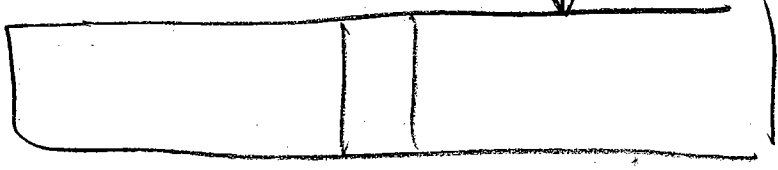


ENGLEWILD  
DEBRIS BASIN



#2 (+)  
(GW)

(SW)  
#3 (+)  
80'



OUTLET

\* Where NATURAL STREAM ENTERS BASIN  
APPROX 60% MAT'L > 4"

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

GW (16)

**SIEVE ANALYSIS WORK SHEET**

LAB SERIAL NO. 22860 Total Weight of Sample 1.32 lbs.  
 Project ENGLEWOOD \_\_\_\_\_ grams.  
 Station \_\_\_\_\_ Moisture Content of Fines \_\_\_\_\_ %.  
 Location \_\_\_\_\_ Date Tested 3/12 Plotted By \_\_\_\_\_  
 Boring No. \_\_\_\_\_ Sample No. 1 Remarks AP  
 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						
1 1/2"	38.1						
(1")	(25.4)	<u>12</u>		<u>9.5</u>	<u>9.5</u>		
3/4"	19.1	<u>18</u>		<u>14.3</u>	<u>23.8</u>		
3/8"	9.52	<u>25</u>	<u>1</u>	<u>19.8</u>	<u>43.6</u>		
No. 4	4.76	<u>15</u>	<u>70</u>	<u>11.9</u>	<u>55.5</u>	<u>44.4</u>	
Pan	0	<u>62</u>		xxxxx			
Total Fractions		<u>1.32</u>		xxxxx			
Sieve Loss-Gain							
Calc. Oven-Dry Fines		<u>.56</u>		<u>44.4</u>			
Total Oven-Dry		<u>1.26</u>		100.00			

Moisture Determination of Fines:  
 Cup No. 50  
 Dry Weight 1636 grams  
 Moisture 11.6 %

WEIGHT, GRAMS 100 FINES (Minus No. 4) (CALC.) OVEN-DRY WEIGHT 89.6 grams.  
 WEIGHT OF TOTAL SAMPLE REPRESENTED BY FINES, OVEN-DRY 202.0 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>22.4</u>	<u>11.1</u>	<u>11.1</u>		
16	1.19	<u>26.1</u>	<u>12.9</u>	<u>79.5</u>		
30	0.59	<u>14.2</u>	<u>7.0</u>	<u>86.5</u>		
50	.297	<u>7.8</u>	<u>3.9</u>	<u>90.4</u>		
100	.149	<u>5.9</u>	<u>2.9</u>	<u>93.3</u>		
200	.074	<u>3.5</u>	<u>1.7</u>	<u>95.2</u>	<u>4.8</u>	
Pan	0	<u>0.0</u>				
Total Fractions		<u>79.9</u>				
Total Dry Weight After Wet Sieving		<u>200.4</u>	<u>80.2</u>	<u>39.7</u>		
Sieve Loss-Gain		<u>120.2</u>	<u>-0.3</u>			

Calculated by NR Date 3/17/69  
 Checked by SHF Date 3/18/69

Note: Cross out sieve numbers not used.

