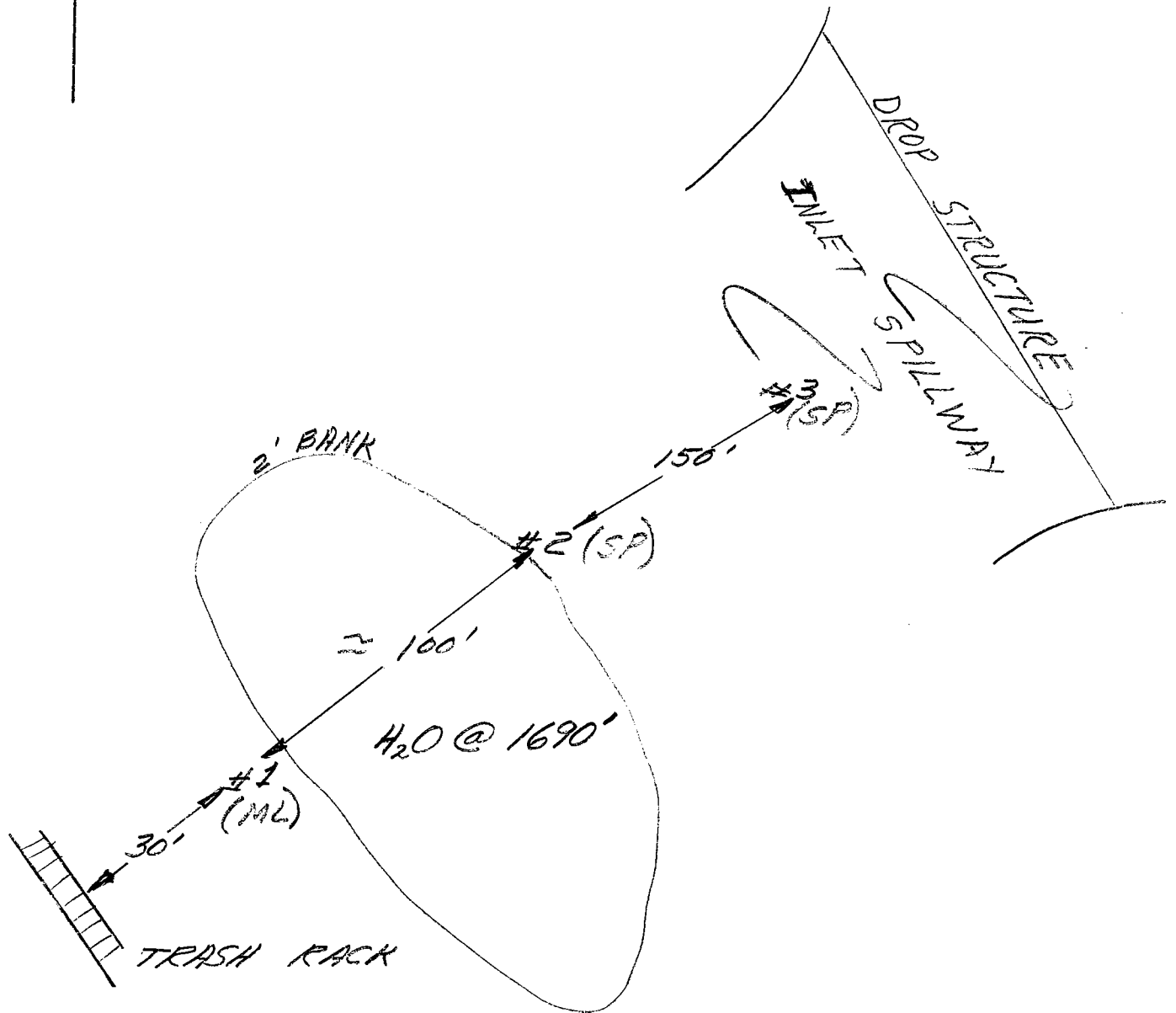
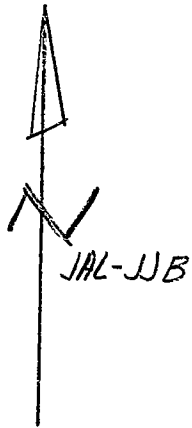


Pickens Debris Basin

41

3/3/69



NOT original

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
Soils and Materials Engineering Division

ML

SIEVE ANALYSIS WORK SHEET

LAB SERIAL NO. 22849
Project PICKENS CYN DB
Station _____
Location _____
Boring No. 1 Sample No. _____
Sampled By WBJAL Lab Tested By NR

