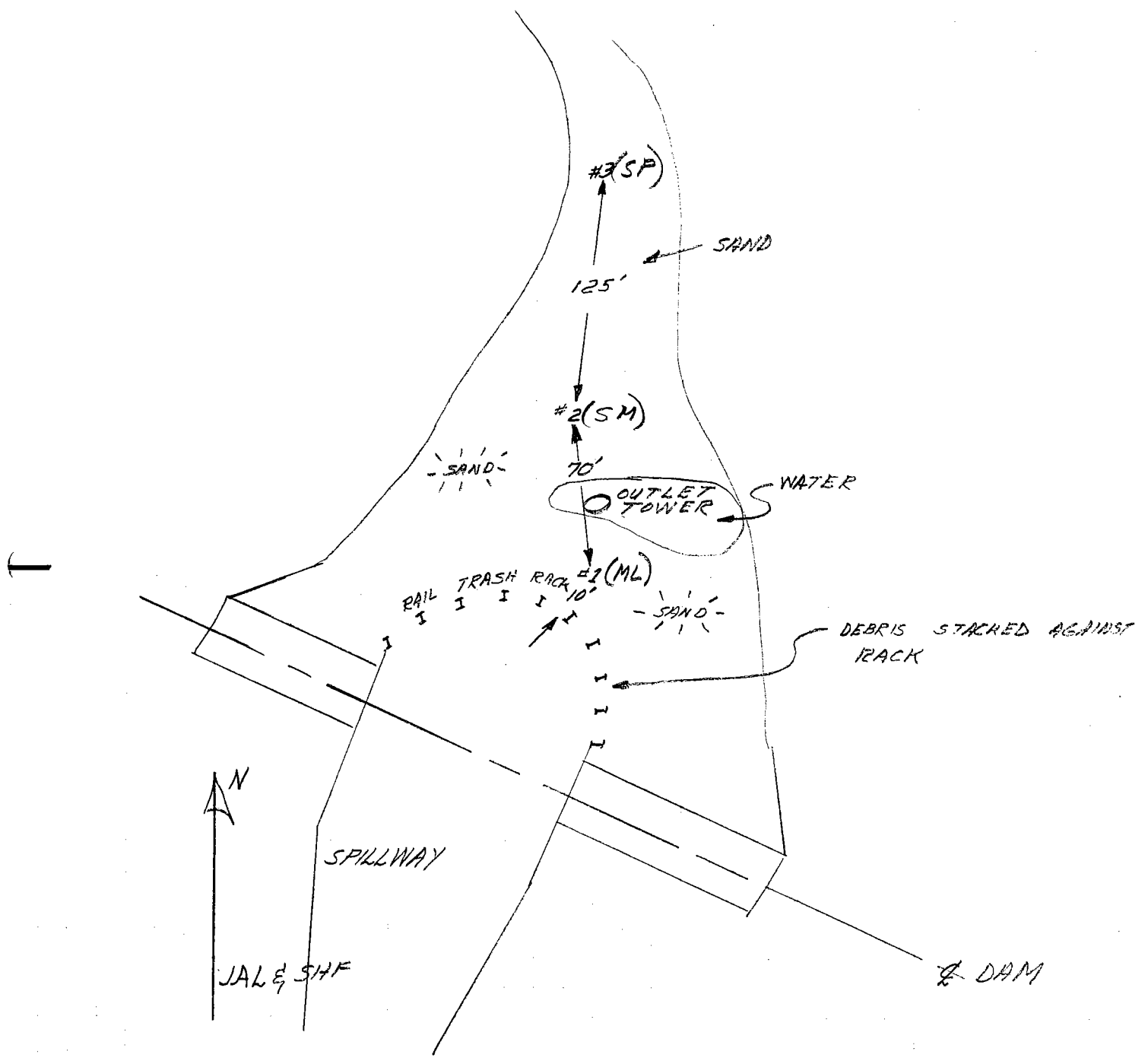


2/29/69
from 2/19/69

Carter Debris Basin



10

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
Foundation and Testing Division

HYDROMETER ANALYSIS WORK SHEET
ASTM Method D422-54T
(Modified)

LAB. SERIAL NO. 22886 Initial Weight of Sample Passing
Project _____ No. 4 Sieve _____ grams
Limits _____
Boring _____ Sample _____
Depth _____
Sampled by _____ Date _____
Field Description _____
Set up by NR Date _____
Lab. Tested by NR Date 2/27/69

