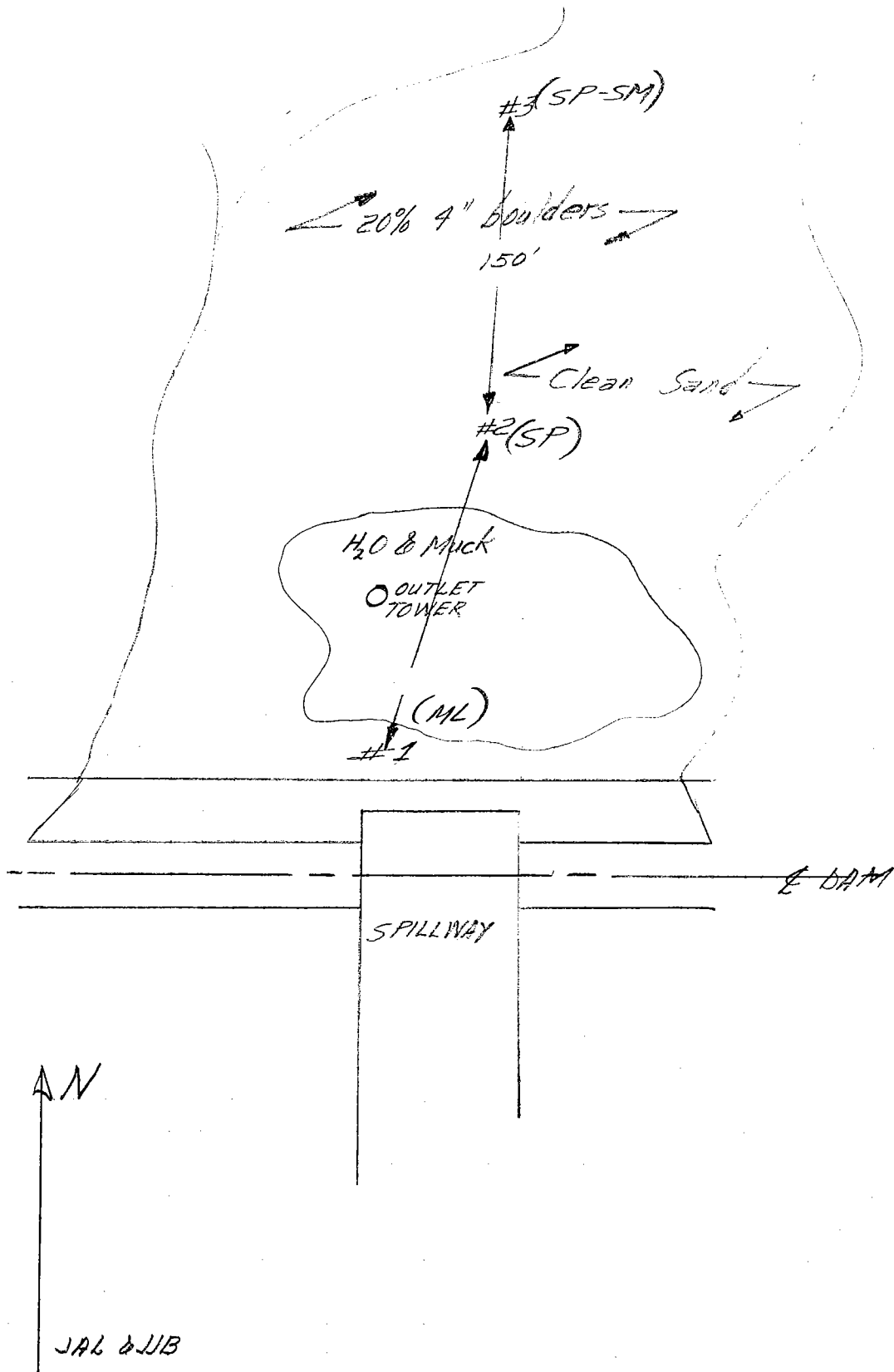


Morgan Canyon J.B.

