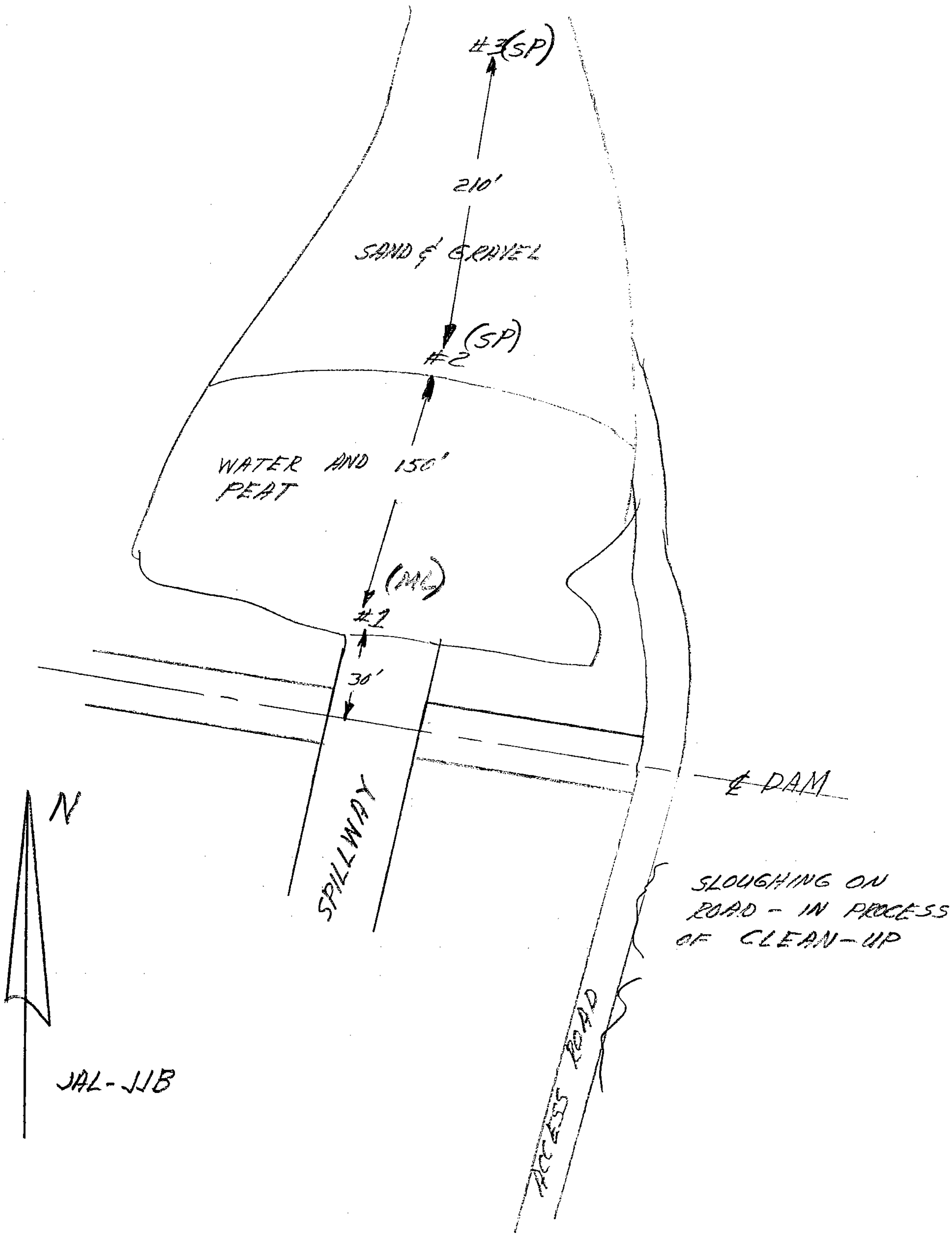
Ruby Debris Basin 2/25/69 from 2/14/69 (44)