Total Weight of Sample 1.11 lbs.
_____ grams.
Moisture Content of Fines _____ %.
Date Tested 2/27 Plotted By _____
Remarks _____
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						
No. 4	4.76			—	—	100.0	
Pan	0	1.11		xxxxx			
Total Fractions		1.11		xxxxx			
Sieve Loss-Gain							
Calc. Oven-Dry Fines		0.75		100.0			
Total Oven-Dry		0.75		100.00			

Moisture Determination of Fines:

Cup No. 39
 Dry Weight 107.6 grams
 Moisture 48.8 %

Handwritten calculations:
 $\frac{74}{50} = 1.48$
 $\frac{16.4}{33.6} = 0.488$
 $\frac{124.0}{107.6} = 1.152$
 $\frac{16.4}{107.6} = 0.152$

FINES (Minus No. 4)

WEIGHT, GRAMS 100 (CALC.) OVEN-DRY WEIGHT 67.3 grams.
WEIGHT OF TOTAL SAMPLE REPRESENTED BY FINES, OVEN-DRY 67.3 grams.

ASTM SIEVE NUMBER	SIZE (mm)	RETAINED GRAMS	% OF TOTAL SAMPLE RETAINED	ACCUM. % OF TOTAL RETAINED	ACCUM. % PASSING	
					ACTUAL	SPEC. REQ.
8	2.38	0.0				
16	1.19	0.1	0.1	0.1		
30	0.59	0.1	0.1	0.2		
50	.297	0.1	0.1	0.3		
100	.149	0.2	0.3	0.6		
200	.074	0.6	0.9	1.6	98.4	
Pan	0	0.0				
Total Fractions		1.1				
Total Dry Weight After Wet Sieving		121.3	1.1	1.6		
Sieve Loss-Gain		120.2				

Calculated by NR Date 3/19/69
Checked by RJT Date 3/20/69

Note: Cross out sieve numbers not used.

#4 (41)

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
Foundation and Testing Division

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

LAB. SERIAL NO. 22849
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. _____
Dry Weight, grams _____
Moisture Content, % _____
Oven-Dry Weight
Passing No. 4 grams _____
Percent Passing No. 4 _____; No. 10 _____ = P₁₀
Oven-Dry Weight of total
Sample represented,
W = 67.3 grams

Type _____ C_g/cc
Dispersing Volume, cc _____
Agent Strength, % _____
Correction, gm/l = C_d _____ -7.0
Soil Specific Gravity = G _____ 2.65
S. G. Correction factor = a _____
Meniscus correction, gm/l = C_m _____ +1.3
Peroxide Treatment Used (Yes) (No) (-5.7)
HYDROMETER NO. _____ JAR NO. _____

11:39:30 STIR
11:39:30 START
11:40 START

Time	11:41	11:44	11:56	12:44	3:56	8:40
Temperature, °C	20.0	20.0	20.0	20.0	20.0	20.2
Temp. correc. Factor = C _t	0	0	0	0	0	0
Elapsed Time, Minutes = T	1	4	16	64	256	1260
Hydrometer Reading, gm/l = R	51.5	35.5	22.0	14.5	11.0	10.0
Effective Depth, cm = L	2.80	3.24	3.56	3.725	3.81	3.83
Total Correction C = C _d + C _m + C _t	-5.7	-5.7	-5.7	-5.7	-5.7	-5.7
Corrected Reading R _c = R + C	45.8	29.8	16.3	8.8	5.3	4.3
K	.01365					
Diameter in mm = D	.0382	.0221	.0121	.00635	.00325	.00147
Percent in Suspension = P	68.0	44.3	24.2	13.1	7.9	6.4
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 3/19/69
Plotted by _____ Date _____

Checked by NR
Date 3/18

Los Angeles County Flood Control District
Soils and Materials Engineering Division

LIQUID LIMIT AND PLASTIC LIMIT TESTS

Lab. Serial No. 22849
Job PICKENS D.B.
Boring No. _____
Sample No. _____
Sampled By _____ Date _____

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

LIQUID LIMIT

ONE POINT TABLE

Container No.	28
No. of Blows	20
Wet Sample Wt. + Tare	
Dry Sample Wt. + Tare	NO
Wt. of Water (Diff)	
Tare	5.320
Wt. of Dry Soil	
Moisture Content	
Liquid Limit	
One Point	
Liquid Limit	

