

HYDRAULICS DIVISION
TECHNICAL NOTE

DATE: December 1982 REPORT NO: 82-30

TITLE: Particle Size Data Report - Rouyn Noranda
Lakes

AUTHOR: G. A. Duncan

REASON FOR REPORT: This report responds to a request for particle
size data from Nabil Arafat, AED.

CORRESPONDENCE FILE NO:
5690 (Study No. 302)

1.0 INTRODUCTION

This report provides the results of grain-size analysis on serial samples from two cores in support of study AED-413.

Mr. Nabil Arafat, AED, submitted 52 subsamples requesting sand, silt and clay percentages.

The samples were analysed under HD Study 302 using standard laboratory procedures (Duncan and LaHaie, 1979). The unused portion of the sample was returned to Mr. Arafat following the analysis.

2.0 PROCEDURE

The Sieve and Sedigraph Method which provides sand, silt and clay percentages was used to analyse 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 percentages of the material occurring within each 1/2 PHI unit.
3. Moment measure statistics (Krumbein & Pettijohn, 1938) and graphic (Folk and Ward, 1957) statistics.
4. Percentiles.
5. Percent gravel, sand, silt and clay.
6. Ratios used to plot Folk's Ternary Classification.
7. Shepard (1954) and Folk (1974) Ternary Classifications.

PHI CONVERSION

The results of samples analysed 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 -6ϕ)
-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†

REFERENCES

- Duncan, G. A. and LaHaie, G. G., 1979. "Size Analysis Procedures Used in the Sedimentology Laboratory, NWRI". NWRI, CCIW, Hydraulics Division Manual, September 1979.
- Folk, R. L., 1968. "Petrology of Sedimentary Rocks". Hemphill Publishing Co., Austin, Texas 182 p.
- Folk, R. L. and Ward, W. C., 1957. "Brazos River Bar: A Study in the Significance of Grain Size Parameters". Jour. Sed. Petrology, V. 27, pp. 3-26.
- Krumbein, W. C. and Pettijohn, F. J., 1938. "Manual of Sedimentary Petrography". Appleton-Century-Crofts, New York, 549 p.
- Sandilands, R. G. and Duncan, G. A., 1980. "SIZDIST - A Computer Program for Size Analysis". NWRI, CCIW, Hydraulics Division Technical Note, Report No. 80-08.
- Shepard, F. P., 1954. "Nomenclature Based on Sand-Silt Ratios". Jour. Sed. Petrology, V. 24, pp. 151-158.

APPENDIX 1
SIZDIST OUTPUT

LAC DFAULT C1 C-1 CM 07 SEDIGRAPH ANALYSIS

12/15/82

PHI	PCT. CUMFQT.	
3	2.48	ASSUMED UPPER LIMIT **
4.00	3.47	2.48 ***
4.50	8.91	5.94 *****
5.00	11.88	14.85 *****
5.50	11.88	26.73 *****
6.00	7.92	38.61 *****
6.50	6.93	46.53 *****
7.00	6.44	53.47 *****
7.50	4.46	59.90 ****
8.00	3.96	64.36 ****
8.50	1.98	68.32 **
9.00	2.97	70.30 ***
9.50	2.97	73.27 ***
10.00	.99	76.24 *
10.50	1.98	77.23 **
11.00	1.98	79.21 **
11.50	.99	81.19 *
12	17.82	82.18 *****
*****	100.00	

MEAN ST.DEV. SKEWNESS KURTOSIS

6.65 1.98 .43 .02 KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI

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

PERCENTILES	MEDIAN	5TH	15TH	25TH
	6.75	4.36	5.05	5.43
		75TH	84TH*****	95TH*****
PCT. GRAVEL	.00	SAND 2.48	SILT (PIPETTE) 0.00	CLAY (PIPETTE) 0.00
			(SEDIGRAPH) 61.88	(SEDIGRAPH) 35.64
GRAVEL+SAND	2.48	SILT/(SILT+CLAY)	63.45	PCT.GRAV+SAND/SILT+CLAY .03
LABELS SHEPARD	-CLAYEY SILT	FOLK(GMS)-MUD		(SCS)-MUD

LAC DFAULT C1 1-2 CM 07 SEDIGRAPH ANALYSIS

12/15/82

PHI	PCT. CUMPGT.		
0.00	0.00		
4.00	2.27	0.00	**
4.50	3.41	2.27	***
5.00	7.95	5.68	*****
5.50	7.95	13.64	*****
6.00	7.95	21.59	*****
6.50	5.68	29.55	*****
7.00	5.68	35.23	*****
7.50	5.68	40.91	*****
8.00	4.55	46.59	*****
8.50	3.41	51.14	***
9.00	3.41	54.55	***
9.50	1.14	57.95	*
10.00	1.14	59.09	*
10.50	2.27	60.23	**
11.00	1.14	62.50	*
11.50	2.27	63.64	**
12.00	34.09	65.91	*****
	100.00		

MEAN ST.DEV. SKEWNESS KURTOSIS

7.16 1.90 .35 -.22 KULMBEIN + PETTICORN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI

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

PERCENTILES	MEDIAN	8.38	5TH	4.90	16TH	5.65	25TH	6.21
			75TH	*****	84TH	*****	95TH	*****

PCT. GRAVEL	.00	SAND	0.00	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00
				(SEDIGRAPH)	46.59	(SEDIGRAPH)	53.41

GRAVEL+SAND	.00	SILT/(SILT+CLAY)	46.59	PCT.GRAV+SAND/SILT+CLAY	.00
LABELS SHEPARD	-SILTY CLAY	FOLK(GMS)-MUD		(SCS)-MUD	

COMMENTS - ORGANICS REMOVED

LAC DFAULT C1 2-3 CM 07 SEDIGRAPH ANALYSIS

12/15/82

PHI	PCT. CUMFCT.	
4.00	0.00	
4.50	0.00	
5.00	2.00	**
5.50	1.00	*
6.00	3.00	*****
6.50	8.00	*****
7.00	17.00	*****
7.50	25.00	*****
8.00	35.00	*****
8.50	44.00	*****
9.00	51.00	*****
9.50	58.00	*****
10.00	63.00	*****
10.50	67.00	***
11.00	70.00	***
11.50	73.00	**
12.00	75.00	*
12.50	76.00	*****
13.00	100.00	*****

MEAN ST.DEV. SKEWNESS KURTOSIS

7.36 1.61 .18 -.49 KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI

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

PERCENTILES	MEDIAN 8.43	5TH 5.67	16TH 6.44	25TH 7.00
		75TH 11.50	84TH*****	95TH*****
PCT. GRAVEL	.00	SAND 8.00	SILT (PIPETTE) 0.00	CLAY (PIPETTE) 0.00
			(SEDIGRAPH) 44.00	(SEDIGRAPH) 56.00
GRAVEL+SAND	.00	SILT/(SILT+CLAY)	44.00	PCT.GRAV+SAND/SILT+CLAY .00
LABELS SHEPARD	-SILTY CLAY	FOLK (GMS)-MUD		(SCS)-MUD

LAC DFAULT C1 4-5 CM 08 SEDIGRAPH ANALYSIS

12/15/82

PHI	PCT. COMPCT.	
4.00	0.00	0.00
4.50	0.00	0.00
5.00	2.97	2.97
5.50	3.96	6.93
6.00	8.91	15.84
6.50	7.92	23.76
7.00	7.92	31.68
7.50	8.91	40.59
8.00	7.92	49.50
8.50	10.89	57.43
9.00	8.91	68.32
9.50	11.88	77.23
10.00	.99	89.11
10.50	3.96	90.10
11.00	2.97	94.06
11.50	.99	97.03
12.00	1.98	99.02
*****		100.00

MEAN ST.DEV. SKEWNESS KURTOSIS

7.95	1.71	.03	-.84	KOUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI
7.94	1.84	-.01	.86	FOLK GRAPHIC STATISTICAL PARAMETERS FOLK AND WARD, 1957

PERCENTILES	MEDIAN	8.03	5TH	5.26	16TH	6.01	25TH	6.58
			75TH	9.38	84TH	9.79	95TH	11.16
PCT. GRAVEL	.00	SAND	0.00	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00	
				(SEDIGRAPH)	49.50	(SEDIGRAPH)	50.50	
GRAVEL+SAND	.00	SILT/(SILT+CLAY)	49.50	PCT.GRAV+SAND/SILT+CLAY	.00			
LABELS SHEPARD	-SILTY CLAY	FOLK(GMS)-MUD				(SCS)-MUD		