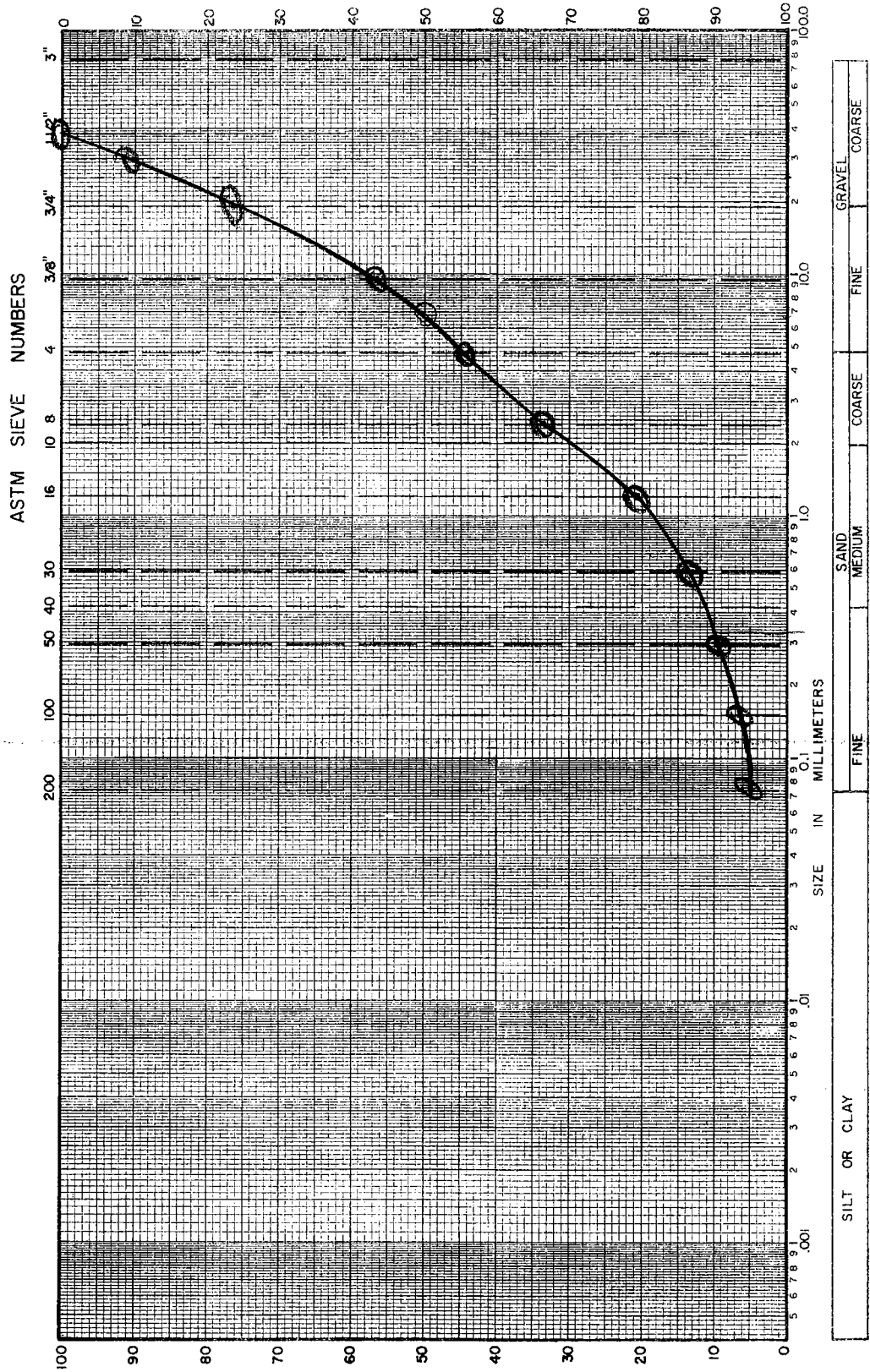
**LOS ANGELES COUNTY FLOOD CONTROL DISTRICT**  
Soils and Materials Engineering Division  
**MECHANICAL ANALYSIS**

LAB. SERIAL NO. 22860  
 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> 0.33 mm  
 D<sub>30</sub> \_\_\_\_\_ mm D<sub>60</sub> \_\_\_\_\_ mm  
 Cu = D<sub>60</sub>/D<sub>10</sub> 33.4 PLOTTED BY SR  
 Cc = (D<sub>30</sub>)<sup>2</sup> / (D<sub>10</sub> x D<sub>60</sub>) 1.1 CHECKED BY SHF  
400 GROUP SYMBOL GW DATE 3/18/69  
3.63

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



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

SW (16)  
GW

**SIEVE ANALYSIS WORK SHEET**

LAB SERIAL NO. 22861  
Project ENGLEWILD D.B.  
Station \_\_\_\_\_  
Location \_\_\_\_\_  
Boring No. \_\_\_\_\_ Sample No. 2  
Sampled By JJB Lab Tested By FK-NR

Total Weight of Sample 1.38 lbs.  
grams.  
Moisture Content of Fines \_\_\_\_\_ %  
Date Tested 2/28 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						
1 1/2"	38.1						
(1")	(25.4)						
3/4"	19.1						
3/8"	9.52	0.14		11.1	11.1		
No. 4	4.76	0.14		11.1	22.2	77.8	
Pan	0	1.10	.30	xxxxx			
Total Fractions		1.38		xxxxx			
Sieve Loss-Gain		—		—			
Calc. Oven-Dry Fines		0.98		77.8			
Total Oven-Dry		1.26		100.00			

Moisture Determination of Fines:  
Cup No. 63  
Dry Weight 163.4 grams  
Moisture 11.9 %

FINES (Minus No. 4)

WEIGHT, GRAMS 100 (CALC.) OVEN-DRY WEIGHT 89.4 grams.  
WEIGHT OF TOTAL SAMPLE REPRESENTED BY FINES, OVEN-DRY 114.9 grams.