2/24/69  
from 2/20/69

38



**LOS ANGELES COUNTY FLOOD CONTROL DISTRICT**

Soils and Materials Engineering Division

S.P. (38)  
~~S.P.~~

**SIEVE ANALYSIS WORK SHEET**

LAB SERIAL NO. 2-2-919 Total Weight of Sample 128 lbs.  
 Project MORCEN CANYON DB \_\_\_\_\_ grams.  
 Station \_\_\_\_\_ Moisture Content of Fines \_\_\_\_\_ %.  
 Location \_\_\_\_\_ Date Tested 2/24 Plotted By FK  
 Boring No. 2 Sample No. \_\_\_\_\_ Remarks NP  
 Sampled By \_\_\_\_\_ Lab Tested By RP 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						
1 1/2"	38.1						
(1")	(25.4)						
3/4"	19.1						
3/8"	9.52	0.04		3.5	3.5		
No. 4	4.76	0.10	14	8.8	12.3	87.7	
Pan	0	1.14		xxxxx			
Total Fractions		1.28		xxxxx			
Sieve Loss-Gain							
Calc. Oven-Dry Fines		1.00		87.7			
Total Oven-Dry		1.14		100.00			

Moisture Determination of Fines:  
 Cup No. 20  
 Dry Weight 161.3 grams  
 Moisture 14.5 %

FINES (Minus No. 4)  
 WEIGHT, GRAMS 100 (CALC.) OVEN-DRY WEIGHT 87.3 grams.  
 WEIGHT OF TOTAL SAMPLE REPRESENTED BY FINES, OVEN-DRY 99.5 grams.

ASTM SIEVE NUMBER	SIZE (mm)	RETAINED GRAMS	% OF TOTAL SAMPLE RETAINED	ACCUM. % OF TOTAL RETAINED	ACCUM. % PASSING	
					ACTUAL	SPEC. REQ.
8	2.38	5.8	5.8	18.1		
16	1.19	7.2	7.2	25.3		
30	0.59	9.7	9.7	35.0		
50	.297	16.8	16.9	51.9		
100	.149	28.4	28.5	80.4		
200	.074	17.5	17.5	97.6	2.4	
Pan	0	0.1				
Total Fractions		85.5				
Total Dry Weight After Wet Sieving		84.9	85.3			
Sieve Loss-Gain		84.9 + 0.6				

Calculated by AK Date 2/27/69  
 Checked by SHP Date 2/28/69

Note: Cross out sieve numbers not used.

