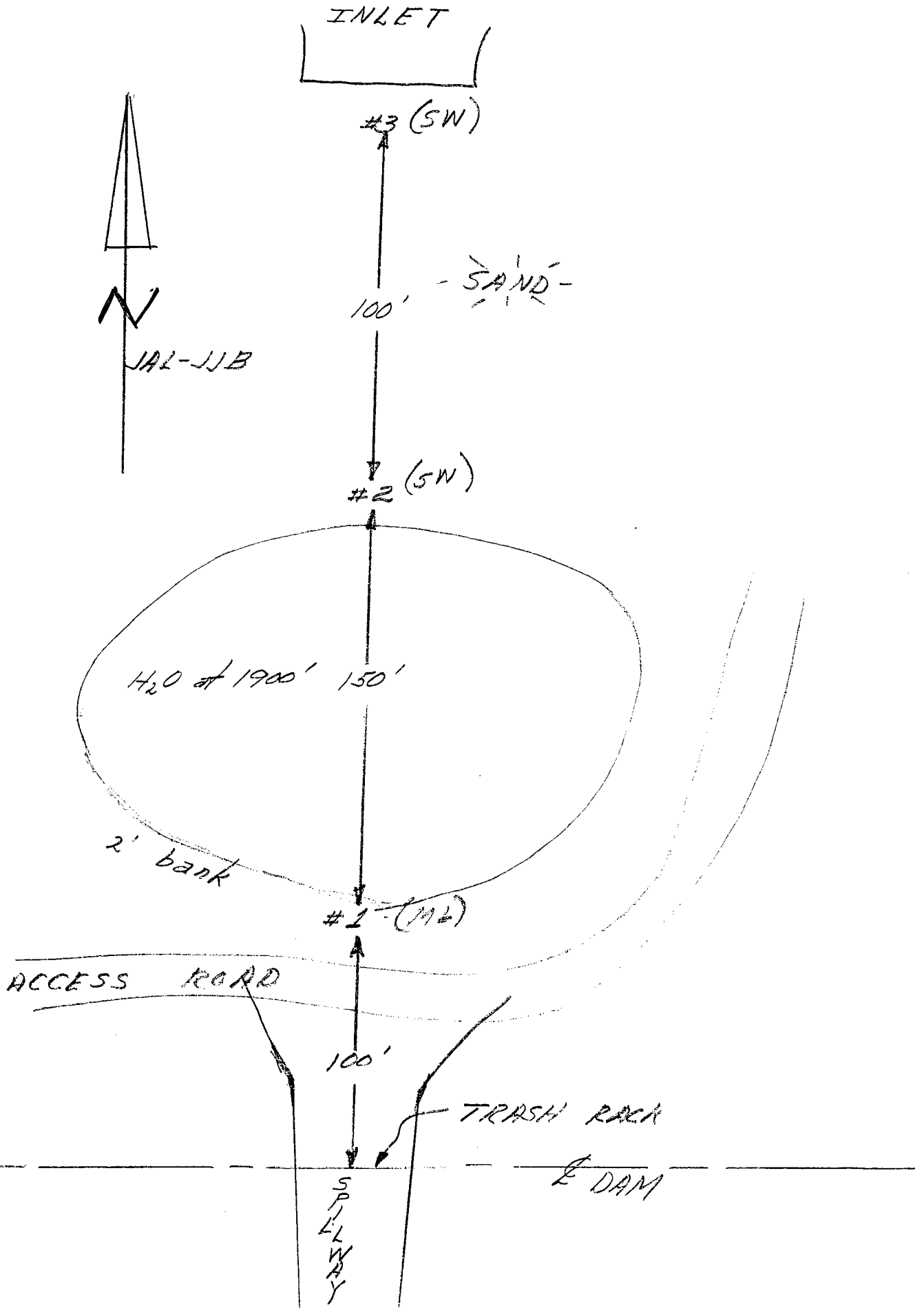


Hay Canyon Debris Basin 3/3/69

T



not organic

ML 24

# LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

Soils and Materials Engineering Division

## SIEVE ANALYSIS WORK SHEET

LAB SERIAL NO. 22840

Total Weight of Sample \_\_\_\_\_ lbs.

