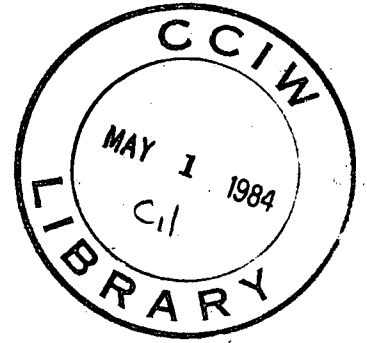


HYDRAULICS DIVISION
TECHNICAL NOTE



DATE: March 27, 1984 REPORT NO: 84-07

TITLE: Particle Size Data Report

AUTHOR: G.A. Duncan

REASON FOR REPORT: This report responds to a request for particle size data from Dr. Carolyn Eyles, University of Toronto

CORRESPONDENCE FILE NO:

1.0 INTRODUCTION

This report provides the results of particle size analyses on sediments submitted by Dr. C. Eyles, University of Toronto.

The 26 samples were analyzed by Sieve and Sedigraph (Duncan and LaHaie, 1979). The standard procedure was modified to give detail analysis of the gravel/sand fractions.

The gravel/sand fractions were retained and returned to Dr. Eyles.

2.0 PROCEDURE

The Sieve and Sedigraph Method which provides sand, silt, and clay percentages was used to analyze the samples. Briefly, the procedure consists of:

1. Splitting the sample to 2g.
2. Removing particles large enough to block Sedigraph Suction Tube (0.088 mm).
3. Dispersing sample in a Calgon suspension.
4. Automatic analysis with the Sedigraph.
5. Processing the results with SIZDIST: a FORTRAN IV computer program (Sandilands and Duncan, 1980)

3.0 RESULTS

For the Sieve and Sedigraph Method, the output consists of:

1. A histogram of the frequency distribution.
2. The percentage and cumulative percentage of the material occurring within 1/2 PHI unit.

3. Moment measures (Krumbein and Pettijohn, 1938) and graphic (Folk and Ward, 1957) statistics.
4. Percentiles.
5. Percent gravel, sand and silt/clay.
6. Ratios used to plot Folk's Ternary Classification.
7. Shepard (1954) and Fold (1974) Ternary Classification.

PHI CONVERSION

The results of samples analyzed in the Sedimentology Lab are presented using the PHI scale (Krumbein, 1934). The conversion from this PHI equation, $\phi = -\log_2 \xi$ (where ξ is the diameter in millimeters) to the Wentworth scale is listed below.

PHI (ϕ)	Millimeters	Microns	Wentworth Size Class
-5.0	32		
-4.5	24		
-4.0	16		Pebble (-2 to -6 ϕ)
-3.5	12		
-3.0	8		
-2.5	6		
-2.0	4		
-1.5	2.83		Granule
-1.0	2.00		
-0.5	1.41		Very coarse sand
0.0	1.00		
0.5	0.71		Coarse sand
1.0	0.51	500	
1.5	0.35	350	Medium sand
2.0	0.25	250	
2.5	0.177	177	Fine sand
3.0	0.125	125	
3.5	0.088	88	Very fine sand
4.0	0.0625	62.5	
8.0	0.0039	3.9	Silt+ Clay+

APPENDIX 1

SIZDIST OUTPUT

BC 1-A

SIEVE, SH. PIP., SEDIGRAPH SAMPLE WT.= 4.761g

03/23/84

PHI	PCT. CUMPCT.		
-1.00			
	.53		*
-.50		.63	
	.22		
0.00		.85	
	.46		
.50		1.31	
	.78		*
1.00		2.09	
	.77		*
1.50		2.86	
	1.33		*
2.00		4.19	
	3.19		***
2.50		7.37	
	6.11		*****
3.00		13.48	
	9.51		*****
3.50		22.99	
	3.97		****
4.00		26.96	
	1.10		*
4.50		28.05	
	5.94		*****
5.00		33.89	
	6.94		*****
5.50		40.83	
	5.84		*****
6.00		46.68	
	6.21		*****
6.50		52.89	
	5.48		*****
7.00		58.36	
	6.57		*****
7.50		64.94	
	5.11		*****
8.00		70.05	
	5.84		*****
8.50		75.90	
	4.75		*****
9.00		80.64	
	4.02		****
9.50		84.66	
	3.29		***
10.00		87.95	
	2.92		***
10.50		90.87	
	2.19		**
11.00		93.06	
	2.13		**
11.50		95.25	
	2.19		**
12.00		97.44	
	2.56		***
*****		100.00	

MEAN ST.DEV. SKEWNESS KURTOSIS

6.17 2.77 .01 -.73

KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE -.5 TO 12.0 PHI

6.27 2.98 .06 .82

FOLK GRAPHIC STATISTICAL PARAMETERS FOLK AND WARD, 1957

PERCENTILES	MEDIAN	6.27	5TH	2.13	16TH	3.13	25TH	3.75
			75TH	8.42	84TH	9.42	95TH	11.44
PCT. GRAVEL	0.00	SAND	26.96	SILT (PIPETTE)	0.00	CLAY (PIPETTE)		0.00
				(SEDIGRAPH)	43.10	(SEDIGRAPH)		29.95

GRAVEL+SAND 26.96 SILT/(SILT+CLAY) 59.00PCT.GRAV+SAND/SILT+CLAY .37

LABELS SHEPARD -SAN SIL CLY FOLK(GMS)-SANDY MUD (SCS)-SANDY MUD

BC 1-C

SIEVE, SH. PIP., SEDIGRAPH SAMPLE WT. = 4.8630

03/23/84

PHI	PCT. CUM PCT.	
-2.00		*****
-1.50	5.64	*****
-1.00	8.02	*****
	13.66	*****
-.50	5.57	*****
	19.23	*****
0.00	5.59	*****
	24.91	*****
.50	7.38	*****
	32.29	*****
1.00	8.37	*****
	40.66	*****
1.50	5.79	*****
	46.45	*****
2.00	5.85	*****
	52.30	*****
2.50	5.31	*****
	58.11	*****
3.00	5.39	*****
	63.49	*****
3.50	4.09	*****
	67.58	*****
4.00	2.12	*****
	69.70	*****
4.50	1.68	*****
	71.38	*****
5.00	2.81	*****
	74.19	*****
5.50	1.96	*****
	76.15	*****
6.00	2.53	*****
	78.68	*****
6.50	1.58	*****
	80.36	*****
7.00	1.58	*****
	82.04	*****
7.50	2.53	*****
	84.57	*****
8.00	1.96	*****
	86.53	*****
8.50	1.40	*****
	87.94	*****
9.00	1.58	*****
	89.62	*****
9.50	1.12	*****
	90.74	*****
10.00	.84	*****
	91.58	*****
10.50	1.12	*****
	92.71	*****
11.00	1.40	*****
	94.11	*****
11.50	.84	*****
	94.95	*****
12.00	.56	*****
	95.51	*****
****	4.49	****
	100.00	