Moisture Cup No. _____ Type Oil, on
Dry Weight, grams _____ Dispersing Volume, cc 12.5
Moisture Content, % _____ Agent Strength, % _____
Oven-Dry Weight Correction, gm/l = C_d -7.0
Passing No. 4 grams _____ Soil Specific Gravity = G 2.65
Percent Passing No. 4 _____; No. 10 _____ = P₁₀ S. G. Correction factor = a 1.0
Oven-Dry Weight of total Meniscus correction, gm/l = C_m +1.3
Sample represented, W = 60.7 grams Peroxide Treatment Used (Yes) (No)
HYDROMETER NO. _____ JAR NO. _____

11:30 START
11:30 START

Time	11:31	11:34	11:46	12:34	3:46	8:30	
Temperature, °C	20.0	20.0	20.0	19.6	20.0	20.0	
Temp. correc. Factor = C _t	0.0	0.0	0.0	-0.1	0.0	0.0	
Elapsed Time, Minutes = T	1	4	16	64	256	1260	
Hydrometer Reading, gm/l = R	51.5	41.5	32.0	23.5	17.0	12.0	
Effective Depth, cm = L	2.8	3.085	3.33	3.53	3.67	3.78	
Total Correction C = C _d + C _m + C _t	-5.7	-5.7	-5.7	-5.8	-5.7	-5.7	
Corrected Reading R _c = R + C	45.8	35.8	26.3	17.7	11.3	6.3	
K	.01365						
Diameter in mm = D	.0382	.0211	.0114	.00602	.00313	.00145	
Percent in Suspension = P	75.5	59.0	43.3	29.2	18.6	10.4	
Percent of (-10) = P'							

$$P = \frac{(R_c)(a)(100)}{(W)}$$

$$P' = \frac{(P)(100)}{(P_{10})}$$

$$D = K \sqrt{\frac{L}{T}}$$

Computed by NR Date 3/5/69
Plotted by _____ Date _____

Checked by RTT
Date 3/11/69

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
Soils and Materials Engineering Division

ML (10)

SIEVE ANALYSIS WORK SHEET

LAB SERIAL NO. 22886
Project CARTER DB
Station _____
Location _____
Boring No. 1 Sample No. _____
Sampled By _____ Lab Tested By RFK

Total Weight of Sample 1.00 lbs.
grams.
Moisture Content of Fines _____ %
Date Tested 3/5/69 Plotted By _____
Remarks NP
Intended Use _____

GRAVEL (Plus No. 4)

ASTM SIEVE NUMBER	SIZE (mm)	RETAINED		% OF TOTAL OVEN-DRY RETAINED	ACCUM. % RETAINED	ACCUM. % PASSING	
		LBS.	GRAMS			ACTUAL	SPEC. REQ.
3"	76.2						
1½"	38.1						
(1")	(25.4)						
¾"	19.1						
⅜"	9.52						
No. 4	4.76				—	—	100.0
Pan	0	1.00		xxxxx			
Total Fractions		1.00		xxxxx			
Sieve Loss-Gain							
Calc. Oven-Dry Fines		0.61		100.0			
Total Oven-Dry		0.61		100.00			

Moisture Determination of Fines:

Cup No. 69
Dry Weight 134.7 grams 39.3 water
Moisture 64.7 % 60.7 dry soil

WEIGHT, GRAMS 100 FINES (Minus No. 4) (CALC.) OVEN-DRY WEIGHT 60.7 grams.
WEIGHT OF TOTAL SAMPLE REPRESENTED BY FINES, OVEN-DRY 60.7 grams.

ASTM SIEVE NUMBER	SIZE (mm)	RETAINED GRAMS	% OF TOTAL SAMPLE RETAINED	ACCUM. % OF TOTAL RETAINED	ACCUM. % PASSING	
					ACTUAL	SPEC. REQ.
8	2.38	—				
16	1.19	0.1	0.2	0.2		
30	0.59	0.1	0.2	0.4		
50	.297	0.1	0.2	0.6		
100	.149	0.5	.8	1.4		
200	.074	3.0	4.9	9.2	90.8	
Pan	0	1.8				
Total Fractions		5.6				
Total Dry Weight After Wet Sieving		125.8	9.2			
Sieve Loss-Gain		120.2				

Calculated by RF Date 3/5/69
Checked by SHE Date 2/14/69

Note: Cross out sieve numbers not used.

