

BORING LOG

Detailed Design for The <b>PROJECT</b> Pipeline System		<b>HOLE NO.</b> DH.16	<b>LOCATION</b> 10K + 969, L = 17
From <b>WORK</b> Dok Krai to Mab Ta Pud Chalam.		<b>DEPTH</b> 5.25 M.	<b>ELEVATION OF HOLE</b> 30.06 m
<b>FOREMAN</b> Surachai Prasiath.		<b>DATE</b> Dec.25,81	
		<b>METHOD OF BORING</b> Std. Pent. resis, Test.	

Slac M.	Layer Depth M.	Log	Tasted Depth M.	N	Soil Description	Remarks
			0.00 0.30	1		
1.00	0.90		1.00			WATER TABLE
			1.30	26		-0.20
2.00			2.00		Poorly graded sands, non-	
			2.30	48		
5.00	2.70		3.00		plastic; very loose sand	DATE
			3.30	41		Dec.25,81
4.00			4.00		is predominantly medium,	
			4.30	47		
5.00	5.25		5.00		brown (SP)	
			5.25	50/25cm		
6.00					Clayey sand, Medium Plasticity,	
7.00					Medium density to dense, sand	
8.00					is fine to coarse, light	
9.00					gray (SC)	
10.00					Silty sand, low plasticity,	
11.00					very dense, sand is fine to	
12.00					coarse, some fine gravel,	
					light gray (SM)	
					Bottom of Hole	
					0.00-2.70 m. alluvial deposit	
					2.70 - decomposed granite	
						PLATE NO.

VERTICAL SCALE 1:100 (1CM = 1 M.)	Traced _____	Checked _____	Sheet _____
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Detailed Design for The <b>PROJECT</b> Pipeline System		<b>HOLE NO.</b> DH.17	<b>LOCATION</b> 14K + 310, L = 24
From <b>WORK</b> Dok Krai to Mab Ta Pud		<b>DEPTH</b> 5.22 M.	<b>ELEVATION OF HOLE</b> 37.07 m
<b>FOREMAN</b> Throngrit. Surachai. Thavil.		<b>DATE</b> Dec.26,81	
<b>METHOD OF BORING</b> Std. Pent. Resis. Test.			

Scale M.	Layer Depth M.	Log	Tested Depth M.	N	Soil Description	Remarks
1.00			1.00			WATER TABLE
			1.30	7		
2.00			2.00		Silty sand, non-plastic,	-0.50 m.
	2.50		2.30	9		
3.00			3.00		loose, sand is fine to medium,	DATE
			3.30	10		
4.00			4.00		light gray (SM)	Dec.26,81
	4.30		4.30	28		
5.00			5.00		Clayey sand, Medium plasticity,	
	5.22		5.22	50/22cm.		
6.00					Medium density, sand is fine	
7.00					to coarse, some fine gravel,	
8.00					yellowish gray (SC)	
9.00					Silty sand, low plasticity,	
10.00					very dense, sand is fine, to	
11.00					coarse, some fine gravel,	
12.00					grayish brown (SM)	
					Bottom of Hole	
					0.00-4.30 m. alluvial deposit	
					4.30 - decomposed granite	
						PLATE NO.
VERTICAL SCALE 1:100 (1CM = 1 M.)				Traced _____	Checked _____	Sheet _____

Detailed Design for The <b>PROJECT</b> Pipeline System	HOLE NO. <u>DH.18</u>	LOCATION <u>14K + 805, L = 28</u>
From <b>WORK</b> Dok Krai to Mab Ta Pud	DEPTH <u>7.30</u> M.	ELEVATION OF HOLE <u>52.67</u> m
FOREMAN <u>Throngrit. Chalam. Thavil.</u>	DATE <u>Jan.5,82</u>	
METHOD OF BORING <u>Std. Pent. Resis. Test.</u>		

Scale M.	Layer Depth M.	Log	Tested Depth M.	N	Soil Description	Remarks
1.00		[Hatched]	1.00			WATER TABLE
		[Hatched]	1.30	12		
2.00		[Hatched]	2.00		Sandy clay, Medium plasticity	-7.02 m.
		[Hatched]	2.30	10		
3.00	2.80	[Dashed]	3.00		Medium, sand is fine to	DATE
		[Dashed]	3.30	19		Jan.5,82
4.00		[Dashed]	4.00		medium, brown (CL)	
		[Dashed]	4.30	20		
5.00		[Dashed]	5.00			
		[Dashed]	5.30	28		
6.00		[Dashed]	6.00		Clayey silt, High plasticity	
		[Dashed]	6.30	24		
7.00	7.30	[Dashed]	7.00		Medium, some fine to coarse	
		[Dashed]	7.30	30		
8.00		[Dashed]			sand and fine gravel, grayish	
9.00		[Dashed]			red (MH)	
10.00		[Dashed]			Bottom of Hole	
11.00		[Dashed]				
12.00		[Dashed]				

VERTICAL SCALE 1:100 (1CM = 1 M.)	Traced _____	Checked _____	Sheet _____
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PLATE NO.







Detailed Design for The <b>PROJECT</b> Pipeline System		<b>HOLE NO.</b> DH.22	<b>LOCATION</b> 19K + 441, L = 38
From <b>WORK</b> Dok Krai to Mab Ta Pud		<b>DEPTH</b> 10.25 M.	<b>ELEVATION OF HOLE</b> 29.77 m
<b>FOREMAN</b> Throngrit. Chalam. Thavil.		<b>DATE</b> Jan. 6, 82	
<b>METHOD OF BORING</b> Std. Pent. Resis. Test.			

Scale M.	Layer Depth M.	Log	Tested Depth M.	N	Soil Description	Remarks
1.00			1.00			WATER TABLE
2.00	1.80		1.30	7		
			2.00		Clayey sand, low plasticity,	-0.38 m.
			2.30	3		
3.00			3.00		loose, sand is fine, brown	DATE
			3.30	5		Jan, 6, 82
4.00	4.10		4.00		(SC)	
			4.30	14		
5.00			5.00		Silty sand, non-plastic,	
			5.30	15		
6.00			6.00		very loose to loose, sand	
			6.30	22		
7.00			7.00		is fine to medium brown (SM)	
			7.30	31		
8.00			8.00		Clayey sand, Medium	
			8.30	21		
9.00			9.00		plasticity, Medium density	
			9.30	40		
10.00	10.25		10.00		to very dense, sand is fine	
			10.25	50/25cm		
11.00					to coarse, gray (SC)	
12.00					Bottom of Hole	
					0.00-9.00 m. alluvial deposit	
					9.00- decomposed granite	
						PLATE NO.
VERTICAL SCALE 1:100 (1CM = 1 M.)				Traced	Checked	Sheet





Detailed Design for The <b>PROJECT</b> Pipeline System		<b>HOLE NO.</b> DH.24	<b>LOCATION</b> 25K + 514, L = 20
From <b>WORK</b> Dok Krai to Mab Ta Pud		<b>DEPTH</b> 9.07 M.	<b>ELEVATION OF HOLE</b> 58.22 m
<b>FOREMAN</b> Throngrit. Chalam. Thavil.		<b>DATE</b> Jan.7,82	
<b>METHOD OF BORING</b> Std. Pent. Resis. Test.			

Scale M.	Layer Depth M.	Log	Tested Depth M.	N	Soil Description	Remarks
1.00			1.00			WATER TABLE
			1.30	9		-1.70 m.
2.00			2.00			DATE
			2.30	9		Jan,7,82
3.00			3.00			
	3.40		3.30	18		
4.00			4.00			
			4.30	31		
5.00			5.00			
			5.30	36		
6.00			6.00			
			6.30	16		
7.00		7.00				
		7.30	49			
8.00		8.00				
		8.30	43			
9.00		9.00				
	9.07	9.07	50/07cm.			
10.00						
11.00						
12.00						
Bottom of Hole						
0.00-7.00 m: alluvial deposit						
7.00- decomposed granite						
<b>PLATE NO.</b>						

VERTICAL SCALE 1:100 (1CM = 1 M.)	Traced _____	Checked _____	Sheet _____
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BORING LOG

Detailed Design for The <b>PROJECT</b> Pipeline System		<b>HOLE NO.</b> A.6	<b>LOCATION</b> 13k+740,L=28
From <b>WORK</b> Dok Krai to Mah Ta Pud Chalam.		<b>DEPTH</b> 5.25 M.	<b>ELEVATION OF HOLE</b> 37.51 m
<b>FOREMAN</b> Prasilath.		<b>DATE</b> Dec.26,81	
		<b>METHOD OF BORING</b> Hand Auger	

Scale M.	Layer Depth M.	Log	Tested Depth M.	N	Soil Description	Remarks
1.00			0.00 0.30 1.00 1.30			WATER TABLE
2.00			2.00 2.30		Silty sand, non-plastic,	-0.21 m.
3.00			3.00 3.30		sand is fine to coarse,	DATE
4.00			4.00 4.30	45	brown and gray (SN)	Dec.26,81
5.00	5.25		5.00 5.25	50/25 cm.		
6.00					Clayey sand, Medium	
7.00					Plasticity, very dense,	
8.00					sand is fine to coarse.	
9.00					grayish brown (SC)	
10.00					Bottom of Hole	
11.00						
12.00						
						PLATE NO.
VERTICAL SCALE 1:100 (1CM = 1 M.)				Traced _____	Checked _____	Sheet _____















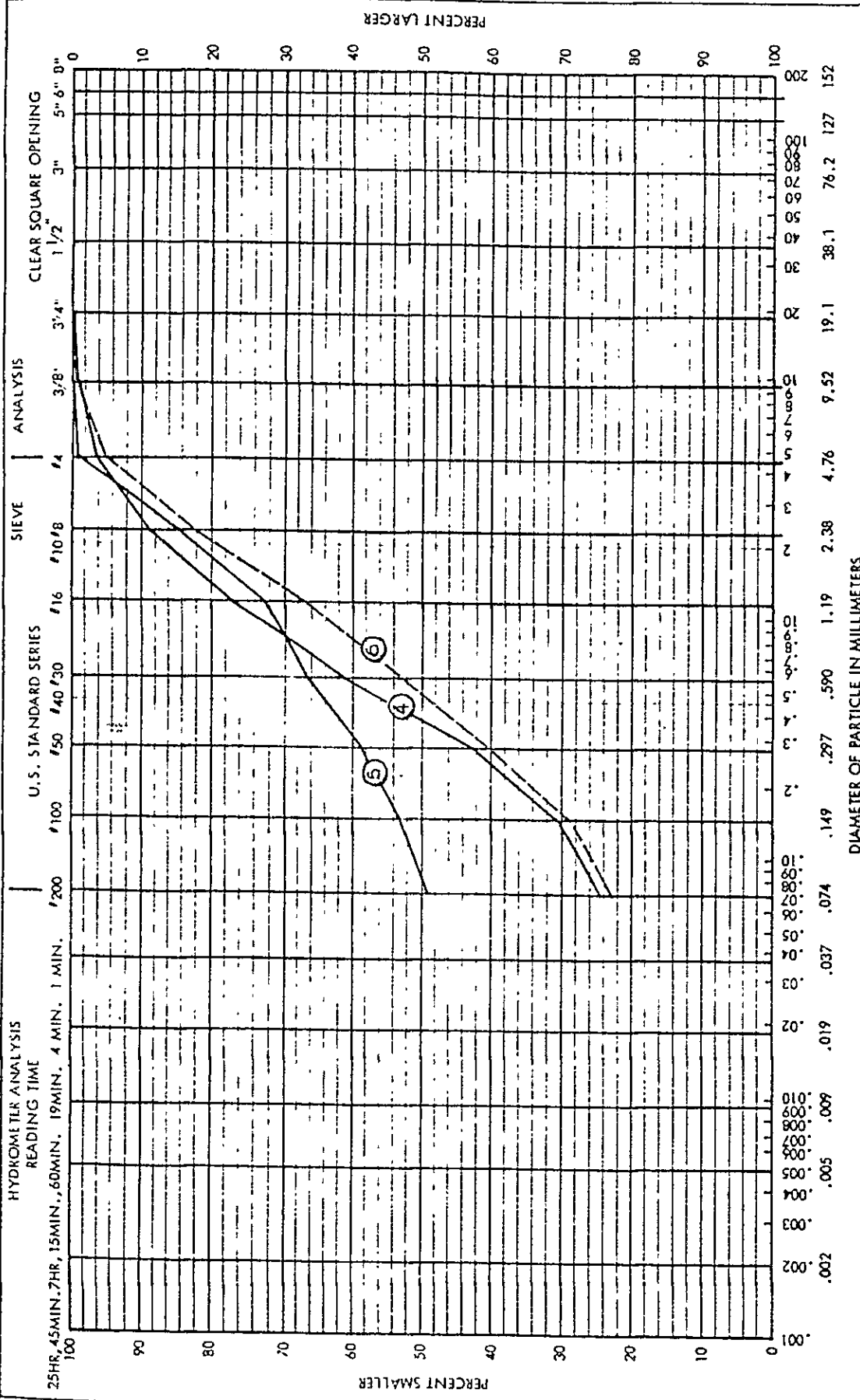
Appendix 2

Laboratory Testing Data









CLAY (plastic) TO SILT (non-plastic)		SAND			GRAVEL		COBBLES
No.	Sample No.	Depth (m)	Atterberg Limits		COARSE	FINE	
			L.L.	P.L.			
4	DH. 4	4.00 - 6.80	—	—	—	—	—
5	DH. 5	1.00 - 1.30	47.0	18.3	—	—	—
6	DH. 5	10.00 - 11.10	—	—	—	—	Inadequate Sample

GRADATION TEST

HYDROMETER ANALYSIS  
READING TIME

25HR., 45MIN., 7HR., 15MIN., 60MIN., 19MIN., 4 MIN., 1 MIN.