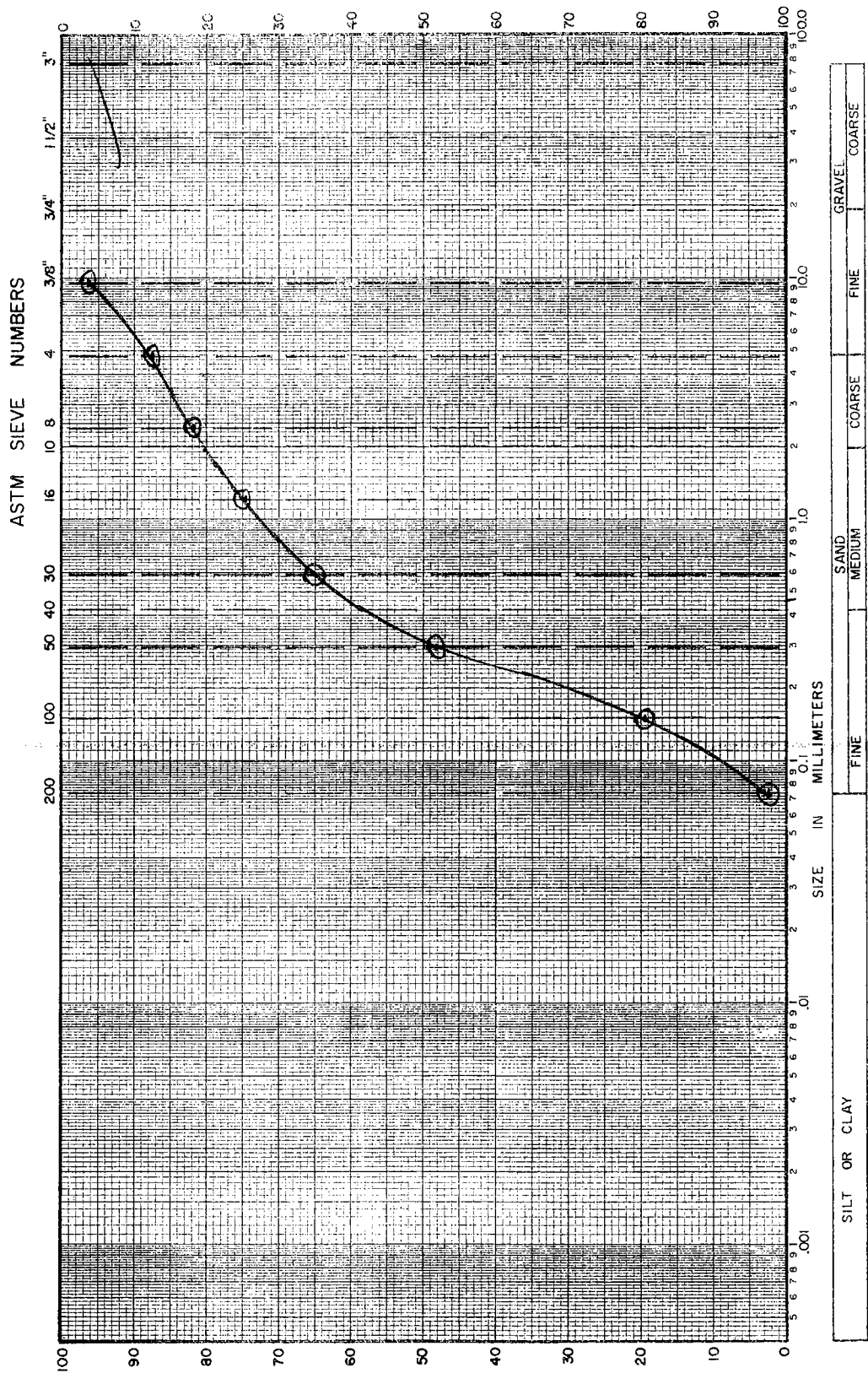
5.1  
120.2  
84.9

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

LAB. SERIAL NO. 22919  
 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 \_\_\_\_\_  $D_{10}$  0.105 mm  
 $D_{30}$  0.2 mm  $D_{60}$  0.45 mm  
 $C_u = D_{60}/D_{10}$  \_\_\_\_\_ PLOTTED BY EX  
 $C_c = (D_{30})^2 / (D_{10} \times D_{60})$  \_\_\_\_\_ CHECKED BY \_\_\_\_\_  
 GROUP SYMBOL \_\_\_\_\_ DATE 2/20/69  
 NOTE:  $D_x$  = PARTICLE DIA. AT X% PASSING



38

**LOS ANGELES COUNTY FLOOD CONTROL DISTRICT**  
Soils and Materials Engineering Division

ML 38

**SIEVE ANALYSIS WORK SHEET**

LAB SERIAL NO. 22918 Total Weight of Sample \_\_\_\_\_ lbs.  
 Project Morgan \_\_\_\_\_ grams.  
 Station \_\_\_\_\_ Moisture Content of Fines \_\_\_\_\_ %.  
 Location \_\_\_\_\_ Date Tested 3/12 Plotted By \_\_\_\_\_  
 Boring No. 1 Sample No. 1 Remarks AF  
 Sampled By \_\_\_\_\_ Lab Tested By AF 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	.90		xxxxx			
Total Fractions				xxxxx			
Sieve Loss-Gain							
Calc. Oven-Dry Fines		.63		100.0			
Total Oven-Dry		.63		100.00			

Moisture Determination of Fines:  
 Cup No. 10  
 Dry Weight 144.4 grams  
 Moisture 42.0 %

FINES (Minus No. 4)

WEIGHT, GRAMS 100 (CALC.) OVEN-DRY WEIGHT 70.4 grams.  
 WEIGHT OF TOTAL SAMPLE REPRESENTED BY FINES, OVEN-DRY 70.4 grams.

