

ATTERBERG LIMITS DETERMINATION

Project _____

Project No. _____

Location of Project _____

Boring No. 2.2

Date of Testing _____

Sample No., Depth | No. P. 9 (18.00m - 18.20m)

Liquid limit test			Plastic limit test	
Test No.	No. of blows	Water content %	Test No.	Water content %
1	48	42.08	1	15.84
2	30	44.09	2	15.09
3	25	44.85	3	16.18
4	20	45.79	Average	15.90
5	15	47.00		
6	10	52.68		
Liquid limit		Plastic limit	Plasticity index	
44.7 %		15.7 %	29.0	

Remarks _____

Sample No., Depth | No. P. 10 (20.00m - 20.20m)

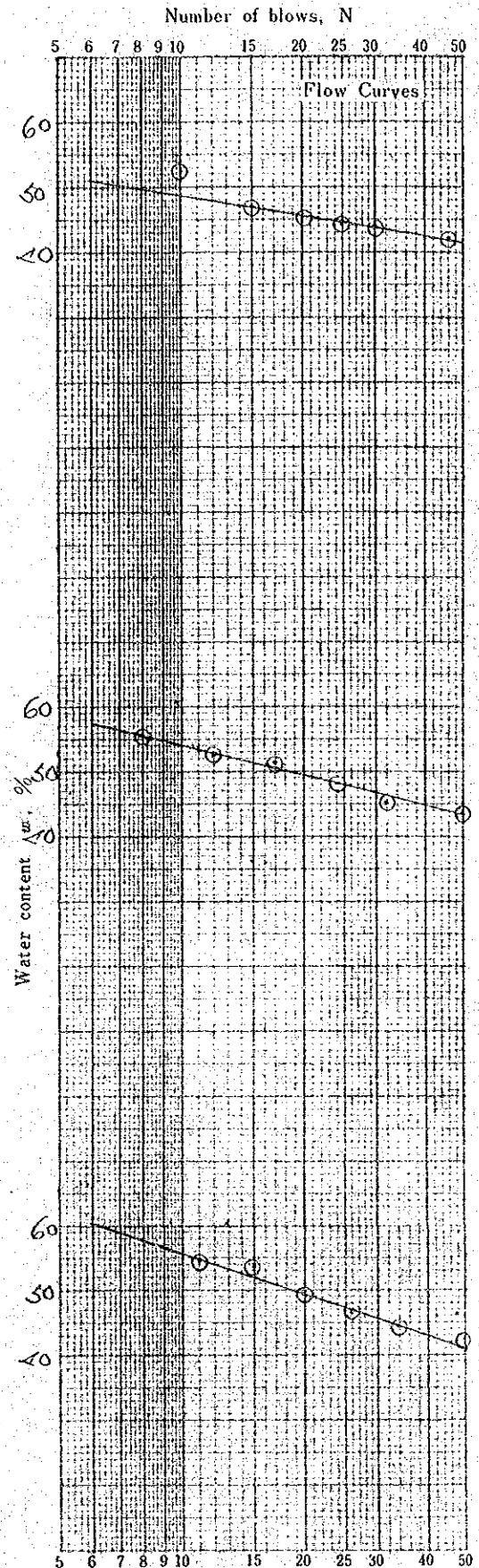
Liquid limit test			Plastic limit test	
Test No.	No. of blows	Water content %	Test No.	Water content %
1	50	43.99	1	14.75
2	32	45.03	2	14.22
3	21	48.08	3	15.82
4	17	51.16	Average	14.93
5	12	52.88		
6	8	55.58		
Liquid limit		Plastic limit	Plasticity index	
49.9 %		14.9 %	33.0	

Remarks _____

Sample No., Depth | No. P. 11 (22.00m - 22.20m)

Liquid limit test			Plastic limit test	
Test No.	No. of blows	Water content %	Test No.	Water content %
1	50	42.86	1	16.31
2	32	44.53	2	17.96
3	25	46.98	3	17.38
4	20	49.72	Average	17.15
5	15	53.58		
6	11	54.36		
Liquid limit		Plastic limit	Plasticity index	
49.1 %		17.2 %	29.9	

Remarks _____



ATTERBERG LIMITS DETERMINATION

Project _____
 Location of Project _____
 Date of Testing _____

Project No. _____
 Boring No. 7-3

Sample No., Depth		No. <u>A 5</u> (<u>10.00m ~ 10.37m</u>)		
Liquid limit test			Plastic limit test	
Test No.	No. of blows	Water content %	Test No.	Water content %
1	<10	57.89	1	21.62
2	30	56.34	2	22.29
3	22	58.01	3	21.81
4	18	62.19	Average	21.91
5	12	61.29		
6	10	62.64		
Liquid limit		Plastic limit	Plasticity index	
57.8 %		21.9 %	35.9	

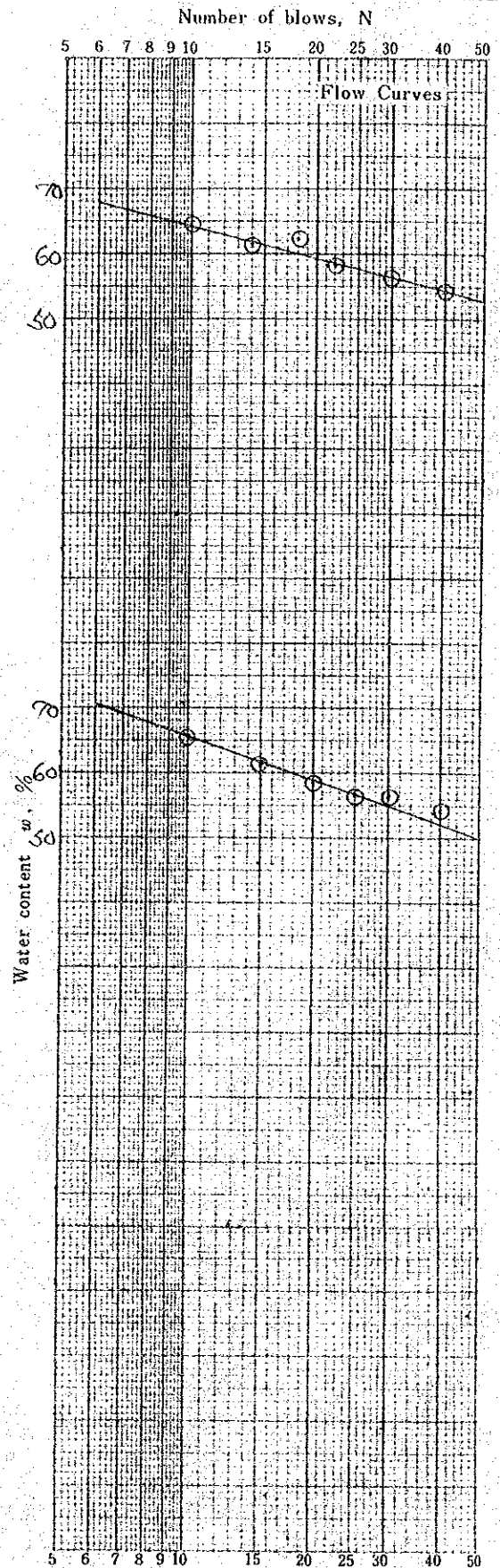
Remarks _____

Sample No., Depth		No. <u>A 6</u> (<u>11.00m ~ 11.35m</u>)		
Liquid limit test			Plastic limit test	
Test No.	No. of blows	Water content %	Test No.	Water content %
1	<10	57.23	1	20.92
2	30	56.37	2	19.47
3	25	56.76	3	19.58
4	20	58.85	Average	20.00
5	15	61.55		
6	10	63.29		
Liquid limit		Plastic limit	Plasticity index	
56.8 %		20.0 %	36.8	

Remarks _____

Sample No., Depth		No. _____ (____ m ~ ____ m)		
Liquid limit test			Plastic limit test	
Test No.	No. of blows	Water content %	Test No.	Water content %
1			1	
2			2	
3			3	
4			Average	
5				
6				
Liquid limit		Plastic limit	Plasticity index	
%		%		

Remarks _____



383
 22

ATTERBERG LIMITS DETERMINATION

Project _____
 Location of Project _____
 Date of Testing _____

Project No. _____
 Boring No. 7-8

Sample No., Depth		No. <u>P.1</u> (<u>2.00m - 2.45m</u>)			
Liquid limit test			Plastic limit test		
Test No.	No. of blows	Water content %	Test No.	Water content %	
1	10	98.95	1	28.36	
2	28	93.39	2	28.62	
3	22	99.38	3	29.11	
4	17	100.26	Average	28.71	
5	13	103.56			
6	10	106.27			
Liquid limit		Plastic limit	Plasticity index		Flow index
98.0 %		28.7 %	69.3		

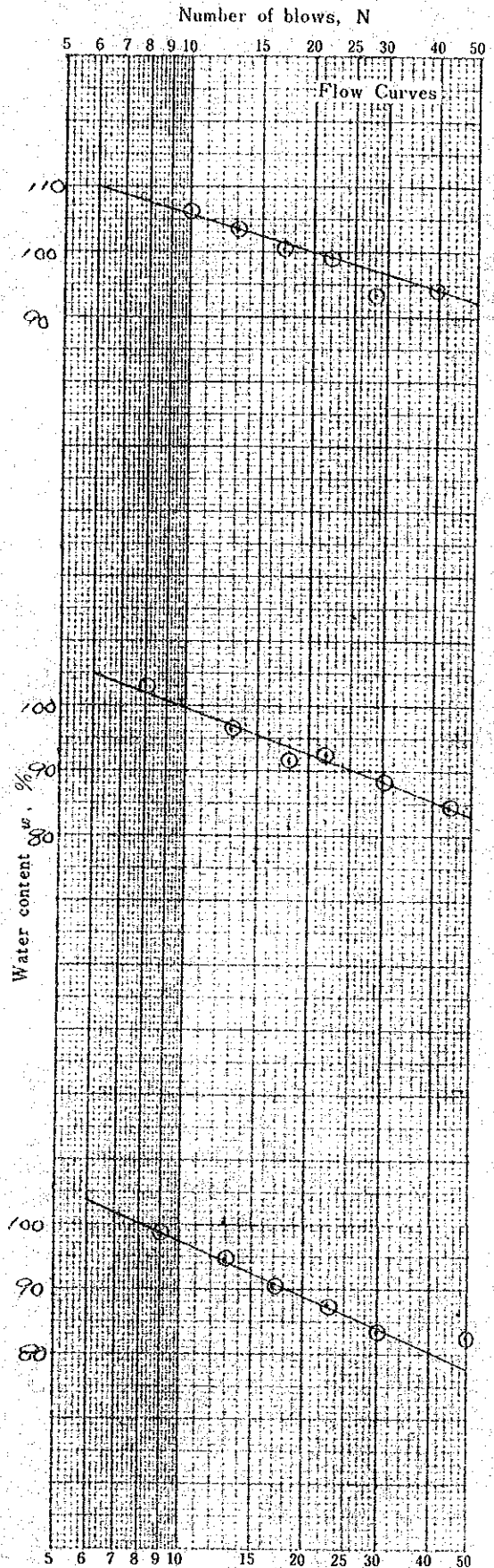
Remarks _____

Sample No., Depth		No. <u>P.2</u> (<u>4.00m - 4.45m</u>)			
Liquid limit test			Plastic limit test		
Test No.	No. of blows	Water content %	Test No.	Water content %	
1	11	82.13	1	27.76	
2	30	88.22	2	26.26	
3	22	92.23	3	26.92	
4	18	91.23	Average	27.05	
5	13	96.53			
6	8	103.62			
Liquid limit		Plastic limit	Plasticity index		Flow index
90.1 %		27.1 %	63.0		

Remarks _____

Sample No., Depth		No. <u>P.3</u> (<u>6.00m - 6.45m</u>)			
Liquid limit test			Plastic limit test		
Test No.	No. of blows	Water content %	Test No.	Water content %	
1	50	82.12	1	25.63	
2	30	83.15	2	27.03	
3	23	87.21	3	26.91	
4	17	90.22	Average	26.53	
5	13	91.49			
6	9	98.89			
Liquid limit		Plastic limit	Plasticity index		Flow index
86.0 %		26.5 %	59.5		

Remarks _____



389
27

ATTERBERG LIMITS DETERMINATION

Project _____

Project No. _____

Location of Project _____

Boring No. F-9

Date of Testing _____

Sample No., Depth No. P1 (2.00m ~ 2.35m)

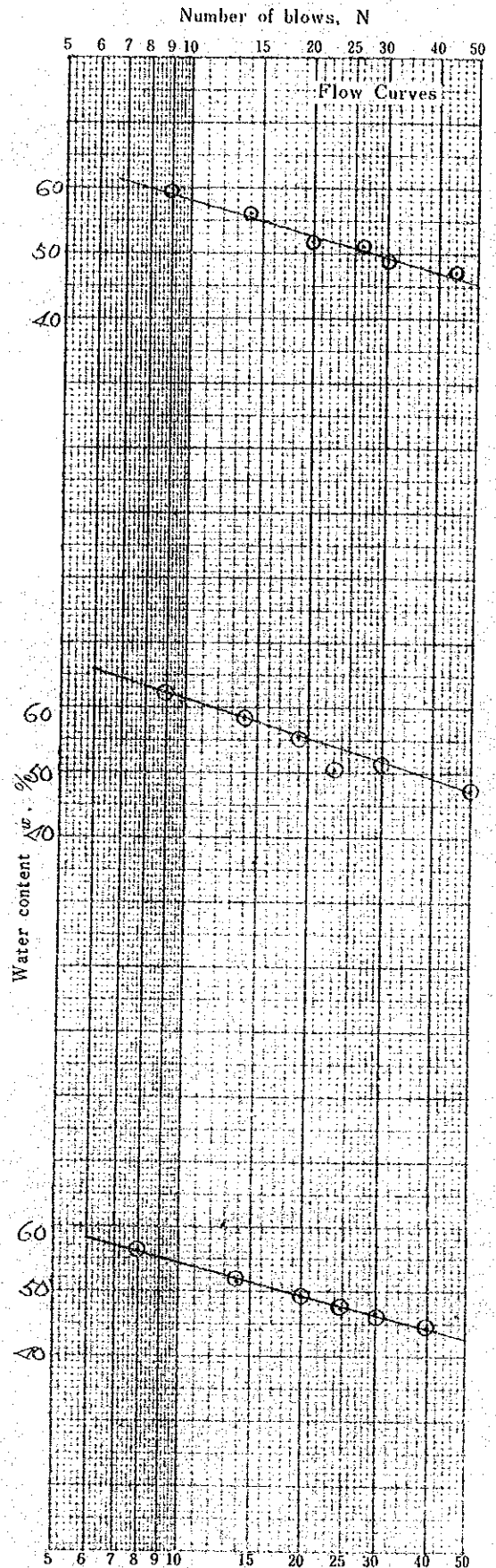
Liquid limit test			Plastic limit test	
Test No.	No. of blows	Water content %	Test No.	Water content %
1	44	47.1	1	18.02
2	30	48.8	2	18.78
3	26	51.2	3	18.66
4	20	51.8	Average	18.49
5	14	56.2		
6	9	59.5		
Liquid limit		Plastic limit	Plasticity index	
50.8 %		18.5 %	32.3	
Remarks _____				

Sample No., Depth No. P2 (4.00m ~ 4.35m)

Liquid limit test			Plastic limit test	
Test No.	No. of blows	Water content %	Test No.	Water content %
1	50	47.50	1	17.96
2	30	51.26	2	17.37
3	23	50.82	3	16.87
4	19	55.43	Average	17.33
5	11	58.88		
6	9	62.97		
Liquid limit		Plastic limit	Plasticity index	
53.2 %		17.3 %	35.9	
Remarks _____				

Sample No., Depth No. P3 (6.00m ~ 6.35m)

Liquid limit test			Plastic limit test	
Test No.	No. of blows	Water content %	Test No.	Water content %
1	20	49.69	1	21.16
2	30	46.28	2	21.46
3	25	49.40	3	20.85
4	20	49.01	Average	21.16
5	14	51.52		
6	8	56.23		
Liquid limit		Plastic limit	Plasticity index	
49.7 %		21.2 %	28.5	
Remarks _____				