Project HAY CYN. D.B.

\_\_\_\_\_ grams.

Station \_\_\_\_\_

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

Location \_\_\_\_\_

Date Tested 2/27 Plotted By \_\_\_\_\_

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

Remarks \_\_\_\_\_

Sampled By \_\_\_\_\_ Lab Tested By 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						
⅜"	9.52	0.03		2.0	2.0		
No. 4	4.76	0.07		4.7	6.7	93.3	
Pan	0	1.84		xxxxx			
Total Fractions		1.94		xxxxx			
Sieve Loss-Gain							
Calc. Oven-Dry Fines		1.39		93.3			
Total Oven-Dry		1.49		100.00			

Moisture Determination of Fines:  
Cup No. 18  
Dry Weight 149.5 grams  
Moisture 32.5 %

WEIGHT, GRAMS 100 FINES (Minus No. 4) (CALC.) OVEN-DRY WEIGHT 75.4 grams.

WEIGHT OF TOTAL SAMPLE REPRESENTED BY FINES, OVEN-DRY 80.8 grams.

ASTM SIEVE NUMBER	SIZE (mm)	RETAINED GRAMS	% OF TOTAL SAMPLE RETAINED	ACCUM. % OF TOTAL RETAINED	ACCUM. % PASSING	
					ACTUAL	SPEC. REQ.
8	2.38	4.0	5.0	11.7		
16	1.19	7.2	8.9	20.6		
30	0.59	5.9	7.3	27.9		
50	.297	3.9	4.8	32.7		
100	.149	4.8	5.9	38.6		
200	.074	4.5	5.6	44.4	55.6	
Pan	0	0.1				
Total Fractions		36.4				
Total Dry Weight After Wet Sieving		150.7	30.5	37.7		
Sieve Loss-Gain		170.2	-0.1			

Calculated by NR Date 3/17/69  
Checked by RTT Date 3/20/69

150.7

Note: Cross out sieve numbers not used.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT  
Foundation and Testing Division

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

LAB. SERIAL NO. 22840  
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 2/27/69  
Lab. Tested by NR Date 3/13/69

Moisture Cup No. 18  
Dry Weight, grams \_\_\_\_\_  
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, 80.8 grams  
W = \_\_\_\_\_ grams

Type Calgon  
Dispersing Volume, cc 125  
Agent Strength, % \_\_\_\_\_  
Correction, gm/l = C<sub>d</sub> -7.0  
Soil Specific Gravity = G 2.65  
S. G. Correction factor = a 1  
Meniscus correction, gm/l = C<sub>m</sub> +1.3  
Peroxide Treatment Used (Yes) (No) \_\_\_\_\_  
HYDROMETER NO. \_\_\_\_\_ JAR NO. \_\_\_\_\_

11:48:30 STIR  
11:49 START

Time	11:48:30 STIR 11:49 START	11:50	11:53	12:05	12:53	4:05	8:49
Temperature, °C		20.0	20.0	20.0	20.0	20.0	20.1
Temp. correc. Factor = C <sub>t</sub>		0.0					
Elapsed Time, Minutes = T		1	4	16	64	256	1260
Hydrometer Reading, gm/l = R		40.0	33.0	26.5	19.5	14.0	11.5
Effective Depth, cm = L		3.11	3.30	3.455	3.62	3.74	3.795
Total Correction C = C <sub>d</sub> + C <sub>m</sub> + C <sub>t</sub>		-5.7					
Corrected Reading R <sub>c</sub> = R + C		34.3	27.3	20.8	13.8	8.3	5.8
K		0.1365					
Diameter in mm = D		0.0425	0.0225	0.0118	0.00616	0.00319	0.00146
Percent in Suspension = P		42.4	33.8	25.7	17.1	10.3	7.2
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 3/17/69  
Plotted by \_\_\_\_\_ Date \_\_\_\_\_

