

# GRAIN SIZE DISTRIBUTION

Project \_\_\_\_\_ Job. No. \_\_\_\_\_

Location of Project \_\_\_\_\_ Boring No. F-4

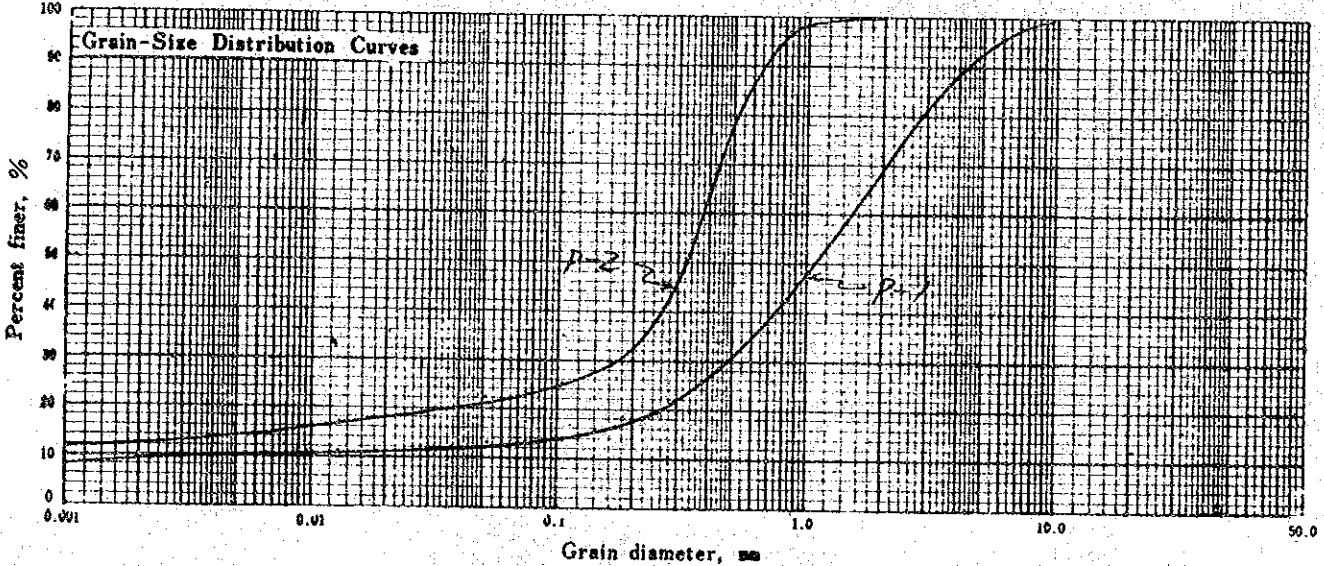
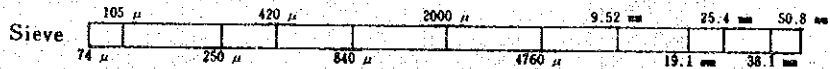
Tested by. \_\_\_\_\_ Date of Testing \_\_\_\_\_

Sample No., Depth: No. P-1 (0.00 m - 0.45 m) Specific Gravity,  $G_s = 2.648$

Sieve	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing					100	91.9	68.7	42.9	26.8	19.4	13.6	13.0
Hydro.	Diam. mm	0.052	0.037	0.024	0.013	0.0076	0.0068	0.0034	0.0016				
	% Passing	12.8	11.9	11.3	10.8	10.5	10.3	10.1	9.2				

Sample No., Depth: No. P-2 (2.00 m - 2.23 m) Specific Gravity,  $G_s = 2.634$

Sieve	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing						100	99.9	96.9	68.0	38.0	25.0	23.3
Hydro.	Diam. mm	0.051	0.036	0.023	0.013	0.0074	0.0067	0.0034	0.0016				
	% Passing	22.3	19.5	18.5	16.6	15.9	14.0	13.0	12.1				



Clay	Silt	Sand	Gravel
0.001	0.005	0.074	2.0

Sample No., Depth	No. <u>P-1</u> <u>0.00 m - 0.45 m</u>	No. <u>P-2</u> <u>2.00 m - 2.23 m</u>	Sample No., Depth	No. <u>P-1</u> <u>0.00 m - 0.45 m</u>	No. <u>P-2</u> <u>2.00 m - 2.23 m</u>
Larger than 4.76 mm	8 %	0 %	Max. diam.	9.52 mm	4.76 mm
4.76 - 2 mm	23 %	0 %	Diam. at 60%	1.50 mm	0.38 mm
2 - 0.42 mm	42 %	32 %	Diam. at 30%	0.48 mm	0.17 mm
0.42 - 0.074 mm	14 %	46 %	Diam. at 10%	0.0040 mm	— mm
0.074 - 0.005 mm	3 %	8 %	Coefficient of uniformity	350	—
Smaller than 0.005 mm	10 %	14 %	Coefficient of curvature	38	—
Smaller than 0.001 mm	8 %	12 %			
2000 μ Sieve Passing	69 %	100 %			
420 μ Sieve Passing	27 %	68 %			
74 μ Sieve Passing	13 %	22 %			

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# GRAIN SIZE DISTRIBUTION

Project \_\_\_\_\_ Job. No. \_\_\_\_\_

Location of Project \_\_\_\_\_ Boring No. F-4

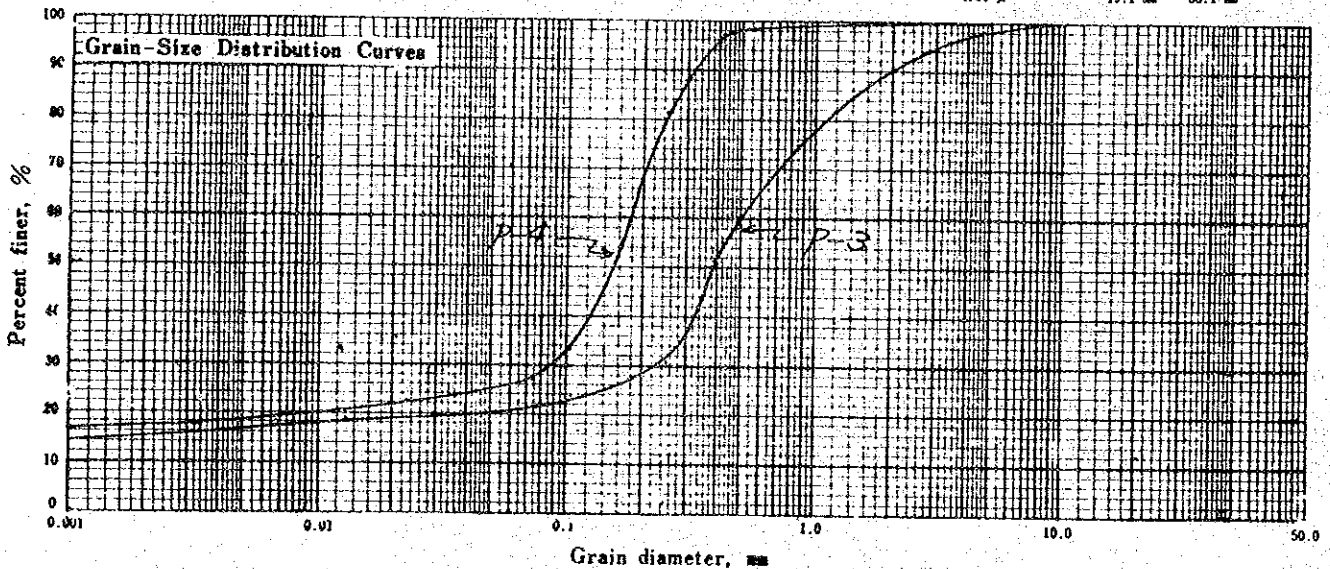
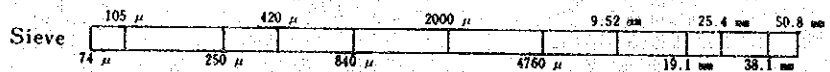
Tested by \_\_\_\_\_ Date of Testing \_\_\_\_\_

Sample No., Depth : No. P-3 (4.00 m - 4.26 m) Specific Gravity,  $G_s = 2.626$

Sieve.	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing					100	98.2	90.0	74.5	54.9	30.6	23.7	21.7
Hydro.	Diam. mm	0.052	0.037	0.023	0.013	0.0075	0.0067	0.0034	0.0016				
	% Passing	20.6	19.7	19.2	18.8	17.7	17.0	16.2	15.3				

Sample No., Depth : No. P-4 (6.00 m - 6.45 m) Specific Gravity,  $G_s = 2.631$

Sieve.	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing					100	99.9	99.8	97.6	81.2	33.6	27.6	
Hydro.	Diam. mm	0.051	0.036	0.023	0.013	0.0075	0.0067	0.0034	0.0016				
	% Passing	25.2	23.3	22.3	20.3	19.3	18.3	17.6	17.3				



Colloid	Clay	Silt	Sand	Gravel
0.001	0.005	0.074	2.0	

Sample No., Depth	No. <u>P-3</u> <u>4.00 m - 4.26 m</u>	No. <u>P-4</u> <u>6.00 m - 6.45 m</u>	Sample No., Depth	No. <u>P-3</u> <u>4.00 m - 4.26 m</u>	No. <u>P-4</u> <u>6.00 m - 6.45 m</u>
Larger than 4.76 mm	2 %	0 %	Max. diam.	9.52 mm	4.76 mm
4.76 - 2 mm	8 %	0 %	Diam. at 60%	0.50 mm	0.18 mm
2 - 0.42 mm	36 %	3 %	Diam. at 30%	0.22 mm	0.088 mm
0.42 - 0.074 mm	33 %	69 %	Diam. at 10%	— mm	— mm
0.074 - 0.005 mm	5 %	10 %	Coefficient of uniformity	—	—
Smaller than 0.005 mm	16 %	18 %	Coefficient of curvature	—	—
Smaller than 0.001 mm	14 %	16 %			
2000 μ Sieve Passing	90 %	100 %			
420 μ Sieve Passing	54 %	97 %			
74 μ Sieve Passing	21 %	28 %			

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# GRAIN SIZE DISTRIBUTION

Project \_\_\_\_\_ Job. No. \_\_\_\_\_

Location of Project \_\_\_\_\_ Boring No. F-4

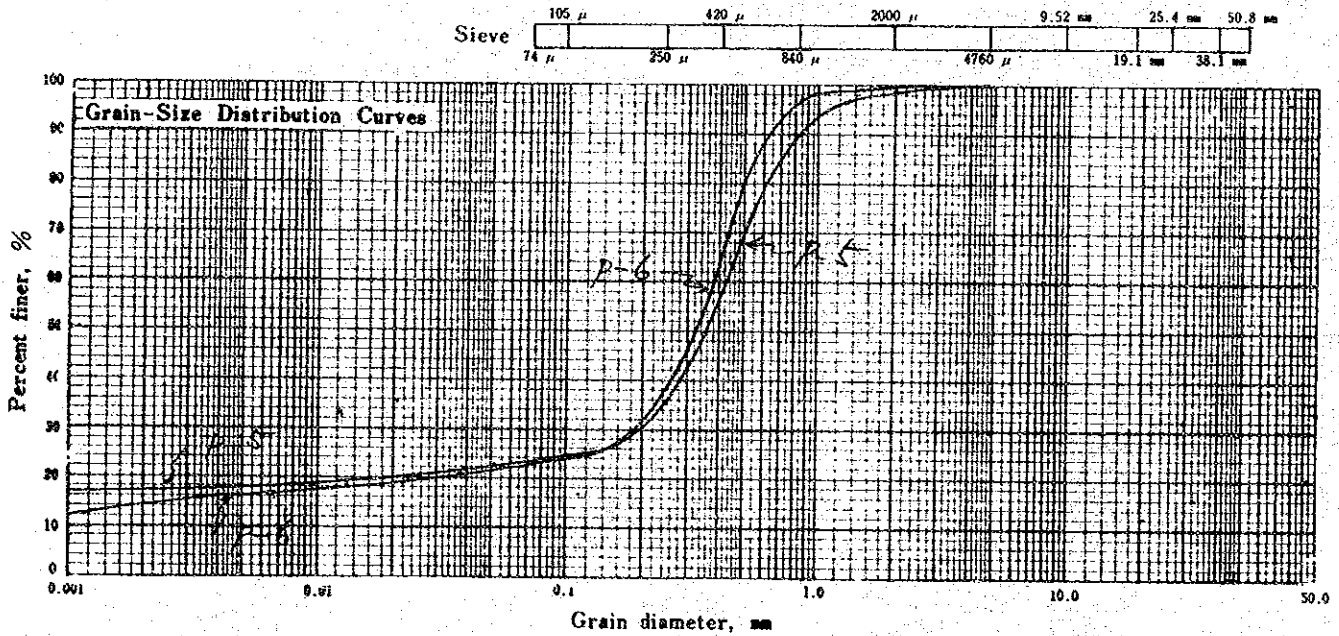
Tested by \_\_\_\_\_ Date of Testing \_\_\_\_\_

Sample No., Depth : No. P-5 (8.00 m - 8.32 m) Specific Gravity,  $G_s = \underline{2.629}$

Sieve	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing						100	98.8	90.1	62.5	35.6	22.1	23.1
Hydro.	Diam. mm	0.051	0.037	0.023	0.013	0.0075	0.0067	0.0039	0.0016				
	% Passing	22.5	20.6	20.1	18.7	18.5	17.8	17.0	16.9				

Sample No., Depth : No. P-6 (10.00 m - 10.37 m) Specific Gravity,  $G_s = \underline{2.629}$

Sieve	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing						100	99.9	97.3	66.6	38.5	24.1	22.5
Hydro.	Diam. mm	0.051	0.036	0.023	0.013	0.0075	0.0067	0.0039	0.0016				
	% Passing	22.2	21.2	20.3	18.4	18.0	16.5	16.3	13.9				



Colloid	Clay	Silt	Sand	Gravel
0.001	0.005	0.074	2.0	

Sample No., Depth	No. <u>P-5</u> <u>8.00 m - 8.32 m</u>	No. <u>P-6</u> <u>10.00 m - 10.37 m</u>	Sample No., Depth	No. <u>P-5</u> <u>8.00 m - 8.32 m</u>	No. <u>P-6</u> <u>10.00 m - 10.37 m</u>
Larger than 4.76 mm	0 %	0 %	Max. diam.	4.76 mm	4.76 mm
4.76 - 2 mm	1 %	0 %	Diam. at 60%	0.42 mm	0.38 mm
2 - 0.42 mm	39 %	33 %	Diam. at 30%	0.19 mm	0.18 mm
0.42 - 0.074 mm	37 %	44 %	Diam. at 10%	— mm	— mm
0.074 - 0.005 mm	5 %	7 %	Coefficient of uniformity	—	—
Smaller than 0.005 mm	18 %	16 %	Coefficient of curvature	—	—
Smaller than 0.001 mm	17 %	12 %			
2000 μ Sieve Passing	99 %	100 %			
420 μ Sieve Passing	60 %	67 %			
74 μ Sieve Passing	23 %	23 %			

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# GRAIN SIZE DISTRIBUTION

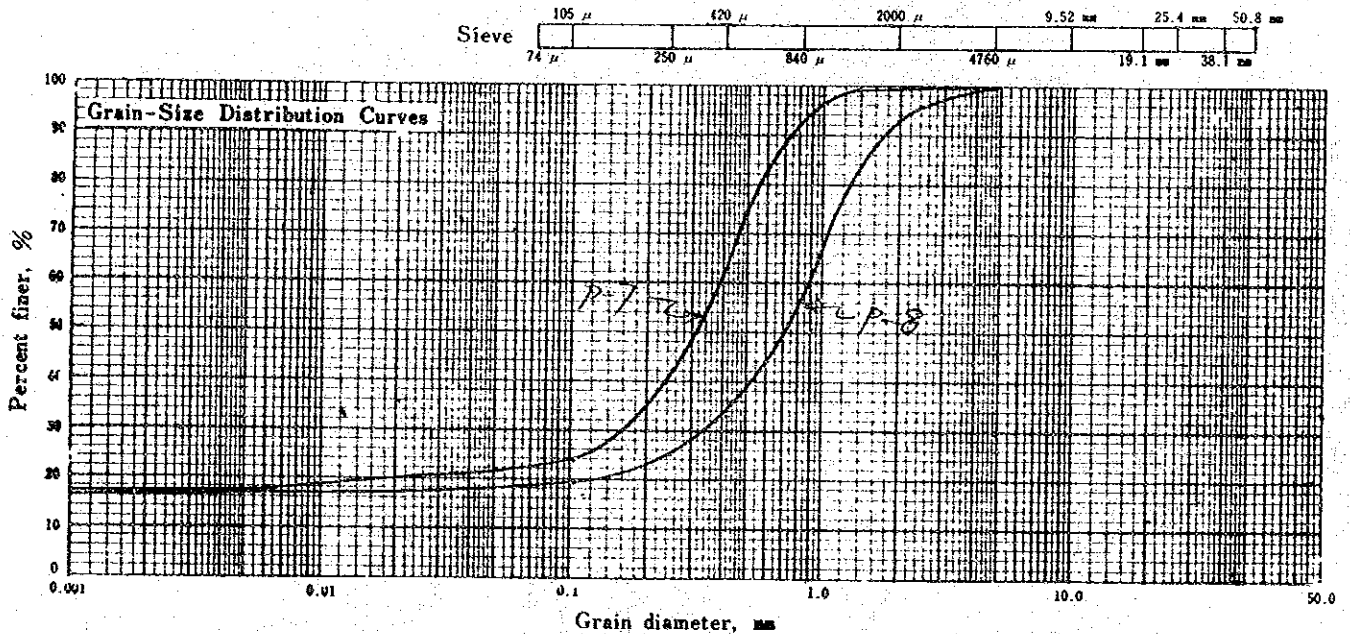
Project \_\_\_\_\_ Job. No. \_\_\_\_\_  
 Location of Project \_\_\_\_\_ Boring No. F-4  
 Tested by. \_\_\_\_\_ Date of Testing \_\_\_\_\_