AC DFAULT C1 5-5 CM 08 SEDIGRAPH ANALYSIS

12/15/82

PHI	FCT.	CUMFCT.	
3.00	0.00	0.00	
4.00	1.00	1.00	*
4.50	1.00	2.00	*
5.00	1.00	3.00	*
5.50	2.00	5.00	**
6.00	3.00	8.00	***
6.50	5.00	13.00	*****
7.00	7.00	20.00	*****
7.50	7.00	27.00	*****
8.00	10.00	37.00	*****
8.50	11.00	48.00	*****
9.00	12.00	60.00	*****
9.50	10.00	70.00	*****
10.00	9.00	79.00	*****
10.50	5.00	84.00	*****
11.00	5.00	89.00	*****
11.50	3.00	92.00	*****
12.00	8.00	100.00	*****

MEAN ST.DEV. SKEWNESS KURTOSIS

8.78 1.62 -.20 -.15

KEUMBEIN + PETTIGORN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI

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

PERCENTILES	MEDIAN	9.08	5TH	6.00	16TH	7.21	25TH	7.86
			75TH	10.28	84TH	11.01	95TH	*****
FCT. GRAVEL	.00	SAND	0.00	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00	
				(SEDIGRAPH)	27.00	(SEDIGRAPH)	73.00	
GRAVEL+SAND	.00	SILT/(SILT+CLAY)	27.00	PCT.GRAV+SAND/SILT+CLAY	.00			
LABELS SHEPARD	-SILTY CLAY	FOLK(GMS)-MUD		(SCS)-CLAY				

LAC DUFALUT C1 5-6 CM 08 SEDIGRAPH ANALYSIS

12/15/82

PHI	PCT.	CUMFCT.	
	0.00		
4.00	1.00	0.00	*
4.50	1.00	1.00	*
5.00	1.00	2.00	*
5.50	1.00	3.00	**
6.00	2.00	5.00	***
6.50	3.00	8.00	****
7.00	5.00	13.00	*****
7.50	7.00	20.00	*****
8.00	7.00	27.00	*****
8.50	10.00	37.00	*****
9.00	11.00	48.00	*****
9.50	12.00	60.00	*****
10.00	10.00	70.00	*****
10.50	9.00	79.00	*****
11.00	5.00	84.00	*****
11.50	5.00	89.00	*****
12.00	3.00	92.00	*****
12.50	8.00	100.00	*****

MEAN ST.DEV. SKEWNESS KURTOSIS

8.78 1.62 -.20 -.15 KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI

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

PERCENTILES	MEDIAN	9.08	5TH	6.00	16TH	7.21	25TH	7.86
			75TH	10.24	84TH	11.01	95TH	*****
PCT. GRAVEL	.00	SAND	0.00	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00	
				(SEDIGRAPH)	27.00	(SEDIGRAPH)	73.00	
GRAVEL+SAND	.00	SILT/(SILT+CLAY)	27.00	PCT.GRAV+SAND/SILT+CLAY			.00	
LABELS SHEPARD	-SILTY CLAY	FOLK (GMS)-MUD		(SCS)-CLAY				

LAC DFAULT C1 6-7 CM 09 SEDIGRAPH ANALYSIS

12/15/82

PHI	PCT.	CUMFCT.	
3	0.00		
4.00	.99	0.00	*
4.50	0.00	.99	
5.00	1.98	.99	**
5.50	.99	2.97	*
6.00	2.97	3.96	***
6.50	2.97	6.93	***
7.00	7.92	9.90	*****
7.50	7.92	17.82	*****
8.00	9.90	25.74	*****
8.50	11.88	35.64	*****
9.00	9.90	47.52	*****
9.50	9.90	57.43	*****
10.00	7.92	67.33	*****
10.50	4.95	75.25	*****
11.00	5.94	80.20	*****
11.50	3.96	86.14	****
12	9.90	90.10	*****
*****		100.00	

MEAN ST.DEV. SKEWNESS KURTOSIS

8.87 1.61 -.15 -.16 KRUMBEIN + PETTICORN (1938) MOMENT MEASURES
FOR SIZE RANGE 4.0 TO 12.0 PHI

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

PERCENTILES	MEDIAN	5TH	16TH	25TH			
	9.13	6.18	7.33	7.95			
		75TH	84TH	95TH			
		10.48	11.32	*****			
PCT. GRAVEL	.00	SAND	0.00	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00
			(SEDIGRAPH)	25.74	(SEDIGRAPH)	74.26	
GRAVEL+SAND	.00	SILT/(SILT+CLAY)	25.74	PCT.GRAV+SAND/SILT+CLAY	.00		
LABELS SHEPARD	-SILTY CLAY	FOLK(GMS)-MUD		(SCS)-CLAY			

LAC DFAULT C1 7-8 CM 09 SEDIGRAPH ANALYSIS

12/15/82

PHI	PCT. CUMECT.		
0.00	0.00		
4.00	1.54	0.00	**
4.50	1.54	1.54	**
5.00	1.54	3.08	**
5.50	1.54	4.62	**
6.00	1.54	6.15	**
6.50	4.62	6.15	*****
7.00	3.08	10.77	***
7.50	6.15	13.85	*****
8.00	7.69	20.00	*****
8.50	9.23	27.69	*****
9.00	12.31	36.92	*****
9.50	10.77	49.23	*****
10.00	9.23	60.00	*****
10.50	7.69	69.23	*****
11.00	6.15	76.92	*****
11.50	6.15	83.06	*****
12.00	4.62	89.23	*****
12.50	6.15	93.85	*****
13.00	6.15	100.00	*****

MEAN ST.DEV. SKEWNESS KURTOSIS

8.81 1.75 -.21 -.26 KRUMBEIN + PETTICORN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI

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

PERCENTILES	MEDIAN	9.04	5TH	5.63	16TH	7.13	25TH	7.63
			75TH	10.38	84TH	11.03	95TH	*****
PCT. GRAVEL	.00	SAND	0.00	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00	
				(SEDIGRAPH)	27.69	(SEDIGRAPH)	72.31	
GRAVEL+SAND	.00	SILT/(SILT+CLAY)	27.69	PCT.GRAV+SAND/SILT+CLAY	.00			
LABELS SHEPARD	-SILTY CLAY	FOLK(GMS)-MUO		(SCS)-CLAY				

LAC DFAULT C1 8-9 CM 09 SEDIGRAPH ANALYSIS

12/15/82

PHI	PCT.	CUM.PCT.	
3	0.00		
4.00	0.00	0.00	
4.50	0.00	0.00	
5.00	1.00	1.00	*
5.50	0.00	1.00	
6.00	2.00	3.00	**
6.50	3.00	6.00	***
7.00	2.00	8.00	**
7.50	6.00	14.00	*****
8.00	7.00	21.00	*****
8.50	9.00	30.00	*****
9.00	12.00	42.00	*****
9.50	13.00	55.00	*****
10.00	11.00	66.00	*****
10.50	10.00	76.00	*****
11.00	6.00	82.00	*****
11.50	6.00	88.00	*****
12.00	3.00	91.00	***
12.50	9.00	91.00	*****
*****	100.00		

MEAN ST.DEV. SKEWNESS KURTOSIS

9.04 1.49 -.20 -.13 KRUMBEIN + PETTICORN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI

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

PERCENTILES	MEDIAN	9.31	5TH	6.33	16TH	7.64	25TH	8.22
			75TH	10.45	84TH	11.17	95TH	*****
PCT. GRAVEL	.00	SAND	0.00	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00	
				(SEDIGRAPH)	21.00	(SEDIGRAPH)	79.00	
GRAVEL+SAND	.00	SILT/(SILT+CLAY)	21.00	PCT.GRAV+SAND/SILT+CLAY	.00			
LABELS SHEPARD	-CLAY	FOLK (GMS)	-MUD	(SCS)	-CLAY			

LAC DUFALT C1 9-10 CM G SEDIGRAPH ANALYSIS

12/15/32

PHI	PCT.	CUMPCT.	
3	0.00		
4.00	1.00	0.00	*
4.50	1.00	1.00	*
5.00	1.00	2.00	*
5.50	1.00	3.00	**
6.00	2.00	5.00	**
6.50	3.00	8.00	***
7.00	4.00	12.00	****
7.50	5.00	17.00	*****
8.00	8.00	25.00	*****
8.50	9.00	34.00	*****
9.00	13.00	47.00	*****
9.50	12.00	59.00	*****
10.00	10.00	69.00	*****
10.50	8.00	77.00	*****
11.00	6.00	83.00	*****
11.50	5.00	88.00	***
12	3.00	91.00	***
****	9.00	100.00	*****