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.	67	103	118
Wet Sample Wt. + Tare			
Dry Sample Wt. + Tare			
Wt. of Water (Diff)			
Tare	5.010	5.854	5.540
Wt. of Dry Soil			
Moisture Content			
Plastic Limit (Average Value)			

Plasticity Index (LL - PL) = PI = _____

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

LAB. SERIAL NO. 22849

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

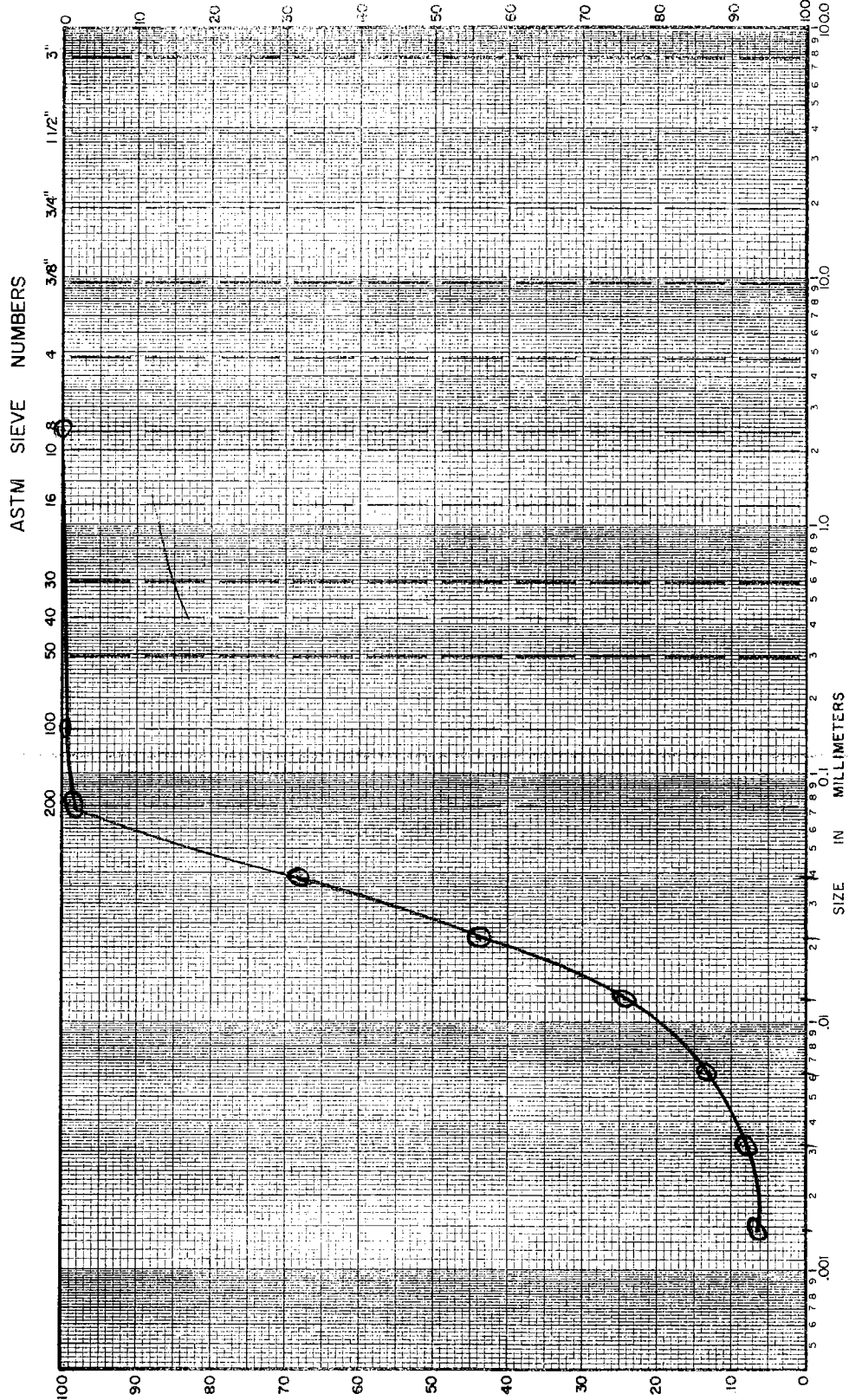
D₃₀ _____ mm D₆₀ _____ mm

Cu = D₆₀/D₁₀ _____ PLOTTED BY RP

Cc = (D₃₀)² / (D₁₀ x D₆₀) _____ CHECKED BY RST

GROUP SYMBOL _____ DATE 3/20/69

NOTE: D_x = PARTICLE DIA. AT X% PASSING



SILT OR CLAY	SAND MEDIUM	FINE COARSE	GRAVEL COARSE
--------------	----------------	----------------	------------------

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
Soils and Materials Engineering Division