Sample No., Depth: No. P-7 (12.00 m - 12.29 m) Specific Gravity,  $G_s = 2.623$

Sieve	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing						100	99.7	94.1	63.0	42.2	23.8	22.0
Hydro.	Diam. mm	0.051	0.036	0.023	0.013	0.0093	0.0066	0.0033	0.0016				
	% Passing	21.8	21.1	20.2	19.2	18.5	17.6	17.4	17.3				

Sample No., Depth: No. P-8 (14.00 m - 14.29 m) Specific Gravity,  $G_s = 2.632$

Sieve	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing						100	92.7	57.4	33.5	24.9	19.3	18.3
Hydro.	Diam. mm	0.052	0.037	0.023	0.013	0.0075	0.0067	0.0033	0.0016				
	% Passing	18.1	17.9	17.7	17.7	17.3	17.3	16.8	16.6				



Colloid	Clay	Silt	Sand	Gravel
0.001	0.005	0.074	2.0	

Sample No., Depth	No. <u>P-7</u> <u>12.00 m - 12.29 m</u>	No. <u>P-8</u> <u>14.00 m - 14.29 m</u>	Sample No., Depth	No. <u>P-7</u> <u>12.00 m - 12.29 m</u>	No. <u>P-8</u> <u>14.00 m - 14.29 m</u>
Larger than 4.76 mm	0 %	0 %	Max. diam.	4.76 mm	4.76 mm
4.76 - 2 mm	1 %	7 %	Diam. at 60%	0.39 mm	0.88 mm
2 - 0.42 mm	36 %	59 %	Diam. at 30%	0.16 mm	0.33 mm
0.42 - 0.074 mm	41 %	16 %	Diam. at 10%	— mm	— mm
0.074 - 0.005 mm	5 %	1 %	Coefficient of uniformity	—	—
Smaller than 0.005 mm	17 %	17 %	Coefficient of curvature	—	—
Smaller than 0.001 mm	16 %	16 %			
2000 μ Sieve Passing	99 %	93 %			
420 μ Sieve Passing	63 %	34 %			
74 μ Sieve Passing	22 %	18 %			

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# GRAIN SIZE DISTRIBUTION

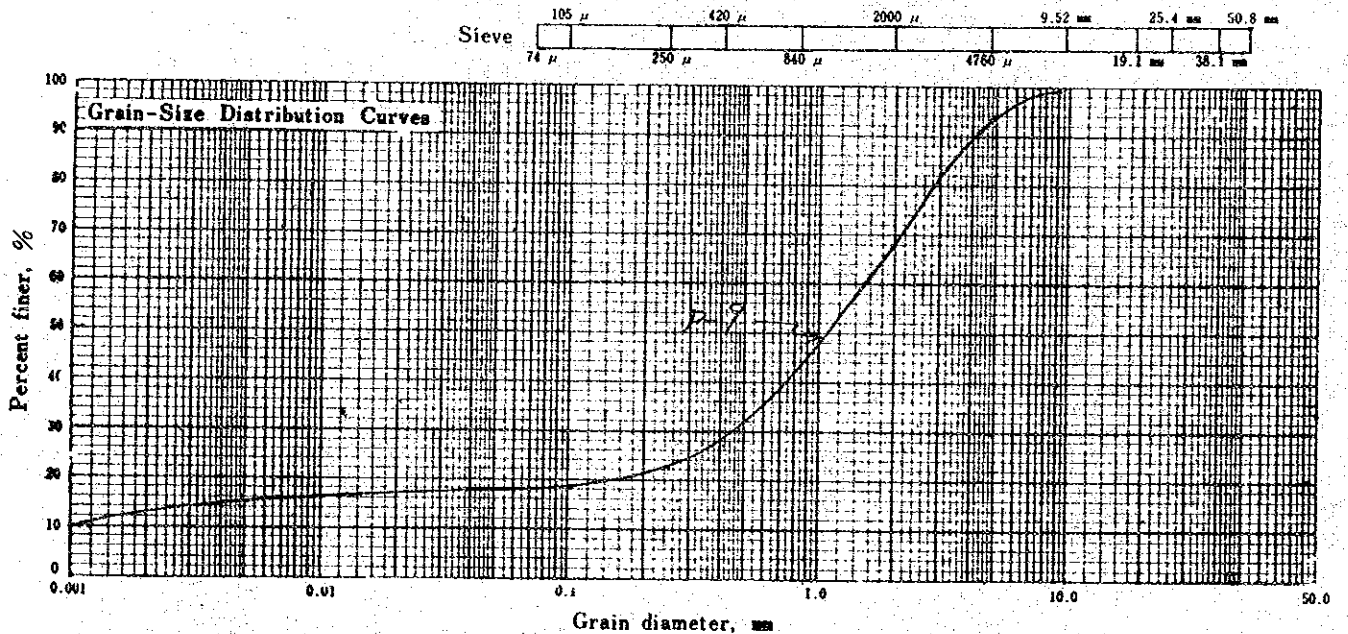
Project \_\_\_\_\_ Job. No. \_\_\_\_\_  
 Location of Project \_\_\_\_\_ Boring No. F-4  
 Tested by \_\_\_\_\_ Date of Testing \_\_\_\_\_

Sample No., Depth: No. P-9 (15.00 m - 15.25 m) Specific Gravity,  $G_s = 2.636$

Sieve	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing					100	92.5	67.8	47.6	27.1	22.3	18.4	17.9
Hydro.	Diam. mm	0.052	0.036	0.023	0.013	0.0075	0.0067	0.0039	0.0016				
	% Passing	17.7	17.5	17.0	16.6	16.3	16.0	15.2	12.5				

Sample No., Depth: No. \_\_\_\_\_ ( \_\_\_\_\_ m - \_\_\_\_\_ m) Specific Gravity,  $G_s =$  \_\_\_\_\_

Sieve	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing												
Hydro.	Diam. mm												
	% Passing												



Colloid	Clay	Silt	Sand	Gravel
0.001	0.005	0.075	2.0	

Sample No., Depth	No. <u>P-9</u> <u>15.00 m - 15.25 m</u>	No. _____ _____ m - _____ m	Sample No., Depth	No. <u>P-9</u> <u>15.00 m - 15.25 m</u>	No. _____ _____ m - _____ m
Larger than 4.76 mm	6 %	%	Max. diam.	9.52 mm	mm
4.76 - 2 mm	26 %	%	Diam. at 60%	1.50 mm	mm
2 - 0.42 mm	40 %	%	Diam. at 30%	0.45 mm	mm
0.42 - 0.074 mm	10 %	%	Diam. at 10%	0.0010 mm	mm
0.074 - 0.005 mm	3 %	%	Coefficient of uniformity	1500	
Smaller than 0.005 mm	15 %	%	Coefficient of curvature	135	
Smaller than 0.001 mm	10 %	%			
2000 μ Sieve Passing	68 %	%			
420 μ Sieve Passing	28 %	%			
74 μ Sieve Passing	18 %	%			

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# GRAIN SIZE DISTRIBUTION

Project \_\_\_\_\_ Job No. \_\_\_\_\_

Location of Project \_\_\_\_\_ Boring No. F-5

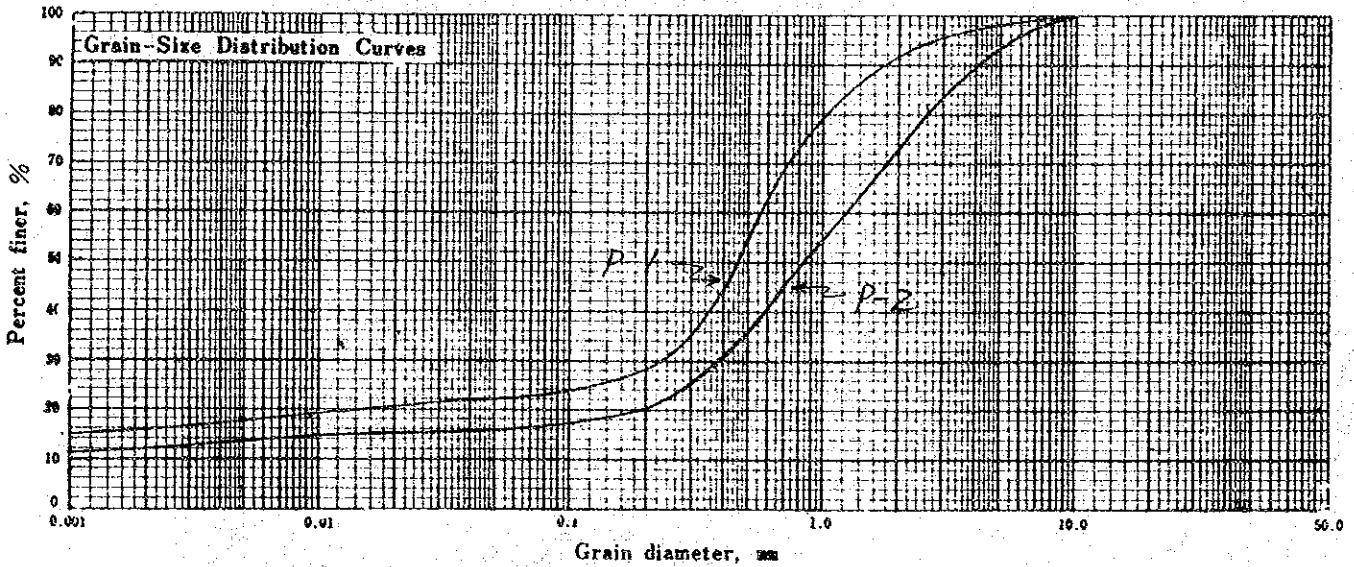
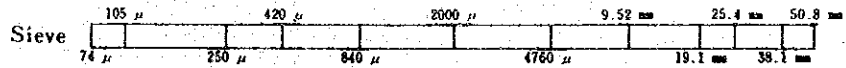
Tested by. \_\_\_\_\_ Date of Testing \_\_\_\_\_

Sample No., Depth: No. P-1 (2.00 m - 2.25 m) Specific Gravity,  $G_s = 2.616$

Sieve.	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing					100	98.6	91.0	75.0	45.4	31.5	21.0	22.5
Hydro.	Diam. mm	0.050	0.035	0.022	0.013	0.0092	0.0065	0.0030	0.0012				
	% Passing	22.0	21.6	21.3	19.5	18.8	17.6	16.7	15.4				

Sample No., Depth: No. P-2 (4.00 m - 4.31 m) Specific Gravity,  $G_s = 2.620$

Sieve.	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing					100	92.9	72.3	50.4	31.5	22.4	16.9	16.0
Hydro.	Diam. mm	0.052	0.037	0.023	0.014	0.0096	0.0068	0.0034	0.0015				
	% Passing	15.8	15.6	15.4	15.3	14.8	14.3	12.5	11.8				



Colloid	Clay	Silt	Sand	Gravel
0.001	0.005	0.074	2.0	

Sample No., Depth	No. <u>P-1</u> <u>2.00 m - 2.25 m</u>	No. <u>P-2</u> <u>4.00 m - 4.31 m</u>	Sample No., Depth	No. <u>P-1</u> <u>2.00 m - 2.25 m</u>	No. <u>P-2</u> <u>4.00 m - 4.31 m</u>
Larger than 4.76 mm	2 %	7 %	Max. diam.	9.52 mm	9.52 mm
4.76 - 2 mm	7 %	20 %	Diam. at 60%	0.56 mm	1.20 mm
2 - 0.42 mm	46 %	41 %	Diam. at 30%	0.23 mm	0.38 mm
0.42 - 0.074 mm	22 %	16 %	Diam. at 10%	— mm	— mm
0.074 - 0.005 mm	6 %	3 %	Coefficient of uniformity	—	—
Smaller than 0.005 mm	17 %	13 %	Coefficient of curvature	—	—
Smaller than 0.001 mm	15 %	11 %			
2000 $\mu$ Sieve Passing	91 %	73 %			
420 $\mu$ Sieve Passing	45 %	32 %			
74 $\mu$ Sieve Passing	23 %	16 %			

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# GRAIN SIZE DISTRIBUTION

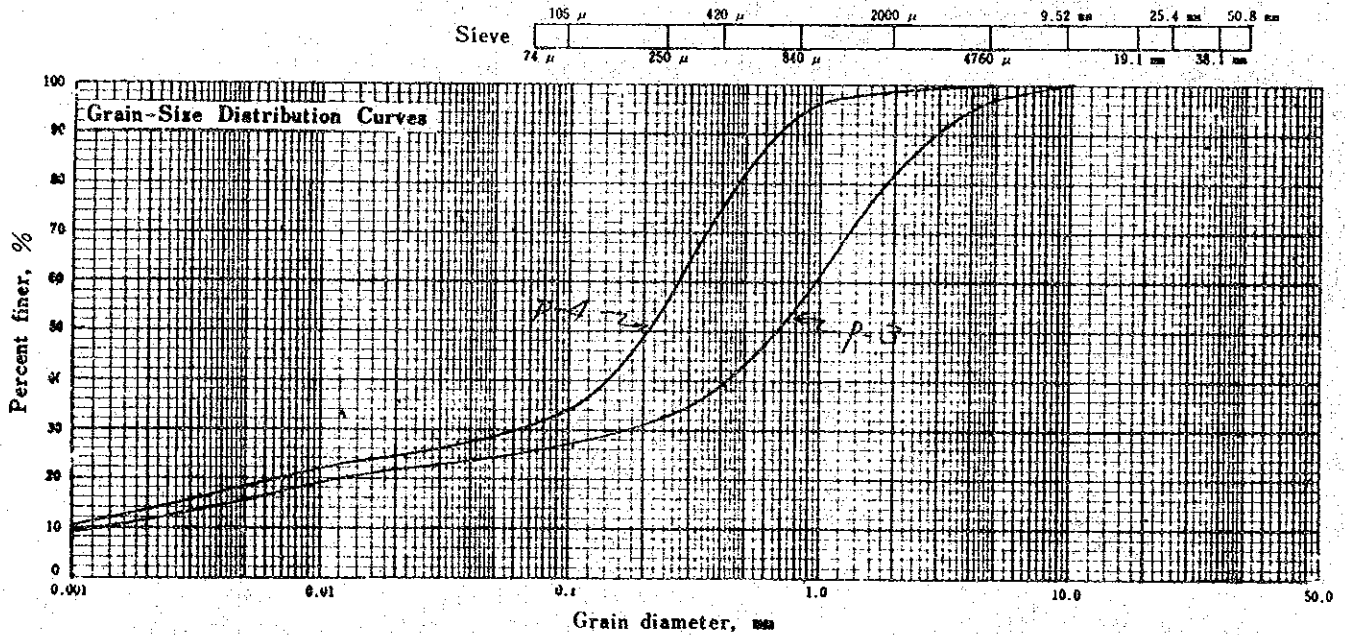
Project \_\_\_\_\_ Job. No. \_\_\_\_\_  
 Location of Project \_\_\_\_\_ Boring No. FI-5  
 Tested by. \_\_\_\_\_ Date of Testing \_\_\_\_\_

Sample No., Depth.: No. P-3 (5.00 m - 5.39 m) Specific Gravity,  $G_s = 2.628$

Sieve.	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing					100	96.7	82.1	55.9	37.3	32.9	26.5	25.7
Hydro.	Diam. mm	0.050	0.029	0.022	0.013	0.0092	0.0066	0.0033	0.0015				
	% Passing	23.5	22.6	22.0	20.2	18.4	16.3	13.6	10.5				

