-2 (24) Gradation Analysis Curve (P-24)



SA	SAMPLE	SOIL CLASSIFICATION	IFICATION	SPECIFIC GRAVITY	GRAVITY	ATTE	ATTERBERG	LIMITS	
NUMBER	DEPTH (m)	UNIFIED	PEVISED PR.SYSTEM			רר	PL	РI	¬S.
P- 25	0 20-100	7.0	A-7-6 (14)			44 8	25 5	193	
	0 7.00-200	70	A-6 (5)			292	0 61	102	
	200-300	7.0	(4) 9-H			30 /	19 5	901	
	× 300- 410	70	A-6 (5)			186	15 8	123	
	• 400 - 500	ಚಿ	(a) 9-2-4			382	22.7	155	

2-1-2 (25) Gradation Analysis Curve (P-25)

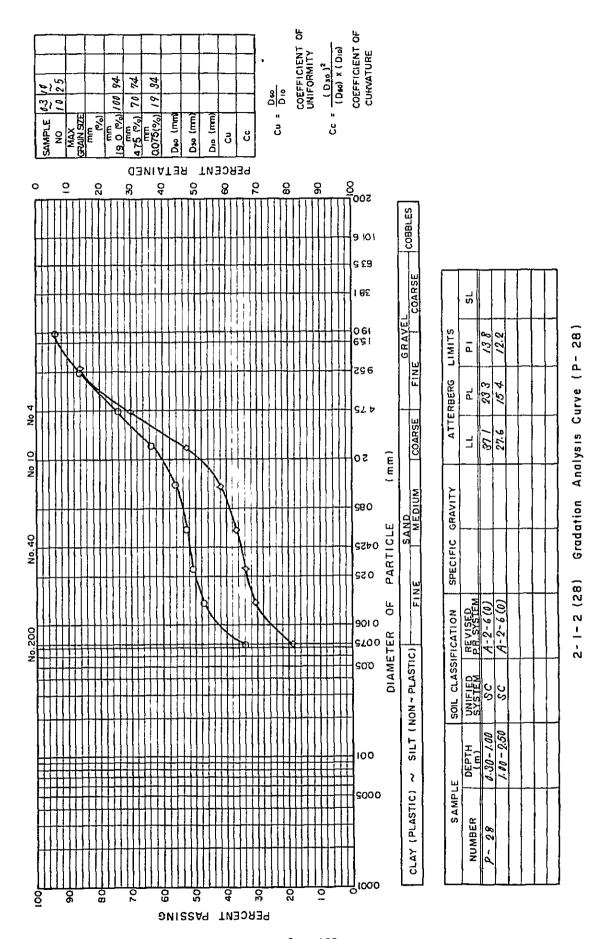


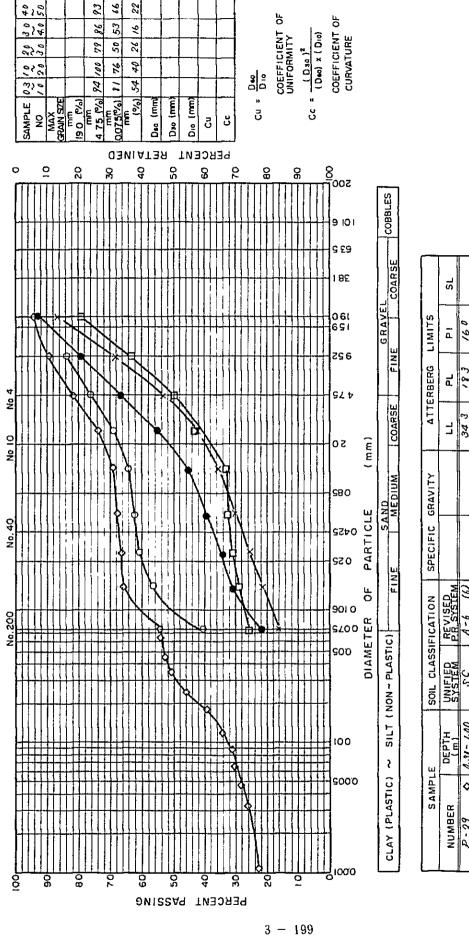
SAMPLE	PLE	SOIL CLASSIFICATION		SPECIFIC GRAVITY	GRAVITY	ATTE	ATTERBERG LIMITS	LIMITS	
NUMBER	OEPTH (m)	UNIFIED	REVISED P.R. SYSTEM			T I	7	ā	SL
5 98-d	1.00-2.00	في ا	A-2-6(0)			303	8 9/	135	
	2.00 - 3.00	٥٥	A-2-6(0)			348	208	134	
L	1 3 00-4 00	<u>ۍ</u> د	(0)9-Z-W			30.7	8 41	651	
^	< 400-500 FW-FC A-2-6(0)	FW-PC	A-2-6(0)			318	19.5	113	

2-1-2 (26) Gradation Analysis Curve (P-26)

ATTERBERG LIMITS	PL P1 SL	22.8 17.8	23 / 155	240 93		
A	7	406	386	333		
GRAVITY				2.74		
SPECIFIC GRAVITY						
SOIL CLASSIFICATION	P.R. SYSTEM	A-7-6 (3)	A-2-6(V)	A-2-6 (0)		
SOIL CLASS	SYSTEM	SC	SC	MD-do	1	
u I	DEPTH (m)	100-200	200-340	300-400	MIXED	
SAMPLE	NUMBER	P-27 0	0	ם	×	

2-1-2(27) Gradation Analysis Curve (P-27)



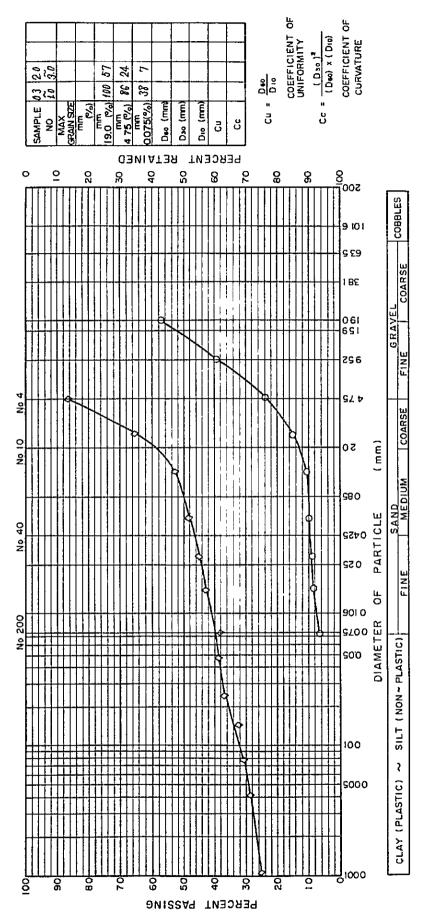


5	SL						
S							
LIMI	ā	09/	ı	15.8	149	9 9/	
ATTERBERG LIMITS	PL	681	!	20 6	184	22.7	
ATTE	LL	34 3	1	364	333	39 3	
GRAVITY				266			
SPECIFIC GRAVITY							
FICATION	REVISED PR.SYSTEM	(9) 9-W		(1) 9-6-V	A-2-6 (0)	A-2-610)	
SOIL CLASSIFICATION	UNIFIED SYSTEM	25	1	ڧن	25	2.	
щ	DEPTH (m)	0.31 - 1.00	1.00-200	2.00 - 3.00	300-410	4.00-500	
SAMPLE	NUMBER	D-99 ♦	0	0	×	•	

29)

4

2-1-2 (29) Gradation Anaiysis Curve



SAMPLE		SOIL CLASS	FICATION	SOIL CLASSIFICATION SPECIFIC GRAVITY	'ITY	ATTE	ATTERBERG LIMITS	LIMITS	
NUMBER	DEPTH (m)	UNIFIED	REVISED P.R. SYSTEM			LL	PL	P.I	SL
p-30 0	0.30 - 100	SM				2 99	44.2	2/2	
0	211-310 FW-FM	FW- FM				39.2	120	12.1	
						-			

2-1-2 (30) Gradation Analysis Curve (P-30)

Project	Upper Quae Yai	O na e	Yai			
Soil sample		¥n S	ilty	Clay and	Brawn Silty Clayand Decomposed	Rock
Pit No P	-			Depth	0.0 - 25 m	
Max grain size	2e	19,0	9,0 mm	(3/4" sleve	sieve )	

Date	- 61	15-3-79			
Type	Type of test	Standard Proctor	Proctor		
Mold	Mold Volume	944 cm3	Weight	Weight 2.005 kg	
Speci	Specific gravity, Gs	y. Gs			

DENSITY

Determination No	1	2	3	2 3 4	5	
Wt mold + soil, kg	3 942	3 600	3 885	3 942 3 600 3 885 3.915 3 860	3 860	
Wt mold,kg	2 005	2.005	2 005	2 005 2.005 2 005 2.005 2 005	2 005	
Wt compacted soil,kg	1861	1 595	1880	1 937 1 595 1 880 1,910	1 855	
Wet density, t/m³	2 052	6891	1 992	2052 1689 1992 2023 1.965	1.965	
Dry density, t/m³	796	1554	1.787	1.737	1,766 1,554 1,787 1,737 1,640	
Void ratio e						
Porosity n						

WATER CONTENT

Determination No	_	1 2 3 4	60	4	5	
Container No	0-2	1-33	82-7	D-2 V-33 L-28 E-41 V-1	1-1	
Wt container + wet soil, gm	270.50	333/3	23291	270.50 33313, 23291 294 38 405 76	415 76	
Wt container + dry soil, gm	235 00	30879	2/0 55	235 00 30879 210 55 25468 34079	340 79	
Wt water, Ww gm	35 50	2434	22 36	35 50 2434 22 36 39 70 64 97	6497	
Wt. container, gm	15.50	28 85	15.56	15.50 2982 15.56 13 86 13 30	13 30	
Wt dry soil, Ws, gm	2/950	27897	19499	21950 27897 19499 240 82 32749	32749	
Water content, w %	16.17	8 72	11 46	16.17 8 72 11 46 16 48 19 84	19 84	

Dry density, t/m³

B 10 12 14 16 18 20

!

Max fd

Project Upper Quae Yaı	0.1
Soil sample Brown Silty	Brown Silty Clay and Decomposed Rock
Pit No. P-2	Depth 00 - 3.0 m
Max. grain size 19.0	19.0 mm (3/4" Sieve)

Date 11 - 4 - 79	- 79		
Type of test	Standard Proctor	_	
Mold · Volume	944 cm³	Weight	2.005 kg
Specific gravity, Gs	, . Gs		

DENSITY

Determination No.	1	- 5	2 3 4	4	5	9
Wt. mold + sail, kg	3 932	3 650	3 730	3 829	3 992 3 650 3 730 3 829 3 930 3 879	3879
Wt mold,kg	2.005	2.005	2 005	2 005	2.005 2.005 2.005 2.005 2.005	2.005
Wt compacted soil, kg	1927	1645	1 725	1.824	1927 1645 1725 1.824 1925 1874	1874
Wet density, t/m3	2.041	1743	1827	1 932	2.041 1.743 1 827 1 932 2 039 1 985	1985
Dry density, t/m³	1 729	909 1	1658	1706	1729 1606 1658 1706 1781 1661	1991
Void ratio e						
Porosity n						

WATER CONTENT

Determination No.	1	2	2 3	4	5	6
Container No.	F-41	F-4	E1-7	F-41 F-4 F-13 F-50 B-50 E-12	8-50	E-12
Wt. container + wet soil, gm	27214	232.82	214 59	27214 232.82 214 59 209 65 264 38 295 89	26438	295 89
Wt. container + dry soil, gm	232.70	216.76	00 961	232. 70 216. 76 196 00 186 96 232 90 208 32	232.90	20832
Wt water, Ww. gm	39.44	30 11	18 59	39.44 17 06 18 59 22.69 31 48 37.59	31 48	37.57
Wt container, gm	13 86	15 24	13 9T	13 86 15 24 13.97 15 43 15 43 15 90	15 43	15.90
Wt. dry soil, Ws. gm	218.84	200 52	182 03	218.84 200 52 182 03 171.53 217.47 19242	217.47	19242
Water content, w %	18.02	8.50	10 21	18.02 8.50 10 21 13.23 14.47 19.52	14.47	19.52

Dry density, t/m³

Samuel Market Content, %

Water content, %

Max 8'd 175 1/m3 Opt w 16 4

2-1-3 (2) Compoction Test

Project Upper Quae Yai	rai	
Soil sample Brown Silty Clay With Decomposed Rack	Clay With	Decomposed Rock
Pit No. P-3	Depth	Depth 0.0 - 5.0 m
Max. grain size 4,75	4,75 mm (No.4 sieve	sieve )

١				
Date	Date 16 - 4 - 79	7.9		
Туре	Type of test	Standard Proctor	tar	
Mold	Mold Volume	944cm <sup>3</sup>	Weight	2.005kg
Speci	Specific gravity, 6s	y, Gs		

DENSITY

Determination No	<b>,</b>	2	c,	4	5	
Wt mold + soil, kg	3753	3 830	3 940	3753 3830 3940 3968 3948	3 948	
Wt mold,kg	2 005	2 005	2.005	2 005 2 005 2.005 2 005 2.005	2.005	
Wt. compacted soil, kg	1748	1 825	1 935	1 963	1748 1825 1935 1963 1943	
Wet density, t/m³	1852	1933	2.049	1 852 1 933 2.049 2.079 2.058	2.058	
Dry density, 1/m3	1717	1 758	1 730	927.1 038 1 30 1 860 1.759	1.759	!
Void ratio e						
Porosity n						

WATER CONTENT

		-			
Determination No	~	2 3 4	છ	4	Ş
Container No.	V-12 E-28 F-17 E-4 E-11	E-28	F-17	E-4	E-11
Wt container + wet soil, gm	360.38 255 70 336 67 296 23 311.60	255 70	236 67	296 23	09718
Wt container + dry soil, gm	336 39	233 94	286 50	266 66	336 39 233 94 286 50 266 66 268.64
Wt water, Ww gm	23 99	21 76	50.17	29.57	23 99 21 76 50.17 29.57 42 96
Wt container, gm	30 78	15.38	14 59	15.24	30 78 15.38 14 59 15.24 16.33
Wt dry soil, Ws, gm	305 61	218 56	271 91	251 42	305 61 218 56 271 91 251 42 252.31
Water content, w %	7.85	96.6	1845	11.76	7.85 9.96 18 45 11.76 17.02

-1-3 (3) Compaction Test

t / m³

Max 8'd 1.81

Project Upper Quae Yai

Soil sample Brown Silty Clay and Decomposed Rock

Pit No. P - 4 Depth 0.0 - 5.0 m

Max.grain size 4.15mm (No.4 Sieve.)