MEAN ST.DEV. SKEWNESS KURTOSIS

2.49 3.40 .44 -.09 KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE -1.5 TO 12.0 PHI

2.80 4.03 .43 1.03 FOLK GRAPHIC STATISTICAL PARAMETERS FOLK AND WARD, 1957

PERCENTILES MEDIAN 1.80 5TH -1.56 16TH -.79 25TH .01
75TH 5.21 84TH 7.39 95TH 11.54

PCT. GRAVEL 13.66 SAND 56.04 SILT (PIPETTE) 0.00 CLAY (PIPETTE) 0.00
(SEDIGRAPH) 16.83 (SEDIGRAPH) 13.47

GRAVEL+SAND 69.70 SILT/(SILT+CLAY) 55.56PCT. GRAV+SAND/SILT+CLAY 2.30

LABELS SHEPARD -SILTY SAND FOLK(GMS)-GRAVELLY MUDDY SAND (SCS)-

BC 3-E

SIEVE, SH. PIP., SEDIGRAPH SAMPLE WT.= 5.776g

PHI PCT. CUMPCT.

03/23/84

-1.00			
	.07		
-.50		.07	
	.15		
0.00		.24	
	.11		
.50		.35	
	.14		
1.00		.50	
	.20		
1.50		.70	
	.41		
2.00		1.10	*
	.31		
2.50		2.01	**
	1.50		
3.00		3.62	**
	2.33		
3.50		5.95	**
	2.32		
4.00		8.28	*
	1.40		
4.50		9.67	*****
	6.52		
5.00		16.19	*****
	9.31		
5.50		25.50	*****
	7.92		
6.00		33.42	*****
	9.78		
6.50		43.20	*****
	8.38		
7.00		51.58	*****
	7.92		
7.50		59.49	*****
	7.92		
8.00		67.41	*****
	6.52		
8.50		73.93	*****
	5.59		
9.00		79.51	****
	4.19		
9.50		83.70	***
	3.26		
10.00		86.96	***
	2.79		
10.50		89.76	**
	2.33		
11.00		92.08	**
	1.86		
11.50		93.95	*
	1.40		
12.00		95.34	*****
	4.55		
*****		100.00	

MEAN ST.DEV. SKEWNESS KURTOSIS

6.88 2.16 -.01 -.00

KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE -.5 TO 12.0 PHI

7.15 2.44 .16 1.13

FOLK GRAPHIC STATISTICAL PARAMETERS FOLK AND WARD, 1957

PERCENTILES	MEDIAN	6.91	5TH	3.30	16TH	4.99	25TH	5.47
			75TH	8.60	84TH	9.55	95TH	11.88

PCT. GRAVEL	0.00	SAND	8.28	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00
				(SEDIGRAPH)	59.13	(SEDIGRAPH)	32.59

GRAVEL+SAND 8.28 SILT/(SILT+CLAY) 64.47PCT.GRAV+SAND/SILT+CLAY .09

LABELS SHEPARD -CLAYEY SILT FOLK(GMS)-MUD (SCS)-MUD

BC 3-F

SIEVE, SH. PIP., SEDIGRAPH SAMPLE WT.= 5.1744

03/23/84

PHI	PCT. CUMPT.		
-1.50			
-1.00	.35	.35	
-.50	.27	.62	
0.00	.23	.85	
.50	.41	1.26	
1.00	.30	1.56	
1.50	.20	1.76	
2.00	.43	2.20	
2.50	.83	3.03	*
3.00	1.46	4.49	*
3.50	2.07	6.56	**
4.00	2.41	8.97	**
4.50	3.68	12.65	****
5.00	6.90	19.55	*****
5.50	8.28	27.82	*****
6.00	7.36	35.18	*****
6.50	6.44	41.61	*****
7.00	6.44	48.05	*****
7.50	7.36	55.41	*****
8.00	6.44	61.84	*****
8.50	4.50	66.44	*****
9.00	6.44	72.88	*****
9.50	4.50	77.47	*****
10.00	4.60	82.07	*****
10.50	4.14	86.21	****
11.00	2.76	88.97	***
11.50	2.30	91.26	**
12.00	1.84	93.10	**
*****	6.90	100.00	*****

MEAN ST.DEV. SKEWNESS KURTOSIS

6.92 2.45 -.12 .04

KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE -1.0 TO 12.0 PHI

> 5 PERCENT OF THE FINES ARE NOT RESOLVED, OBTAIN FOLK STATS. GRAPHICALLY

PERCENTILES MEDIAN 7.13 5TH 3.12 16TH 4.74 25TH 5.33

75TH 9.23 84TH 10.23 95TH*****

PCT. GRAVEL .35 SAND 8.62 SILT (PIPETTE) 0.00 CLAY (PIPETTE) 0.00

(SEDIGRAPH) 52.87 (SEDIGRAPH) 38.16

GRAVEL+SAND 8.97 SILT/(SILT+CLAY) 58.08 PCT. GRAV+SAND/SILT+CLAY .10

LABELS STEPHARD -CLAYEY SILT FOLK(GMS)-MUD

(SCS)-MUD

BC 3-G

SIEVE, SH. PIP., SEDIGRAPH SAMPLE WT. = 6.1395

03/23/84

PHI	PCT.	CUMPCT.	
-3.00			
-2.50	8.82	8.82	*****
-2.00	0.00	8.82	
-1.50	0.00	8.82	
-1.00	0.00	8.82	
-.50	0.00	8.82	
0.00	.17	8.99	
.50	.14	9.13	
1.00	.12	9.25	
1.50	.16	9.40	
2.00	.27	9.67	
2.50	.52	10.29	*
3.00	1.36	11.65	*
3.50	2.70	14.35	***
4.00	2.04	16.39	**
4.50	3.38	19.77	***
5.00	5.49	25.26	*****
5.50	7.60	32.86	*****
6.00	5.91	38.77	*****
6.50	5.49	44.26	*****
7.00	5.91	50.17	*****
7.50	6.33	56.51	*****
8.00	6.33	62.84	*****
8.50	5.07	67.91	*****
9.00	5.91	73.82	*****
9.50	5.91	79.73	*****
10.00	5.07	84.80	*****
10.50	3.80	88.60	****
11.00	2.53	91.13	***
11.50	2.11	93.24	**
12.00	1.27	94.51	*
*****	5.49	100.00	*****