Checked by NR  
Date 3/18

Los Angeles County Flood Control District  
Soils and Materials Engineering Division

ML<sup>(24)</sup>

LIQUID LIMIT AND PLASTIC LIMIT TESTS

Lab. Serial No. 22840  
Job \_\_\_\_\_  
Boring No. \_\_\_\_\_  
Sample No. \_\_\_\_\_  
Sampled By \_\_\_\_\_ Date \_\_\_\_\_

Remarks \_\_\_\_\_  
Lab. Tested By NR Date 2/26  
Computed By NR Date 2/27  
Plotted By \_\_\_\_\_ Date \_\_\_\_\_

LIQUID LIMIT

ONE POINT TABLE

Container No.	58
No. of Blows	22
Wet Sample Wt. + Tare	6.439
Dry Sample Wt. + Tare	6.028
Wt. of Water (Diff)	.411
Tare	4.973
Wt. of Dry Soil	1.055
Moisture Content	39.0
Liquid Limit	—
One Point Liquid Limit	38

BLOWS	FACTOR
16	.947
17	.954
18	.961
19	.967
20	.973
21	.979
22	.985
23	.990
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.	52	9	200
Wet Sample Wt. + Tare	5.349	5.319	5.736
Dry Sample Wt. + Tare	5.287	5.243	5.612
Wt. of Water (Diff)	.062	.076	.124
Tare	5.114	5.025	5.256
Wt. of Dry Soil	.173	.218	.356
Moisture Content	36	35	35
Plastic Limit (Average Value)			