Date 19.	19 - 3 - 79			
Type of test	Standard Proctor	Proctor		
Mold · Volume	944 сп		Weight	2.005 kg
Specific gravity, Gs	ty, Gs			

DENSITY

Determination No.	1	2	9	4	9	
Wt mold + soil, kg	3.750	3 800	3942	3.750 3 800 3 942 3 925 3 900	3 900	
Wt mold,kg	2.005	2.005	2 005	2.005 2.005 2.005 2.005	2.005	
Wt. compacted soil,kg	1745	1,795	1.937	1745 1795 1937 1.920 1.895	7.895	
Wet density, t∕m³	1.849	1901	2.052	1849 1 901 2.052 2 034 2 007	2 007	
Dry density, t/m³	1649	1.660	1.722	1649 1.660 1.722 1.703 1.659	1 659	
Void ratio e						
Porosity n						

WATER CONTENT

Determination No	1	2	ئ	4	\$	
Container No.	01-2	E- 30	E-16	Z-10 E-30 E-16 Z-11	٧- 3	
Wt. container + wet soil.gm	28195 191 52 217.75 318.59 36848	191 52	217.75	318 59	36848	
Wt. container + dry soil, gm	25360 168 94 185 19 261 51 310 21	p6 891	185 19	26/5/	3/0 2/	
Wt water, Ww gm	28 35	22 58	32.56	28 35 22 58 32 56 47 08 58 27	58 27	
Wt. container, gm	20 05	18 81	15 33	20 05 13 31 15 33 18 90 32 20	05 EC	
Wt. dry soil, Ws.gm	233 55 155.63 169 86 242 61 278 01	155.63	169 86	242.61	278 01	
Water content, w %	1214	1451	19 17	1214 1451 1917 1941 20 96	20 96	

Dry density, t/m<sup>2</sup>

Is la 16 B 20 22

Water content, %

Max. rd 1.73 t/m<sup>3</sup> Opt. w | 84 %

2-1-3 (4) Compaction Test

Project Up	D B C	Upper Quae Yai	Yai	
Soil sample	Bro	E C	Brown Clayey Gravel	level
Pit No P-	P - 54		Depth	Depth 0.0 - 1.0 m
Max grain size	ø.	19.01	19.0 mm (3/4" sieve	" sieve }

Date	Date 19-3-79	62		
Type of test		Standard Proctor		
Mold	Mold Volume	944cm3	Weight	Weight 2.005 kg
Specif	Specific gravity, Gs	, Gs		

DENSITY

Determination No	1	2	Е	<b>7</b>	5
Wt. mold + soil , kg	3.890	3838	3 930	3.890 3 838 3 930 3.930 3 885	3 885
Wt mold,kg	2 002	2 0 0 5	\$ 005	2 005 2 005 2 005 2 005	2 005
Wt compacted soil, kg	1 885	8881	566 1	526 1	1 885 1 833 1 925 1 925 1 880
Wet density, t/m³	1 997	1942	2 039	2 039	1 997 1 942 2 039 2 039 1 992
Dry density, t/m³	1 755	1742	1.770	1 755 1 742 1.770 1 754 1 679	1679
Void rotio e					
Porosity n					

WATER CONTENT

Determination No.	1	2	2 3 4	7	'n	
Cantainer No	91 - I	V-10	V- 35	E-16 V-10 V-35 Z-2 V- 15	٧- ہج	
Wt container + wet sail, gm	24789	294 72	401.41	247 89 294 72 401.41 349.35 376 10	376 10	
Wt container + dry soil, gm	219 74	26761	352.47	219 74 267 61 35247 30294 321 63	321 63	
Wt. water, Ww gm	28.15	27 11	48 94	28.15 27 11 48 94 46.41 54 47	54 47	
Wt. container, gm	15 33	31.45	30 30	15 33 31.45 30 30 17.10 29 80	29 80	
Wt. dry soil, Ws.gm	204 41	236.16	322 17	204 41 236.16 322 17 285.84 291 83	291 83	
Water content, w %	13.77	11. 48	15.19	13.77 11. 48 15.19 16.24 18 66	18 66	

2-1-3 (5) Compaction Test

%

15,0

p o

t/m3

Max 8'd 1.78

Project Upp	Upper Quar Yai	(ai
Soil sample B	Brown Clayey Grauel	by Grouel
Pit No. P - 58	58	Depth 0.0 - 2.0 m
Max. grain size	19.0 mm	19.0 mm ( 3/4" Sleve )

Date	22- 3-79	æ		
Type	Type of test	Standard Proctor		
Mold	Mold Volume	944 cm2	Weight	2.005kg
Speci	Specific gravity, 6s	, Gs		

DENSITY

Wt. mold + soil, kg 3.965 3.835 3.885 3.970 3.922 Wt. mold, kg 2.005 2.005 2.005 2.005 2.005	9653	835	3885			
	2 500	005		3970	3.922	
		000	2.005	2.005	2.005	
Wt. compacted soil,kg 1.960 1.830 1.865 1.917	460 1.	000	1.880	1.965	1917	
Wet density, t/m <sup>3</sup> 2.076 1.939 1.992 2.082 2.031	076 1	939	1 992	2.085	2031	
Dry density, t/m <sup>3</sup> 1811 1.776 1.801 1854 1.736	811 1	377.	1.801	1854	1 736	
Void ratio e						
Porosity n						

ER CONTENT

					į	
Daterminotion No	1	2	3	4	5	
Container No.	X-17	0-5	X-17 0-6 N-3 1-1 1-7	7-1	1-7	
Wt. container + wet soil, gm	432.74	71 710	308 85	331 12	432.74 317 17 308 85 331 12 304 62	
Wt container+dry soil, gm	380 29	291.62	280 69	29638	380 29 291.62 280 69 296 38 262.52	
Wt. water, Ww gm	52.45	25 55	28 16	24 74	52.45 25 55 28 16 34 74 42 10	
Wt container, gm	21 26	13 60	14.80	13.30	21 26 13 60 14.80 13.30 14 50	
Wt dry soil, Ws, gm	359 83 278 02 265.89 283.08 248.02	27802	265.89	288.08	248.02	
Water content, w %	1461	9.19	10.59	12.27	14 61 9.19 10.59 12.27 16 97	

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Water content, % Mox.Yd 186\_ t/m³ Opt w \_

- I-3 (6) Compaction Test

Project	Upper	Quae Yai	Yai			
Soil sam	Soil sample Brown Sitty Clay and	Sitty	Clay	and	Oecomposed	Rock
Prt No	P - 6		Depth	ቱ	0 - 5.0 m	:
Max. grain size	n size	0 61	19 0 mm (3/4" sleve	-4	sieve)	

Date	Date 21 - 3-79	79		
Туре	Type of test	Standard	Proctor	
Mold	Mold Volume	944 cm 3	Weight	2.005 kg
Speci	Specific gravity, Gs	y, Gs		

DENSITY

Determination No	1	6	3	3 4	Ŋ
Wt mold + soil, kg	3 830	028€	3 790	3885	3 830 3 870 3 790 3 885 3 895
Wt. mold,kg	2.005	2.005	2.005	2.005	2.005 2.005 2.005 2.005 2.005
Wt. compacted soil, kg	1 825	1865	1.785	1.880	1 825 1 865 1.785 1.880 1 890
Wet density, t/m³	1933	9161	1861	1933 1976 1891 1992 2002	2 002
Dry density, t/m³	1577	1640	999 /	1577 1640 1666 1.714 1689	689 1
Void ratio e					
Porosity n					

WATER CONTENT

Determination No		2	ຕ	4	49	
Container No	6-1	F-27	F-29	V-9 F-27 F-29 X-4 E-37	E-37	}
Wt. container + wet soil, gm	414 01	263 26	240 62	414 01 263 26 240 62 269 44 214 38	2/4 38	
Wt container + dry soil, gm	343 38	221 19	213 79	23464	343 38 221 19 213 79 234 64 183 32	
Wt water, Ww am	69 04	4207	26 83	70 69 42 07 26 83 34 80 31 06	90 10	
Wt container, gm	30 30	1572	1489	30 30 1572 1489 20 20 15 59	15 59	
Wt dry sorl, Ws.gm	313 08	20547	19890	214.44	313 08 205 47 198 90 214 44 167.73	
Water content, w %	22 58	20 48	1349	16 23	22 58 20 48 13 49 16 23 18 52	

Dry density, t/m³

Samina density, t/m³

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2-I-3 (7) Compaction Test

Project Upper Quae Yai		ai
Soil sample Brown	Clay	Clayey Gravel
Pit No P-7		Depth 00 - 4.5 m
Max. grain size	9. Om	19.0mm (3/4" sieve)

Date 14-3-79	3-	6.2		
Type of test		Standard - Procter		
Motd : Volume	9 8	944 cm³	Weight	2.005 kg
Specific gravity, Gs	ovit	y, Gs		

DENSITY

					ĺ	
Determination No	1	2	2 3	4 5	b	
Wt. mold + soil, kg	3 870 3 910 3,900 3 944 3.855	0168	3.900	3 944	3.855	
Wt. mold,kg	2005 2.005 2 005 2.005 2 005	2.005	2 005	2.005	2 005	
Wt. compacted soil, kg	1865	506 1	1895	1939	1865 1905 1895 1939 1850	
Wet density, t/m³	9661	2.018	1976 2.018 2.007 2.054 1959	2.054	1959	
Dry density, t/m³	4.709	1 740	1.709 1 740 1 661 1 721 1.587	1721	1.587	ļ
Void ratio e						
Porosity n						

WATER CONTENT

Determination No	1	ς, (λ)	m	4	S
Contoiner No.	E-14	9-Q	8/-X	E-60	E-14 D-5 X-18 E-60 E-44
Wt. container + wet soil, gm	220 34	281 11	27/45	278 11	220 34 281 11 271 45 278 11 27916
Wt container + dry soil, gm	19280	244 19	228.15	285 5B	192 80 244 19 228.15 235 58 229 31
Wt water, Ww gm	27 54	3692	27 54 36 92 4330 42 53 49 85	4253	49 85
Wt container, gm	1991	1360	1661 1360 2040 15.69 16.57	15.69	16.57
Wt dry soil, Ws, gm	61921	230 59	207.75	219 89	17619 230 59 201.75 219 89 212.74
Water content, w %	1563	10 91	20 84	19.34	1563 1601 2084 19.34 2343

Or, density, 1/m³

To density, 1/m³

Opt. w 171 %

2 - I - 3 (8) Compoction Test

it Upper Guae Yai	sample Brown Clayey Gravel	o P - 8 Depth 0.0 - 3.0 m	grain size 19 0 mm (3/4" sieve)
Project	Soil sample	Pit No P - 8	Max grain size

Date	21-3-79	- 79		
Type	Type of test	Standard Procter		
Mold	Mold Volume 944cm3	944 cm³	Weight	Weight 2.005 kg
Speci	Specific gravity, Gs	y. Gs		

DENSITY

Wt. mold + soil, kg       3.930 3 965 3.775 3 862 3.965         Wt. mold, kg       2.005 2 005 2 005 2 005 2 005         Wt. compacted soil, kg       1 925 1 960 1 770 1 857 1.960         Wet density, t/m³       2 039 2 076 1 875 1 967 2 076         Dry density, t/m³       1 715 1 757 1 678 1.744 1.797	Determination No	-	7	8	1 2 3 4	5	
ad soil,kg , t/m³ t/m³	Wt. mold + soil, kg	3.930	3 965	3.775	398 €	3.965	
, kg	Wt. mold, kg	2005	2 005	2 005	2 005	2,005	
	Wt. compacted soil, kg	1 925	036 1	1 770	1857	1.960	
	Wet density, t/m³	2 039	2 076	1875	1 967	2 076	
Void ratio e	Dry density, 1/m3	1 715	1 757	1 678	1.744	1.797	
	Void ratio e						
1 (1816)	Porosity n			i			

WATER CONTENT

Determination No	ł	2	3 4	4	5	
Container No	E-20	E-20 E-60 E-12 E-1 E-24	E-12	E-1	E-24	
Wt container + wet soil, gm	272.06	272.06 266 69 237 01 232 37 241.59	23701	23237	241.59	
Wt container + dry soil, gm	23/ 49	231 49 228 15 213 73 207 65 211 15	21373	20765	211 15	
Wt. water, Ww gm	40.57	40.57 38 54 23 28 24 72 30 44	23 28	24 72	30 44	
Wt container, gm	16 46	16 46 15 69 15 90 14 37 14 96	15 90	14.37	14.96	
Wt dry soil, Ws. 9m	215 03	215 03 212.46 197 83 193.28 196 19	197 83	193.28	61 961	
Water content, w %	1881	1887 1814 1177 1279 15 52	11 77	12 79	15 52	

Sm/J, thensity, then is a second of the seco

2-1-3 (9) Compaction Test

Max Fd 1.82

Project Upper Quae Yai	Yai
Soil sample Brown	Clayey Sand
Pit No. P-9	Depth 00-2.0 mm
Max. grain size	4.75 mm (No. 4 sieve)

Date	- 12	21 - 3- 79	6				
Туре	Type of test	Stan	dord	Standard Proctor			
Mold	Mold Volume	944 cm <sup>3</sup>	4 cm3		Weight	Weight 2.005kg	
Speci	Specific gravity, Gs	ıty, G	9				

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Determination No	1	2		3 4	5
Wt. mold + soil, kg	3 940	3985	3874	3 940 3 985 3 874 3 975 4 025	4 025
Wt mold,kg	2.005	2 005	2.005	2.005 2.005 2.005 2.005 2.005	2.005
Wt. compacted soil, kg	1 935	1 980	1869	1 970	1 935 1 980 1 869 1 970 2.020
Wet density, 1/m3	2.050	2.097	1 980	2. 050 2.097 1 980 2.087 2.140	2.140
Dry density, t/m³	1 737	1 800	1. 790	1 850	1 737 1 800 1.790 1 850 1 862
Void ratio e					
Porosity n					

## WATER CONTENT

Determination No.		2	က	3 4	5
Container Na.	E-9	E-9 E-44 E-14 E-15 E-25	E-14	E-15	E- 25
Wt. container + wet soil, gm	91 692	269 16 280.82 236 31 213 34 251 13	23¢ 31	213 34	251 13
Wt container + dry soil, gm	230 49	230 49 243 37 215 26 190 71 220.37	21526	140 11	220.37
Wt. water, Ww. gm	38.67	38.67 37 45 21 05 22.63 30.76	21 05	22.63	30.76
Wt. container, gm	15.99	15.99 16.57 16.61 13 86 14 38	16.61	13 86	14 38
Wt dry soil, Ws.gm	214 50	214 50 226.80 198.65 176.85 205 99	198.65	176.85	205 99
Water content, w %	18 03	15 91	10.59	12.79	18 03 16 51 10.59 12.79 14 92

Ory density, t/m³

© Talent of the second of

2-1-3 (10) Compaction Test

Project up	Upper Quae Yai	Yai
Soil sample	Brown Siity	Brown Silty Clay Decomposed Gravel
Pit No. P-10	0	Depth 0.0 - 5.0 m
Max. grain size	e 4.75 mm	n (No.4 sieve)

Date 5-3	5-3-79			
Type of test	Standard Procter	Proc	ter	
Mold Volume	944 c m 3		Weight	Weight 2.005kg
Specific gravity, 6s	ty, 6s			

DENSITY

Determination No.	1	2	3	4	5	
Wt mold + soil, kg	3.796	3.903	3 830	3.796 3.903 3 830 3 875 3 863	3 863	
Wt. mold, kg	2 005	2.005	2005	2 005 2 005 2 005 2 005 2 005	2 005	
Wt compacted soil,kg	1.791	1898	1825	1.791 1898 1825 1870 1.858	1.858	
Wet density, t/m³	1897	2011	1933	1897 2011 1933 1981 1968	836 1	
Dry density, t/m³	1.600	1644	1517	1.600 1644 1517 1 586 1683	1683	
Void ratio e						
Porosity n						

### WATER CONTENT

Determination No	1	8 3	3	4	5	
Container No.	E- 29	E-29 E-4 E-1	E-1	E-8 E-23	E-23	
Wt. container + wet soil, 9m	201.66	201.66 285 66 289 05 224 75 198.90	289 05	224 75	198.90	
Wt. container + dry soil, gm	17239	17239 236.26 229 90 183 06 167 69	229 90	18306	167 69	
Wt water, Ww. gm	29 27	29 27 49 40 59 15 41 69 31 21	59 15	41 69	91 21	
Wt. container, gm	14 89	14 89 15 24 14 37 15.79 15.56	14 37	15. 79	15.56	
Wt dry soil, Ws.gm	157 50	157 50 221 02 215.53 167.27 152.13	2/5.53	167.27	152.13	
Water content, w %	18.58	2235	27.44	24 92	18.58 22.35 27.44 24 92 20.52	