ANALYSIS

CLEAR SQUARE OPENING

1/2" 3/4" 3" 5" 6" 8"

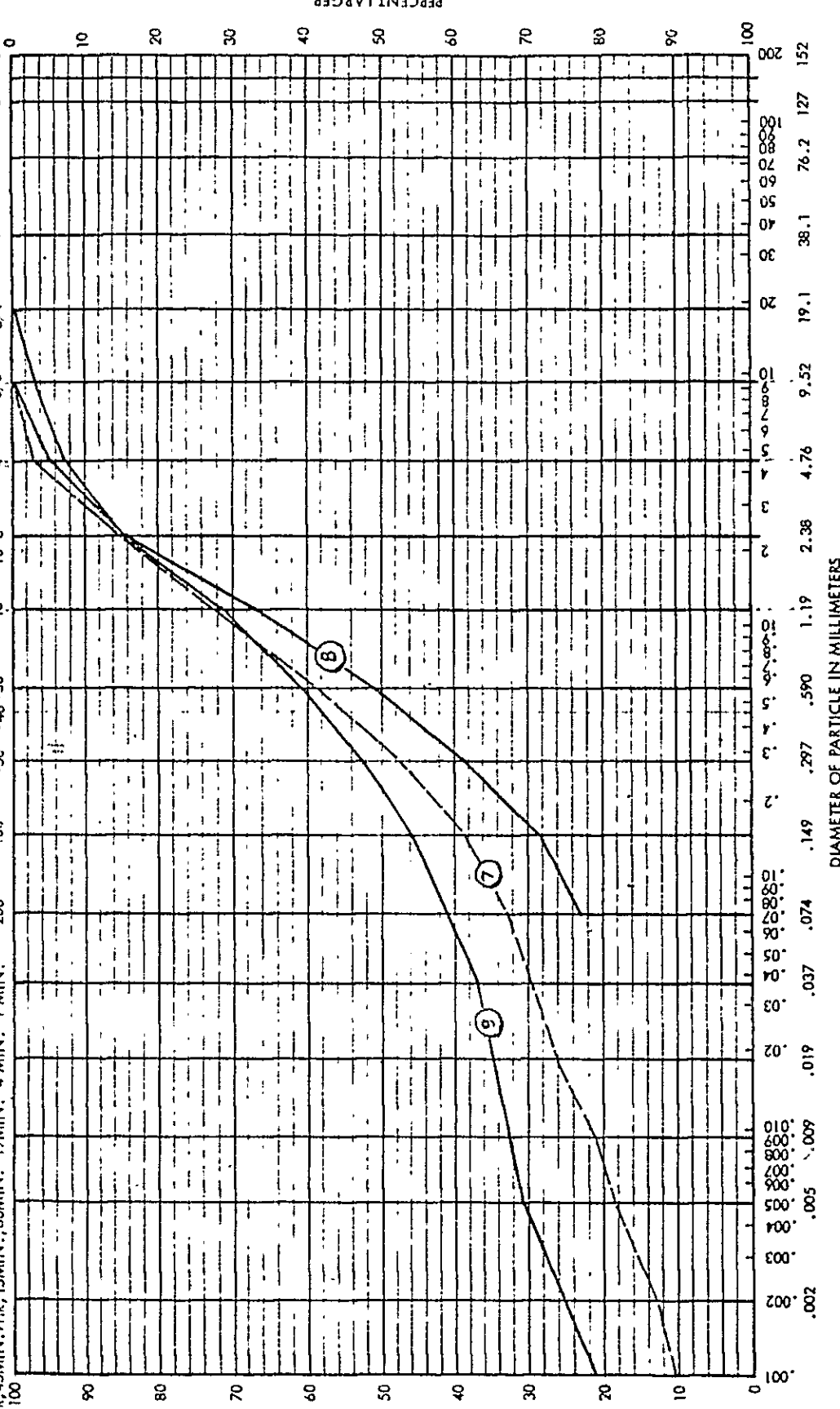
SIEVE

U.S. STANDARD SERIES

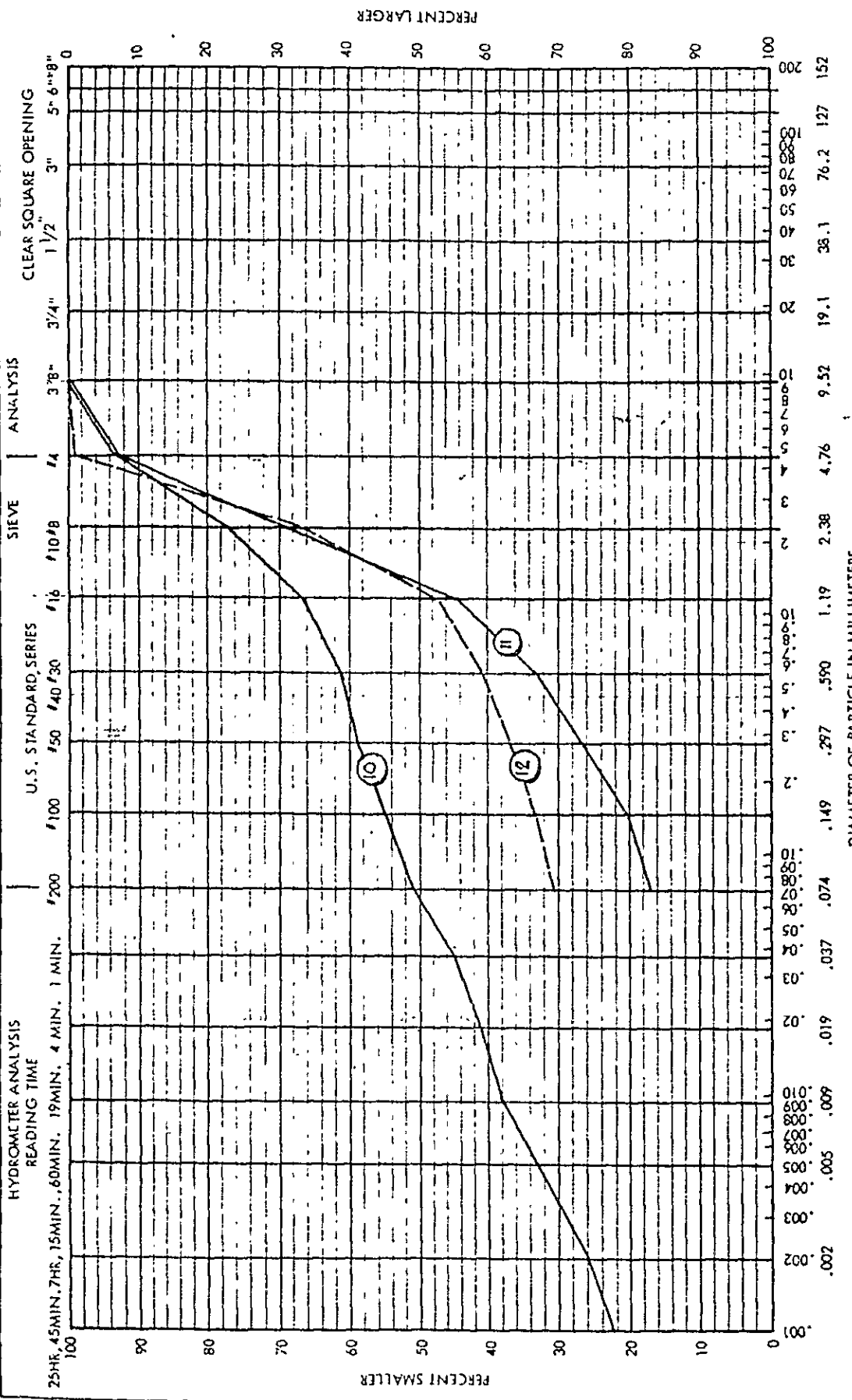
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PERCENT SMALLER

PERCENT LARGER



CLAY (plastic) TO SILT (non-plastic)		SAND		GRAVEL		COBBLES										
FINE		MEDIUM		FINE		COARSE										
.002	.005	.019	.037	.074	.149	.297	.590	1.19	2.36	4.76	9.52	19.1	38.1	76.2	127	152



CLAY (plastic) TO SILT (non-plastic)	SAND			GRAVEL		COBBLES
	FINE	MEDIUM	COARSE	FINE	COARSE	
No. Sample No.	Soil Classification					
Depth (m.)	MH					
Notes:	Inadequate Sample					



HYDROMETER ANALYSIS  
READING TIME

25 HR., 45 MIN., 7 HR., 15 MIN., 60 MIN., 19 MIN., 4 MIN., 1 MIN.

U.S. STANDARD SERIES

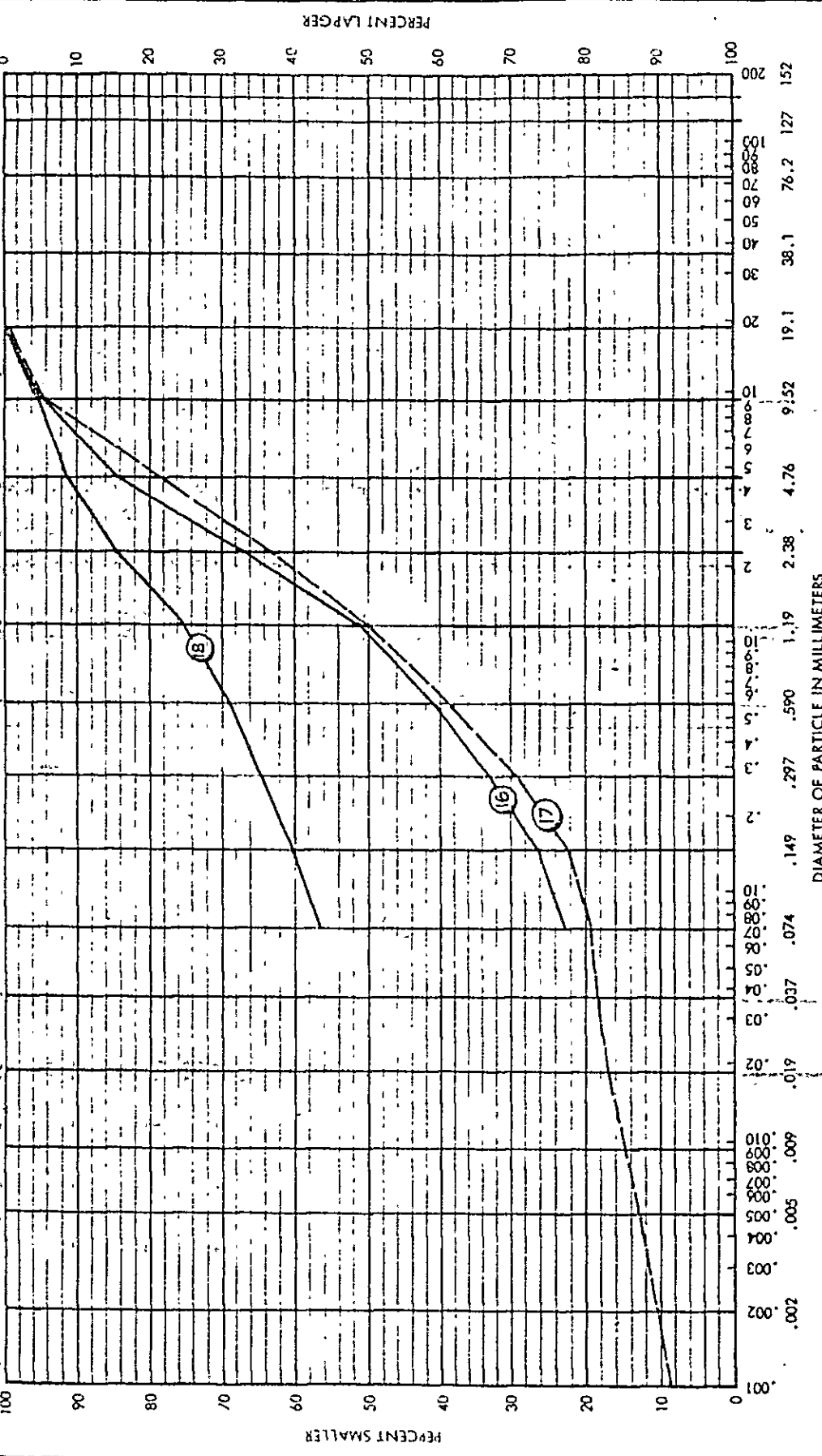
#200 #100 #75 #40 #30 #16 #10 #8

SIEVE ANALYSIS

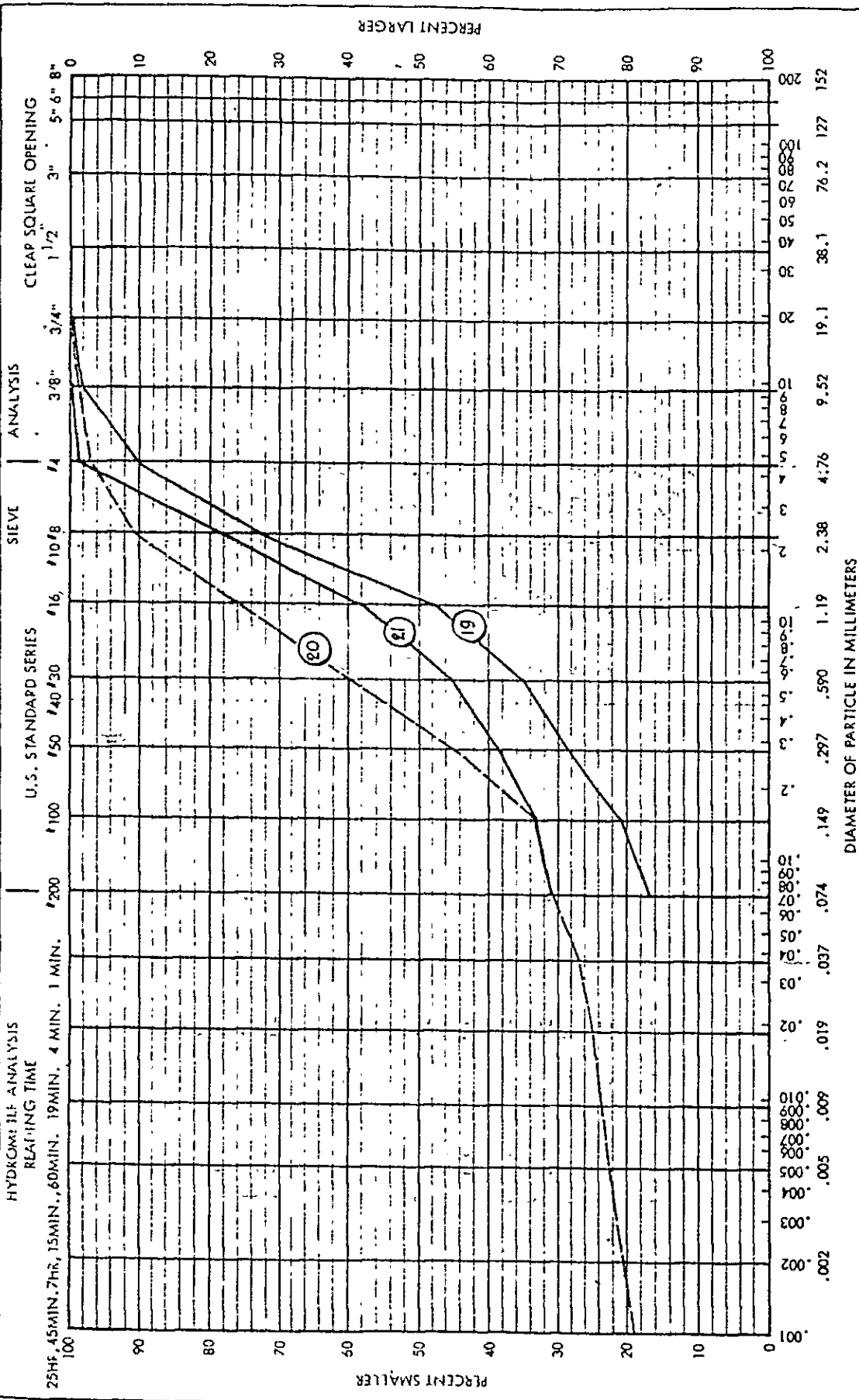
3/8" 3/4" 1" 1 1/2" 2" 3" 4" 6" 10"

CLEAR SQUARE OPENING

1 1/2" 3" 5" 6" 8"