MEAN ST.DEV. SKEWNESS KURTOSIS

6.18 3.62 -.57 .97

KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE -2.5 TO 12.0 PHI

> 5 PERCENT OF THE FINES ARE NOT RESOLVED, OBTAIN FOLK STATS. GRAPHICALLY

PERCENTILES	MEDIAN	6.99	5TH	-2.72	16TH	3.90	25TH	4.98
			75TH	9.10	84TH	9.92	95TH	*****

PCT. GRAVEL 8.82 SAND 7.57 SILT (PIPETTE) 0.00 CLAY (PIPETTE) 0.00

(SEDIGRAPH) 46.45 (SEDIGRAPH) 37.16

GRAVEL+SAND 16.39 SILT/(SILT+CLAY) 55.56PCT.GRAV+SAND/SILT+CLAY .20

LABELS SHEPARD -CLAYEY SILT FOLK(GMS)-GRAVELLY MUD (SCS)-

BC 4-F

SIEVE, SH. PIP., SEDIGRAPH SAMPLE WT.= 5.0925

03/23/84

PHI	PCT. CUM PCT.	
-1.50		
-1.00	.56	*
-.50	.45	
0.00	1.01	
.50	.42	
1.00	1.43	
1.50	.26	
2.00	.33	
2.50	.23	
3.00	.44	
3.50	1.16	*
4.00	1.92	**
4.50	5.67	***
5.00	2.51	***
5.50	2.76	***
6.00	10.94	*
6.50	.30	*
7.00	11.84	*****
7.50	5.40	*****
8.00	17.23	*****
8.50	7.65	*****
9.00	24.88	*****
9.50	6.30	*****
10.00	31.18	*****
10.50	7.65	*****
11.00	38.83	*****
11.50	6.75	*****
12.00	45.57	*****
	7.65	*****
	53.22	*****
	5.85	*****
	59.07	*****
	7.20	*****
	65.26	*****
	5.40	*****
	71.66	*****
	5.85	*****
	77.51	*****
	4.50	****
	82.01	****
	4.50	****
	86.51	****
	3.15	***
	89.65	****
	3.50	****
	93.25	***
	2.70	***
	95.95	****
*****	4.05	****
	100.00	

MEAN ST.DEV. SKEWNESS KURTOSIS

7.12 2.58 -.22 .22

KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE -1.0 TO 12.0 PHI

7.47 2.70 .05 .98

FOLK GRAPHIC STATISTICAL PARAMETERS FOLK AND WARD, 1957

PERCENTILES MEDIAN 7.29 5TH 2.83 16TH 4.89 25TH 5.51
75TH 9.29 84TH 10.22 95TH 11.82

PCT. GRAVEL .56 SAND 10.38 SILT (PIPETTE) 0.00 CLAY (PIPETTE) 0.00
(SEDIGRAPH) 48.13 (SEDIGRAPH) 40.93
GRAVEL+SAND 10.94 SILT/(SILT+CLAY) 54.04 PCT.GRAV+SAND/SILT+CLAY .12

~~LABELS SHEPARD - CLAYEY SILT FOLK (GMS) - SANDY MUD~~

~~(SCS) - SANDY MUD~~

BC 5-D

SIEVE, SH. PIP., SEDIGRAPH SAMPLE WT.= 5.3773

03/23/84

PHI	PCT.	CUM PCT.	
-2.00			
-1.50	1.12	1.12	*
-1.00	0.00	1.12	
	.09	1.21	
-.50	.37	1.58	
0.00	.25	1.83	
.50	.52	2.35	*
1.00	.58	2.93	*
1.50	1.30	4.24	*
2.00	2.56	6.80	***
2.50	4.44	11.23	****
3.00	9.33	20.57	*****
3.50	4.98	25.54	*****
4.00	3.01	28.55	***
4.50	7.14	35.70	*****
5.00	5.54	41.34	*****
5.50	4.51	45.85	*****
6.00	4.99	50.74	*****
6.50	4.14	54.88	****
7.00	4.14	59.01	****
7.50	4.14	63.15	****
8.00	3.75	66.91	****
8.50	4.51	71.42	*****
9.00	4.14	75.56	****
9.50	4.89	80.45	*****
10.00	4.14	84.58	****
10.50	3.75	88.34	****
11.00	2.63	90.98	***
11.50	3.01	93.98	***
12.00	6.02	100.00	*****

MEAN ST.DEV. SKEWNESS KURTOSIS

6.33 3.02 -.02 -.71

KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE -1.5 TO 12.0 PHI

> 5 PERCENT OF THE FINES ARE NOT RESOLVED, OBTAIN FOLK STATS. GRAPHICALLY

PERCENTILES	MEDIAN	6.42	5TH	2.15	16TH	3.26	25TH	3.95
			75TH	9.43	84TH	10.43	95TH	*****

PCT. GRAVEL	1.12	SAND	24.43	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00
				(SEDIGRAPH)	37.60	(SEDIGRAPH)	36.85

GRAVEL+SAND 25.54 SILT/(SILT+CLAY) 50.51PCT. GRAV+SAND/SILT+CLAY .34

LABELS SHEPARD -SAN SIL CLY FOLK(GMS)-SANDY MUD

(SCS)-SANDY MUD

7

BC 6-C

SIEVE, SH. PIP., SEDIGRAPH SAMPLE WT.= 5.6079

03/23/84

PHI	PCT. CUM PCT.		
-1.50			*
-1.00	.73		*
-.50	.91	.73	*
0.00	.50	1.63	*
.50	.51	2.13	*
1.00	.69	2.65	*
1.50	.75	3.33	*
2.00	15.12	4.10	*****
2.50	2.77	19.22	***
3.00	5.09	21.99	*****
3.50	8.09	27.07	*****
4.00	5.27	35.16	*****
4.50	1.20	40.42	*
5.00	4.21	41.63	****
5.50	5.72	45.84	*****
6.00	3.91	51.56	****
6.50	3.61	55.47	****
7.00	3.91	59.08	****
7.50	3.91	62.99	****
8.00	3.01	65.90	***
8.50	3.91	69.91	****
9.00	3.91	73.82	****
9.50	4.51	77.73	*****
10.00	3.61	82.25	****
10.50	3.01	85.86	***
11.00	2.41	88.87	**
11.50	2.71	91.27	***
12.00	1.81	93.98	**
****	4.21	95.79	****
		100.00	

