

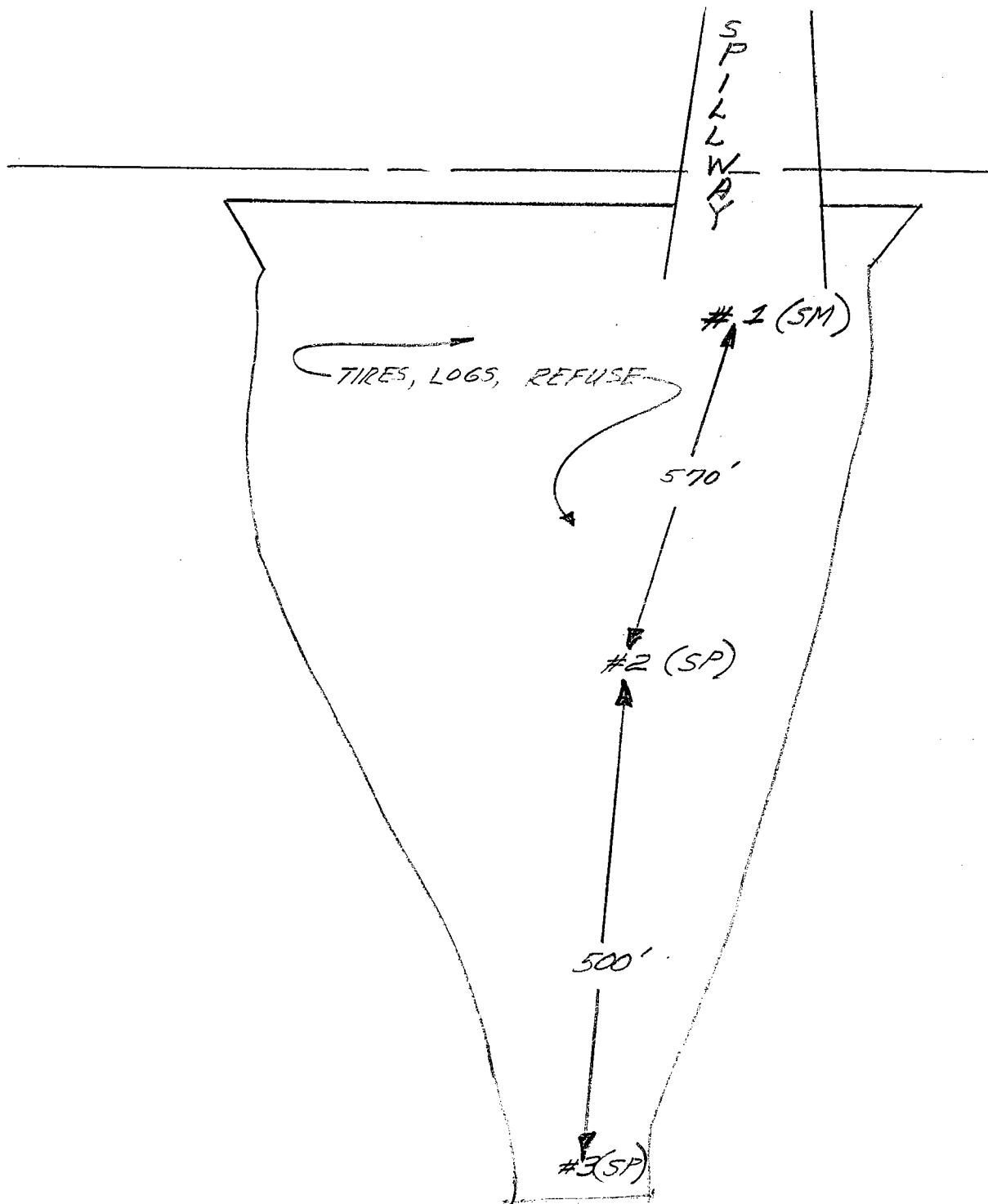
Verdugo Debris Basin

3/3/69

59



JAL-JJB



1

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
Soils and Materials Engineering Division