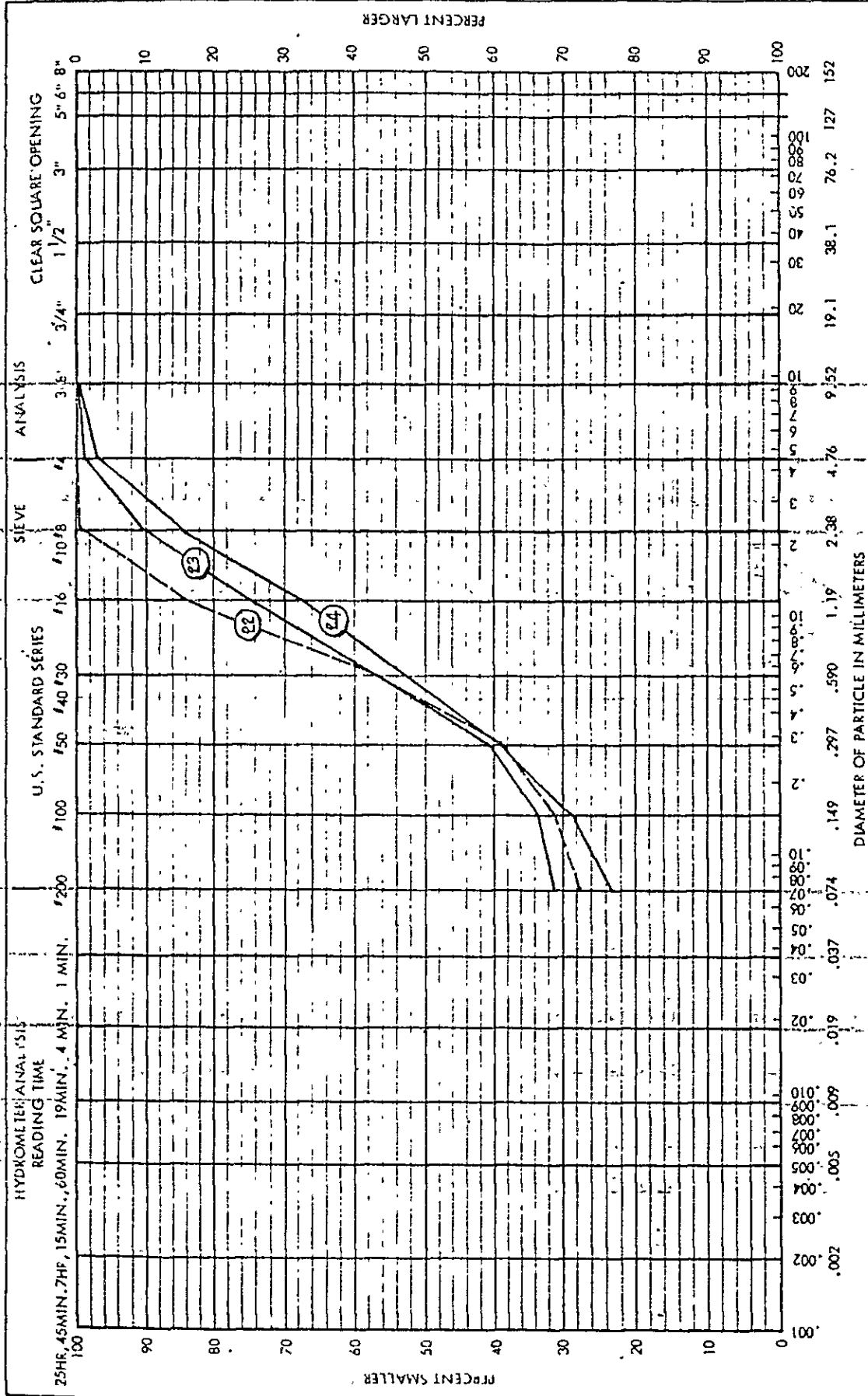
No.	Sample No.	Depth (m)	Atterberg Limits		Soil Classification
			L.L.	P.L.	
(16)	DH. 16	1.00-2.30	33.5	17.7	SC
(17)	DH. 17	3.00-4.30	40.9	24.9	SC
(18)	DH. 18	4.00-7.30	60.0	35.2	MH



No.	Sample No.	Depth (m.)	Atterberg Limits		Soil Classification			
			L.L.	P.L.	CLAY	SAND	GRAVEL	COBBLES
(19)	DH. 19	5.00 - 6.90	35.7	22.2	SC			
(20)	DH. 20	4.00 - 4.30	36.8	19.3	SC			
(21)	DH. 21	4.00 - 5.90	38.8	21.2	SC			

GRADATION TEST

Project 6800719  
 HYDROMETER ANALYSIS  
 READING TIME  
 25HR, 45MIN, 7HF, 15MIN., 60MIN., 19MIN., 4 MIN., 1 MIN.



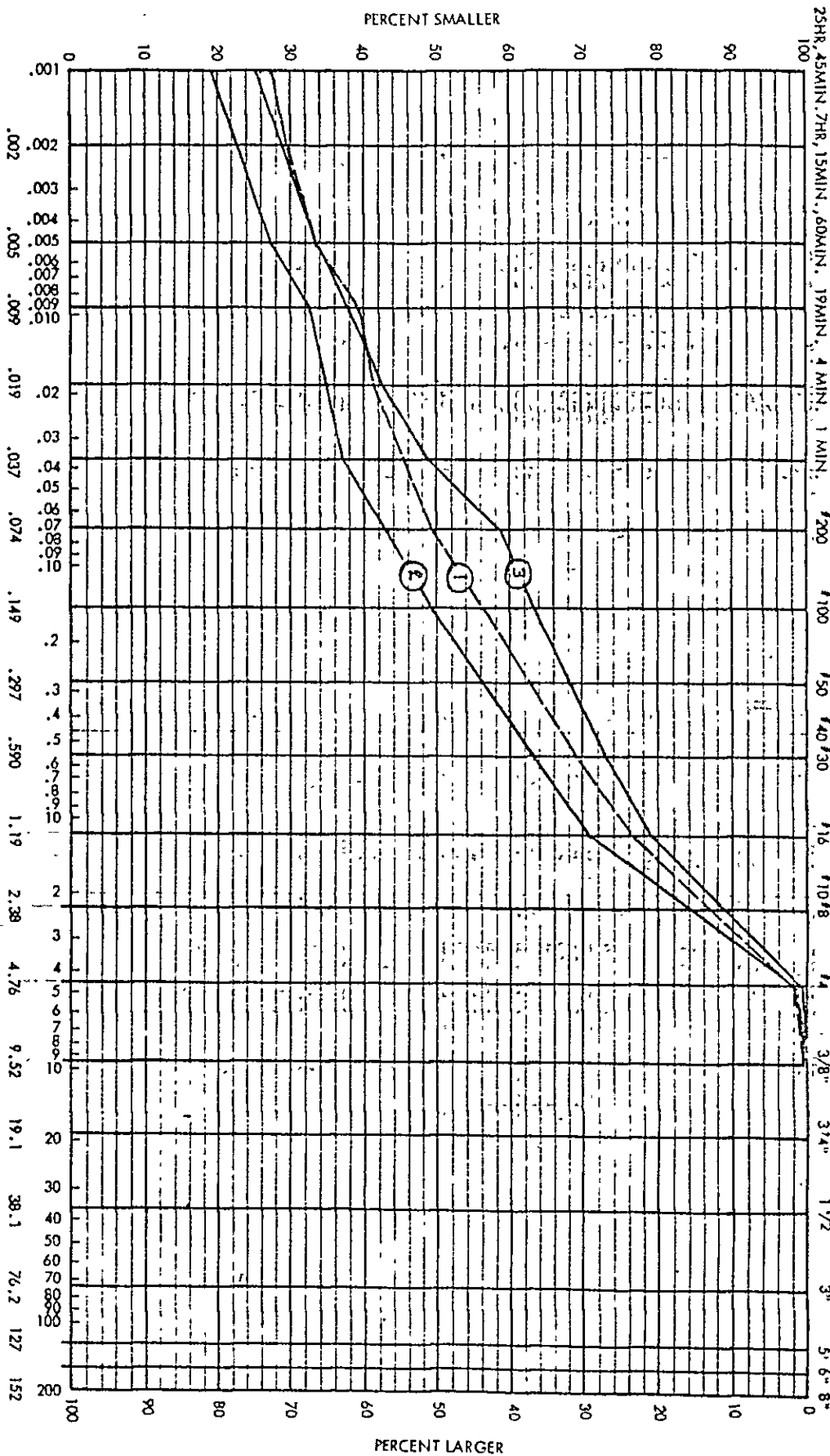


Project 00117711

GRADATION TEST

Memo. 57/1000

HYDROMETER ANALYSIS  
READING TIME  
U.S. STANDARD SERIES  
SIEVE  
ANALYSIS  
CLEAR SQUARE OPENING



DIAMETER OF PARTICLE IN MILLIMETERS

CLAY (fines) TO SILT (non-plastic)		FINE			SAND			GRAVEL	
No.	Sample No.	Depth (m)	Atterberg Limits			Soil Classification			Wn. (%)
			L.L.	PL	P.I.	Medium	Coarse	Fine	
①	A. 2	1.00 - 1.00	52.0	19.0	33.0	SC			17.2
②	A. 2	2.00 - 3.00	48.2	13.9	34.3	SC			15.6
③	A. 4	1.00 - 1.00	51.7	18.4	33.3	CH			16.6

Notes:

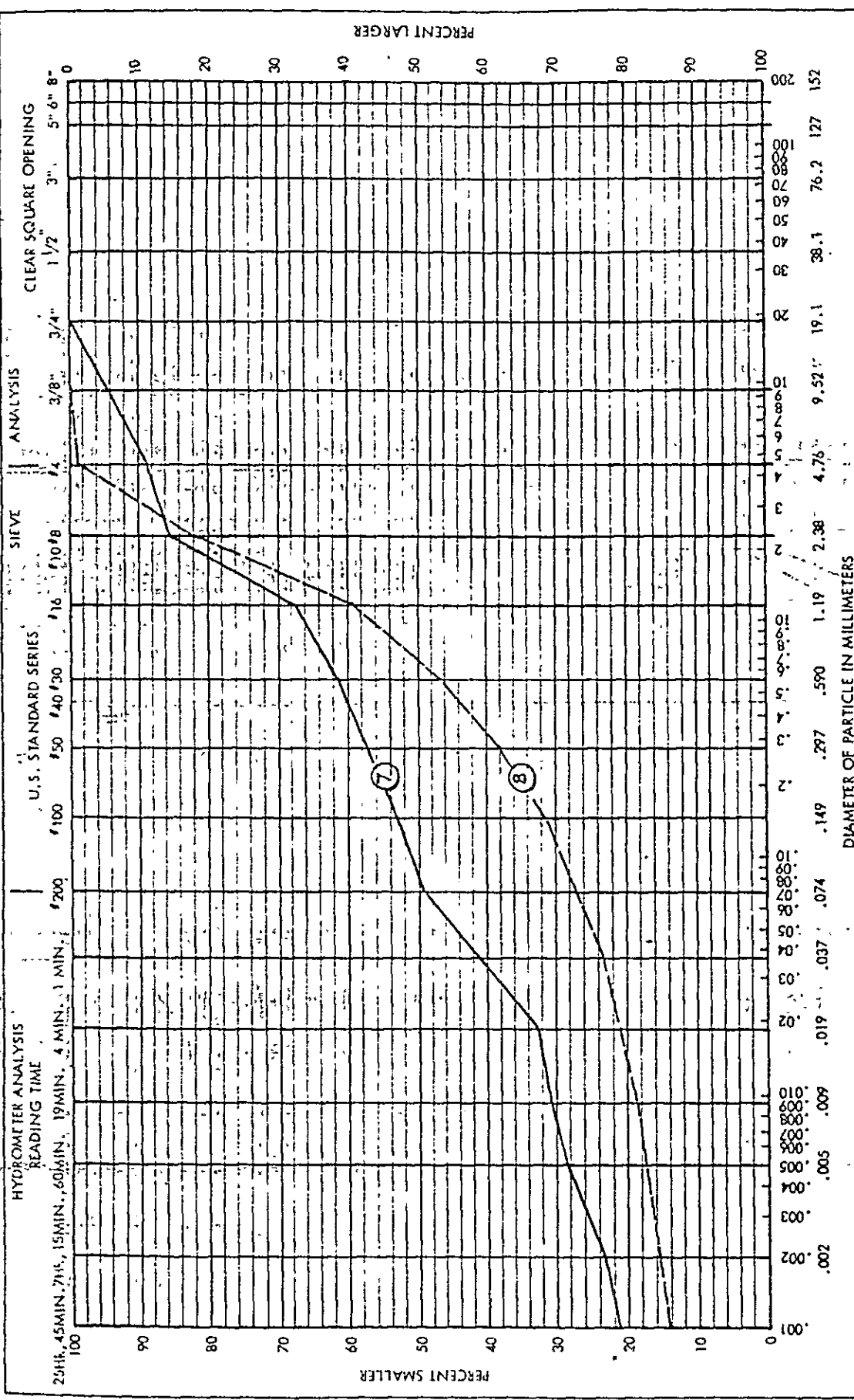
PL 1.00  
VS 1.00  
Date 1-2-1911  
Sheet 9 of 30





Monday, 27/9/85

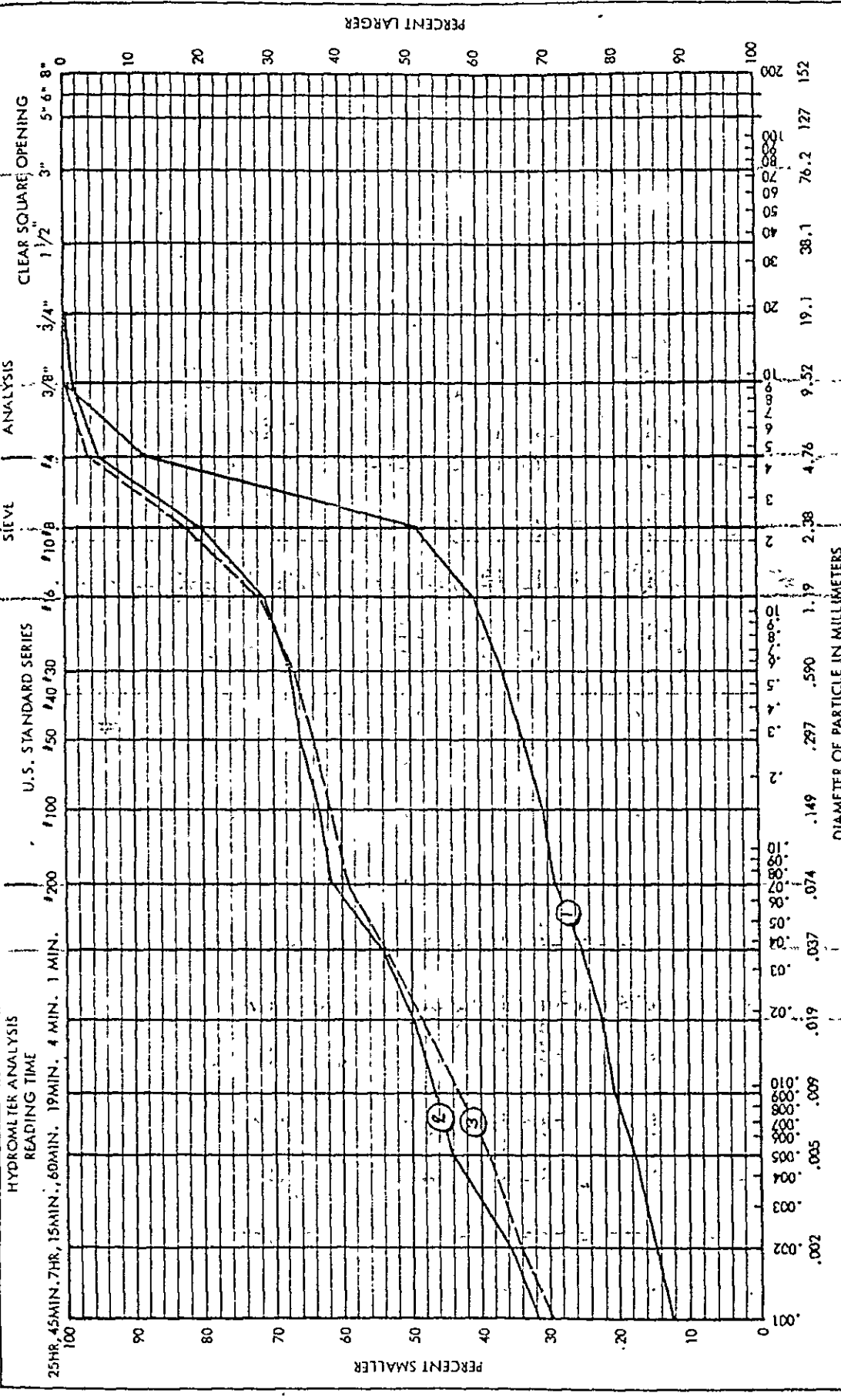
GRADATION TEST



CLAY (plastic) TO SILT (non-plastic)		FINE SAND		MEDIUM SAND		COARSE SAND		GRAVEL		COBBLES	
No.	Sample No.	Depth (m)	Atterberg Limits		Soil Classification		Wn (%)				
7	A18	2.00 - 3.00	L.L.	P.L.	SM	16.6					
8	A19	3.00 - 4.00	L.L.	P.L.	SC	12.9					

Notes:

Project 10000778



HYDROMETER ANALYSIS  
 READING TIME  
 25HR. 45MIN. 7HR. 15MIN. 60MIN. 19MIN. 4MIN. 1MIN.