ASTM SIEVE NUMBER	SIZE (mm)	RETAINED GRAMS	% OF TOTAL SAMPLE RETAINED	ACCUM. % OF TOTAL RETAINED	ACCUM. % PASSING	
					ACTUAL	SPEC. REQ.
8	2.38	0.1	0.1	0.1		
16	1.19	0.0	0.0	0.1		
30	0.59	0.1	0.1	0.2		
50	.297	0.2	0.3	0.5		
100	.149	7.1	10.1	10.6		
200	.074	21.7	30.8	47.4	58.6	
Pan	0	4.5	6.2			
Total Fractions		33.7				
Total Dry Weight After Wet Sieving		153.7 <u>120.2</u>	33.5	47.6		
Sieve Loss-Gain		33.5	+2			

Calculated by AF Date 3/24/69  
 Checked by JJB Date 3/25/69

Note: Cross out sieve numbers not used.

#6 (38)

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT  
Foundation and Testing Division

HYDROMETER ANALYSIS WORK SHEET

ASTM Method D422-54T  
(Modified)

LAB. SERIAL NO. 22918  
Project \_\_\_\_\_  
Limits \_\_\_\_\_  
Boring \_\_\_\_\_ Sample \_\_\_\_\_  
Depth \_\_\_\_\_  
Sampled by \_\_\_\_\_ Date \_\_\_\_\_  
Field Description \_\_\_\_\_

Initial Weight of Sample Passing  
No. 4 Sieve \_\_\_\_\_ grams

Remarks \_\_\_\_\_

Set up by NR Date 3/12/69  
Lab. Tested by NR Date 3/12/69

Moisture Cup No. 10  
Dry Weight, grams 144.4  
Moisture Content, % \_\_\_\_\_  
Oven-Dry Weight  
Passing No. 4 grams \_\_\_\_\_  
Percent Passing No. 4 \_\_\_\_\_; No. 10 \_\_\_\_\_ = P<sub>10</sub>  
Oven-Dry Weight of total  
Sample represented, 70.4 grams  
W = \_\_\_\_\_ grams

Type Calgon  
Dispersing Volume, cc 12.5  
Agent Strength, % \_\_\_\_\_  
Correction, gm/l = C<sub>d</sub> -8.0  
Soil Specific Gravity = G 2.65  
S. G. Correction factor = a 1  
Meniscus correction, gm/l = C<sub>m</sub> +1.3 (-6.7)  
Peroxide Treatment Used (Yes) (No)  
HYDROMETER NO. \_\_\_\_\_ JAR NO. \_\_\_\_\_

11:50:30 STR  
11:51 START

Time	11:50:30 STR 11:51 START	11:52	11:55	12:07	12:55	4:07	8:51
Temperature, °C		19.6	19.6	20.0	18.4	20.0	20.2
Temp. correc. Factor = C <sub>t</sub>		-1	-1	0	-1.3	0	0
Elapsed Time, Minutes = T		1	4	16	64	256	1260
Hydrometer Reading, gm/l = R		27.5	17.0	13.0	11.0	10.0	9.0
Effective Depth, cm = L		3.435	3.67	3.77	3.81	3.83	3.85
Total Correction C = C <sub>d</sub> + C <sub>m</sub> + C <sub>t</sub>		-6.8	-6.8	-6.7	-7.0	-6.7	-6.7
Corrected Reading R <sub>c</sub> = R + C		20.7	10.2	6.3	4.0	3.3	2.3
K		0.1365	0.1365	0.1365	0.1399	0.1365	0.1365
Diameter in mm = D		.0470	.0251	.0128	.00666	.00327	.00148
Percent in Suspension = P		29.4	14.5	9.0	5.7	4.7	3.3
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 3/24/69  
Plotted by \_\_\_\_\_ Date \_\_\_\_\_