MEAN ST.DEV. SKEWNESS KURTOSIS

5.46 3.23 .11 -1.05

KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE -1.0 TO 12.0 PHI

5.67 3.52 .18 .72

FOLK GRAPHIC STATISTICAL PARAMETERS FOLK AND WARD, 1957

PERCENTILES	MEDIAN	5.35	5TH	1.53	16TH	1.89	25TH	2.80
			75TH	8.65	84TH	9.74	95TH	11.78

PCT. GRAVEL	.73	SAND	39.70	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00
				(SEDIGRAPH)	29.49	(SEDIGRAPH)	30.09

GRAVEL+SAND 40.42 SILT/(SILT+CLAY) 49.49 PCT. GRAV+SAND/SILT+CLAY .68

~~LABELS SHEPARD - SAN SIL CLY F CLK (GMS) - SANDY MUD~~

~~(SCS) - SANDY MUD~~

BC 8-C

SIEVE, SH. PIP., SEDIGRAPH SAMPLE WT.= 5.7380

03/23/84

PHI	PCT. CUMPT.		
-2.50			**
-2.00	2.41		
-1.50	0.00	2.41	
-1.00	0.00	2.41	
-.50	.30	2.41	
0.00	.40	2.71	
.50	.33	3.11	
1.00	.54	3.44	*
1.50	.74	3.97	*
2.00	1.37	4.71	*
2.50	2.40	6.08	**
3.00	3.97	8.48	****
3.50	6.67	12.45	*****
4.00	3.99	19.12	****
4.50	3.48	23.11	***
5.00	5.02	26.59	*****
5.50	5.80	31.61	*****
6.00	5.02	37.41	*****
6.50	4.25	42.43	****
7.00	4.64	46.68	*****
7.50	5.41	51.32	*****
8.00	5.80	56.73	*****
8.50	5.02	62.52	*****
9.00	5.41	67.55	*****
9.50	5.41	72.95	*****
10.00	5.41	78.36	*****
10.50	3.86	83.77	****
11.00	3.48	87.64	***
11.50	1.55	91.11	**
12.00	1.93	92.66	**
*****	5.41	94.59	*****
		100.00	

MEAN ST.DEV. SKEWNESS KURTOSIS

6.34 3.09 -.24 -.08

KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE -2.0 TO 12.0 PHI

> 5 PERCENT OF THE FINES ARE NOT RESOLVED, OBTAIN FOLK STATS. GRAPHICALLY

PERCENTILES	MEDIAN	6.86	5TH	1.60	16TH	3.27	25TH	4.27
			75TH	9.19	84TH	10.03	95TH	*****

PCT. GRAVEL 2.41 SAND 20.70 SILT (PIPETTE) 0.00 CLAY (PIPETTE) 0.00

(SEDIGRAPH) 39.41

(SEDIGRAPH) 37.48

GRAVEL+SAND 23.11 SILT/(SILT+CLAY) 51.26PCT.GRAV+SAND/SILT+CLAY .30

LABELS SHEPARD -SAN SIL CLY FOLK(GMS)-SANDY MUD

(SCS)-SANDY MUD

BC 9-A

SIEVE, SH. PIP., SEDIGRAPH SAMPLE WT.= 4.8996

03/23/84

PHI	PCT. CUM PCT.	
-2.50		
-2.00	4.83	*****
-1.50	0.00	4.83
-1.00	1.11	*
-.50	.98	5.94
0.00	.94	6.91
.50	1.44	7.86
1.00	1.47	9.29
1.50	1.41	10.76
2.00	2.17	12.17
2.50	3.38	14.34
3.00	4.55	17.72
3.50	4.80	22.28
4.00	3.44	27.08
4.50	1.56	30.52
5.00	3.63	32.07
5.50	5.53	35.70
6.00	4.84	41.23
6.50	4.84	46.07
7.00	5.19	50.91
7.50	6.22	56.10
8.00	6.22	62.32
8.50	5.88	68.54
9.00	5.19	74.42
9.50	3.80	79.60
10.00	4.84	83.41
10.50	4.84	88.25
11.00	2.77	93.09
11.50	1.04	95.85
12.00	.35	96.89
****	2.77	97.23
	100.00	***

MEAN ST.DEV. SKEWNESS KURTOSIS

5.69 3.48 -.29 -.42

KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE -2.0 TO 12.0 PHI

6.07 3.69 -.21 .95

FOLK GRAPHIC STATISTICAL PARAMETERS FOLK AND WARD, 1957

PERCENTILES MEDIAN 6.41 5TH -1.42 16TH 2.25 25TH 3.28
75TH 8.56 84TH 9.56 95TH 10.85

PCT. GRAVEL 5.94 SAND 24.58 SILT (PIPETTE) 0.00 CLAY (PIPETTE) 0.00

(SEDIGRAPH) 38.03

(SEDIGRAPH) 31.46

GRAVEL+SAND 30.52 SILT/(SILT+CLAY) 54.73PCT. GRAV+SAND/SILT+CLAY .44

LABELS SHEPARD -SAN SIL CLY FOLK(GMS)-GRAVELLY MUD (SCS)-

BC 9-B

SIEVE, SH. PIP., SEDIGRAPH SAMPLE WT.= 5.3170

03/23/84

PHI	PCT. CUM PCT.	
0.00	.15	
.50	.13	.15
1.00	.25	.28
1.50	1.39	.53
2.00	5.31	1.92
2.50	11.50	7.23
3.00	15.80	18.73
3.50	6.73	34.53
4.00	1.56	41.25
4.50	8.12	42.82
5.00	9.69	50.94
5.50	6.56	60.63
6.00	6.25	67.19
6.50	5.00	73.44
7.00	3.75	78.44
7.50	2.81	82.19
8.00	1.87	85.00
8.50	1.87	86.88
9.00	1.25	88.75
9.50	1.25	90.00
10.00	.94	91.25
10.50	1.25	92.19
11.00	1.25	93.44
11.50	.94	94.69
12.00	4.37	95.63
****	100.00	