(44)

ML

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
Soils and Materials Engineering Division

SIEVE ANALYSIS WORK SHEET

LAB SERIAL NO. 22902
Project RUBY DD
Station
Location
Boring No. 1 Sample No. 1
Sampled By Lab Tested By NR

Total Weight of Sample lbs.
grams.
Moisture Content of Fines %.
Date Tested 3/12 Plotted By
Remarks NP
Intended Use

GRAVEL (Plus No. 4)

ASTM SIEVE NUMBER	SIZE (mm)	RETAINED LBS.	RETAINED GRAMS	% OF TOTAL OVEN-DRY RETAINED	ACCUM.' % RETAINED	ACCUM. % PASSING ACTUAL	ACCUM. % PASSING SPEC. REQ.
3"	76.2						
1½"	38.1						
(1")	(25.4)						
3/4"	19.1						
3/8"	9.52						
No. 4	4.76			—	0	100.0	
Pan	0	1.23		xxxxx			
Total Fractions				xxxxx			
Sieve Loss-Gain							
Calc. Oven-Dry Fines		.91		100.0			
Total Oven-Dry		.91		100.00			

Moisture Determination of Fines:
Cup No. 1
Dry Weight 148.1 grams
Moisture 35.0 %

FINES (Minus No. 4)

WEIGHT, GRAMS 100 (CALC.) OVEN-DRY WEIGHT 74.1 grams.
WEIGHT OF TOTAL SAMPLE REPRESENTED BY FINES, OVEN-DRY 74.1 grams.

ASTM SIEVE NUMBER	SIZE (mm)	RETAINED GRAMS	% OF TOTAL SAMPLE RETAINED	ACCUM.' % OF TOTAL RETAINED	ACCUM. % PASSING ACTUAL	ACCUM. % PASSING SPEC. REQ.
8	2.38	0.1	0.1	0.1		
16	1.19	0.0	—	0.1		
30	0.59	0.1	0.1	0.2		
50	.297	0.1	0.1	0.3		
100	.149	1.5	2.0	2.3		
200	.074	11.0	14.8	18.2	81.8	
Pan	0	0.8	1.0			
Total Fractions		13.6				
Total Dry Weight After Wet Sieving	133.7	13.5	18.2			
Sieve Loss-Gain	120.2	.1				

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

Note: Cross out sieve numbers not used.

#4 (44)

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
Foundation and Testing Division

HYDROMETER ANALYSIS WORK SHEET

ASTM Method D422-54T
(Modified)

LAB. SERIAL NO. 22902
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 3/24/69

Moisture Cup No. 1
Dry Weight, grams 148.1
Moisture Content, %
Oven-Dry Weight Passing No. 4 grams
Percent Passing No. 4 ; No. 10 = P10
Oven-Dry Weight of total Sample represented, W = 74.1 grams

Dispersing Agent: Type Calgon; Volume, cc 125; Strength, %
Correction, gm/l = C_d −8.0
Soil Specific Gravity = G 2.65
S. G. Correction factor = a 1.0 (−6.7)
Meniscus correction, gm/l = C_m +1.3
Peroxide Treatment Used (Yes) (No)
HYDROMETER NO. JAR NO.

Time (11:39:30 STIR; 11:40 START)	11:41	11:44	11:56	12:44	3:56	8:40	
Temperature, °C	20.0	19.9	19.6	20.5	20.6	20.0	
Temp. correc. Factor = C_t	0	0	−.1	+.1	+0.1	0	
Elapsed Time, Minutes = T	1	4	16	64	256	1260	
Hydrometer Reading, gm/l = R	44.6	26.0	18.0	13.5	11.5	10.0	
Effective Depth, cm = L	3.00	3.46	3.65	3.755	3.795	3.83	
Total Correction $C = C_d + C_m + C_t$	−6.7	−6.7	−6.8	−6.6	−6.6	−6.7	
Corrected Reading $R_c = R + C$	37.8	19.3	11.2	6.9	4.9	3.3	
K	.01365				.01348	.01365	
Diameter in mm = D	.0409	.0236	.0125	.00643	.00319	.00247	
Percent in Suspension = P	51.1	26.1	15.1	9.3	6.6	4.5	
Percent of (—10) = P'							

$$P = \frac{(R_c)\,(a)\,(100)}{(W)} \qquad P' = \frac{(P)\,(100)}{(P_{10})} \qquad D = K\sqrt{\frac{L}{T}}$$