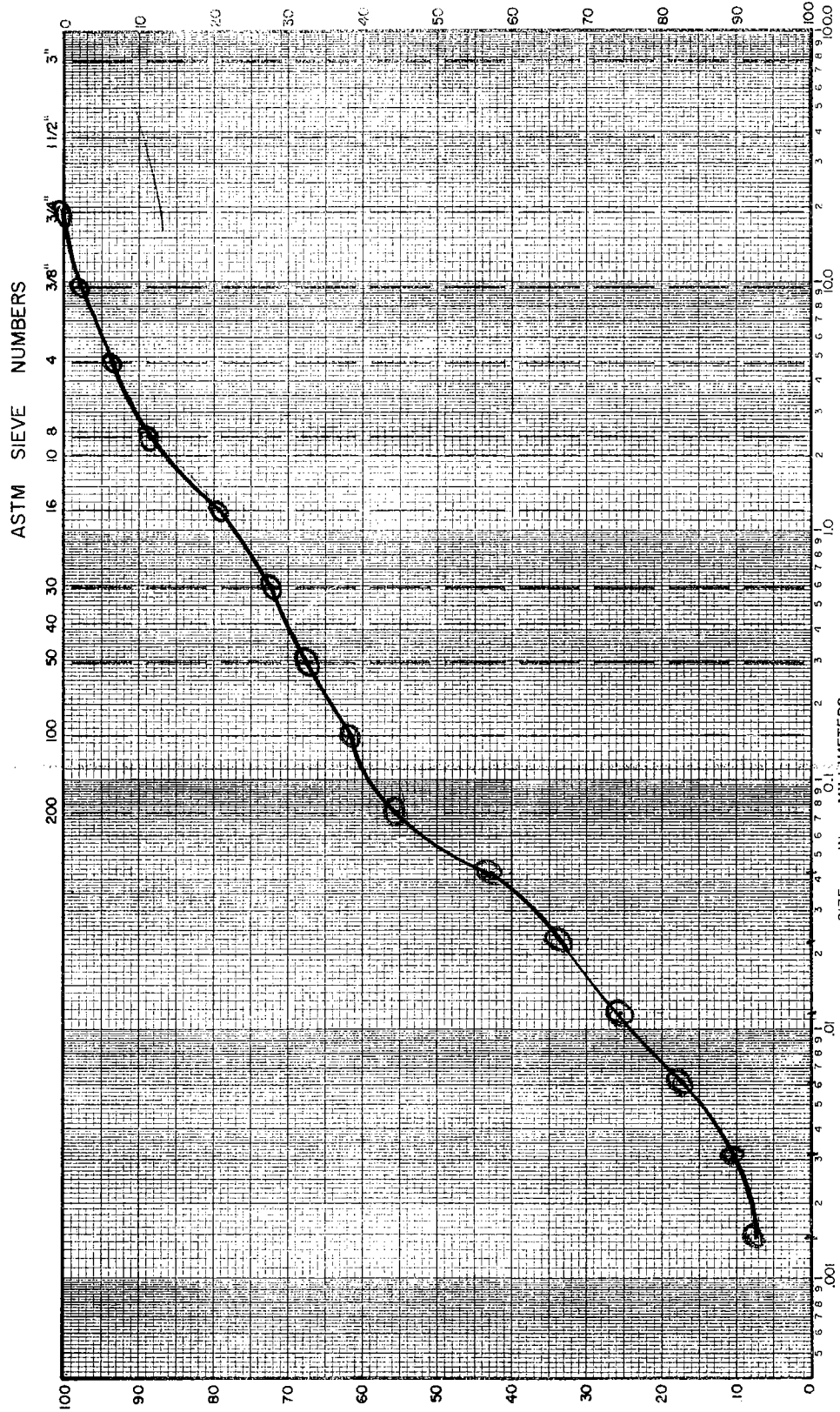
Plasticity Index (LL - PL) = PI = 3

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

LAB. SERIAL NO. 22640  
 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  
 C<sub>u</sub> = D<sub>60</sub> / D<sub>10</sub> \_\_\_\_\_ PLOTTED BY MS  
 C<sub>c</sub> = (D<sub>30</sub>)<sup>2</sup> / (D<sub>10</sub> x D<sub>60</sub>) \_\_\_\_\_ CHECKED BY RTT  
 GROUP SYMBOL \_\_\_\_\_ DATE 3/20/60  
 NOTE: D<sub>x</sub> = PARTICLE DIA. AT X% PASSING



SILT OR CLAY		FINE SAND		MEDIUM SAND		COARSE SAND		FINE GRAVEL		COARSE GRAVEL	
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**LOS ANGELES COUNTY FLOOD CONTROL DISTRICT**  
Soils and Materials Engineering Division

SW 24

**SIEVE ANALYSIS WORK SHEET**

LAB SERIAL NO. 22841  
Project HAY CYN. D.B.  
Station \_\_\_\_\_  
Location \_\_\_\_\_  
Boring No. \_\_\_\_\_ Sample No. \_\_\_\_\_  
Sampled By \_\_\_\_\_ Lab Tested By RP

Total Weight of Sample 2.68 lbs.  
grams.  
Moisture Content of Fines \_\_\_\_\_ %  
Date Tested 2/17/69 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						
1 1/2"	38.1						
(1")	(25.4)						
3/4"	19.1						
3/8"	9.52	0.06		2.3	2.3		
No. 4	4.76	0.17	.23	6.6	8.9	91.1	
Pan	0	2.45		xxxxx			
Total Fractions		2.68		xxxxx			
Sieve Loss-Gain							
Calc. Oven-Dry Fines		2.34		91.1			
Total Oven-Dry		2.57		100.00			

Moisture Determination of Fines:  
Cup No. 56  
Dry Weight 169.7 grams  
Moisture 4.5 %

WEIGHT, GRAMS 100 FINES (Minus No. 4) (CALC.) OVEN-DRY WEIGHT 95.7 grams.  
WEIGHT OF TOTAL SAMPLE REPRESENTED BY FINES, OVEN-DRY 105.0 grams.