Sample No., Depth.: No. P-4 (6.00 m - 6.45 m) Specific Gravity,  $G_s = 2.626$

Sieve.	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing						100	98.8	93.7	75.9	56.5	34.3	32.0
Hydro.	Diam. mm	0.049	0.025	0.022	0.013	0.0092	0.0065	0.0033	0.0014				
	% Passing	29.1	27.2	24.3	23.3	21.4	19.2	16.3	12.1				



Colloid	Clay	Silt	Sand	Gravel
0.001	0.005	0.074	2.0	

Sample No., Depth	No. <u>P-3</u> <u>5.00 m - 5.39 m</u>	No. <u>P-4</u> <u>6.00 m - 6.45 m</u>	Sample No., Depth	No. <u>P-3</u> <u>5.00 m - 5.39 m</u>	No. <u>P-4</u> <u>6.00 m - 6.45 m</u>
Larger than 4.76 mm	3 %	0 %	Max. diam.	9.52 mm	4.76 mm
4.76 - 2 mm	15 %	1 %	Diam. at 60%	0.95 mm	0.27 mm
2 - 0.42 mm	43 %	23 %	Diam. at 30%	0.17 mm	0.062 mm
0.42 - 0.074 mm	13 %	44 %	Diam. at 10%	0.0013 mm	0.0010 mm
0.074 - 0.005 mm	11 %	14 %	Coefficient of uniformity	730	270
Smaller than 0.005 mm	15 %	18 %	Coefficient of curvature	23	14
Smaller than 0.001 mm	9 %	10 %			
2000 μ Sieve Passing	82 %	99 %			
420 μ Sieve Passing	39 %	76 %			
74 μ Sieve Passing	26 %	32 %			

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# GRAIN SIZE DISTRIBUTION

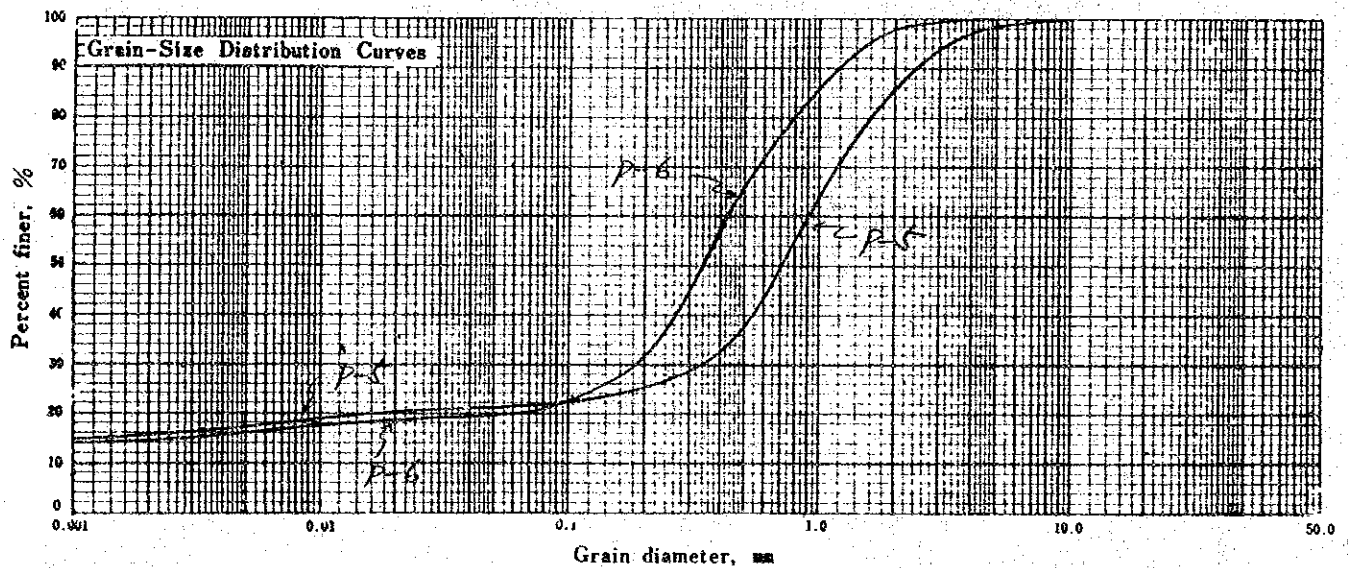
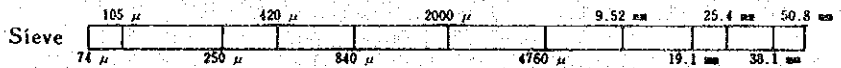
Project \_\_\_\_\_ Job. No. \_\_\_\_\_  
 Location of Project \_\_\_\_\_ Boring No. F1-5  
 Tested by. \_\_\_\_\_ Date of Testing \_\_\_\_\_

Sample No., Depth : No. P-5 (8.00 m - 8.32 m) Specific Gravity,  $G_s = 2.626$

Sieve.	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing					100	98.8	86.1	57.7	33.2	27.2	21.9	21.0
Hydro.	Diam. mm	0.050	0.036	0.023	0.013	0.0092	0.0065	0.0033	0.0014				
	% Passing	20.8	20.5	20.2	19.7	18.8	17.6	16.7	15.4				

Sample No., Depth : No. P-6 (10.00 m - 10.29 m) Specific Gravity,  $G_s = 2.624$

Sieve.	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing					100	97.8	77.1	49.9	37.9	23.0	21.0	
Hydro.	Diam. mm	0.050	0.036	0.023	0.013	0.0093	0.0066	0.0033	0.0014				
	% Passing	20.6	19.7	18.7	18.2	17.5	16.6	15.7	14.4				



Colloid	Clay	Silt	Sand	Gravel
0.001	0.005	0.074	2.0	

Sample No., Depth	No. <u>P-5</u> <u>8.00 m - 8.32 m</u>	No. <u>P-6</u> <u>10.00 m - 10.29 m</u>	Sample No., Depth	No. <u>P-5</u> <u>8.00 m - 8.32 m</u>	No. <u>P-6</u> <u>10.00 m - 10.29 m</u>
Larger than 4.76 mm	2 %	0 %	Max. diam.	9.52 mm	4.76 mm
4.76 - 2 mm	12 %	2 %	Diam. at 60%	0.90 mm	0.42 mm
2 - 0.42 mm	53 %	48 %	Diam. at 30%	0.34 mm	0.19 mm
0.42 - 0.074 mm	12 %	29 %	Diam. at 10%	— mm	— mm
0.074 - 0.005 mm	4 %	5 %	Coefficient of uniformity	—	—
Smaller than 0.005 mm	17 %	16 %	Coefficient of curvature	—	—
Smaller than 0.001 mm	15 %	14 %			
2000 μ Sieve Passing	86 %	98 %			
420 μ Sieve Passing	33 %	50 %			
74 μ Sieve Passing	21 %	21 %			

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# GRAIN SIZE DISTRIBUTION

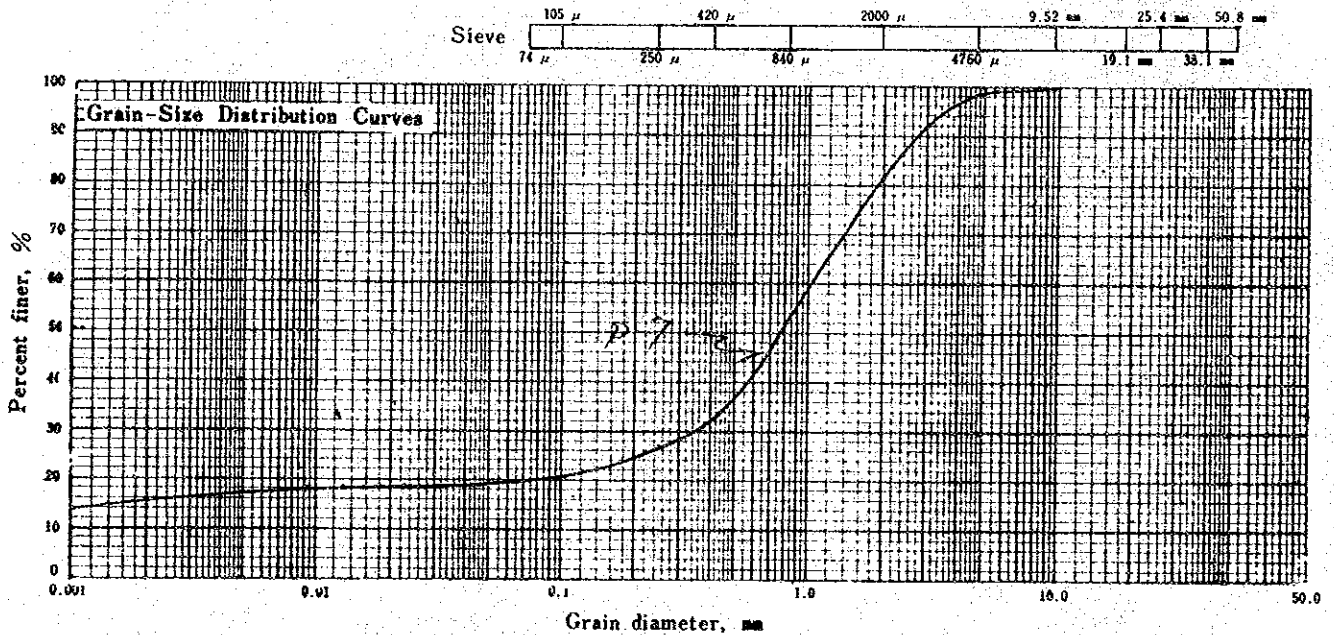
Project \_\_\_\_\_ Job. No. \_\_\_\_\_  
 Location of Project \_\_\_\_\_ Boring No. F-5  
 Tested by. \_\_\_\_\_ Date of Testing \_\_\_\_\_

Sample No., Depth: No. P-7 (11.00 m - 11.25 m) Specific Gravity,  $G_s = 2.630$

Sieve.	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing					100	99.2	81.8	54.0	32.5	26.9	20.6	19.8
Hydro.	Diam. mm	0.075	0.036	0.020	0.013	0.0092	0.0065	0.0030	0.0014				
	% Passing	19.4	19.0	18.6	18.4	18.1	17.2	16.3	15.0				

Sample No., Depth: No. \_\_\_\_\_ ( \_\_\_\_\_ m - \_\_\_\_\_ m) Specific Gravity,  $G_s =$  \_\_\_\_\_

Sieve.	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing												
Hydro.	Diam. mm												
	% Passing												



Colloid	Clay	Silt	Sand	Gravel
0.001	0.005	0.074	2.0	

Sample No., Depth	No. <u>P-7</u> <u>11.00 m - 11.25 m</u>	No. _____ _____ m - _____ m	Sample No., Depth	No. <u>P-7</u> <u>11.00 m - 11.25 m</u>	No. _____ _____ m - _____ m
Larger than 4.76 mm	2 %	%	Max. diam.	<u>9.52</u> mm	mm
4.76 - 2 mm	17 %	%	Diam. at 60%	<u>1.00</u> mm	mm
2 - 0.42 mm	48 %	%	Diam. at 30%	<u>0.35</u> mm	mm
0.42 - 0.074 mm	13 %	%	Diam. at 10%	— mm	mm
0.074 - 0.005 mm	3 %	%	Coefficient of uniformity	—	
Smaller than 0.005 mm	17 %	%	Coefficient of curvature	—	
Smaller than 0.001 mm	14 %	%			
2000 $\mu$ Sieve Passing	81 %	%			
420 $\mu$ Sieve Passing	33 %	%			
74 $\mu$ Sieve Passing	20 %	%			

419

58

# GRAIN SIZE DISTRIBUTION

Project \_\_\_\_\_ Job. No. \_\_\_\_\_

Location of Project \_\_\_\_\_ Boring No. F-6

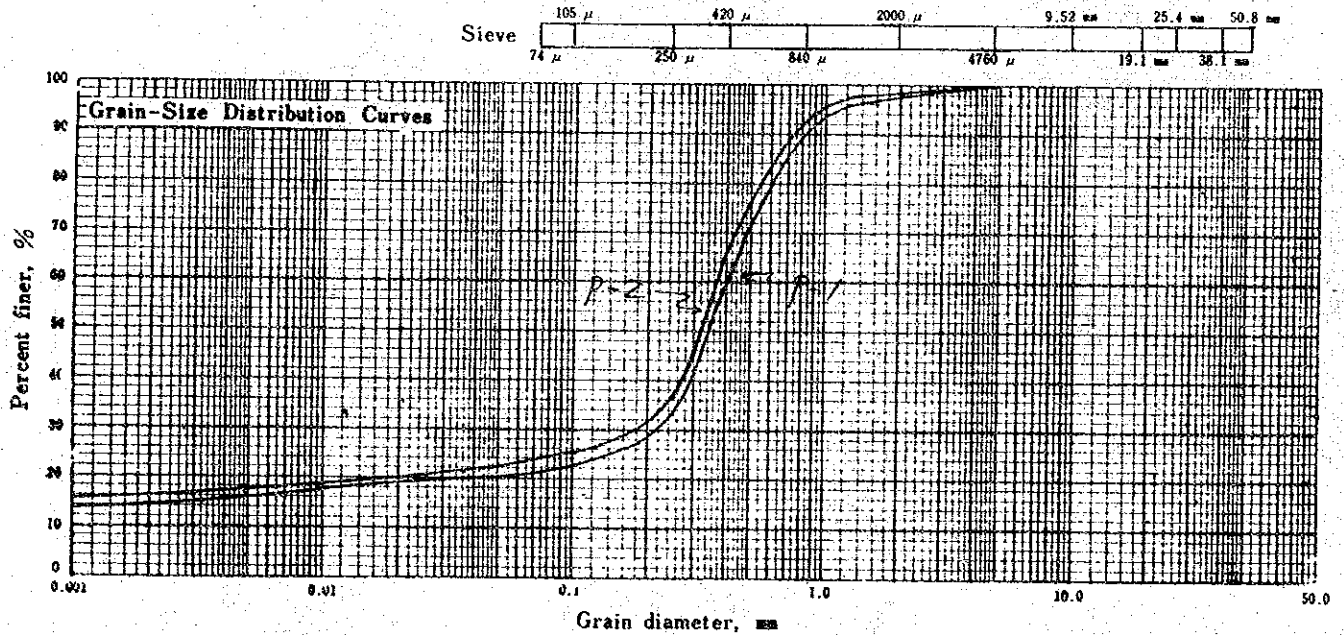
Tested by. \_\_\_\_\_ Date of Testing \_\_\_\_\_

Sample No., Depth: No. P-1 (2.00 m - 2.45 m) Specific Gravity,  $G_s = 2.634$

Sieve	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
% Passing							100	97.9	90.8	64.3	33.3	22.7	21.0
Hydro.	Diam. mm	0.051	0.036	0.023	0.013	0.0094	0.0066	0.0037	0.0016				
% Passing		20.5	19.6	19.5	18.8	16.9	16.4	15.0	14.1				

Sample No., Depth: No. P-2 (4.00 m - 4.45 m) Specific Gravity,  $G_s = 2.638$

Sieve	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
% Passing							100	98.3	93.1	68.1	36.5	25.4	21
Hydro.	Diam. mm	0.050	0.036	0.023	0.013	0.0095	0.0067	0.0034	0.0016				
% Passing		22.4	21.4	20.5	18.6	18.3	17.8	16.9	15.9				



Colloid	Clay	Silt	Sand	Gravel
0.001	0.005	0.074	2.0	

Sample No., Depth	No. <u>P-1</u> <u>2.00 m - 2.45 m</u>	No. <u>P-2</u> <u>4.00 m - 4.45 m</u>	Sample No., Depth	No. <u>P-1</u> <u>2.00 m - 2.45 m</u>	No. <u>P-2</u> <u>4.00 m - 4.45 m</u>
Larger than 4.76 mm	0 %	0 %	Max. diam.	4.76 mm	4.76 mm
4.76 - 2 mm	2 %	2 %	Diam. at 60%	0.41 mm	0.37 mm
2 - 0.42 mm	34 %	30 %	Diam. at 30%	0.22 mm	0.18 mm
0.42 - 0.074 mm	43 %	44 %	Diam. at 10%	— mm	— mm
0.074 - 0.005 mm	5 %	6 %	Coefficient of uniformity	—	—
Smaller than 0.005 mm	16 %	18 %	Coefficient of curvature	—	—
Smaller than 0.001 mm	13 %	15 %			
2000 μ Sieve Passing	98 %	98 %			
420 μ Sieve Passing	64 %	68 %			
74 μ Sieve Passing	21 %	24 %			