Computed by NR Date 3/24/69
Plotted by Date

Checked by JJB
Date 3/25/69

76H930— Cdb 9-63

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

Soils and Materials Engineering Division

MECHANICAL ANALYSIS

LAB. SERIAL NO. 22902

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

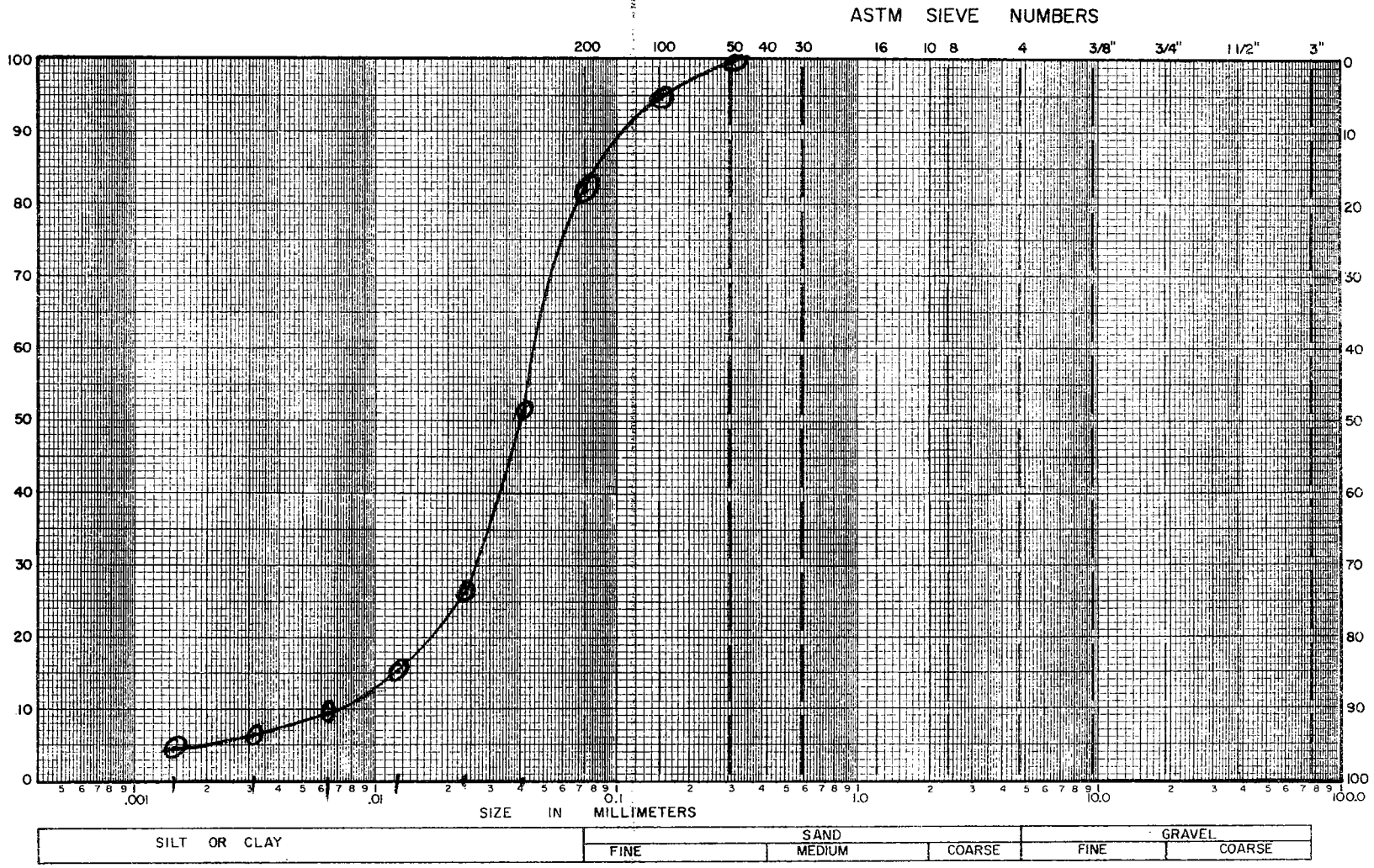
D_{30} _____ mm D_{60} _____ mm

$Cu = D_{60}/D_{10}$ _____ PLOTTED BY AB

$Cc = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ _____ CHECKED BY _____

GROUP SYMBOL _____ DATE _____

NOTE: D_X = PARTICLE DIA. AT X % PASSING



44

(44)

SP 1

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
Soils and Materials Engineering Division

SIEVE ANALYSIS WORK SHEET

LAB SERIAL NO. 22903 — Total Weight of Sample 1.30 lbs.
Project RUBY — grams.
Station — Moisture Content of Fines %.
Location — Date Tested 3/5/69 Plotted By
Boring No. 2 Sample No. 1 — Remarks ND
Sampled By VTB Lab Tested By MR-FK — Intended Use

GRAVEL (Plus No. 4)

ASTM SIEVE NUMBER	SIZE (mm)	RETAINED LBS.	RETAINED GRAMS	% OF TOTAL OVEN-DRY RETAINED	ACCUM. % RETAINED	ACCUM. % PASSING ACTUAL	ACCUM. % PASSING SPEC. REQ.