ASTM SIEVE NUMBER	SIZE (mm)	RETAINED GRAMS	% OF TOTAL SAMPLE RETAINED	ACCUM. % OF TOTAL RETAINED	ACCUM. % PASSING	
					ACTUAL	SPEC. REQ.
8	2.38	14.55	13.9	22.8		
16	1.19	23.80	22.7	45.5		
30	0.59	21.45	20.4	65.9		
50	.297	15.90	15.1	81.0		
100	.149	11.10	10.6	91.6		
200	.074	4.40	4.2	96.1	3.9	
Pan	0	0.10	.16			
Total Fractions		91.20				
Total Dry Weight After Wet Sieving <u>213.1</u>		91.60	87.2			
Sieve Loss-Gain <u>121.5</u>		-.40				

Calculated by RP Date 2/18/69  
Checked by RJT Date 2/19/69

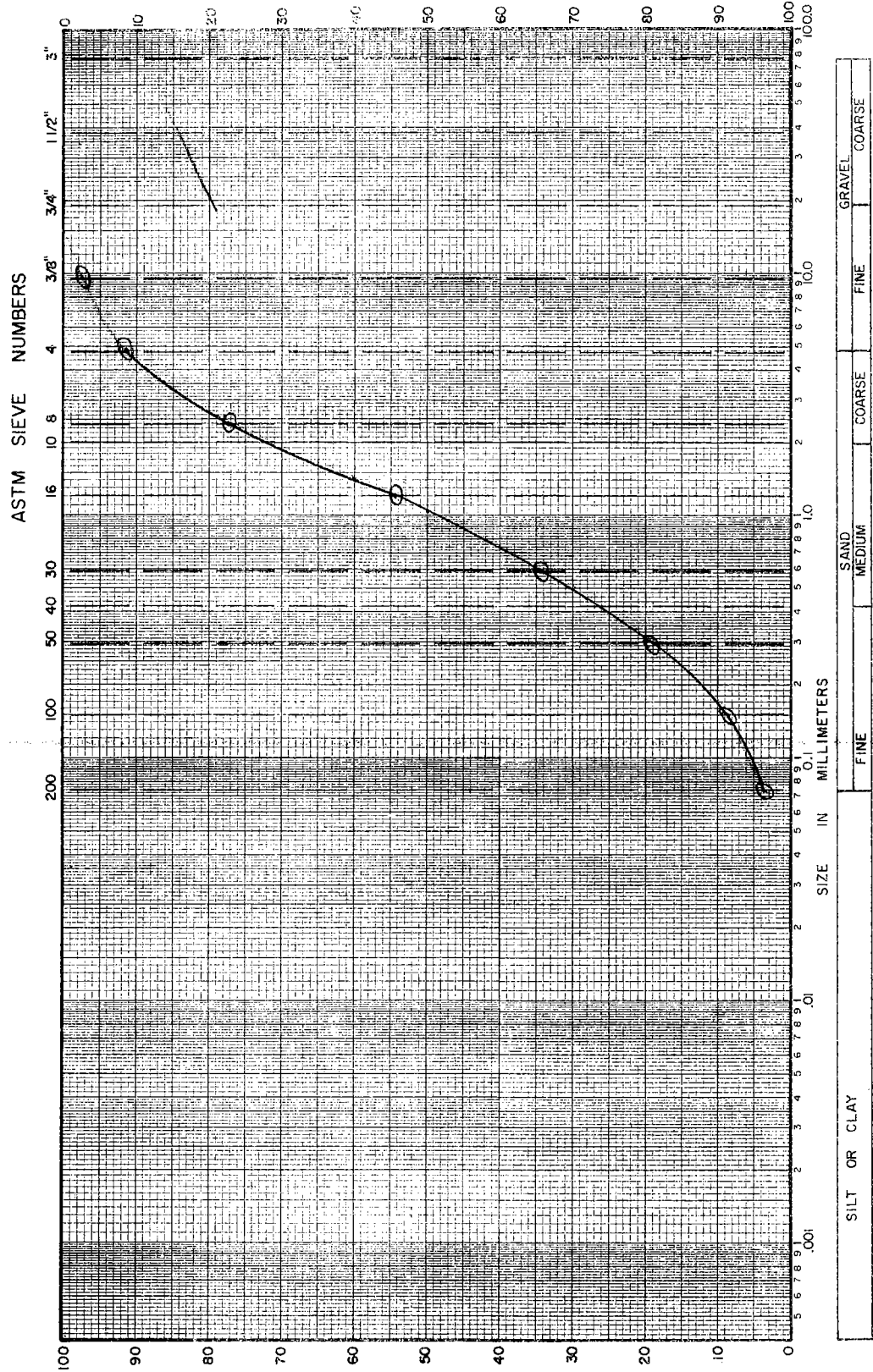
Note: Cross out sieve numbers not used.