MEAN ST.DEV. SKEWNESS KURTOSIS

5.04 2.30 .43 .26

KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE .5 TO 12.0 PHI

5.22 2.66 .30 1.11

FOLK GRAPHIC STATISTICAL PARAMETERS FOLK AND WARD, 1957

PERCENTILES	MEDIAN	4.94	5TH	2.29	16TH	2.88	25TH	3.20
			75TH	6.66	84TH	7.82	95TH	11.67

PCT. GRAVEL	0.00	SAND	41.25	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00
				(SEDIGRAPH)	43.75	(SEDIGRAPH)	15.00

GRAVEL+SAND 41.25 SILT/(SILT+CLAY) 74.47 PCT. GRAV+SAND/SILT+CLAY .70

LABELS SHEPARD -SANDY SILT FOLK(GMS)-SANDY MUD (SCS)-SANDY SILT

GRAVEL+SAND 33.71 SILT/(SILT+CLAY) 54.31PCT, GRAV+SAND/SILT+CLAY .51

.LABELS SHEPARD -SAN SIL CLY FCLK(GMS)-GRAVELLY MUD (SCS)-

BK 1-C

SIEVE, SH. PIP., SEDIGRAPH SAMPLE WT.= 6.6133

03/23/84

PHI	PCT. CUM PCT.	
.50	.22	
1.00	.55	*
1.50	.87	**
2.00	3.21	*****
2.50	8.46	*****
3.00	20.71	*****
3.50	45.69	*****
4.00	56.69	*****
4.50	59.75	***
5.00	68.94	*****
5.50	78.13	*****
6.00	83.38	*****
6.50	87.10	****
7.00	89.50	**
7.50	91.03	**
8.00	92.34	*
8.50	93.22	*
9.00	94.09	*
9.50	94.75	
10.00	95.19	
10.50	95.63	
11.00	95.06	
11.50	96.50	
12.00	96.94	
****	3.06	***
****	100.00	

MEAN ST.DEV. SKEWNESS KURTOSIS

4.26	1.83	.71	2.53	KRUMBEIN + PETT IJOHN (1938) MOMENT MEASURES FOR SIZE RANGE 1.0 TO 12.0 PHI
4.20	1.97	.53	1.39	FOLK GRAPHIC STATISTICAL PARAMETERS FOLK AND WARD, 1957

PERCENTILES	MEDIAN 3.70	5TH 2.17	16TH 2.81	25TH 3.09
		75TH 5.33	84TH 6.08	95TH 9.79
PCT. GRAVEL	0.00	SAND 56.69	SILT (PIPETTE) 0.00	CLAY (PIPETTE) 0.00
			(SEDIGRAPH) 35.65	(SEDIGRAPH) 7.66
GRAVEL+SAND	56.69	SILT/(SILT+CLAY)	82.32PCT. GRAV+SAND/SILT+CLAY	1.31
LABELS SHEPARD	-SILTY SAND	FOLK(GMS)-MUDDY SAND		(SCS)-SILTY SAND

BK 1-0

SIEVE, SH. PIP., SEDIGRAPH SAMPLE WT.= 7.6185

PHI PCT. CUMPCT.

03/23/84

-1.50			
-1.00	.63	.63	*
-.50	.64	1.27	*
0.00	.10	1.38	
.50	.13	1.51	
1.00	.20	1.70	
1.50	.33	2.04	
2.00	1.94	3.97	**
2.50	4.59	8.56	*****
3.00	2.01	10.57	**
3.50	4.11	14.68	****
4.00	3.66	18.35	****
4.50	5.31	23.65	*****
5.00	6.53	30.19	*****
5.50	7.76	37.94	*****
6.00	6.12	44.07	*****
6.50	5.72	49.78	*****
7.00	6.12	55.91	*****
7.50	5.31	61.21	*****
8.00	5.31	66.52	*****
8.50	4.90	71.42	*****
9.00	4.90	76.32	*****
9.50	4.08	80.40	****
10.00	4.08	84.49	****
10.50	2.86	87.34	***
11.00	3.67	91.02	****
11.50	2.86	93.88	***
12.00	1.53	95.51	**
****	4.49	100.00	****

MEAN ST.DEV. SKEWNESS KURTOSIS

6.42	2.76	-.05	-.48
6.71	3.04	.09	.94

KRUMBEIN + PETT IJOHN (1938) MOMENT MEASURES FOR SIZE RANGE -1.0 TO 12.0 PHI

FOLK GRAPHIC STATISTICAL PARAMETERS FOLK AND WARD, 1957

PERCENTILES	MEDIAN	6.52	5TH	2.11	16TH	3.68	25TH	4.60
			75TH	8.87	84TH	9.94	95TH	11.84
PCT. GRAVEL	.63	SAND	17.72	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00	
				(SEDIGRAPH)	48.18	(SEDIGRAPH)	33.48	
GRAVEL+SAND	18.35	SILT/(SILT+CLAY)	59.00	PCT. GRAV+SAND/SILT+CLAY				.22

LABELS SHEPARD - CLAYEY SILT FOLK (MCS) SANDY MUD (CS) SANDY MUD

BK 2-C

SIEVE, SH. PIP., SEDIGRAPH SAMPLE WT.= 5.928g

03/23/84

PHI	PCT.	CUMPCT.	
-1.50			
-1.00	.26	.26	
-.50	.19	.46	
0.00	.09	.54	
.50	.18	.73	
1.00	.35	1.08	
1.50	.39	1.47	
2.00	.73	2.20	*
2.50	.93	3.14	*
3.00	2.17	5.31	**
3.50	6.31	11.62	*****
4.00	6.89	18.51	*****
4.50	2.47	20.98	**
5.00	11.11	32.09	*****
5.50	20.99	53.08	*****
6.00	13.99	67.08	*****
6.50	9.88	75.95	*****
7.00	5.35	82.30	*****
7.50	3.29	85.60	***
8.00	2.06	87.65	**
8.50	.82	88.48	*
9.00	1.23	89.71	*
9.50	1.23	90.95	*
10.00	1.23	92.18	*
10.50	.82	93.00	*
11.00	1.23	94.24	*
11.50	.82	95.06	*
****	4.94	100.00	*****