MEAN ST.DEV. SKEWNESS KURTOSIS

8.84 1.61 -.23 .01 KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI

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

PERCENTILES	MEDIAN	9.13	5TH	6.00	16TH	7.40	25TH	8.00
			75TH	10.33	84TH	11.10	95TH	*****
PCT. GRAVEL	.00	SAND	0.00	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00	
				(SEDIGRAPH)	25.00	(SEDIGRAPH)	75.00	
GRAVEL+SAND	.00	SILT/(SILT+CLAY)	25.00	PCT.GRAV+SAND/SILT+CLAY			.00	
LABELS SHEPARD	-CLAY	FOLK(GMS)-MUD		(SCS)-CLAY				

LAC DUFALOT C1 10-11 CM SEDIGRAPH ANALYSIS

12/15/82

PHI	PCT. CUMFCT.	
3	0.00	
4.00	0.00	
4.50	1.49	*
5.00	0.00	
5.50	1.49	*
6.00	2.99	***
6.50	2.99	***
7.00	3.98	****
7.50	7.96	*****
8.00	9.95	*****
8.50	10.95	*****
9.00	12.94	*****
9.50	10.95	*****
10.00	7.96	*****
10.50	6.97	*****
11.00	4.98	*****
11.50	4.98	*****
12.00	2.99	***
****	6.97	*****
	100.00	

MEAN ST.DEV. SKEWNESS KURTOSIS

8.68 1.60 -.12 -.11 KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI

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

PERCENTILES	MEDIAN 8.84	5TH 5.92	16TH 7.22	25TH 7.73
		75TH 10.13	84TH 10.89	95TH *****
PCT. GRAVEL	.00	SAND 0.00	SILT (PIPETTE) 0.00	CLAY (PIPETTE) 0.00
			(SEDIGRAPH) 30.35	(SEDIGRAPH) 69.65
GRAVEL+SAND	.00	SILT/(SILT+CLAY)	30.35PCT.GRAV+SAND/SILT+CLAY	.00
LABELS SHEPARD	-SILTY CLAY	FOLK (GMS)-MUD		(SCS)-CLAY

LAC DFAULT C1 11-12 CM SEDIGRAPH ANALYSIS

12/15/32

PHI	PCT.	CUM.PCT.	
4.00	0.00	0.00	
4.50	1.00	1.00	*
5.00	0.00	1.00	
5.50	0.00	1.00	
6.00	3.00	4.00	***
6.50	2.00	6.00	**
7.00	4.00	10.00	****
7.50	5.00	15.00	*****
8.00	8.00	23.00	*****
8.50	10.00	33.00	*****
9.00	11.00	44.00	*****
9.50	14.00	58.00	*****
10.00	10.00	68.00	*****
10.50	9.00	77.00	*****
11.00	6.00	83.00	*****
11.50	6.00	89.00	*****
12.00	4.00	93.00	*****
12.50	7.00	100.00	*****

MEAN ST.DEV. SKEWNESS KURTOSIS

8.99 1.55 -.19 -.03 KRUMBEIN + PETTI JOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI

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

PERCENTILES	MEDIAN	9.21	5TH	6.25	16TH	7.56	25TH	8.10
			75TH	10.39	84TH	11.03	95TH	*****
PCT. GRAVEL	.00	SAND	0.00	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00	
				(SEDIGRAPH)	23.00	(SEDIGRAPH)	77.00	
GRAVEL+SAND	.00	SILT/(SILT+CLAY)	23.00	PCT.GRAV+SAND/SILT+CLAY			.00	
LABELS SHEPARD	-CLAY	FOLK(GMS)	-MUD	(SCS)	-CLAY			

LAC DFAULT G1 12-13 CM SEDIGRAPH ANALYSIS

12/15/82

DEPTH	PCT. CUMFCT.	ASSUMED UPPER LIMIT	
4.00	0.00	1.22	*
4.50	0.00	1.22	
5.00	0.00	1.22	
5.50	.61	1.83	*
6.00	3.05	4.88	***
6.50	2.44	7.32	**
7.00	3.66	10.98	****
7.50	7.32	18.29	*****
8.00	7.32	25.61	*****
8.50	13.41	39.02	*****
9.00	12.20	51.22	*****
9.50	12.20	63.41	*****
10.00	9.76	73.17	*****
10.50	7.32	80.49	*****
11.00	5.10	86.59	*****
11.50	4.88	91.46	*****
12.00	3.66	95.12	*****
****	4.88	100.00	*****

MEAN ST.DEV. SKEWNESS KURTOSIS

6.82 1.59 -.20 .27
 9.03 1.76 .04 1.13

KRUMBEIN + PETTI JOHN (1938) MOMENT MEASURES
 FOR SIZE RANGE 4.0 TO 12.0 PHI

FOLK GRAPHIC STATISTICAL PARAMETERS
 FOLK AND WARD, 1957

PERCENTILES	MEDIAN	8.95	5TH	6.03	16TH	7.34	25TH	7.96
			75TH	10.13	84TH	10.79	95TH	11.98
PCT. GRAVEL	.00	SAND	1.22	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00	
				(SEDIGRAPH)	24.39	(SEDIGRAPH)	74.39	
GRAVEL+SAND	1.22	SILT/(SILT+CLAY)	24.69	PCT.GRAV+SAND/SILT+CLAY			.01	
LABELS SHEPARD	-SILTY CLAY	FOLK(GMS)-MUD		(SCS)-CLAY				

LAC DUFALUT C1 13-14 CM SEDIGRAPH ANALYSIS

12/15/82

PHI	PCT. CUMFCT.	
4.00	0.00	
4.50	0.00	
5.00	1.00	*
5.50	1.00	*
6.00	2.00	****
6.50	3.00	***
7.00	3.00	***
7.50	8.00	*****
8.00	11.00	*****
8.50	9.00	*****
9.00	16.00	*****
9.50	11.00	*****
10.00	9.00	*****
10.50	6.00	*****
11.00	5.00	*****
11.50	5.00	*****
12.00	4.00	*****
12.50	4.00	*****
13.00	100.00	

MEAN ST.DEV. SKEWNESS KURTOSIS

8.72	1.58	-.07	-.34	KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI
8.92	1.77	.06	1.11	FOLK GRAPHIC STATISTICAL PARAMETERS FOLK AND WARD, 1957

PERCENTILES	MEDIAN	8.81	5TH	5.88	16TH	7.25	25TH	7.73	
			75TH	9.94	84TH	10.70	95TH	11.86	
PCT. GRAVEL	.00	SAND	0.00	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00		
				(SEDIGRAPH)	31.00	(SEDIGRAPH)	69.00		
GRAVEL+SAND	.00	SILT/(SILT+CLAY)	31.00	PCT.GRAV+SAND/SILT+CLAY			.00		
LABELS SHEPARD -SILTY CLAY				FOLK(GMS)-MUD				(SCS)-CLAY	

LAC DFAULT C1 14-15 CM SEDIGRAPH ANALYSIS

12/15/32

PHI	PCT. CUMFCT.		
4.00	0.00	0.00	
4.50	.50	.50	
5.00	0.00	.50	
5.50	.50	.99	
6.00	1.38	2.97	**
6.50	2.97	5.94	***
7.00	2.97	8.91	***
7.50	6.93	15.84	*****
8.00	6.93	22.77	*****
8.50	9.90	32.67	*****
9.00	12.87	45.54	*****
9.50	12.87	59.42	*****
10.00	9.90	68.32	*****
10.50	8.91	77.23	*****
11.00	5.94	83.17	*****
11.50	6.93	90.10	*****
12.00	4.95	95.05	*****
12.50	4.95	100.00	*****

MEAN ST.DEV. SKEWNESS KURTOSIS

9.05 1.54 -.14 -.28 ~~KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI~~
 9.25 1.74 .03 1.02 FOLK GRAPHIC STATISTICAL PARAMETERS FOLK AND WARD, 1957

PERCENTILES	MEDIAN	5TH	16TH	25TH
	9.17	5.34	7.51	8.11
		10.33	11.06	12.00
PCT. GRAVEL	.00	SAND 0.00	SILT (PIPETTE) 0.00	CLAY (PIPETTE) 0.00
			(SEDIGRAPH) 22.77	(SEDIGRAPH) 77.23
GRAVEL+SAND	.00	SILT/(SILT+CLAY) 22.77	PCT.GRAV+SAND/SILT+CLAY	.00
LABELS SHEPARD	-CLAY	FOLK(GMS)-MUD	(SCS)-CLAY	

LAC DFAULT C1 16-17 CM SEDIGRAPH ANALYSIS

12/15/82

PHI	PCT. CUMFCT.		
3	0.00		
4.00	0.00	0.00	
4.50	0.00	0.00	
5.00	.99	.99	
5.50	.50	1.49	
6.00	1.49	2.97	*
6.50	2.97	5.94	***
7.00	2.97	8.91	***
7.50	4.95	13.86	*****
8.00	6.93	20.79	*****
8.50	10.89	31.68	*****
9.00	13.86	45.54	*****
9.50	12.87	58.42	*****
10.00	10.89	69.31	*****
10.50	7.92	77.23	*****
11.00	4.95	82.18	*****
11.50	4.95	87.13	***
12	2.97	90.10	*****
*****	9.90	100.00	*****

MEAN ST.DEV. SKEWNESS KURTOSIS

8.94 1.46 -.17 .01 KEUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI

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

PERCENTILES	MEDIAN	9.17	5TH	8.34	16TH	7.65	25TH	8.19
			75TH	10.36	84TH	11.13	95TH	*****
PCT. GRAVEL	.00	SAND	0.00	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00	
				(SEDIGRAPH)	20.79	(SEDIGRAPH)	79.21	
GRAVEL+SAND	.00	SILT/(SILT+CLAY)	20.79	PCT.GRAV+SAND/SILT+CLAY	.00			
LABELS SHEPARD	-CLAY	FOLK (GMS)	-MUD	(SCS)	-CLAY			

LAC DFAULT C1 17-18 CM SEDIGRAPH ANALYSIS

12/15/82

PHI PCT. CUMFCT.