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

LAB. SERIAL NO. 22841  
 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 50 D<sub>10</sub> .17 mm  
 D<sub>30</sub> 0.50 mm D<sub>60</sub> 1.4 mm  
1.250 Cu = D<sub>60</sub>/D<sub>10</sub> 8.24 PLOTTED BY \_\_\_\_\_  
1.238 Cc = (D<sub>30</sub>)<sup>2</sup> / (D<sub>10</sub> x D<sub>60</sub>) 1.05 CHECKED BY RII  
 GROUP SYMBOL \_\_\_\_\_ DATE 11/2/69  
 NOTE: D<sub>x</sub> = PARTICLE DIA. AT X% PASSING



SW 24

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT  
Soils and Materials Engineering Division

SIEVE ANALYSIS WORK SHEET

LAB SERIAL NO. 22842  
Project HAY CYN. D.B.  
Station \_\_\_\_\_  
Location \_\_\_\_\_  
Boring No. \_\_\_\_\_ Sample No. \_\_\_\_\_  
Sampled By \_\_\_\_\_ Lab Tested By NR

Total Weight of Sample 2.36 lbs.  
grams.  
Moisture Content of Fines \_\_\_\_\_ %  
Date Tested 2/17/69 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						
1 1/2"	38.1						
(1")	(25.4)						
3/4"	19.1						
3/8"	9.52	0.02		0.9	0.9		
No. 4	4.76	06	08	2.7	3.6	96.4	
Pan	0	2.28		xxxxx			
Total Fractions		2.36		xxxxx			
Sieve Loss-Gain							
Calc. Oven-Dry Fines		2.17		96.4			
Total Oven-Dry		2.25		100.00			

Moisture Determination of Fines:  
Cup No. 48  
Dry Weight 169.2 grams  
Moisture 5.0 %

WEIGHT, GRAMS 100 FINES (Minus No. 4) (CALC.) OVEN-DRY WEIGHT 95.2 grams.  
WEIGHT OF TOTAL SAMPLE REPRESENTED BY FINES, OVEN-DRY 98.8 grams.

ASTM SIEVE NUMBER	SIZE (mm)	RETAINED GRAMS	% OF TOTAL SAMPLE RETAINED	ACCUM. % OF TOTAL RETAINED	ACCUM. % PASSING	
					ACTUAL	SPEC. REQ.
8	2.38	15.50	15.7	19.3		
16	1.19	23.10	23.4	42.7		
30	0.59	24.60	24.9	67.6		
50	.297	14.80	15.0	82.6		
100	.149	9.20	9.3	91.9		
200	.074	3.45	3.5	95.4	4.6	
Pan	0	0.05				
Total Fractions		90.70				
Total Dry Weight After Wet Sieving		212.15	90.65	91.8		
Sieve Loss-Gain		21.50	+	0.05		

Calculated by NR Date 2/19/69  
Checked by SHF Date 2/20/69

212.15  
121.50

Note: Cross out sieve numbers not used.



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

LAB. SERIAL NO. 22042  
 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> 0.17 mm  
 D<sub>30</sub> 0.54 mm D<sub>60</sub> 1.3 mm  
 C<sub>u</sub> = D<sub>60</sub>/D<sub>10</sub> 7.6 PLOTTED BY AR  
292 C<sub>c</sub> = (D<sub>30</sub>)<sup>2</sup> / (D<sub>10</sub> x D<sub>60</sub>) 1.3 CHECKED BY RII  
227 GROUP SYMBOL \_\_\_\_\_ DATE 3/24/62  
 NOTE: D<sub>x</sub> = PARTICLE DIA. AT X% PASSING