SM

59

SIEVE ANALYSIS WORK SHEET

LAB SERIAL NO. 22843
Project VERDUGO D.B.
Station _____
Location _____
Boring No. _____ Sample No. _____
Sampled By _____ Lab Tested By R

Total Weight of Sample 2.28 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	0.05		2.5	2.5		
No. 4	4.76	0.15	.20	7.4	9.9	90.1	
Pan	0	2.08		xxxxx			
Total Fractions		2.28		xxxxx			
Sieve Loss-Gain							
Calc. Oven-Dry Fines		1.82		90.1			
Total Oven-Dry		2.02		100.00			

Moisture Determination of Fines:

Cup No. 1
Dry Weight 161.6 grams
Moisture 14.2 %

FINES (Minus No. 4)

WEIGHT, GRAMS 100 (CALC.) OVEN-DRY WEIGHT 87.6 grams.
WEIGHT OF TOTAL SAMPLE REPRESENTED BY FINES, OVEN-DRY 97.2 grams.

ASTM SIEVE NUMBER	SIZE (mm)	RETAINED GRAMS	% OF TOTAL SAMPLE RETAINED	ACCUM. % OF TOTAL RETAINED	ACCUM. % PASSING	
					ACTUAL	SPEC. REQ.
8	2.38	3.95	4.1	14.0		
16	1.19	18.15	18.7	32.7		
30	0.59	28.50	29.3	62.0		
50	.297	14.30	14.7	76.7		
100	.149	5.90	6.1	82.8		
200	.074	1.55	1.6	84.5	15.5	
Pan	0	0.00				
Total Fractions		72.35				
Total Dry Weight After Wet Sieving		194.0	72.50	74.6		
Sieve Loss-Gain		121.5	-.15			

Calculated by R Date 2/18/69
Checked by RJT Date 4/18/69

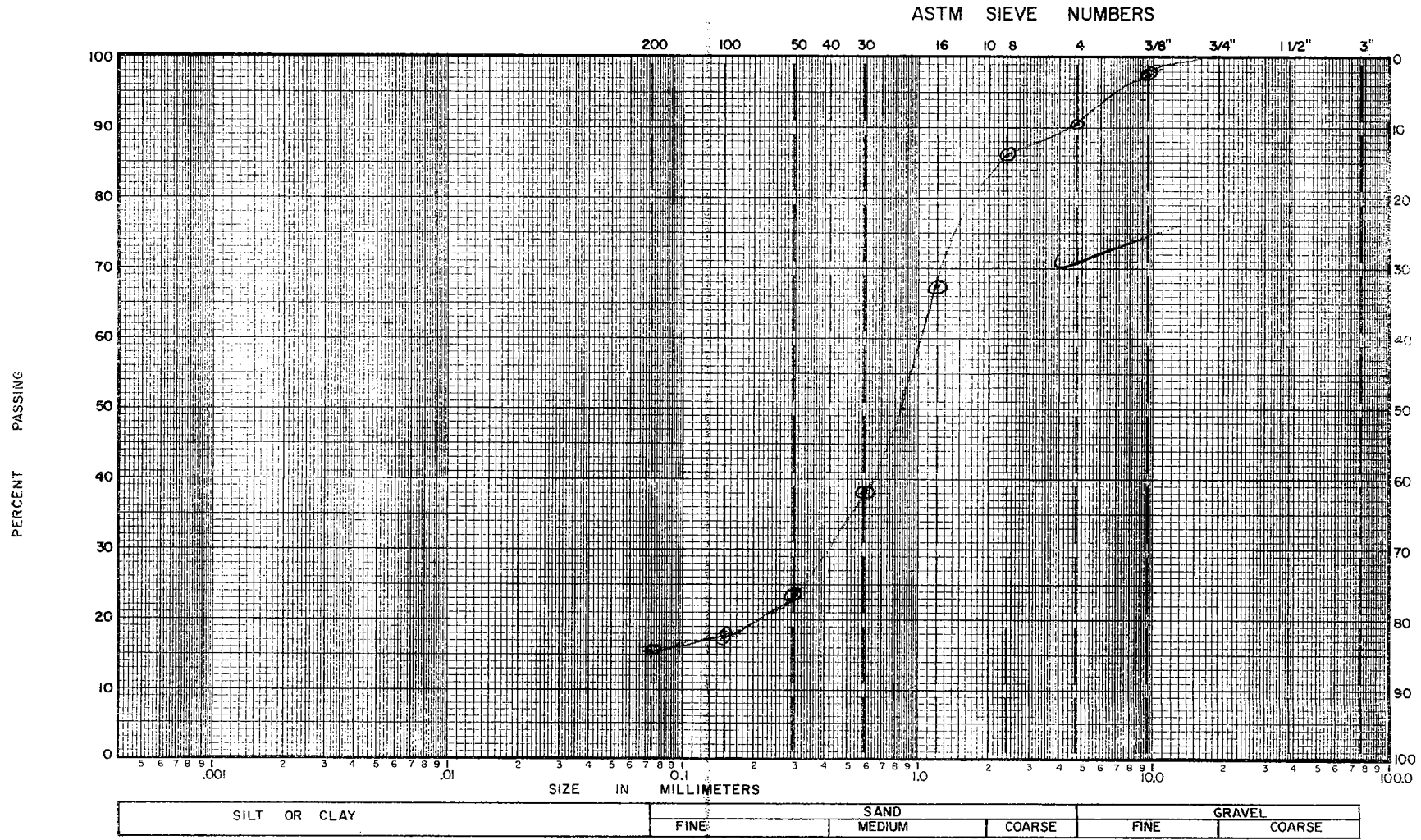
Note: Cross out sieve numbers not used.