ASSUMED UPPER LIMIT

4.00	1.98	1.98	**
4.50	0.00	1.98	
5.00	0.00	1.98	
5.50	.99	2.97	*
6.00	.99	3.96	*
6.50	1.98	5.94	**
7.00	1.98	7.92	**
7.50	5.94	13.86	*****
8.00	6.93	20.79	*****
8.50	8.91	29.70	*****
9.00	11.88	41.58	*****
9.50	11.88	53.47	*****
10.00	10.89	64.36	*****
10.50	9.90	74.26	*****
11.00	6.93	81.19	*****
11.50	5.94	87.13	*****
1	4.95	92.08	*****
*****	7.92	100.00	*****

MEAN ST.DEV. SKEWNESS KURTOSIS

9.07 1.65 -.38 .34

~~KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI~~

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

PERCENTILES	MEDIAN	9.35	5TH	6.26	16TH	7.65	25TH	8.24
			75TH	10.55	84TH	11.24	95TH	*****
PCT. GRAVEL	.00	SAND	1.98	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00	
				(SEDIGRAPH)	18.91	(SEDIGRAPH)	79.21	
GRAVEL+SAND	1.98	SILT/(SILT+CLAY)	19.19	PCT.GRAV+SAND/SILT+CLAY	.02			
LABELS SHEPARD	-CLAY	FOLK (GMS)	-NUD	(SCS)	-CLAY			

AC DFAULT C1 18-19 CM SEDIGRAPH ANALYSIS

12/15/82

PHI PCT. CUMFCT.

3.9 ASSUMED UPPER LIMIT

0.00	2.50	***
0.50	2.50	
1.00	3.13	*
1.50	3.75	*
2.00	3.75	****
2.50	7.50	***
3.00	10.00	****
3.50	13.75	*****
4.00	21.25	*****
4.50	31.25	*****
5.00	41.25	*****
5.50	55.00	*****
6.00	66.25	*****
6.50	73.75	*****
7.00	81.25	*****
7.50	87.50	*****
8.00	93.75	***
8.50	96.25	****
9.00	100.00	

MEAN ST.DEV. SKEWNESS KURTOSIS

8.66	1.73	-.26	.29	KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI
8.90	1.81	.01	1.04	FOLK GRAPHIC STATISTICAL PARAMETERS FOLK AND WARD, 1957

PERCENTILES	MEDIAN	8.82	5TH	5.67	16TH	7.15	25TH	7.69
			75TH	10.08	84TH	10.72	95TH	11.75
PCT. GRAVEL	.00	SAND	2.50	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00	
				(SEDIGRAPH)	28.75	(SEDIGRAPH)	68.75	
GRAVEL+SAND	2.50	SILT/(SILT+CLAY)	29.49	PCT.GRAV+SAND/SILT+CLAY			.03	
TABELS SHEPARD	-SILTY CLAY	FOLK (GMS)-MUD		(SCS)-CLAY				

LAC DUFALUT C1 19-20 CM SEDIGRAPH ANALYSIS

12/15/82

PHI	PCT. CUMFCT.	
3.00	1.00	ASSUMED UPPER LIMIT *
4.00	0.00	1.00
4.50	0.00	1.00
5.00	1.00	2.00 *
5.50	.50	2.00 *
6.00	1.50	2.50 **
6.50	2.00	4.00 **
7.00	4.00	6.00 ****
7.50	6.00	10.00 *****
8.00	9.00	16.00 *****
8.50	11.00	25.00 *****
9.00	12.00	36.00 *****
9.50	10.00	48.00 *****
10.00	10.00	58.00 *****
10.50	8.00	68.00 *****
11.00	9.00	76.00 *****
11.50	6.00	85.00 *****
12.00	9.00	91.00 *****
*****	100.00	

MEAN ST.DEV. SKENNESS KURTOSIS

9.34 1.57 -.34 .75 KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI

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

PERCENTILES	MEDIAN	9.60	5TH	6.75	16TH	8.00	25TH	8.50
			75TH	10.34	84TH	11.44	95TH	*****
PCT. GRAVEL	.00	SAND	1.00	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00	
				(SEDIGRAPH)	15.00	(SEDIGRAPH)	34.00	
GRAVEL+SAND	1.00	SILT/(SILT+CLAY)	15.15	PCT.GRAV+SAND/SILT+CLAY	.01			
TABELS SHEPARD -CLAY		FOLK(GMS)-MUD		(SCS)-CLAY				

LAC DFAULT C1 20-21 CM SEDIGRAPH ANALYSIS

12/15/62

PHI	PCT. CUMPCT.	
3.00	1.00	ASSUMED UPPER LIMIT *
4.00	1.00	*
4.50	1.50	*
5.00	2.00	*
5.50	2.00	*
6.00	3.00	*
6.50	4.00	**
7.00	6.00	****
7.50	10.00	*****
8.00	16.00	*****
8.50	23.00	*****
9.00	34.00	*****
9.50	45.00	*****
10.00	56.00	*****
10.50	67.00	*****
11.00	76.00	*****
11.50	85.00	*****
12.00	92.00	*****
*****	100.00	

MEAN ST.DEV. SKEWNESS KURTOSIS

9.40 1.61 -.42 1.05 ~~KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI~~

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

PERCENTILES	MEDIAN 9.73	5TH 8.75	16TH 8.03	25TH 6.59
		75TH 10.94	84TH 11.44	95TH*****
PCT. GRAVEL	.00	SAND 1.00	SILT (PIPETTE) 0.00	CLAY (PIPETTE) 0.00
			(SEDIGRAPH) 15.00	(SEDIGRAPH) 84.00
GRAVEL+SAND	1.00	SILT/(SILT+CLAY)	15.15PCT.GRAV+SAND/SILT+CLAY	.01
LABELS SHEPARD -CLAY		FOLK(GMS)-MUD		(SCS)-CLAY

LAC DFAULT C1 21-22 CM SEDIGRAPH ANALYSIS

12/15/82

PHI	PCT. CUMFCT.	
3.00	0.00	
4.00	.99	*
4.50	0.00	
5.00	.99	*
5.50	.99	*
6.00	1.98	**
6.50	2.97	***
7.00	3.96	****
7.50	6.93	*****
8.00	9.90	*****
8.50	11.88	*****
9.00	12.87	*****
9.50	11.88	*****
10.00	9.90	*****
10.50	6.93	*****
11.00	5.94	*****
11.50	3.47	***
12.00	8.42	*****
*****	100.00	

MEAN ST.DEV. SKEWNESS KURTOSIS

9.11 1.50 -.28 .38 KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI

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

PERCENTILES	MEDIAN 9.37	5TH 6.51	16TH 7.80	25TH 8.31
		75TH 10.49	84TH 11.15	95TH*****
PCT. GRAVEL	.00	SAND 0.00	SILT (PIPETTE) 0.00	CLAY (PIPETTE) 0.00
			(SEDIGRAPH) 18.81	(SEDIGRAPH) 81.19
GRAVEL+SAND	.00	SILT/(SILT+CLAY)	18.81PCT.GRAV+SAND/SILT+CLAY	.00
LABELS SHEPARD	-CLAY	FOLK (GMS)-MUD		(SCS)-CLAY

LAC DFAULT C1 22-23 CM SEDIGRAPH ANALYSIS

12/15/32

PHI	PCT. CUMFCT.	
3	0.00	
4.00	0.00	
4.50	0.00	
5.00	1.03	*
5.50	1.03	*
6.00	2.06	*
6.50	3.09	***
7.00	6.19	****
7.50	10.31	*****
8.00	16.49	*****
8.50	22.63	*****
9.00	32.99	*****
9.50	46.39	*****
10.00	58.76	*****
10.50	70.10	*****
11.00	79.38	*****
11.50	84.54	****
12	88.66	****
****	92.79	*****
****	100.00	

MEAN ST.DEV. SKEWNESS KURTOSIS

8.93 1.51 -.16 -.13 KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI

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

PERCENTILES	MEDIAN	9.15	5TH	6.31	16TH	7.45	25TH	8.11
			75TH	10.26	84TH	10.95	95TH	*****
PCT. GRAVEL	.00	SAND	0.00	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00	
				(SEDIGRAPH)	22.68	(SEDIGRAPH)	77.32	
GRAVEL+SAND	.00	SILT/(SILT+CLAY)	22.68	PCT.GRAV+SAND/SILT+CLAY			.00	
LABELS SHEPARD -CLAY		FOLK(GMS)-MU3		(SCS)-CLAY				

12/15/82

PHI PCT. CUMPCT.