Checked by NR  
Date 3/25/69

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

LAB. SERIAL NO. 22918

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 \_\_\_\_\_ D<sub>10</sub> \_\_\_\_\_ mm

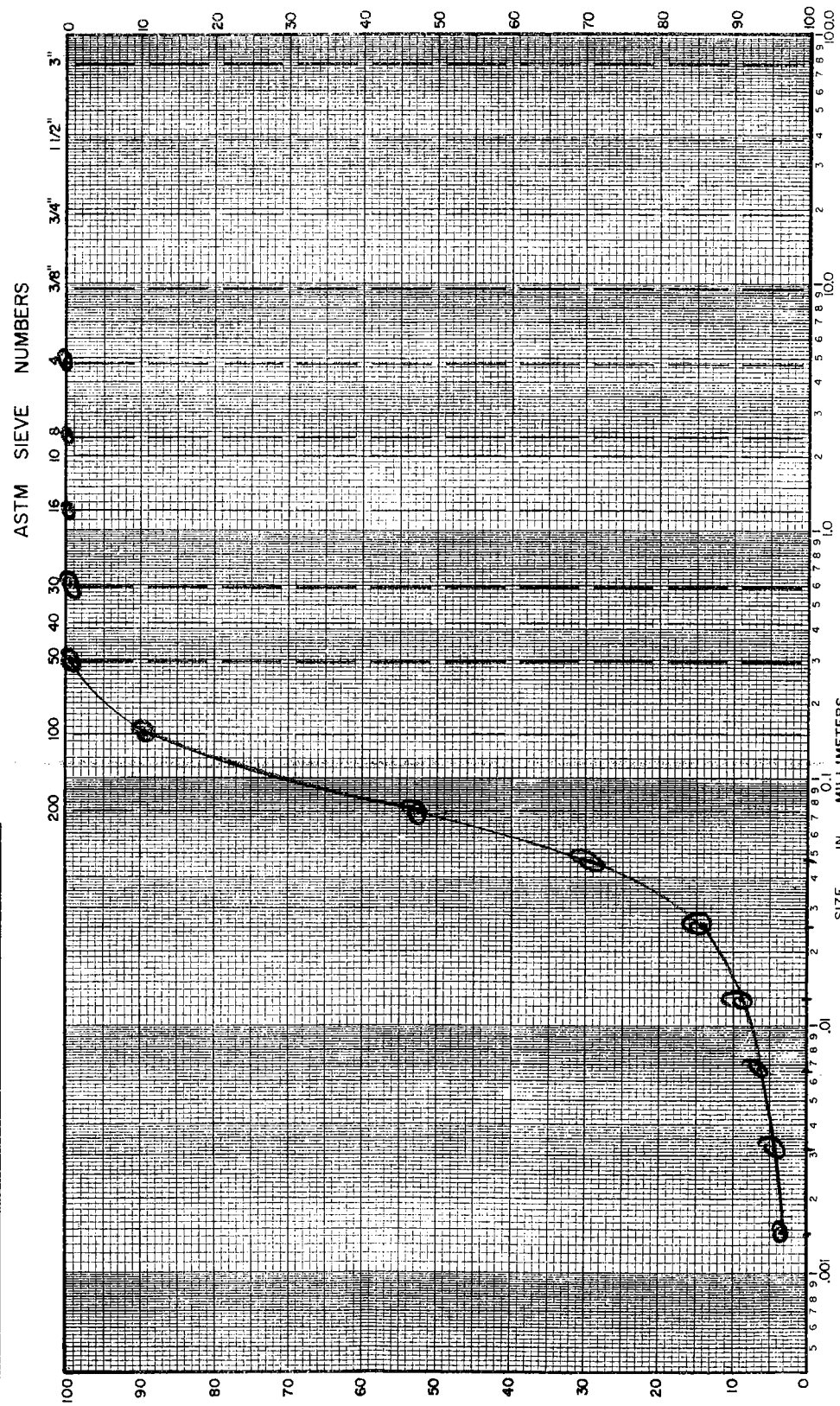
D<sub>30</sub> \_\_\_\_\_ mm D<sub>60</sub> \_\_\_\_\_ mm