U.S. STANDARD SERIES

SIEVE ANALYSIS  
 CLEAR SQUARE OPENING  
 #200 1/2" 3/4" 3/8" #10 #6 #40 #30 #10 #4 #2 5" 6" 8"

DIAMETER OF PARTICLE IN MILLIMETERS  
 .002 .005 .009 .019 .037 .074 .149 .297 .590 1.19 2.38 4.76 9.52 19.1 38.1 76.2 127 152

PERCENT SMALLER

PERCENT LARGER

CLAY (plastic) TO SILT (non-plastic)

Soil Classification

Atterberg Limits

Wn. (%)

qu. (kg/cm<sup>2</sup>)

γw. (gm/cm<sup>3</sup>)

Notes: 1) TP. 1 1.00 46.2 28.6 17.6 SM 98.5

2) " 2.00 62.0 38.1 23.9 MH 105.1

3) " 3.00 60.9 39.1 21.8 MH 20.8

Drawn P.I. Checked VS. Date 1-2-88

Sheet 12 of 30



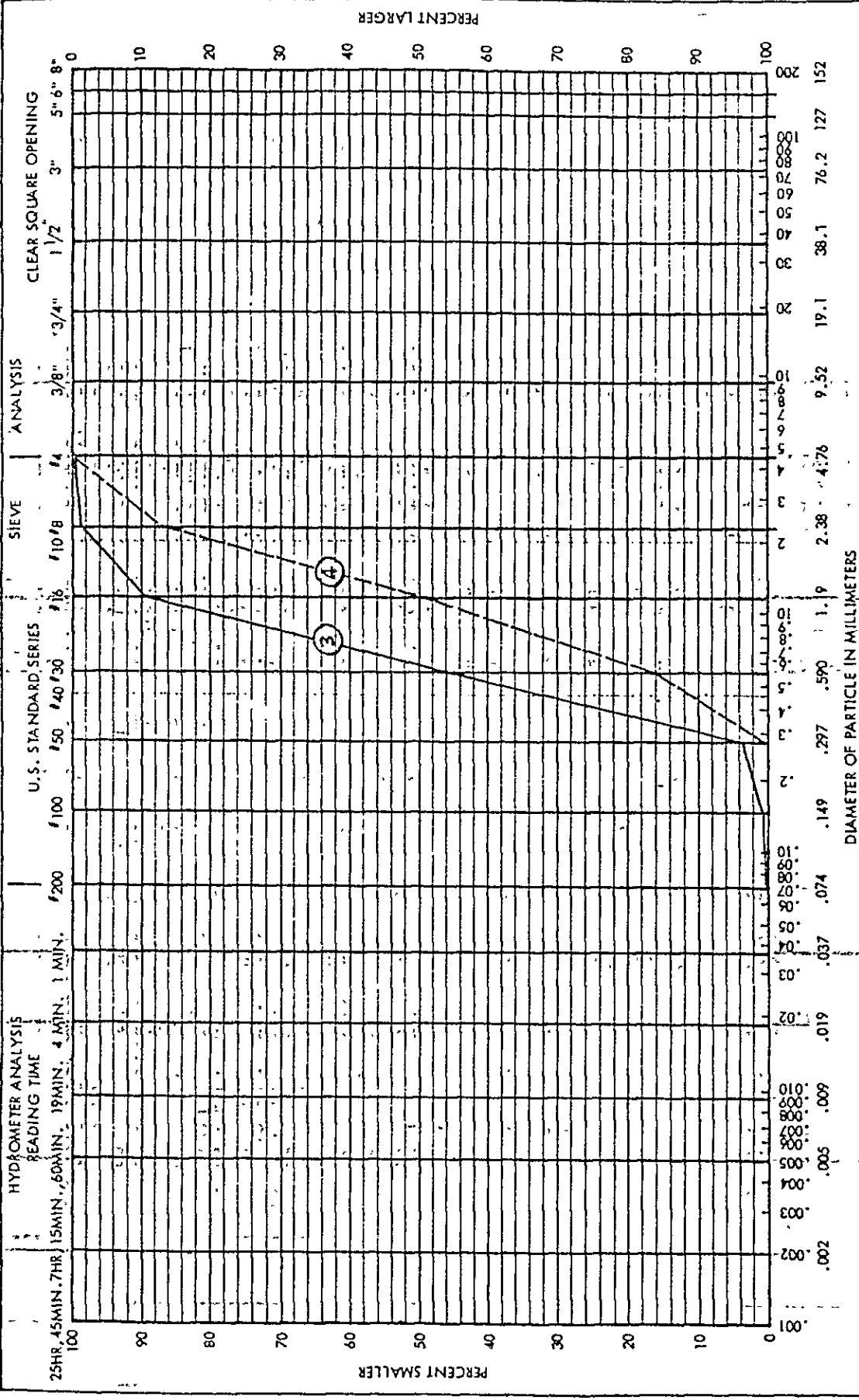






GRADATION TEST

Project 00000000



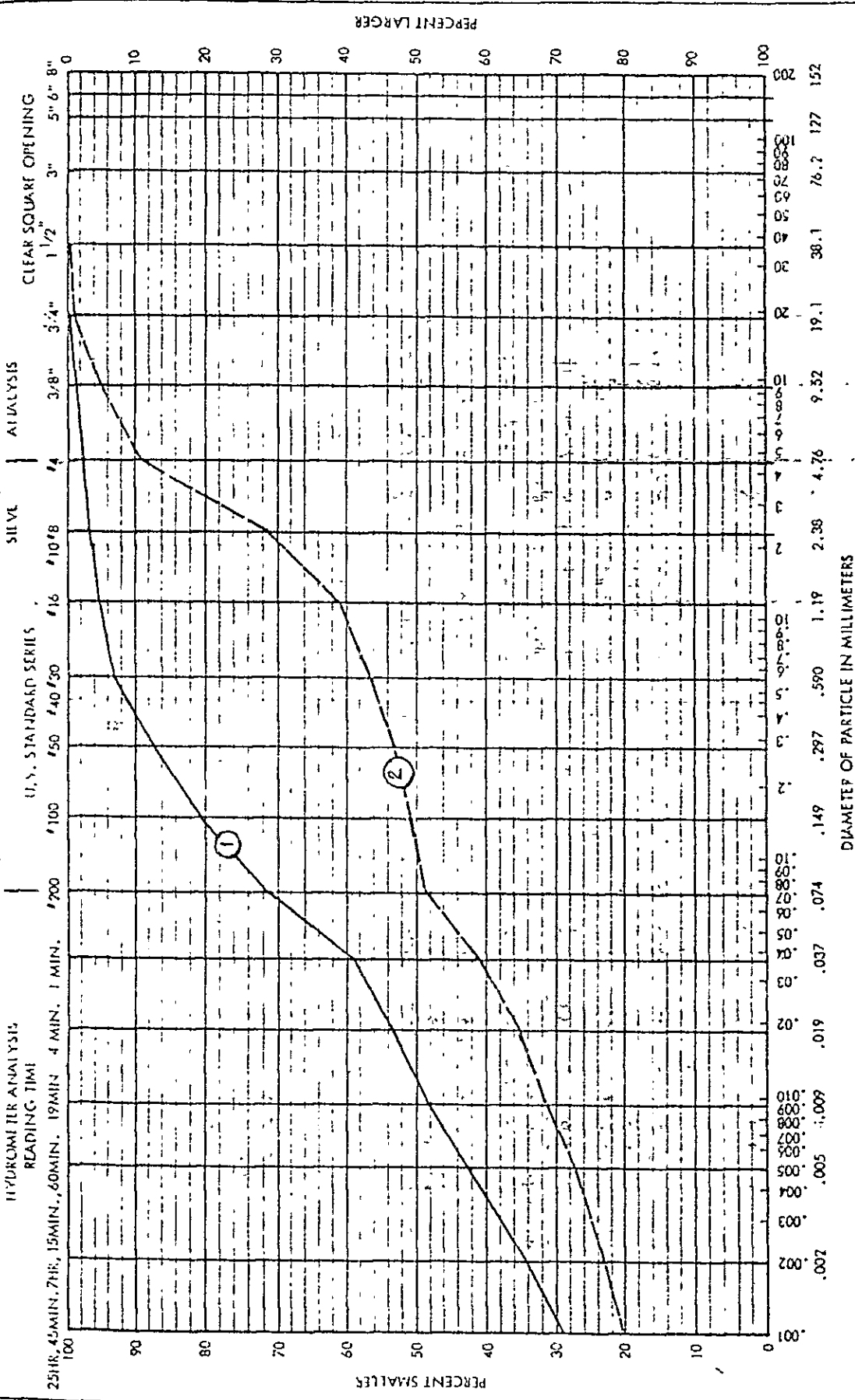
No.	Sample No.	Depth (m)	Atterberg Limits		Soil Classification	Wn. (%)
			L.L.	P.L.		
③	SBP 3	1.00	Non-Plastic	SP	SP	1.8
④	SBP 4	2.00	Non-Plastic	SP	SP	1.4

Notes: (3) SBP 3, 1.00, Non-Plastic, SP, 1.8; (4) SBP 4, 2.00, Non-Plastic, SP, 1.4

Drawn: [ ] Plotted: [ ] Checked: [ ] Date: 1-2-81

VS.





CLAY (plastic) TO SILT (non-plastic)	FINE SAND		MEDIUM SAND		COARSE SAND		GRAVEL		COBBLES
	FINE	MEDIUM	COARSE	COARSE	FINE	COARSE	COARSE	COARSE	
Notes:	Atterberg Limits		Soil Classification		Wn. (%)				
	No.	Sample No.	Depth (M.)						
(1)	Borrow-1	-		ML	18.8	18.7	19.1	38.1	Khao Talian
(2)	Borrow-2	-		SM	18.6	24.3	19.1	76.2	Dok Krai

RESEARCH AND LABORATORY DIVISION  
ROYAL IRRIGATION DEPARTMENT  
Project : DOK KRAI TO NAB TA PUD

Report on Soil Analyses

Lab. No. 4/2525

Soil Chemistry and Physics Laboratory

Lab. Sample No.	Field Description		pH Paste	Lab. Sample No.	Field Description		pH Paste
	Zone	Location			Depth (m.)	Location	
161	DH-1	Intake Tower	4.9	180	A-5	12k+560, L=16	5.1
162	DH-2	in Res.	5.2	181	A-6	13k+740, L=28	4.6
163	DH-6	Caisson yard	4.6	182	A-7	17k+742, L=25	5.0
164	DH-9	1k+524, L=14	4.8	183	A-8	21k+945, L=9	4.7
165	DH-10	4k+183, L=20	5.1	184	A-9	24k+240, L=17	4.6
166	DH-11	6k+242, L=17	5.0	185	TP-1	6k+814, L=14	5.1
167	DH-12	6k+852, L=71	4.7	186	TP-1	6k+814, L=14	4.7
168	DH-14	8k+487, L=9	6.0	187	TP-1	6k+814, L=14	4.5
169	DH-17	14k+310, L=24	4.8	188	TP-2	15k+556, L=33	4.7
170	DH-18	14k+805, L=28	5.0	189	TP-2	15k+556, L=33	4.8
171	DH-19	16k+686, L=26	6.9	190	TP-2	15k+556, L=33	5.1
172	DH-20	18k+280, L=26	4.9	191	TP-3	23k+301, L=18	5.0
173	DH-21	18k+685, L=28	4.9	192	TP-3	23k+301, L=18	5.2
174	DH-22	19k+441, L=36	4.8	193	TP-3	23k+301, L=18	5.1
175	DH-23	20k+741, L=20	5.0	194	No.2	Receiving well site	5.0
176	DH-24	25k+514, L=20	6.0	195	Sand	Lame Ban Yoan	6.0
177	A-2	2k+827, L=9	4.7	196	borrow	"	5.7
178	A-2	2k+827, L=9	4.8	197	pits	Kong Ton Po	5.0
179	A-4	9k+171, L=14	5.1	198	"	"	5.1

pH paste : water saturated soil paste.

RESEARCH AND LABORATORY DIVISION

ROYAL IRRIGATION DEPARTMENT

Project : DOK KRAI TO MAB TA PUD

Report on Soil Analyses

Lab. No. 4/2525

Soil Chemistry and Physics Laboratory

Lab. Sample No.	Field Description		pH Paste	Sat. % SP.	Sat. Extract. Cond. ECx10 <sup>3</sup>	Sat. Extract NACL g/100g Soil	Organic Matter OM %
	Zone	Location					
195	Sand	Lame Ban Yonn	6.0	25.3	< 0.20	0.0009	0.06
196	borrow	"	5.7	23.6	< 0.20	0.0004	0.16
197	pits	Kong Ton Po	5.0	26.0	< 0.20	0.0009	0.05
198	"	"	5.1	25.3	< 0.20	0.0004	0.17

Reported by : Ananasi Phathanasobhin.

Reviewed by : La-ou Aonthornchai.

Chief, Soil Chemistry & Physics Laboratory.

Handwritten notes and calculations:

$1 \text{ cm} = 2.7 \text{ g soil} \rightarrow .0028 \text{ g OM} / 100 \text{ g soil} = 0.28\%$

$100 \text{ g} \rightarrow .0028 \text{ g OM} / 2.7 = 0.104\%$

$100 \text{ g} \rightarrow .0028 \text{ g OM} / 2.7 = 0.104\%$

Organic Matter O.M % Method : Walkley-Black (wet oxidation) procedure as given by M.L. Jackson on p.219 in "Soil Chemical Analysis" Prentice-Hall, Inc.