0.5	0.00		
0.00	0.00	0.00	
0.50	0.00	0.00	
0.00	0.00	0.00	
0.50	1.01	1.01	*
0.00	1.01	2.02	*
0.50	2.02	4.04	**
0.00	2.02	4.04	**
0.50	4.04	6.06	****
0.00	4.04	6.06	****
0.50	6.06	10.10	*****
0.00	6.06	10.10	*****
0.50	7.07	16.16	*****
0.00	7.07	16.16	*****
0.50	11.11	23.23	*****
0.00	11.11	23.23	*****
0.50	12.12	34.34	*****
0.00	12.12	34.34	*****
0.50	13.13	46.46	*****
0.00	13.13	46.46	*****
0.50	11.11	59.60	*****
0.00	11.11	59.60	*****
0.50	9.09	70.71	*****
0.00	9.09	70.71	*****
1.00	8.08	79.80	*****
0.00	8.08	79.80	*****
1.50	5.05	87.88	*****
0.00	5.05	87.88	*****
2.00	7.07	92.93	*****
0.00	7.07	92.93	*****
2.50		100.00	

MEAN ST.DEV. SKEWNESS KURTOSIS

9.38 1.45 -.25 -.12 KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI

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

PERCENTILES	MEDIAN	9.63	5TH	6.74	16TH	7.99	25TH	8.58
			75TH	10.74	84TH	11.25	95TH	*****

PCT. GRAVEL	.00	SAND	0.00	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00
				(SEDIGRAPH)	16.16	(SEDIGRAPH)	83.84

GRAVEL+SAND	.00	SILT/(SILT+CLAY)	16.16	PCT.GRAV+SAND/SILT+CLAY	.00
TABLS SHEPARD -CLAY		FOLK(GMS)-MUD		(SCS)-CLAY	

LAG DFAULT G1 24-25 CM SEDIGRAPH ANALYSIS

12/15/82

PHI	PCT. CUMFCT.	ASSUMED UPPER LIMIT
4.00	.99	.99
4.50	0.00	.99
5.00	.99	1.98
5.50	.99	2.97
6.00	1.98	4.95
6.50	1.98	6.93
7.00	1.98	8.91
7.50	4.95	13.86
8.00	6.93	20.79
8.50	7.92	28.71
9.00	11.88	40.59
9.50	12.87	53.47
10.00	8.91	62.38
10.50	9.90	72.28
11.00	5.94	78.22
11.50	6.93	85.15
12.00	6.93	92.08
12.50	7.92	100.00

MEAN ST.DEV. SKEWNESS KURTOSIS

9.13 1.69 -.30 .35 ~~KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI~~

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

PERCENTILES	MEDIAN	5TH	16TH	25TH	75TH	84TH	95TH
	9.37	6.01	7.65	8.27	10.73	11.42	*****
PCT. GRAVEL	.00	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00		
		(SEDIGRAPH)	19.80	(SEDIGRAPH)	79.21		
GRAVEL+SAND	.99	SILT/(SILT+CLAY)	20.00PCT.GRAV+SAND/SILT+CLAY	.01			
LABELS SHEPARD	-CLAY	FGLK(GMS)-MUD		(SCS)-CLAY			

12/17/82

PHI	PCT.	CUMPCT.	
3.00	0.00		
4.00	2.70	0.00	***
4.50	2.70	2.70	***
5.00	4.05	5.41	****
5.50	4.05	9.46	****
6.00	5.41	13.51	*****
6.50	6.76	18.92	*****
7.00	9.46	25.68	*****
7.50	10.81	35.14	*****
8.00	9.46	45.95	*****
8.50	9.46	55.41	*****
9.00	8.11	64.86	*****
9.50	6.76	72.97	*****
10.00	6.76	79.73	*****
10.50	5.41	86.49	*****
11.00	4.05	91.89	****
11.50	3.38	95.95	***
12.00	.68	99.32	*
*****	100.00		

MEAN ST.DEV. SKEWNESS KURTOSIS

8.21 1.88 -.05 -.67

KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI

8.25 2.00 .01 .98

FOLK GRAPHIC STATISTICAL PARAMETERS FOLK AND WARD, 1957

PERCENTILES	MEDIAN	5TH	16TH	25TH
	8.21	4.93	6.23	6.95
		9.65	10.32	11.38
PCT. GRAVEL	.00	SAND 0.00	SILT (PIPETTE) 0.00	CLAY (PIPETTE) 0.00
			(SEDIGRAPH) 45.95	(SEDIGRAPH) 54.05
GRAVEL+SAND	.00	SILT/(SILT+CLAY)	45.95 PCT. GRAV+SAND/SILT+CLAY	.00
LABELS SHEPARD	-SILTY CLAY	FOLK(GMS)-MUD	(SCS)-MUD	

12/17/82

PHI PCT. CUMPCT.

3. ASSUMED UPPER LIMIT

4.00	1.51	1.51	**
4.50	.50	2.01	*
5.00	.50	2.51	*
5.50	2.01	4.52	**
6.00	4.02	8.54	****
6.50	3.02	11.56	***
7.00	4.02	15.58	****
7.50	8.04	23.62	*****
8.00	9.05	32.66	*****
8.50	8.04	40.70	*****
9.00	14.07	54.77	*****
9.50	11.06	65.83	*****
10.00	9.05	74.87	*****
10.50	7.04	81.91	*****
11.00	6.03	87.94	*****
11.50	5.03	92.96	***
12.00	3.02	95.98	****
*****	4.02	100.00	

MEAN ST.DEV. SKEWNESS KURTOSIS

8.62 1.74 -.22 -.05

KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI

8.84 1.86 -.02 1.06

FOLK GRAPHIC STATISTICAL PARAMETERS FOLK AND WARD, 1957

PERCENTILES	MEDIAN	8.83	5TH	5.56	16TH	7.03	25TH	7.58
			75TH	10.01	84TH	10.67	95TH	11.84
PCT. GRAVEL	.00	SAND	1.51	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00	
				(SEDIGRAPH)	31.16	(SEDIGRAPH)	67.34	
GRAVEL+SAND	1.51	SILT/(SILT+CLAY)	31.63	PCT.GRAV+SAND/SILT+CLAY	.02			
LABELS SHEPARD	-SILTY CLAY	FOLK(GMS)-MUD		(SGS)-CLAY				

12/17/82

PHI	PCT. CUM PCT.	
3.00	1.00	ASSUMED UPPER LIMIT
4.00	0.00	1.00
4.50	1.00	1.00 *
5.00	2.00	2.00 **
5.50	4.00	4.00 **
6.00	6.00	6.00
6.50	10.00	4.00 ****
7.00	14.00	4.00 ****
7.50	22.00	8.00 ****
8.00	30.00	8.00 ****
8.50	41.00	11.00 ****
9.00	53.00	12.00 ****
9.50	66.00	13.00 ****
10.00	75.00	9.00 ****
10.50	82.00	7.00 ****
11.00	87.00	5.00 ****
11.50	93.00	6.00 ****
12.00	97.00	4.00 ****
****	100.00	3.00 ***

MEAN ST.DEV. SKEWNESS KURTOSIS

8.72	1.68	-.13	-.07	KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI
8.90	1.80	-.01	1.06	FOLK GRAPHIC STATISTICAL PARAMETERS FOLK AND WARD, 1957

PERCENTILES	MEDIAN	5TH	16TH	25TH
	8.88	5.75	7.13	7.69
		10.00	10.70	11.75
PCT. GRAVEL	.00	SAND 1.00	SILT (PIPETTE) 0.00	CLAY (PIPETTE) 0.00
			(SEDIGRAPH) 29.00	(SEDIGRAPH) 70.00
GRAVEL+SAND	1.00	SILT/(SILT+CLAY)	29.29PCT.GRAV+SAND/SILT+CLAY	.01
LABELS SHEPARD	-SILTY CLAY	FOLK(GMS)-MUD		(SCS)-CLAY