Dry density. t/m³

...50

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2-1-3 (II) Compostion Test

Mox Fd 1.65

Project Upper	Upper Quae Yai	Yai
Sort sample Ligh	1 Brown I	Soil sample Light Brown Latertic Clay And Decomposed Rock
Pit No P - II		Depth 0.0 - 5.0 m
Max, groin size	19.0 m	19.0 mm (3/4" sleve)

Date	14 - 3 - 79	- 79		
Type of test	test	Standard Proctor		
Mold · Volume	огите	944 cm3	Weight	2.005 kg
Specific gravity, Gs	gravit	ly , Gs		

DENSITY

Determination No.	1	2	1 2 3 4	4	3	G
Wt. mold + soil, kg	3 918 3.828 3 948 3 963 3.745 3 982	3.828	3 948	3963	3.745	3982
Wt. mold,kg	2 005 2.005 2.005 2.005 2.005 2.005	2.005	2.005	2 00 5	2 005	2.005
Wt. compacted soil,kg	1 9/3	1 823	1 943	1 958	1 913 1 823 1 943 1 958 1.740 1 977	1977
Wet density, t/m³	2.026 1.931 2.058 2.074 1843 2.094	1.931	2.058	2.074	1843	2.094
Dry density, t/m³	1 784	1715	944 1	1,742	1 784 1 715 1 776 1.742 1.661 1.798	1.798
Void ratio e						
Porosity n						

WATER CONTENT

Determination No	/	~	ය 4	4	Ю	9
Container No	E-37 E-1 V-36 E-25 E-29 E-50	E-1	96 -A	E-25	E-39	E-50
Wt. container + wet soil, gm	245 12 262.57 266.71 269 98 272 55 293 99	262.57	266.71	269 98	272 55	29399
Wt container + dry soil, gm	21766	23486	234 29	229 08	247.08	21766 23486 234 29 229 08 247.08 254 56
Wt water, Ww gm	27 46	27.71	32 42	27 46 27 71 32 42 40 90 25 47	25.47	3943
Wt container, gm	15 59	14.87	30.70	14.38	15.72	15 59 14 37 30 70 14 38 15 72 15.43
Wt dry soil, Ws. gm	202.07	220.49	203.59	214 70	231.36	202.07 220.49 203.59 214 70 231.36 239 13
Water content, w %	13 59	12.57	15 92	19 05	11 00	13 59 12.57 15 92 19 05 11 00 16 49

Max, rd 183 t/m³ Opt w.

2-1-3 (12) Compaction Test

Project Upper Guae Yai	Yai
Soil sample Brown Silty	Brown Sitty Clay and Decomposed Rack
Pit No P - 12	Depth 00-5.0 m
Max grain size 19,0 mg	19.0 mm (3/4 sieve)

Date	Date 19 - 3 - 79	3-	7.9			
Туре	Type of test		Standard Practor	Pract	ior	
Mold	Mold Volume	9	944 cm <sup>3</sup>		Weight	t 2.005 kg
Speci	Specific gravity, 6s	vity	. 65			

DENSITY

Detarmination No	1	2	ઈ	3 4	5
Wt mold + soil, kg	4 040	3 805	4 040 3805 4 035 4035 3 950	4035	3 950
Wt mold, kg	2,005	2.005	2.005 2.005 2.005 2.005 2.005	2,005	2 005
Wt compacted soil, kg	2 035	008 /	2.030	2 030	2 035 1 800 2. 030 2 030 1 945
Wet density, t/m³	2. 156	1 907	2. 156 1 907 2. 150 2 150 2 060	2 150	090 8
Dry density, t/m³	1 907	1.742	1 928	1876	1 907 1.742 1 928 1 876 1 870
Void ratio e					
Porosity n					

WATER CONTENT

Determination No	1	2	က	4	5	
Container No.	V- 20	V-20 D-2 M-16 X-100 Y-1	M-16	001-X	1-k	
Wt container + wet soil, gm	445 70	445 70 291 74 324 39 363 37 297 73	324 39	36337	297 73	
Wt container + dry soil, gm	397 67 207 79 29251 319 16 271 49	25779	29251	91 618	271 49	
Wt water, Ww gm	98 N3	48 03 23 95 31 88 44.21 26 24	31 88	44 2	26 24	
Wt container, gm	29 80	29 80 15 50 15 70 16 30 13 30	15 70	08 91	13 30	
Wt dry soil, Ws.gm	36787	36787 252 29 276 81 302 86 258 19	276 81	302 86	25819	
Water content, w %	90 81	1306 949 11 52 14 59 10 16	11 52	14 59	91 01	

Max 8'd 193 t/m3

2-1-3 (13) Compaction Test

Project	Upper Quae Yai	Yai	
Soil sample	Brown Decomposed Rock	резодш	Rock
Pit No. P - 13	13	Depth	Depth 00 - 14 m
Max grain size		19.0 mm (3/4" sieve	sieve }

DENSITY

Date	14-3-79	67		
Туре	Type of test	Standard Proctor		
Mold	Mold Volume	944 cm <sup>3</sup>	Weight	Weight 2,005 kg
Speci	Specific gravity, Gs	y. Gs		

Wt. mold + soil, kg       3 928       3 848       3 972       3.952         Wt. mold, kg       2.005       2.005       2.005       2.005         Wt. compacted soil, kg       1 923       1.843       1.967       1 947         Wet density, t/m³       2.037       1 952       2.084       2.063         Void ratio e       1 810       1.755       1 821       1.752         Porosity n       1 810       1.755       1 821       1 752	Determination No.	1	2	က	4
,kg	Wt. mald + soil , kg	3 928	3848	3972	3.952
, kg	Wt. mold, kg	2.005	2005	2.005	2 005
	Wt. compacted soil, kg	1 923	1.843	1.967	1947
	Wet density, t/m3	2.037	1 952	2.084	2.063
Void ratio e Porosity n	Dry density, t/m³	1810	1.755	1821	1 752
Porosity n	Void ratio e				
	Porosity n				

	-	ĺ	[	,	) دی
Determination No.	/	3	כי	4	3
Container No	E-9	E 24	E-9 E-24 E-20 E-15	E-15	i.,
Wt. container + wet soil, gm	833 BB	246.81	233 09 246.81 239 07 225 79	225 79	
Wt container + dry soil, gm	208 90	223.40	211.02	208 90 223.40 211.02 193.85	<del></del>
Wt. water, Ww. gm	24 19	2341	28.05	24 19 2341 28.05 31 94	2
Wt. container, gm	15 99	14 96	1646	15 99 14 96 16 46 13.86	 . <u>4 - 1 .</u>
Wt. dry soil, Ws, gm	192.91	208.44	194.56	192.91 208.44 194.56 179 99	<u>-                                    </u>
Water content, w %	12.54	11 23	14 42	12.54 /1 23 14 42 17.75	

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		±1\	4 4 4 4 4 <del>4 4 4 4 4 4 4 4 4 4 4 4 4 4 </del>	t/m³
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2-1-3 (14) Compaction Test

	tock	Depth 0- 3.0 m	sieve )
Yai	mposed F	Depth	190 mm (3/4" sieve
Upper Quae Yai	e Brown Decomposed Rock	- 14	
Project	Soil sample	Pit No P - 14	Max grain size

15 - 3 - 79	of test Standard Proctor	Volume 944cm³ Weight 2.005kg	Specific gravity. Gs
	Type of tes	Mold Volu	Specific gr
	Data 15 - 3 - 79	15 - 3 - f test	3 - 79 Standard Procto

DENSITY

Determination No.	٠.	04	c,	4	5
Wt mold + soil, kg	3 952	3 730	3880	3 992	3 952 3 730 3 880 3 992 3 918
Wt mold,kg	2 005	2 005	2 005 2 005 2 005 2.005 2.005	2.005	2.005
Wt. compacted soil, kg	1 949	1 725	1 949 1725 1.875 1.987 1913	1.987	1913
Wet density, t/m³	2 063 1.827 1 986 2 105 2 026	1.827	1986	2 105	2 0 26
Dry density, t/m³	1 793	6991	1774	1797	1793 1.669 1774 1797 1677
Void ratio e					
Porosity n					

WATER CONTENT

Determination No	f	2 3 4	3	4	2	i
Cantainer No.	1-15	V-15 X-100 V-20 E-12 V-10	V-20	E-12	01-1	
Wt container + wet soil, gm	403 33 305 92 333 95 259 29 431.09	305 92	333 95	259 29	431.19	ļ
Wt container + dry soil, gm	354 49	354 49 280.90 301 56 223 71 362 26	301 56	223 71	36226	
Wt. water, Ww gm	48 84	4884 25 02 32.39 35 58 68 83	32.39	35 58	68 83	
Wt container, gm	29 80	29 80 16 30 29 80 15.90 3145	29 80	15.90	3/45	
Wt. dry soil, Ws.gm	32469	32469 26460 27176 207.81 330.81	27/ 76	207.81	330.81	
Water content, w %	15.04	15.04 946 1192 17.12 20 81	1192	17.12	20 81	

Dry density, t/m³

Series of the series of t

2-1-3 (15) Compaction Test

Max 7'd 1.80

Project Upper	Quae Yai	Yai	
Soil sample Reddish	lish Bro	Brown Clayey Sand	Sand
Pit No. P - 15		Depth	Depth 00- 1.00 m
Max, grain size	4.75 mm	nm (No 4 sieve	sieve }

Date 27-3-79	-79		
Type of test	Standard Proctor	Proctor	
Mold · Volume	944 cm 3	Weight	Weight 2.005kg
Specific gravity, Gs	у, 6s		

DENSITY

	1	2	2 3	4	S	G
Wt. mold + soil, kg	1.591	3611	3.745	3.591 3611 3.745 3.725 3.754 3.735	3.754	3 735
Wt. mold, kg	. 005	2.005	2.005	2.005 2.005 2.005 2.005 2.005 2.005	2,005	2.005
Wt. compacted soil, kg	586	1.606	1 740	1.586 1.606 1.740 1.720 1.749 1.730	1 749	1 730
Wet density, 1/m <sup>3</sup>	089	1.701	1843	1.680 1.701 1 843 1 822 1.853 1 833	1.853	1 833
Dry density, t/m³	344	1339	1.419	1. 344   1339   1.419   1. 357   1415   1 359	1415	650 F
Vaid ratio e						
Porosity n						

WATER CONTENT

Determination No	<b></b>	7	ຕາ	4	Ş	حه
Container No.	E-9	E-26	E-44	E-9 E-26 E-44 E-29 E-17 E-11	E-17	E-11
Wt. container + wet soil, gm	179.56	19789	182.27	179.56 19789 182.27 203 89 198 86 198 66	198 86	1986
Wt container + dry soil, gm	146 83	158.95	144 15	146 83 158.95 144 15 155 68 155 32 151 53	155 32	151 5.
Wt water, Ww gm	32.73	38 94	38 12	32.73 38 94 38 12 48 21 43 54 47 13	43 54	47 1
Wt container, gm	1599	14.99	16.57	15 99 14.99 16.57 14 89 14.59 16.33	14.59	16.33
Wt. dry soil, Ws.gm	130.84	14396	127. 58	130.84 14396 127.58 140.79 140.73 135 20	140.73	135 20
Water content, w %	25 02	27, 05	29.88	25 02 27, 05 29, 88 34, 24 30.94 34 86	30.94	34 86

26 28 30 3 Water content, % Em\1, ylienəb yıQ

2-1-3 (16) Compaction Test

Project Upper	Upper Quoe Yai	Date 27-3-79	7.9
Soil sample Bro	Brown Clayey Gravel	Type of test Standard	Standa
Pet No P - 16	Depth 00- 4.0 m	Mold · Volume 944 cm	944 c
Max grain size	19.0 mm (3/4" sieve )	Specific gravity, Gs	. Gs

Date 27-3-79	-79		
Type of test	Standard Proctor	Proctor	
Mold Volume 944 cm <sup>3</sup>	944 cm <sup>3</sup>	Weigh	Weight 2,005 kg
Specific gravity, Gs	.y. Gs		

DENSITY						
Determination No.	_	2	35	4	5	L
Wt mold + soil, kg	3 989	3.957	3 903	3 989 3.957 3 903 3 835 3 935	3 935	
Wt mold, kg	2 005	2,005	2.005	2 005 2 005 2,005 2,005 2,005	2.005	
Wt compacted soil,kg	1984	1 952	868 1	984   1 952   1 898   1 830   1 930	1 930	
Wet density, t/m³	2 102	2.068	2 011	2 102 2 068 2 011 1 939 2.044	2.044	
Dry density, t/m3	1 826	992 1	9/1 1	826 1756 1.775 1.787 1.732	1 732	
Void ratio e						i
Porosity n						L_
						1

Wet density, t/m³	2 102	2.068	2 011	2 102 2.068 2 011 1 939 2.044	2.044		٤
Dry density, t/m³	1 826	9GL 1	1, 775	1 826 1 756 1. 775 1. 737 1. 732	1.732		ш / 1
Void ratio e							; <del>-</del> ,
Porosity n							1្មែន
TER CONTENT			]				иәр /
Determination No	1	2	ఌ	4	5	Г	נים_
Container No.	E-38	E-39	E-47	E-38 E-39 E-47 E-43 E-46	E-46		
Wt. container + wet soil, gm	22312 22668 229 69 258 11 247.00	89 977	229 69	258 11	247.00		
Wt container + dry soil, gm	195.68	19465	204 35	195.68 194 65 204 35 232 75 211.46	211.46		
Wt water, Ww gm	27.44	32 03	25 34	27.44 32 03 25 34 25 36 35 54	35 54		
Wt container, gm	14.35	14.73	13 86	14 35 14 73 13 86 14 12 14 07	14 07		_
Wt dry soil, Ws.gm	181 33 179.92 190 49 218.63 197 39	179.92	190 49	2/8.63	19739		
						Ī	

Dry density. L/m³  1.85  1.75  1.80  1.75  1.80  1.75  1.80  1.75  1.85  1.85  1.83
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2-1-3(17) Compaction Test

15 13 17 80 13.30 11.60 18.00

Water content, w %

Date	23 - 3- 79	ļ <sup>"</sup>	62			
Туре	ŏ		Standard Proctor	Proc1	for	
Mold	Mold Volume		944 cm 3		Weight	2.0 O5 kg
Speci	Specific gravity, Gs	vity	. Gs			

DENSITY

Determination No	+	2	60	3 4	5	
Wt. mold + soil, kg	3 944	3.920	3 944 3.920 3 945 3.958 3 631	3.958	3631	
Wt mold,kg	2.005	2005	2.005 2.005 2.005 2.005	2.005	2.005	
Wt. compacted saif, kg	1.939	1915	1.939 1.915 1.940 1.953 1.626	1 953	1 626	
Wet density, t/m³	2.054	2.029	2.054 2.029 2.055 2.069 1.722	2.069	1.722	
Dry density, t/m³	1.733	1802	1.733 1802 1.796 1.763 1.576	1, 763	1.576	
Void ratio e						
Porosity n						

WATER CONTENT

		[				
Determination No		2	رئ	4	5	
Container No.	X- 7	81-X	X-7 X-13 V-12 V-11 X-16	11 -4	91-X	
Wt. container + wet soil, gm	381 92	30108	381 92 301 06 338.29 371.52 346 67	371.52	L9 9 <del>1</del> 8	
Wt container + dry soil, gm	325.08	26943	325.08 269 43 299.60 321 22 319.14	32122	319.14	
Wt. water, Ww. gm	5684	31.63	5684 31.63 38.69 50.30 27.53	5a 30	27. 53	
Wt container, gm	1797	06 11	30.78	30.90	1797 17 90 30.78 30.90 21.30	
Wt. dry soil, Ws, gm	307.11	25! 53	307.11 251.53 268.82 290.32 297.84	290.32	297.84	
Water content, w %	18.51	12.58	1439	17.33	18.51 12.58 14.39 17.33 9 24	