420

Self

# GRAIN SIZE DISTRIBUTION

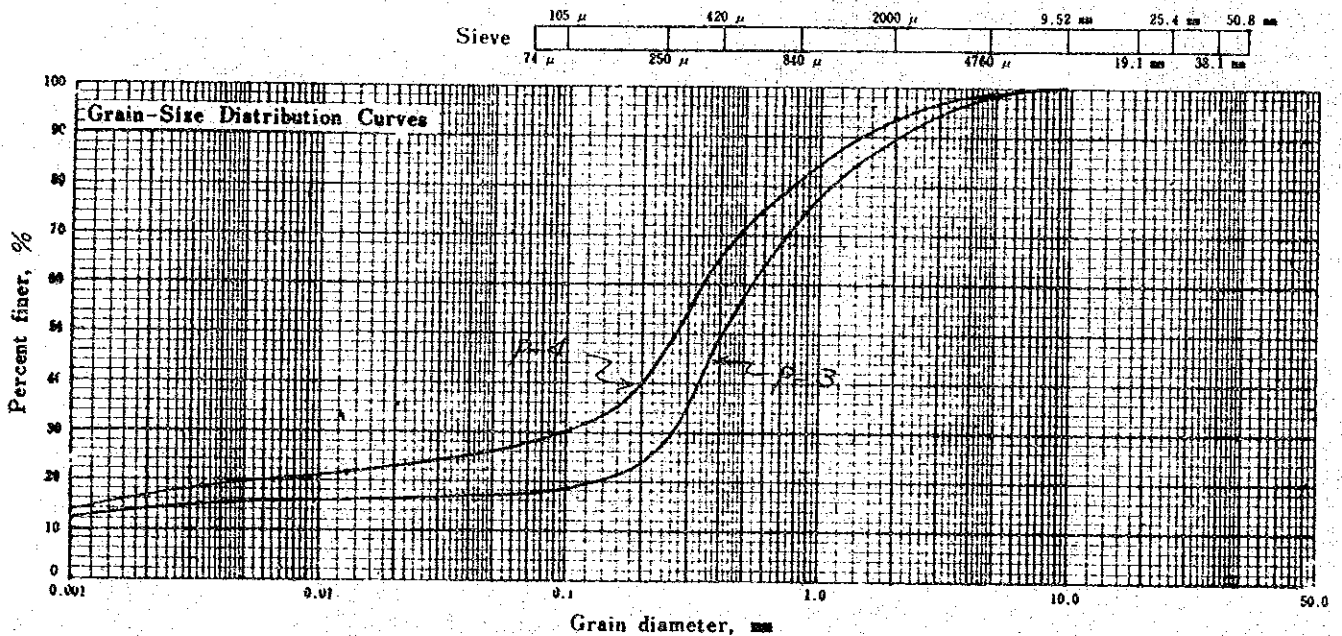
Project \_\_\_\_\_ Job. No. \_\_\_\_\_  
 Location of Project \_\_\_\_\_ Boring No. F-6  
 Tested by. \_\_\_\_\_ Date of Testing \_\_\_\_\_

Sample No., Depth: No. P-3 (6.00 m - 6.45 m) Specific Gravity,  $G_s = 2.632$

Sieve	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing					100	98.0	88.5	74.7	50.9	28.7	18.1	17.2
Hydro.	Diam. mm	0.051	0.036	0.023	0.013	0.0094	0.0066	0.0033	0.0016				
	% Passing	16.9	16.8	16.5	16.3	15.9	15.7	14.8	13.9				

Sample No., Depth: No. P-4 (8.00 m - 8.45 m) Specific Gravity,  $G_s = 2.649$

Sieve	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing					100	99.2	94.0	80.1	67.2	47.9	30.6	28.4
Hydro.	Diam. mm	0.050	0.036	0.023	0.013	0.0094	0.0066	0.0033	0.0016				
	% Passing	26.1	24.2	23.2	21.3	20.4	19.6	18.7	15.9				



Colloid	Clay	Silt	Sand	Gravel
0.001	0.005	0.074	2.0	

Sample No., Depth	No. <u>P-3</u> <u>6.00 m - 6.45 m</u>	No. <u>P-4</u> <u>8.00 m - 8.45 m</u>	Sample No., Depth	No. <u>P-3</u> <u>6.00 m - 6.45 m</u>	No. <u>P-4</u> <u>8.00 m - 8.45 m</u>
Larger than 4.76 mm	2 %	2 %	Max. diam.	9.52 mm	9.52 mm
4.76 - 2 mm	9 %	4 %	Diam. at 60%	0.53 mm	0.34 mm
2 - 0.42 mm	38 %	27 %	Diam. at 30%	0.26 mm	0.095 mm
0.42 - 0.074 mm	34 %	39 %	Diam. at 10%	— mm	— mm
0.074 - 0.005 mm	2 %	8 %	Coefficient of uniformity	—	—
Smaller than 0.005 mm	15 %	20 %	Coefficient of curvature	—	—
Smaller than 0.001 mm	12 %	14 %			
2000 μ Sieve Passing	89 %	94 %			
420 μ Sieve Passing	51 %	67 %			
74 μ Sieve Passing	17 %	28 %			

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60

# GRAIN SIZE DISTRIBUTION

Project \_\_\_\_\_ Job. No. \_\_\_\_\_

Location of Project \_\_\_\_\_ Boring No. F-6

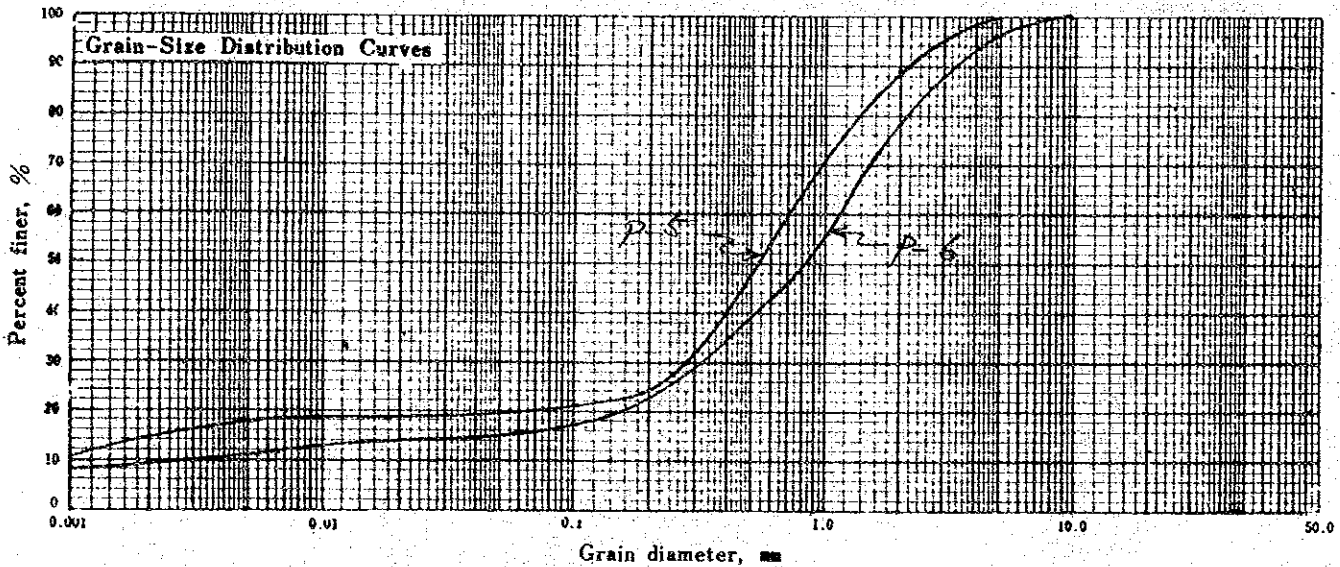
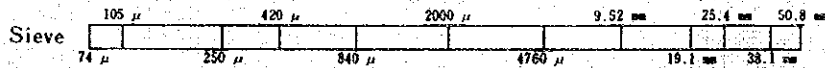
Tested by \_\_\_\_\_ Date of Testing \_\_\_\_\_

Sample No., Depth : No. P-5 (10.00 m - 10.41 m) Specific Gravity,  $G_s = 2.653$

Sieve.	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing						100	88.7	66.3	41.6	27.6	21.3	20.4
Hydro.	Diam. mm	0.051	0.036	0.023	0.013	0.0094	0.0066	0.0033	0.0016				
	% Passing	19.5	19.7	19.5	19.3	19.0	18.4	16.5	13.7				

Sample No., Depth : No. P-6 (12.00 m - 12.34 m) Specific Gravity,  $G_s = 2.639$

Sieve.	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing					100	96.3	78.0	50.2	35.1	27.9	17.3	16.0
Hydro.	Diam. mm	0.051	0.037	0.023	0.013	0.0095	0.0067	0.0034	0.0016				
	% Passing	15.2	14.3	14.0	13.4	12.5	11.6	9.8	8.9				



Colloid	Clay	Silt	Sand	Gravel
0.001	0.005	0.074	2.0	

Sample No., Depth	No. <u>P-5</u> 10.00 m - 10.41 m	No. <u>P-6</u> 12.00 m - 12.34 m	Sample No., Depth	No. <u>P-5</u> 10.00 m - 10.41 m	No. <u>P-6</u> 12.00 m - 12.34 m
Larger than 4.76 mm	0 %	4 %	Max. diam.	4.76 mm	9.52 mm
4.76 - 2 mm	11 %	18 %	Diam. at 60%	0.70 mm	1.15 mm
2 - 0.42 mm	47 %	43 %	Diam. at 30%	0.28 mm	0.31 mm
0.42 - 0.074 mm	22 %	19 %	Diam. at 10%	— mm	0.0028 mm
0.074 - 0.005 mm	2 %	5 %	Coefficient of uniformity	—	410
Smaller than 0.005 mm	18 %	11 %	Coefficient of curvature	—	30
Smaller than 0.001 mm	11 %	8 %			
2000 μ Sieve Passing	89 %	78 %			
420 μ Sieve Passing	42 %	35 %			
74 μ Sieve Passing	20 %	16 %			

422  
BT

# GRAIN SIZE DISTRIBUTION

Project \_\_\_\_\_ Job No. \_\_\_\_\_

Location of Project \_\_\_\_\_ Boring No. F1-7

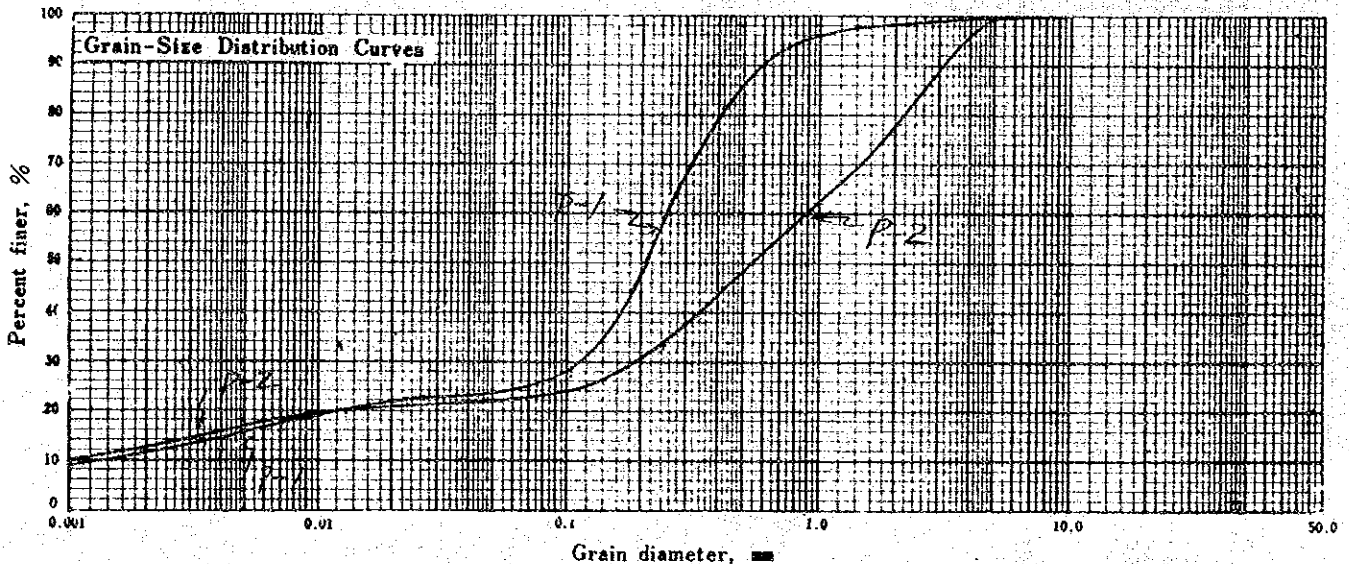
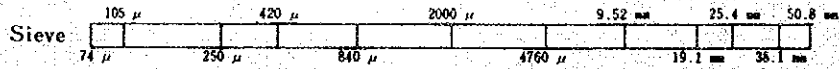
Tested by \_\_\_\_\_ Date of Testing \_\_\_\_\_

Sample No., Depth.: No. P-1 (2.00 m - 2.45 m) Specific Gravity,  $G_s = 2.620$

Sieve	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing						100	98.1	94.6	81.1	59.5	28.1	25.0
Hydro.	Diam. mm	0.050	0.036	0.025	0.013	0.0093	0.0066	0.0034	0.0016				
	% Passing	24.1	23.1	22.1	19.2	18.2	17.3	13.4	10.5				

Sample No., Depth.: No. P-2 (4.00 m - 4.45 m) Specific Gravity,  $G_s = 2.625$

Sieve	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing					100	99.8	77.1	48.4	44.7	33.3	27.6	22.1
Hydro.	Diam. mm	0.050	0.036	0.025	0.013	0.0092	0.0066	0.0033	0.0016				
	% Passing	21.9	21.7	21.5	19.9	19.6	18.1	14.4	11.7				



Colloid	Clay	Silt	Sand	Gravel
0.001	0.005	0.074	2.0	

Sample No., Depth	No. <u>P-1</u> <u>2.00 m - 2.45 m</u>	No. <u>P-2</u> <u>4.00 m - 4.45 m</u>	Sample No., Depth	No. <u>P-1</u> <u>2.00 m - 2.45 m</u>	No. <u>P-2</u> <u>4.00 m - 4.45 m</u>
Larger than 4.76 mm	0 %	1 %	Max. diam.	4.76 mm	9.52 mm
4.76 - 2 mm	2 %	22 %	Diam. at 60%	0.25 mm	0.89 mm
2 - 0.42 mm	17 %	32 %	Diam. at 30%	0.11 mm	0.19 mm
0.42 - 0.074 mm	56 %	23 %	Diam. at 10%	0.0014 mm	0.0010 mm
0.074 - 0.005 mm	9 %	6 %	Coefficient of uniformity	180	890
Smaller than 0.005 mm	16 %	16 %	Coefficient of curvature	35	41
Smaller than 0.001 mm	9 %	10 %			
2000 μ Sieve Passing	98 %	77 %			
420 μ Sieve Passing	81 %	45 %			
74 μ Sieve Passing	25 %	22 %			

# GRAIN SIZE DISTRIBUTION

Project \_\_\_\_\_ Job No. \_\_\_\_\_

Location of Project \_\_\_\_\_ Boring No. F-7

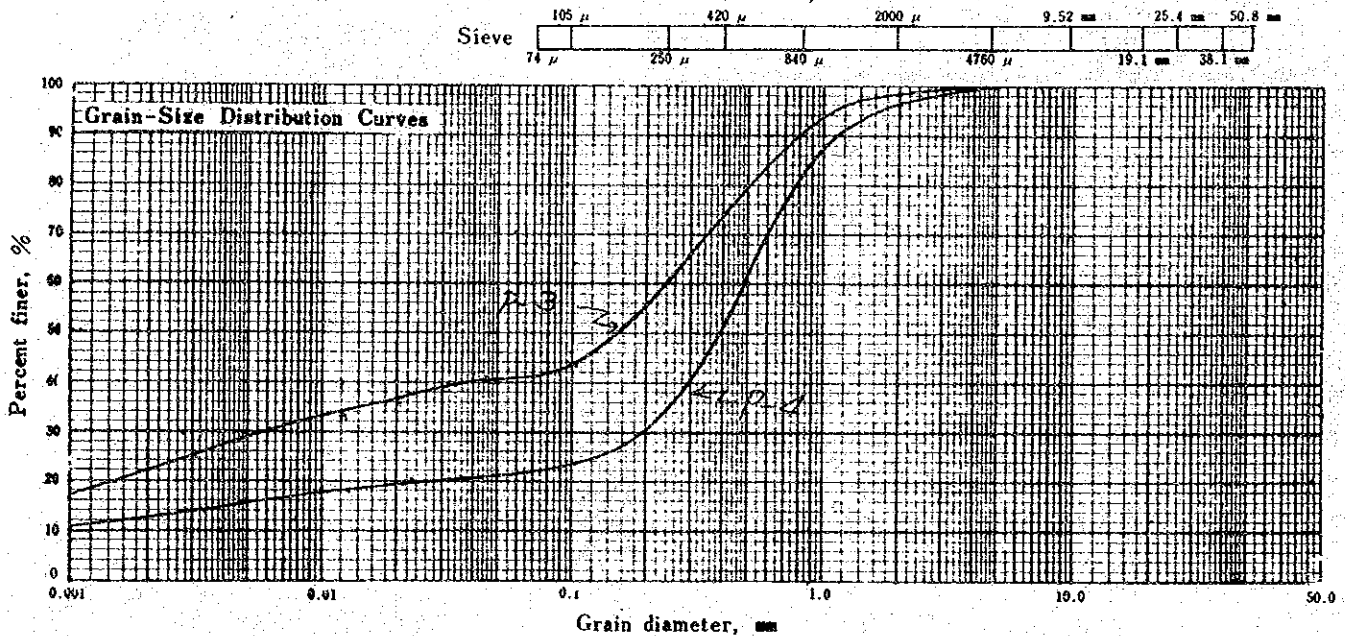
Tested by \_\_\_\_\_ Date of Testing \_\_\_\_\_