ASTM SIEVE NUMBER	SIZE (mm)	RETAINED GRAMS	% OF TOTAL SAMPLE RETAINED	ACCUM. % OF TOTAL RETAINED	ACCUM. % PASSING	
					ACTUAL	SPEC. REQ.
8	2.38	15.9	13.8	36.0		
16	1.19	35.8	31.2	67.2		
30	0.59	20.3	17.7	84.9		
50	.297	9.1	7.9	92.8		
100	.149	4.2	3.7	96.49	61.5	
200	.074	1.4	1.2	97.6	2.4	
Pan	0	—				
Total Fractions		86.7				
Total Dry Weight After Wet Sieving		86.6	75.4			
Sieve Loss-Gain		-0.1				

Calculated by FK Date 3-5-69  
Checked by SHF Date 3/6/69

Note: Cross out sieve numbers not used.

209.8  
120.2



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

SW (16)

**SIEVE ANALYSIS WORK SHEET**

LAB SERIAL NO. 22862 Total Weight of Sample 1.27 lbs.  
 Project ENGLEWILD \_\_\_\_\_ grams.  
 Station \_\_\_\_\_ Moisture Content of Fines \_\_\_\_\_ %.  
 Location \_\_\_\_\_ Date Tested 3/3/69 Plotted By \_\_\_\_\_  
 Boring No. \_\_\_\_\_ Sample No. 3 Remarks AP  
 Sampled By \_\_\_\_\_ Lab Tested By NR-FK 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	.05		4.6	4.6		
No. 4	4.76	.12	.17	11.1	15.7	84.3	
Pan	0	1.10		xxxxx			
Total Fractions		1.27		xxxxx			
Sieve Loss-Gain							
Calc. Oven-Dry Fines		0.91		84.3			
Total Oven-Dry		1.08		100.00			

Moisture Determination of Fines:  
 Cup No. 14  
 Dry Weight 156.6 grams  
 Moisture 21.1 %

FINES (Minus No. 4)

WEIGHT, GRAMS 100 (CALC.) OVEN-DRY WEIGHT 82.6 grams.  
 WEIGHT OF TOTAL SAMPLE REPRESENTED BY FINES, OVEN-DRY 98.0 grams.

ASTM SIEVE NUMBER	SIZE (mm)	RETAINED GRAMS	% OF TOTAL SAMPLE RETAINED	ACCUM. % OF TOTAL RETAINED	ACCUM. % PASSING	
					ACTUAL	SPEC. REQ.
8	2.38	8.8	9.0	24.7		
16	1.19	23.9	24.4	49.1		
30	0.59	21.8	22.2	71.3		
50	.297	16.9	17.2	88.5	88.5	
100	.149	8.0	8.2	96.8	96.7	
200	.074	2.1	2.1	98.8	1.2	
Pan	0	0.1				
Total Fractions		81.6				
Total Dry Weight After Wet Sieving		201.6	83.1			
Sieve Loss-Gain		120.2	+1.2			

Calculated by NR Date 3/3/69  
 Checked by SHF Date 3/3/69

Note: Cross out sieve numbers not used.

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

LAB. SERIAL NO. 22862  
 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 \_\_\_\_\_  $D_{10}$  0.20 mm  
 $D_{30}$  1.65 mm  $D_{60}$  7.80 mm  
 $C_u = D_{60}/D_{10}$  \_\_\_\_\_ PLOTTED BY AR  
1.42  $C_c = (D_{30})^2$  \_\_\_\_\_  
2.80  $D_{10} \times D_{60}$  \_\_\_\_\_ CHECKED BY SHF  
 GROUP SYMBOL \_\_\_\_\_ DATE 3/3/69  
 NOTE:  $D_x$  = PARTICLE DIA. AT X% PASSING