MEAN ST. DEV. SKEWNESS KURTOSIS

5.47 1.83 .22 1.92

KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE -1.0 TO 11.5 PHI

5.50 2.15 .24 2.03

FOLK GRAPHIC STATISTICAL PARAMETERS FOLK AND WARD, 1957

PERCENTILES	MEDIAN	5.43	5TH	2.93	16TH	3.82	25TH	4.68
			75TH	6.40	84TH	7.26	95TH	11.46

PCT. GRAVEL	.26	SAND	18.25	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00
				(SEDIGRAPH)	69.14	(SEDIGRAPH)	12.35

GRAVEL+SAND 18.51 SILT/(SILT+CLAY) 84.85 PCT. GRAV+SAND/SILT+CLAY .23

LABELS SHEPARD -SANDY SILT FOLK(GMS)-SANDY MUD (SCS)-SANDY SILT

3K 5-B

SIEVE, SH. PIP., SEDIGRAPH SAMPLE WT.= 7.5867

PHI PCT. CUMPCT.

03/23/84

-2.50			***
-2.00	2.68	2.68	***
-1.50	3.40	6.07	*
-1.00	1.29	7.36	*
-.50	1.03	8.39	*
0.00	.55	8.93	*
.50	.52	9.56	*
1.00	.36	10.41	*
1.50	1.13	11.54	*
2.00	3.58	15.12	****
2.50	6.28	21.40	*****
3.00	3.02	24.42	***
3.50	1.30	26.32	**
4.00	2.12	28.34	**
4.50	.72	29.05	*
5.00	4.66	33.71	*****
5.50	7.17	40.88	*****
6.00	6.09	46.97	*****
6.50	6.81	53.78	*****
7.00	7.52	61.30	*****
7.50	6.81	68.11	*****
8.00	4.56	72.77	*****
8.50	3.94	76.71	****
9.00	4.30	81.01	****
9.50	3.94	84.95	****
10.00	2.87	87.82	***
10.50	2.87	90.68	***
11.00	1.79	92.48	**
11.50	1.43	93.91	*
12.00	1.43	95.34	*
****	4.56	100.00	*****

MEAN ST.DEV. SKEWNESS KURTOSIS

5.48 3.45 -.26 -.33

KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE -2.0 TO 12.0 PHI

5.89 3.88 -.15 1.08

FOLK GRAPHIC STATISTICAL PARAMETERS FOLK AND WARD, 1957

PERCENTILES	MEDIAN	6.22	5TH	-1.66	16TH	2.07	25TH	3.15
			75TH	8.28	84TH	9.38	95TH	11.88

PCT. GRAVEL 7.36 SAND 20.98 SILT (PIPETTE) 0.00 CLAY (PIPETTE) 0.00

GRAVEL+SAND 28.34 SILT/(SILT+CLAY) 62.00PCT.GRAV+SAND/SILT+CLAY .40

LABELS SHEPARD -SAN SIL CLY FOLK(GMS)-GRAVELLY MUD (SCS)-

~~LABELS SHEPARD - SAN SIL CLY FOLK (GMS) - SANDY MUD~~

~~(SCS) - SANDY MUD~~

BK 11-A

SIEVE, SH. PIP., SEDIGRAPH SAMPLE WT.= 7.2807

03/23/84

PHI	PCT. CUM PCT.	
-3.50	16.34	*****
-3.00	16.34	
-2.50	16.34	
-2.00	16.34	
-1.50	16.34	
-1.00	17.35	*
-.50	18.45	*
0.00	19.16	*
.50	19.81	*
1.00	20.41	*
1.50	20.93	*
2.00	21.79	*
2.50	23.13	**
3.00	25.10	***
3.50	27.79	**
4.00	30.19	*
4.50	30.89	**
5.00	33.31	****
5.50	37.11	****
6.00	41.25	****
6.50	45.75	****
7.00	49.89	*****
7.50	55.08	****
8.00	58.88	****
8.50	63.02	****
9.00	67.52	****
9.50	71.32	*****
10.00	76.16	*****
10.50	81.34	****
11.00	85.83	***
11.50	89.29	***
12.00	92.40	*****
*****	100.00	

MEAN ST.DEV. SKEWNESS KURTOSIS

5.28 4.89 -.33 -.86

KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE -3.0 TO 12.0 PHI

> 5 PERCENT OF THE FINES ARE NOT RESOLVED, OBTAIN FOLK STATS. GRAPHICALLY

PERCENTILES MEDIAN 7.01 5TH -3.35 16TH -3.01 25TH 2.97

75TH 9.88 84TH 10.80 95TH*****

PCT.	GRAVEL	17.35	SAND	12.84	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00
					(SEDIGRAPH)	28.68	(SEDIGRAPH)	41.12
	GRAVEL+SAND	30.19	SILT/(SILT+CLAY)	41.09	PCT.GRAV+SAND/SILT+CLAY			.43
	LABELS SHEPARD	-SAN	SIL	CLY	FOLK (GMS)-GRAVELLY MUD		(SCS)-	

BK 15-A

SIEVE, SH. PIP., SEDIGRAPH SAMPLE WT.= 8.2398

03/23/84

PHI	PCT. CUM PCT.		
-2.50			
-2.00	7.51	7.61	*****
-1.50	8.97	16.58	*****
-1.00	3.38	19.96	***
-.50	6.39	26.35	*****
0.00	3.19	29.54	***
.50	2.99	32.53	***
1.00	2.33	34.91	**
1.50	1.77	36.67	**
2.00	2.84	39.51	***
2.50	4.32	43.83	****
3.00	8.34	52.17	*****
3.50	7.95	60.12	*****
4.00	2.80	62.93	***
4.50	.28	63.20	
5.00	2.13	65.33	**
5.50	3.34	68.67	***
6.00	2.97	71.64	***
6.50	3.15	74.79	***
7.00	2.22	77.01	**
7.50	3.52	80.54	****
8.00	2.78	83.32	***
8.50	2.50	85.91	***
9.00	2.04	87.95	**
9.50	2.04	89.99	**
10.00	2.04	92.03	**
10.50	1.67	93.70	**
11.00	1.30	94.99	*
11.50	1.48	96.48	*
12.00	1.11	97.59	*
*****	2.41	100.00	**