Sample No., Depth: No. P-3 (6.00 m - 6.39 m) Specific Gravity,  $G_s = 2.664$

Sieve	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing						100	98.0	90.6	74.4	60.5	43.5	41.2
Hydro.	Diam. mm	0.045	0.032	0.021	0.012	0.0085	0.0061	0.0031	0.0015				
	% Passing	40.8	39.8	37.0	33.1	32.2	30.3	24.6	19.8				

Sample No., Depth: No. P-4 (8.00 m - 8.45 m) Specific Gravity,  $G_s = 2.627$

Sieve	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing						100	96.7	83.1	53.1	35.1	23.4	21.9
Hydro.	Diam. mm	0.050	0.036	0.023	0.013	0.0094	0.0066	0.0033	0.0016				
	% Passing	21.5	20.5	20.3	17.7	16.7	16.4	13.9	12.0				



Colloid	Clay	Silt	Sand	Gravel
0.001	0.005	0.074	2.0	

Sample No., Depth	No. <u>P-3</u> <u>6.00 m - 6.39 m</u>	No. <u>P-4</u> <u>8.00 m - 8.45 m</u>	Sample No., Depth	No. <u>P-3</u> <u>6.00 m - 6.39 m</u>	No. <u>P-4</u> <u>8.00 m - 8.45 m</u>
Larger than 4.76 mm	0 %	0 %	Max. diam.	4.76 mm	4.76 mm
4.76 - 2 mm	2 %	4 %	Diam. at 60%	0.24 mm	0.48 mm
2 - 0.42 mm	24 %	43 %	Diam. at 30%	0.0058 mm	0.19 mm
0.42 - 0.074 mm	33 %	31 %	Diam. at 10%	— mm	— mm
0.074 - 0.005 mm	12 %	6 %	Coefficient of uniformity	—	—
Smaller than 0.005 mm	29 %	16 %	Coefficient of curvature	—	—
Smaller than 0.001 mm	17 %	11 %			
2000 $\mu$ Sieve Passing	98 %	96 %			
420 $\mu$ Sieve Passing	74 %	53 %			
74 $\mu$ Sieve Passing	41 %	22 %			

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67

# GRAIN SIZE DISTRIBUTION

Project \_\_\_\_\_ Job No. \_\_\_\_\_

Location of Project \_\_\_\_\_ Boring No. F1-7

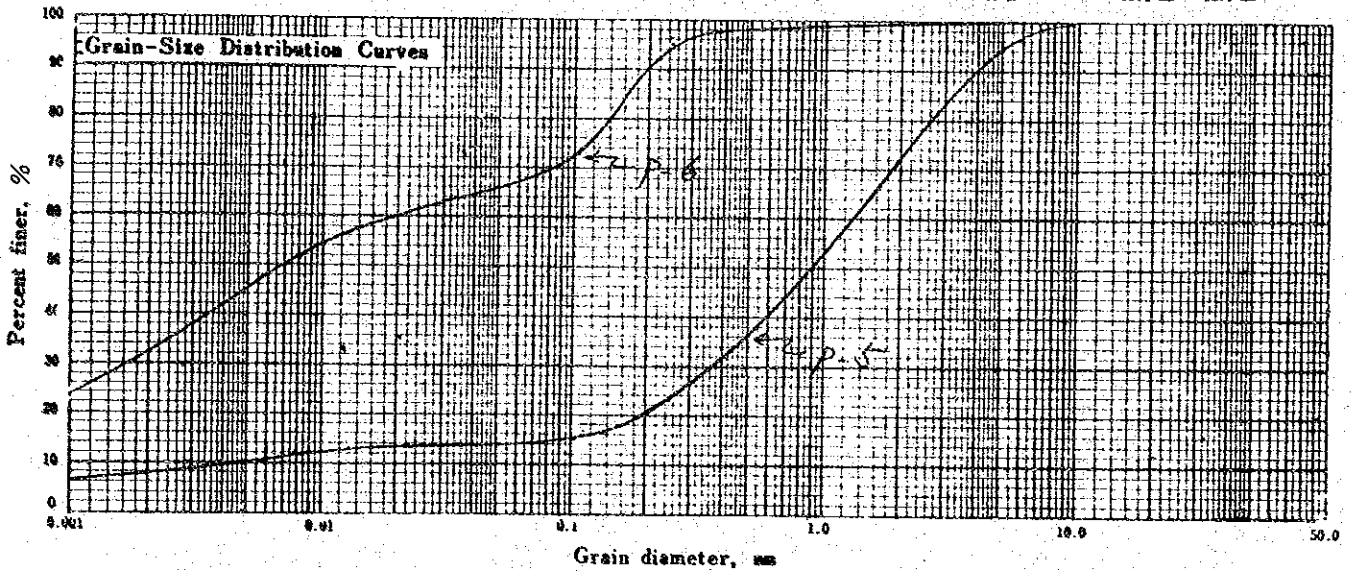
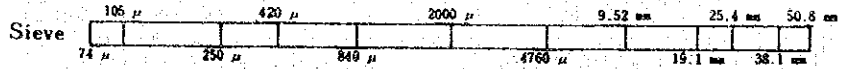
Tested by \_\_\_\_\_ Date of Testing \_\_\_\_\_

Sample No., Depth: No. P-5 (10.00 m - 10.34 m) Specific Gravity,  $G_s = 2.632$

Sieve	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing					100	99.3	71.9	48.7	31.5	23.1	15.1	14.3
Hydro.	Diam. mm	0.051	0.036	0.023	0.013	0.0075	0.0067	0.0034	0.0016				
	% Passing	14.1	13.7	13.0	12.5	12.3	11.0	9.5	7.3				

Sample No., Depth: No. P-6 (12.00 m - 12.28 m) Specific Gravity,  $G_s = 2.646$

Sieve	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing					100	99.8	99.1	98.0	95.7	73.3	69.4	
Hydro.	Diam. mm	0.042	0.030	0.019	0.011	0.0081	0.0059	0.0030	0.0015				
	% Passing	65.0	62.6	59.8	55.2	51.5	46.9	37.7	28.4				



Colloid	Clay	Silt	Sand	Gravel
0.001	0.005	0.074	2.0	

Sample No., Depth	No. <u>P-5</u>	No. <u>P-6</u>	Sample No., Depth	No. <u>P-5</u>	No. <u>P-6</u>
	<u>10.00 m - 10.34 m</u>	<u>12.00 m - 12.28 m</u>		<u>10.00 m - 10.34 m</u>	<u>12.00 m - 12.28 m</u>
Larger than 4.76 mm	7 %	0 %	Max. diam.	9.52 mm	4.76 mm
4.76 - 2 mm	21 %	1 %	Diam. at 60%	1.30 mm	0.020 mm
2 - 0.42 mm	40 %	1 %	Diam. at 30%	0.37 mm	0.0017 mm
0.42 - 0.074 mm	18 %	29 %	Diam. at 10%	0.0047 mm	—
0.074 - 0.005 mm	4 %	24 %	Coefficient of uniformity	280	—
Smaller than 0.005 mm	10 %	45 %	Coefficient of curvature	22	—
Smaller than 0.001 mm	6 %	24 %			
2000 μ Sieve Passing	72 %	99 %			
420 μ Sieve Passing	32 %	98 %			
74 μ Sieve Passing	14 %	69 %			

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# GRAIN SIZE DISTRIBUTION

Project \_\_\_\_\_ Job No. \_\_\_\_\_

Location of Project \_\_\_\_\_ Boring No. F-7

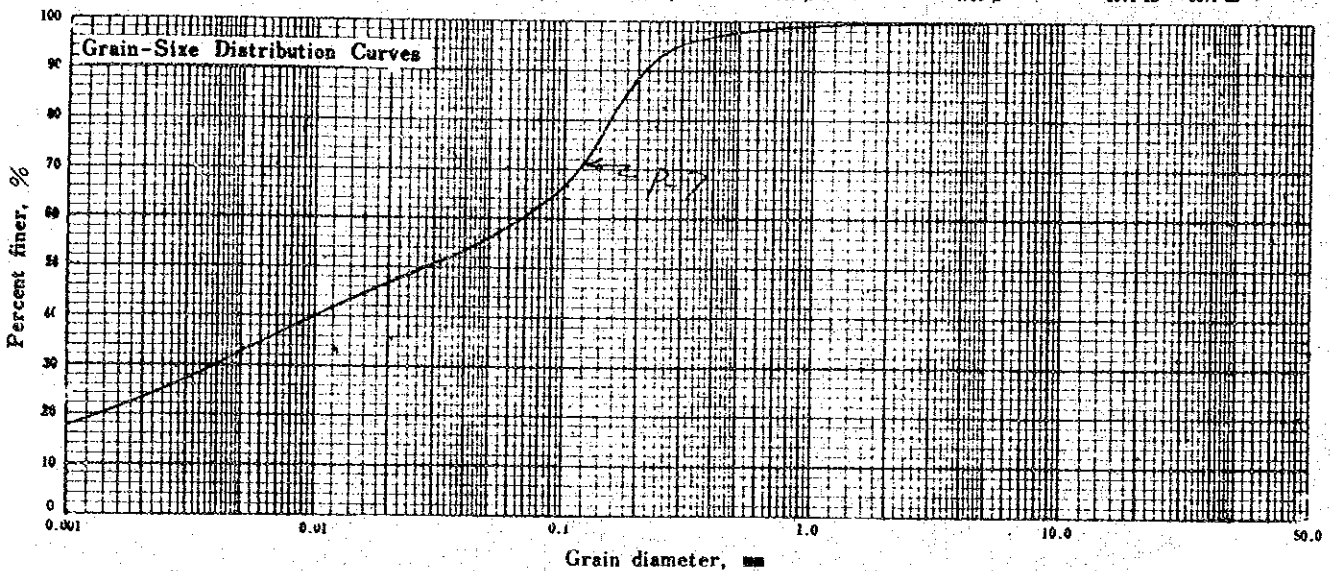
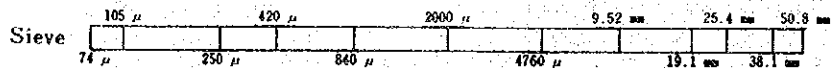
Tested by \_\_\_\_\_ Date of Testing \_\_\_\_\_

Sample No., Depth: No. P-7 (13.00 m - 13.24 m) Specific Gravity,  $G_s = 2.636$

Sieve.	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing						100	99.8	98.8	97.1	94.2	66.3	61.2
Hydro.	Diam. mm	0.044	0.032	0.020	0.012	0.0086	0.0051	0.0032	0.0016				
	% Passing	54.3	50.6	47.8	41.4	38.6	31.5	27.5	21.1				

Sample No., Depth: No. \_\_\_\_\_ (    m -     m) Specific Gravity,  $G_s =$  \_\_\_\_\_

Sieve.	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing												
Hydro.	Diam. mm												
	% Passing												



Colloid	Clay	Silt	Sand	Gravel
0.001	0.005	0.074	2.0	

Sample No., Depth	No. <u>P-7</u> <u>13.00 m - 13.24 m</u>	No. _____ <u>    m -     m</u>	Sample No., Depth	No. <u>P-7</u> <u>13.00 m - 13.24 m</u>	No. _____ <u>    m -     m</u>
Larger than 4.76 mm	0 %	%	Max. diam.	<u>4.76</u> mm	mm
4.76 - 2 mm	0 %	%	Diam. at 60%	<u>0.068</u> mm	mm
2 - 0.42 mm	3 %	%	Diam. at 30%	<u>0.0039</u> mm	mm
0.42 - 0.074 mm	36 %	%	Diam. at 10%	—	mm
0.074 - 0.005 mm	28 %	%	Coefficient of uniformity	—	
Smaller than 0.005 mm	33 %	%	Coefficient of curvature	—	
Smaller than 0.001 mm	18 %	%			
2000 μ Sieve Passing	100 %	%			
420 μ Sieve Passing	97 %	%			
74 μ Sieve Passing	61 %	%			

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65



**GRAIN SIZE DISTRIBUTION**

Project \_\_\_\_\_ Job No. \_\_\_\_\_

Location of Project \_\_\_\_\_ Boring No. F-8

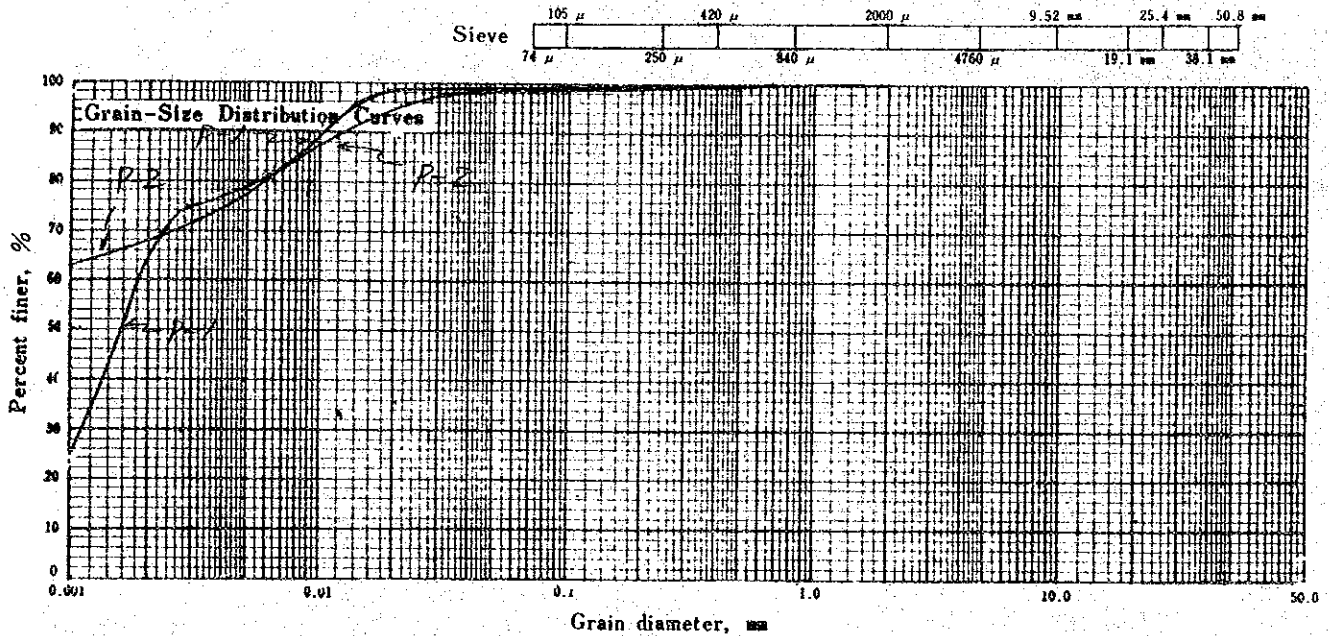
Tested by \_\_\_\_\_ Date of Testing \_\_\_\_\_

Sample No., Depth: No. P-1 (2.00 m - 2.45 m) Specific Gravity,  $G_s = 2.689$

Sieve.	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing							100	99.8	99.7	99.6	99.5	99.4
Hydro.	Diam. mm	0.042	0.030	0.019	0.011	0.0077	0.0057	0.0029	0.0014				
	% Passing	99.3	99.2	98.8	92.6	83.9	80.0	75.2	62.8				

Sample No., Depth: No. P-2 (4.00 m - 4.45 m) Specific Gravity,  $G_s = 2.698$

Sieve.	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing							100	99.9	99.7	99.6	99.5	99.3
Hydro.	Diam. mm	0.047	0.033	0.021	0.012	0.0088	0.0062	0.0032	0.0014				
	% Passing	99.0	97.3	95.6	89.5	86.6	81.7	72.2	65.3				