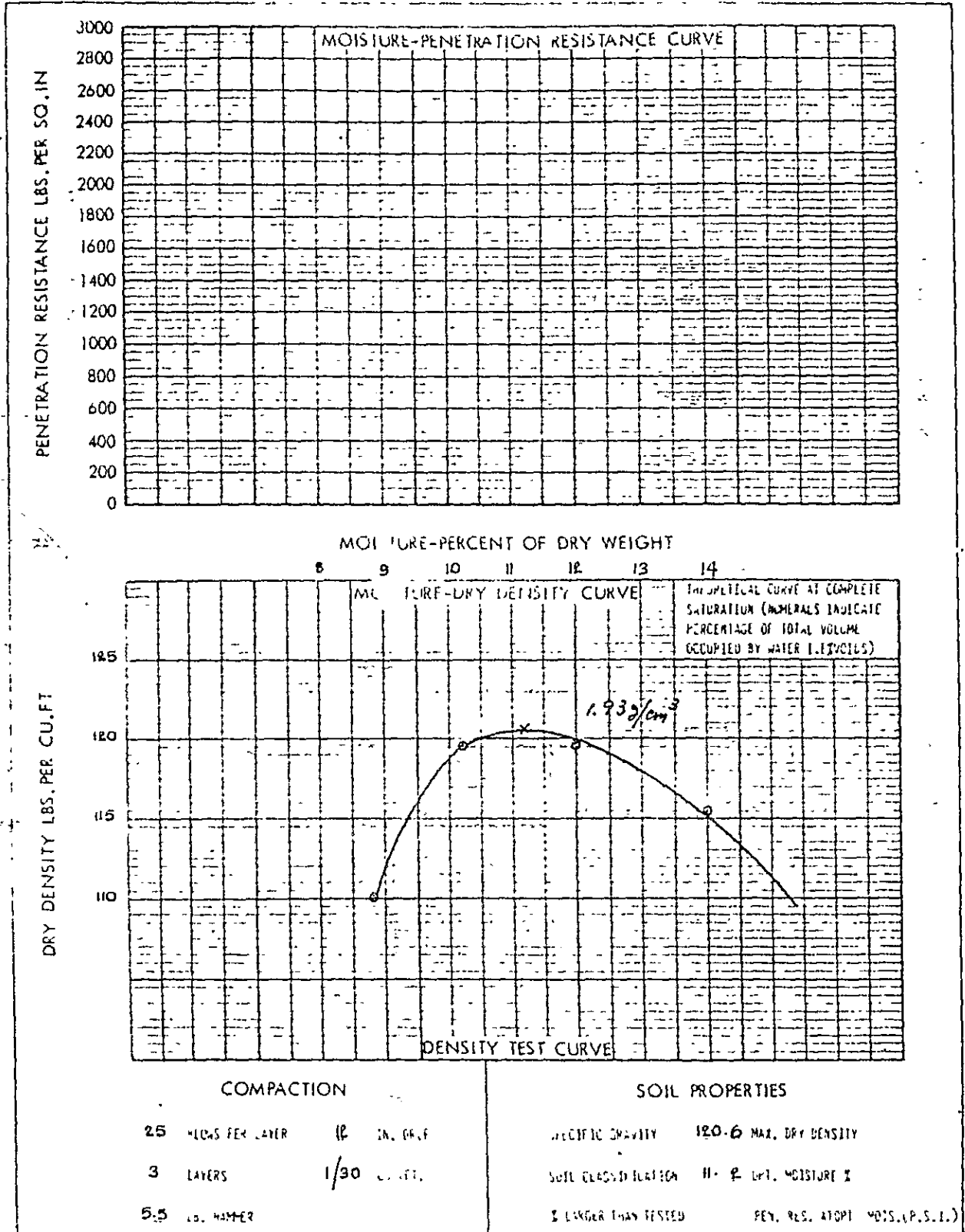


COMPACTION TEST CURVE

Project: 10000000

TP.1 (1.00 N.)

Memo. 57/2525



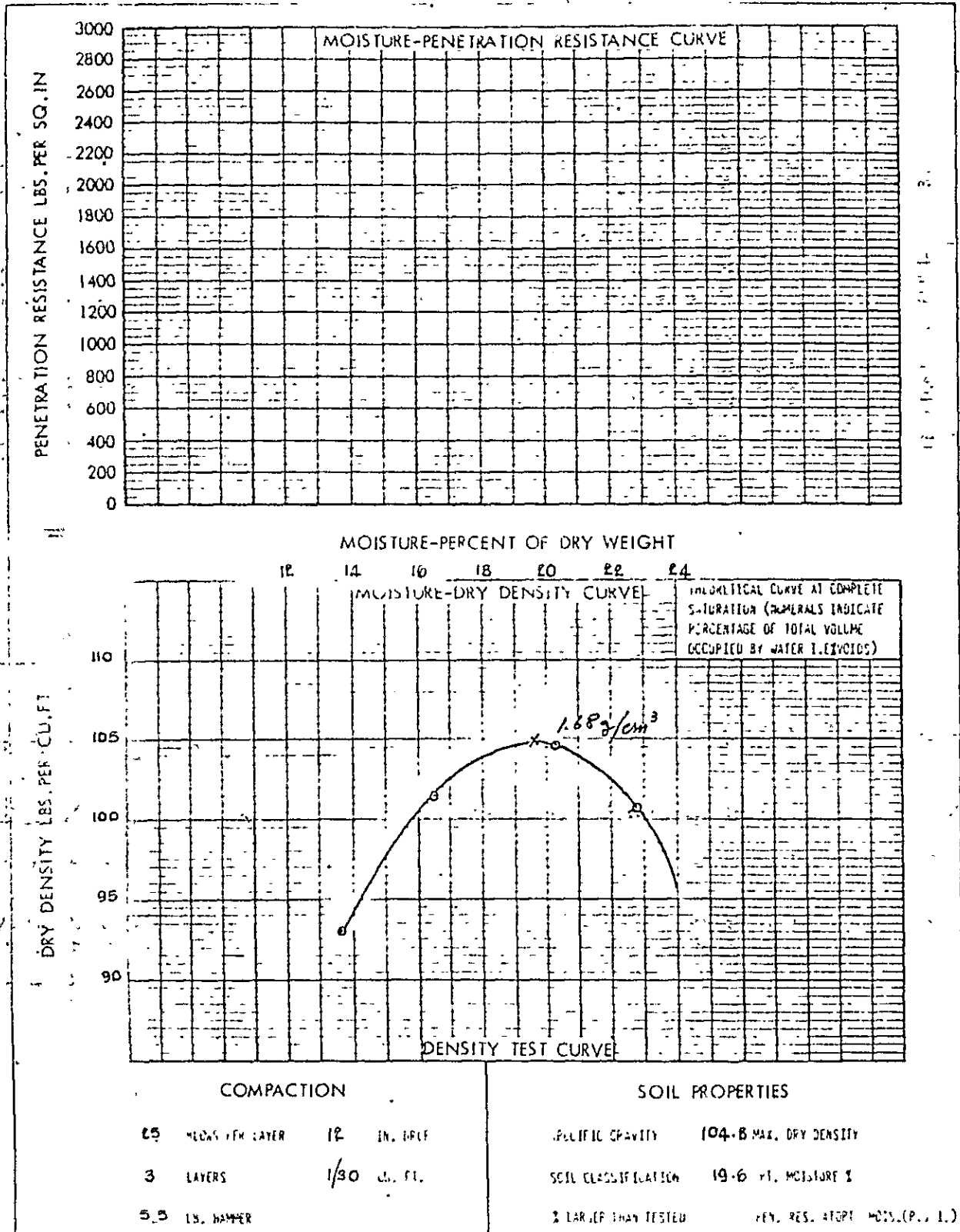


COMPACTION TEST CURVE

Project: 02000772

TP.1 (200 N.)

Memo. 57/2525



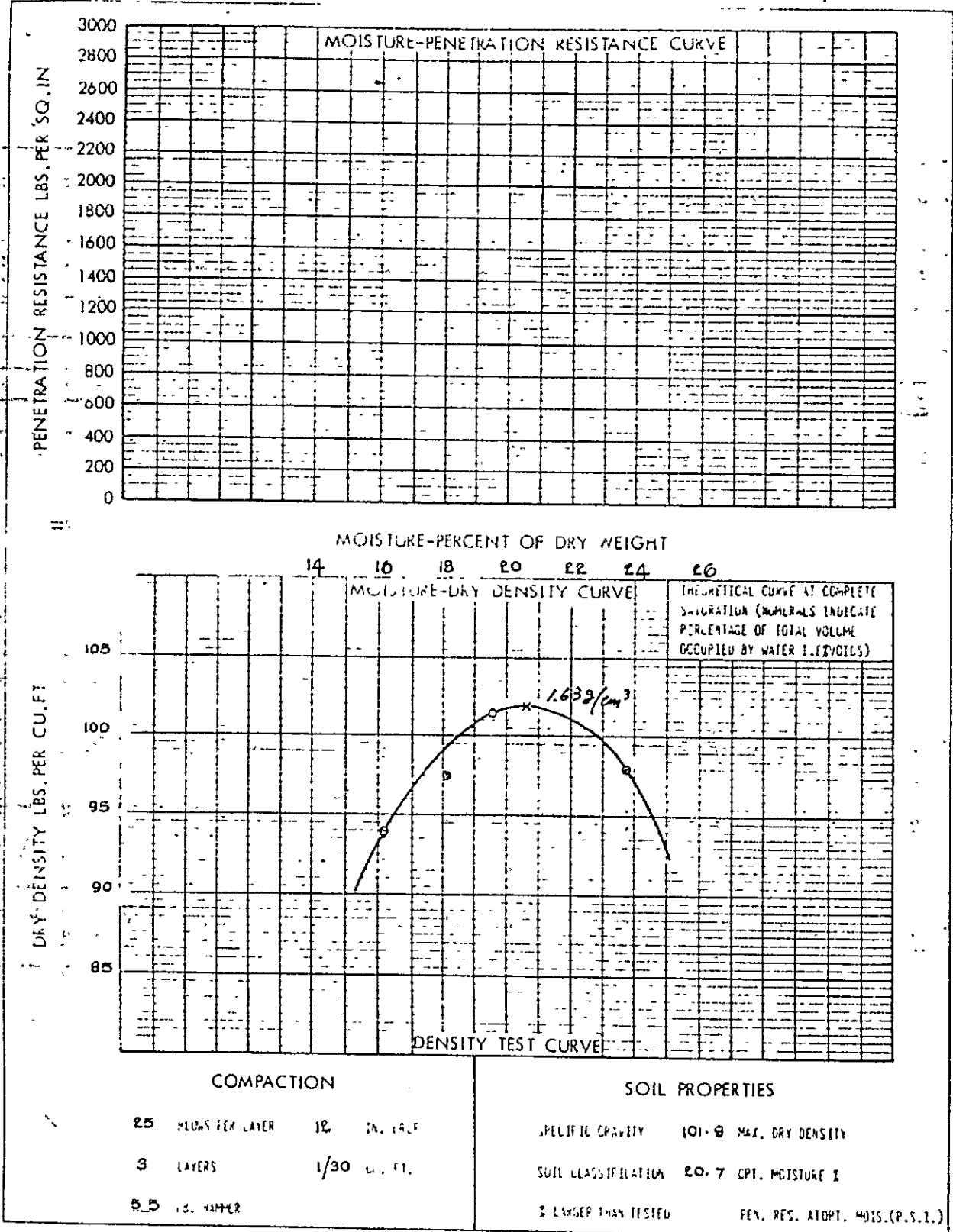


COMPACTION TEST CURVE

Project ๙๘๓๓๓๘

TP. 1. (3.00H.)

Memo. 57/2525



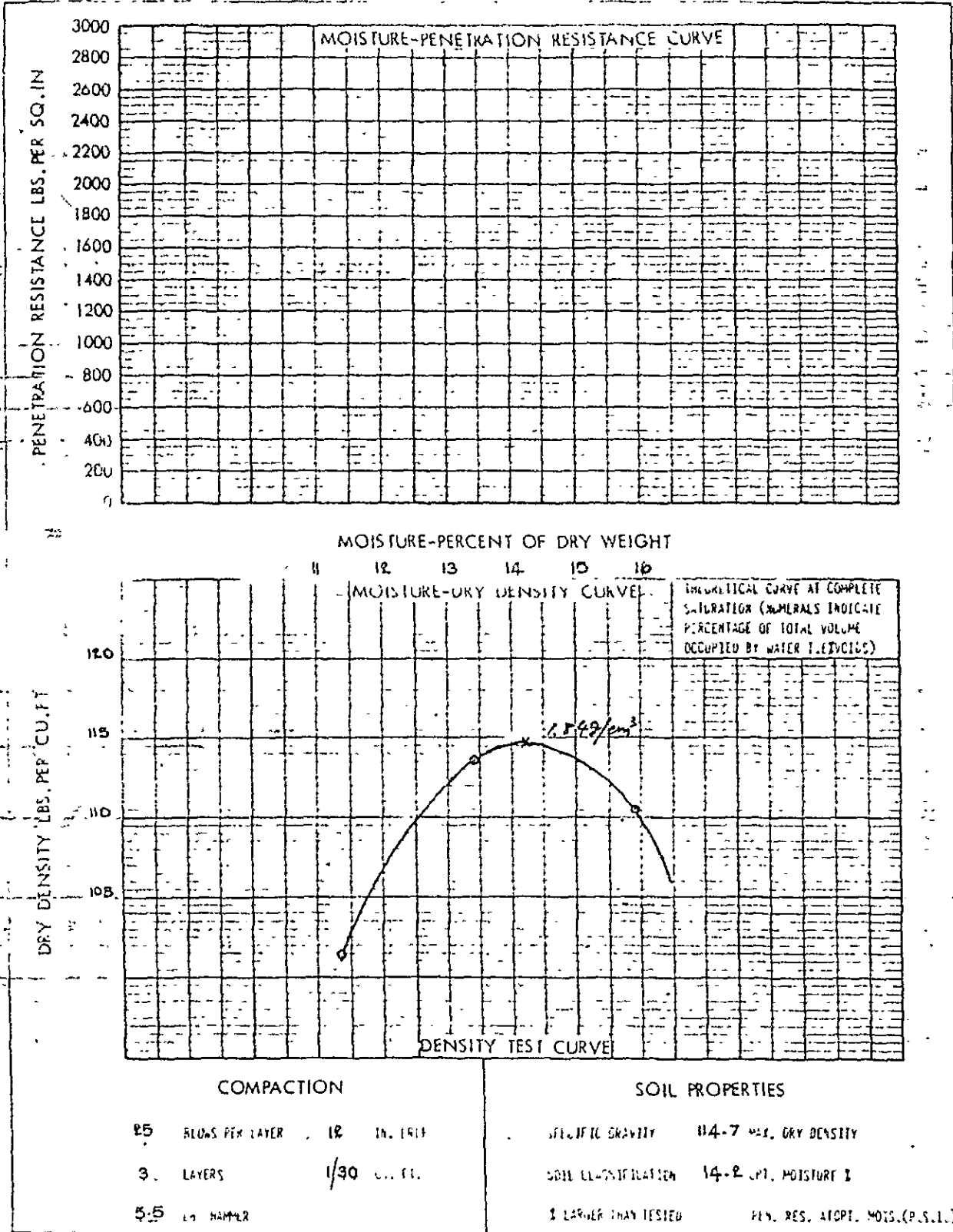


COMPACTION TEST CURVE

Project 08800004

TP. 2 (1.00N.)