MEAN ST.DEV. SKEWNESS KURTOSIS

3.10 3.98 .18 -.95

KRUMBEIN + PETT IJOHN (1938) MOMENT MEASURES FOR SIZE RANGE -2.0 TO 12.0 PHI

3.16 4.41 .16 .75

FOLK GRAPHIC STATISTICAL PARAMETERS FOLK AND WARD, 1957

PERCENTILES	MEDIAN	2.87	5TH	-2.17	16TH	-1.53	25TH	-.61
			75TH	6.55	84TH	8.13	95TH	11.00

PCT. GRAVEL 19.96 SAND 42.97 SILT (PIPETTE) 0.00 CLAY (PIPETTE) 0.00

GRAVEL+SAND 62.93 SILT/(SILT+CLAY) 55.00PCT. GRAV+SAND/SILT+CLAY 1.70

LABELS SHEPARD -SILTY SAND FOLK(GMS)-GRAVELLY MUDDY SAND (SCS)-

BK 17-A

SIEVE, SH. PIP., SEDIGRAPH SAMPLE WT.= 8.5867

03/23/84

PHI	PCT. CUM PCT.		
-2.50		*****	
-2.00	5.55	**	
-1.50	2.09	5.66	***
-1.00	3.14	7.75	**
-.50	2.22	10.89	**
0.00	1.56	13.11	**
.50	1.39	14.67	*
1.00	1.32	16.06	*
1.50	4.48	17.38	****
2.00	4.64	21.85	*****
2.50	6.16	26.50	*****
3.00	7.09	32.66	*****
3.50	6.27	39.74	*****
4.00	4.83	46.01	*****
4.50	2.48	50.84	**
5.00	5.96	53.33	*****
5.50	6.21	59.28	*****
6.00	3.97	65.49	****
6.50	3.23	69.46	***
7.00	2.73	72.69	***
7.50	2.98	75.42	***
8.00	2.73	78.40	***
8.50	2.48	81.13	**
9.00	2.73	83.61	***
9.50	2.48	86.35	**
10.00	2.23	88.83	**
10.50	1.74	91.06	**
11.00	1.74	92.80	**
11.50	.99	94.54	*
12.00	.99	95.53	*
*****	3.48	96.52	***
		100.00	

MEAN ST.DEV. SKEWNESS KURTOSIS

4.03 3.55 .05 -.66 KRUMBEIN & PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE -2.0 TO 12.0 PHI

4.32 4.04 .13 1.07 FOLK GRAPHIC STATISTICAL PARAMETERS FOLK AND WARD, 1957

PERCENTILES MEDIAN 3.91 5TH -2.06 16TH .48 25TH 1.84
75TH 6.92 84TH 8.57 95TH 11.23

PCT. GRAVEL 10.89 SAND 39.95 SILT (PIPETTE) 0.00 CLAY (PIPETTE) 0.00

GRAVEL+SAND 50.84 SILT/(SILT+CLAY) 61.62PCT. GRAV+SAND/SILT+CLAY 1.03

LABELS SHÉPARD -SILTY SAND FOLK(GMS)-GRAVELLY MUD (SCS)-

03/23/84

PHI	PCT. CUM PCT.	
0.00		
.50	.75	*
1.00	.17 .92	
1.50	.17 1.09	
2.00	.27 1.36	
2.50	.53 1.88	*
3.00	.35 2.75	*
3.50	1.48 4.23	*
4.00	1.56 5.89	**
4.50	.95 6.83	*
5.00	3.78 10.62	****
5.50	6.62 17.24	*****
6.00	8.04 25.28	*****
6.50	8.99 34.26	*****
7.00	8.04 42.30	*****
7.50	9.93 52.23	*****
8.00	7.09 59.33	*****
8.50	6.62 65.95	*****
9.00	6.62 72.57	*****
9.50	5.58 78.25	*****
10.00	4.73 82.97	*****
10.50	3.31 86.28	***
11.00	2.84 89.12	***
11.50	2.36 91.49	**
12.00	1.42 92.91	*
*****	7.09 100.00	*****

MEAN ST.DEV. SKEWNESS KURTOSIS

7.26 2.14 -.14 .30

KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE .5 TO 12.0 PHI

> 5 PERCENT OF THE FINES ARE NOT RESOLVED, OBTAIN FOLK STATS. GRAPHICALLY

PERCENTILES	MEDIAN	7.39	5TH	3.73	16TH	5.41	25TH	5.98
			75TH	9.21	84TH	10.15	95TH	*****
PCT. GRAVEL	0.00	SAND	5.89	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00	
				(SEDIGRAPH)	53.44	(SEDIGRAPH)	40.67	
GRAVEL+SAND	5.89	SILT/(SILT+CLAY)	56.78	PCT. GRAV+SAND/SILT+CLAY			.06	
LABELS SHEPARD	-CLAYEY	SILT FOLK(GMS)	-MUD			(SCS)	-MUD	

BK 19-D

SIEVE, SH. PIP., SEDIGRAPH SAMPLE WT.= 7.4205

03/23/84

PHI	PCT. CUMPCT.	
-2.00		**
-1.50	1.76	*
-1.00	.75	**
-.50	2.38	*
0.00	1.15	*
.50	1.31	**
1.00	1.70	**
1.50	2.19	**
2.00	3.16	***
2.50	5.44	*****
3.00	6.63	*****
3.50	5.00	*****
4.00	3.15	***
4.50	1.55	**
5.00	4.52	*****
5.50	4.29	****
6.00	4.52	*****
6.50	5.28	*****
7.00	4.62	*****
7.50	5.51	*****
8.00	5.61	*****
8.50	4.62	*****
9.00	4.62	*****
9.50	4.29	****
10.00	3.63	****
10.50	2.97	***
11.00	2.64	***
11.50	1.65	**
12.00	1.98	**
****	2.64	***
****	100.00	

MEAN ST.DEV. SKEWNESS KURTOSIS

5.58 3.36 -.10 -.82

KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE -1.5 TO 12.0 PHI

5.87 3.62 -.08 .87

FOLK GRAPHIC STATISTICAL PARAMETERS FOLK AND WARD, 1957

PERCENTILES	MEDIAN	6.02	5TH	-.45	16TH	2.15	25TH	2.89
			75TH	8.44	84TH	9.44	95TH	11.39

PCT. GRAVEL	2.50	SAND	32.12	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00
				(SEDIGRAPH)	36.32	(SEDIGRAPH)	29.05