Colloid	Clay	Silt	Sand	Gravel
0.001	0.005	0.074	2.0	

Sample No., Depth	No. <u>P-1</u> <u>2.00 m - 2.45 m</u>	No. <u>P-2</u> <u>4.00 m - 4.45 m</u>	Sample No., Depth	No. <u>P-1</u> <u>2.00 m - 2.45 m</u>	No. <u>P-2</u> <u>4.00 m - 4.45 m</u>
Larger than 4.76 mm		%	Max. diam.	<u>2.00</u> mm	<u>2.00</u> mm
4.76 - 2 mm		%	Diam. at 60%	<u>0.0018</u> mm	— mm
2 - 0.42 mm	<u>0</u> %	<u>0</u> %	Diam. at 30%	<u>0.0011</u> mm	— mm
0.42 - 0.074 mm	<u>1</u> %	<u>1</u> %	Diam. at 10%	— mm	— mm
0.074 - 0.005 mm	<u>20</u> %	<u>22</u> %	Coefficient of uniformity	—	—
Smaller than 0.005 mm	<u>79</u> %	<u>77</u> %	Coefficient of curvature	—	—
Smaller than 0.001 mm	<u>25</u> %	<u>63</u> %			
2000 μ Sieve Passing	<u>100</u> %	<u>100</u> %			
420 μ Sieve Passing	<u>100</u> %	<u>100</u> %			
74 μ Sieve Passing	<u>99</u> %	<u>99</u> %			

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# GRAIN SIZE DISTRIBUTION

Project \_\_\_\_\_ Job No. \_\_\_\_\_

Location of Project \_\_\_\_\_ Boring No. F-8

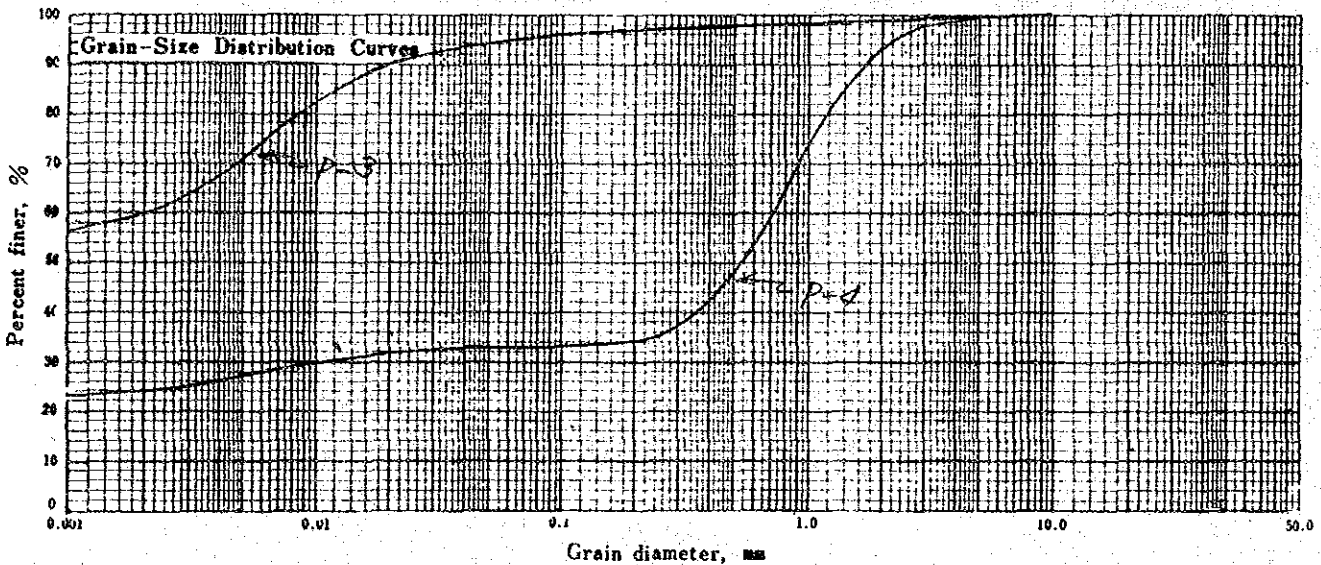
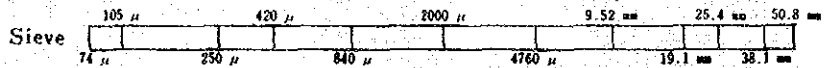
Tested by \_\_\_\_\_ Date of Testing \_\_\_\_\_

Sample No., Depth: No. P-3 (6.00 m - 6.45 m) Specific Gravity,  $G_s = 2.705$

Sieve	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing					100	99.2	99.0	98.0	97.3	96.6	96.0	95.8
Hydro.	Diam. mm	0.047	0.033	0.021	0.012	0.0088	0.0062	0.0032	0.0014				
	% Passing	93.7	91.0	90.5	85.7	80.3	75.0	64.3	57.8				

Sample No., Depth: No. P-4 (8.00 m - 8.45 m) Specific Gravity,  $G_s = 2.657$

Sieve	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing					100	93.4	67.8	43.4	25.2	23.0	23.1	
Hydro.	Diam. mm	0.048	0.034	0.022	0.013	0.0089	0.0063	0.0032	0.0015				
	% Passing	32.8	22.5	31.9	30.0	29.0	28.1	29.0	23.4				



Colloid	Clay	Silt	Sand	Gravel
0.001	0.005	0.074	2.0	

Sample No., Depth	No. <u>P-3</u> <u>6.00 m - 6.45 m</u>	No. <u>P-4</u> <u>8.00 m - 8.45 m</u>	Sample No., Depth	No. <u>P-3</u> <u>6.00 m - 6.45 m</u>	No. <u>P-4</u> <u>8.00 m - 8.45 m</u>
Larger than 4.76 mm	0 %	0 %	Max. diam.	9.52 mm	4.76 mm
4.76 - 2 mm	1 %	7 %	Diam. at 60%	0.0020 mm	0.71 mm
2 - 0.42 mm	1 %	50 %	Diam. at 30%	— mm	0.011 mm
0.42 - 0.074 mm	3 %	10 %	Diam. at 10%	— mm	— mm
0.074 - 0.005 mm	24 %	6 %	Coefficient of uniformity	—	—
Smaller than 0.005 mm	71 %	27 %	Coefficient of curvature	—	—
Smaller than 0.001 mm	56 %	23 %			
2000 μ Sieve Passing	99 %	93 %			
420 μ Sieve Passing	98 %	43 %			
74 μ Sieve Passing	95 %	33 %			

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# GRAIN SIZE DISTRIBUTION

Project \_\_\_\_\_ Job No. \_\_\_\_\_

Location of Project \_\_\_\_\_ Boring No. F-8

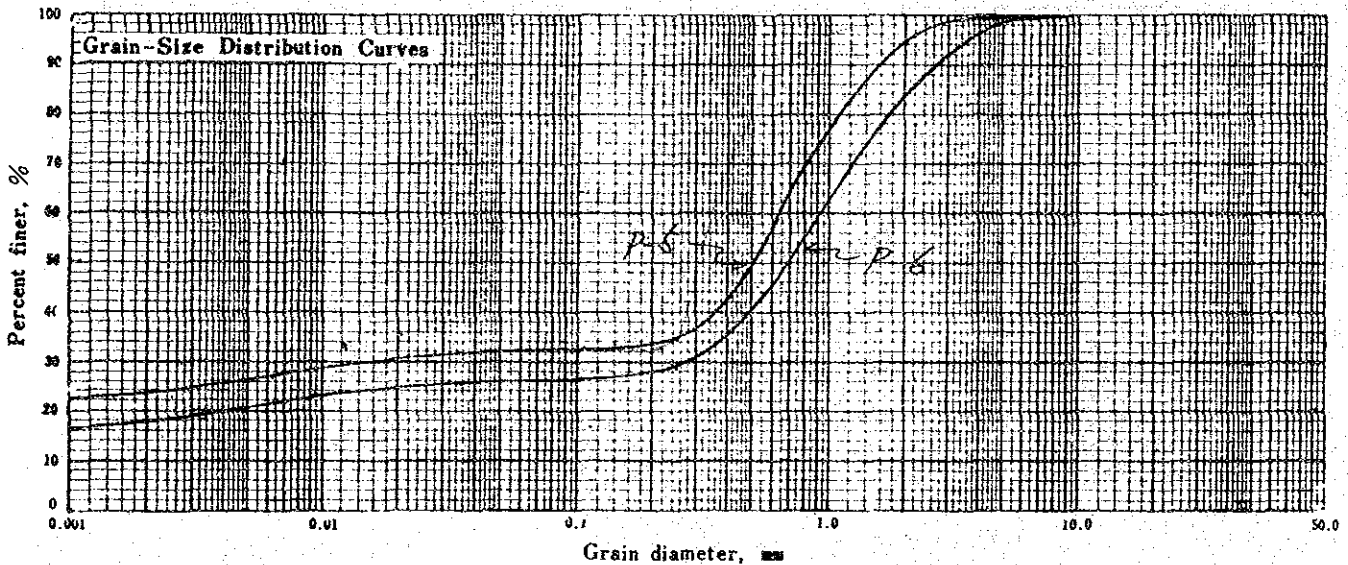
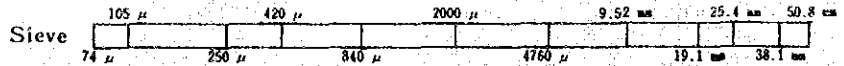
Tested by \_\_\_\_\_ Date of Testing \_\_\_\_\_

Sample No., Depth: No. P-5 (10.00 m - 10.48 m) Specific Gravity,  $G_s = 2.646$

Sieve	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing					100	99.7	94.5	71.7	43.2	34.3	32.4	32.2
Hydro.	Diam. mm	0.048	0.039	0.022	0.013	0.0099	0.0063	0.0032	0.0015				
	% Passing	32.0	31.8	31.2	30.2	28.3	27.4	24.5	22.6				

Sample No., Depth: No. P-6 (11.00 m - 11.45 m) Specific Gravity,  $G_s = 2.642$

Sieve	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing					100	98.5	83.6	57.3	36.0	28.2	26.2	26.0
Hydro.	Diam. mm	0.050	0.035	0.022	0.013	0.0092	0.0065	0.0033	0.0016				
	% Passing	25.8	25.5	24.8	24.2	23.2	22.3	18.5	17.6				



Colloid	Clay	Silt	Sand	Gravel
0.001	0.005	0.074	2.0	

Sample No., Depth	No. <u>P-5</u> <u>10.00 m - 10.48 m</u>	No. <u>P-6</u> <u>11.00 m - 11.45 m</u>	Sample No., Depth	No. <u>P-5</u> <u>10.00 m - 10.48 m</u>	No. <u>P-6</u> <u>11.00 m - 11.45 m</u>
Larger than 4.76 mm	0 %	2 %	Max. diam.	9.52 mm	9.52 mm
4.76 - 2 mm	6 %	14 %	Diam. at 60%	0.63 mm	0.92 mm
2 - 0.42 mm	51 %	48 %	Diam. at 30%	0.015 mm	0.27 mm
0.42 - 0.074 mm	11 %	10 %	Diam. at 10%	— mm	— mm
0.074 - 0.005 mm	6 %	5 %	Coefficient of uniformity	—	—
Smaller than 0.005 mm	26 %	21 %	Coefficient of curvature	—	—
Smaller than 0.001 mm	22 %	16 %			
2000 μ Sieve Passing	94 %	84 %			
420 μ Sieve Passing	43 %	36 %			
74 μ Sieve Passing	32 %	26 %			

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# GRAIN SIZE DISTRIBUTION

Project \_\_\_\_\_ Job No. \_\_\_\_\_

Location of Project \_\_\_\_\_ Boring No. F-8

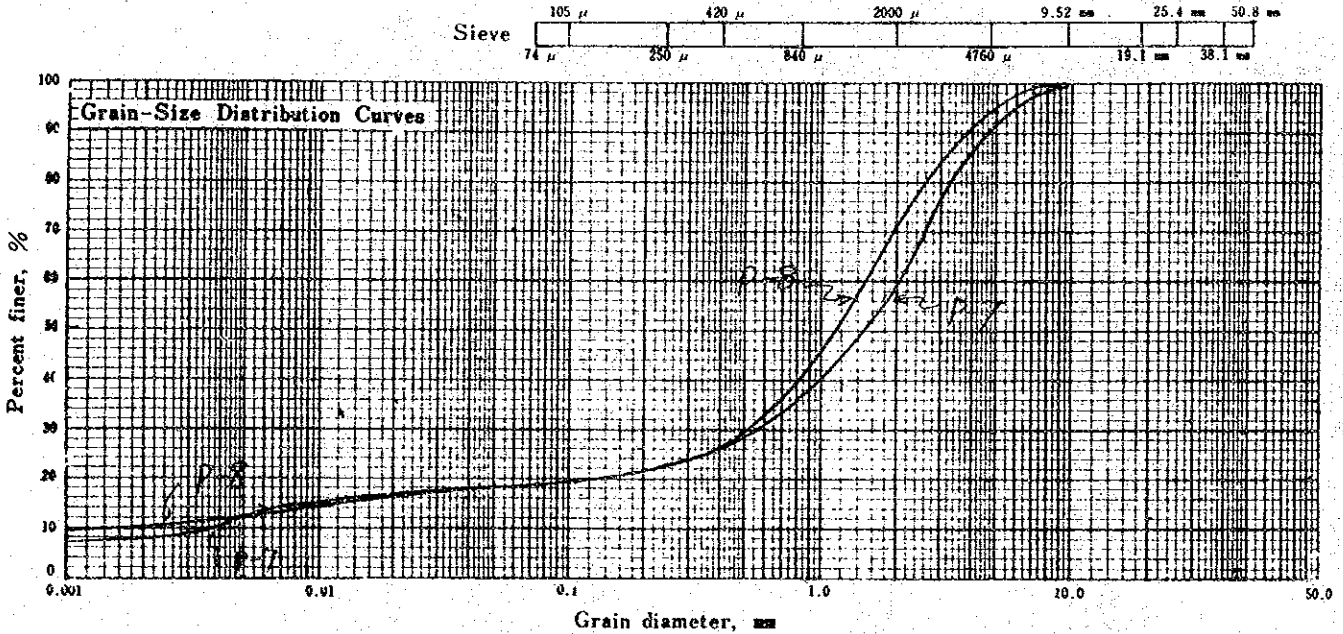
Tested by \_\_\_\_\_ Date of Testing \_\_\_\_\_

Sample No., Depth: No. P-7 (24.00 m - 24.35 m) Specific Gravity,  $G_s = 2.629$

Sieve.	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing					100	90.7	58.2	36.6	26.6	22.8	19.3	18.8
Hydro.	Diam. mm	0.051	0.036	0.023	0.013	0.0075	0.0067	0.0034	0.0016				
	% Passing	18.3	17.7	17.0	16.1	14.7	14.3	9.8	8.0				

Sample No., Depth: No. P-8 (26.00 m - 26.12 m) Specific Gravity,  $G_s = 2.630$

Sieve.	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing					100	94.1	71.7	40.9	26.8	22.9	19.2	18.6
Hydro.	Diam. mm	0.051	0.037	0.023	0.013	0.0075	0.0067	0.0034	0.0016				
	% Passing	18.3	17.9	16.7	15.6	14.5	13.4	10.5	10.0				



Colloid	Clay	Silt	Sand	Gravel
0.001	0.005	0.074	2.0	

Sample No., Depth	No. <u>P-7</u> <u>24.00 m - 24.35 m</u>	No. <u>P-8</u> <u>26.00 m - 26.12 m</u>	Sample No., Depth	No. <u>P-7</u> <u>24.00 m - 24.35 m</u>	No. <u>P-8</u> <u>26.00 m - 26.12 m</u>
Larger than 4.76 mm	10 %	6 %	Max. diam.	9.52 mm	9.52 mm
4.76 - 2 mm	32 %	23 %	Diam. at 60%	2.10 mm	1.50 mm
2 - 0.42 mm	32 %	44 %	Diam. at 30%	0.56 mm	0.52 mm
0.42 - 0.074 mm	7 %	8 %	Diam. at 10%	0.0037 mm	0.0015 mm
0.074 - 0.005 mm	7 %	7 %	Coefficient of uniformity	570	1000
Smaller than 0.005 mm	12 %	12 %	Coefficient of curvature	40	120
Smaller than 0.001 mm	7 %	9 %			
2000 μ Sieve Passing	58 %	71 %			
420 μ Sieve Passing	26 %	27 %			
74 μ Sieve Passing	19 %	19 %			