305
24

ATTERBERG LIMITS DETERMINATION

Project _____
 Location of Project _____
 Date of Testing _____

Project No. _____
 Boring No. 7.9

Sample No., Depth		No. <u>P-4</u>		(8.00 m ~ 8.41 m)	
Liquid limit test			Plastic limit test		
Test No.	No. of blows	Water content %	Test No.	Water content %	
1	<u>18</u>	<u>45.77</u>	1	<u>15.99</u>	
2	<u>30</u>	<u>46.59</u>	2	<u>12.15</u>	
3	<u>28</u>	<u>40.10</u>	3	<u>12.29</u>	
4	<u>28</u>	<u>52.10</u>	Average	<u>12.1</u>	
5	<u>12</u>	<u>52.50</u>			
6	<u>10</u>	<u>59.27</u>			
Liquid limit		Plastic limit	Plasticity index		Flow index
<u>49.0 %</u>		<u>12.1 %</u>	<u>37.6</u>		

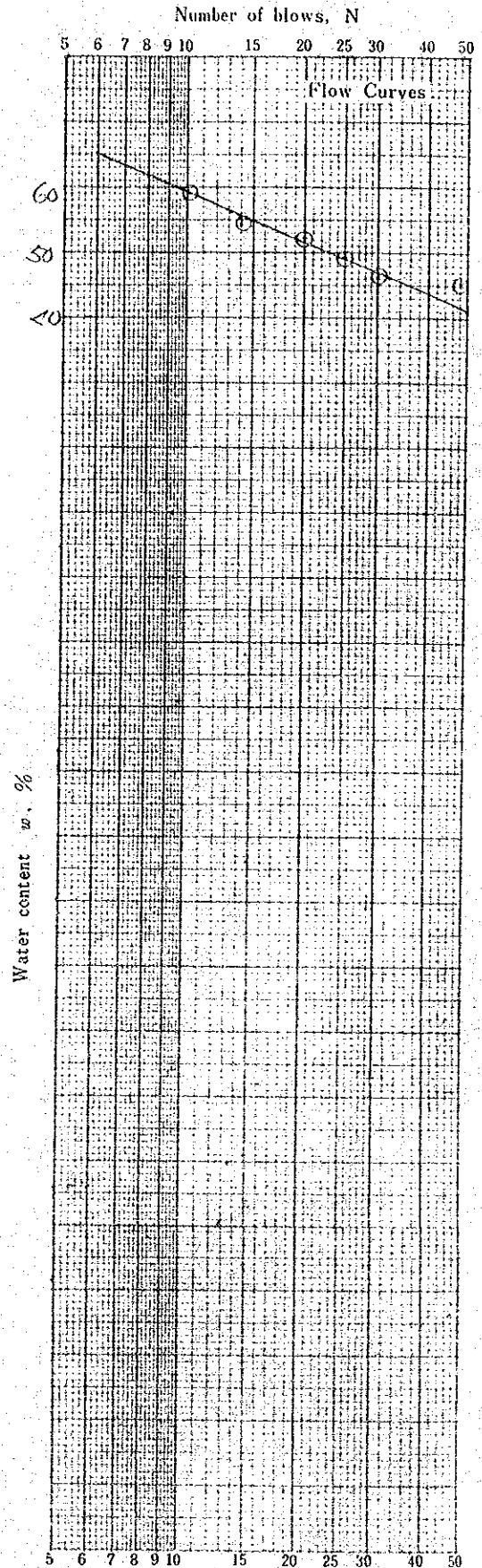
Remarks _____

Sample No., Depth		No.		(m ~ m)	
Liquid limit test			Plastic limit test		
Test No.	No. of blows	Water content %	Test No.	Water content %	
1			1		
2			2		
3			3		
4			Average		
5					
6					
Liquid limit		Plastic limit	Plasticity index		Flow index
%		%			

Remarks _____

Sample No., Depth		No.		(m ~ m)	
Liquid limit test			Plastic limit test		
Test No.	No. of blows	Water content %	Test No.	Water content %	
1			1		
2			2		
3			3		
4			Average		
5					
6					
Liquid limit		Plastic limit	Plasticity index		Flow index
%		%			

Remarks _____



386
25

GRAIN SIZE DISTRIBUTION

Project _____ Job. No. _____

Location of Project _____ Boring No. E-1

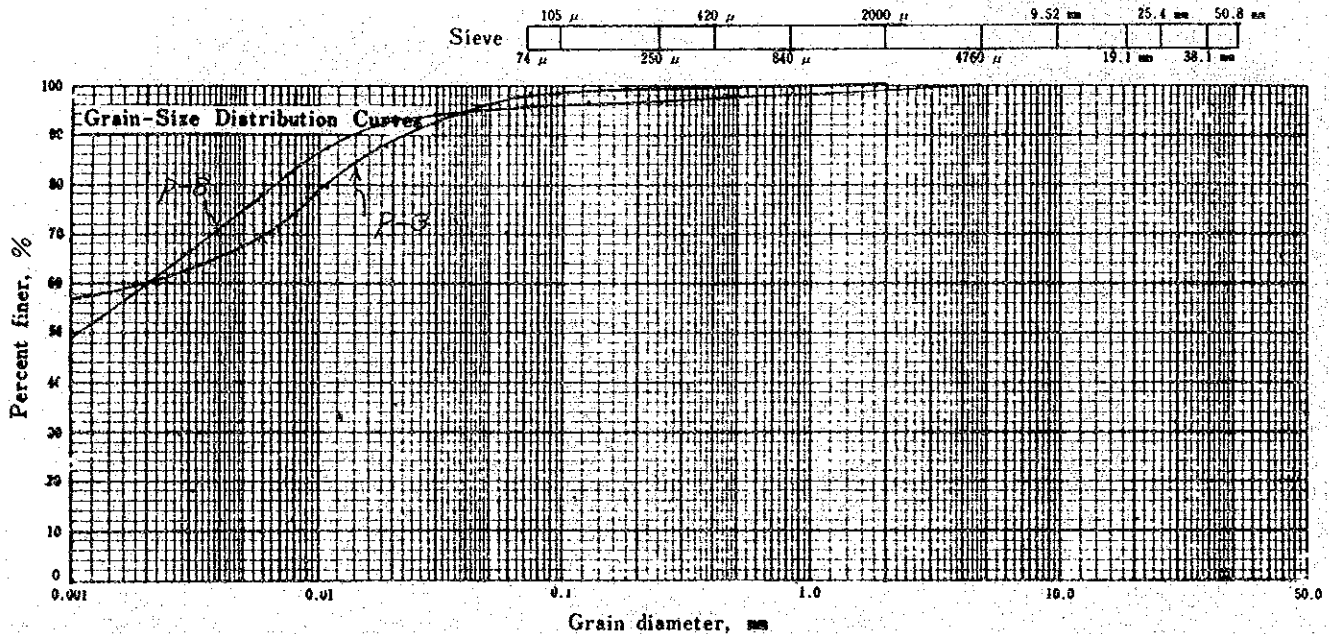
Tested by. _____ Date of Testing _____

Sample No., Depth. : No. P-3 (6.00 m - 6.45 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	99.7	99.6	99.5	99.4	98.4
Hydro.	Diam. mm	0.041	0.020	0.019	0.011	0.0081	0.0058	0.0030	0.0013				
	% Passing	95.0	93.2	87.7	79.5	74.0	68.5	62.0	58.0				

Sample No., Depth. : No. P-8 (16.00 m - 16.45 m) Specific Gravity, $G_s = 2.606$

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	99.2	98.5	97.7	96.1
Hydro.	Diam. mm	0.042	0.030	0.019	0.011	0.0080	0.0057	0.0029	0.0013				
	% Passing	95.5	94.1	92.8	87.4	82.0	76.6	65.9	53.0				



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 - 6.45 m</u>	No. <u>P-8</u> <u>16.00 m - 16.45 m</u>	Sample No., Depth	No. <u>P-3</u> <u>6.00 m - 6.45 m</u>	No. <u>P-8</u> <u>16.00 m - 16.45 m</u>
Larger than 4.76 mm			Max. diam.	2.00 mm	4.76 mm
4.76 - 2 mm		1 %	Diam. at 60%	0.0020 mm	0.0020 mm
2 - 0.42 mm	1 %	2 %	Diam. at 30%	— mm	— mm
0.42 - 0.074 mm	1 %	1 %	Diam. at 10%	— mm	— mm
0.074 - 0.005 mm	31 %	21 %	Coefficient of uniformity	—	—
Smaller than 0.005 mm	67 %	75 %	Coefficient of curvature	—	—
Smaller than 0.001 mm	57 %	49 %			
2000 μ Sieve Passing	100 %	99 %			
420 μ Sieve Passing	99 %	97 %			
74 μ Sieve Passing	98 %	96 %			

387
25

GRAIN SIZE DISTRIBUTION

Project _____ Job No. _____

Location of Project _____ Boring No. E-1

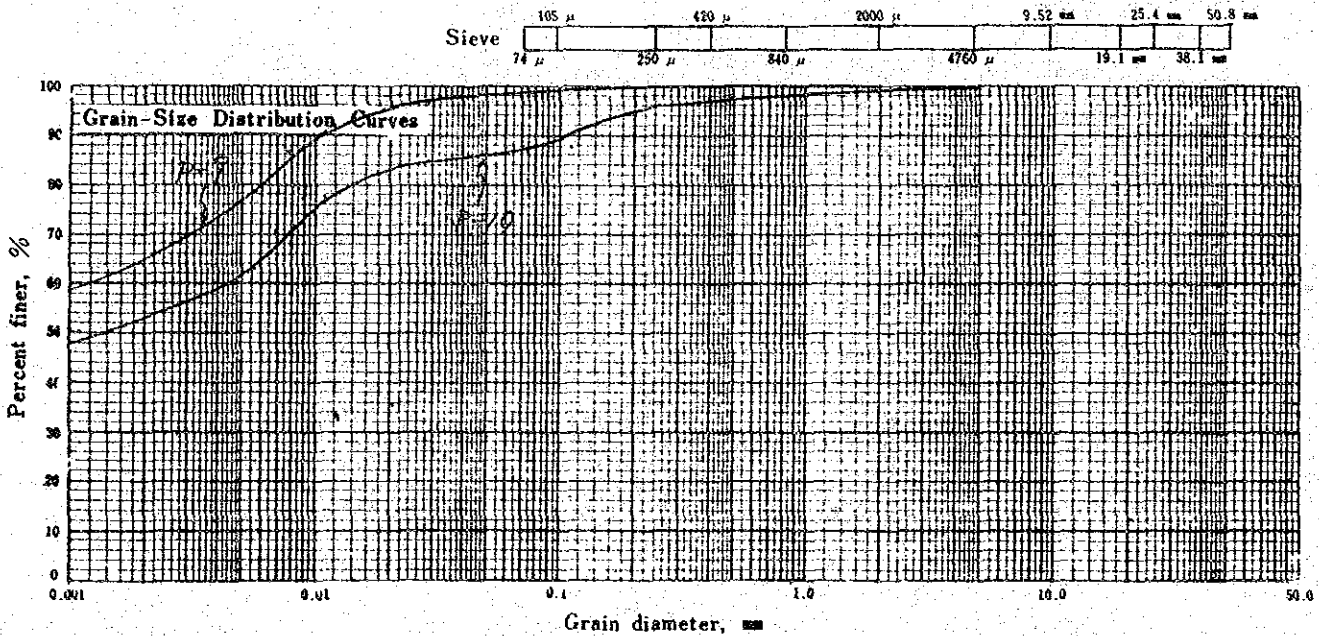
Tested by _____ Date of Testing _____

Sample No., Depth : No. P-9 (18.00 m - 18.45 m) Specific Gravity, $G_s = > 616$

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	99.9	99.8	99.7	99.6	99.5
Hydro.	Diam. mm	0.041	0.029	0.019	0.011	0.0079	0.0057	0.0029	0.0013				
	% Passing	78.1	96.5	94.6	91.9	86.5	78.4	68.9	60.0				

Sample No., Depth : No. P-10 (20.00 m - 20.45 m) Specific Gravity, $G_s = > 625$

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	98.5	97.6	97.1	96.3	89.4
Hydro.	Diam. mm	0.040	0.029	0.018	0.011	0.0079	0.0057	0.0029	0.0012				
	% Passing				77.9	70.6	62.3	56.0	49.2				



Colloid	Clay	Silt	Sand	Gravel
0.001	0.005	0.074	2.0	

Sample No., Depth	No. <u>P-9</u> <u>18.00 m - 18.45 m</u>	No. <u>P-10</u> <u>20.00 m - 20.45 m</u>	Sample No., Depth	No. <u>P-9</u> <u>18.00 m - 18.45 m</u>	No. <u>P-10</u> <u>20.00 m - 20.45 m</u>
Larger than 4.76 mm		%	Max. diam.	<u>2.00</u> mm	<u>4.76</u> mm
4.76 - 2 mm		%	Diam. at 60%	<u>0.0012</u> mm	<u>0.0045</u> mm
2 - 0.42 mm	<u>0</u> %	<u>2</u> %	Diam. at 30%	— mm	— mm
0.42 - 0.074 mm	<u>1</u> %	<u>10</u> %	Diam. at 10%	— mm	— mm
0.074 - 0.005 mm	<u>22</u> %	<u>25</u> %	Coefficient of uniformity	—	—
Smaller than 0.005 mm	<u>77</u> %	<u>62</u> %	Coefficient of curvature	—	—
Smaller than 0.001 mm	<u>59</u> %	<u>48</u> %			
2000 μ Sieve Passing	<u>100</u> %	<u>99</u> %			
420 μ Sieve Passing	<u>100</u> %	<u>97</u> %			
74 μ Sieve Passing	<u>99</u> %	<u>87</u> %			

388
27

GRAIN SIZE DISTRIBUTION

Project _____ Job. No. _____

Location of Project _____ Boring No. E-1

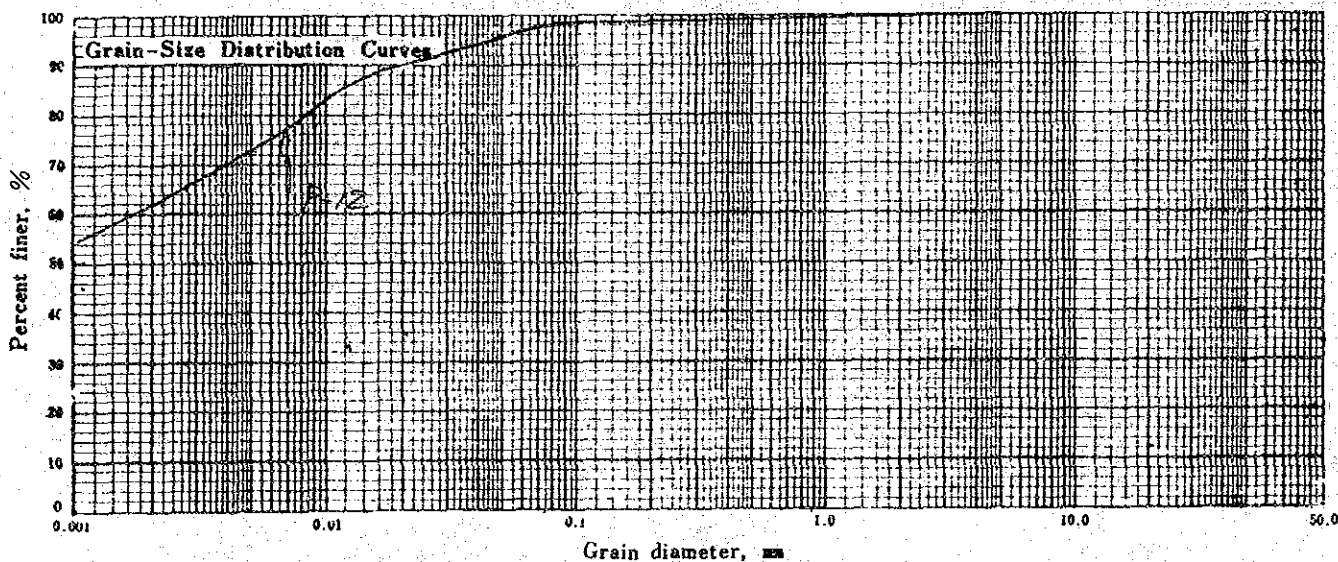
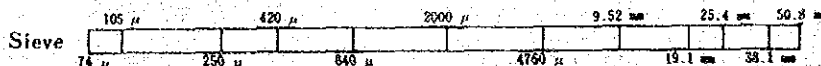
Tested by _____ Date of Testing _____

Sample No., Depth: No. P-12 (24.00 m - 24.45 m) Specific Gravity, $G_s = 2.686$

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							99.9	99.7	99.4	99.3	98.4	98.1
Hydro.	Diam. mm	0.038	0.027	0.017	0.010	0.0074	0.0053	0.0028	0.0012				
	% Passing	93.8	91.7	89.6	83.3	77.1	52.9	64.6	55.6				