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

LAB. SERIAL NO. 22843
 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} _____ mm
 D_{30} _____ mm D_{60} _____ mm
 $C_u = D_{60}/D_{10}$ _____ PLOTTED BY NR
 $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ _____ CHECKED BY RJT
 GROUP SYMBOL _____ DATE 2/19/69
 NOTE: D_x = PARTICLE DIA. AT X% PASSING



(12)

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
Soils and Materials Engineering Division

SP 59

SIEVE ANALYSIS WORK SHEET

LAB SERIAL NO. 22844
Project VERDUGO D.E.
Station _____
Location _____
Boring No. _____ Sample No. _____
Sampled By _____ Lab Tested By AR

Total Weight of Sample 2.26 lbs.
_____ grams.
Moisture Content of Fines _____ %.
Date Tested 2/17/69 Plotted By _____
Remarks NM
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	<u>0.02</u>		<u>1.1</u>	<u>1.1</u>		
No. 4	4.76	<u>0.09</u>	<u>.11</u>	<u>4.8</u>	<u>5.9</u>	<u>94.1</u>	
Pan	0	<u>2.15</u>		xxxxx			
Total Fractions		<u>2.26</u>		xxxxx			
Sieve Loss-Gain		<u>-</u>					
Calc. Oven-Dry Fines		<u>1.78</u>		<u>94.2</u>			
Total Oven-Dry		<u>1.89</u>		100.00			

Moisture Determination of Fines:
Cup No. 11
Dry Weight 156.8 grams
Moisture 20.8 %

WEIGHT, GRAMS 100 FINES (Minus No. 4) (CALC.) OVEN-DRY WEIGHT 82.8 grams.
WEIGHT OF TOTAL SAMPLE REPRESENTED BY FINES, OVEN-DRY 88.0 grams.