Max. 8 d 1.8 1 t/m3 Opt w 13.6

2-1-3 (18) Compaction Test

Project	Upper Quae Yai	Q no e	Yaj	!		
Soil sample		Irown	Clayey	Brown Clayey Sand and Decomposed Rock	scomposed	Rock
Pit No	P - 18	60		Depth 0 - 5.0 m	5.0 m	
Max. grain size	ın size	19.	EE 0	19.0 mm (3/4" sieve	e )	

Date 19- 3-79	.79		
Type of test	Standard Proctor	Proctor	
Mold · Volume	944 cm 3	Weight	2.005 kg
Specific gravity, 6s	y. Gs		

DENSITY

Determination No	,	2	ۍ	4	5	
Wt mold + soil , kg	3812	3 1885	3940	3812 3885 3940 3918 3862	3882	
Wt mold,kg	2 005	2 005	2005	2005 2005 2005 2005 2005	2 005	
Wt compacted soil,kg	1807	1880	1.935	1807 1880 1.935 1913 1857	/ 857	
Wet density, 1/m3	1914	1992	2 050	1914 1992 2050 2026 1967	1961	
Dry density, t/m³	1654	1 692	1.715	1654 1692 1.715 1.679 1599	1.599	
Vaid ratio e						
Porosity n						

# WATER CONTENT

					İ	
Determination No.	,	2	ය	3 4	5	
Container No.	E- 26	E-58	E-25	E- 26 E-58 E-25 E-41 E-8	E-8	
Wt container + wet soil, gm	22318	189 80	215 89	2/4 33	22318 189 80 215 89 214 33 245 74	
Wt container + dry soil, gm	19492	16349	18319	19492 16349 18319 18012 20281	20281	
Wt water, Ww gm	28 26	26 31	32.70	28 26 26 31 32.70 34 31 42 95	42 95	
Wt container, gm	1499	15 29	15 56	1499 1529 1556 1386 1579	15.79	
Wt dry soil, Ws.gm	179.93	14820	16763	179.93 148.20 167.63 166.16 187.62	187 62	
Water content, w %	15:11	17.75	1951	15.71 17.15 1951 2065 22 95	22 %	

2-1-3 (19) Compaction Test

19.0

t / m³

Max 8'd 1.72

	Rock		
Quae Yai	Brown Latentic Clay and Decomposed Rock	Depth 0.0 - 5.0 m	19.0mm (3/4" Sieve)
Project Upper Que	Soil sample Brown	Pit No P - 19	Max grain size

Date	15-	15-3-79			
Туре	of test	Type of test Standard Proctor	Procto		
Mold	Mold Volume	944 cm3		Weight	2.005 kg
Speci	Specific gravity, 6s	ty, Gs			

DENSITY

Determination No.	/	2	£	4	9
Wt. mold + soil, kg	3.768	3.905	3.963	3.768 3.905 3.963 3.985 4000	4 000
Wt mold.kg	2 005	2 005	2 00 5	2 005 2 005 2 005 2 005	2005
Wt. compacted sout, kg	1.763	1 900	1 958	0861	1.763 1.900 1.938 1.980 1.995
Wet density, t/m³	1.868	2.013	2074	1.868 2.013 2 074 2.097 2.113	2.113
Dry density, t/m³	1.715	1 786	1.820	1.715 1.786 1.820 1.818 1.788	881.1
Void ratio e					
Porosity n					

WATER CONTENT

Determination No	/	2	3	3 4	\$	
Container No	E-26	E-28	E-26 E-28 E-8 E-30 E-29	E-30	E-29	
Wt. container + wet soil, gm	276 92	238 65	298 82	82 961	78 92 238 65 298 82 196 78 288 87	
Wt container + dry soil, gm	255.49 213 43 202.77 172 41 246 78	213 43	202.77	17241	84.952	
Wt water, Ww. 9m	21 43	25 22	26 05	24 37	21 43 25 22 26 05 24 37 42.09	
Wt cantainer, gm	14.99	15 29	14.99 15 29 15.79 13 31 14.89	13 3/	14.89	
Wt. dry soil, Ws, gm	240.50 198.14 186 98 159.10 231.89	198.14	86 981	159.10	231.89	
Water content, w %	168	12.73	8 91 12.73 13 93 15.32 18 15	15.32	31 81	

8 10 12 14 16 18 20

Max. Yd 183 t/m³ Opt w 14.5

2- 1-3 (20) Compaction Test

Date	- 82	28 - 3 - 79	1				
Туре	Type of test	Stan	dard	Standard Practor	٥٦		
Mold	Mold Volume 944 cm	944	E o		Weight	Weight 2.005 kg	
Speci	Specific gravity, 6s	ty. 6s					

DENSITY

Determination No.	\	0	~	7	7.	L
		7	2	+	•	
Wt mold + soil, kg	3968	3 948	3924	3 966 3 948 3 924 3 898 3 785	3 785	
Wt mold, kg	2 005	2 005	2 00 5	2 005 2 005 2 005 2 005	2 005	
Wt compacted soil,kg	1961	1943	1919	1 961 1943 1919 1893 1.780	1.780	
Wet density, t/m³	2077	2 058	2 033	2077 2058 2033 2005 1886	1 886	
Dry density, t/m³	064 /	1 734	1718	790 1734 1718 1762	1690	
Void ratio e						
Porosity n						

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200	)
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Determination No	-	2	3 4	4	5	
Container No	E-32	E-34	E-35	E-32 E-34 E-35 E-42 E-53	E-53	
Wt container + wet soit, gm	22890	21 597	270 82	22890 26512 270 82 214.33 24.35	24.35	
Wt container + dry soil, gm	199,62	225 53	231 15	199, 62 225 53 231 15 190 27 225 03	225 03	
Wt water, Ww gm	29 28	39.59	3967	29 28 39.59 39 67 24 06 24 32	24 32	
Wt container, gm	16 89	13 94	1498	16 89 13 94 14 98 16.12 15 94	76 91	
Wt dry soil, Ws, gm	182.73	211. 59	11917	182.73 211. 59 21617 174 15 209 09	209 09	
Water content, w %	16.02	18.71	18.35	16.02 18.71 18.35 13 82 11.63	11,63	

Dry density, t/m<sup>3</sup>

Water content, % Max Vd 180 t/m³ Opt v

%

156

2-1-3 (21) Compaction Test

	1 840		
	Sail sample Reddish Brawn Silty Clay With Some Gravel	E	
	y With	0 - 2.0 m	sieve)
	Ity Cla	Depth 00 -	( No.4 sieve
Yai	rown Si	De	4. 75 mm
Upper Quae Yai	dish B		4. 7
Uppe	ole Red	P-2	size
Project	oil samp	Pit No.	Max. grain size

Date 12-:	12-3-79		i	
Type of test Standard Proctor	Stendard	Procto	<b>.</b>	
Mold · Volume 944 cm	944 cm <sup>3</sup>		Weight	Weight 2.005 kg
Specific gravity, Gs	ty, Gs			

DENSITY

O contraction No	,	٥	δ	4	7	9
Wt mold + soil ka	3410	3673	3632	3690	3410 3673 3632 3690 3.730 3616	3198
Wt. mold, kg	2.005	2.005	2.005	2.005	2.005 2.005 2.005 2.005 2.005 2.005	2005
Wt. compacted soil, kg	1 405	1668	1627	1,685	1 405 1668 1,627 1,685 1,725 1,611	1191
Wet density, t/m³	1.488	1.767	1.724	1.785	1.488 1.767 1.724 1.785 1827 1.706	1.706
Dry density, t/m³	1178	1337	1.308	1.344	1178 1 337 1.308 1.344 1.358 1.158	1.158
Void ratio e						
Porosity n				j		

WATER CONTENT

Determination No.	/	2	က	3 4	5	6
Container No.	2.2	V-36	0-3	D-5 V-36 D-3 V-2 Z-19 V-13	5-19	V-13
Wt. container + wet soil, gm	188.73	253.29	248.65	188.73 253.29 248.65 311.62 284.42 395.22	284 42	39522
Wt container + dry soil, gm	15219 19911 19218 24241 219.48 27855	11661	192.18	24241	219.48	27855
Wt. water, Ww. gm	36.54	5418	5647	36.54 54 18 5647 6921 6494 116.67	6494	116.67
Wt. container, gm	13.60	30.70	1480	13 60 30.70 1480 31.70 31 23 32.00	3123	32.00
Wt. dry soil, Ws.gm	138 59	168.41	177.38	138 59 168.41 177.38 210.71 188 25 246.55	188 25	246.55
Water content, w %	2635	3217	3183	28 35 32 17 31 83 32 84 34 49 47 32	3449	4732

Max rd 1.36 t/m<sup>3</sup> Opt w 36.0

2-1-3 (22) Compaction Test

	Soil sample Reddish Brown Silty Clay With Some Gravel	0-2.5 m	(u) s (u)
Yai	Brown Silty C	Depth 0.0 - 2.5 m	19.0 mm (3/4" Siave)
Hoper Ouce You	nple Reddish	p - 22	
Project	Soil son	Pit No	Mox. orom size

Date 5 -	5 - 3 - 79			
Type of test	Standard Proctor	Proct	1	
Mold · Volume 944 cm 3	944 cm 3		Weight	Weight 2.005 kg
Specific gravity, Gs	ity, Gs		į	

DENSITY

Determination No	1	2	Е	4	5
Wt. mold + soil, kg	3857	3 965	4047	4.057	3857 3965 4047 4057 4025
Wt mold,kg	2 005	2005	2.005	2 005	2 005 2 005 2.005 2.005 2 005
Wt compacted soil, kg	1.852	1.960	2042	2.052	1.852 1.960 2 042 2.052 2.020
Wet density, t/m3	1962	2.076	2163	2.174	1962 2076 2163 2174 2140
Dry density, t/m³	1.790	1.873	1161	1.881	1.790 1.873 1.911 1.881 1.793
Void ratio e					
Porosity n					

WATER CONTENT

Determination No.	1	2	3 4	4	5	
Container No.	E-2	E-24	E-25	E-2   E-24   E-25   E-27   E-30	E-30	
Wt container + wet soil, gm	218 05	50 9/2	26/25	24965	218 05 276 05 26/ 25 24965 268 65	
Wt container + dry soil, gm	200 24	250 48	23252	218.16	200 24 250 48 23252 218.16 227.30	<b>1</b>
Wt water, Ww. 9m	1811	25.57	28 73	3/49	1781 25.57 28 73 31 49 41.35	
Wt container, gm	1534	14 96	1438	15.72	1534 1496 1438 15.72 13.31	
Wt dry soil, Ws, gm	184.90	235 52	218 14	20244	84.90 235 52 218 14 20244 213 99	
Water content, w %	963	10.36	13.17	1556	9 63 10.86 13.17 15.56 1932	

Dry density, t/m³

Ory density, t/m³

Ory density, t/m³

Ory density, t/m³

2- |- 3 (23 ) Compaction Test

Max. Td 1.91 1/m3

2-1-3 (24) Compaction Test

Project Upper Quae Yai			,		Date	13 - 2	3 - 79				
Soil sample Reddish Brown Sl	SIIIy Clay				Type of test		Standard Pro	Proctor	į		
Pit No. P - 23A Depth	0.0 - 1.0 m				Mold Volume		944 cm3	Weight	2.005 kg		
Max. grain size 4.75mm ( N	(No.4 sieve)				Specific gr	gravity	, Gs			ļ	
)ENSITY				•							•
Determination No		2	3 4	5							
Wt. mold + soil , kg	3504 3628 3715 3724	28 37	15 37	24 3685	S2						
Wt. mold,kg	2 005 2.0	2.005 20	2 005 2.005	05 2005	15						
Wt. compacted soil,kg	1499 16	1623 17	6121 0121	089 / 61.	10						
Wet density, t/m³	1.588 17	31 6121	1811 1.8	1.821 1.780	30	-; 4					
Dry density, t/m3	1 239 15	51 3081	1336 1.350	90 / 360	0.5	л / 1					
Vaid ratio e						٠ ٢					
Porosity a						116					
WATER CONTENT						րցե չ _ 					
Determination No	5 /	8	3 4	5		ηQ				9	
Container No.	E-58 E	E-4 E-	E-11 E-	E-30 E-28	80		6				
Wt. container + wet soil, gm	18215 218 67 219 82 25407 245 59	36721	782 25	107 245	59	2,1					
Wt. container + dry soil, gm	14549 16980 16646 19178	91 08 6	161 949	78 178 29	53	!					
Wt. water, Ww. gm	36.66 4	48 87 53.36	396	6229 6730	30						
Wt. contoiner, gm	15 29 14	15 24 16 33 1331	333 1	31 15.38	38						
Wt. dry soil, Ws, gm	130.20 15	4.56 15	0.13 178	1.20 154.56 150.13 178.47 162.91	61						
Water content, w %	28.15 31.62		35.54 3490	190 41.31	31		28 30	32 34 3 Water	36 38 er content,	\$ \$	4 (1
							Max. 1'4 1.35	آب ا		-	%

Project Upper Quae Yai	
Soil sample Reddish Brown Slity Soil	
Pit No. P - 23 B Depth 0.0 - 2.0 m	
Max. grain size 475 mm (No.4 sieve)	

Date 21-3-79 Type of test Stand Mold: Volume 944 Specific gravity. Gs
---

DENSITY

Determination No	1	2	co	4	5
Wt mold + soil, kg	3 735	3.7/5	3.715	3.760	3 735 3.715 3.715 3.760 3.695
Wt mold,kg	2005	2005	2.005	2005 2005 2.005 2.005 2.005	2005
Wt. compacted soil,kg	1 730	1.710	1710	1730 1.710 1.710 1.755 1690	0691
Wet density, t/m³	1833	1181	1181	1833 1.811 1.81 1.859	1 790
Dry density, t/m³	1.378	1309	1.385	1.378 1,309 1,385 1 374 1,277	1.277
Void ratio e					
Porosity n					

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Determination No.		2	3	4	5	
Container No.	E-8	E-8 E-30 E-23 E-58 E-26	E-23	E-58	9Z-3	
Wt. container + wet soil, gm	225 77	225 77 26730 177.96 20599 272.15	177,96	20599	272.15	
Wt. container + dry soil, gm	17372	17372 19682 139 70 15625 19842	139 70	15625	19842	
Wt. water, Ww. gm	52.05	70 48	38 26	4974	52.05 70 48 38 26 49 74 73.73	
Wt container, gm	1579	1831	15:56	6251	1579 1331 15.56 1529 1499	
Wt. dry soil, Ws.gm	15793	183 51	124 14	96.071	15793 18351 124 14 140.96 18343	
Water content, w %	330	38 4	8.0€	35.3	330 384 30.8 35.3 40.2	

Dry density. 1.4

Ory density. 1.4

Nox. 7d 1.39 t/m³ Opt w 340 %

2-1-3 (25) Compaction Test

Soil sample Reddish Brown Sitty Clay With Some Gravel
Pit No. P - 24 | Depth Q.O. - 5.0 m

Max grain size 4.75 mm (No. 4 sieve)

Date	5 - 3 - 79	- 79		
Туре	Type of test	Standard Proctor	Proctor	
Mold	Mold Volume	944cm3	Weight	2.005 kg
Speci	Specific gravity, Gs	ty, Gs		

DENSITY

Determination No	1	2	3	4	5
Wt mold + soii, kg	3 665	3745	3.780	3 665 3 745 3.780 3 790 3.755	3.755
Wt. mold,kg	2.005	2.005	2.005	2.005 2.005 2.005 2.005 9.005	2005
Wt. compacted soil, kg	1.660	1.740	1775	1.660 1.740 1.775 1.785	1.750
Wet density, t/m³	1.758	1.843	1880	1.758 1.843 1.880 1.891	1.854
Dry density, t/m³	1405	1445	1.461	1405 1445 1.461 1446 1.379	1.379
Void ratio e					
Porosity n					