SP (41)

SIEVE ANALYSIS WORK SHEET

LAB SERIAL NO. 22850
Project PICKENS CYN DB
Station _____
Location _____
Boring No. 2 Sample No. _____
Sampled By JPB-JAL Lab Tested By NR

Total Weight of Sample _____ lbs.
_____ grams.
Moisture Content of Fines _____ %.
Date Tested 2/17/69 Plotted By _____
Remarks NAN P
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	0.03		1.8	1.8		
⅜"	9.52	0.08		4.9	6.7		
No. 4	4.76	0.06	.17	3.7	10.4	89.6	
Pan	0	1.48		xxxxx			
Total Fractions		1.65		xxxxx			
Sieve Loss-Gain							
Calc. Oven-Dry Fines		1.46		89.6			
Total Oven-Dry		1.63		100.00			

Moisture Determination
of Fines: 98.6
Cup No. 47
Dry Weight 172.6 grams
Moisture 1.4 % < 2.0

WEIGHT, GRAMS 100 FINES (Minus No. 4) (CALC.) OVEN-DRY WEIGHT 98.6 grams.
WEIGHT OF TOTAL SAMPLE REPRESENTED BY FINES, OVEN-DRY 110.0 grams.

ASTM SIEVE NUMBER	SIZE (mm)	RETAINED GRAMS	% OF TOTAL SAMPLE RETAINED	ACCUM. % OF TOTAL RETAINED	ACCUM. % PASSING	
					ACTUAL	SPEC. REQ.
8	2.38	6.40	5.8	16.2		
16	1.19	18.85	17.1	33.3		
30	0.59	29.55	26.9	60.2		
50	.297	25.60	23.3	83.5		
100	.149	13.40	12.2	95.7		
200	.074	3.20	2.9	98.7	1.3	
Pan	0	0.00				
Total Fractions		97.0				
Total Dry Weight After Wet Sieving		218.6 124.5	97.1	88.3		
Sieve Loss-Gain		1				

Calculated by NR Date 2/17/69
Checked by RTT Date 2/19/69

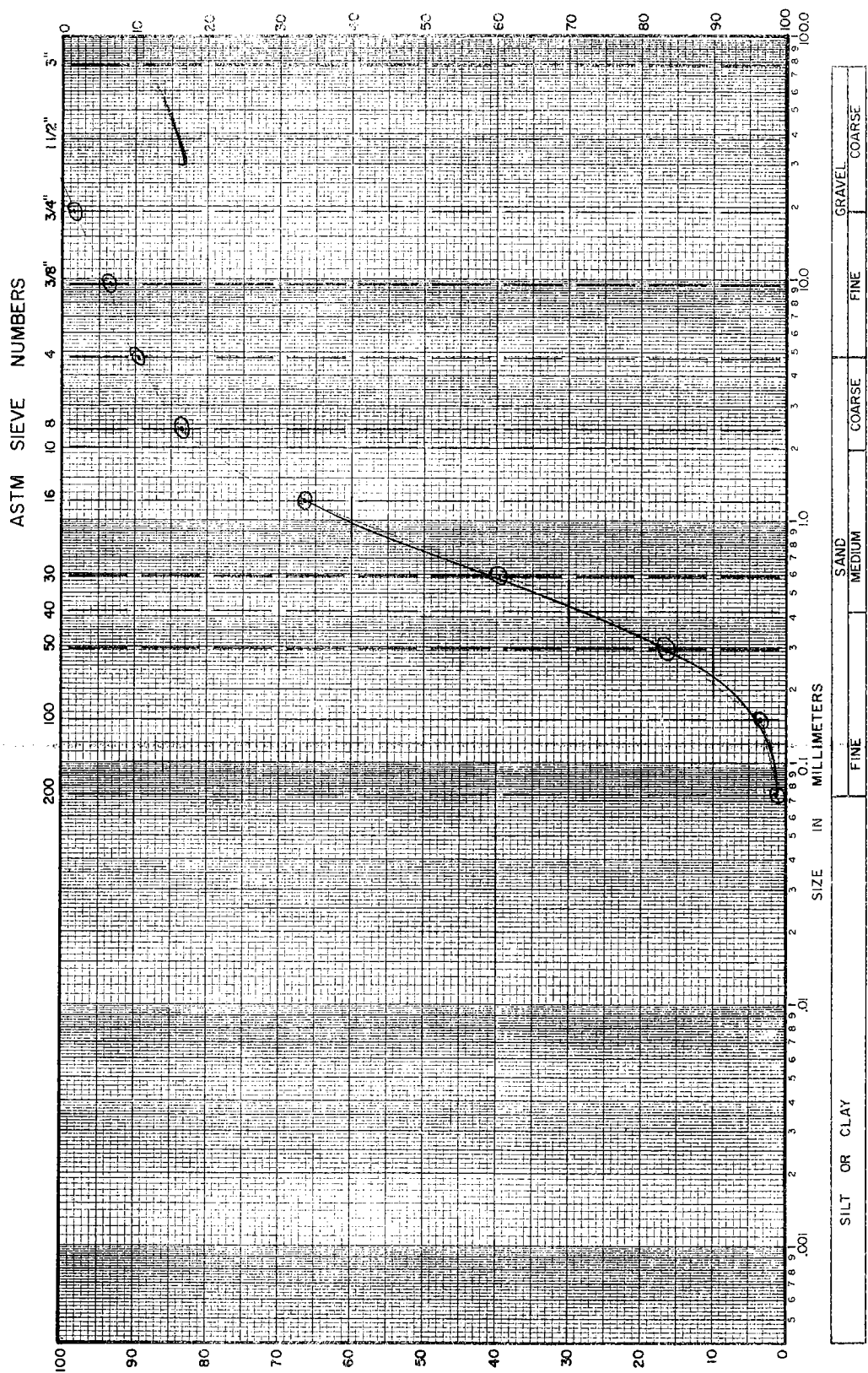
Note: Cross out sieve numbers not used.