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# GRAIN SIZE DISTRIBUTION

Project \_\_\_\_\_ Job No. \_\_\_\_\_

Location of Project \_\_\_\_\_ Boring No. F-9

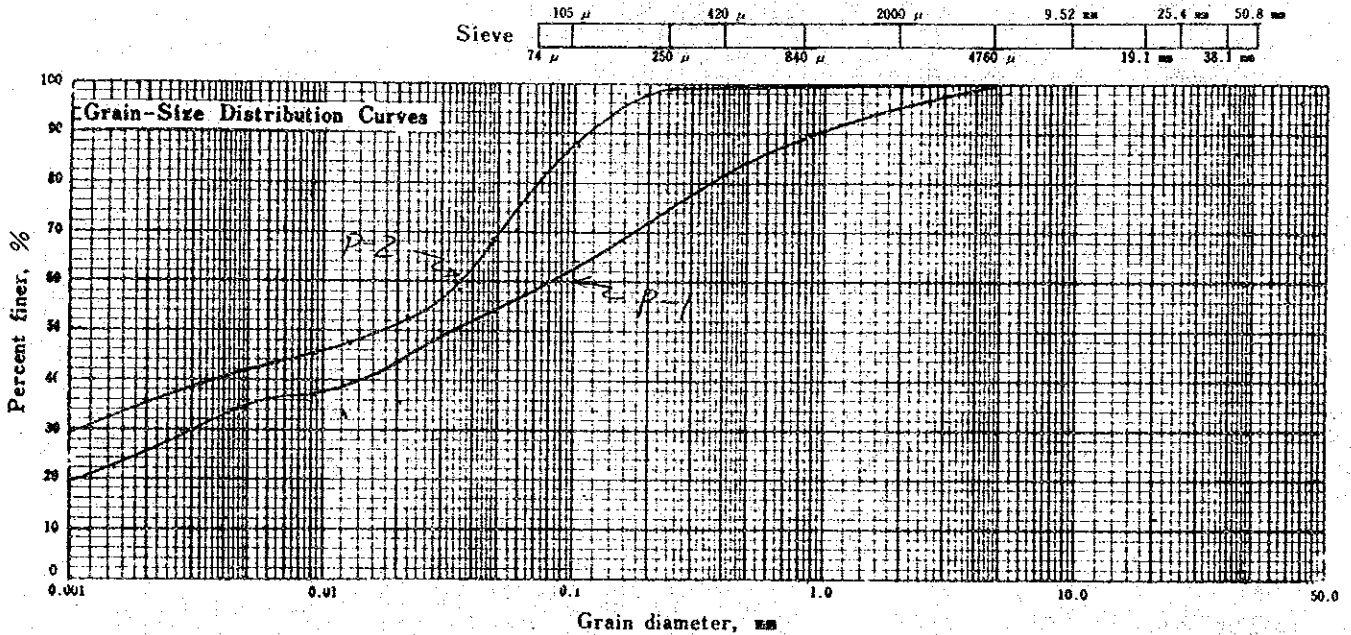
Tested by \_\_\_\_\_ Date of Testing \_\_\_\_\_

Sample No., Depth : No. P-1 (2.00 m - 2.43 m) Specific Gravity,  $G_s = 2.631$

Sieve	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing						100	95.2	89.3	81.6	75.4	62.6	59.8
Hydro.	Diam. mm	0.049	0.035	0.022	0.013	0.0073	0.0046	0.0033	0.0015				
	% Passing	53.8	49.9	48.0	42.2	36.5	35.1	26.9	22.3				

Sample No., Depth : No. P-2 (4.00 m - 4.35 m) Specific Gravity,  $G_s = 2.644$

Sieve	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing						100	99.9	99.8	99.6	99.1	86.6	80.5
Hydro.	Diam. mm	0.048	0.035	0.022	0.013	0.0091	0.0065	0.0033	0.0019				
	% Passing	68.5	58.7	52.7	46.9	45.0	43.6	39.1	32.5				



Colloid	Clay	Silt	Sand	Gravel
0.001	0.005	0.074	2.0	

Sample No., Depth	No. <u>P-1</u> <u>2.00 m - 2.43 m</u>	No. <u>P-2</u> <u>4.00 m - 4.35 m</u>	Sample No., Depth	No. <u>P-1</u> <u>2.00 m - 2.43 m</u>	No. <u>P-2</u> <u>4.00 m - 4.35 m</u>
Larger than 4.76 mm	0 %	0 %	Max. diam.	4.76 mm	4.76 mm
4.76 - 2 mm	5 %	0 %	Diam. at 60%	0.077 mm	0.035 mm
2 - 0.42 mm	13 %	1 %	Diam. at 30%	0.0031 mm	0.0011 mm
0.42 - 0.074 mm	23 %	19 %	Diam. at 10%	— mm	— mm
0.074 - 0.005 mm	24 %	38 %	Coefficient of uniformity	—	—
Smaller than 0.005 mm	35 %	42 %	Coefficient of curvature	—	—
Smaller than 0.001 mm	19 %	29 %			
2000 μ Sieve Passing	95 %	100 %			
420 μ Sieve Passing	82 %	99 %			
74 μ Sieve Passing	59 %	80 %			

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# GRAIN SIZE DISTRIBUTION

Project \_\_\_\_\_ Job. No. \_\_\_\_\_

Location of Project \_\_\_\_\_ Boring No. F-9

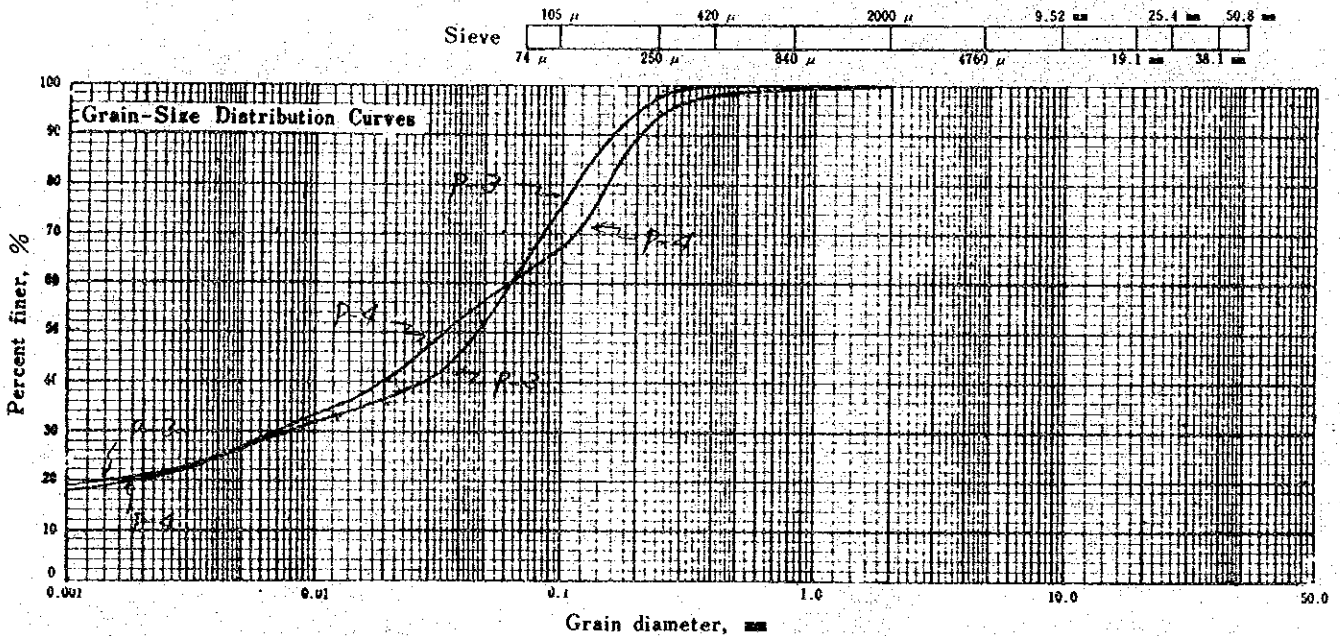
Tested by \_\_\_\_\_ Date of Testing \_\_\_\_\_

Sample No., Depth: No. P-3 (6.00 m - 6.31 m) Specific Gravity,  $G_s = \geq 2.630$

Sieve	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing							100	99.9	99.8	99.4	76.0	67.2
Hydro.	Diam. mm	0.049	0.036	0.023	0.013	0.0073	0.0066	0.0033	0.0015				
	% Passing	52.9	42.5	38.6	32.9	31.5	29.6	23.2	20.5				

Sample No., Depth: No. P-4 (8.00 m - 8.41 m) Specific Gravity,  $G_s = 2.647$

Sieve	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing							100	99.9	99.5	98.3	75.3	62.9
Hydro.	Diam. mm	0.044	0.031	0.021	0.012	0.0088	0.0063	0.0032	0.0014				
	% Passing	54.7	47.9	40.1	34.2	32.5	29.6	23.5	19.2				



Colloid	Clay	Silt	Sand	Gravel
0.001	0.005	0.074	2.0	

Sample No., Depth	No. <u>P-3</u> <u>6.00 m - 6.31 m</u>	No. <u>P-4</u> <u>8.00 m - 8.41 m</u>	Sample No., Depth	No. <u>P-3</u> <u>6.00 m - 6.31 m</u>	No. <u>P-4</u> <u>8.00 m - 8.41 m</u>
Larger than 4.76 mm	%	%	Max. diam.	<u>2.00</u> mm	<u>4.76</u> mm
4.76 - 2 mm	%	<u>0</u> %	Diam. at 60%	<u>0.063</u> mm	<u>0.063</u> mm
2 - 0.42 mm	<u>0</u> %	<u>2</u> %	Diam. at 30%	<u>0.0078</u> mm	<u>0.0070</u> mm
0.42 - 0.074 mm	<u>33</u> %	<u>35</u> %	Diam. at 10%	— mm	— mm
0.074 - 0.005 mm	<u>40</u> %	<u>36</u> %	Coefficient of uniformity	—	—
Smaller than 0.005 mm	<u>27</u> %	<u>27</u> %	Coefficient of curvature	—	—
Smaller than 0.001 mm	<u>19</u> %	<u>18</u> %			
2000 μ Sieve Passing	<u>100</u> %	<u>100</u> %			
420 μ Sieve Passing	<u>100</u> %	<u>98</u> %			
74 μ Sieve Passing	<u>67</u> %	<u>63</u> %			

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# GRAIN SIZE DISTRIBUTION

Project \_\_\_\_\_ Job. No. \_\_\_\_\_

Location of Project \_\_\_\_\_ Boring No. F-9

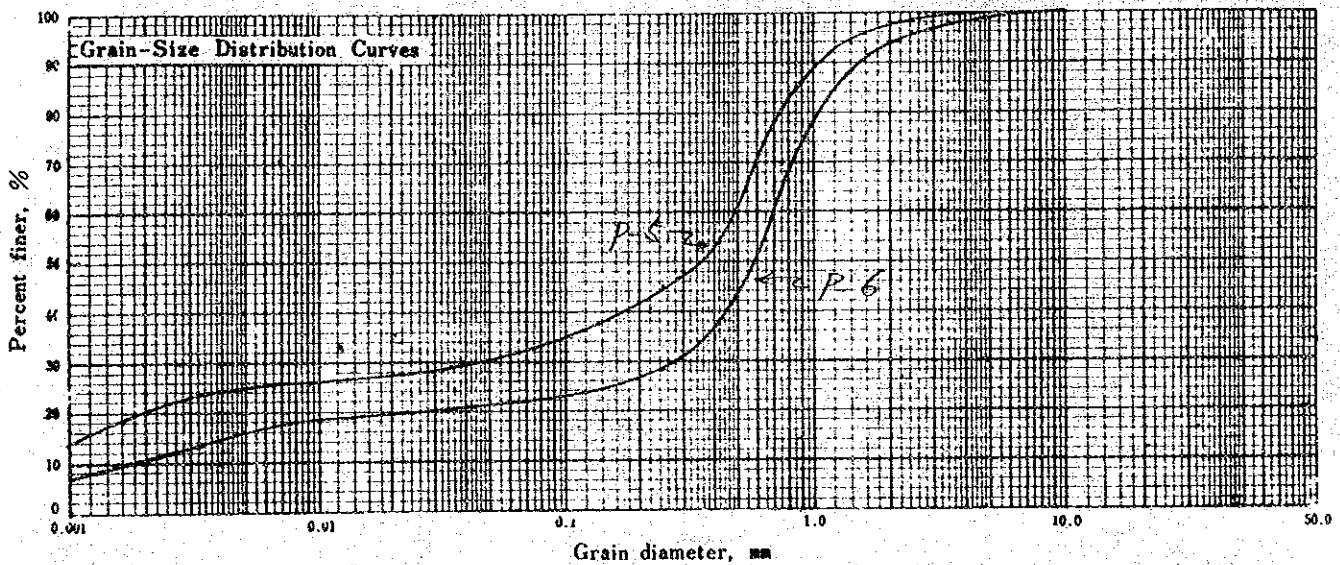
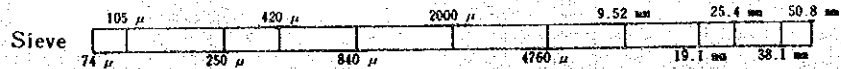
Tested by \_\_\_\_\_ Date of Testing \_\_\_\_\_

Sample No., Depth: No. P-5 (10.00 m - 10.34 m) Specific Gravity,  $G_s = 2.610$

Sieve	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing						100	97.8	85.0	53.9	24.9	24.8	22.6
Hydro.	Diam. mm	0.049	0.035	0.022	0.013	0.0091	0.0064	0.0032	0.0016				
	% Passing	20.2	29.3	27.9	26.5	25.6	24.7	23.7	18.2				

Sample No., Depth: No. P-6 (12.00 m - 12.22 m) Specific Gravity,  $G_s = 2.629$

Sieve	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing					100	99.2	94.5	72.6	37.7	28.5	22.9	22.1
Hydro.	Diam. mm	0.050	0.036	0.023	0.013	0.0092	0.0065	0.0033	0.0015				
	% Passing	21.1	20.2	20.0	18.6	18.2	17.7	13.7	9.7				



Colloid	Clay	Silt	Sand	Gravel
0.001	0.005	0.074	2.0	

Sample No., Depth	No. <u>P-5</u> <u>10.00 m - 10.34 m</u>	No. <u>P-6</u> <u>12.00 m - 12.22 m</u>	Sample No., Depth	No. <u>P-5</u> <u>10.00 m - 10.34 m</u>	No. <u>P-6</u> <u>12.00 m - 12.22 m</u>
Larger than 4.76 mm	0 %	1 %	Max. diam.	4.76 mm	9.52 mm
4.76 ~ 2 mm	2 %	5 %	Diam. at 60%	0.49 mm	0.70 mm
2 ~ 0.42 mm	44 %	56 %	Diam. at 30%	0.046 mm	0.18 mm
0.42 ~ 0.074 mm	21 %	16 %	Diam. at 10%	— mm	0.0017 mm
0.074 ~ 0.005 mm	8 %	6 %	Coefficient of uniformity	—	410
Smaller than 0.005 mm	25 %	16 %	Coefficient of curvature	—	27
Smaller than 0.001 mm	14 %	7 %			
2000 μ Sieve Passing	98 %	94 %			
420 μ Sieve Passing	54 %	38 %			
74 μ Sieve Passing	33 %	22 %			

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**GRAIN SIZE DISTRIBUTION**

Project \_\_\_\_\_ Job. No. \_\_\_\_\_

Location of Project \_\_\_\_\_ Boring No. F-9

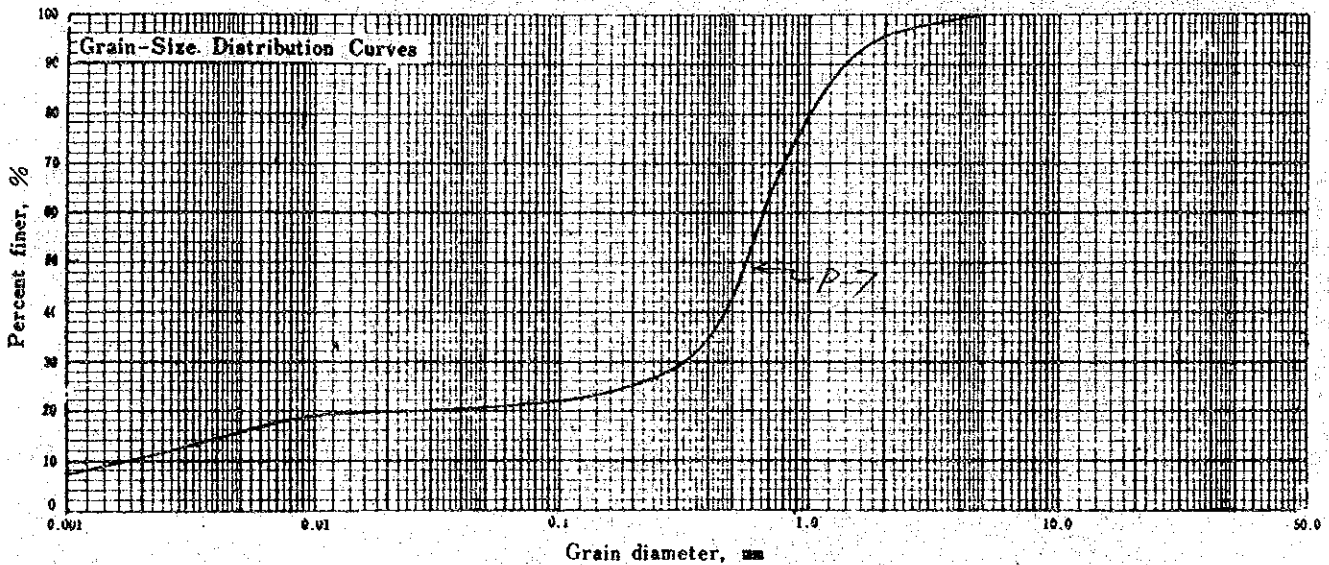
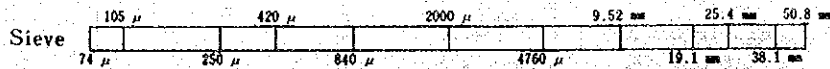
Tested by. \_\_\_\_\_ Date of Testing \_\_\_\_\_