WATER CONTENT

4 5	E-15 E-28 E-16 E-37 E-26	20657 19458 22902 201.87 26302	16783 15590 181 35 158 02 199 45	3874 3868 4767 43.85 6357	13 86 15 38 15 33 15.59 1499	153 97 140.52 166 02 14243 18446	25.16 27.53 28 71 30.79 3446
S	B-16	22902	18135	4767	15 33	166.02	28 71
2	E-28	19458	155 90	3868	15 38	140.52	27.53
1	E-15	20657	16783	38 74	13.86	153 97	25./6
Determination No	Container No	Wt container + wet soil, gm	Wt. container + dry soil, gm	Wt. water, Ww gm	Wt container, gm	Wt. dry soil, Ws. gm	Water content, w %

Dry density. LAM

Las

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Las

Las

Las

Las

Water content, %

Water content, %

Max. Fd 1.47 t/m³ 00t w 29.1

2-1-3(26) Compaction Test

Project Upper Quae Yai	
oil sample Yellowish Brow	Soil sample Yellowish Brown Sity Clay With Some Decomposed Rock
Pit No P- 25	Depth 00- 5.0 mm
Max grain size 4.75mm	4.75mm (No.4 sieve)

Date	22 -	22 - 3 - 79		
Type of test		Standard Proctor	101	
Mold	Volume	Mold Volume 944 cm3	Weight	Weight 2.005 kg
Specif	Specific gravity, 6s	ly, Gs		

DENSITY

Determination No	+	2	တ	4	5
Wt mold + soil, kg	3858	3925	3815	3 858 3 925 3 815 3.925 3.965	3.965
Wt mold, kg	2.005	2 005	2005	2.005 2 005 2 005 2 005 2.005	2.005
Wt compacted soil,kg	1 853	1.920	1 810	1853 1.920 1810 1.920 1960	1960
Wet density, t/m³	1963	2034	Libi	1963 2034 1917 2034 2076	2 076
Dry density, 1/m3	1610	1 704	1897	1610 1704 1681 1748 1775	1775
Void ratio e					
Porosity n					

WATER CONTENT

Determination No	1	2	િ	3 4	2
Container Na.	E-43	E-39	E-4/	E-43 E-39 E-4 E-38 E-46	E-46
Wt container + wet soil, gm	309 50	29619	23831	304 50 296 19 238 31 251 37 245 28	245 28
Wt container + dry soil, gm	256 38	250 52	210.70	256 38 250 52 210.70 217.20 211.78	211.78
Wt water, Ww. gm	53 12	4567	27.61	33.17	53 12 45 67 27 61 33.17 33.50
Wt container, gm	14.12	14.73	98 E I	1435	14.12 14.73 1386 1435 14.07
Wt dry soil, Ws. gm	24226	235 79	196 84	20285	242.26 235.79 196 84 20285 197.71
Water content, w %	21.93	19.37	1403	16.35	21.93 19.37 14.03 16.35 16.94

Dry density. L/m³

Dry density. L/m³

Nater content. % 170 % 170 %

2-1-3 (27) Compaction Test

Project Upper Quae Yai

Soil sample Light Yellowish Brown Clayey Grave!

Pit No. P - 26 | Depth 0 - 5,0 m

Max.grain size 19.0 mm (3/4"sleve)

Date 2-	2 - 3 - 79		
Type of test	Standard Proctor	,	
Mold · Volume	944 cm <sup>3</sup>	Weight	2.005 kg
Specific gravity, Gs	.y , Gs		

DENSITY

		,		[	ľ	
Determination No	-	2	3	2 3 4	5	
Wt. mold + sorl , kg	3 840	3 970	4039	3 840 3 970 4039 4 008 3.982	3.982	
Wt mold,kg	2 005	2.005	2 005	2 005 2 005 2 005 2 005 2 005	2 005	
Wt. compacted soil, kg	1.835	596 1	2034	1.835 1965 2034 2003 1977	1977	ļ
Wet density, t/m3	1,944	280.2	2155	1944 2082 2155 2122 2.094	2.094	
Dry density, t/m³	1.784	1880	1.903	1846	1.784 1880 1.903 1846 1.787	
Void ratio e						
Porosity n						
						ı

WATER CONTENT

Determination No.	<i> </i>	2 3	3	4	5	
Cantainer Na.	V-12	V-12 D-3 H-1	1-11	01-1 6-0	01-1	
Wt. container + wet sail, gm	388 82	388 82 324,63 398.18 38408 44906	398.18	38408	44916	
Wt. container + dry soil. gm	359 35	29456	35320	336 09	359 35 294 56 353 20 336 09 387 74	
Wt. woter, Ww gm	29.47	29.47 30 07 4498 4799 6132	4498	4799	6132	
Wt. container, gm	3/45	14.80	13 30	15 50	3/45 14.80 1330 1550 3030	
Wt. dry sail, Ws, gm	327.90	279.76	339 90	320.59	327.90 279.76 339 90 320.59 357 44	
Water content, w %	8 99	899 10.75 1383 1497 1716	1828	1497	17.16	İ

-1-3 (28) Compaction Test

Max rd

Project	Upper Quoe You	,
Soil san	nple Light Yellowish	Soil sample Light Yellowish Brown Clayer Sand With Some Gravel
P.t No	p - 27	Depth 0.0 - 5.0 m
Max grain size		19 0 mm (3/4"sieve)

Date	2-3-79	79		
Туре	of test	Type of test Standard Practor	•	
Mold	Mold : Volume	9 44 cm 3	Weight	2 005 kg
Speci	Specific gravity, Gs	ty, Gs		

DENSITY

Determination No	1	2	3	3 4	5
Wt mold + soil, kg	3 833	3 910	3 953	3902	3 833 3 910 3 953 3 902 3 875
Wt mold,kg	2005	2 005	2 005	2.005	2005 2 005 2 005 2 005
Wt compacted soil, kg	1828	1.905	1.948	1897	1828 1.905 1.948 1897 1870
Wet density, t/m3	3861	2.018	2064	1936 2.018 2064 2.010 1.981	1861
Dry density, 1/m3	1698	1 733	1 739	1 672	1 698 1 733 1 739 1 672 1 627
Void ratio e					
Porosity n	-				

WATER CONTENT

Determination No	_	2	3	4	Ŋ	
Container No	V- 23	V- 23 X-16 V-29 V-13 V-3	V- 29	V-13	V-3	
Wt container + wet soil, gm	39741	250 56	320 02	402 77	39741 250 56 320 02 402 77 349 08	
Wt container + dry soil, gm	352 42	218 22	27476	340 33	352 42 218 22 274 76 340 33 292.48	
Wt water, Ww gm	44.99	32.34	4526	6244	44.99 32.34 45 26 62 44 56 60	
Wt container, gm	31.54	21 30	32.28	3200	31.54 21 30 32.28 32.00 32.20	
Wt dry soil, Ws.gm	320 88	19692	24248	308 33	320 88 196 92 242 48 308 33 260 28	
Water content, w %	14 02	14 02 16.42 18.67 20 25 21.75	18.67	20 25	21.75	

1. 15 16 17 18 19 20 21 2 Mater content, %

Max 7'd 1.75 1/m³ Opt w 18.0

2-1-3 (29) Compaction Test

		ı	_
	Some		
	With	2.5 m	1)
	Sand	0 - 2.5 m	5 10 4
	Clayey	Depth	(3/4)
ē	Brown	۵	19.0 mm (3 / 4ª sieve)
Quoe Y	lowish	8	19.0
Upper Quae Yai	ple Yal	P - 28	n size
Project	Soil sample Yellowish Brown Clayey Sand With Some	Pit No.	Max. grain size

Date 28 -	28 - 3 - 79		
Type of test	Standard Proctor	or	
Mold · Volume	944 cm³	Weight	2.005 kg
Specific grovity, Gs	y, Gs		

DENSITY

	,	•	,	,	4	
Determination No	_	~	מ	4	C	
Wt. mold + soil, kg	3 965	3 925	3 965 3 925 3 920 3945 3.792	3945	3.792	
Wt. mold,kg	2.005	2.005	2.005 2.005 2.005 2.005 2.005	2.005	2 005	
Wt compacted soil, kg	0361	1 920	1.960 1920 1915 1940 1787	1 940	1 787	
Wet density, t/m³	2.076	2034	2.076 2034 2029 2.055 1893	2.055	1893	
Dry density, t/m³	1 798	1.734	1798 1.734 1.734 1.820 1.714	1 820	1714	
Void ratio e						
Porosity n						

WATER CONTENT

Determination No.	-	2	S	1 2 3 4	9	
Container No.	9/-3	E-19	E-18	E-16 E-19 E-18 E-56 E-47	E-47	
Wt container + wet soil, gm	28/80	30 076	23396	23180 240 06 23396 20389 24490	24490	
	20285	20701	20178	20285 20701 20178 18237 22335	22335	Ţ
	28 95	33.05	32/8	2895 33.05 3218 21 52 21.55	21.55	
Wt. container, gm	1533	15 81	1453	1533 1581 1453 1612 1683	1683	
Wt. dry soil, Ws. gm	187.52	191 20	187.25	187.52 191 20 187.25 166.35 206.52	206.52	
Water content, w %	1544	1729	17.19	15 44 17 29 17.19 12.94 10 43	1043	

Dry density, tim<sup>3</sup>

British and the second of the second

2-1-3 (30) Compaction Test

Opt. w 13.5

Mox. Fd 1.83

Project	Upper Quae Yal	Yal
Soil sample	Yallow Brown	Soil sample Yallow Brown With Some Gravel Clayey Sand
Pit No P- 29	53	Depth 0.0- 5.0 m
Max grain size	ze 19.0 mm	mm (3/4" sleve)

Date	13-3-79	79			
Туре	Type of test	Standard Proctor	Procto		
Mold	Mold Volume	944 cm <sup>3</sup>		Weight	Weight 2.005kg
Speci	Specific gravity, Gs	ty, Gs			

DENSITY

Determination No	1	2	3	4	ى
Wt mold + soil, kg	3687	3,900	3 955	3 687 3 900 3 955 3 915 3 871	3871
Wt mold,kg	2.005	2 005	2.005	2.005 2 005 2.005 2 005 2 005	2 005
Wt compacted soif,kg	1682	568 1	0561	1 682 1 895 1 950 1 910	998 /
Wet density, t/m³	1 782	2.007	2.066	782 2.007 2.066 2.023 1.977	1 977
Dry density, t/m³	1612	391 1	1 782	1 612 1.766 1.782 1.678 1.643	1643
Vold ratio e					
Porosity n					

WATER CONTENT

Determination No.	1	2	လ	4	ۍ	
Container No.	91 - I	E-16 E-29 E-23 E-26 E-8	E-23	E-26	E-8	
Wt container + wet soil, gm	20789	249.73	24927	248.23	207 89 249 73 249 27 248.23 287 11	
Wt. container + dry soil, gm	189 55	221 53	217 10	208.40	189 55 221 53 217 10 208.40 241.22	
Wt. water, Ww. gm	18.34	18.34 28.20 32.17 39.83 45.89	32.17	39.83	45 89	
Wt. container, gm	15 33	15 33 14 89 15 56 14 99 15.79	15 56	14.99	12: 14	
Wt. dry soil, Ws.gm	174 22	206.64	201.54	193.41	174 22 206.64 201.54 193.41 225.43	
Water content, w %	10,53	13 65	1596	20.59	10.53 13 65 15 96 20.59 20.35	

2-1-3 (31) Competion Test

Project	Upper	Upper Quae Yai	۲ai		
Soil sample	9 Brc	S E M	д уе у	Brown Clayey Gravel	
Prt No.	P - 30		Dep	Depth 0.0 - 3.0 mm	30 mm
Max. grain size	size	9.0	(3)	19.0 mm (3/4" sieve	

27- 3- 79	of test Standard Proctor	Volume 944cm3 Weight 2,005kg	Specific growth Gs
Date 27	Type of test	Mold Volume	Spacific are

DENSITY

Determination No.	_	2	9	4	5	
Wt. mold + spil, kg	3 739	3863	3851	3 739 3863 3851 3828 3 688	3688	
Wt mold.kg	2005	2 005	2 005	2 005	2005 2005 2005 2005 2005	
Wt. compacted soil,kg	1 734	1858	1846	1734 1858 1846 1823 1683	1683	
Wet density, t/m3	1837	1968	1 956	1837 1968 1956 1931 1783	1 783	
Dry density, t/m³	1 555	1631	1575	1 555 1 621 1 575 1 514 1 537	1537	
Void ratio e						
Porosity n						
				ļ		

NATER CONTENT

WAIER CONTENT						
Determination No.	1	2	3	4	5	
Container No.	E- 60	E-8	E-60 E-8 E-23 E-1	E-1	E-25	
Wt. container + wet soil, gm	225 47 210 00 23235 238 43 235 57	210 00	232.35	23843	235.57	
Wt. container + dry soil, gm	19325 17571 19012 19003 205 06	17571	19012	19003	205 06	
Wt. water, Ww. gm	32.25	3429	42 23	32.22 3429 4223 4840 3051	30 51	
Wt. container, gm	15 69	15 79	15 56	1569 1579 1556 1430 1438	1438	
Wt dry soil, Ws.gm	17756	159 92	174 56	17756 159 92 174 56 175.73 190 68	93 061	
Water content, w %	18 15	2144	24 19	2754	18 15 2144 24 19 2754 1600	

2-1-3 (32) Compaction Test

2-2-1 Results of Soil Tests for Representative Samples

			Soil Clas	ssification	Water		Att	terberg Lin	nits			Gradat				Compa	ction*1& Perme:	ability (I)
Area No.	Sample No.	Depth	Unified System	Revised P.R. System	Content as received	Specific Gravity	LL	PL	ΡΙ	-38.1 (1 1/2")	- 19.0 <sup>mm</sup> (3/4")	-4.75 mm (No.4)	-2.0 <sup>mm</sup> (No.10)	-0.425 <sup>mm</sup> (No.40)	-0.075 <sup>mm</sup> (No.200)	Optunum Water Content	Maximum Dry Densîty	Coefficient of Permeability
		(m)			(%)		(%)	(%)		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(t/m <sup>3</sup> )	(cm/sec.)
( Fine	Materials )																	
	P - 10	2.5	sc	A-7-6(2)	14.5	2.71	42.2	23.2	19.0		100	90	76	52	37	20.0	1.680	2.8x10 <sup>-8</sup>
]	P - 25	3.0	CL	A-6 (5)	12.2	2.61	30.8	17.2	13.6	100	98	92	84	74	54	17.8	1.773	1.3x10 <sup>-8</sup>
	P - 27	1.5	SC	A-7-6(3)	14.8	2.64	40.6	22.8	17.8		100	86	70	52	41	_	_	<del>-</del>
( Medi	um Materials )		<u> </u>	[ ]					[ [			[		<u> </u>				ļ
	P - 19	1.5	sc	A-2-6(1)	9.9	2.67	36.2	22.1	14.1		100	83	60	37	29	18.5	1.790	2.6x10 <sup>-8</sup>
	P - 26	2.5	GC	A-2-6(0)	7.2	2.70	34.2	20.8	13.4	100	89	49	31	24	21		_	_
	P - 29	4.5	SC	A-2-6(0)	14.8	2.71	37.0	19.8	17.2	100	93	66	52	36	22	15.2	1.792	3.3x10 <sup>-8</sup>
( Coars	se Materials )	ļ									-				•			
j	P-20	4.5	GW-GC	A-2-6(0)	10.4	2.77	36.4	21.5	14.9	100	56	29	19	13	10	17.2	1.753	4.5x10 <sup>-8</sup>
	P - 25	4.7	GC	A-2-6(0)	12.0	2.65	28.1	15.7	12.4	100	89	49	32	21	16	14.6	1.880	1.3x10 <sup>-8</sup>
	P - 27	3.7	GP-GM	A-2-6(0)	15.6	2.64	33.3	24.0	9.3		100	42	27	15	9	_	_	-