12/17/82

PHI	PCT. CUMFCT.	
4.00	0.00	
4.50	.99	*
5.00	0.00	
5.50	0.00	
6.00	2.97	***
6.50	2.97	***
7.00	3.47	***
7.50	6.44	*****
8.00	8.91	*****
8.50	8.91	*****
9.00	13.86	*****
9.50	13.86	*****
10.00	11.88	*****
10.50	8.91	*****
11.00	4.95	*****
11.50	4.95	*****
12.00	5.94	*****
12.50	99.01	
13.00	.99	*
13.50	100.00	

MEAN ST.DEV. SKEWNESS KURTOSIS

8.97	1.56	-.15	-.07	KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI
9.02	1.62	-.04	1.08	FOLK GRAPHIC STATISTICAL PARAMETERS FOLK AND WARD, 1957

PERCENTILES	MEDIAN	5TH	16TH	25TH
	9.05	5.18	7.44	7.96
		75TH	84TH	95TH
		10.04	10.53	11.66
PCT. GRAVEL	.00	SAND 0.00	SILT (PIPETTE) 0.00	CLAY (PIPETTE) 0.00
			(SEDIGRAPH) 25.74	(SEDIGRAPH) 74.26
GRAVEL+SAND	.00	SILT/(SILT+CLAY)	25.74	PCT.GRAV+SAND/SILT+CLAY .00
LABELS SHEPARD	-SILTY CLAY	FOLK(GMS)-MUD		(SCS)-CLAY

12/17/82

PHI	PCT.	CUMPCT.	
	0.00		
4.00	0.00	0.00	
4.50	0.00	0.00	
5.00	.50	.50	*
5.50	1.01	1.51	*
6.00	1.01	2.51	*
6.50	2.01	4.52	**
7.00	4.02	8.54	****
7.50	5.03	13.57	*****
8.00	8.04	21.61	*****
8.50	8.04	29.65	*****
9.00	13.07	42.71	*****
9.50	12.06	54.77	*****
10.00	12.06	66.83	*****
10.50	10.05	76.88	*****
11.00	7.04	83.92	*****
11.50	6.03	89.95	*****
12.00	4.02	93.97	****
12.50	6.03	100.00	*****

MEAN ST.DEV. SKEWNESS KURTOSIS

9.10 1.49 -.18 -.22 KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI

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

PERCENTILES	MEDIAN	9.30	5TH	6.56	16TH	7.65	25TH	8.21
			75TH	10.41	84TH	11.01	95TH	*****
PCT. GRAVEL	.00	SAND	0.00	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00	
				(SEDIGRAPH)	21.61	(SEDIGRAPH)	78.39	
GRAVEL+SAND	.00	SILT/(SILT+CLAY)	21.61PCT.GRAV+SAND/SILT+CLAY		.00			
LABELS SHEPARD	-CLAY	FOLK(GMS)-MUD			(SCS)-CLAY			

12/17/82

PHI PCT. CUMFCT.

ASSUMED UPPER LIMIT

	1.01		*
4.00	0.00	1.01	
4.50	1.01	1.01	*
5.00	0.00	2.02	
5.50	0.00	2.02	
	2.02		**
6.00	2.53	4.04	***
6.50	4.55	6.57	*****
7.00	5.05	11.11	*****
7.50	7.07	16.16	*****
8.00	9.09	23.23	*****
8.50	12.12	32.32	*****
9.00	14.14	44.44	*****
9.50	11.11	58.59	*****
10.00	11.11	69.70	*****
10.50	4.04	80.81	****
11.00	5.05	84.85	*****
11.50	3.03	89.90	***
12.00	7.07	92.93	*****
*****	100.00		

MEAN ST.DEV. SKEWNESS KURTOSIS

8.91 1.56 -.30 .50 KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI

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

PERCENTILES	MEDIAN	9.20	5TH	6.19	16TH	7.48	25TH	8.10
			75TH	10.24	84TH	10.90	95TH	*****

PCT. GRAVEL	.00	SAND	1.01	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00
				(SEDIGRAPH)	22.22	(SEDIGRAPH)	76.77

GRAVEL+SAND 1.01 SILT/(SILT+CLAY) 22.45 PCT.GRAV+SAND/SILT+CLAY .01

LABELS SHEPARD -CLAY FOLK (GMS)-1UD (SCS)-CLAY

12/17/82

DEPTH	PCT.	CUMFCT.	
0.00		0.00	
4.00	1.00	1.00	*
4.50	1.00	2.00	*
5.00	2.00	4.00	**
5.50	3.00	7.00	***
6.00	4.00	11.00	****
6.50	7.00	18.00	*****
7.00	7.00	25.00	*****
7.50	7.00	32.00	*****
8.00	10.00	42.00	*****
8.50	12.00	54.00	*****
9.00	13.00	67.00	*****
9.50	9.00	76.00	*****
10.00	8.00	84.00	*****
10.50	6.00	90.00	*****
11.00	6.00	96.00	*****
11.50	2.00	98.00	**
12.00	6.00	100.00	*****

MEAN ST.DEV. SKEWNESS KURTOSIS

8.73 1.65 -.21 -.22 KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES
 FOR SIZE RANGE 4.0 TO 12.0 PHI

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

PERCENTILES	MEDIAN	9.00	5TH	5.67	16TH	7.14	25TH	7.79
			75TH	10.19	84TH	10.83	95TH	*****

PCT. GRAVEL .00 SAND 0.00 SILT (PIPETTE) 0.00 CLAY (PIPETTE) 0.00
 (SEDIGRAPH) 28.00 (SEDIGRAPH) 72.00

GRAVEL+SAND .00 SILT/(SILT+CLAY) 28.00 PCT.GRAV+SAND/SILT+CLAY .00

LABELS SHEPARD -SILTY CLAY FOLK(GMS)-MUD (SCS)-CLAY

12/17/82

PHI PCT. CUMPCT.

ASSUMED UPPER LIMIT

4.00	1.01	1.01	
4.50	0.00	1.01	*
5.00	1.01	2.02	*
5.50	1.01	3.03	*
6.00	1.01	4.04	**
6.50	2.02	6.06	***
7.00	3.03	9.09	*****
7.50	6.06	15.15	*****
8.00	8.08	23.23	*****
8.50	8.08	31.31	*****
9.00	13.13	44.44	*****
9.50	14.14	58.59	*****
10.00	11.11	69.70	*****
10.50	10.10	79.80	*****
11.00	6.06	85.86	*****
11.50	4.55	90.40	*****
12.00	6.57	96.97	*****
	3.03	100.00	***

MEAN ST.DEV. SKEWNESS KURTOSIS

9.04	1.61	-.28	.50	KRUMBEIN + PETTI JOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI
9.20	1.67	-.33	1.07	FOLK GRAPHIC STATISTICAL PARAMETERS FOLK AND WARD, 1957

PERCENTILES	MEDIAN	9.20	5TH	6.24	16TH	7.55	25TH	8.11
			75TH	10.26	84TH	10.85	95TH	11.85
PCT. GRAVEL	.00	SAND	1.01	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00	
				(SEDIGRAPH)	22.22	(SEDIGRAPH)	76.77	
GRAVEL+SAND	1.01	SILT/(SILT+CLAY)	22.45	PCT. GRAV+SAND/SILT+CLAY			.01	
LABELS SHEPARD	-CLAY		FOLK(GMS)-MUD			(SCS)-CLAY		

12/17/82

PHI	PCT. CUM PCT.		
4.00	0.00	0.00	
4.50	0.00	0.00	
5.00	1.00	1.00	*
5.50	0.00	1.00	
6.00	2.00	3.00	**
6.50	3.00	6.00	***
7.00	2.00	8.00	**
7.50	5.00	13.00	*****
8.00	7.00	20.00	*****
8.50	8.00	28.00	*****
9.00	12.00	40.00	*****
9.50	14.00	54.00	*****
10.00	12.00	66.00	*****
10.50	11.00	77.00	*****
11.00	8.00	85.00	*****
11.50	5.00	90.00	*****
12.00	5.00	95.00	*****
*****	5.00	100.00	*****

MEAN ST.DEV. SKEWNESS KURTOSIS

9.16	1.50	-.23	-.04	KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI
9.34	1.66	-.34	1.11	FOLK GRAPHIC STATISTICAL PARAMETERS FOLK AND WARD, 1957