3"	76.2						
1½"	38.1						
(1")	(25.4)						
3/4"	19.1						
3/8"	9.52	0.01		0.8	0.8		
No. 4	4.76	0.12	.13	9.7 9.8	~~10.6~~ 10.5	89.5	
Pan	0	1.17		xxxxx			
Total Fractions		1.30		xxxxx			
Sieve Loss-Gain							
Calc. Oven-Dry Fines		1.11		89.5			
Total Oven-Dry		1.24		100.00			

Moisture Determination of Fines:
Cup No. 62
Dry Weight 69.2 grams
Moisture 5.0 %

FINES (Minus No. 4)

WEIGHT, GRAMS 100 (CALC.) OVEN-DRY WEIGHT 95.2 grams.
WEIGHT OF TOTAL SAMPLE REPRESENTED BY FINES, OVEN-DRY 106.4 grams.

ASTM SIEVE NUMBER	SIZE (mm)	RETAINED GRAMS	% OF TOTAL SAMPLE RETAINED	ACCUM. % OF TOTAL RETAINED	ACCUM. % PASSING ACTUAL	ACCUM. % PASSING SPEC. REQ.
8	2.38	14.6	13.7	~~24.3~~ 24.2		
16	1.19	25.4	23.9	48.2	48.1	
30	0.59	24.6	23.1	71.3	71.2	
50	.297	18.2	17.1	88.4	88.3	
100	.149	9.0	8.5	96.9	96.8	
200	.074	1.5	1.4	~~98.5~~	~~1.5~~	
Pan	0	0.2		98.4	1.6	
Total Fractions		93.5				
Total Dry Weight After Wet Sieving 213.7 / 120.2		93.5	87.9			
Sieve Loss-Gain		0				

213.7 − 120.2

Calculated by MF Date 3/6/69
Checked by SHF Date 3/6/69

Note: Cross out sieve numbers not used.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