Los Angeles County Flood Control District
Soils and Materials Engineering Division

LIQUID LIMIT AND PLASTIC LIMIT TESTS

Lab. Serial No. 22886
Job CARTER D.B.
Boring No. _____
Sample No. _____
Sampled By _____ Date _____

Remarks _____
Lab. Tested By FK Date 2-27-69
Computed By _____ Date _____
Plotted By _____ Date _____

LIQUID LIMIT

ONE POINT TABLE

Container No.	28
No. of Blows	23
Wet Sample Wt. + Tare	6.682
Dry Sample Wt. + Tare	6.164
Wt. of Water (Diff)	0.518
Tare	50.92
Wt. of Dry Soil	1.072
Moisture Content	48.3
Liquid Limit	48.0
One Point Liquid Limit	—

BLOWS	FACTOR
16	.947
17	.954
18	.961
19	.967
20	.973
21	.979
22	.985
<u>23</u>	<u>.990</u>
24	.995
25	1.000
26	1.005
27	1.009
28	1.014
29	1.018
30	1.022
31	1.026
32	1.030
33	1.034
34	1.038
35	1.042

PLASTIC LIMIT

Run No.	1	2	3
Container No.	42	38	47
Wet Sample Wt. + Tare	5.525	5.557	5.548
Dry Sample Wt. + Tare	5.379	5.412	5.404
Wt. of Water (Diff)	0.146	0.145	0.144
Tare	49.96	50.34	50.39
Wt. of Dry Soil	0.383	0.378	0.365
Moisture Content	38.1	38.3	39.4
Plastic Limit (Average Value)	39		