Memo. 57/2525



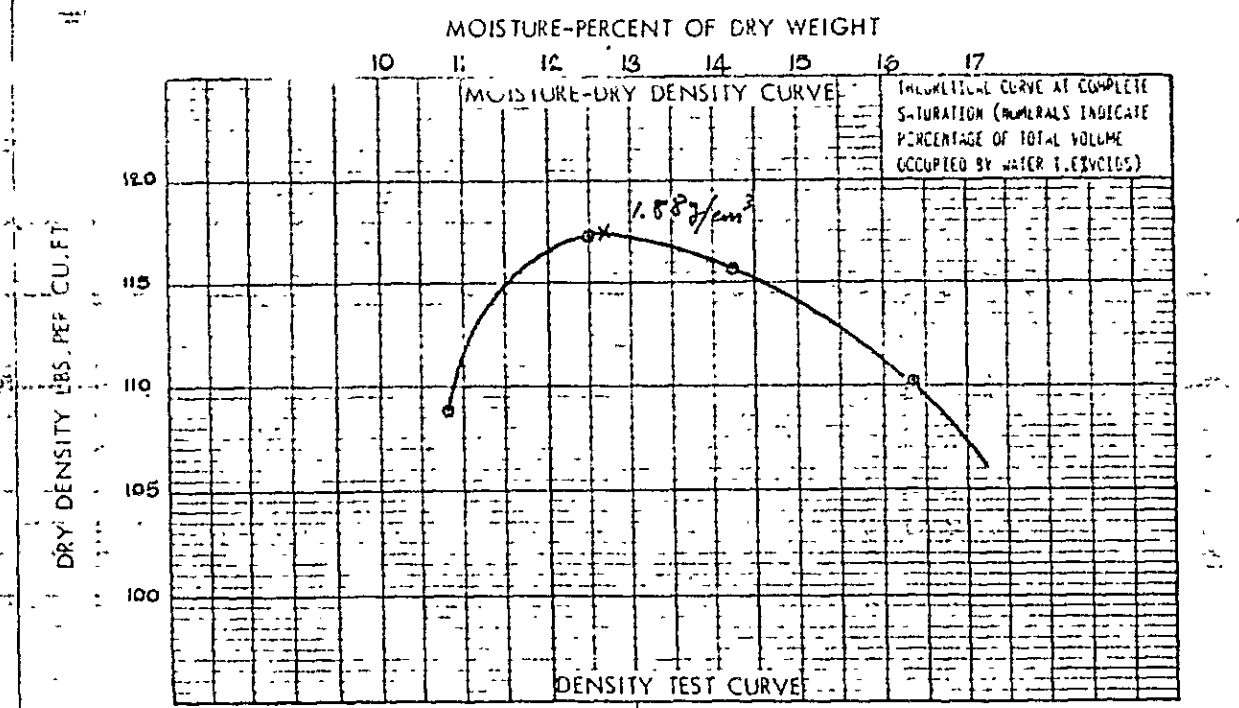
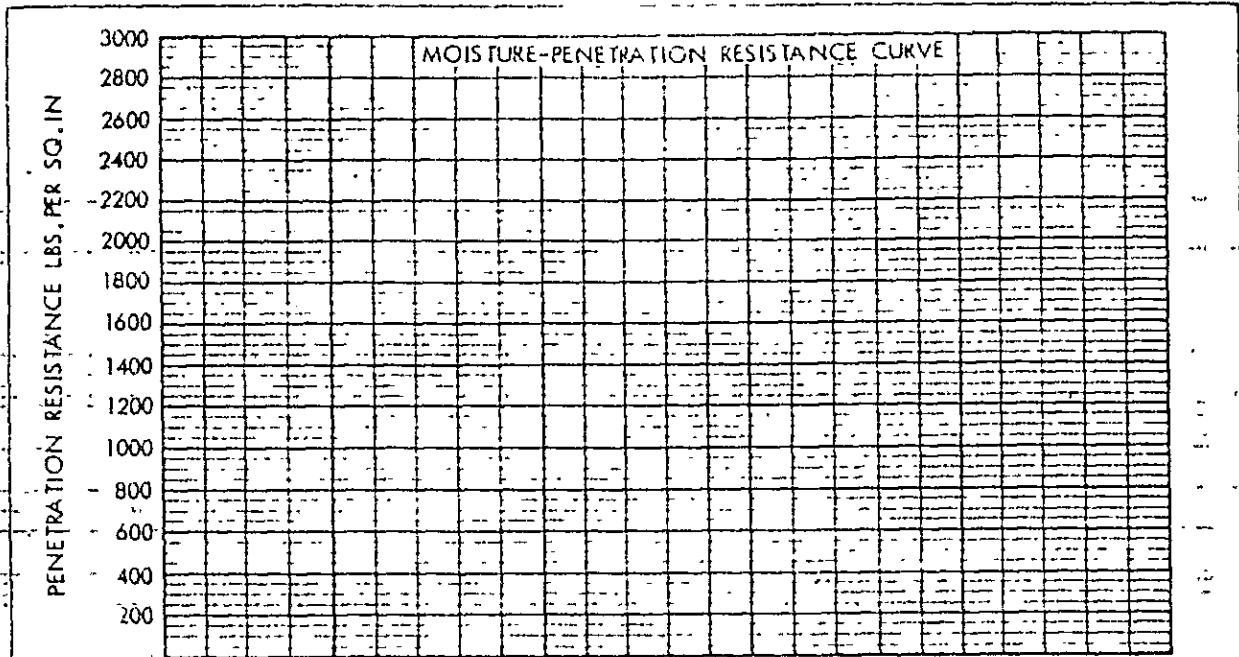


COMPACTION TEST CURVE

Project: ۸۸۸۸۸۸

TP. 2 (2.00 H.)

Memo. 57/2525.



COMPACTION

25 PLOWS PER LAYER . 12 IN. DEEP  
3 LAYERS 1/30 CU. FT.  
25 lb. HAMMER

SOIL PROPERTIES

SPECIFIC GRAVITY 117.4 MAX. DRY DENSITY  
SOIL CLASSIFICATION 12.7% MOISTURE %  
3 LARGER THAN TESTED PEN. RES. ADAPT. MOIS. (P.S.I.)



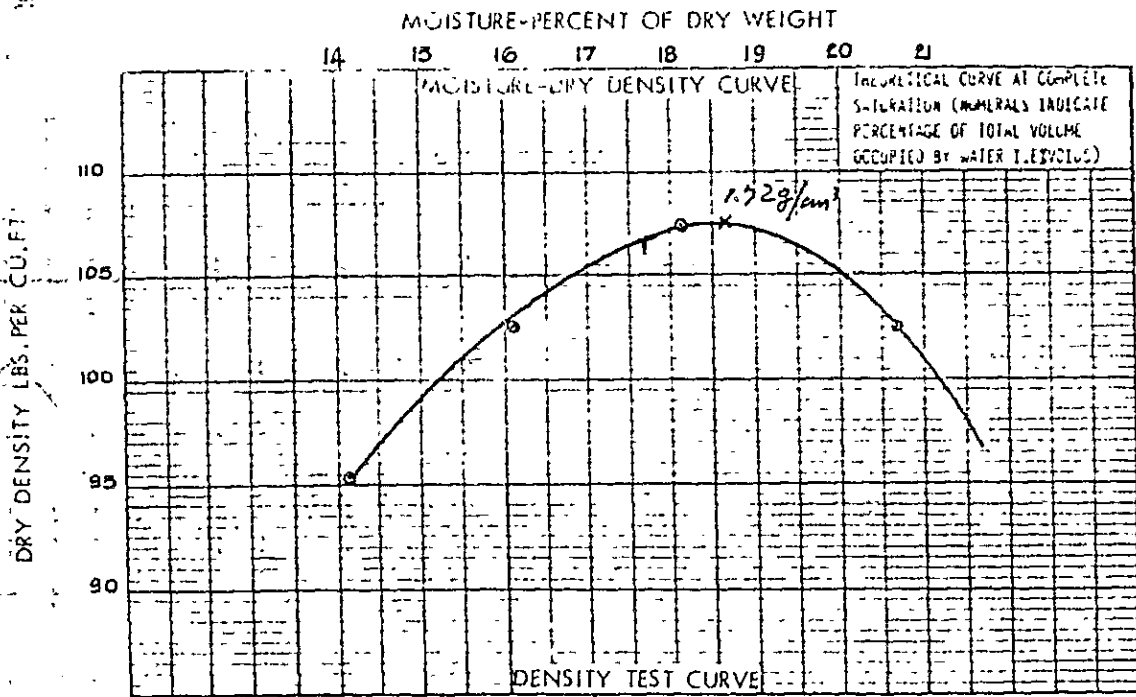
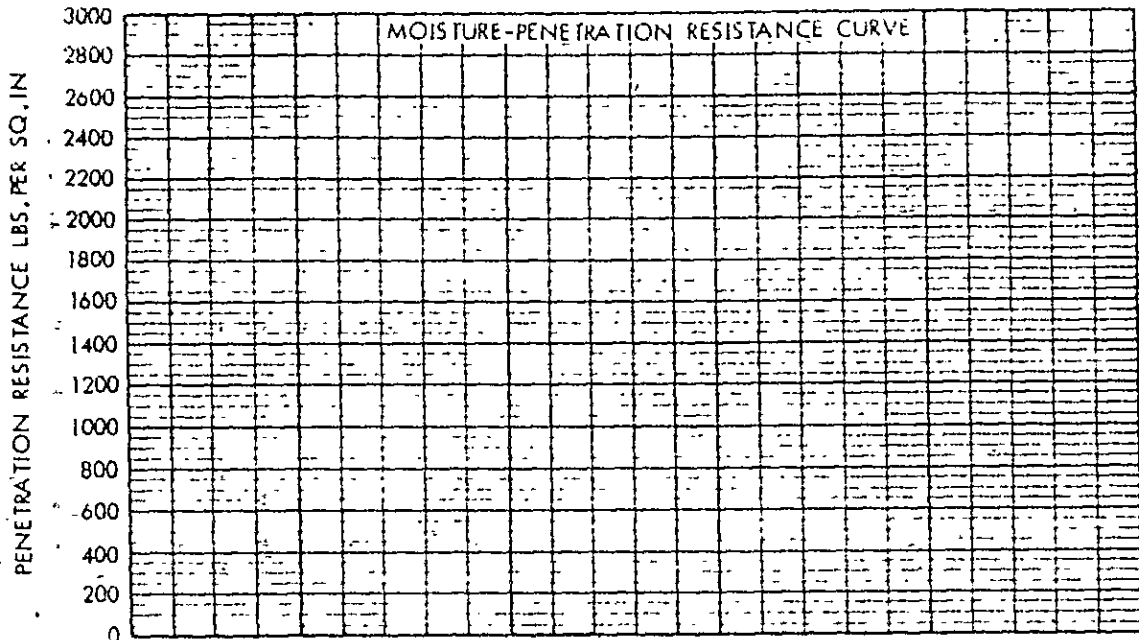


COMPACTION TEST CURVE

Project ๓๓๓๓๓๓

TP.2 ( 3.00 N. )

Area. 57/2525



COMPACTION

25 BLOWS PER LAYER . 12 IN. DROP  
3 LAYERS 1/30 C.C. FT.  
5-B LB. HAMMER

SOIL PROPERTIES

SPECIFIC GRAVITY 107.5 % DRY DENSITY  
SOIL CLASSIFICATION 18.7 % MOISTURE %  
% LARGER THAN TESTED PEN. RES. AT OPT. MOISS. (P.C.I.)

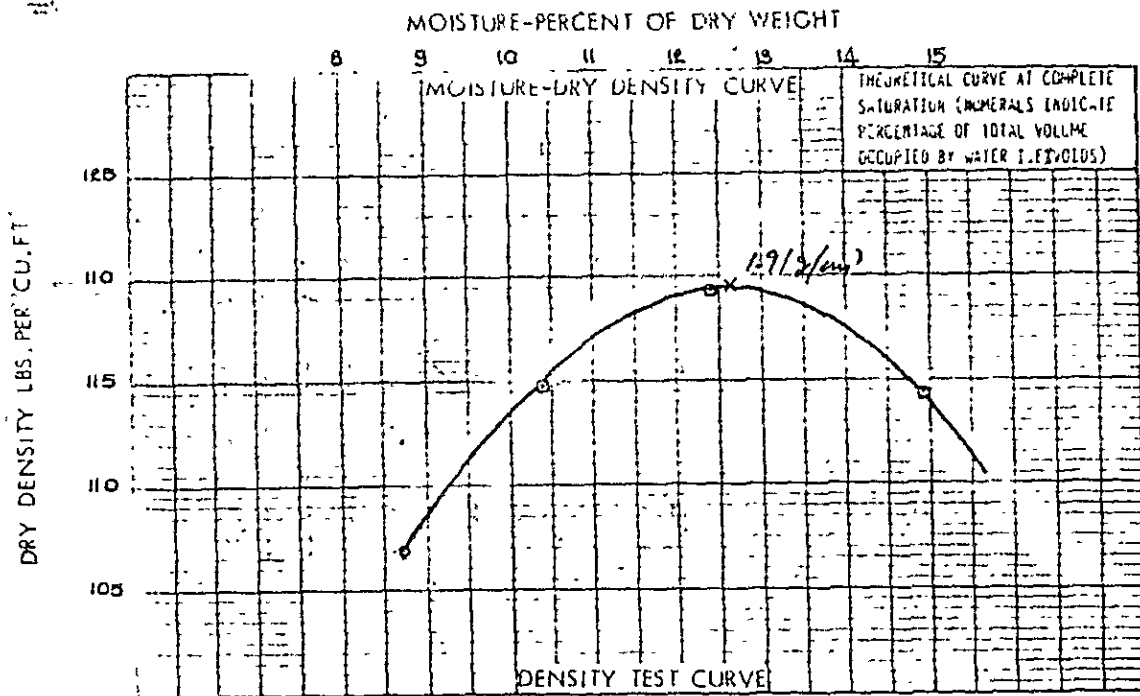
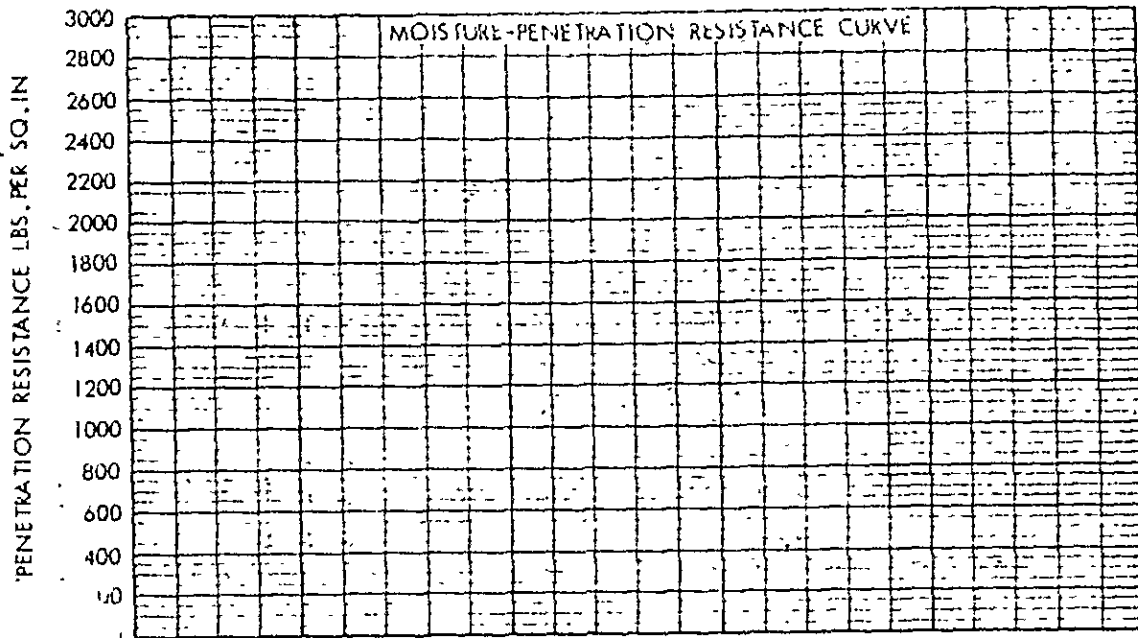


COMPACTION TEST CURVE

Project: ตชกกาฬ

TP. 3 (1-00H.)