Soils and Materials Engineering Division

MECHANICAL ANALYSIS

LAB. SERIAL NO. 22903

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} .27 mm

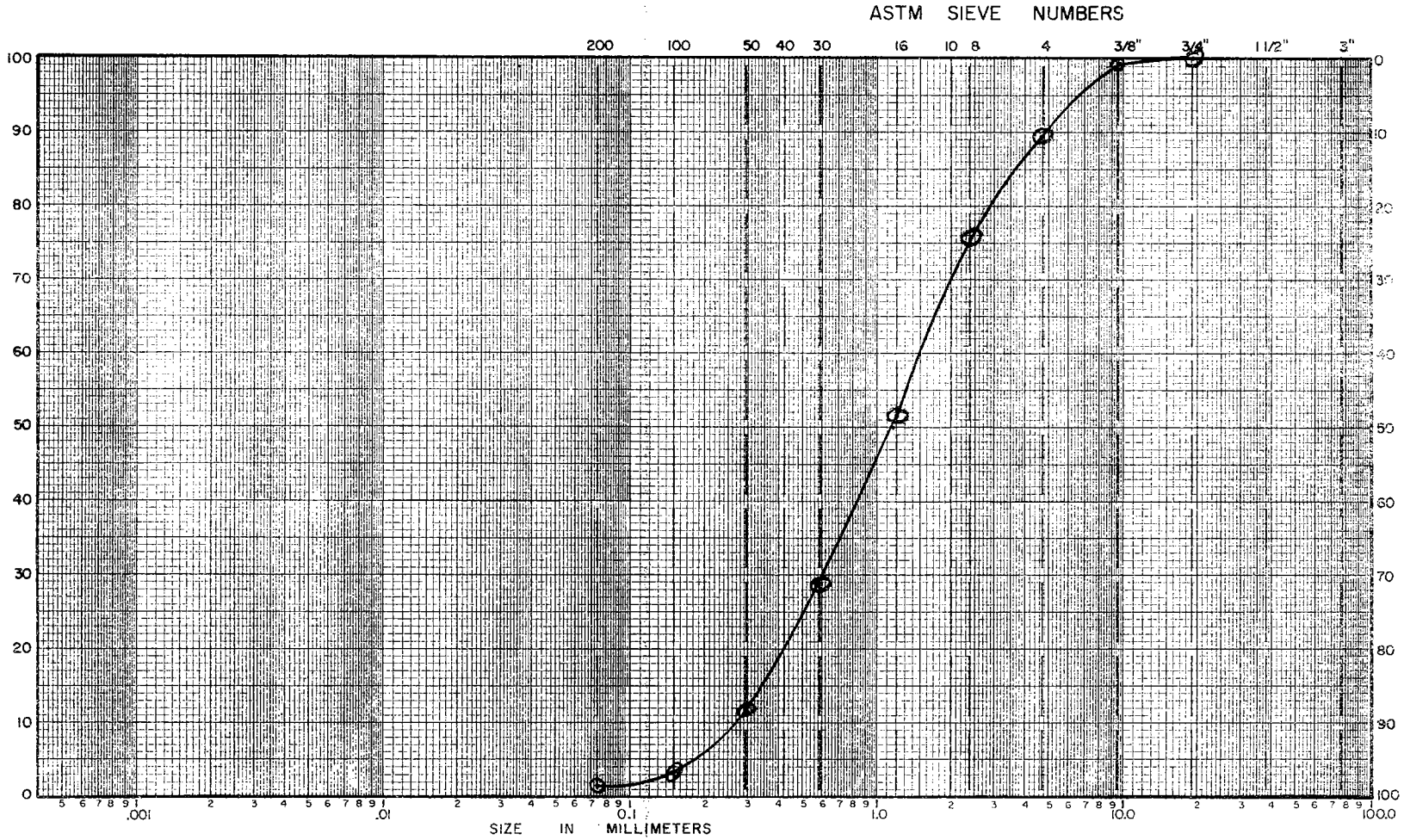
D_{30} .60 mm D_{60} 1.5 mm

$Cu = D_{60}/D_{10}$ 5.5 PLOTTED BY NR

$Cc = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ CHECKED BY SH

GROUP SYMBOL DATE 3/6/69

NOTE: D_X = PARTICLE DIA. AT X% PASSING



SILT OR CLAY	SAND			GRAVEL	
	FINE	MEDIUM	COARSE	FINE	COARSE

SP (44)