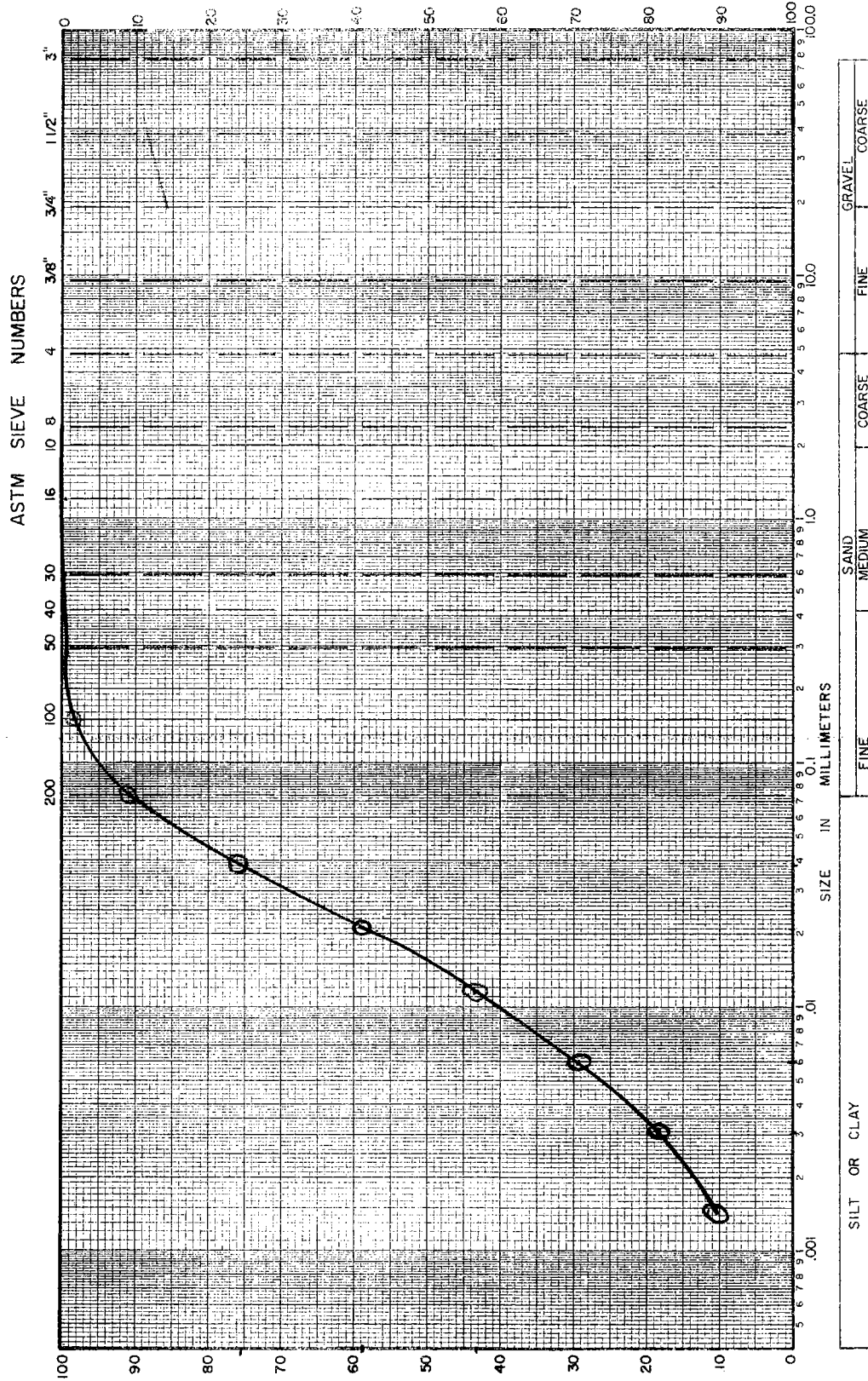
Plasticity Index (LL - PL) = PI = _____

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
Soils and Materials Engineering Division
MECHANICAL ANALYSIS

LAB. SERIAL NO. 22886
 JOB _____
 BORING NO. _____ SAMPLE NO. _____
 STATION _____ DEPTH _____ FT.
 LOCATION _____
 SAMPLED BY _____ DATE _____
 FIELD CLASSIFICATION _____ BY _____
 PLAS. IND. _____ LIQ. LIM. _____
 REMARKS _____

CLASSIFICATION DATA

PERCENT (+) NO. 200 _____ PERCENT (+) NO. 4 _____
 % (+) NO. 4 / % (+) NO. 200 _____ D₁₀ _____ mm
 D₃₀ _____ mm D₆₀ _____ mm
 C_u = D₆₀ / D₁₀ _____ PLOTTED BY AK
 C_c = (D₃₀)² / (D₁₀ x D₆₀) _____ CHECKED BY _____
 GROUP SYMBOL _____ DATE _____
 NOTE: D_x = PARTICLE DIA. AT X% PASSING



LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
Soils and Materials Engineering Division

SM ¹⁰

SIEVE ANALYSIS WORK SHEET

LAB SERIAL NO. 22887
Project CARTER DB
Station _____
Location _____
Boring No. 2 Sample No. _____
Sampled By _____ Lab Tested By AR-

Total Weight of Sample 0.92 lbs.
_____ grams.
Moisture Content of Fines _____ %.
Date Tested 2/26 Plotted By FK
Remarks NP
Intended Use _____

GRAVEL (Plus No. 4)

ASTM SIEVE NUMBER	SIZE (mm)	RETAINED		% OF TOTAL OVEN-DRY RETAINED	ACCUM. % RETAINED	ACCUM. % PASSING	
		LBS.	GRAMS			ACTUAL	SPEC. REQ.
3"	76.2						
1½"	38.1						
(1")	(25.4)						
¾"	19.1						
⅜"	9.52						
No. 4	4.76	0.02		2.4	2.4	97.6	
Pan	0	0.90		xxxxx			
Total Fractions		0.92		xxxxx			
Sieve Loss-Gain							
Calc. Oven-Dry Fines		1.82		97.6			
Total Oven-Dry		84		100.00			

Moisture Determination of Fines:
Cup No. 11
Dry Weight 164.7 grams
Moisture 10.3 %

WEIGHT, GRAMS 100 FINES (Minus No. 4) (CALC.) OVEN-DRY WEIGHT 90.7 grams.
WEIGHT OF TOTAL SAMPLE REPRESENTED BY FINES, OVEN-DRY 92.9 grams.

ASTM SIEVE NUMBER	SIZE (mm)	RETAINED GRAMS	% OF TOTAL SAMPLE RETAINED	ACCUM. % OF TOTAL RETAINED	ACCUM. % PASSING	
					ACTUAL	SPEC. REQ.
8	2.38	3.5	3.8	6.2		
16	1.19	14.8	15.9	22.1		
30	0.59	26.7	28.7	50.8		
50	.297	20.8	22.4	73.2		
100	.149	10.7	11.5	84.7		
200	.074	2.0	2.2	86.7	13.3	
Pan	0	0.0				
Total Fractions		78.5				
Total Dry Weight After Wet Sieving		198.5	78.3	84.3		
Sieve Loss-Gain		120.2	+ .2			

Calculated by AR Date 2/28/09
Checked by SHF Date 2/28/09

Note: Cross out sieve numbers not used.