PERCENTILES	MEDIAN	9.36	5TH	6.33	16TH	7.71	25TH	8.31
			75TH	10.41	84TH	10.94	95TH	12.00
PCT. GRAVEL	.00	SAND	0.00	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00	
				(SEDIGRAPH)	20.00	(SEDIGRAPH)	80.00	
GRAVEL+SAND	.00	SILT/(SILT+CLAY)	20.00	PCT.GRAV+SAND/SILT+CLAY			.00	
LABELS SHEPARD	-CLAY		FOLK (GMS)-MUD			(SCS)-CLAY		

12/17/82

PHI	PCT. CUM PCT.		
4.00	0.00	0.00	
4.50	.50	.50	*
5.00	.50	1.01	*
5.50	.50	1.51	*
6.00	1.01	2.51	*
6.50	3.02	5.53	***
7.00	2.01	7.54	**
7.50	6.03	13.57	*****
8.00	5.03	19.60	*****
8.50	8.04	27.64	*****
9.00	12.06	39.70	*****
9.50	13.07	52.76	*****
10.00	12.06	64.82	*****
10.50	11.06	75.88	*****
11.00	7.04	82.91	*****
11.50	7.04	89.95	*****
12.00	4.02	93.97	*****
12.50	6.03	100.00	*****

MEAN ST.DEV. SKEWNESS KURTOSIS

9.17 1.51 -.26 .10 KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI

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

PERCENTILES	MEDIAN	9.39	5TH	6.41	16TH	7.70	25TH	8.34
			75TH	10.46	84TH	11.08	95TH	*****
PCT. GRAVEL	.00	SAND	0.00	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00	
				(SEDIGRAPH)	19.60	(SEDIGRAPH)	80.40	
GRAVEL+SAND	.00	SILT/(SILT+CLAY)	19.60	PCT.GRAV+SAND/SILT+CLAY	.00			
LABELS SHEPARD	-CLAY	FOLK (GMS)-MUD		(SCS)-CLAY				

12/17/82

PHI	PCT. CUMPCT.		
0	0.00		
4.00	0.50	0.00	*
4.50	0.00	.50	
5.00	.50	.50	*
5.50	1.51	1.01	**
6.00	2.01	2.51	**
6.50	3.02	4.52	***
7.00	5.03	7.54	*****
7.50	5.03	12.56	*****
8.00	9.05	17.59	*****
8.50	11.06	26.63	*****
9.00	11.06	37.69	*****
9.50	11.06	48.74	*****
10.00	10.05	59.80	*****
10.50	9.05	69.85	*****
11.00	8.04	78.89	*****
11.50	5.03	86.93	*****
0	8.04	91.96	*****
*****	100.00		

MEAN ST.DEV. SKEWNESS KURTOSIS

9.27 1.53 -.24 -.12 KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI

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

PERCENTILES	MEDIAN	9.56	5TH	6.58	16TH	7.84	25TH	8.41
			75TH	10.78	84TH	11.32	95TH	*****
PCT. GRAVEL	.00	SAND	0.00	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00	
				(SEDIGRAPH)	17.59	(SEDIGRAPH)	82.41	
GRAVEL+SAND	.00	SILT/(SILT+CLAY)	17.59	PCT.GRAV+SAND/SILT+CLAY			.00	
LABELS SHEPARD	-CLAY	FOLK(GMS)-MUD		(SCS)-CLAY				

12/20/82

PHI	PCT. CUMFCT.	
3.00	1.00	ASSUMED UPPER LIMIT
4.00	0.00	1.00
4.50	1.00	1.00 *
5.00	0.00	2.00
5.50	1.00	2.00 *
6.00	2.00	3.00 **
6.50	3.00	5.00 ***
7.00	5.00	8.00 *****
7.50	7.00	13.00 *****
8.00	8.00	20.00 *****
8.50	12.00	28.00 *****
9.00	11.00	40.00 *****
9.50	12.00	51.00 *****
10.00	10.00	63.00 *****
10.50	7.00	73.00 *****
11.00	6.00	80.00 *****
11.50	5.00	86.00 *****
12.00	9.00	91.00 *****
*****		100.00

MEAN ST.DEV. SKEWNESS KURTOSIS

9.13 1.59 -.32 .63 KRUMBEIN + PETTICORN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI

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

PERCENTILES	MEDIAN	9.45	5TH	5.50	16TH	7.71	25TH	8.31
			75TH	10.64	84TH	11.33	95TH	*****
PCT. GRAVEL	.00	SAND	1.00	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00	
				(SEDIGRAPH)	19.00	(SEDIGRAPH)	80.00	
GRAVEL+SAND	1.00	SILT/(SILT+CLAY)	19.19	PCT.GRAV+SAND/SILT+CLAY			.01	
LABELS SHEPARD	-CLAY		FOLK (GMS)-MUD			(SCS)-CLAY		

12/17/82

PHI	PCT. CUM PCT.	ASSUMED UPPER LIMIT	
4.00	1.00	1.00	*
4.50	1.00	2.00	**
5.00	2.00	4.00	**
5.50	1.00	5.00	**
6.00	2.00	7.00	**
6.50	3.00	10.00	**
7.00	4.00	14.00	**
7.50	5.00	19.00	**
8.00	7.00	26.00	**
8.50	9.00	35.00	**
9.00	9.00	44.00	**
9.50	11.00	55.00	**
10.00	10.00	65.00	**
10.50	8.00	75.00	**
11.00	7.00	83.00	**
11.50	4.00	90.00	**
12.00	6.00	94.00	**
12.50	100.00		**

MEAN ST.DEV. SKÉWNESS KURTOSIS

8.90 1.81 -.32 .02 KRUMBEIN + PETTI JOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI

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

PERCENTILES	MEDIAN 9.27	5TH 5.50	16TH 7.20	25TH 7.93
		75TH 10.50	84TH 11.07	95TH*****
PCT. GRAVEL	.00	SAND 1.00	SILT (PIPETTE) 0.00	CLAY (PIPETTE) 0.00
			(SEDIGRAPH) 25.00	(SEDIGRAPH) 74.00
GRAVEL+SAND	1.00	SILT/(SILT+CLAY)	25.25	PCT.GRAV+SAND/SILT+CLAY .01
LABELS SHEPARD	-SILTY CLAY	FOLK(GMS)-MUD		(SCS)-CLAY

LAC CHASSI C1 13-14 CM SEDIGRAPH ANALYSIS

12/17/82

PHI	PCT. CUM PCT.		
3	1.01	1.01	*
4.00	.51	1.52	*
4.50	.51	2.02	*
5.00	1.01	3.03	**
5.50	2.02	5.05	*
6.00	1.01	6.06	***
6.50	3.03	9.09	*****
7.00	5.05	14.14	*****
7.50	6.06	20.20	*****
8.00	7.07	27.27	*****
8.50	12.12	39.39	*****
9.00	10.10	49.49	*****
9.50	10.10	59.60	*****
10.00	9.09	68.69	***
10.50	3.03	71.72	*****
11.00	13.13	84.85	*****
11.50	6.06	90.91	*****
12	9.09	100.00	*****

MEAN ST.DEV. SKEWNESS KURTOSIS

9.20 1.74 -.33 .29 KRUMBEIN + PETTIT JOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI

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

PERCENTILES	MEDIAN	9.53	5TH	5.99	16TH	7.65	25TH	8.34
			75TH	11.13	84TH	11.47	95TH	*****
PCT. GRAVEL	.00	SAND	1.01	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00	
				(SEDIGRAPH)	19.19	(SEDIGRAPH)	79.80	
GRAVEL+SAND	1.01	SILT/(SILT+CLAY)	19.39	PCT.GRAV+SAND/SILT+CLAY			.01	
LABELS SHEPARD	-CLAY	FOLK(GMS)-MUD		(SCS)-CLAY				

LAC CHASSI C1 14-15 CM SEDIGRAPH ANALYSIS

12/17/82

PHI	PCT. CUMFCT.	
3.00	0.00	
4.00	0.00	0.00
4.50	0.00	0.00
5.00	0.00	0.00
5.50	1.00	*
5.50	2.00	**
6.00	3.00	***
6.50	6.00	**
7.00	8.00	*****
7.50	14.00	*****
8.00	20.00	*****
8.50	28.00	*****
9.00	39.00	*****
9.50	50.00	*****
10.00	60.00	*****
10.50	71.00	*****
11.00	78.00	*****
11.50	85.00	****
12.00	89.00	*****
****	100.00	

MEAN ST.DEV. SKEWNESS KURTOSIS

9.15 1.53 -.19 -.44 KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI

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

PERCENTILES	MEDIAN 9.50	5TH 6.33	16TH 7.67	25TH 8.31
		75TH 10.79	84TH 11.43	95TH*****
PCT. GRAVEL	.00	SAND 0.00	SILT (PIPETTE) 0.00	CLAY (PIPETTE) 0.00
			(SEDIGRAPH) 20.00	(SEDIGRAPH) 80.00
GRAVEL+SAND	.00	SILT/(SILT+CLAY)	20.00PCT.GRAV+SAND/SILT+CLAY	.00
LABELS SHEPARD	-CLAY	FOLK(GMS)-MUD		(SCS)-CLAY