Sample No., Depth: No. P-7 (14.00 m - 14.27 m) Specific Gravity,  $G_s =$  2.626

Sieve	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing						100	96.4	72.9	25.0	26.6	22.1	21.5
Hydro.	Diam. mm	0.050	0.036	0.023	0.013	0.0092	0.0065	0.0033	0.0015				
	% Passing	20.3	20.1	19.8	19.6	18.7	17.8	12.9	9.8				

Sample No., Depth: No. \_\_\_\_\_ (    m -     m) Specific Gravity,  $G_s =$  \_\_\_\_\_

Sieve	Diam. mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	% Passing												
Hydro.	Diam. mm												
	% Passing												



Colloid	Clay	Silt	Sand	Gravel
0.001	0.005	0.074	2.0	

Sample No., Depth	No. <u>P-7</u> <u>14.00 m - 14.27 m</u>	No. <u>    m -     m</u>	Sample No., Depth	No. <u>P-7</u> <u>14.00 m - 14.27 m</u>	No. <u>    m -     m</u>
Larger than 4.76 mm	0 %	%	Max. diam.	<u>4.76</u> mm	mm
4.76 - 2 mm	4 %	%	Diam. at 60%	<u>0.65</u> mm	mm
2 - 0.42 mm	61 %	%	Diam. at 30%	<u>0.32</u> mm	mm
0.42 - 0.074 mm	14 %	%	Diam. at 10%	<u>0.0017</u> mm	mm
0.074 - 0.005 mm	5 %	%	Coefficient of uniformity	<u>380</u>	
Smaller than 0.005 mm	16 %	%	Coefficient of curvature	<u>93</u>	
Smaller than 0.001 mm	7 %	%			
2000 μ Sieve Passing	96 %	%			
420 μ Sieve Passing	25 %	%			
74 μ Sieve Passing	21 %	%			

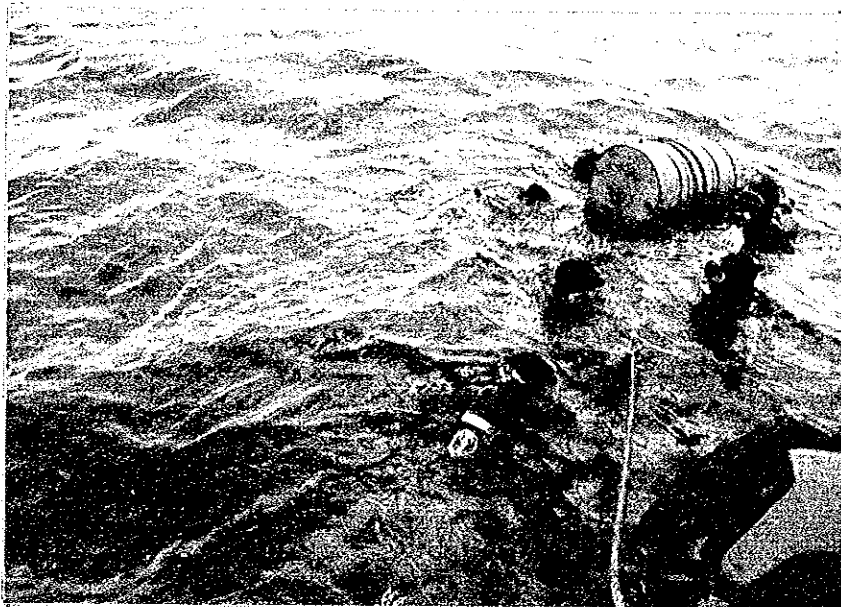
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現場写真



The Slave Station at P. Sebarok. The setting of the electric positioning equipment (AUDISTER).



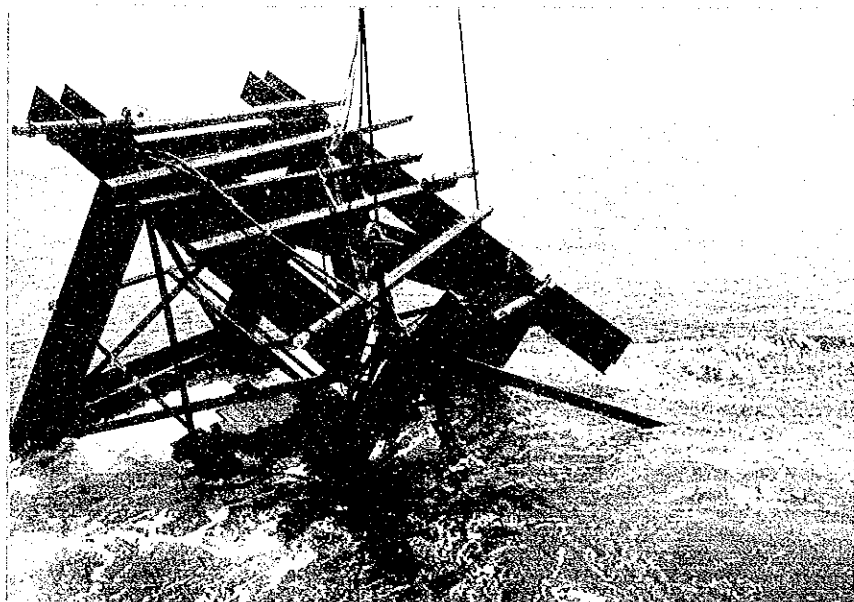
Diver Survey at Shoal-A. The detecting work of the bombs and the other explosives.



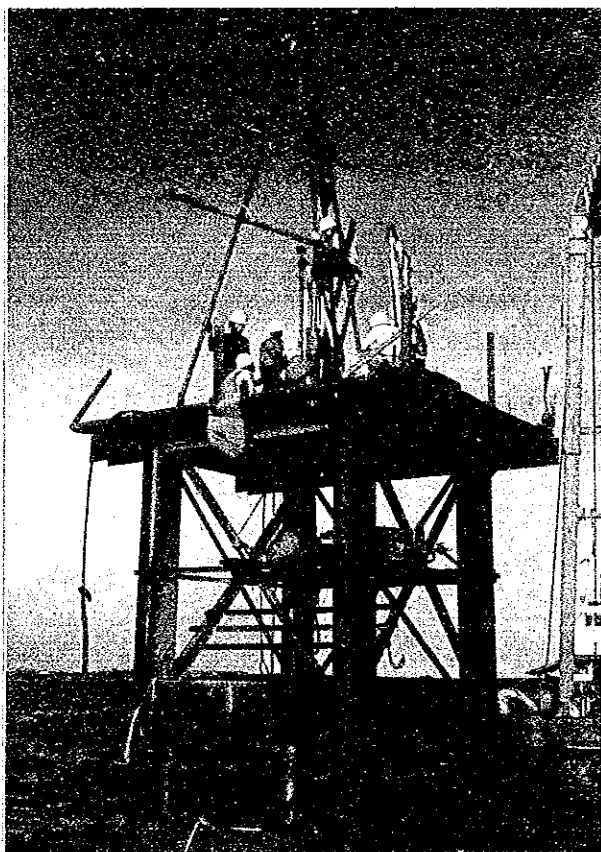
The explosion of the bombs. The meeting for the work.



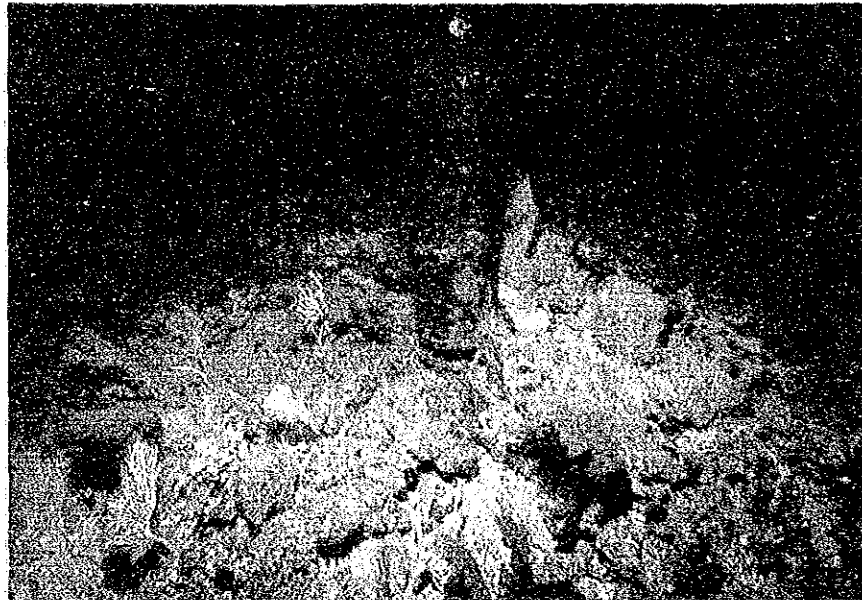
The inclined boring tower by the strong tidal current at Shoal-A.



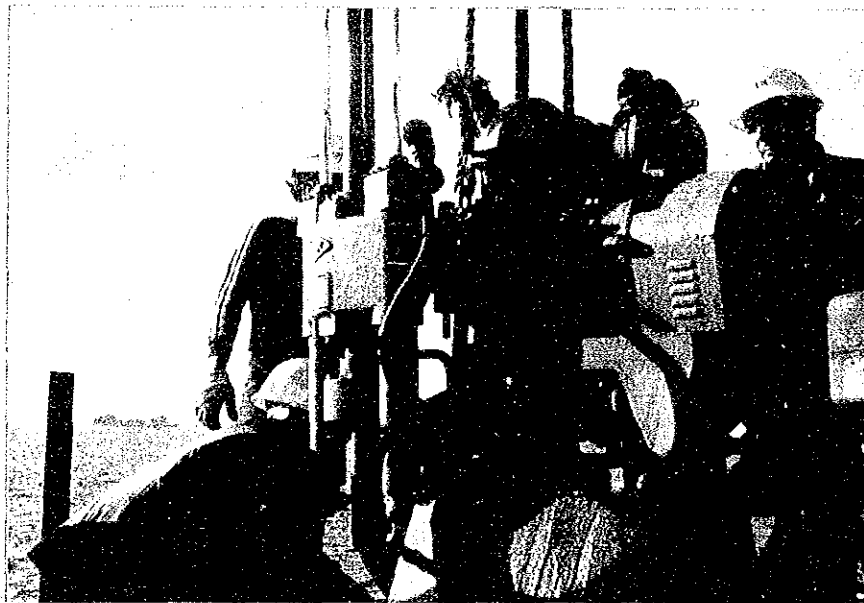
The puring up work of the fell down boring tower.



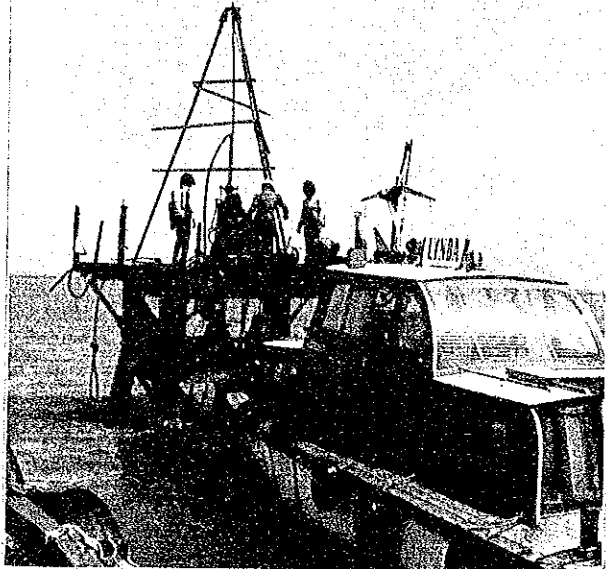
The scene of the boring at BH-C-1 ( Shoal-C )



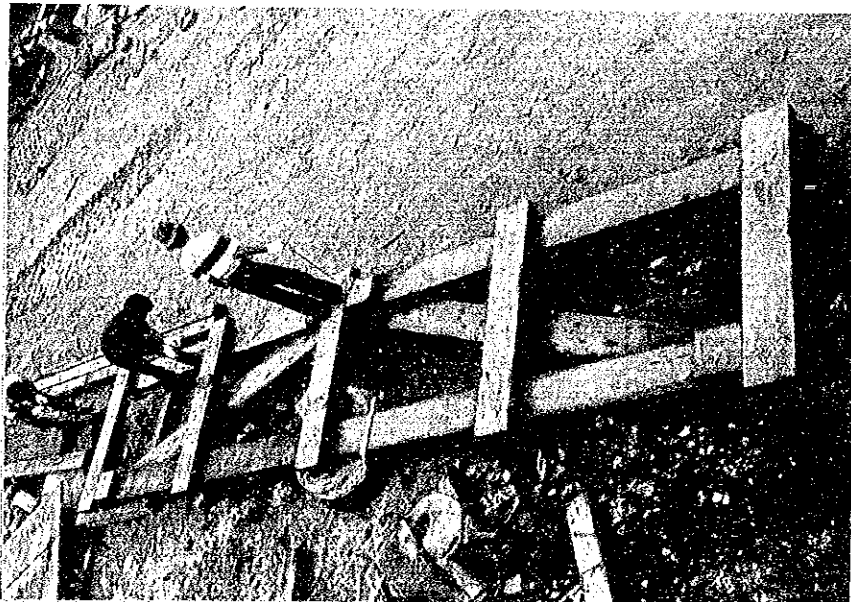
The scene of the sea bottom at BH-C-3 point. The steel pipe is the bottom of the casing pipe.



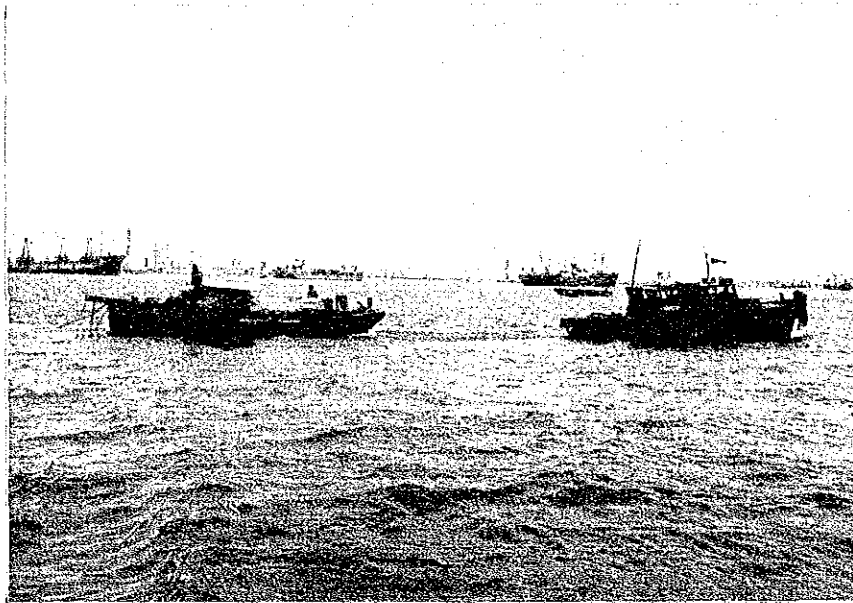
The scene of the operation of the boring.



The boring operation at Off-shore Changi.



h The setting of the towing frame for the magnetic detecting. The magnetic detector will be set on this stage.



The scene of the magnetic detecting. The right side is the tug-boat and the left side is the magnetic detecting barge.