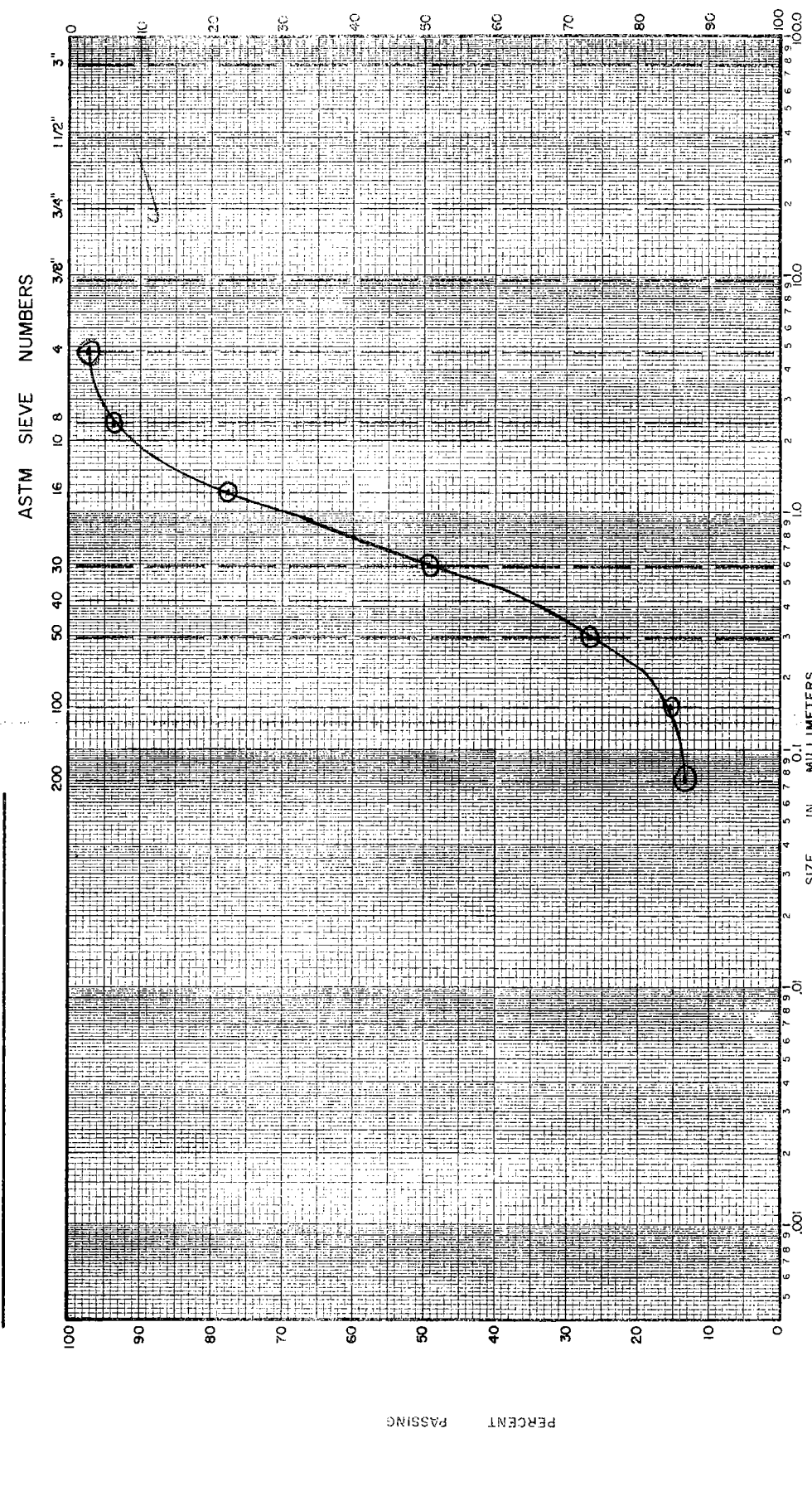
LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
Soils and Materials Engineering Division
MECHANICAL ANALYSIS