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-12</u> <u>24.00 m - 24.45 m</u>	No. _____ _____ m - _____ m	Sample No., Depth	No. <u>P-12</u> <u>24.00 m - 24.45 m</u>	No. _____ _____ m - _____ m
Larger than 4.76 mm	0%	0%	Max. diam.	<u>4.76</u> mm	mm
4.76 - 2 mm	0%	0%	Diam. at 60%	<u>0.0017</u> mm	mm
2 - 0.42 mm	1%	0%	Diam. at 30%	—	mm
0.42 - 0.074 mm	1%	0%	Diam. at 10%	—	mm
0.074 - 0.005 mm	25%	0%	Coefficient of uniformity	—	
Smaller than 0.005 mm	73%	0%	Coefficient of curvature	—	
Smaller than 0.001 mm	54%	0%			
2000 μ Sieve Passing	100%	0%			
420 μ Sieve Passing	99%	0%			
74 μ Sieve Passing	98%	0%			

389

GRAIN SIZE DISTRIBUTION

Project _____ Job. No. _____

Location of Project _____ Boring No. E-2

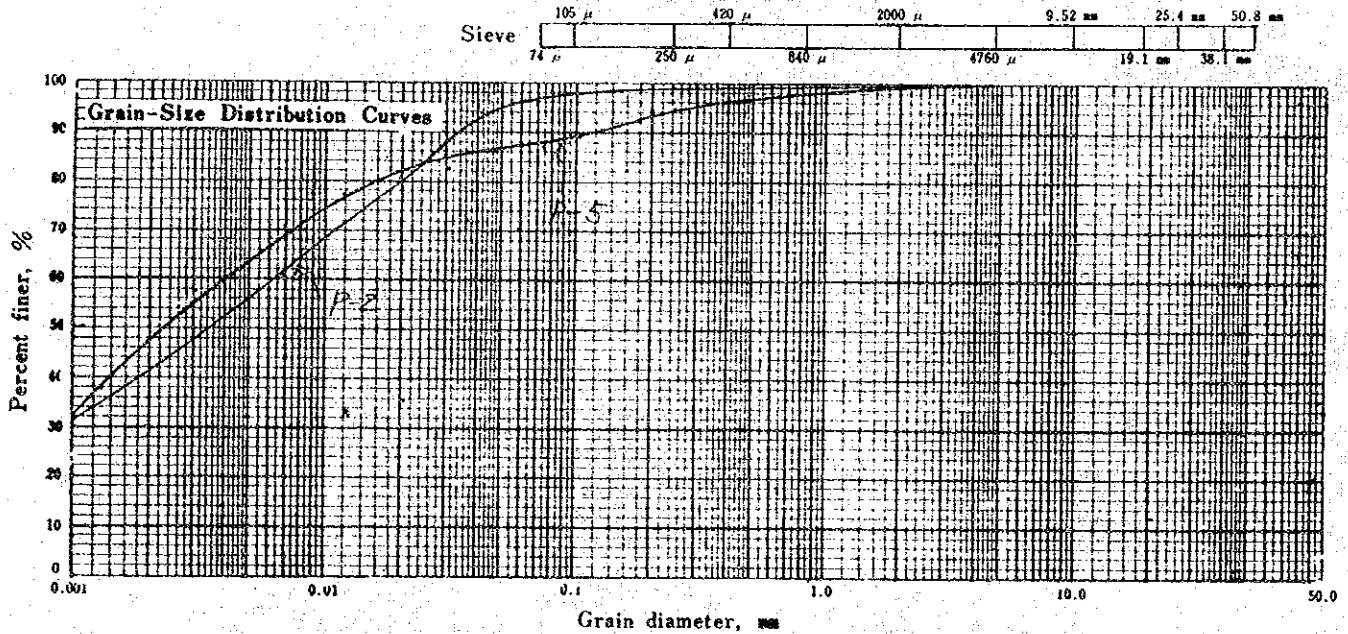
Tested by _____ Date of Testing _____

Sample No., Depth : No. P-2 (4.00 m - 4.45 m) Specific Gravity, $G_s = 2.660$

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	99.3	98.9	98.0	97.3
Hydro.	Diam. mm	0.042	0.030	0.020	0.012	0.0083	0.0059	0.0030	0.0018				
	% Passing	93.7	85.4	78.6	71.7	66.2	60.6	55.1	35.6				

Sample No., Depth : No. P-5 (10.00 m - 10.45 m) Specific Gravity, $G_s = 2.607$

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	97.5	95.9	94.5	88.9	86.9
Hydro.	Diam. mm	0.044	0.031	0.020	0.012	0.0084	0.0060	0.0031	0.0013				
	% Passing	86.4	72.3	80.9	76.8	70.0	65.9	57.6	37.6				



Colloid	Clay	Silt	Sand	Gravel
0.001	0.005	0.074	2.0	

Sample No., Depth	No. <u>P-2</u> <u>4.00 m - 4.45 m</u>	No. <u>P-5</u> <u>10.00 m - 10.45 m</u>	Sample No., Depth	No. <u>P-2</u> <u>4.00 m - 4.45 m</u>	No. <u>P-5</u> <u>10.00 m - 10.45 m</u>
Larger than 4.76 mm	%	%	Max. diam.	<u>4.76</u> mm	<u>4.76</u> mm
4.76 - 2 mm	%	<u>1</u> %	Diam. at 60%	<u>0.0063</u> mm	<u>0.0040</u> mm
2 - 0.42 mm	<u>1</u> %	<u>3</u> %	Diam. at 30%	— mm	— mm
0.42 - 0.074 mm	<u>2</u> %	<u>8</u> %	Diam. at 10%	— mm	— mm
0.074 - 0.005 mm	<u>41</u> %	<u>24</u> %	Coefficient of uniformity	—	—
Smaller than 0.005 mm	<u>56</u> %	<u>64</u> %	Coefficient of curvature	—	—
Smaller than 0.001 mm	<u>31</u> %	<u>32</u> %			
2000 μ Sieve Passing	<u>100</u> %	<u>99</u> %			
420 μ Sieve Passing	<u>99</u> %	<u>96</u> %			
74 μ Sieve Passing	<u>97</u> %	<u>88</u> %			

390
29

GRAIN SIZE DISTRIBUTION

Project _____ Job. No. _____

Location of Project _____ Boring No. E-2

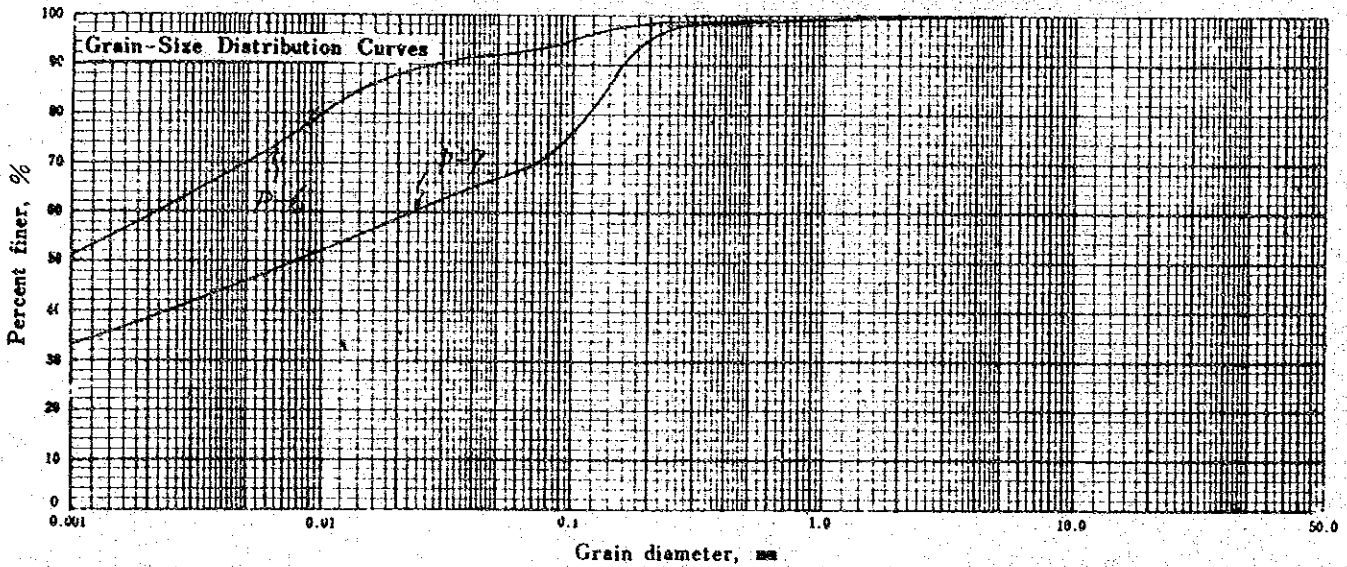
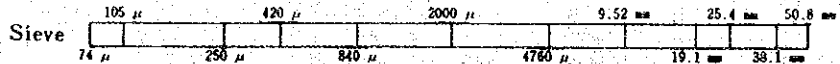
Tested by _____ Date of Testing _____

Sample No., Depth: No. P-6 (12.00 m - 12.45 m) Specific Gravity, $G_s =$ 2.681

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	99.7	99.6	95.3	92.7
Hydro.	Diam. mm	0.039	0.027	0.018	0.010	0.0075	0.0054	0.0028	0.0012				
	% Passing	91.1	89.8	86.8	81.4	75.0	70.7	63.2	52.9				

Sample No., Depth: No. P-7 (14.00 m - 14.45 m) Specific Gravity, $G_s =$ 2.697

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	99.5	98.5	75.7	70.3
Hydro.	Diam. mm	0.043	0.031	0.020	0.012	0.0083	0.0059	0.0030	0.0013				
	% Passing	65.1	64.0	58.2	53.9	50.5	47.1	42.7	35.2				



Colloid	Clay	Silt	Sand	Gravel
0.001	0.005	0.074	2.0	

Sample No., Depth	No. <u>P-6</u> <u>12.00 m - 12.45 m</u>	No. <u>P-7</u> <u>14.00 m - 14.45 m</u>	Sample No., Depth	No. <u>P-6</u> <u>12.00 m - 12.45 m</u>	No. <u>P-7</u> <u>14.00 m - 14.45 m</u>
Larger than 4.76 mm	%	%	Max. diam.	<u>4.76 mm</u>	<u>4.76 mm</u>
4.76 ~ 2 mm	%	%	Diam. at 60%	<u>0.0022 mm</u>	<u>0.023 mm</u>
2 ~ 0.42 mm	<u>1</u> %	<u>2</u> %	Diam. at 30%	— mm	— mm
0.42 ~ 0.074 mm	<u>6</u> %	<u>28</u> %	Diam. at 10%	— mm	— mm
0.074 ~ 0.005 mm	<u>23</u> %	<u>24</u> %	Coefficient of uniformity	—	—
Smaller than 0.005 mm	<u>70</u> %	<u>46</u> %	Coefficient of curvature	—	—
Smaller than 0.001 mm	<u>51</u> %	<u>33</u> %			
2000 μ Sieve Passing	<u>100</u> %	<u>100</u> %			
420 μ Sieve Passing	<u>99</u> %	<u>98</u> %			
75 μ Sieve Passing	<u>93</u> %	<u>70</u> %			

391
30

GRAIN SIZE DISTRIBUTION

Project _____ Job. No. _____

Location of Project _____ Boring No. E-2

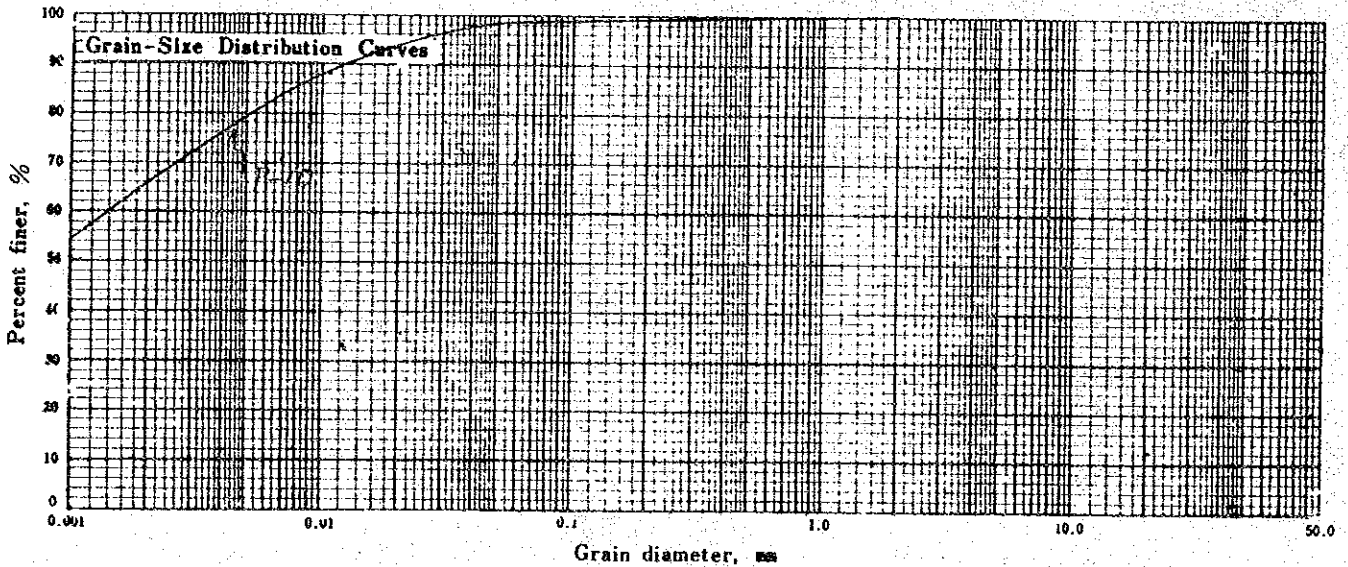
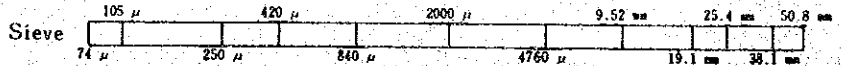
Tested by. _____ Date of Testing _____

Sample No., Depth: No. P-10 (20.00 m - 20.45 m) Specific Gravity, $G_s =$ 2.672

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	99.7	99.5	99.3
Hydro.	Diam. mm	0.040	0.028	0.018	0.011	0.0077	0.0055	0.0028	0.0012				
	% Passing	98.1	95.6	93.2	88.2	84.5	78.3	70.9	57.5				

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	0.074	2.0	

Sample No., Depth	No. <u>P-10</u> <u>20.00 m - 20.45 m</u>	No. _____ _____ m - _____ m	Sample No., Depth	No. <u>P-10</u> <u>20.00 m - 20.45 m</u>	No. _____ _____ m - _____ m
Larger than 4.76 mm	0 %	0 %	Max. diam.	<u>2.00</u> mm	_____ mm
4.76 - 2 mm	0 %	0 %	Diam. at 60%	<u>0.0014</u> mm	_____ mm
2 - 0.42 mm	0 %	0 %	Diam. at 30%	_____ mm	_____ mm
0.42 - 0.074 mm	1 %	0 %	Diam. at 10%	_____ mm	_____ mm
0.074 - 0.005 mm	20 %	0 %	Coefficient of uniformity	_____	_____
Smaller than 0.005 mm	79 %	0 %	Coefficient of curvature	_____	_____
Smaller than 0.001 mm	54 %	0 %			
2000 μ Sieve Passing	100 %	0 %			
420 μ Sieve Passing	100 %	0 %			
74 μ Sieve Passing	99 %	0 %			

397

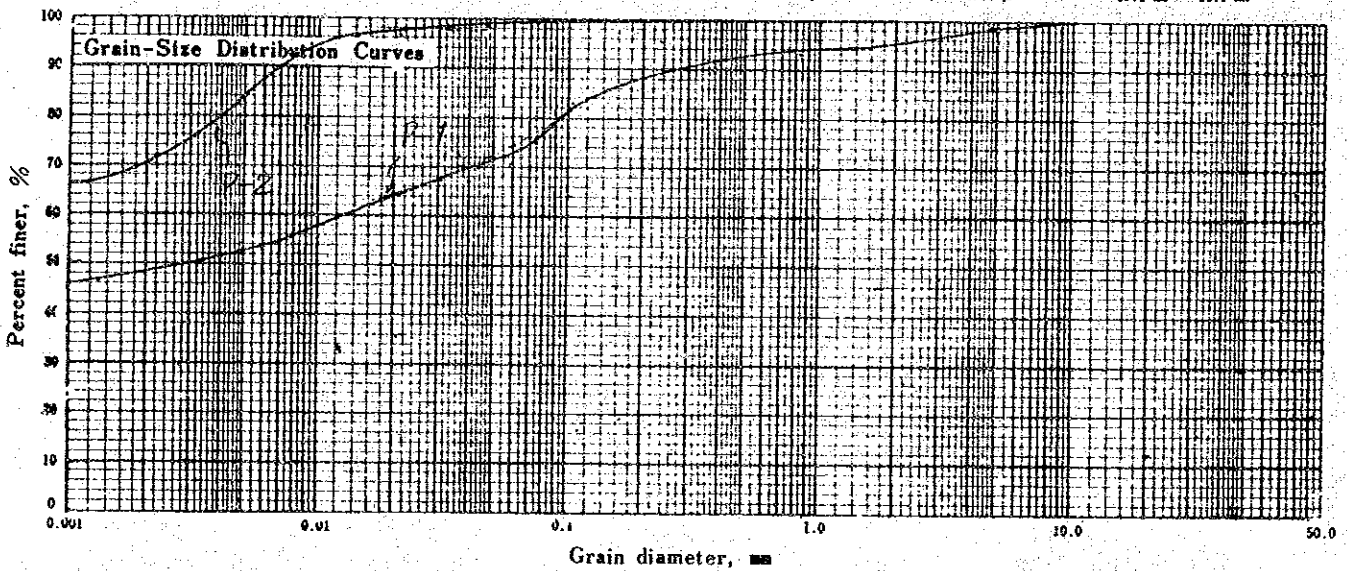
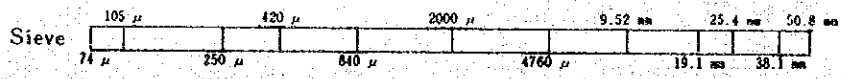
31

GRAIN SIZE DISTRIBUTION

Project _____ Job No. _____
 Location of Project _____ Boring No. Fi-1
 Tested by _____ Date of Testing _____

Sample No., Depth: No.		P-1 (2.00 m - 2.45 m) Specific Gravity, G _s = 2.678											
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	94.9	93.1	91.7	90.0	82.8	74.9
Hydro.	Diam. mm	0.001	0.031	0.020	0.012	0.0087	0.0060	0.0030	0.0015				
	% Passing	70.6	67.0	64.6	62.2	56.2	52.7	50.1	46.3				

Sample No., Depth: No.		P-2 (4.00 m - 4.45 m) Specific Gravity, G _s = 2.694											
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	97.4	98.1
Hydro.	Diam. mm	0.047	0.033	0.021	0.012	0.0087	0.0062	0.0031	0.0015				
	% Passing	98.8	98.2	97.0	96.7	94.1	89.1	75.7	67.3				



Colloid	Clay	Silt	Sand	Gravel
0.001	0.005	0.074	2.0	

Sample No., Depth	No. P-1 2.00 m - 2.45 m	No. P-2 4.00 m - 4.45 m	Sample No., Depth	No. P-1 2.00 m - 2.45 m	No. P-2 4.00 m - 4.45 m
Larger than 4.76 mm	1 %		Max. diam.	9.52 mm	200 mm
4.76 - 2 mm	4 %		Diam. at 60%	0.003 mm	— mm
2 - 0.42 mm	3 %	0 %	Diam. at 30%	— mm	— mm
0.42 - 0.074 mm	17 %	1 %	Diam. at 10%	— mm	— mm
0.074 - 0.005 mm	22 %	15 %	Coefficient of uniformity	—	—
Smaller than 0.005 mm	53 %	84 %	Coefficient of curvature	—	—
Smaller than 0.001 mm	46 %	66 %			
2000 μ Sieve Passing	95 %	100 %			
420 μ Sieve Passing	92 %	100 %			
74 μ Sieve Passing	75 %	99 %			

GRAIN SIZE DISTRIBUTION

Project _____ Job. No. _____

Location of Project _____ Boring No. FI-1

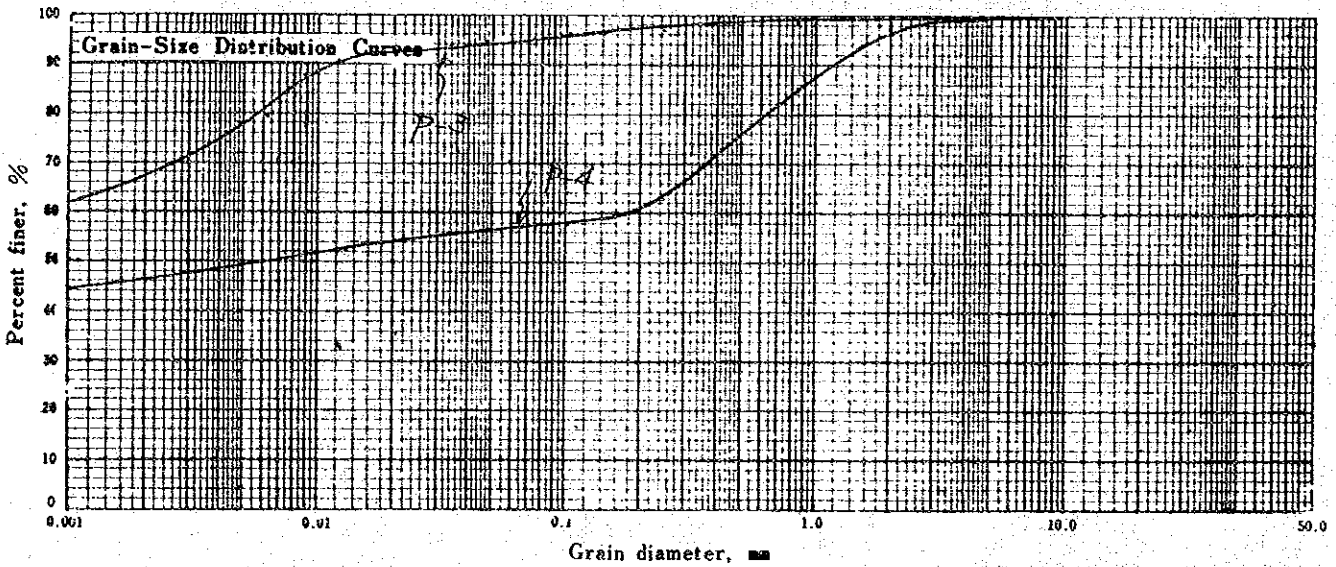
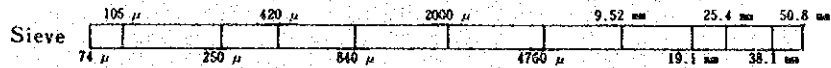
Tested by. _____ Date of Testing _____

Sample No., Depth : No. P-3 (6.00 m - 6.45 m) Specific Gravity, $G_s =$ 2.699

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	98.6	98.3	97.6	97.0	96.0	94.8
Hydro.	Diam. mm	0.047	0.034	0.021	0.012	0.0088	0.0063	0.0032	0.0013				
	% Passing	94.2	93.5	92.8	90.2	87.9	79.8	72.1	63.8				

Sample No., Depth : No. P-4 (8.00 m - 8.45 m) Specific Gravity, $G_s =$ 2.669

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	96.8	85.6	72.9	63.4	57.7	56.7	
Hydro.	Diam. mm	0.049	0.035	0.022	0.013	0.0090	0.0064	0.0033	0.0013				
	% Passing	56.2	54.9	54.5	52.2	51.3	50.0	47.9	44.8				



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.	<u>9.52</u> mm	<u>4.76</u> mm
4.76 - 2 mm	1 %	3 %	Diam. at 60%	— mm	<u>0.18</u> mm
2 - 0.42 mm	1 %	25 %	Diam. at 30%	— mm	— mm
0.42 - 0.074 mm	3 %	14 %	Diam. at 10%	— mm	— mm
0.074 - 0.005 mm	17 %	9 %	Coefficient of uniformity	—	—
Smaller than 0.005 mm	78 %	49 %	Coefficient of curvature	—	—
Smaller than 0.001 mm	62 %	44 %			
2000 μ Sieve Passing	99 %	97 %			
420 μ Sieve Passing	98 %	72 %			
74 μ Sieve Passing	95 %	58 %			

394
27

GRAIN SIZE DISTRIBUTION

Project _____ Job No. _____

Location of Project _____ Boring No. FI-1

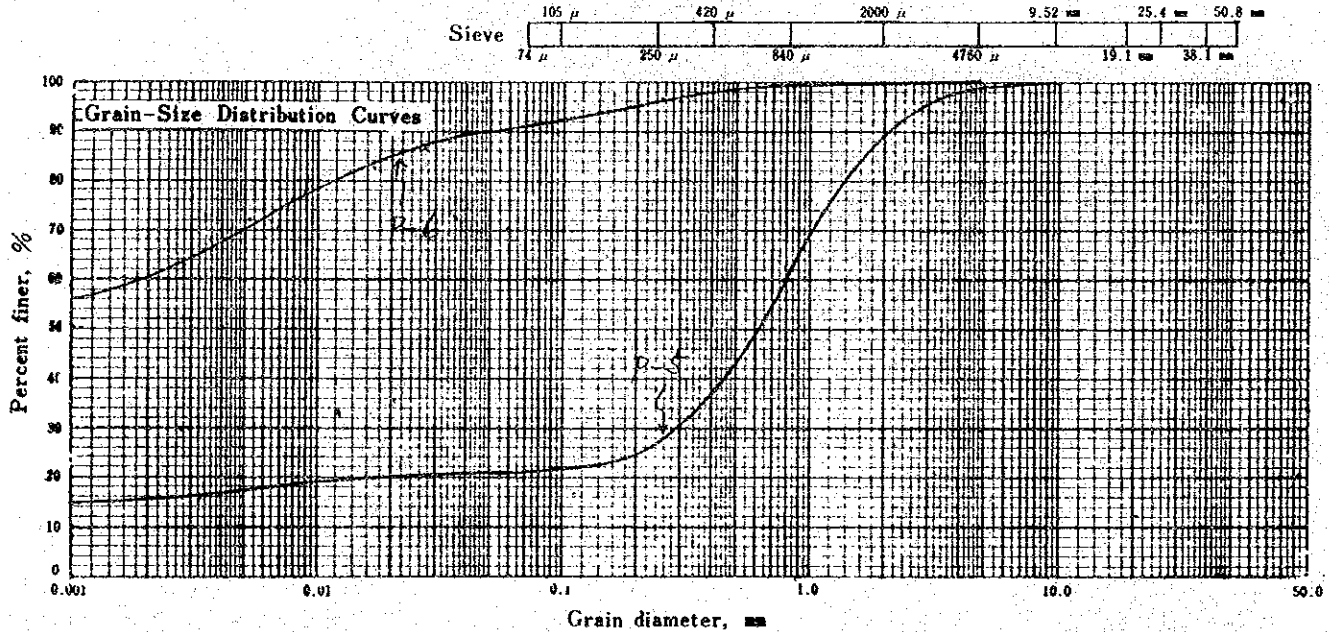
Tested by _____ Date of Testing _____

Sample No., Depth: No. P-5 (10.00 m - 10.45 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	99.3	89.3	62.1	38.2	27.3	21.6	20.7
Hydro.	Diam. mm	0.051	0.036	0.025	0.013	0.0075	0.0066	0.0033	0.0014				
	% Passing	20.3	20.1	19.9	19.2	18.9	17.9	15.8	15.6				

Sample No., Depth: No. P-6 (12.00 m - 12.45 m) Specific Gravity, $G_s = 2.704$

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	99.4	98.7	96.6	92.5	91.6
Hydro.	Diam. mm	0.038	0.027	0.017	0.010	0.0075	0.0053	0.0028	0.0012				
	% Passing	89.6	86.5	82.5	80.4	75.2	72.1	62.7	56.3				



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 - 10.45 m</u>	No. <u>P-6</u> <u>12.00 m - 12.45 m</u>	Sample No., Depth	No. <u>P-5</u> <u>10.00 m - 10.45 m</u>	No. <u>P-6</u> <u>12.00 m - 12.45 m</u>
Larger than 4.76 mm	1 %	0 %	Max. diam.	4.76 mm	4.76 mm
4.76 - 2 mm	10 %	0 %	Diam. at 60%	0.80 mm	0.0019 mm
2 - 0.42 mm	51 %	2 %	Diam. at 30%	0.29 mm	— mm
0.42 - 0.074 mm	17 %	7 %	Diam. at 10%	— mm	— mm
0.074 - 0.005 mm	4 %	21 %	Coefficient of uniformity	—	—
Smaller than 0.005 mm	17 %	70 %	Coefficient of curvature	—	—
Smaller than 0.001 mm	15 %	56 %			
2000 μ Sieve Passing	89 %	100 %			
420 μ Sieve Passing	38 %	98 %			
74 μ Sieve Passing	21 %	91 %			

395
24

GRAIN SIZE DISTRIBUTION

Project _____ Job. No. _____

Location of Project _____ Boring No. 71-1

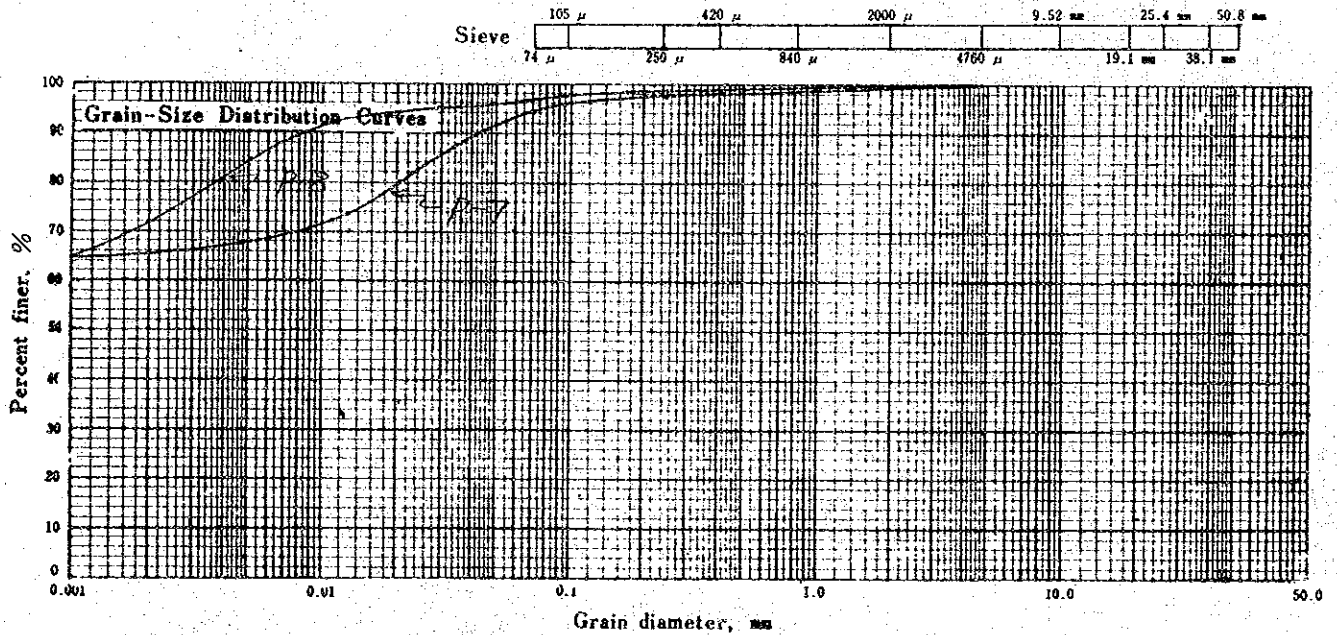
Tested by. _____ Date of Testing _____

Sample No., Depth : No. P-7 (14.00 m - 14.45 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	99.9	98.7	97.8	97.1	96.2	95.9
Hydro.	Diam. mm	0.048	0.025	0.015	0.0075	0.00375	0.001875	0.0009375	0.00046875				
	% Passing	90.5	87.0	80.2	83.6	69.9	69.2	68.1	65.4				

Sample No., Depth : No. P-8 (16.00 m - 16.45 m) Specific Gravity, $G_s =$ 2.712

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	99.1	98.2	97.8	97.5	97.2
Hydro.	Diam. mm	0.040	0.028	0.018	0.010	0.005	0.0025	0.00125	0.000625	0.0003125			
	% Passing	95.3	94.6	93.8	91.3	88.2	84.7	75.2	66.1				



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 - 14.45 m</u>	No. <u>P-8</u> <u>16.00 m - 16.45 m</u>	Sample No., Depth	No. <u>P-7</u> <u>14.00 m - 14.45 m</u>	No. <u>P-8</u> <u>16.00 m - 16.45 m</u>
Larger than 4.76 mm	0 %	0 %	Max. diam.	4.76 mm	4.76 mm
4.76 ~ 2 mm	0 %	0 %	Diam. at 60%	— mm	— mm
2 ~ 0.42 mm	2 %	1 %	Diam. at 30%	— mm	— mm
0.42 ~ 0.074 mm	3 %	2 %	Diam. at 10%	— mm	— mm
0.074 ~ 0.005 mm	27 %	13 %	Coefficient of uniformity	—	—
Smaller than 0.005 mm	68 %	84 %	Coefficient of curvature	—	—
Smaller than 0.001 mm	65 %	65 %			
2000 μ Sieve Passing	100 %	100 %			
420 μ Sieve Passing	98 %	99 %			
74 μ Sieve Passing	95 %	97 %			

396

38

GRAIN SIZE DISTRIBUTION

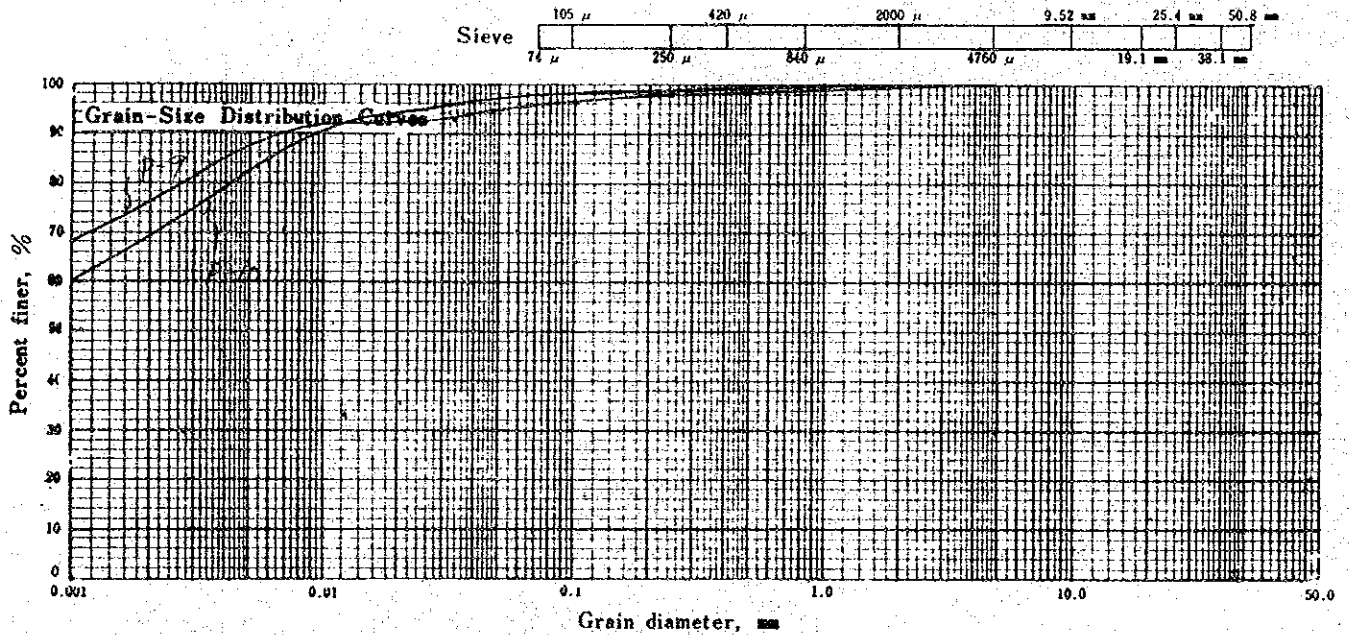
Project _____ Job. No. _____
 Location of Project _____ Boring No. F-1
 Tested by. _____ Date of Testing _____

Sample No., Depth: No. P-9 (18.00 m - 18.45 m) Specific Gravity, $G_s =$ 2.708

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	99.9	98.6	97.9	96.3	95.7
Hydro.	Diam. mm	0.075	0.033	0.021	0.012	0.0086	0.0061	0.0031	0.0013				
	% Passing	94.7	92.2	92.1	92.0	91.8	89.6	81.6	70.9				

Sample No., Depth: No. P-10 (20.00 m - 20.45 m) Specific Gravity, $G_s =$ 2.717

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	99.1	98.6	97.8	97.5
Hydro.	Diam. mm	0.075	0.033	0.018	0.011	0.0075	0.0054	0.0028	0.0012				
	% Passing	96.9	95.6	94.3	91.8	89.2	85.4	73.9	63.3				



Colloid	Clay	Silt	Sand	Gravel
0.001	0.005	0.074	2.0	

Sample No., Depth	No. <u>P-9</u> <u>18.00 m - 18.45 m</u>	No. <u>P-10</u> <u>20.00 m - 20.45 m</u>	Sample No., Depth	No. <u>P-9</u> <u>18.00 m - 18.45 m</u>	No. <u>P-10</u> <u>20.00 m - 20.45 m</u>
Larger than 4.76 mm	0 %	0 %	Max. diam.	4.76 mm	2.00 mm
4.76 - 2 mm	0 %	0 %	Diam. at 60%	— mm	0.0010 mm
2 - 0.42 mm	1 %	1 %	Diam. at 30%	— mm	— mm
0.42 - 0.074 mm	3 %	1 %	Diam. at 10%	— mm	— mm
0.074 - 0.005 mm	9 %	16 %	Coefficient of uniformity	—	—
Smaller than 0.005 mm	87 %	82 %	Coefficient of curvature	—	—
Smaller than 0.001 mm	68 %	60 %			
2000 μ Sieve Passing	100 %	100 %			
420 μ Sieve Passing	99 %	99 %			
75 μ Sieve Passing	96 %	98 %			

397
26

GRAIN SIZE DISTRIBUTION

Project _____ Job. No. _____

Location of Project _____ Boring No. FI-1

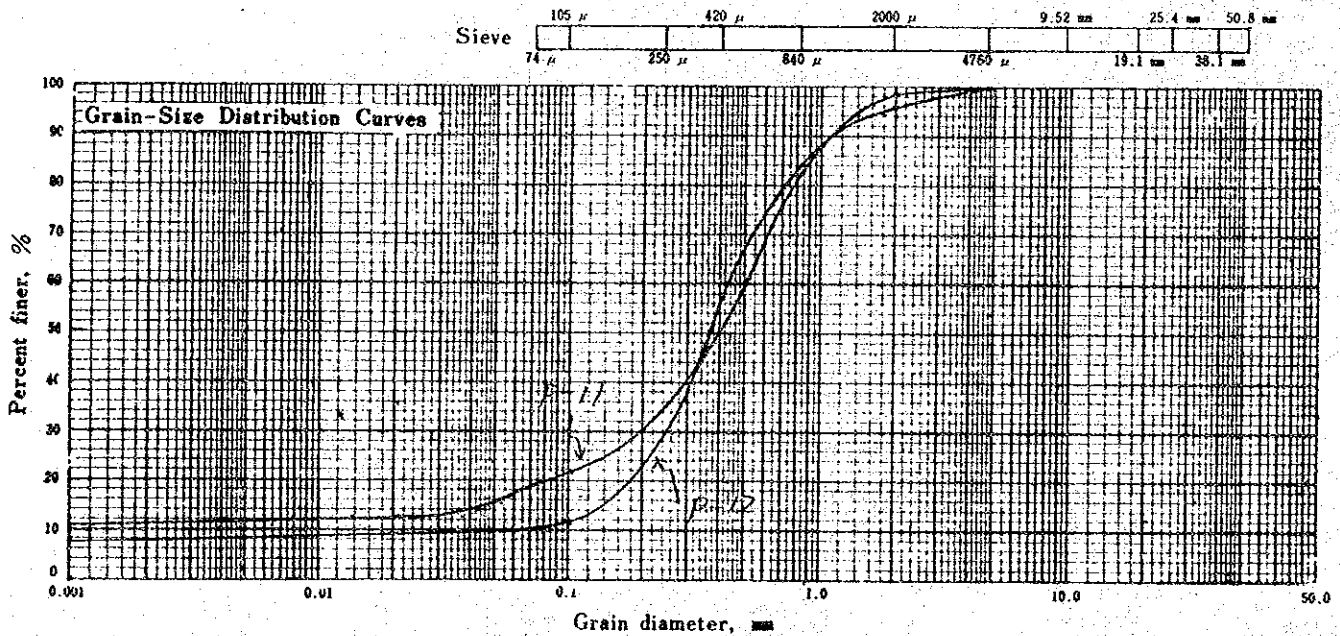
Tested by. _____ Date of Testing _____

Sample No., Depth: No. P-11 (22.00 m ~ 22.45 m) Specific Gravity, $G_s =$ 2.570

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	98.7	82.2	51.3	34.9	21.2	19.3
Hydro.	Diam. mm	0.053	0.037	0.025	0.014	0.0077	0.0068	0.0039	0.0018				
	% Passing	15.3	13.2	12.2	12.0	11.8	11.5	11.0	10.9				

Sample No., Depth: No. P-12 (24.00 m ~ 24.45 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	99.9	95.6	83.5	57.0	30.5	11.0	9.7
Hydro.	Diam. mm	0.053	0.037	0.025	0.014	0.0076	0.0068	0.0039	0.0012				
	% Passing	9.2	8.8	8.3	7.8	7.5	7.3	6.9	6.7				



Colloid	Clay	Silt	Sand	Gravel
0.001	0.005	0.074	2.0	

Sample No., Depth	No. <u>P-11</u> <u>22.00 m ~ 22.45 m</u>	No. <u>P-12</u> <u>24.00 m ~ 24.45 m</u>	Sample No., Depth	No. <u>P-11</u> <u>22.00 m ~ 22.45 m</u>	No. <u>P-12</u> <u>24.00 m ~ 24.45 m</u>
Larger than 4.76 mm	0 %	0 %	Max. diam.	4.76 mm	9.52 mm
4.76 ~ 2 mm	2 %	4 %	Diam. at 60%	0.50 mm	0.43 mm
2 ~ 0.42 mm	46 %	39 %	Diam. at 30%	0.20 mm	0.25 mm
0.42 ~ 0.074 mm	33 %	47 %	Diam. at 10%	— mm	0.060 mm
0.074 ~ 0.005 mm	7 %	2 %	Coefficient of uniformity	—	7.2
Smaller than 0.005 mm	12 %	8 %	Coefficient of curvature	—	2.4
Smaller than 0.001 mm	11 %	7 %			
2000 μ Sieve Passing	98 %	96 %			
420 μ Sieve Passing	52 %	57 %			
74 μ Sieve Passing	19 %	10 %			

GRAIN SIZE DISTRIBUTION

Project _____ Job. No. _____

Location of Project _____ Boring No. FI-1

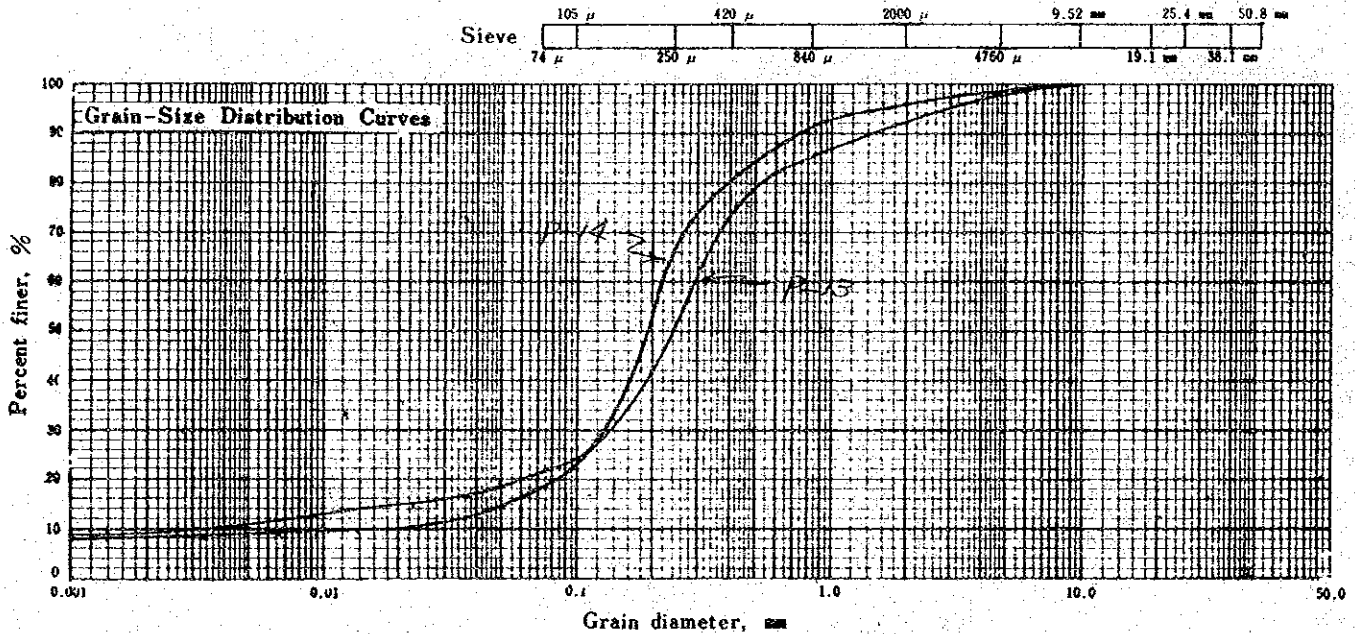
Tested by _____ Date of Testing _____

Sample No., Depth: No. P-13 (26.00 m - 26.45 m) Specific Gravity, $G_s = 2.621$

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	98.4	92.2	85.8	74.9	51.5	23.6	21.7
Hydro.	Diam. mm	0.051	0.037	0.025	0.012	0.0075	0.0067	0.0039	0.0014				
	% Passing	18.3	16.2	14.2	14.0	12.1	11.8	10.0	9.8				

Sample No., Depth: No. P-14 (28.00 m - 28.45 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	97.5	95.7	91.9	81.8	67.8	22.5	18.6
Hydro.	Diam. mm	0.052	0.037	0.024	0.011	0.0076	0.0068	0.0034	0.0014				
	% Passing	14.1	12.0	10.0	9.8	9.0	8.8	7.9	7.7				



Colloid	Clay	Silt	Sand	Gravel
0.001	0.005	0.074	2.0	

Sample No., Depth	No. <u>P-13</u> <u>26.00 m - 26.45 m</u>	No. <u>P-14</u> <u>28.00 m - 28.45 m</u>	Sample No., Depth	No. <u>P-13</u> <u>26.00 m - 26.45 m</u>	No. <u>P-14</u> <u>28.00 m - 28.45 m</u>
Larger than 4.76 mm	2 %	2 %	Max. diam.	9.52 mm	9.52 mm
4.76 - 2 mm	6 %	2 %	Diam. at 60%	0.29 mm	0.22 mm
2 - 0.42 mm	11 %	12 %	Diam. at 30%	0.14 mm	0.13 mm
0.42 - 0.074 mm	53 %	65 %	Diam. at 10%	0.017 mm	0.0033 mm
0.074 - 0.005 mm	11 %	10 %	Coefficient of uniformity	17	67
Smaller than 0.005 mm	11 %	9 %	Coefficient of curvature	4.0	23
Smaller than 0.001 mm	9 %	8 %			
2000 μ Sieve Passing	92 %	96 %			
420 μ Sieve Passing	75 %	84 %			
74 μ Sieve Passing	22 %	19 %			

GRAIN SIZE DISTRIBUTION

Project _____ Job. No. _____

Location of Project _____ Boring No. FI-1

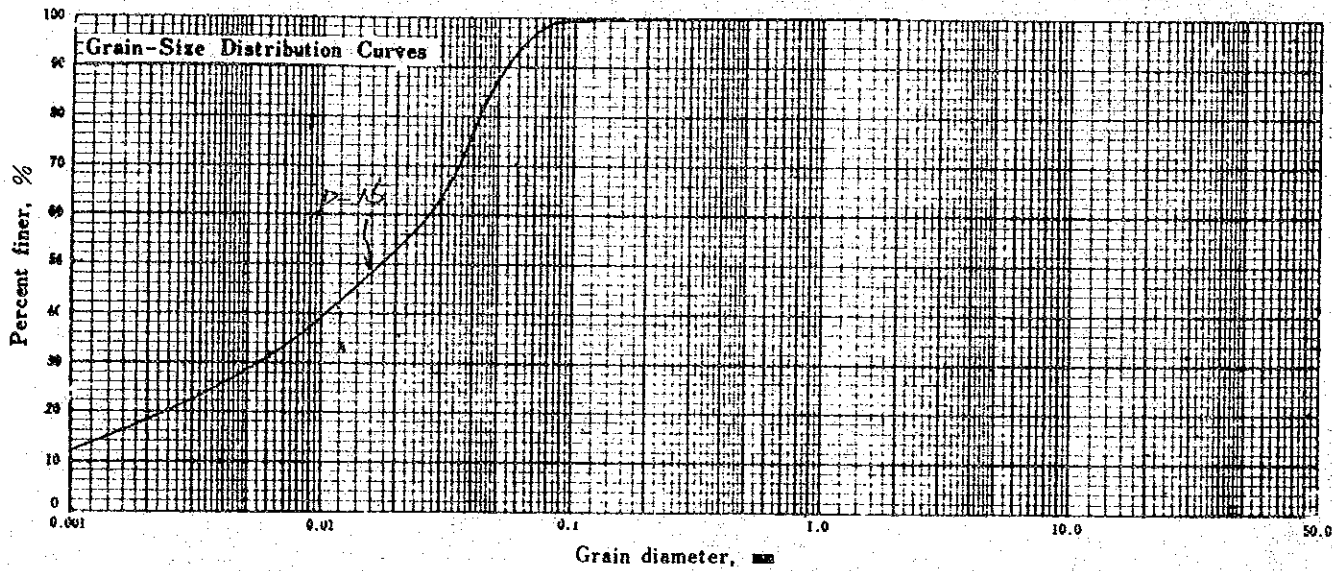
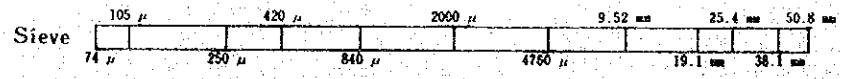
Tested by. _____ Date of Testing _____

Sample No., Depth: No. P-15 (30.00 m - 30.45 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	99.9	99.7	99.5	99.2	99.2
Hydro.	Diam. mm	0.075	0.0375	0.020	0.012	0.0086	0.0062	0.0032	0.0014				
	% Passing	80.3	63.0	48.8	41.3	36.6	31.0	23.3	19.7				

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-15</u> <u>30.00 m - 30.45 m</u>	No. _____	Sample No., Depth	No. <u>P-15</u> <u>30.00 m - 30.45 m</u>	No. _____
Larger than 4.76 mm	%	%	Max. diam.	<u>2.00</u> mm	mm
4.76 - 2 mm	%	%	Diam. at 60%	<u>0.027</u> mm	mm
2 - 0.42 mm	<u>0</u> %	%	Diam. at 30%	<u>0.0055</u> mm	mm
0.42 - 0.074 mm	<u>2</u> %	%	Diam. at 10%	— mm	mm
0.074 - 0.005 mm	<u>69</u> %	%	Coefficient of uniformity	—	
Smaller than 0.005 mm	<u>29</u> %	%	Coefficient of curvature	—	
Smaller than 0.001 mm	<u>12</u> %	%			
2000 μ Sieve Passing	<u>100</u> %	%			
420 μ Sieve Passing	<u>100</u> %	%			
74 μ Sieve Passing	<u>98</u> %	%			

400
29

GRAIN SIZE DISTRIBUTION

Project _____ Job No. _____

Location of Project _____ Boring No. F-2

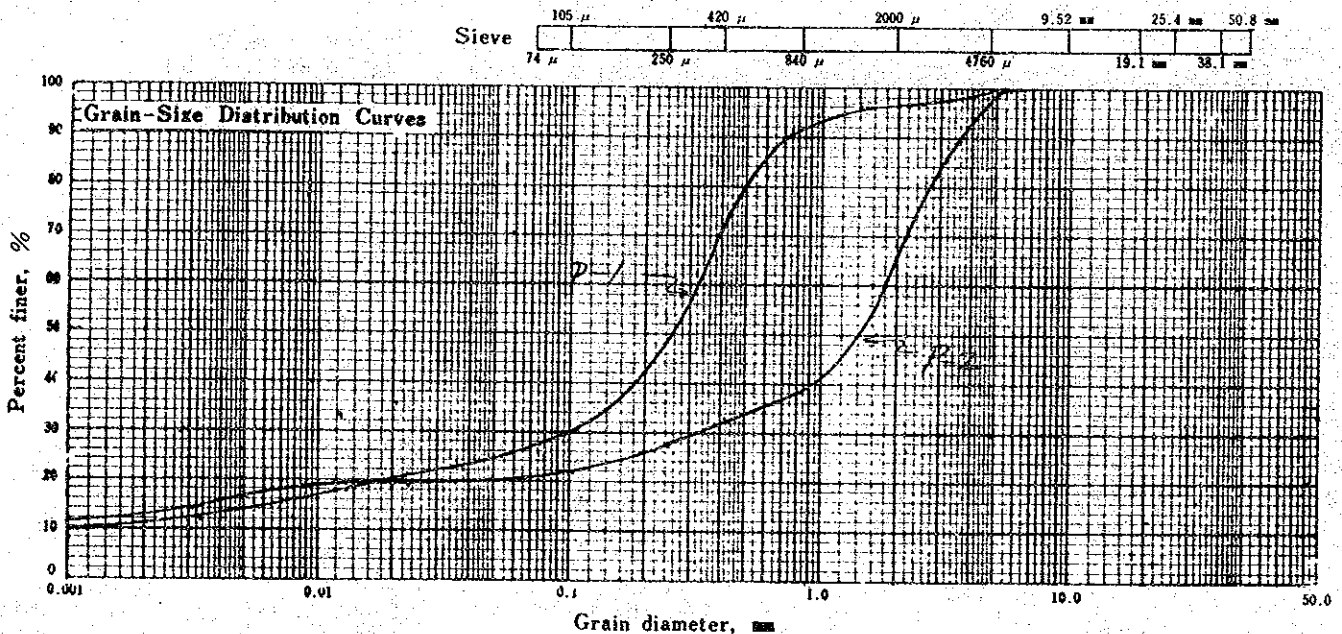
Tested by _____ Date of Testing _____

Sample No., Depth: No. P-1 (2.00 m - 2.29 m) Specific Gravity, $G_s = 2.65$

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	93.8	73.0	49.0	30.5	27.8	
Hydro.	Diam. mm	0.050	0.036	0.025	0.013	0.0074	0.0067	0.0033	0.0015				
	% Passing	28.6	22.7	20.8	18.8	17.9	15.0	11.5	10.2				

Sample No., Depth: No. P-2 (4.00 m - 4.45 m) Specific Gravity, $G_s = 2.65$

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	99.0	65.1	38.2	23.1	27.3	21.7	21.2
Hydro.	Diam. mm	0.051	0.036	0.025	0.013	0.0074	0.0066	0.0031	0.0014				
	% Passing	20.6	19.7	19.2	18.8	18.3	18.1	13.7	11.5				



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 - 2.29 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 - 2.29 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	4 %	34 %	Diam. at 60%	0.32 mm	1.80 mm
2 - 0.42 mm	23 %	33 %	Diam. at 30%	0.10 mm	0.32 mm
0.42 - 0.074 mm	45 %	11 %	Diam. at 10%	0.0010 mm	— mm
0.074 - 0.005 mm	14 %	5 %	Coefficient of uniformity	320	—
Smaller than 0.005 mm	14 %	16 %	Coefficient of curvature	31	—
Smaller than 0.001 mm	10 %	12 %			
2000 μ Sieve Passing	96 %	65 %			
420 μ Sieve Passing	73 %	32 %			
74 μ Sieve Passing	28 %	21 %			

GRAIN SIZE DISTRIBUTION

Project _____ Job. No. _____

Location of Project _____ Boring No. F-2

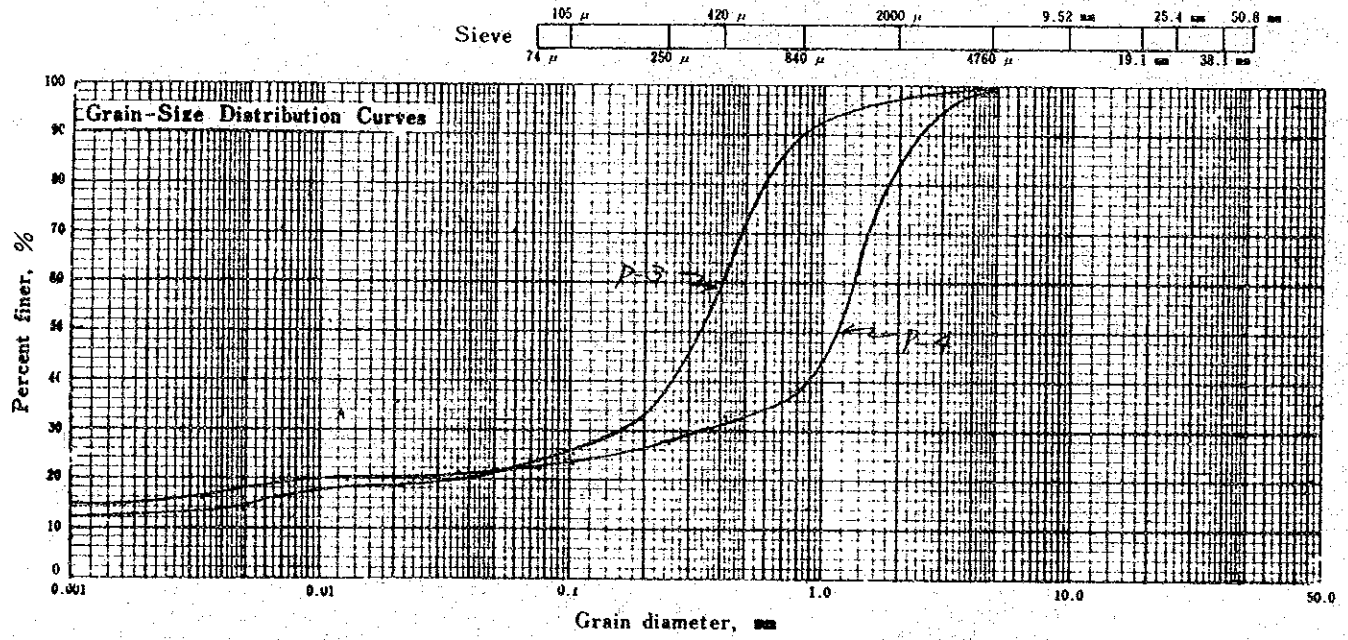
Tested by _____ Date of Testing _____

Sample No., Depth : No. P-3 (6.00 m - 6.27 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	97.8	90.4	62.2	39.5	25.3	22.6
Hydro.	Diam. mm	0.051	0.036	0.023	0.013	0.0071	0.0067	0.0049	0.0015				
	% Passing	20.9	19.9	19.0	18.0	17.0	16.5	13.6	12.2				

Sample No., Depth : No. P-4 (8.00 m - 8.30 m) Specific Gravity, $G_s = 2.635$

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	83.7	38.3	33.1	27.4	23.2	22.7
Hydro.	Diam. mm	0.050	0.036	0.023	0.013	0.0073	0.0066	0.0033	0.0015				
	% Passing	22.0	21.1	20.4	19.8	19.4	19.1	15.6	14.3				



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 - 6.27 m</u>	No. <u>P-4</u> <u>8.00 m - 8.30 m</u>	Sample No., Depth	No. <u>P-3</u> <u>6.00 m - 6.27 m</u>	No. <u>P-4</u> <u>8.00 m - 8.30 m</u>
Larger than 4.76 mm	0 %	0 %	Max. diam.	4.76 mm	4.76 mm
4.76 - 2 mm	2 %	16 %	Diam. at 60%	0.41 mm	1.30 mm
2 - 0.42 mm	36 %	53 %	Diam. at 30%	0.16 mm	0.33 mm
0.42 - 0.074 mm	38 %	9 %	Diam. at 10%	— mm	— mm
0.074 - 0.005 mm	10 %	4 %	Coefficient of uniformity	—	—
Smaller than 0.005 mm	14 %	18 %	Coefficient of curvature	—	—
Smaller than 0.001 mm	12 %	14 %			
2000 μ Sieve Passing	98 %	84 %			
420 μ Sieve Passing	62 %	31 %			
74 μ Sieve Passing	24 %	22 %			

402
44

GRAIN SIZE DISTRIBUTION

Project _____ Job. No. _____

Location of Project _____ Boring No. F-2

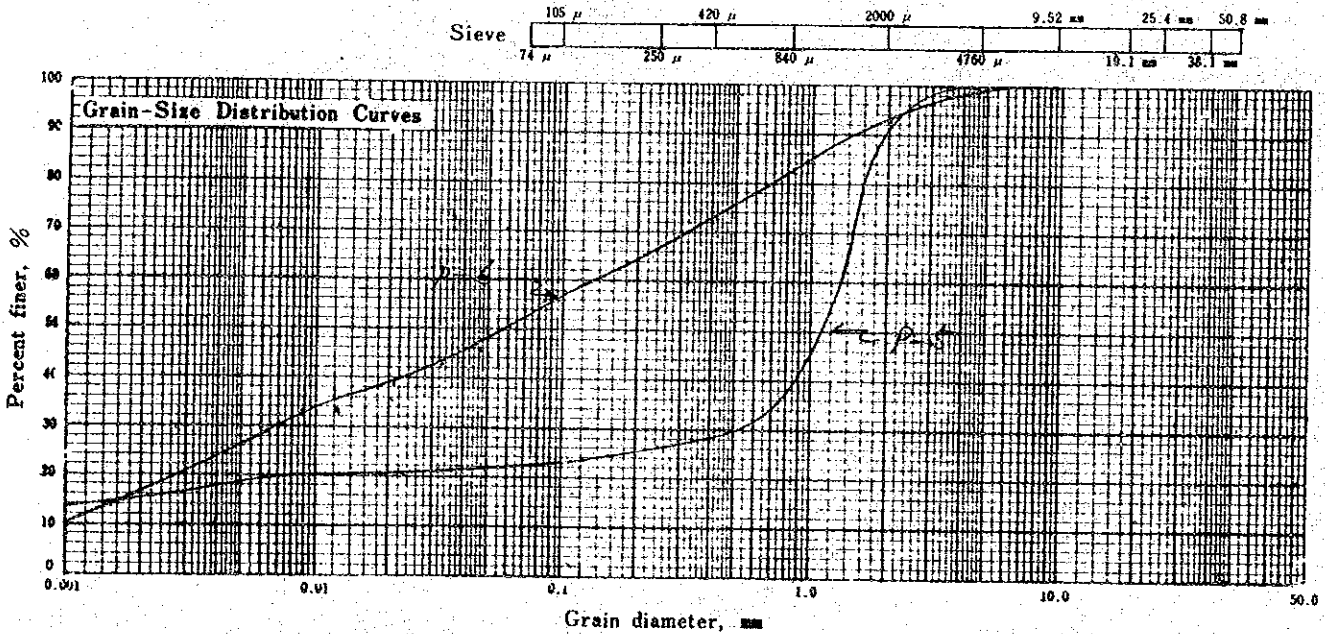
Tested by. _____ Date of Testing _____

Sample No., Depth: No. P-5 (10.00 m - 10.29 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	90.9	38.9	28.5	26.4	22.8	22.1	
Hydro.	Diam. mm	0.049	0.036	0.023	0.013	0.0092	0.0065	0.0033	0.0015				
	% Passing	21.6	21.6	20.7	20.2	20.0	19.5	16.5	14.3				

Sample No., Depth: No. P-6 (12.00 m - 12.27 m) Specific Gravity, $G_s = 2.690$

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	99.5	92.9	82.8	73.2	67.4	57.3	55.9
Hydro.	Diam. mm	0.046	0.033	0.021	0.012	0.0087	0.0062	0.0032	0.0015				
	% Passing	45.9	43.1	38.5	36.8	33.1	29.4	21.0	11.4				



Colloid	Clay	Silt	Sand	Gravel
0.001	0.005	0.074	2.0	

Sample No., Depth	No. <u>P-5</u> 10.00 m - 10.29 m	No. <u>P-6</u> 12.00 m - 12.27 m	Sample No., Depth	No. <u>P-5</u> 10.00 m - 10.29 m	No. <u>P-6</u> 12.00 m - 12.27 m
Larger than 4.76 mm	0 %	1 %	Max. diam.	4.76 mm	9.52 mm
4.76 - 2 mm	9 %	6 %	Diam. at 60%	1.30 mm	0.13 mm
2 - 0.42 mm	63 %	20 %	Diam. at 30%	0.52 mm	0.0070 mm
0.42 - 0.074 mm	6 %	20 %	Diam. at 10%	— mm	0.0010 mm
0.074 - 0.005 mm	3 %	27 %	Coefficient of uniformity	—	130
Smaller than 0.005 mm	19 %	26 %	Coefficient of curvature	—	0.4
Smaller than 0.001 mm	13 %	10 %			
2000 μ Sieve Passing	91 %	93 %			
420 μ Sieve Passing	28 %	73 %			
74 μ Sieve Passing	22 %	53 %			

403
472

GRAIN SIZE DISTRIBUTION

Project _____ Job No. _____

Location of Project _____ Boring No. F-2

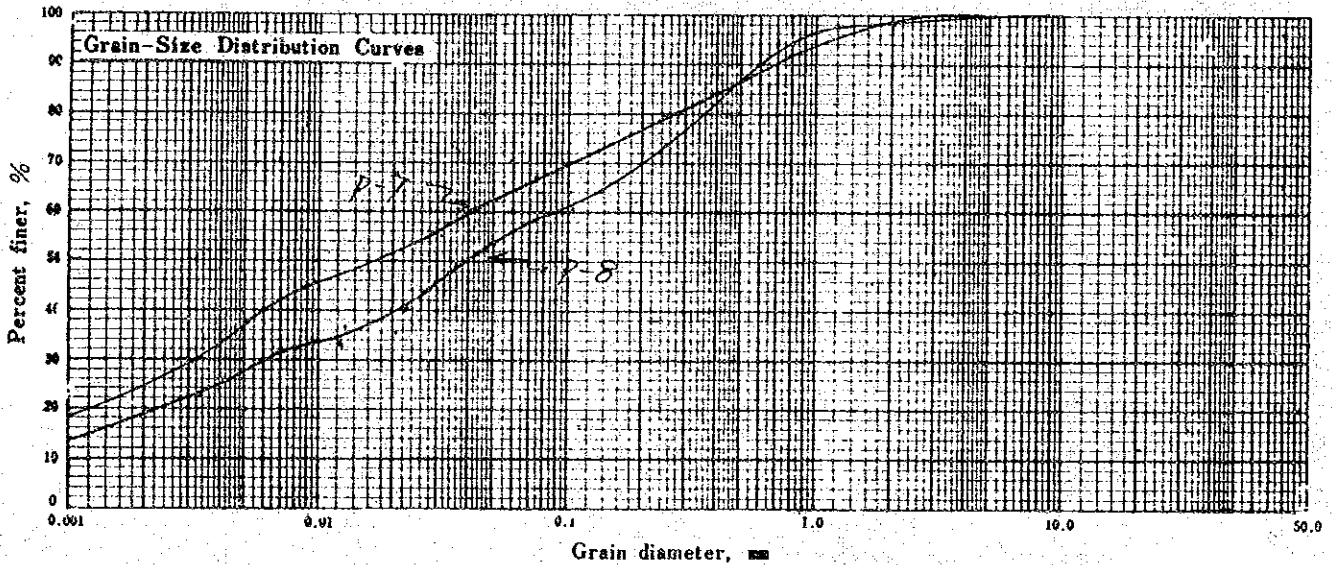
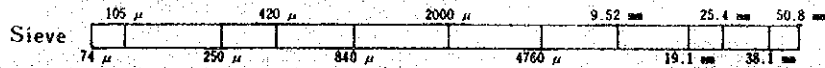
Tested by _____ Date of Testing _____

Sample No., Depth: No. P-7 (14.00 m - 14.25 m) Specific Gravity, $G_s = 2.677$

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	92.1	84.1	79.9	70.1	66.7
Hydro.	Diam. mm	0.093	0.031	0.020	0.012	0.0084	0.0060	0.0031	0.0019				
	% Passing	57.9	55.3	51.6	46.0	44.1	40.9	29.7	21.0				

Sample No., Depth: No. P-8 (16.00 m - 16.23 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	99.3	98.2	95.2	85.1	78.7	60.0	58.9
Hydro.	Diam. mm	0.050	0.036	0.023	0.013	0.0094	0.0066	0.0033	0.0015				
	% Passing	53.8	49.1	40.1	36.6	32.9	32.1	22.4	16.1				



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 - 14.25 m</u>	No. <u>P-8</u> <u>16.00 m - 16.23 m</u>	Sample No., Depth	No. <u>P-7</u> <u>14.00 m - 14.25 m</u>	No. <u>P-8</u> <u>16.00 m - 16.23 m</u>
Larger than 4.76 mm	0 %	1 %	Max. diam.	4.76 mm	9.52 mm
4.76 - 2 mm	1 %	1 %	Diam. at 60%	0.091 mm	0.090 mm
2 - 0.42 mm	15 %	15 %	Diam. at 30%	0.0031 mm	0.0062 mm
0.42 - 0.074 mm	17 %	24 %	Diam. at 10%	— mm	— mm
0.074 - 0.005 mm	30 %	32 %	Coefficient of uniformity	—	—
Smaller than 0.005 mm	37 %	27 %	Coefficient of curvature	—	—
Smaller than 0.001 mm	18 %	13 %			
2000 μ Sieve Passing	99 %	98 %			
420 μ Sieve Passing	84 %	83 %			
74 μ Sieve Passing	67 %	59 %			

208
47

GRAIN SIZE DISTRIBUTION

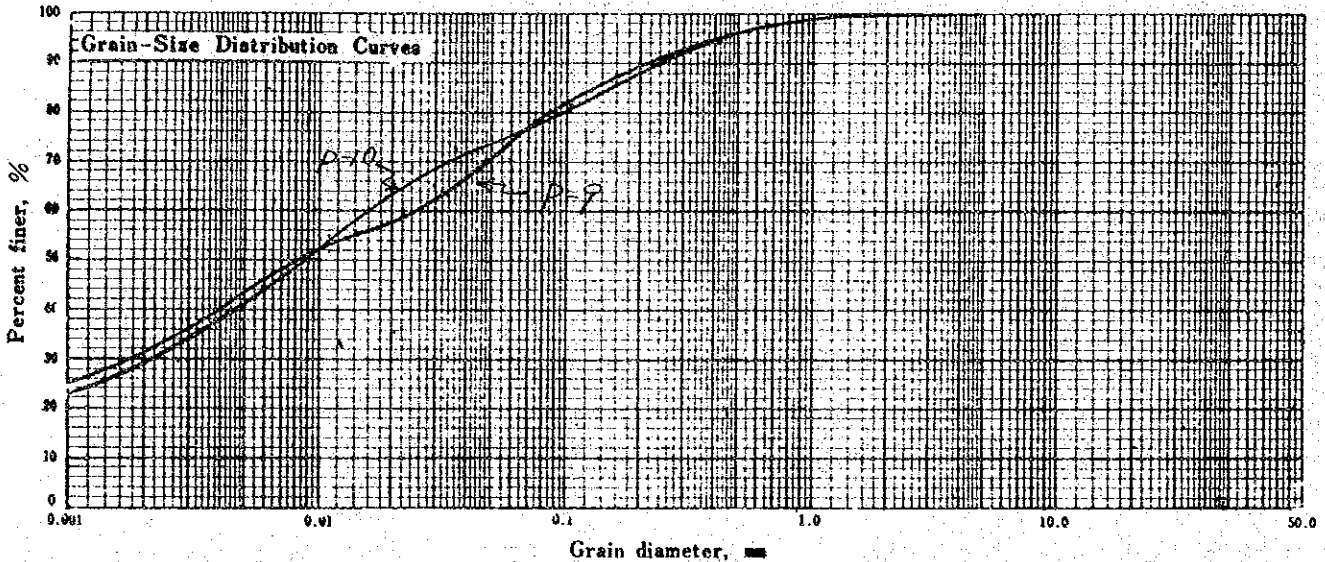
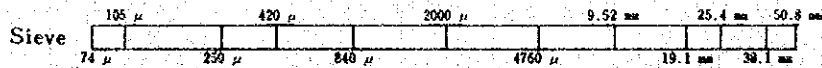
Project _____ Job. No. _____
 Location of Project _____ Boring No. FI-2
 Tested by. _____ Date of Testing _____

Sample No., Depth: No. P-9 (18.00 m - 18.25 m) Specific Gravity, $G_s =$ 2.662

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	98.0	94.2	90.6	81.4	78.4
Hydro.	Diam. mm	0.048	0.039	0.022	0.013	0.0070	0.0064	0.0032	0.0013				
	% Passing	70.6	63.3	57.6	54.1	50.5	47.2	36.6	26.7				

Sample No., Depth: No. P-10 (20.00 m - 20.22 m) Specific Gravity, $G_s =$ 2.683

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	98.1	94.5	90.5	80.0	78.5
Hydro.	Diam. mm	0.041	0.030	0.019	0.011	0.0083	0.0059	0.0030	0.0014				
	% Passing	71.9	64.5	62.6	55.2	47.8	45.2	34.3	24.6				



Colloid	Clay	Silt	Sand	Gravel
0.001	0.005	0.075	2.0	

Sample No., Depth	No. <u>P-9</u> <u>18.00 m - 18.25 m</u>	No. <u>P-10</u> <u>20.00 m - 20.22 m</u>	Sample No., Depth	No. <u>P-9</u> <u>18.00 m - 18.25 m</u>	No. <u>P-10</u> <u>20.00 m - 20.22 m</u>
Larger than 4.76 mm	0 %	0 %	Max. diam.	<u>4.76 mm</u>	<u>4.76 mm</u>
4.76 - 2 mm	0 %	0 %	Diam. at 60%	<u>0.025 mm</u>	<u>0.016 mm</u>
2 - 0.42 mm	6 %	6 %	Diam. at 30%	<u>0.0017 mm</u>	<u>0.0021 mm</u>
0.42 - 0.074 mm	16 %	16 %	Diam. at 10%	— mm	— mm
0.074 - 0.005 mm	35 %	37 %	Coefficient of uniformity	—	—
Smaller than 0.005 mm	43 %	41 %	Coefficient of curvature	—	—
Smaller than 0.001 mm	25 %	23 %			
2000 μ Sieve Passing	100 %	100 %			
420 μ Sieve Passing	94 %	94 %			
75 μ Sieve Passing	78 %	78 %			

405
44

GRAIN SIZE DISTRIBUTION

Project _____ Job No. _____

Location of Project _____ Boring No. F1-2

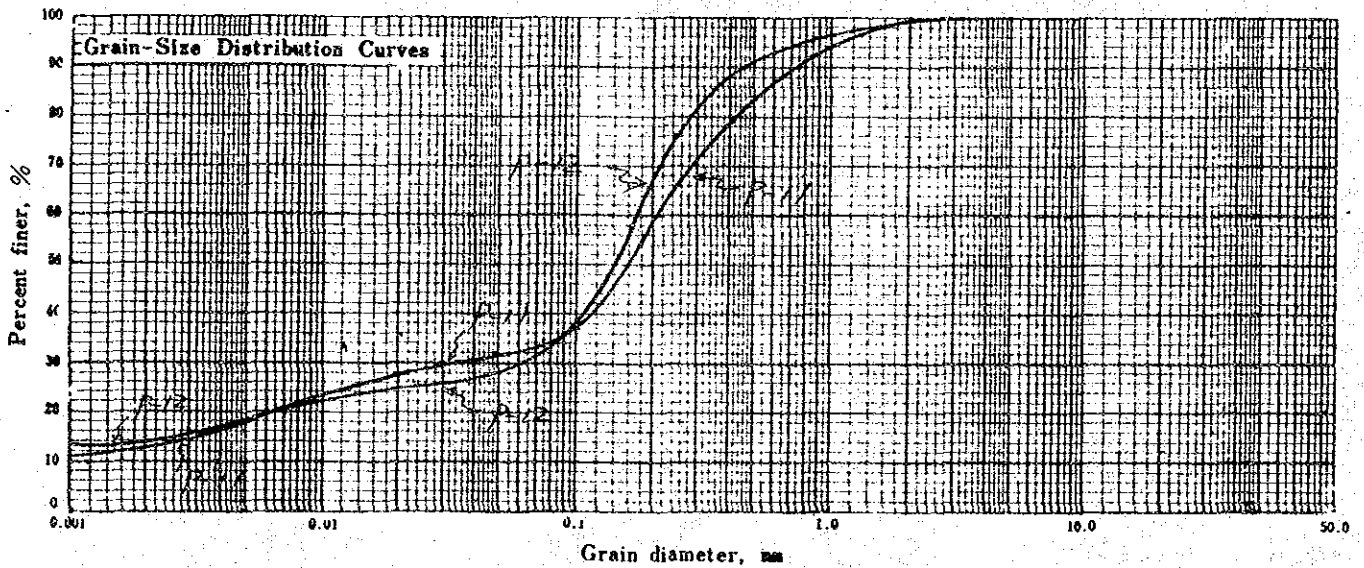
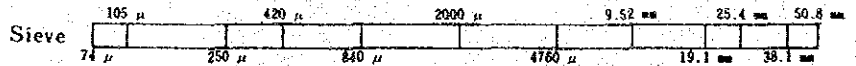
Tested by _____ Date of Testing _____

Sample No., Depth : No. P-11 (22.00 m - 22.29 m) Specific Gravity, $G_s =$ 2.652

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	92.0	79.4	66.2	36.8	32.6
Hydro.	Diam. mm	0.099	0.035	0.022	0.013	0.0072	0.0065	0.0033	0.0015				
	% Passing	32.0	30.1	28.2	24.4	22.5	20.6	15.2	12.0				

Sample No., Depth : No. P-12 (21.00 m - 21.29 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	99.0	95.2	88.7	76.0	37.7	34.6
Hydro.	Diam. mm	0.052	0.037	0.023	0.014	0.0075	0.0068	0.0034	0.0015				
	% Passing	37.8	25.9	25.9	23.7	21.8	18.3	15.2	12.6				



Colloid	Clay	Silt	Sand	Gravel
0.001	0.005	0.074	2.0	

Sample No., Depth	No. <u>P-11</u> <u>22.00 m - 22.29 m</u>	No. <u>P-12</u> <u>21.00 m - 21.29 m</u>	Sample No., Depth	No. <u>P-11</u> <u>22.00 m - 22.29 m</u>	No. <u>P-12</u> <u>21.00 m - 21.29 m</u>
Larger than 4.76 mm	0 %	0 %	Max. diam.	4.76 mm	4.76 mm
4.76 - 2 mm	1 %	1 %	Diam. at 60%	0.21 mm	0.17 mm
2 - 0.42 mm	20 %	10 %	Diam. at 30%	0.035 mm	0.062 mm
0.42 - 0.074 mm	45 %	57 %	Diam. at 10%	— mm	— mm
0.074 - 0.005 mm	16 %	14 %	Coefficient of uniformity	—	—
Smaller than 0.005 mm	18 %	18 %	Coefficient of curvature	—	—
Smaller than 0.001 mm	11 %	13 %			
2000 μ Sieve Passing	99 %	99 %			
420 μ Sieve Passing	79 %	89 %			
74 μ Sieve Passing	34 %	32 %			

406
44F

GRAIN SIZE DISTRIBUTION

Project _____ Job. No. _____

Location of Project _____ Boring No. F-2

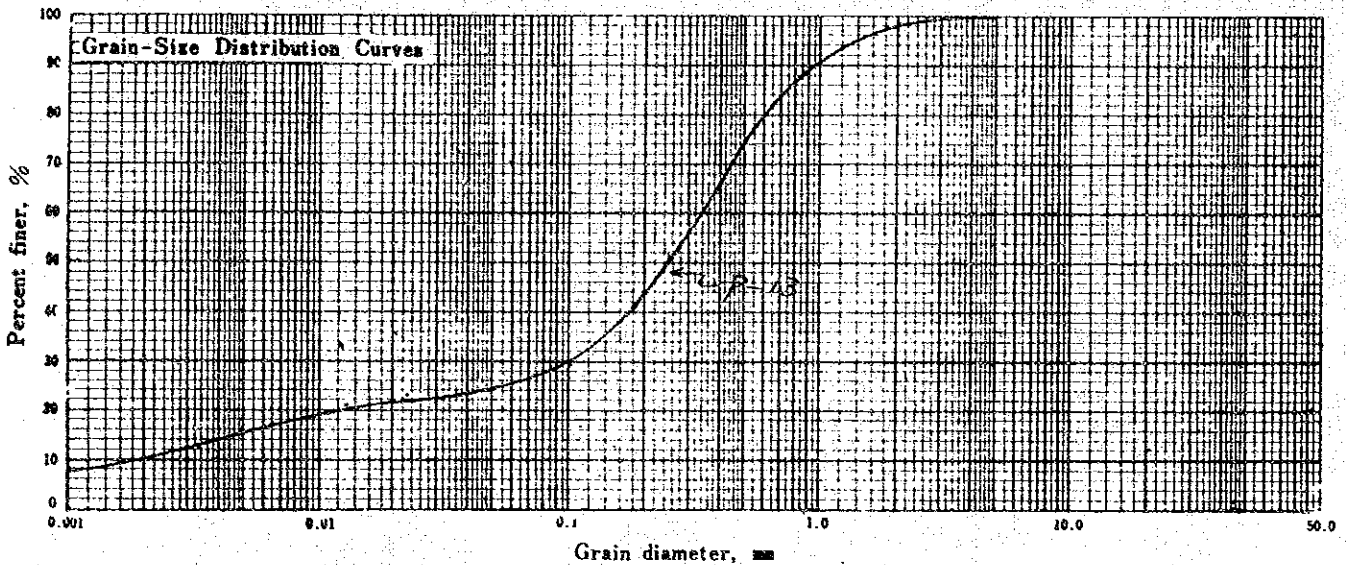
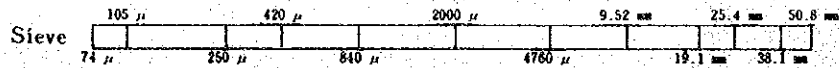
Tested by _____ Date of Testing _____

Sample No., Depth: No. P-13 (25.00m - 25.27m) 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	98.4	89.4	67.1	51.3	29.5	27.1
Hydro.	Diam. mm	0.009	0.036	0.075	0.150	0.300	0.600	1.200	2.500	5.000			
	% Passing	23.5	22.6	22.6	20.7	17.8	17.0	12.4	9.2				

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-13</u> <u>25.00m - 25.27m</u>	No. _____ _____ m - _____ m	Sample No., Depth	No. <u>P-13</u> <u>25.00m - 25.27m</u>	No. _____ _____ m - _____ m
Larger than 4.76 mm	0 %	%	Max. diam.	4.76 mm	mm
4.76 - 2 mm	2 %	%	Diam. at 60%	0.34 mm	mm
2 - 0.42 mm	31 %	%	Diam. at 30%	0.10 mm	mm
0.42 - 0.074 mm	40 %	%	Diam. at 10%	0.0090 mm	mm
0.074 - 0.005 mm	12 %	%	Coefficient of uniformity	38	
Smaller than 0.005 mm	15 %	%	Coefficient of curvature	3.3	
Smaller than 0.001 mm	7 %	%			
2000 μ Sieve Passing	98 %	%			
420 μ Sieve Passing	67 %	%			
74 μ Sieve Passing	27 %	%			

207
kpk

GRAIN SIZE DISTRIBUTION

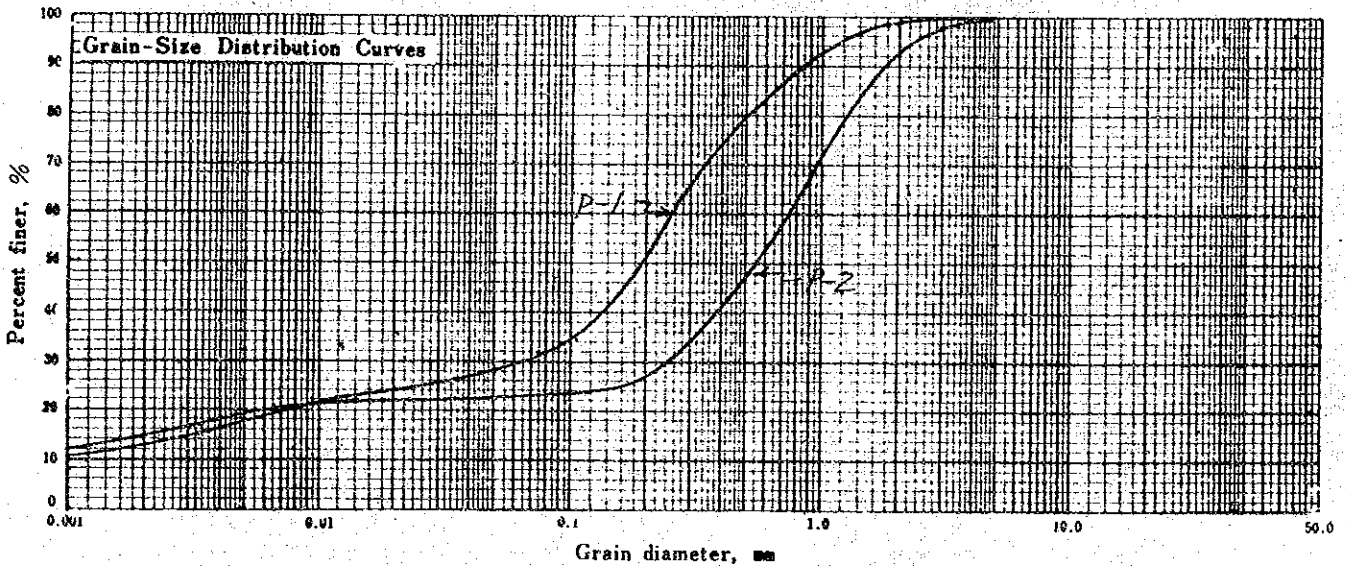
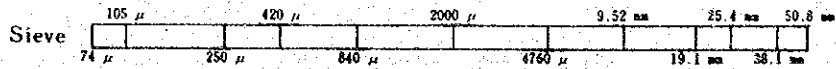
Project _____ Job. No. _____
 Location of Project _____ Boring No. F1-3
 Tested by: _____ Date of Testing _____

Sample No., Depth: No. P-1 (2.00 m - 2.25 m) Specific Gravity, $G_s =$ 2.640

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	89.0	75.2	60.0	34.3	31.7
Hydro.	Diam. mm	0.050	0.036	0.023	0.013	0.0094	0.0067	0.0033	0.0015				
	% Passing	27.9	26.0	24.1	22.3	21.4	17.5	15.0	11.8				

Sample No., Depth: No. P-2 (4.00 m - 4.30 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	92.2	64.2	43.2	30.6	23.2	22.2
Hydro.	Diam. mm	0.050	0.036	0.023	0.013	0.0092	0.0065	0.0033	0.0015				
	% Passing	22.0	22.0	21.9	21.4	21.2	20.3	16.7	13.6				



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 - 4.30 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 - 4.30 m</u>
Larger than 4.76 mm	0 %	0 %	Max. diam.	4.76 mm	4.76 mm
4.76 - 2 mm	1 %	8 %	Diam. at 60%	0.25 mm	0.75 mm
2 - 0.42 mm	24 %	49 %	Diam. at 30%	0.0065 mm	0.24 mm
0.42 - 0.074 mm	44 %	20 %	Diam. at 10%	— mm	— mm
0.074 - 0.005 mm	13 %	4 %	Coefficient of uniformity	—	—
Smaller than 0.005 mm	18 %	19 %	Coefficient of curvature	—	—
Smaller than 0.001 mm	11 %	12 %			
2000 μ Sieve Passing	99 %	92 %			
420 μ Sieve Passing	75 %	43 %			
74 μ Sieve Passing	31 %	23 %			

408
649

GRAIN SIZE DISTRIBUTION

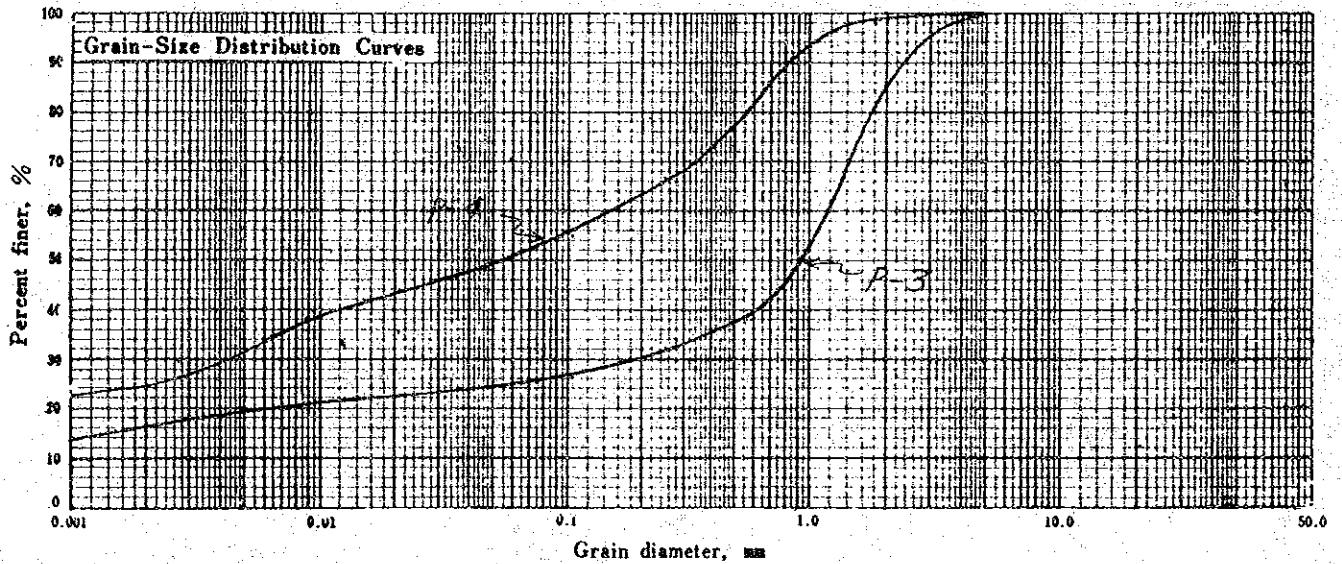
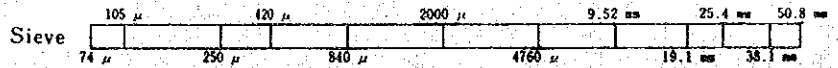
Project _____ Job. No. _____
 Location of Project _____ Boring No. F-3
 Tested by. _____ Date of Testing _____

Sample No., Depth: No. P-3 (6.00 m - 6.27 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	84.9	47.3	35.7	31.9	26.0	25.0
Hydro.	Diam. mm	0.053	0.037	0.024	0.014	0.0096	0.0068	0.0034	0.0015				
	% Passing	24.2	23.8	22.6	22.0	20.9	20.2	18.0	15.5				

Sample No., Depth: No. P-4 (8.00 m - 8.35 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	99.2	90.3	73.2	66.7	54.8	52.6
Hydro.	Diam. mm	0.046	0.033	0.021	0.012	0.0088	0.0063	0.0032	0.0014				
	% Passing	28.2	46.4	43.7	40.0	38.2	34.5	27.4	23.4				



Colloid	Clay	Silt	Sand	Gravel
0.001	0.005	0.075	2.0	

Sample No., Depth	No. <u>P-3</u> <u>6.00 m - 6.27 m</u>	No. <u>P-4</u> <u>8.00 m - 8.35 m</u>	Sample No., Depth	No. <u>P-3</u> <u>6.00 m - 6.27 m</u>	No. <u>P-4</u> <u>8.00 m - 8.35 m</u>
Larger than 4.76 mm	0 %	0 %	Max. diam.	4.76 mm	4.76 mm
4.76 - 2 mm	15 %	1 %	Diam. at 60%	1.18 mm	0.15 mm
2 - 0.42 mm	50 %	26 %	Diam. at 30%	0.19 mm	0.0044 mm
0.42 - 0.074 mm	10 %	20 %	Diam. at 10%	— mm	— mm
0.074 - 0.005 mm	6 %	22 %	Coefficient of uniformity	—	—
Smaller than 0.005 mm	19 %	31 %	Coefficient of curvature	—	—
Smaller than 0.001 mm	14 %	23 %			
2000 μ Sieve Passing	85 %	99 %			
420 μ Sieve Passing	35 %	73 %			
74 μ Sieve Passing	25 %	53 %			

207
168

GRAIN SIZE DISTRIBUTION

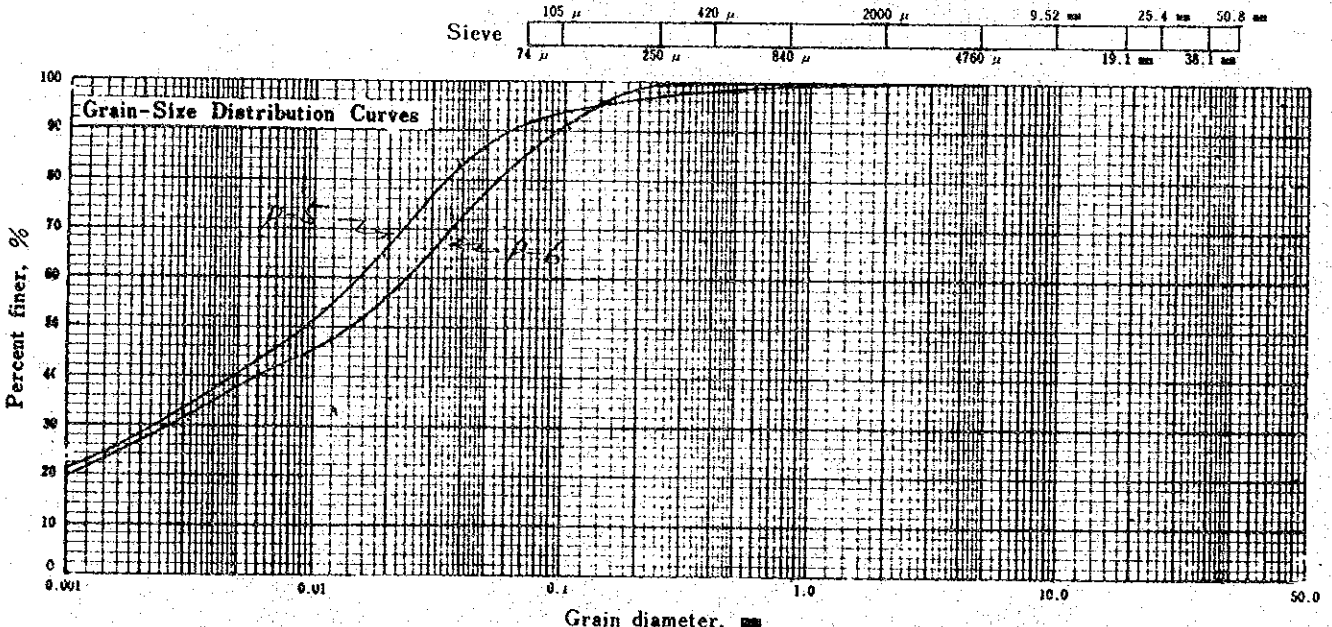
Project _____ Job. No. _____
 Location of Project _____ Boring No. F-3
 Tested by. _____ Date of Testing _____

Sample No., Depth: No. P-5 (10.00 m - 10.31 m) Specific Gravity, $G_s = 2.702$

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	99.4	98.5	97.4	93.9	92.3
Hydro.	Diam. mm	0.038	0.028	0.019	0.011	0.0081	0.0059	0.0030	0.0014				
	% Passing	82.9	75.1	64.5	53.8	48.0	43.4	32.9	24.8				

Sample No., Depth: No. P-6 (11.00 m - 11.45 m) Specific Gravity, $G_s = 2.661$

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	99.7	99.7	90.6	86.5
Hydro.	Diam. mm	0.041	0.030	0.020	0.012	0.0084	0.0060	0.0031	0.0014				
	% Passing	74.2	65.7	56.0	46.4	44.5	40.6	31.1	23.9				



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 - 10.31 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 - 10.31 m</u>	No. <u>P-6</u> <u>11.00 m - 11.45 m</u>
Larger than 4.76 mm	%	%	Max. diam.	4.76 mm	4.76 mm
4.76 - 2 mm	0 %	%	Diam. at 60%	0.015 mm	0.024 mm
2 - 0.42 mm	2 %	0 %	Diam. at 30%	0.0023 mm	0.0027 mm
0.42 - 0.074 mm	6 %	14 %	Diam. at 10%	— mm	— mm
0.074 - 0.005 mm	51 %	48 %	Coefficient of uniformity	—	—
Smaller than 0.005 mm	41 %	38 %	Coefficient of curvature	—	—
Smaller than 0.001 mm	21 %	20 %			
2000 μ Sieve Passing	100 %	100 %			
420 μ Sieve Passing	98 %	100 %			
74 μ Sieve Passing	92 %	86 %			

210
 ul