ASTM SIEVE NUMBER	SIZE (mm)	RETAINED GRAMS	% OF TOTAL SAMPLE RETAINED	ACCUM. % OF TOTAL RETAINED	ACCUM. % PASSING	
					ACTUAL	SPEC. REQ.
8	2.38	<u>2.75</u>	<u>3.1</u>	<u>9.0</u>		
16	1.19	<u>9.10</u>	<u>10.3</u>	<u>19.3</u>		
30	0.59	<u>11.60</u>	<u>13.2</u>	<u>32.5</u>		
50	.297	<u>15.10</u>	<u>17.2</u>	<u>49.7</u>		
100	.149	<u>29.50</u>	<u>33.5</u>	<u>83.2</u>		
200	.074	<u>11.50</u>	<u>13.1</u>	<u>96.7</u>	<u>3.3</u>	
Pan	0	<u>0.20</u>	<u>.2</u>			
Total Fractions		<u>79.75</u>				
Total Dry Weight After Wet Sieving		<u>201.4</u>	<u>79.90</u>	<u>90.8</u>		
Sieve Loss-Gain		<u>121.5</u>	<u>-.15</u>			

Calculated by NR Date 2/18/69
Checked by PJT Date 2/19/69

201.4
121.5
79.9

Note: Cross out sieve numbers not used.