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

LAB. SERIAL NO. 22850
 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 D₁₀ .23 mm
 D₃₀ 0.43 mm D₆₀ .97 mm
 C_u = D₆₀/D₁₀ 4.2 PLOTTED BY _____
 C_c = (D₃₀)² / (D₁₀ x D₆₀) _____ CHECKED BY RJT
 GROUP SYMBOL _____ DATE 2/20/64
 NOTE: D_x = PARTICLE DIA. AT X% PASSING



41

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
Soils and Materials Engineering Division

SP (4)

SIEVE ANALYSIS WORK SHEET

LAB SERIAL NO. 22851
Project PICKENS CYN DB
Station _____
Location _____
Boring No. 3 Sample No. _____
Sampled By JOB-JAL Lab Tested By NR

Total Weight of Sample 1.75 lbs.
_____ grams.
Moisture Content of Fines _____ %.
Date Tested 2/17/69 Plotted By _____
Remarks NON PLASTIC
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	0.02		1.2	1.2		
No. 4	4.76	0.05	07	2.9	4.1	95.9	
Pan	0	1.68		xxxxx			
Total Fractions		1.75		xxxxx			
Sieve Loss-Gain							
Calc. Oven-Dry Fines		1.63		95.9			
Total Oven-Dry		1.70		100.00			

Moisture Determination of Fines:
Cup No. 69
Dry Weight 170.8 grams
Moisture 3.3 %

FINES (Minus No. 4)

WEIGHT, GRAMS 100 (CALC.) OVEN-DRY WEIGHT 96.8 grams.
WEIGHT OF TOTAL SAMPLE REPRESENTED BY FINES, OVEN-DRY 100.9 grams.

ASTM SIEVE NUMBER	SIZE (mm)	RETAINED GRAMS	% OF TOTAL SAMPLE RETAINED	ACCUM. % OF TOTAL RETAINED	ACCUM. % PASSING	
					ACTUAL	SPEC. REQ.
8	2.38	5.05	5.0	9.1		
16	1.19	18.25	18.1	27.2		
30	0.59	31.95	31.7	58.9		
50	.297	26.80	26.6	85.5		
100	.149	10.95	10.9	96.4		
200	.074	2.40	2.4	98.8	1.2	
Pan	0	0.00	—			
Total Fractions		95.40				
Total Dry Weight After Wet Sieving		217.1 121.5	95.60	94.7		
Sieve Loss-Gain		-.20				