	Compact	ion** & Permeat	oility (II)		Triaxial (	Compression Stre	ngth (CIU) .*4	
Sample	Optimum	Maximum	Coefficient of	Water	Total S	tress	Effective	Stress
No.	Water Content	Dry Density	Permeability	Content	С	ф	<u>c</u>	$\overline{\phi}$
	(%)	(t/m <sup>3</sup> )	(cm/sec.)	(%)	(kg/cm <sup>2</sup> )	(deg.)	(kg/cm <sup>2</sup> )	(deg.)
P-10	17.5	1.812*2	_		_	-	-	-
P-25	14.0	1.910 *2	_	_			_	_
P-27	12.2	1.923 *3	3.8x10 <sup>-8</sup>	12.2	1.2	22.5	0.78	27.0
P–19 P–26 P–29	14.0 11.2 12.4	1.904 *2 2.010 *3 1.910 *2	 2.1x10 <sup>-8</sup> 	 11.2 	 0.5 	– 19.6 –	 0.96 	_ 20.9 _
P-20 P-25 P-27	13.6 12.2 11.3	1.910 *2 1.968 *2 1.952 *3	- - 2.0x10 <sup>-7</sup>	- - 11.3	- - 2.2	- - 17.8	- - 1.32	- - 27.0

<sup>\*1</sup> ASTM D 698-70 METHOD C

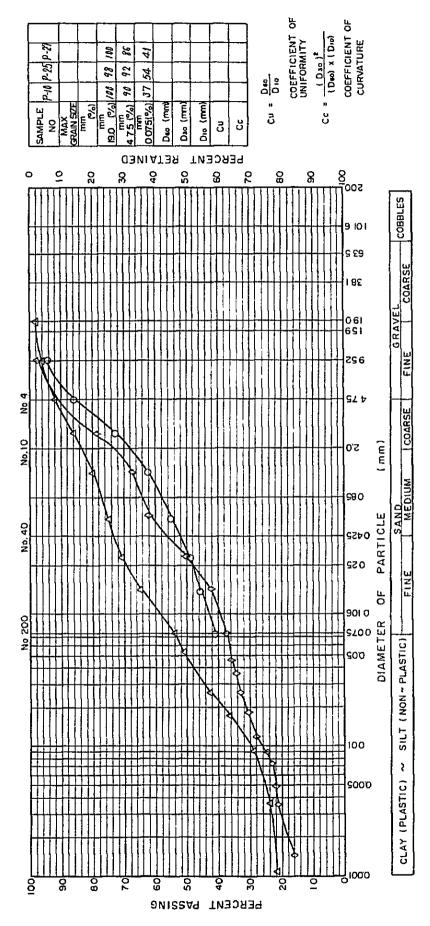
\*2 ASTM D 1557-70 METHOD B

\*4\*Specimens were compacted by ASTM D 1557-70 METHOD B and they were at optimum water Content, maximum dry density.

\*In permeability tests, falling head permeability tests were performed on specimens compacted by ASTM D 698-70. METHOD C (\*1) and constant head permeability tests were performed on specimens compacted by ASTM D 1557-70 METHOD B (\*3).

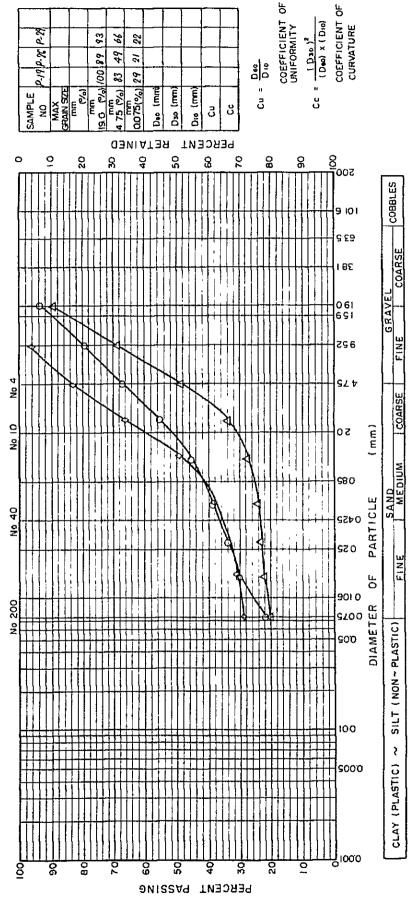
\*Coefficient of permeability is at optimum water

<sup>•</sup>Coefficient of permeability is at optimum water content.



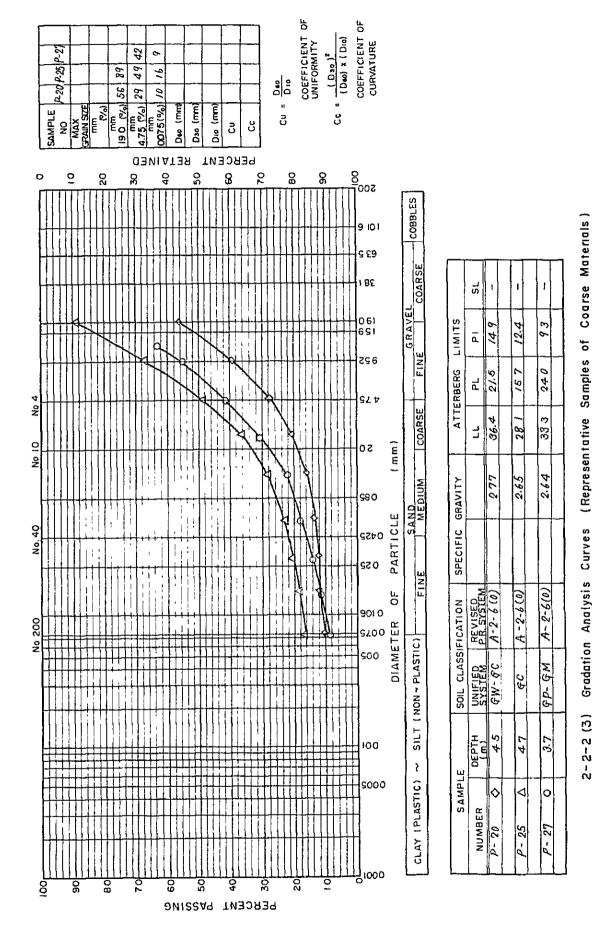
SAMPLE	LE	SOIL CLASS	SOIL CLASSIFICATION SPECIFIC GRAVITY	SPECIFIC	GRAVITY	ATTE	ATTERBERG LIMITS	LIMITS	
NUMBER	DEPTH	UNIFIED	REVISED P. SYSTEM			I L	٦٢	١d	75
0 01-d	2.5	SC	A-7-6(2)		2.71	42.2	23.2	190	l
D-25 A	3.0	70	(G) 9-V 73		79.6	30 8 172	172	981	1
P-27 0	7.5	SC	SC A-7-6(3)		2.64	3.04	22.8	17.8	1
27 0	2	30	(00 /-1		7:07	a		22.0	22.0

Gradation Analysis Curves (Representative Samples of Fine Materials) 2-2-2 (1)



ຶ້	SAMPLE	ш	SOIL CLASS	SOIL CLASSIFICATION	SPECIFIC GRAVITY	GRAVITY	4	ALIERBERG LIMITS	C I WIT	
NUMBER		OEPTH (m)	UNIFIED	REVISED P.R. SYSTEM				PL	ld	SL
p.19	0	7.5	၁ဇ	19-2-6(1)		2.67	36.2	22.1	141	
0.26	<	25	36	A-2-6(0)		2.70	342	21.8	13.4	1
p- 29	0	45	30	A-2-6(0)		2.71	37.0	9.61	17.4	1

2-2-2(2) Cradation Analysis Curves (Representative Samples of Mediam Materials)

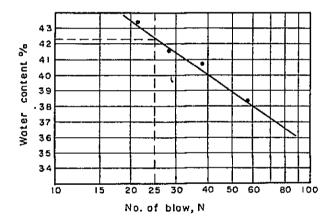


3 - 237

Project	Upper Quae Yaı		
Soil sample			
Pit No.	P - 10	Depth	2.50 m
Date	79-6-22		

### Liquid Limit Determination

AL-13	AL-18	AL-19	AL-21
47.11	45.11	43.99	44.87
41.60	40.22	39.39	40.13
28.85	28.54	28.09	27.78
12.75	11.68	11.30	12.35
5.51	4.89	4.60	4.74
43.22	41.87	40 71	38.38
21	29	39	58
	47.11 41.60 28.85 12.75 5.51 43.22	47.11     45.11       41.60     40.22       28.85     28.54       12.75     11.68       5.51     4.89       43.22     41.87	47.11     45.11     43.99       41.60     40.22     39.39       28.85     28.54     28.09       12.75     11.68     11.30       5.51     4.89     4.60       43.22     41.87     40.71



 Liquid limit %
 42.2

 Plastic limit %
 23.2

 Plasticity index Ip.
 19.0

### Plastic Limit Determination

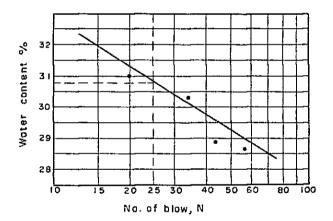
Container No.	V-16	V-19	V-20
Wt. container + wet soil, gm	13.78	14.55	13.93
Wt. container + dry soil, gm	13.15	13.73	13.25
Wt. container, gm	10.42	10 29	10.25
Wt. dry soil, gm	2.73	3.44	3.00
Wt. water, gm	0.63	0.82	0.68
Water content, w %	23.1	23.8	22.7

2-2-3 (1) Atterberg Limits (Representative Samples of Fine Materials)

Project	Upper Quae Ya	i	
Soil sample			
Pit No	P - 25	Depth	3.00 m
Date	79-6-22		

### Liquid Limit Determination

Container No	AL-5	AL-8	AL-9	AL-10
Wt. container + wet soil, gm	47.50	49.38	47.75	47.69
Wt. container + dry soil, gm	42.93	44,47	43.43	43.39
Wt. container, gm	28.19	28.27	28.49	28.33
Wt. dry soil, gm	14.74	16 20	14.94	15.06
Wt. water, gm	4 57	4.91	4.32	4.30
Water content, w %	31.00	30.31	28.92	28.55
No. of blows, N	20	33	42	59



 Liquid limit %
 30.8

 Plastic limit %
 17.2

 Plasticity index Ip.
 13.6

### Plastic Limit Determination

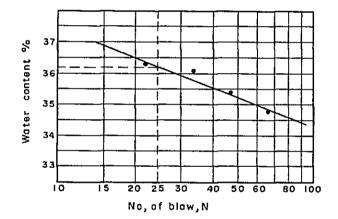
Container No.	V-9	V-10	V-11
Wt. container + wet soil, gm	14.33	15.34	14.67
Wt. container + dry soil, gm	13.73	14.61	14.04
Wt. container, gm	10.27	10.45	10.27
Wt. dry soil, gm	3 46	4.16	3.77
Wt. water, gm	0.60	0.73	0.63
Water content, w %	17.3	17.5	16.7

2-2-3 (2) Atterberg Limits (Representative Samples of Fine Materials)

Project	Upper Quae Y	'ai	
Soil sample			
Pit No.	P - 19	Depth	1.50 m
Date	79-6-22	· · · · · · ·	

Liquid Limit Determination

Container No.	AL-4	AL-43	AL-45	AL-47
Wt. container + wet soil, gm	43.97	44.90	47.43	45.76
Wt. container + dry soil, gm	39.87	40.40	42.48	41.32
Wt. container, gm	28.62	27.92	28.15	28.59
Wt. dry soil, gm	11.25	12.48	13.97	12.73
Wt. water, gm	4.10	4.50	4.95	4.44
Water content, w %	36.44	36.06	35,43	34.88
No. of blows, N	22	34	48	69



Liquid limit % 36.2

Plastic limit % 22.1

Plasticity index Ip. 14.1

Plastic Limit Determination

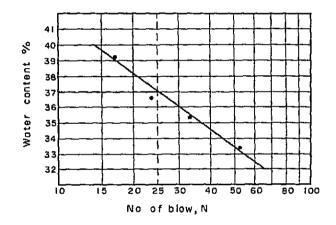
Container No.	V-1	V-4	V-7
Wt. container + wet soil, gm	14.47	14.90	14.60
Wt. container + dry soil, gm	13.75	14.10	13.85
Wt. container, gm	10.42	10.54	10.46
Wt. dry soil, gm	3.33	3.56	3.39
Wt. water, gm	0.72	0.80	0.75
Water content, w %	21.60	22.50	22.1

2-2-3 (3) Atterberg Limits (Representative Samples of Medium Materials)

Project	Upper Quae Y	ai	
Soil sample			
Pit No.	P · 29	Depth	4.50 m
Date	79-6-22		

### Liquid Limit Determination

Container No.	AL-33	AL-37	AL-40	AL-46
Wt. container + wet soil, gin	45.55	47.10	45.54	45.72
Wt. container + dry soil, gm	40.86	42.01	40.97	41.39
Wt. container, gm	28.84	28.13	27.97	28.37
Wt. dry soil, gm	12.02	13.88	13.00	13.02
Wt. water, gm	4.69	5.09	4.57	4.33
Water content, w %	39.02	36.67	35.15	33.26
No. of blows, N	17	23	32	52



Liquid limit % 37.0

Plastic lunit % 19.8

Plasticity index Ip. 17.2

Plastic Limit Determination

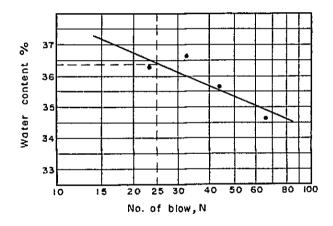
Container No.	V-39	V-42	V-46
Wt. container + wet soil, gm	13.35	14.19	14.54
Wt. container + dry soil, gm	12.80	13.60	13.81
Wt. container, gm	10.06	10.56	10.12
Wt. dry soil, gm	2.74	3.04	3.69
Wt. water, gm	0.55	0.59	0.73
Water content, w %	20.1	19.4	19.8

2-2-3 (4) Atterberg Limits (Representative Samples of Medium Materials)

Project	Upper Quae Yai		
Soil sample			
Pit No.	P - 20	Depth	4.50 m
Date	79-6-22		

Liquid Limit Determination

Container No.	AL-16	AL-20	AL-26	AL-41
Wt. container + wet woil, gm	45.20	44.91	45.35	45.75
Wt. container + dry soil, gm	40.60	40.53	40.87	41.33
Wt. container, gm	27.96	28.57	28.29	28.56
Wt. dry soil, gm	12.64	11.96	12.58	12.77
Wt. water, gm	4.60	4.38	4.48	4.42
Water content, w %	36.39	36.62	35.61	34.61
No. of blows, N	23	32	45	67



 Liquid limit %
 36.4

 Plastic limit %
 21.5

 Plasticity index Ip.
 14.9

Plastic Limit Determination

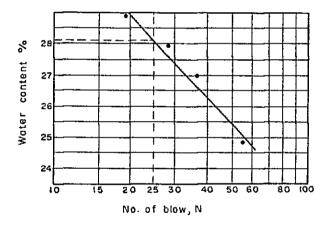
Container No.	V-2	V-3	V-6
Wt. container + wet soil, gm	13.33	14.02	14.86
Wt. container + dry soil, gm	12.83	13.37	14.04
Wt. container, gm	10.31	10.39	10.44
Wt. dry soil, gm	2.52	2.98	3.60
Wt. water, gm	0.50	0,65	0.82
Water content, w %	19.8	21.8	22.8