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
Soils and Materials Engineering Division

SIEVE ANALYSIS WORK SHEET

LAB SERIAL NO. 22904 — Total Weight of Sample _____ lbs.

Project RUBY D.B. — _____ grams.

Station _____ — Moisture Content of Fines _____ %.

Location _____ — Date Tested 3-3 Plotted By _____

Boring No. _____ Sample No. 1 — Remarks _____

Sampled By JJB Lab Tested By FK-NR — Intended Use _____

GRAVEL (Plus No. 4)

ASTM SIEVE NUMBER	SIZE (mm)	RETAINED LBS.	RETAINED GRAMS	% OF TOTAL OVEN-DRY RETAINED	ACCUM. % RETAINED	ACCUM. % PASSING ACTUAL	ACCUM. % PASSING SPEC. REQ.
3"	76.2						
1½"	38.1						
(1")	(25.4)						
3/4"	19.1						
3/8"	9.52						
No. 4	4.76	0.03		2.9	2.9	97.1	
Pan	0	1.09		xxxxx			
Total Fractions		1.12		xxxxx			
Sieve Loss-Gain		—		—			
Calc. Oven-Dry Fines		1.00		97.1			
Total Oven-Dry		1.03		100.00			

Moisture Determination of Fines:
Cup No. 11
Dry Weight 165.5 grams
Moisture 9.3 %

FINES (Minus No. 4)

WEIGHT, GRAMS 100 — (CALC.) OVEN-DRY WEIGHT 91.5 grams.

WEIGHT OF TOTAL SAMPLE REPRESENTED BY FINES, OVEN-DRY 94.2 grams.

ASTM SIEVE NUMBER	SIZE (mm)	RETAINED GRAMS	% OF TOTAL SAMPLE RETAINED	ACCUM. % OF TOTAL RETAINED	ACCUM. % PASSING ACTUAL	ACCUM. % PASSING SPEC. REQ.
8	2.38	1.9	2.0	4.9		
16	1.19	7.9	8.4	13.3		
30	0.59	22.4	23.8	37.1		
50	.297	32.6	34.6	71.7		
100	.149	19.9	21.1	92.8		
200	.074	4.1	4.4	~~97.2~~	~~2.8~~	
Pan	0	—		97.3	2.7	
Total Fractions		88.8				
Total Dry Weight After Wet Sieving		88.9	94.4			
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.

~~109.1~~
120.2

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

Soils and Materials Engineering Division

MECHANICAL ANALYSIS

LAB. SERIAL NO. 22954

JOB RUBY D. B.

BORING NO. _____ SAMPLE NO. _____

STATION _____ DEPTH _____ FT.

LOCATION _____

SAMPLED BY JJB DATE _____

FIELD CLASSIFICATION _____ BY _____

PLAS. IND. _____ LIQ. LIM. _____

REMARKS NON-PLASTIC

1090
0352

CLASSIFICATION DATA

PERCENT (+) NO. 200 97.2 PERCENT (+) NO. 4 2.9

%(+)NO.4/%(+)NO. 200 _____ D_{10} 0.17 mm

D_{30} 0.30 mm D_{60} 0.56 mm

$Cu = D_{60}/D_{10}$ 3.3 PLOTTED BY MTV

$Cc = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ .995 CHECKED BY SME

GROUP SYMBOL _____ DATE 3-5-69

NOTE: D_X = PARTICLE DIA. AT X% PASSING