Moist. 57/2525



COMPACTION

25 BLOWS PER LAYER 12 IN. LAYER  
3 LAYERS 1/30 IN. FT.  
S.B. 14. HAMMER

SOIL PROPERTIES

SPECIFIC GRAVITY 119.5 MAX. DRY DENSITY  
SOIL CLASSIFICATION 12.6 OPT. MOISTURE %  
1 LAYER THAN TESTED PEN. RES. AT OPT. MOIS. (P.S.I.)

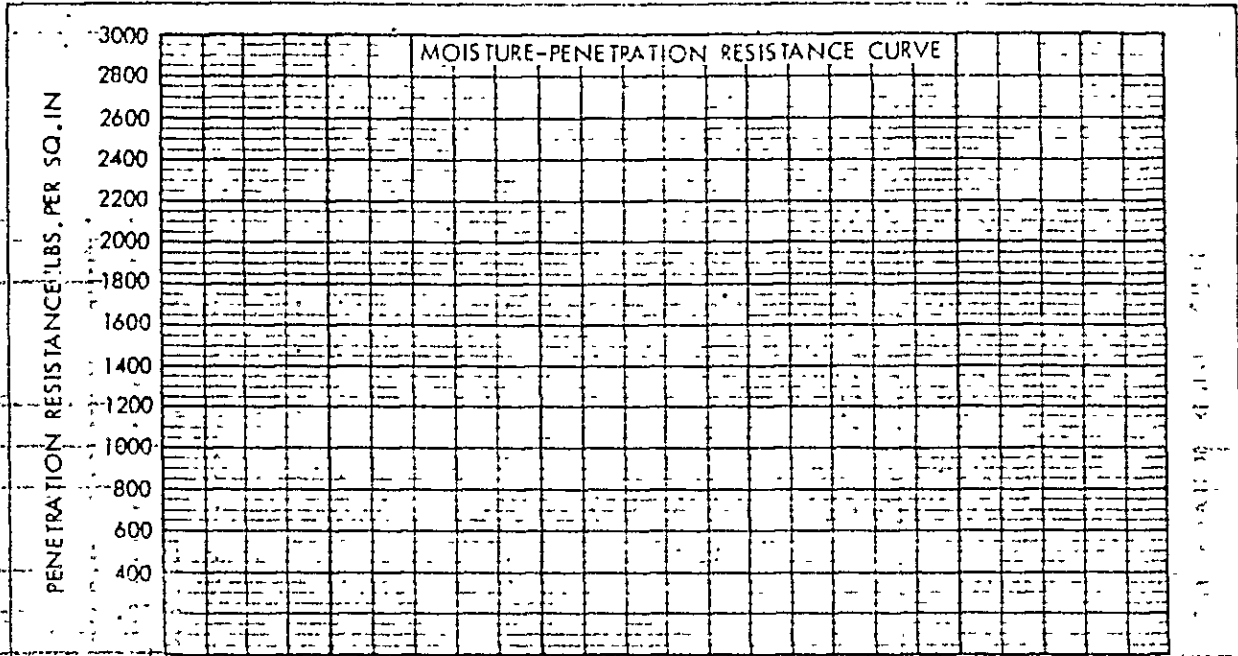


COMPACTION TEST CURVE

Project 02000770

TP. 3 ( 2.00 N. )

Memo 57/2525



COMPACTION

25 BLOWS PER LAYER 12 IN. DEEP  
 3 LAYERS 1/30 U.S.  
 5.5 LB. HAMMER

SOIL PROPERTIES

SPECIFIC GRAVITY 1.23.0 MAX. DRY DENSITY  
 SOIL CLASSIFICATION 11.1 MOISTURE %  
 % LARGER THAN TESTED 100.0 PER. RES. ADPT. MOIS. (P.S.I.)

Drawn TO, US.

Checked

VS.

Date 29-1-32

Sheet 20 of 30

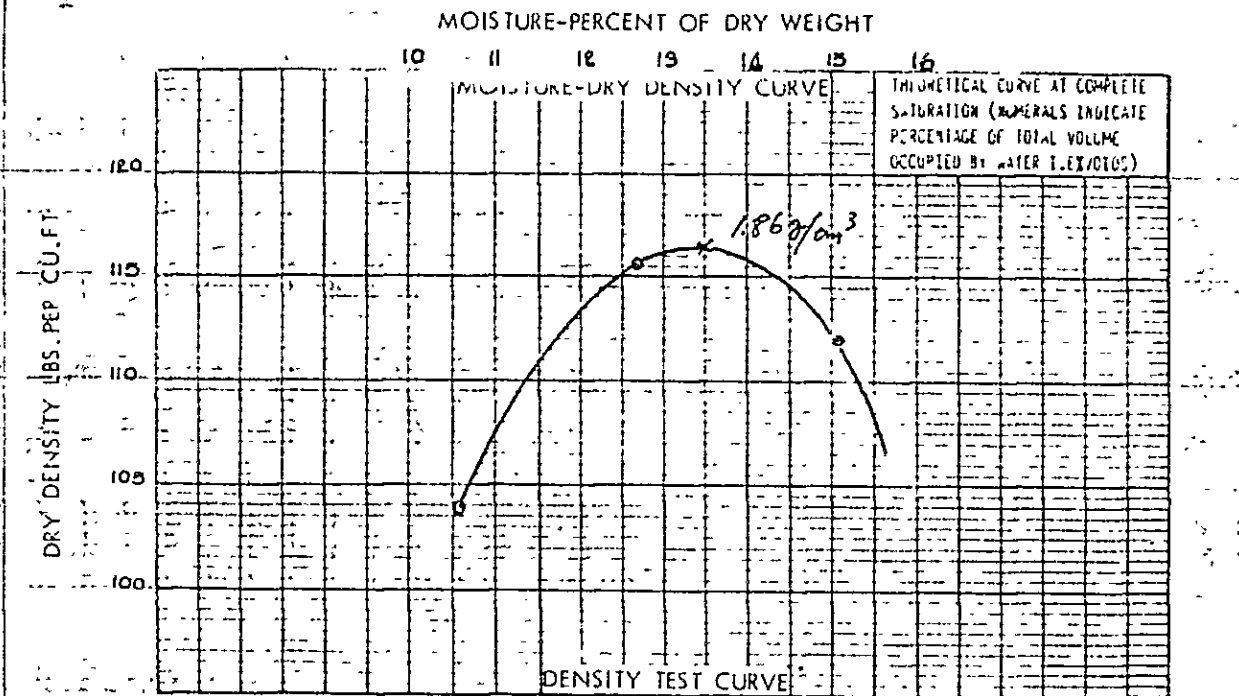
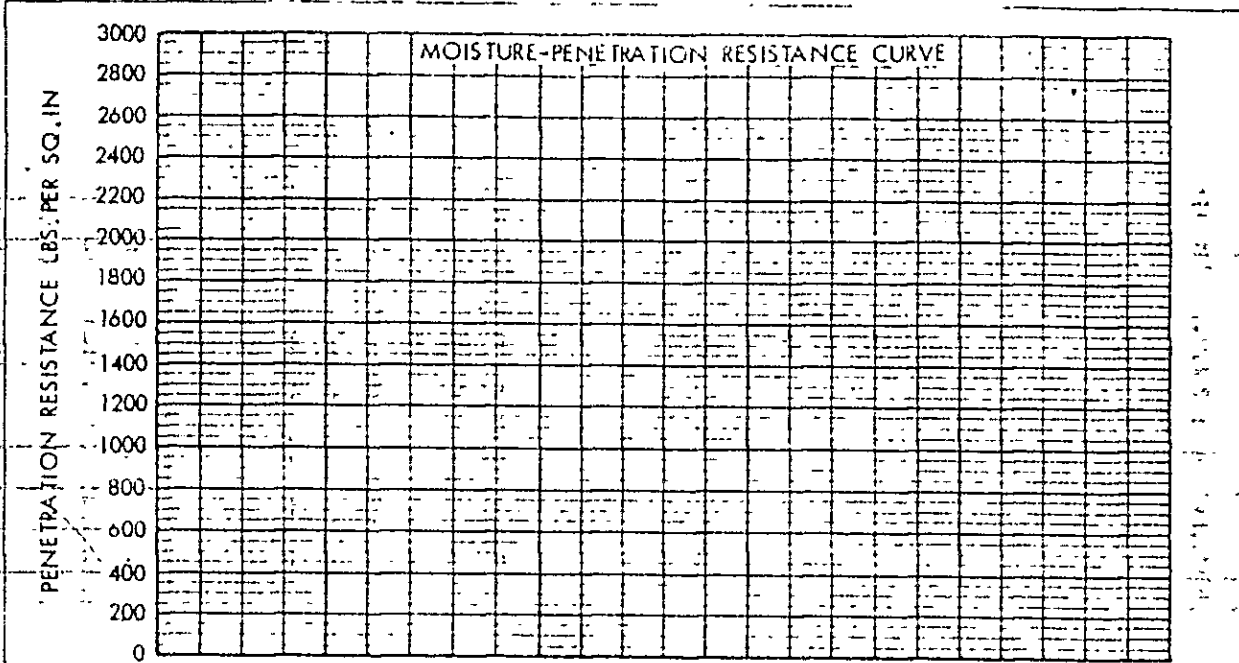


COMPACTION TEST CURVE

Project 02000778

TP. 3 (S.OON.)

Form 57/2525



COMPACTION

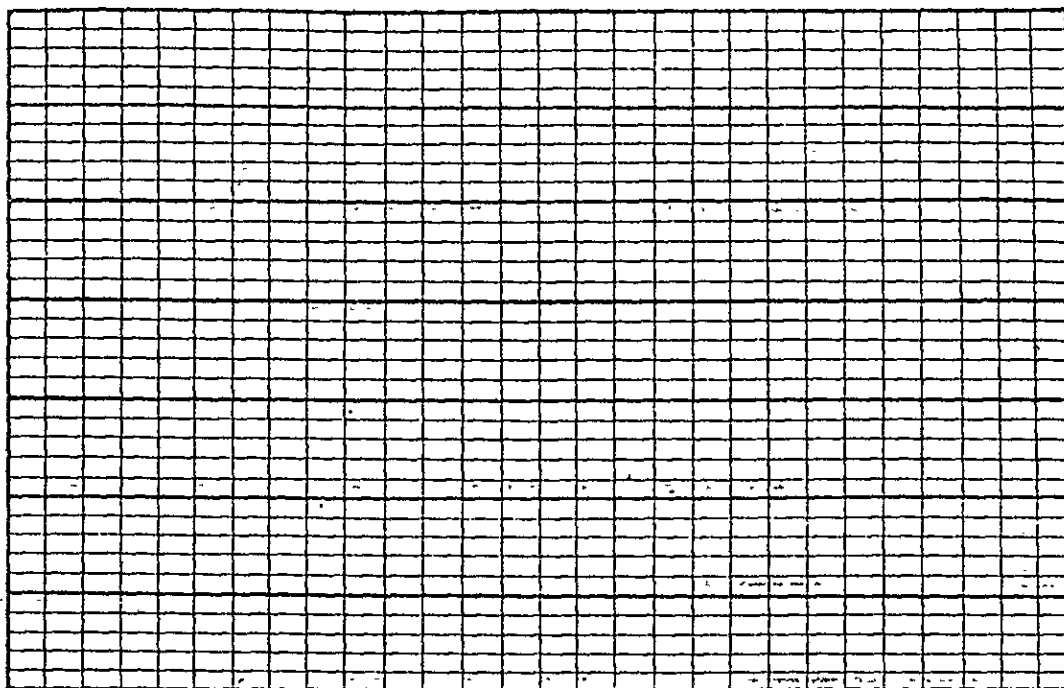
25 ... HOURS PER LAYER 12 IN. OR LE  
3 ... LAYERS 1/30 ... FT.  
50 LB. HAMMER

SOIL PROPERTIES

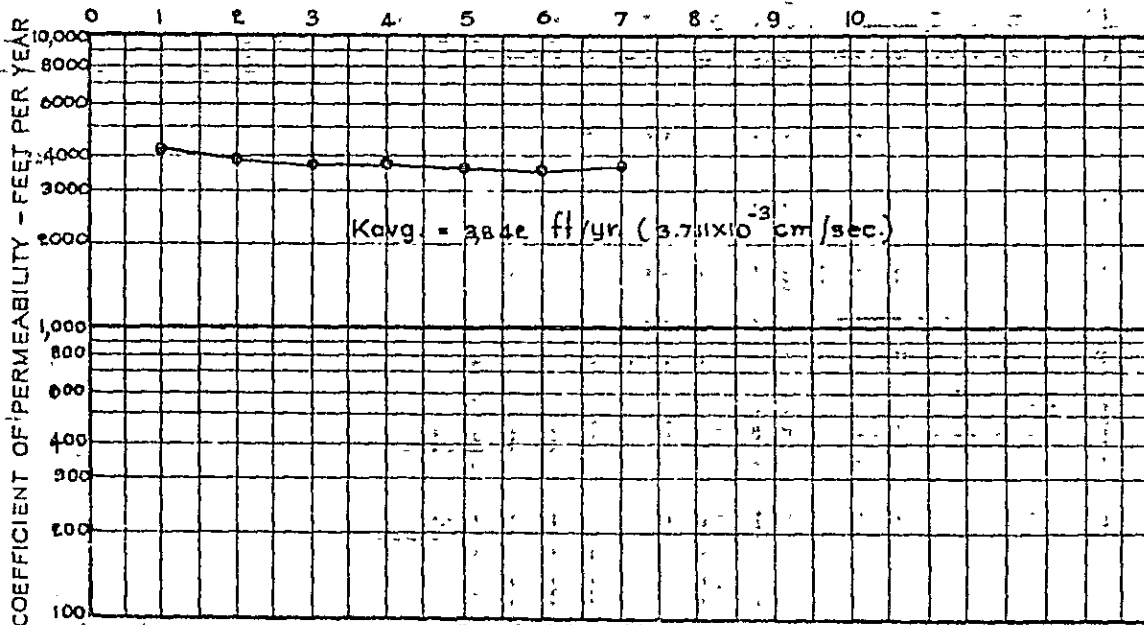
SPECIFIC GRAVITY 116.4 MAX. DRY DENSITY  
SOIL CLASSIFICATION 13.5 OPT. MOISTURE %  
% LARGER THAN TESTED PEN. RES. ADOPT. MOIS. (P.S.I.)