LAB. SERIAL NO. _____
 JOB _____
 BORING NO. _____ SAMPLE NO. _____
 STATION _____ DEPTH _____ FT.
 LOCATION _____
 SAMPLED BY _____ DATE _____
 FIELD CLASSIFICATION _____ BY _____
 PLAS. IND. _____ LIQ. LIM. _____
 REMARKS _____

CLASSIFICATION DATA

PERCENT (+) NO. 200 _____ PERCENT (+) NO. 4 _____
 % (+) NO. 4 / % (+) NO. 200 _____ D₁₀ _____ mm
 D₃₀ _____ mm D₆₀ _____ mm
 C_u = D₆₀ / D₁₀ _____ PLOTTED BY FK
 C_c = (D₃₀)² / (D₁₀ x D₆₀) _____ CHECKED BY _____
 GROUP SYMBOL _____ DATE 7/29/72

NOTE: D_x = PARTICLE DIA. AT X% PASSING



SILT OR CLAY	SAND		FINE		COARSE		GRAVEL	
	0.075	0.425	0.425	2.0	2.0	75	75	75

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

Soils and Materials Engineering Division

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SIEVE ANALYSIS WORK SHEET

LAB SERIAL NO. 22888
 Project CARTER DB
 Station _____
 Location _____
 Boring No. 3 Sample No. _____
 Sampled By _____ Lab Tested By NR

Total Weight of Sample 1.15 lbs.
 _____ grams.
 Moisture Content of Fines _____ %.
 Date Tested 2/20 Plotted By _____
 Remarks NP
 Intended Use _____

GRAVEL (Plus No. 4)

ASTM SIEVE NUMBER	SIZE (mm)	RETAINED		% OF TOTAL OVEN-DRY RETAINED	ACCUM. % RETAINED	ACCUM. % PASSING	
		LBS.	GRAMS			ACTUAL	SPEC. REQ.
3"	76.2						
1½"	38.1						
(1")	(25.4)						
¾"	19.1						
⅜"	9.52						
No. 4	4.76	0.02	0.02	1.9	1.9	98.1	
Pan	0	1.13		xxxxx			
Total Fractions		1.15		xxxxx			
Sieve Loss-Gain							
Calc. Oven-Dry Fines		1.05		98.1			
Total Oven-Dry		1.07		100.00			

Moisture Determination of Fines:
 Cup No. 14
 Dry Weight 167.1 grams
 Moisture 7.4 %

WEIGHT, GRAMS 100 FINES (Minus No. 4) (CALC.) OVEN-DRY WEIGHT 93.1 grams.
 WEIGHT OF TOTAL SAMPLE REPRESENTED BY FINES, OVEN-DRY 94.9 grams.

ASTM SIEVE NUMBER	SIZE (mm)	RETAINED GRAMS	% OF TOTAL SAMPLE RETAINED	ACCUM. % OF TOTAL RETAINED	ACCUM. % PASSING	
					ACTUAL	SPEC. REQ.
8	2.38	7.1	7.5	9.4		
16	1.19	25.9	27.3	36.7		
30	0.59	29.4	31.0	67.7		
50	.297	15.8	16.6	84.3		
100	.149	8.3	8.7	93.0		
200	.074	2.9	3.1	96.0	4.0	
Pan	0	0.1	-			
Total Fractions		89.5				
Total Dry Weight After Wet Sieving		209.5	89.3	94.1		
Sieve Loss-Gain		120.2 + 0.2				