2-2-3 (5) Atterberg Limits (Representative Samples of Coarse Materials)

Project	Upper Quae Y	'ai	
Soil sample			
Pit No	P - 25	Depth	4.70 m
Date	79-6-22		

## Liquid Limit Determination

Container No.	AL-23	AL-24	AL-29	AL-32
Wt. container + wet soil, gm	50.33	47.03	46.49	44.32
Wt. container + dry soil, gm	45.41	42.97	42.72	41.10
Wt. container, gm	28.44	28.46	28.73	28.14
Wt dry soil, gm	16.97	14.51	13.99	12.96
Wt. water, gm	4.92	4 06	3.77	3.22
Water content, w %	28.99	27.98	26.95	24.85
No. of blows, N	19	28	36	54



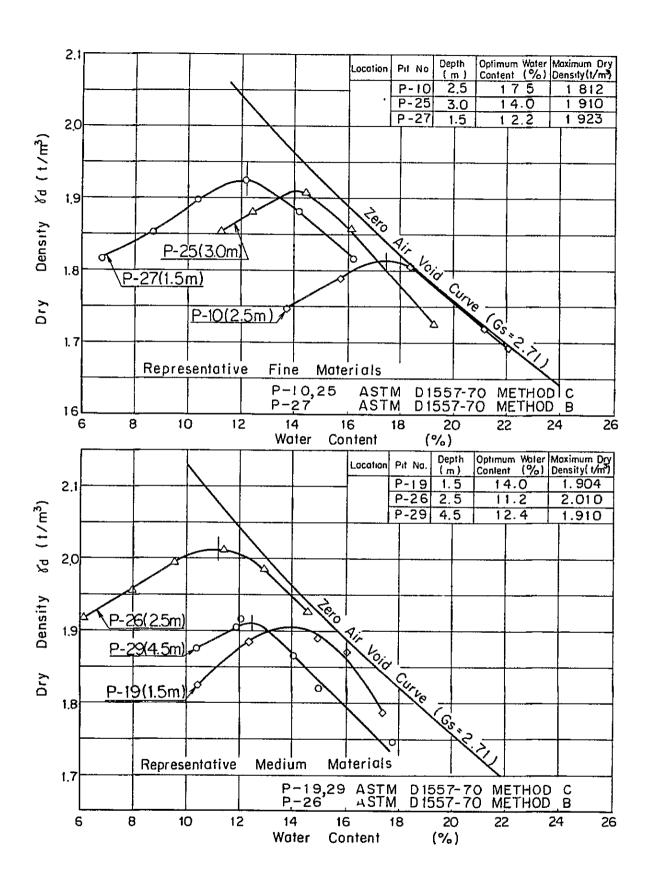
 Liquid limit %
 28.1

 Plastic limit %
 15.7

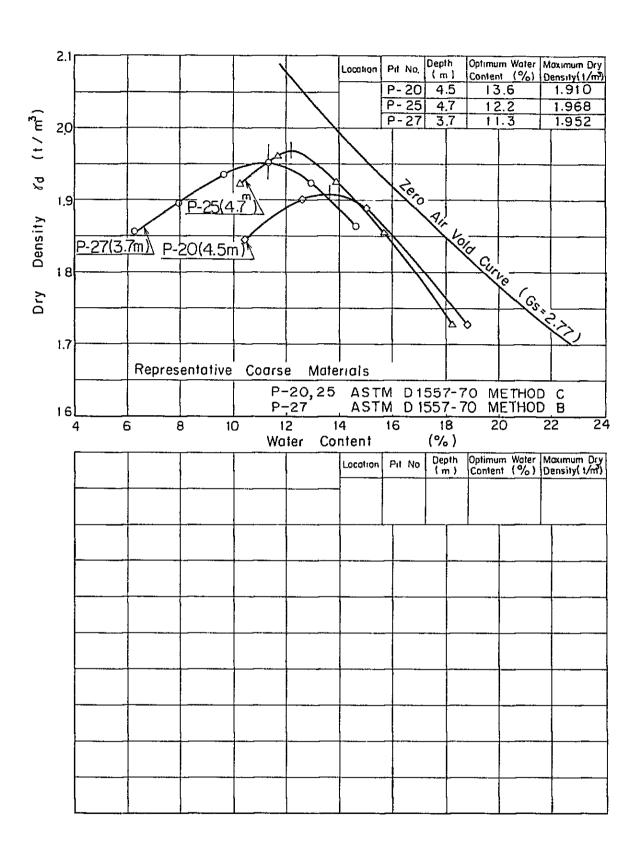
 Plasticity index lp
 12.4

## Plastic Limit Determination

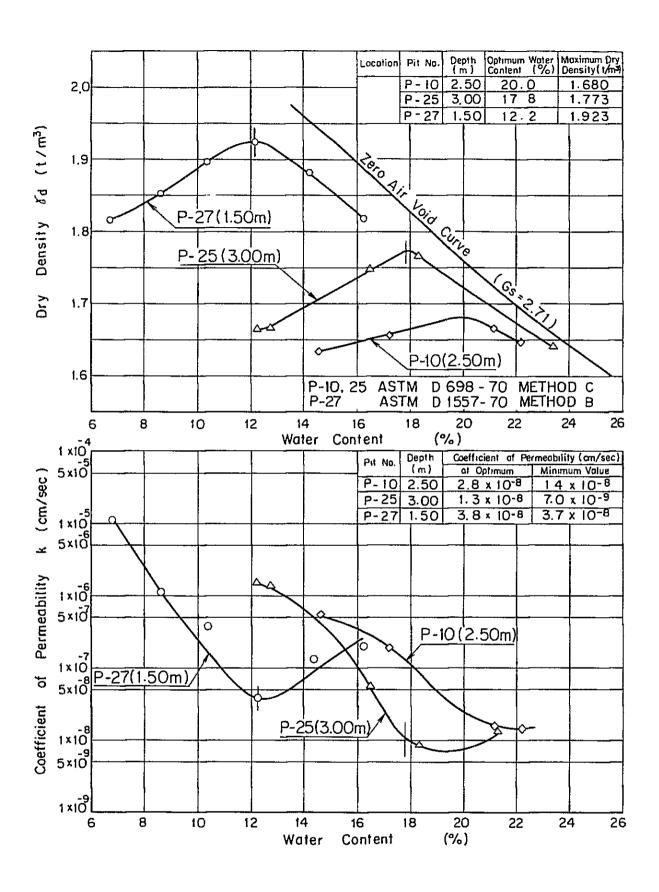
Container No.	V-22	V-29	V-32
Wt. container + wet soil, gm	14.20	14.20	14.97
Wt. container + dry soil, gm	13.69	13.66	14 38
Wt. container, gm	10.48	10.20	10.59
Wt dry soil, gm	3.21	3.46	3.79
Wt water, gm	0.51	0.54	0.59
Water content, w %	15.9	15.6	15.6



2-2-4(1) Compaction Test

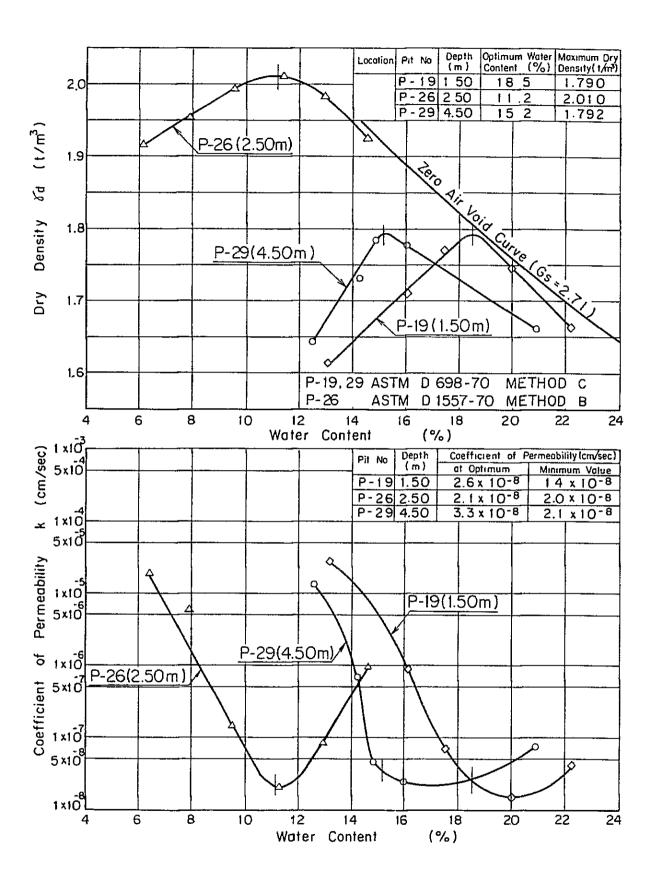


2-2-4 (2) Compaction Test



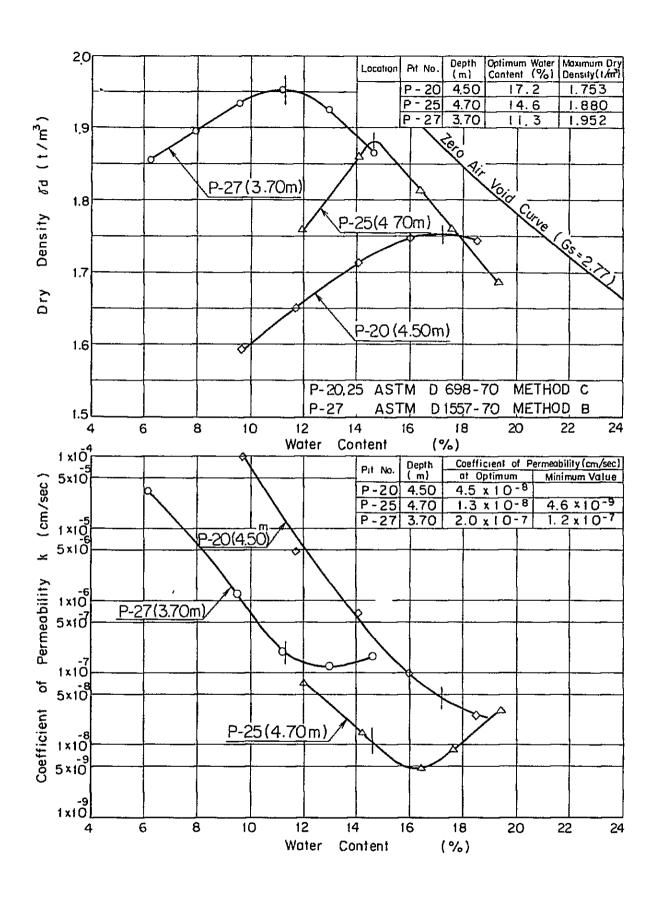
2-2-5 (1) Compaction and Permeability Test

(Representative Samples of Fine Materials)



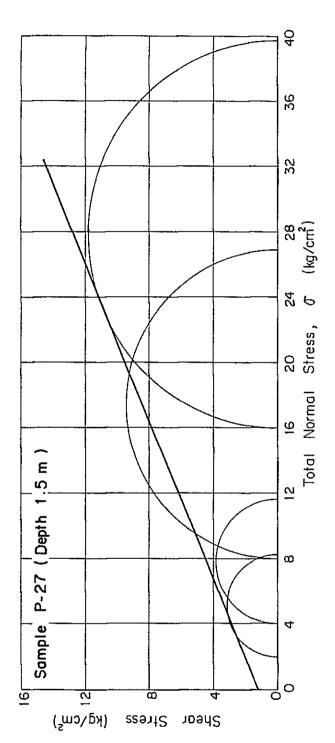
2-2-5(2) Compaction and Permeability Test

(Representative Samples of Medium Moterials)



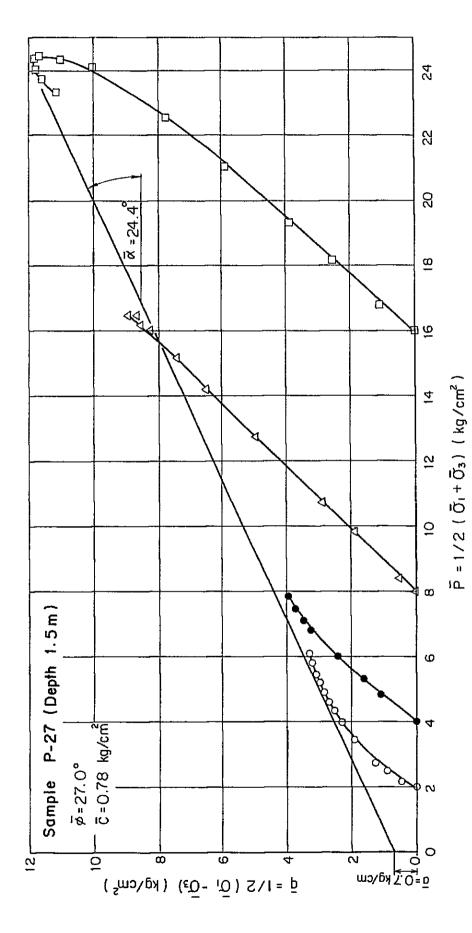
2-2-5 (3) Compaction and Permeability Test

( Representative Samples of Coarse Materials )

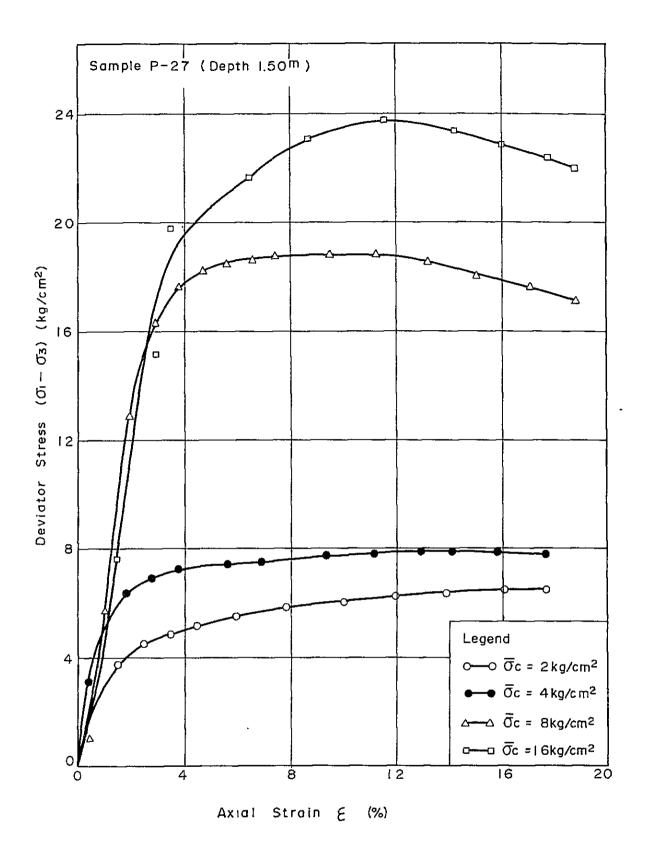


Dit No.	Depth	Initial Specimen Data	men Data	Shear	Shear Values	
	( w )	Water Content (%)	Vater Content (%) Dry Density (1/m³)	C (kg/cm²) 1	tan & (a	deg )
P - 27	1.50	14.9	1.792	2.	0.414 2	22.5