PERMEABILITY - SETTLEMENT TEST

VOLUME CHANGE - PERCENT  
EXPANSION  
CONSOLIDATION



TIME IN MINUTES



REMARKS Compacted to field condition ( $\gamma_w = 1.942 \text{ gm/cm}^3$  and  $W_n = 3.6\%$ )

INITIAL CONDITION

FINAL CONDITION

PLACEMENT USED \_\_\_\_\_ CONSOLIDATION (%) \_\_\_\_\_  
 DRY DENSITY (gm/cm<sup>3</sup>) 1.872 CONSOLIDATED DRY DENSITY (pcf) \_\_\_\_\_  
 WATER CONTENT (%) 3.6 \_\_\_\_\_  
 CONSOLIDATION LOAD (PSI) \_\_\_\_\_ WATER CONTENT (%) 14.0  
 (DEPTH OF FILL) \_\_\_\_\_ PENETRATION RESISTANCE (PSI) \_\_\_\_\_  
 CLASSIFICATION SM \_\_\_\_\_  
 SIZE OF SPECIMEN φ 6.25 COEFFICIENT OF PERMEABILITY (K)  
 (FT PER YEAR) 3,842

ROYAL IRRIGATION DEPARTMENT  
 RESEARCH & LABORATORY SECTION  
 SOIL MECHANICS LABORATORY

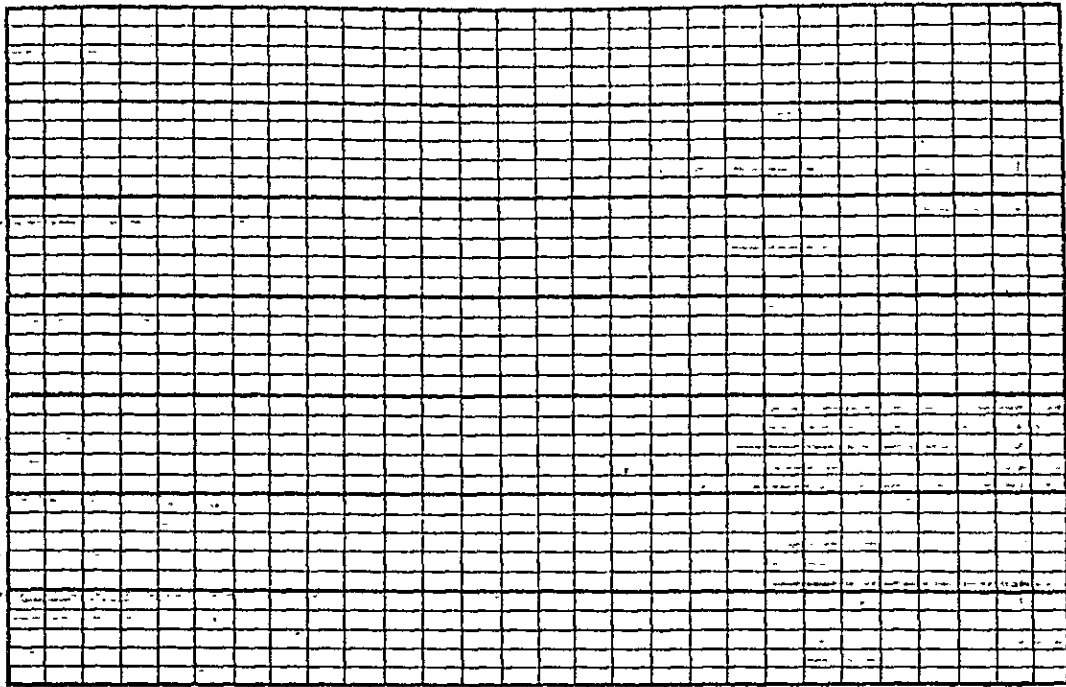
2200770

SAMPLE NO. Receiving Well Site (No. 2)

DRAWN VV CHECKED VS DATE 1-2-92

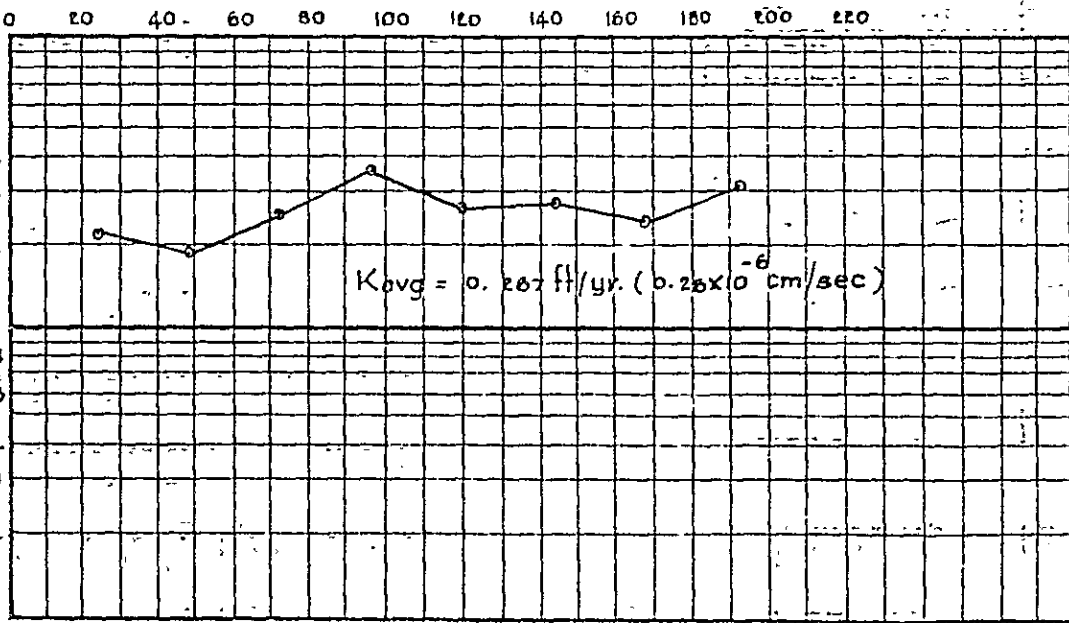
PERMEABILITY - SETTLEMENT TEST

VOLUME CHANGE - PERCENT  
EXPANSION  
CONSOLIDATION



TIME IN HOURS

COEFFICIENT OF PERMEABILITY - FEET PER YEAR



REMARKS Compacted to 95% compaction at o.m.c.

INITIAL CONDITION

FINAL CONDITION

PLACEMENT USED \_\_\_\_\_ CONSOLIDATION (%) \_\_\_\_\_  
 DRY DENSITY (PCF) 101.4 CONSOLIDATED, DRY DENSITY (PCF) \_\_\_\_\_  
 WATER CONTENT (%) 19.0 \_\_\_\_\_  
 CONSOLIDATION LOAD (PSI) \_\_\_\_\_ WATER CONTENT (%) \_\_\_\_\_  
 (DEPTH OF FILL) \_\_\_\_\_ PENETRATION RESISTANCE (PSI) \_\_\_\_\_  
 CLASSIFICATION \_\_\_\_\_  
 SIZE OF SPECIMEN φ 4 x 3 COEFFICIENT OF PERMEABILITY (K)  
 (FT. PER YR.) 0.27

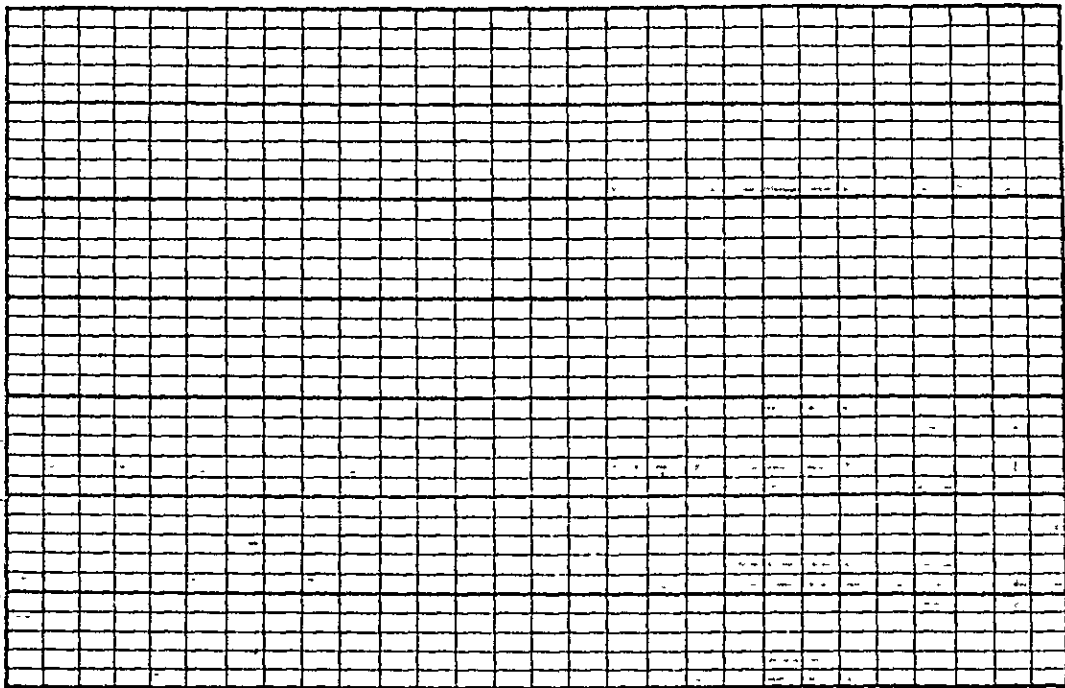
ROYAL IRRIGATION DEPARTMENT  
 RESEARCH & LABORATORY SECTION  
 SOIL MECHANICS LABORATORY

0800118

SAMPLE NO. IP. 2 (2.00 M.)  
 DRAWN VV CHECKED V9 DATE 9-2-82

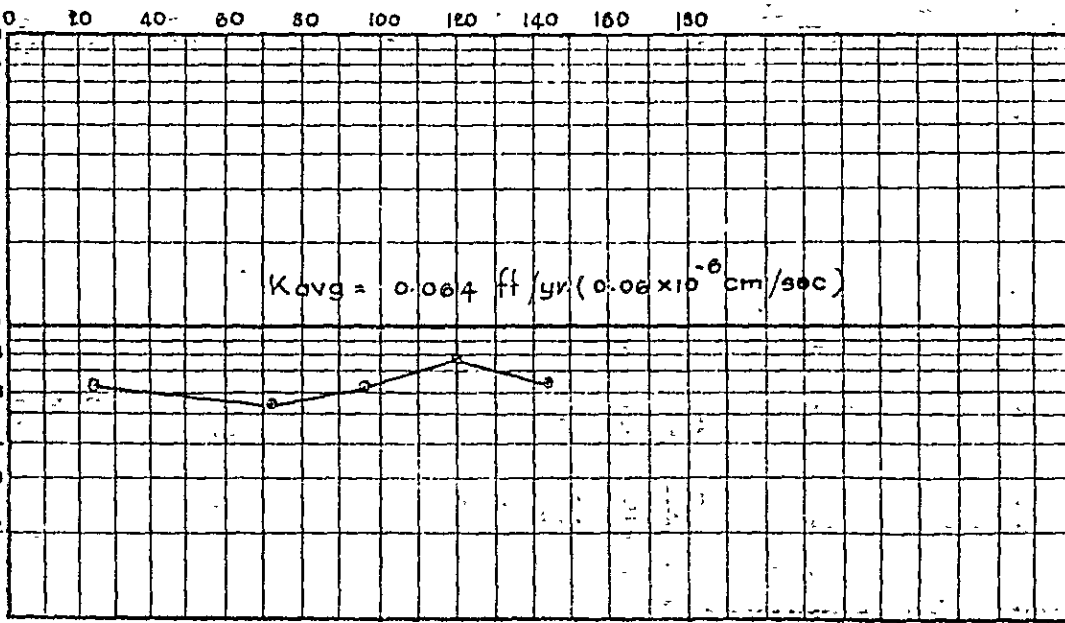
PERMEABILITY - SETTLEMENT TEST

VOLUME CHANGE - PERCENT  
EXPANSION  
CONOLIDATION



TIME IN HOURS

COEFFICIENT OF PERMEABILITY - FEET PER YEAR



$K_{avg} = 0.064 \text{ ft/yr} (0.06 \times 10^{-6} \text{ cm/sec})$

REMARKS - Compacted to 98% compacted at 0.100

INITIAL CONDITION

FINAL CONDITION

PLACEMENT USED \_\_\_\_\_ CONSOLIDATION (%) \_\_\_\_\_  
 DRY DENSITY (PCF) 116.2 CONSOLIDATED, DRY DENSITY (PCF) \_\_\_\_\_  
 WATER CONTENT (%) 13.5 \_\_\_\_\_  
 CONSOLIDATION LOAD (PSI) \_\_\_\_\_ WATER CONTENT (%) \_\_\_\_\_  
 (DEPTH OF FILL) \_\_\_\_\_ PENETRATION RESISTANCE (PSI) \_\_\_\_\_  
 CLASSIFICATION \_\_\_\_\_  
 SIZE OF SPECIMEN 0.6 x 3 COEFFICIENT OF PERMEABILITY (ft/yr) 0.064

ROYAL IRRIGATION DEPARTMENT  
 RESEARCH & LABORATORY SECTION  
 SOIL MECHANICS LABORATORY

0800710

SAMPLE NO. IP-3 (3.00M.)

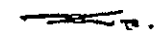
DRAWN VV CHECKED VS DATE 10-2-82

ROYAL IRRIGATION DEPARTMENT  
 RESEARCH AND LABORATORY DIVISION  
 SOILS & MATERIALS LABORATORY

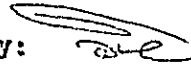
Lab. No. M - 42 C<sub>1</sub>

Date : Feb. 4, 1932

Project : THE PIPE LINE SYSTEM  
 (From Dok Krai to Map Ta Pud)

Tested By : 

Sample : ROCK CORE DRILLS

Checked By: 

UNIAXIAL COMPRESSION TEST

Sample	Depth m.	Dimension diameter x height	Uniaxial Compression ksc.
DH-1	6.00 - 6.15	5.46 x 11.80	589
DH-2	5.90 - 6.00	5.46 x 6.00	303
	6.10 - 6.20	5.46 x 9.00	358
	7.50 - 7.65	5.46 x 10.20	589
DH-4	9.00 - 9.10	4.16 x 7.12	184



ROYAL IRRIGATION DEPARTMENT  
RESEARCH AND LABORATORY SECTION  
CONCRETE AND CONSTRUCTION MATERIALS LABORATORY

LAB NO. N - 42 C<sub>2</sub>

DATE : January 28, 1982

PROJECT : THE TIP LINE SYSTEM.

TESTED BY *Jan*

(From Dok Kral to Hay Ta Pud)

CHECKED BY *[Signature]*

MECHANICAL ANALYSIS AND PHYSICAL PROPERTIES OF GRAVEL

Screen Size Retained on - %	COARSE STONE FROM DOK KRAY	Specification Limits
Specific Gravity	-	not less than
Abrasion by Los Angeles Machine Loss - %	30.00	not more than 50%
Sodium Sulfate Loss - %	-	not more than 12%
Absorption %	-	-

Notes:

