

GRAIN SIZE ANALYSIS -
AVERAGE GRAIN SIZE
BY MOMENT METHOD

PROFILE LINE, DATE: R-93, 7/24/91

SAMPLE ELEVATION: +8

SCREEN OPENING		PHI	WT RETAIN		CUMM	WEIGHTED		PHI 16	PHI 84
mm	phi	MID POINT "D"	GRAMS "W"	WEIGHT %	WEIGHT %COARSER	MOMENT D*W	%FINER	interpolated	interpolated
4.000	-2.00	-4.00	2.73	5.64	5.64	-10.92	94.36		
2.828	-1.50	-1.75	1.19	2.46	8.10	-2.08	91.90	0.00	0.00
2.000	-1.00	-1.25	1.94	4.01	12.11	-2.43	87.89	0.00	0.00
1.414	-0.50	-0.75	2.21	4.57	16.68	-1.66	83.32	-0.57	0.00
1.000	0.00	-0.25	3.69	7.63	24.31	-0.92	75.69	0.00	0.00
0.707	0.50	0.25	4.20	8.68	33.00	1.05	67.00	0.00	0.00
0.500	1.00	0.75	3.20	6.62	39.61	2.40	60.39	0.00	0.00
0.354	1.50	1.25	4.28	8.85	48.46	5.35	51.54	0.00	0.00
0.250	2.00	1.75	3.80	7.86	56.32	6.65	43.68	0.00	0.00
0.177	2.50	2.25	6.33	13.09	69.40	14.24	30.60	0.00	0.00
0.125	3.00	2.75	8.09	16.73	86.13	22.25	13.87	0.00	2.94
0.088	3.50	3.25	5.08	10.50	96.63	16.51	3.37	0.00	0.00
0.063	4.00	3.75	1.02	2.11	98.74	3.83	1.26	0.00	0.00
PAN		5.00	0.61	1.26	100.00	3.05	0.00	0.00	0.00

SUMS = 48.37 100 57.3175 -0.57 2.94
AVERAGE PH 1.185 1.180774
AVERAGE mm 0.440 0.441

GRAIN SIZE ANALYSIS -
AVERAGE GRAIN SIZE
BY MOMENT METHOD

PROFILE LINE, DAT R-93, 7/24/91

SAMPLE ELEVATION: +4

SCREEN OPENING		PHI	WT RETAIN		CUMM	WEIGHTED		PHI 16	PHI 84
mm	phi	MID POINT "D"	GRAMS "W"	WEIGHT %	WEIGHT %COARSER	MOMENT D*W	%FINER	interpolated	interpolated
4.000	-2.00	-3.00	0.00	0.00	0.00	0.00	100.00		
2.828	-1.50	-1.75	0.16	0.23	0.23	-0.28	99.77		
2.000	-1.00	-1.25	0.21	0.30	0.53	-0.26	99.47	0.00	0.00
1.414	-0.50	-0.75	0.56	0.81	1.34	-0.42	98.66	0.00	0.00
1.000	0.00	-0.25	3.89	5.61	6.96	-0.97	93.04	0.00	0.00
0.707	0.50	0.25	15.79	22.79	29.74	3.95	70.26	0.20	0.00
0.500	1.00	0.75	20.53	29.63	59.37	15.40	40.63	0.00	0.00
0.354	1.50	1.25	20.06	28.95	88.32	25.08	11.68	0.00	1.43
0.250	2.00	1.75	5.88	8.49	96.81	10.29	3.19	0.00	0.00
0.177	2.50	2.25	1.57	2.27	99.08	3.53	0.92	0.00	0.00
0.125	3.00	2.75	0.33	0.48	99.55	0.91	0.45	0.00	0.00
0.088	3.50	3.25	0.12	0.17	99.73	0.39	0.27	0.00	0.00
0.063	4.00	3.75	0.05	0.07	99.80	0.19	0.20	0.00	0.00
PAN		4.00	0.14	0.20	100.00	0.56	0.00	0.00	0.00

SUMS = 69.29 100.000 58.353 0.20 1.43
AVERAGE PH 0.842 0.812
AVERAGE mm 0.558 0.570

GRAIN SIZE ANALYSIS -
AVERAGE GRAIN SIZE
BY MOMENT METHOD

PROFILE LINE, DAT R-93, 7/24/91

SAMPLE ELEVATION: 0

SCREEN OPENING		PHI	WT RETAIN		CUMM	WEIGHTED		PHI 16	PHI 84
mm	phi	MID POINT "D"	GRAMS "W"	WEIGHT %	WEIGHT %COARSER	MOMENT D*W	%FINER	interpolated	interpolated
4.000	-2.00	-3.10	8.15	10.35	10.35	-25.27	89.65		
2.828	-1.50	-1.75	7.24	9.19	19.54	-12.67	80.46	-1.69	0.00
2.000	-1.00	-1.25	7.94	10.08	29.62	-9.93	70.38	0.00	0.00
1.414	-0.50	-0.75	8.22	10.44	40.05	-6.17	59.95	0.00	0.00
1.000	0.00	-0.25	13.63	17.30	57.36	-3.41	42.64	0.00	0.00
0.707	0.50	0.25	14.63	18.57	75.93	3.66	24.07	0.00	0.00
0.500	1.00	0.75	8.93	11.34	87.27	6.70	12.73	0.00	0.86
0.354	1.50	1.25	7.99	10.14	97.41	9.99	2.59	0.00	0.00
0.250	2.00	1.75	1.49	1.89	99.30	2.61	0.70	0.00	0.00
0.177	2.50	2.25	0.27	0.34	99.64	0.61	0.36	0.00	0.00
0.125	3.00	2.75	0.16	0.20	99.85	0.44	0.15	0.00	0.00
0.088	3.50	3.25	0.09	0.11	99.96	0.29	0.04	0.00	0.00
0.063	4.00	3.75	0.01	0.01	99.97	0.04	0.03	0.00	0.00
PAN		10.00	0.02	0.03	100.00	0.20	0.00	0.00	0.00

SUMS = 78.77 100 -32.905 -1.69 0.86
AVERAGE PH -0.418 -0.41827
AVERAGE mm 1.336 1.336

GRAIN SIZE ANALYSIS -
AVERAGE GRAIN SIZE
BY MOMENT METHOD

PROFILE LINE, DATE: R-93, 7/24/91

SAMPLE ELEVATION: -4

SCREEN OPENING	PHI	WT RETAIN	WEIGHT	CUMM	WEIGHTED		PHI 16	PHI 84
mm	phi	GRAMS	%	WEIGHT	MOMENT	%FINER	interpolated	interpolated
		"W"		%COARSER	D*W			
4.000	-2.00	0.00	0.00	0.00	0.00	100.00		
2.828	-1.50	0.00	0.00	0.00	0.00	100.00		
2.000	-1.00	0.00	0.00	0.00	0.00	100.00		
1.414	-0.50	0.00	0.00	0.00	0.00	100.00		
1.000	0.00	0.04	0.09	0.09	-0.01	99.91	0.00	0.00
0.707	0.50	0.31	0.72	0.81	0.08	99.19	0.00	0.00
0.500	1.00	0.75	3.39	4.20	1.10	95.80	0.00	0.00
0.354	1.50	1.25	23.29	27.49	12.61	72.51	1.25	0.00
0.250	2.00	1.75	33.19	60.69	25.17	39.31	0.00	0.00
0.177	2.50	2.25	29.25	89.94	28.51	10.06	0.00	2.40
0.125	3.00	3.73	8.61	98.55	10.26	1.45	0.00	0.00
0.088	3.50	3.25	1.32	99.86	1.85	0.14	0.00	0.00
0.063	4.00	3.75	0.12	99.98	0.19	0.02	0.00	0.00
PAN		12.00	0.01	100.00	0.12	0.00	0.00	0.00

SUMS = 43.32 100 79.8725 1.25 2.40
AVERAGE PH 1.844 1.825906
AVERAGE mm 0.279 0.282

GRAIN SIZE ANALYSIS -
AVERAGE GRAIN SIZE
BY MOMENT METHOD

PROFILE LINE, DAT R-93, 7/24/91

SAMPLE ELEVATION: -8

SCREEN OPENING	PHI	WT RETAIN	WEIGHT	CUMM	WEIGHTED		PHI 16	PHI 84
mm	phi	GRAMS	%	WEIGHT	MOMENT	%FINER	interpolated	interpolated
		"W"		%COARSER	D*W			
4.000	-2.00	0.00	0.00	0.00	0.00	100.00		
2.828	-1.50	0.00	0.00	0.00	0.00	100.00		
2.000	-1.00	0.10	0.21	0.21	-0.13	99.79	0.00	0.00
1.414	-0.50	0.16	0.34	0.55	-0.12	99.45	0.00	0.00
1.000	0.00	0.36	0.76	1.32	-0.09	98.68	0.00	0.00
0.707	0.50	0.96	2.04	3.35	0.24	96.65	0.00	0.00
0.500	1.00	1.66	3.52	6.87	1.25	93.13	0.00	0.00
0.354	1.50	5.00	10.61	17.48	6.25	82.52	1.43	0.00
0.250	2.00	7.21	15.29	32.77	12.62	67.23	0.00	0.00
0.177	2.50	12.68	26.90	59.67	28.53	40.33	0.00	0.00
0.125	3.00	13.34	28.30	87.97	36.69	12.03	0.00	2.93
0.088	3.50	3.25	5.17	98.94	16.80	1.06	0.00	0.00
0.063	4.00	0.42	0.89	99.83	1.58	0.17	0.00	0.00
PAN		0.08	0.17	100.00	0.32	0.00	0.00	0.00

SUMS = 47.14 100 103.93 1.43 2.93
AVERAGE PH 2.205 2.18003
AVERAGE mm 0.217 0.221

GRAIN SIZE ANALYSIS -
AVERAGE GRAIN SIZE
BY MOMENT METHOD

PROFILE LINE, DATE: R-93, 7/24/91

SAMPLE ELEVATION: -12

SCREEN OPENING	PHI	WT RETAIN	WEIGHT	CUMM	WEIGHTED		PHI 16	PHI 84
mm	phi	GRAMS	%	WEIGHT	MOMENT	%FINER	interpolated	interpolated
		"W"		%COARSER	D*W			
4.000	-2.00	2.35	4.03	4.03	-4.70	95.97		
2.828	-1.50	0.51	0.87	4.90	-0.89	95.10	0.00	0.00
2.000	-1.00	0.88	1.51	6.41	-1.10	93.59	0.00	0.00
1.414	-0.50	1.45	2.48	8.89	-1.09	91.11	0.00	0.00
1.000	0.00	6.06	10.38	19.27	-1.52	80.73	-0.16	0.00
0.707	0.50	14.67	25.13	44.41	3.67	55.59	0.00	0.00
0.500	1.00	0.75	12.00	20.56	64.96	35.04	0.00	0.00
0.354	1.50	11.80	20.22	85.18	14.75	14.82	0.00	1.47
0.250	2.00	5.15	8.82	94.00	9.01	6.00	0.00	0.00
0.177	2.50	2.25	3.53	97.53	4.64	2.47	0.00	0.00
0.125	3.00	2.75	0.98	98.51	1.57	1.49	0.00	0.00
0.088	3.50	3.25	0.46	98.97	0.88	1.03	0.00	0.00
0.063	4.00	3.75	0.31	99.28	0.68	0.72	0.00	0.00
PAN		8.00	0.42	100.00	3.36	0.00	0.00	0.00

SUMS = 58.37 100 38.25 -0.16 1.47
AVERAGE PH 0.655 0.65657
AVERAGE mm 0.635 0.634