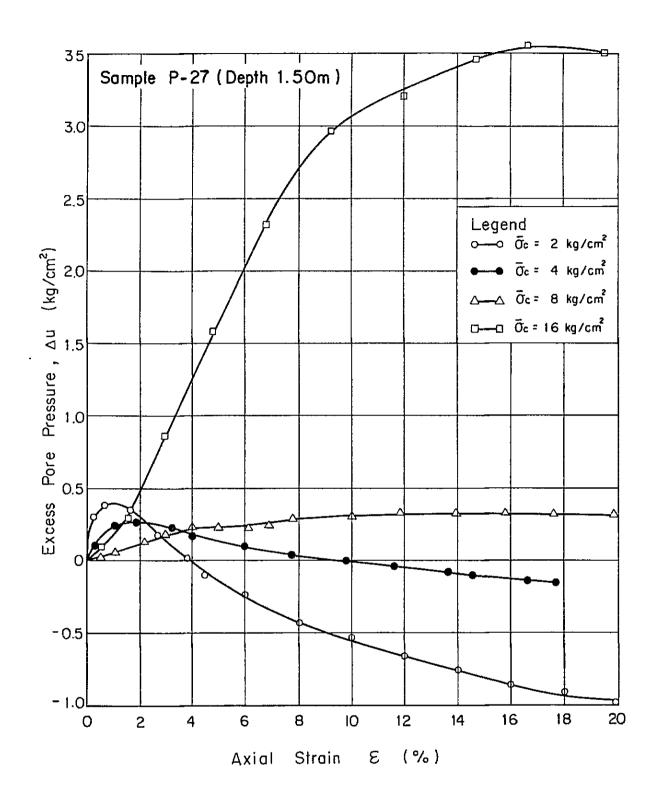
2-2-6 (1) Mohr's Envelope in Terms of Total Streeses for CIU Triaxial Tests. (Representative Sample of Fine Materials)



Effective Stress Paths and Strength Envelope for CIV Triaxial Tests ( Representative Samples of Fine Materials ) 2-2-6 (2)

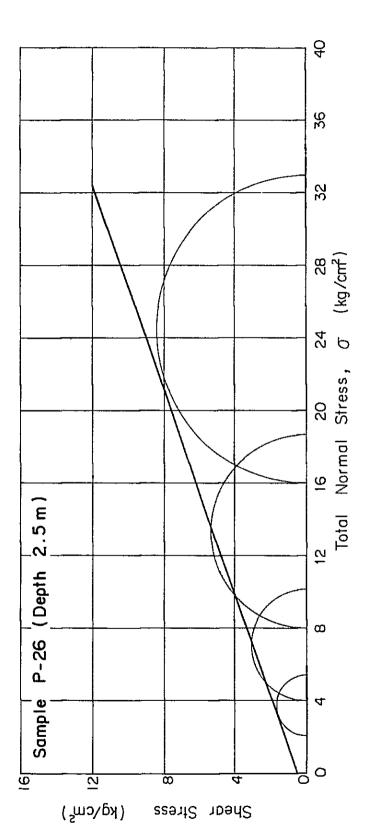


2-2-6(3) Deviator Stress vs. Axial Strain for CIU Triaxial Tests
(Representative Samples of Fin Materials)



2-2-6(4) Excess Pore Pressure vs. Axial Strain for  $\overline{\text{CIU}}$  Triaxial Tests.

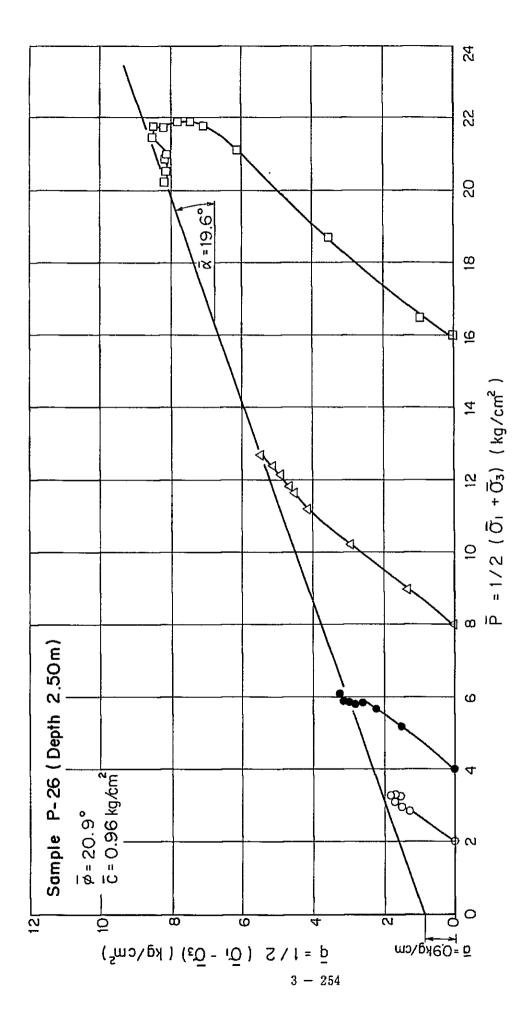
( Representative Samples of Fine Materials )



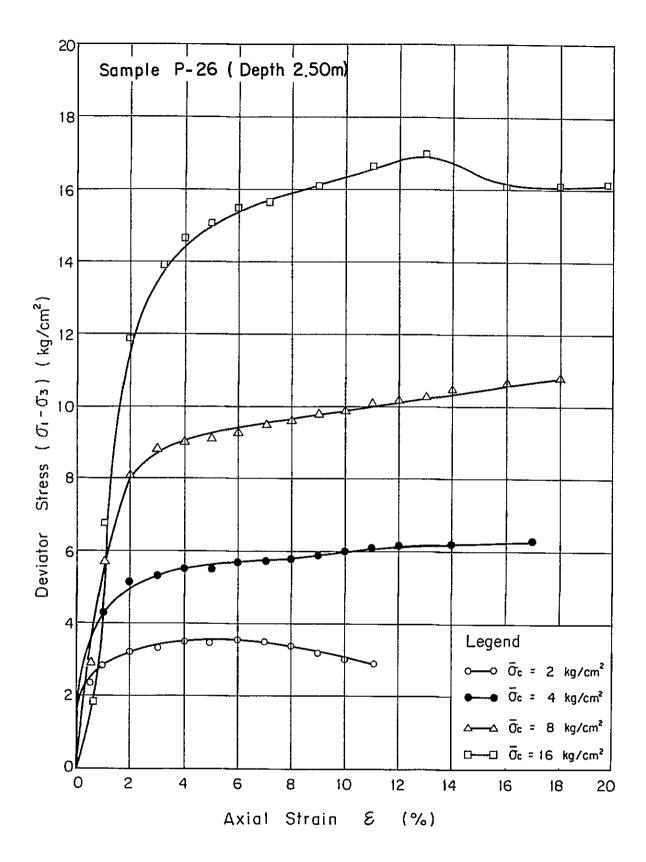
- 14	epth	Initial Specimen	men Data	She	Shear Values	
01 11	( m )	Water Content (%) Dry Density (1/m³)	Dry Density (1/m³)	C (kg/cm²)	tan ø	( deg )
P - 26   2	2.50	თ 	1.872	0.5	0.356	19.6

Mohr's Envelope in Terms of Total Streeses for CIU Triaxial Tests. 2-2-6 (5)

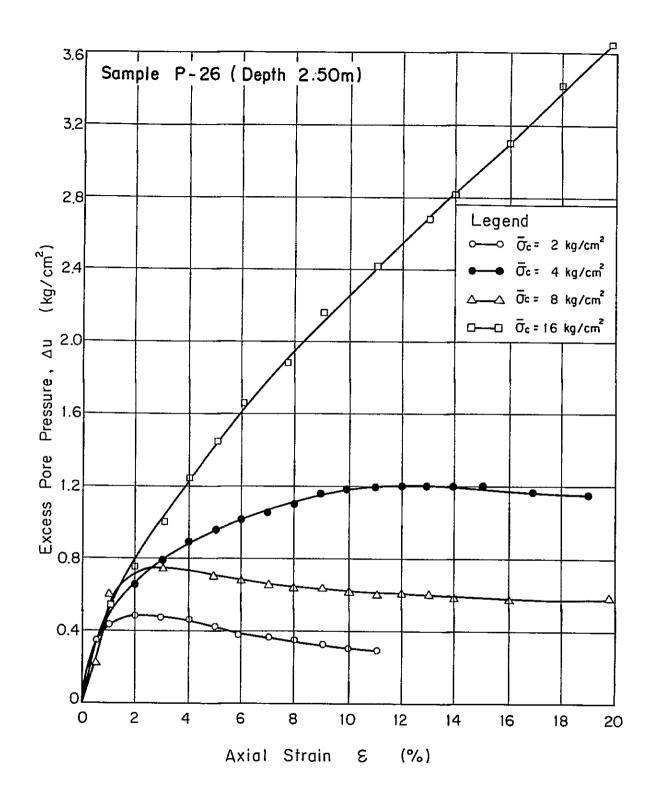
( Representative Samples of Medium Materials



2-2-6(6) Effective Stress Paths and Strength Envelope for CIU Triaxial Tests ( Representative Samples of Medium Materials )

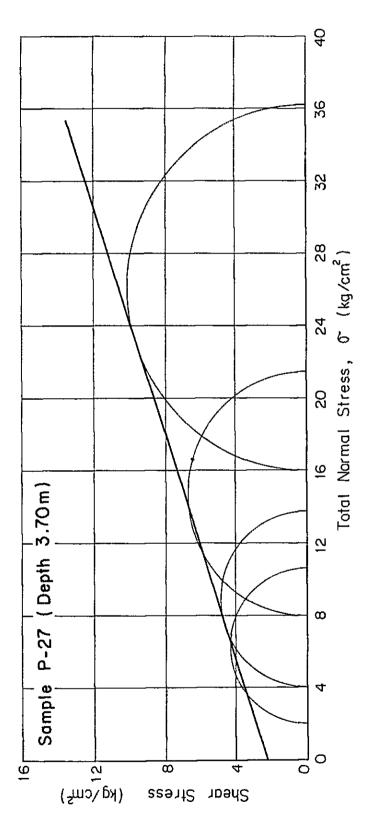


2-2-6 (7) Deviator Stress vs. Axial Strain for CIU Triaxial Tests
(Representative Samples of Medium Materials)



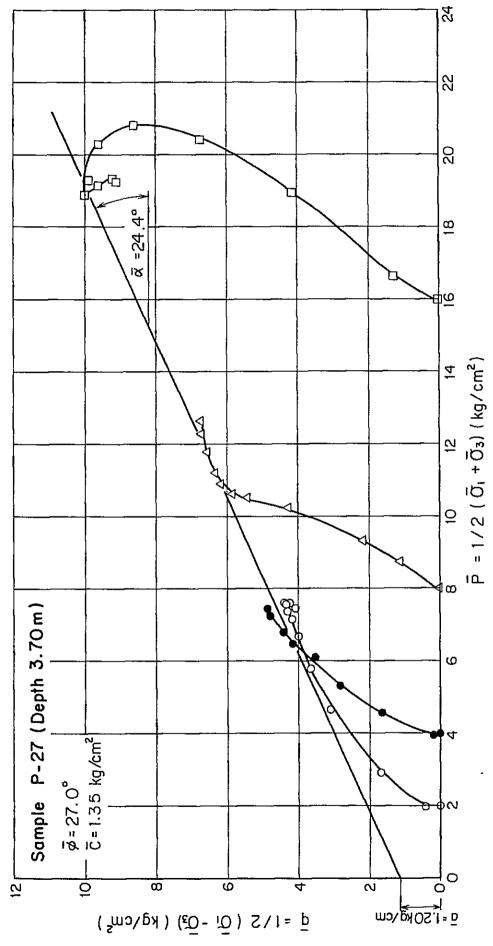
2-2-6 (8) Excess Pore Pressure vs. Axial Strain for CIU Triaxial Tests.

( Representative Samples of Medium Materials )

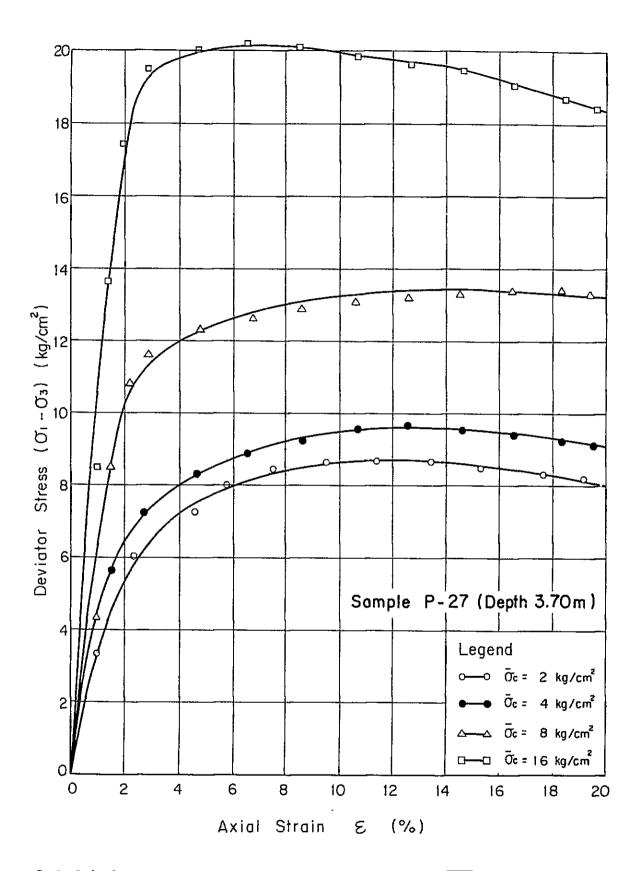


	Depth	Initial Specimen	imen Data	She	Shear Values	
Fil No.	( m )	Water Content (%)	Dry Density (1/m³)	C ( kg/cm²)	tan Ø	( deg )
P-27	3.70	13.6	1.757	2.2	0.321	17.8

2-2-6 (9) Mohr's Envelope in Terms of Total Streeses for CIU Triaxial Tests. (Representative Samples of Coarse Materials)

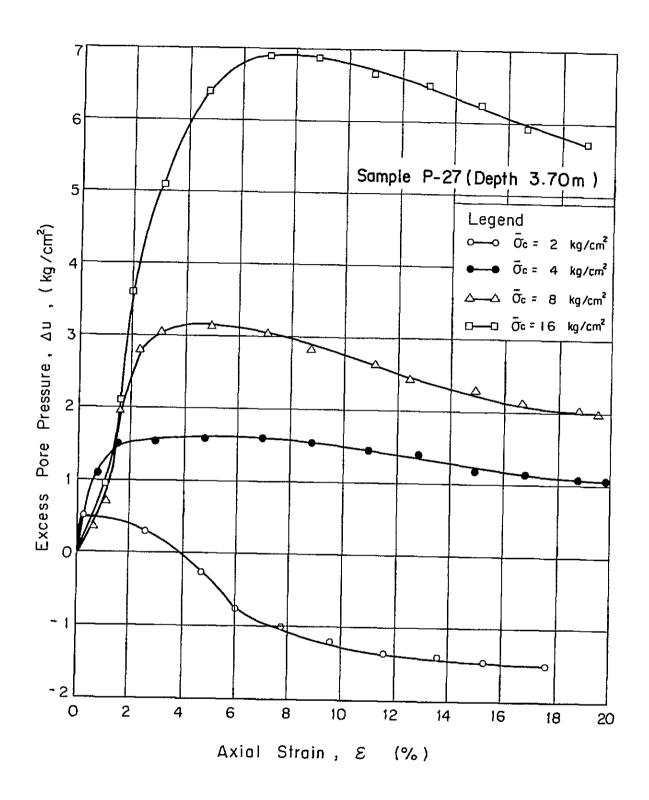


Effective Stress Paths and Strength Envelope for CIU Triaxial Tests (Representative Samples of Coarse Materials) 2-2-6 (10)



2-2-6 (11) Deviator Stress vs. Axial Strain for CIU Triaxial Tests.

( Representative Samples of Coarse Materials )



2-2-6(12) Excess Pore Pressure vs. Axial Strain for CIU Triaxial Tests.

( Representative Samples of Coarse Materials )