Cu = D<sub>60</sub>/D<sub>10</sub> \_\_\_\_\_ PLOTTED BY LR

Cc = (D<sub>30</sub>)<sup>2</sup> / (D<sub>10</sub> x D<sub>60</sub>) \_\_\_\_\_ CHECKED BY \_\_\_\_\_

GROUP SYMBOL \_\_\_\_\_ DATE \_\_\_\_\_

NOTE: D<sub>x</sub> = PARTICLE DIA. AT X% PASSING



SILT OR CLAY		SAND		GRAVEL	
FINE	MEDIUM	FINE	COARSE	FINE	COARSE

**LOS ANGELES COUNTY FLOOD CONTROL DISTRICT**

Soils and Materials Engineering Division

38

SM-5P

**SIEVE ANALYSIS WORK SHEET**

LAB SERIAL NO. 22920

Total Weight of Sample 1.12 lbs.

Project MORRIS CRY. D.B.

grams.

Station \_\_\_\_\_

Moisture Content of Fines \_\_\_\_\_ %.

Location \_\_\_\_\_

Date Tested 3-4-69 Plotted By \_\_\_\_\_

Boring No. \_\_\_\_\_ Sample No. 1

Remarks NP

Sampled By JJB Lab Tested By FK-NR

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						
3/8"	9.52	0.04		4.0	4.0		
No. 4	4.76	0.04	08	4.0	8.0	92.0	
Pan	0	1.04		xxxxx			
Total Fractions		1.12		xxxxx			
Sieve Loss-Gain							
Calc. Oven-Dry Fines		92		92.0			
Total Oven-Dry		1.00		100.00			

Moisture Determination of Fines:  
Cup No. 6  
Dry Weight 162.6 grams  
Moisture 12.9 %

FINES (Minus No. 4)

WEIGHT, GRAMS 100 (CALC.) OVEN-DRY WEIGHT 88.6 grams.

WEIGHT OF TOTAL SAMPLE REPRESENTED BY FINES, OVEN-DRY 96.3 grams.

ASTM SIEVE NUMBER	SIZE (mm)	RETAINED GRAMS	% OF TOTAL SAMPLE RETAINED	ACCUM. % OF TOTAL RETAINED	ACCUM. % PASSING	
					ACTUAL	SPEC. REQ.
8	2.38	2.1	2.2	10.2		
16	1.19	5.1	5.3	15.5		
30	0.59	10.0	10.4	25.9		
50	.297	18.3	19.0	44.9		
100	.149	28.3	29.4	74.3		
200	.074	13.4	13.9	89.9	10.1	
Pan	0	1.8				
Total Fractions		79.0				
Total Dry Weight After Wet Sieving		78.9	81.9			
Sieve Loss-Gain		1.1				

Calculated by SP Date 3/5/69  
Checked by SHF Date 3/6/69

Note: Cross out sieve numbers not used.