Calculated by NR Date 2/24/89
 Checked by SHF Date 2/27/89

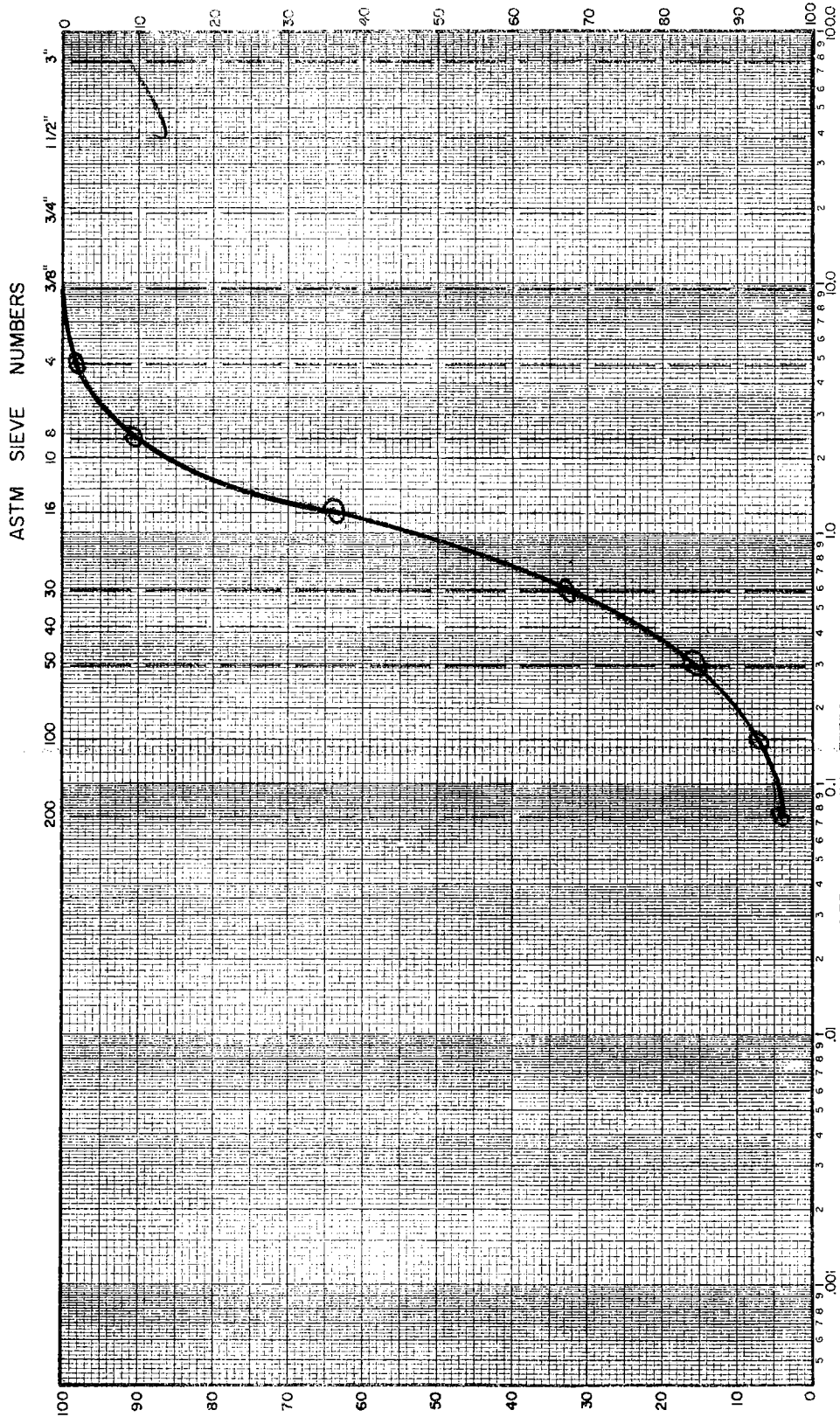
Note: Cross out sieve numbers not used.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
Soils and Materials Engineering Division
MECHANICAL ANALYSIS

LAB. SERIAL NO. 22-888
 JOB CARTER D.B.
 BORING NO. _____ SAMPLE NO. _____
 STATION _____ DEPTH _____ FT.
 LOCATION _____
 SAMPLED BY _____ DATE _____
 FIELD CLASSIFICATION _____ BY _____
 PLAS. IND. _____ LIQ. LIM. _____
 REMARKS _____

CLASSIFICATION DATA

PERCENT (+) NO. 200 _____ PERCENT (+) NO. 4 _____
 % (+) NO. 4 / % (+) NO. 200 _____ D₁₀ 0.20 mm
 D₃₀ 0.56 mm D₆₀ 1.1 mm
 C_u = D₆₀ / D₁₀ 5.5 PLOTTED BY R
 C_c = (D₃₀)² / (D₁₀ x D₆₀) _____ CHECKED BY BII
 GROUP SYMBOL _____ DATE 2/27/69
 NOTE: D_x = PARTICLE DIA. AT X% PASSING



0	10	20	30	40	50	60	70	80	90	100
0.075	0.15	0.3	0.6	1.18	2.0	4.75	9.5	19	37.5	75
150	300	600	1200	2500						
SILT OR CLAY			SAND			COARSE		FINE		GRAVEL
			MEDIUM							COARSE

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