Calculated by NR 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. 22851

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 78.8 PERCENT (+) NO. 4 4.1

%(+) NO. 4 / %(+) NO. 200 4.50 D₁₀ 0.23 mm

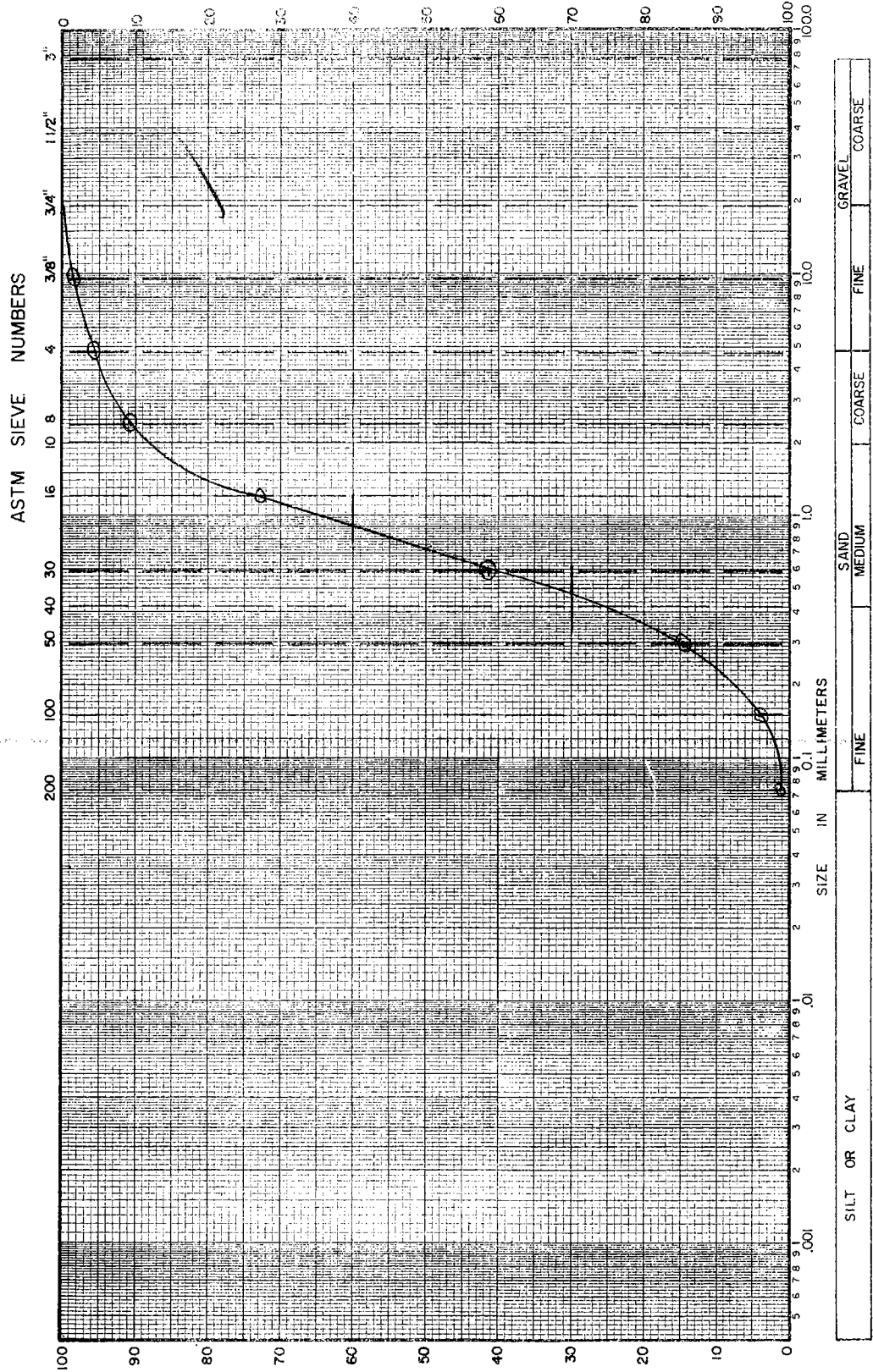
D₃₀ 0.47 mm D₆₀ 0.90 mm

Cu = D₆₀/D₁₀ 3.9 PLOTTED BY NR

Cc = (D₃₀)² / (D₁₀ x D₆₀) _____ CHECKED BY RIF

GROUP SYMBOL _____ DATE 2/12/60

NOTE: D_x = PARTICLE DIA. AT X% PASSING



(41)