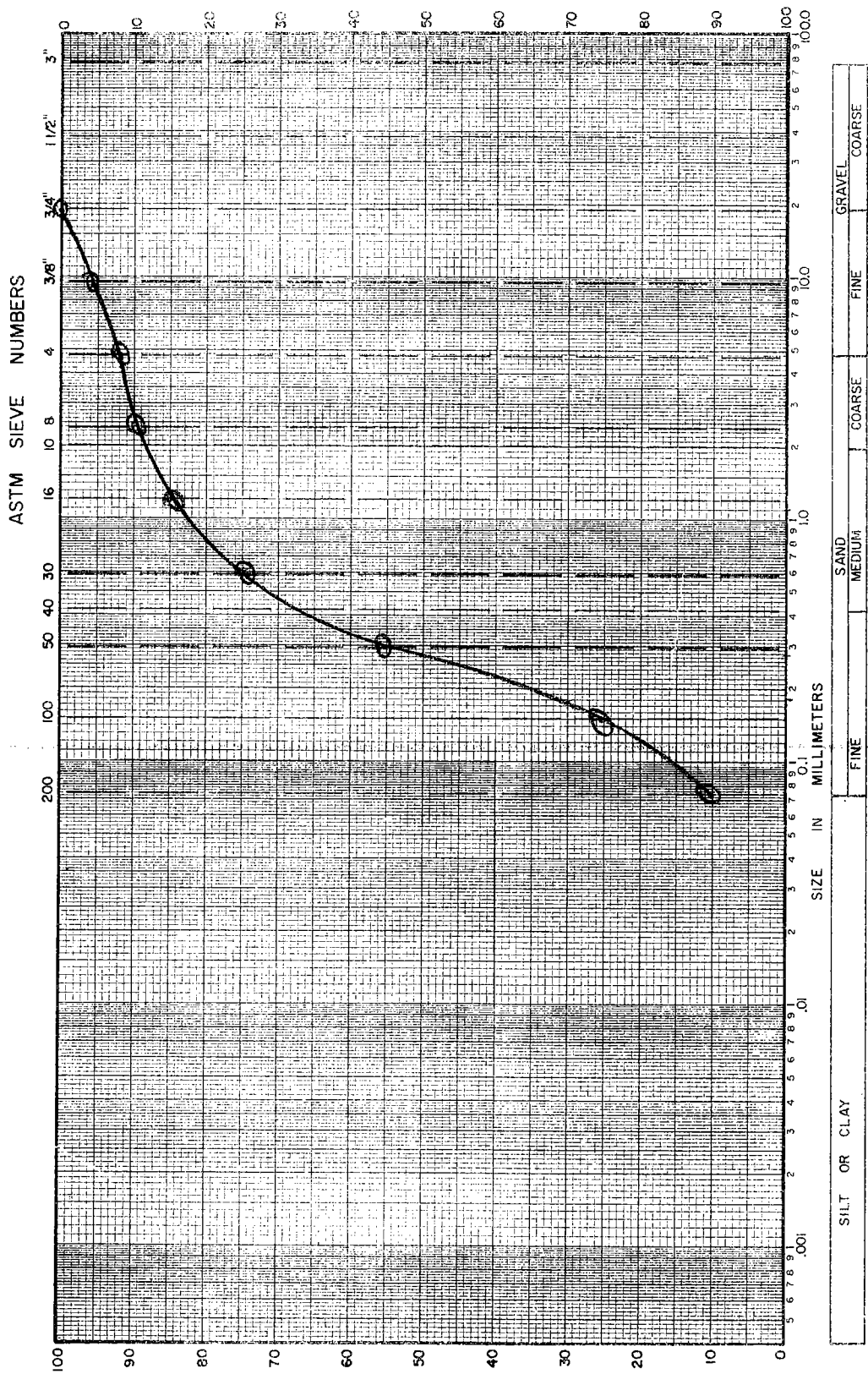
199.1  
120.2

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

LAB. SERIAL NO. 22920  
 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 \_\_\_\_\_  $D_{10}$  0.74 mm  
 $D_{30}$  \_\_\_\_\_ mm  $D_{50}$  1.35 mm  
 $C_u = D_{60}/D_{10}$  4.7 PLOTTED BY XLR  
 $C_c = (D_{30})^2$  \_\_\_\_\_ CHECKED BY JHE  
 $D_{10} \times D_{60}$  \_\_\_\_\_ DATE 3/1/68  
 GROUP SYMBOL \_\_\_\_\_  
 NOTE:  $D_x$  = PARTICLE DIA. AT X% PASSING



38