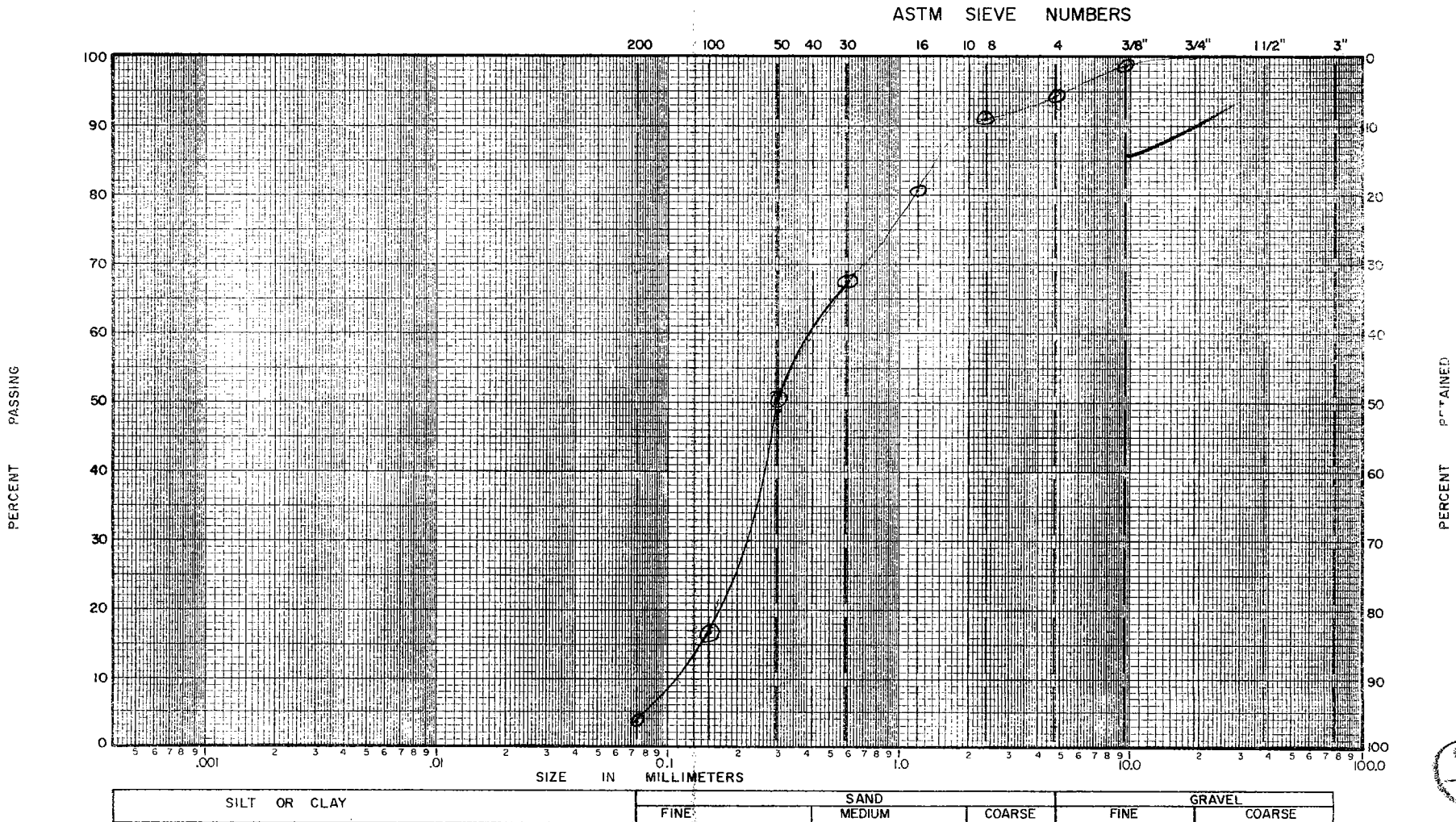
79.9

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

LAB. SERIAL NO. 22844
 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} 0.11 mm ✓
 D_{30} 0.22 mm D_{60} .41 mm ✓
 $C_u = D_{60}/D_{10}$ 3.7 ✓ PLOTTED BY AE
 $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ _____ CHECKED BY RJT
 GROUP SYMBOL _____ DATE 2/19/69
 NOTE: D_x = PARTICLE DIA. AT X% PASSING



17

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
Soils and Materials Engineering Division

SP 59

SIEVE ANALYSIS WORK SHEET

LAB SERIAL NO. 22845
Project VERDUGO D.B.
Station _____
Location _____
Boring No. _____ Sample No. _____
Sampled By _____ Lab Tested By R

Total Weight of Sample 2.09 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						
1½"	38.1						
(1")	(25.4)						
¾"	19.1						
⅜"	9.52	0.06		2.9 ✓	2.9		
No. 4	4.76	0.15	.21 ✓	7.3 ✓	10.2 ✓	89.8 ✓	
Pan	0	1.88		xxxxx			
Total Fractions		2.09 ✓		xxxxx			
Sieve Loss-Gain							
Calc. Oven-Dry Fines		1.84 ✓		89.8 ✓			
Total Oven-Dry		2.05 ✓		100.00			

Moisture Determination of Fines:
Cup No. 71
Dry Weight 171.7 grams
Moisture 2.4 %

FINES (Minus No. 4)

WEIGHT, GRAMS 100 (CALC.) OVEN-DRY WEIGHT 97.7 grams.
WEIGHT OF TOTAL SAMPLE REPRESENTED BY FINES, OVEN-DRY 108.8 grams.

ASTM SIEVE NUMBER	SIZE (mm)	RETAINED GRAMS	% OF TOTAL SAMPLE RETAINED	ACCUM. % OF TOTAL RETAINED	ACCUM. % PASSING	
					ACTUAL	SPEC. REQ.
8	2.38	27.90	25.6 ✓	35.8 ✓		
16	1.19	32.40	29.8 ✓	65.6 ✓		
30	0.59	18.90	17.4 ✓	83.0 ✓		
50	.297	11.80	10.8 ✓	93.8 ✓		
100	.149	4.50	4.1 ✓	97.9 ✓		
200	.074	0.95	0.9 ✓	98.7 ✓	98.9	100
Pan	0	0.00		98.8	100	
Total Fractions		96.45 ✓				
Total Dry Weight After Wet Sieving		218.0	96.50	88.7 ✓		
Sieve Loss-Gain		12.15	-0.15			

Calculated by R Date 2/19/69
Checked by SHE Date 2/20/69

Note: Cross out sieve numbers not used.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

Soils and Materials Engineering Division

MECHANICAL ANALYSIS

LAB. SERIAL NO. 22845
 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} 0.40 mm
 D_{30} 1.05 mm D_{60} 2.2 mm
 $C_u = D_{60}/D_{10}$ 5.5 PLOTTED BY _____
 $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ _____ CHECKED BY SHP
 GROUP SYMBOL _____ DATE _____
 NOTE: D_x = PARTICLE DIA. AT X% PASSING