~~GRAVEL+SAND 34.63 SILT/(SILT+CLAY) 55.56PCT. GRAV+SAND/SILT+CLAY .53~~

LABELS SHEPARD -SAN SIL CLY FOLK(GMS)-SANDY MUD

(SCS)-SANDY MUD

03/23/84

PHI	PCT. CUM PCT.		
-2.00			
-1.50	1.79	1.79	**
-1.00	.34	2.12	
-0.50	1.08	3.20	*
0.00	1.20	4.40	*
.50	1.59	6.09	**
1.00	2.30	8.39	**
1.50	2.37	10.75	**
2.00	2.95	13.70	***
2.50	2.94	16.64	***
3.00	2.56	19.20	***
3.50	1.72	20.92	**
4.00	2.21	23.13	**
4.50	1.56	24.69	**
5.00	3.90	28.60	****
5.50	6.24	34.84	*****
6.00	5.85	40.69	*****
6.50	6.24	46.93	*****
7.00	5.85	52.79	*****
7.50	6.24	59.03	*****
8.00	6.24	65.27	*****
8.50	5.46	70.74	*****
9.00	5.07	75.81	*****
9.50	5.07	80.88	*****
10.00	4.29	85.17	****
10.50	3.51	88.68	****
11.00	2.34	91.03	**
11.50	2.34	93.37	**
12.00	1.95	95.32	**
****	4.58	100.00	*****

MEAN ST. DEV. SKEWNESS KURTOSIS

6.14 3.25 -.25 -.46

KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE -1.5 TO 12.0 PHI

6.34 3.65 -.15 1.10

FOLK GRAPHIC STATISTICAL PARAMETERS FOLK AND WARD, 1957

PERCENTILES	MEDIAN	6.76	5TH	.18	16TH	2.39	25TH	4.54
			75TH	8.92	84TH	9.86	95TH	11.92

PCT. GRAVEL	2.12	SAND	21.01	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00
				(SEDIGRAPH)	42.14	(SEDIGRAPH)	34.73

GRAVEL+SAND 23.13 SILT/ (SILT+CLAY) 54.82PCT. GRAV+SAND/SILT+CLAY .30

LABELS SHEPARD -SAN SIL CLY FOLK(GMS)-SANDY MUD

(SCS)-SANDY MUD

03/23/84

PHI	PCT. CUMPCT.	
-3.00	7.30	*****
-2.50	0.00	7.30
-2.00	3.27	***
-1.50	3.95	****
-1.00	3.37	***
-.50	2.26	**
0.00	1.38	*
.50	.92	*
1.00	.81	*
1.50	1.39	*
2.00	3.15	***
2.50	4.90	*****
3.00	6.46	*****
3.50	2.51	***
4.00	1.15	*
4.50	3.49	***
5.00	5.53	*****
5.50	4.95	*****
6.00	5.53	*****
6.50	4.37	****
7.00	4.95	*****
7.50	3.43	***
8.00	3.43	***
8.50	3.20	***
9.00	3.49	***
9.50	2.31	***
10.00	2.33	**
10.50	2.34	**
11.00	2.33	**
11.50	1.46	*
12.00	3.49	***
*****	100.00	

MEAN ST.DEV. SKEWNESS KURTOSIS

4.50	4.09	-.12	-.96
4.61	4.66	-.17	.98

KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE -2.5 TO 12.0 PHI

FOLK GRAPHIC STATISTICAL PARAMETERS
FOLK AND WARD, 1957

PERCENTILES	MEDIAN	5.32	5TH	-2.66	16TH	-.78	25TH	2.06
			75TH	7.96	84TH	9.29	95TH	11.49

PCT. GRAVEL 14.52 SAND 27.24 SILT (PIPETTE) 0.00 CLAY (PIPETTE) 0.00
(SEDIGRAPH) 33.49 (SEDIGRAPH) 24.75
GRAVEL+SAND 41.76 SILT/(SILT+CLAY) 57.50 PCT. GRAV+SAND/SILT+CLAY .72
LABELS SHEPARD -SAN SIL CLY FOLK(GMS)-GRAVELLY MUD (SCS)-

03/23/84

PHI	PCT. CUMPCT.	
-2.50		****
-2.00	3.68	
	1.30	*
-1.50	4.98	*****
-1.00	9.79	*****
	5.86	*****
-.50	15.64	*****
0.00	21.26	*****
	4.74	*****
.50	26.00	*****
1.00	31.72	*****
	4.56	*****
1.50	36.27	*****
	5.65	*****
2.00	41.92	*****
	6.25	*****
2.50	48.16	*****
	6.75	*****
3.00	54.92	*****
	5.43	*****
3.50	60.35	**
	2.42	**
4.00	62.77	**
	1.88	**
4.50	64.66	***
	2.59	***
5.00	67.25	***
	3.16	***
5.50	70.31	***
	2.83	***
6.00	73.14	***
	2.83	***
6.50	75.97	***
	3.06	***
7.00	79.03	***
	2.59	***
7.50	81.62	**
	2.36	**
8.00	83.98	**
	1.88	**
8.50	85.86	**
	2.12	**
9.00	87.98	**
	1.88	**
9.50	89.87	**
	1.88	**
10.00	91.75	**
	1.88	**
10.50	93.64	*
	1.18	*
11.00	94.82	*
	.71	*
11.50	95.52	*
	.71	*
12.00	96.23	****
****	3.77	****
	100.00	

MEAN ST.DEV. SKEWNESS KURTOSIS

3.16 3.57 .27 -.67

KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE -2.0 TO 12.0 PHI

3.39 4.03 .31 .87

FOLK GRAPHIC STATISTICAL PARAMETERS FOLK AND WARD, 1957

PERCENTILES	MEDIAN	2.64	5TH	-1.50	16TH	-.47	25TH	.39
			75TH	6.33	84TH	8.01	95TH	11.13

PCT. GRAVEL 9.79 SAND 52.99 SILT (PIPETTE) 0.00 CLAY (PIPETTE) 0.00

GRAVEL+SAND 62.77 SILT/(SILT+CLAY) 56.96PCT.GRAV+SAND/SILT+CLAY 1.69

LABELS SHEPARD -SILTY SAND FOLK(GMS)-GRAVELLY MUDDY SAND (SCS)-

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