12/17/82

PHI	PCT. CUM PCT.	
3.00	0.00	
4.00	1.00	*
4.50	1.00	
5.00	1.00	
5.50	1.00	*
6.00	2.00	**
6.50	4.00	***
7.00	7.00	*****
7.50	12.00	*****
8.00	18.00	*****
8.50	25.00	*****
9.00	35.00	*****
9.50	45.00	*****
10.00	55.00	*****
10.50	65.00	*****
11.00	74.00	*****
11.50	83.00	*****
12.00	90.00	*****
*****	100.00	

MEAN ST.DEV. SKEWNESS KURTOSIS

9.37 1.59 -.27 -.02 KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI

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

PERCENTILES	MEDIAN	9.75	5TH	6.67	16TH	7.83	25TH	8.50
			75TH	11.06	84TH	11.57	95TH	*****
PCT. GRAVEL	.00	SAND	0.00	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00	
				(SEDIGRAPH)	18.00	(SEDIGRAPH)	82.00	
GRAVEL+SAND	.00	SILT/(SILT+CLAY)	18.00	PCT.GRAV+SAND/SILT+CLAY	.00			
ABELS SHEPARD -CLAY		FOLK (GMS)-MUD		(SCS)-CLAY				

12/17/82

PHI PCT. CUMPCT.

0	0.00		
4.00	0.50	0.00	*
4.50	.50	.50	*
5.00	1.00	1.00	*
5.50	1.50	2.00	**
6.00	2.50	3.50	***
6.50	2.00	6.00	**
7.00	5.00	8.00	*****
7.50	5.00	13.00	*****
8.00	7.00	18.00	*****
8.50	11.00	25.00	*****
9.00	11.00	36.00	*****
9.50	10.00	47.00	*****
10.00	11.00	57.00	*****
10.50	10.00	68.00	*****
11.00	9.00	78.00	*****
11.50	5.00	87.00	*****
0	8.00	92.00	*****
*****	100.00		

MEAN ST.DEV. SKEWNESS KURTOSIS

9.30 1.60 -.32 .04

KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI

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

PERCENTILES	MEDIAN	9.65	5TH	6.30	16TH	7.80	25TH	8.50
			75TH	10.85	84TH	11.33	95TH	*****

PCT. GRAVEL	.00	SAND	0.00	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00
				(SEDIGRAPH)	18.00	(SEDIGRAPH)	82.00

GRAVEL+SAND .00 SILT/(SILT+CLAY) 18.00 PCT.GRAV+SAND/SILT+CLAY .00

LABELS SHEPARD -CLAY FOLK(GMS)-MUD (SCS)-CLAY

12/17/82

PHI	PCT.	CUMPCT.	
	0.00	0.00	
4.00	0.00	0.00	
4.50	1.00	1.00	*
5.00	1.00	2.00	*
5.50	1.00	3.00	*
6.00	3.00	6.00	***
6.50	4.00	10.00	****
7.00	6.00	16.00	*****
7.50	7.00	23.00	*****
8.00	8.00	31.00	*****
8.50	11.00	42.00	*****
9.00	11.00	53.00	*****
9.50	11.00	64.00	*****
10.00	10.00	74.00	*****
10.50	6.00	80.00	*****
11.00	7.00	87.00	*****
11.50	5.00	92.00	*****
12.00	8.00	100.00	*****

MEAN ST.DEV. SKEWNESS KURTOSIS

9.08 1.59 -.18 -.36 KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI

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

PERCENTILES	MEDIAN	9.36	5TH	6.33	16TH	7.50	25TH	8.13
			75TH	10.58	84TH	11.29	95TH	*****
PCT. GRAVEL	.00	SAND	0.00	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00	
				(SEDIGRAPH)	23.00	(SEDIGRAPH)	77.00	
GRAVEL+SAND	.00	SILT/(SILT+CLAY)	23.00	PCT.GRAV+SAND/SILT+CLAY	.00			
LABELS SHEPARD	-CLAY	FOLK(GMS)-MUD		(SCS)-CLAY				

12/17/82

PHI PCT. CUMPCT.

0	0.00	0.00	
4.00	0.00	0.00	
4.50	0.00	0.00	
5.00	1.02	0.00	*
5.50	3.06	1.02	***
6.00	3.06	4.08	***
6.50	3.06	7.14	***
7.00	5.10	10.20	*****
7.50	7.14	15.31	*****
8.00	9.18	22.45	*****
8.50	11.22	31.63	*****
9.00	12.24	42.86	*****
9.50	10.20	55.10	*****
10.00	11.22	65.31	*****
10.50	7.14	76.53	*****
11.00	6.12	83.67	*****
11.50	4.08	89.80	****
12.00	6.12	93.88	*****
*****	100.00	100.00	

MEAN ST.DEV. SKEWNESS KURTOSIS

9.06 1.55 -.18 -.45 KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI

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

PERCENTILES	MEDIAN	9.29	5TH	6.15	16TH	7.55	25TH	8.14
			75TH	10.43	84TH	11.03	95TH	*****

PCT. GRAVEL	.00	SAND	0.00	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00
				(SEDIGRAPH)	22.45	(SEDIGRAPH)	77.55
GRAVEL+SAND	.00	SILT/(SILT+CLAY)	22.45	PCT.GRAV+SAND/SILT+CLAY	.00		
LABELS SHEPARD	-CLAY	FOLK (GMS)	-MUO	(SCS)	-CLAY		

12/17/82

PHI	PCT. CUM PCT.	
4.00	0.00	
4.50	0.00	
5.00	0.00	
5.50	1.01	*
6.00	2.02	**
6.50	3.03	**
7.00	5.05	****
7.50	9.09	*****
8.00	14.14	*****
8.50	20.20	*****
9.00	27.27	*****
9.50	39.39	*****
10.00	50.51	*****
10.50	61.62	*****
11.00	72.73	*****
11.50	81.82	*****
12.00	87.88	*****
	92.93	*****
	100.00	*****

MEAN ST.DEV. SKEWNESS KURTOSIS

9.20 1.53 -.20 -.41 KRUMBEIN + PETTI JOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI

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

PERCENTILES	MEDIAN 9.48	5TH 6.49	16TH 7.65	25TH 8.34
		75TH 10.63	84TH 11.18	95TH*****
PCT. GRAVEL	.00	SAND 0.00	SILT (PIPETTE) 0.00	CLAY (PIPETTE) 0.00
			(SEDIGRAPH) 20.20	(SEDIGRAPH) 79.80
GRAVEL+SAND	.00	SILT/(SILT+CLAY)	20.20	PCT.GRAV+SAND/SILT+CLAY .00
LABELS SHEPARD	-CLAY	FOLK(GMS)-MUD		(SCS)-CLAY

LAC CHASSI C1 20-21 CM SEDIGRAPH ANALYSIS

12/17/82

PHI	PCT.	CUM.PCT.	
0.00	0.00	0.00	
4.00	0.00	0.00	
4.50	.50	0.50	*
5.00	1.01	1.51	*
5.50	1.01	2.51	*
6.00	3.02	5.53	***
6.50	3.02	8.54	***
7.00	5.03	13.57	*****
7.50	8.04	21.61	*****
8.00	8.04	29.65	*****
8.50	10.05	39.70	*****
9.00	12.06	51.76	*****
9.50	10.05	61.81	*****
10.00	6.04	71.86	*****
10.50	8.04	79.90	*****
11.00	8.04	87.94	*****
11.50	7.04	94.97	*****
12.00	5.03	100.00	*****

MEAN ST.DEV. SKEWNESS KURTOSIS

9.24 1.59 -.18 -.44 KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI

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

PERCENTILES	MEDIAN	9.43	5TH	6.41	16TH	7.65	25TH	8.21
			75TH	11.70	84TH	11.25	95TH	71.94
PCT. GRAVEL	.00	SAND	0.00	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00	
				(SEDIGRAPH)	21.61	(SEDIGRAPH)	78.39	
GRAVEL+SAND	.00	SILT/(SILT+CLAY)	21.61	PCT.GRAV+SAND/SILT+CLAY	.00			
LABELS SHEPARD	-CLAY	FOLK(GMS)-MUO		(SCS)-CLAY				

LAC CHASSI C1 21-22 CM SEDIGRAPH ANALYSIS

12/17/82

PHI	PCT.	CUMPCT.	
0	0.00	0.00	
4.00	0.00	0.00	
4.50	0.00	0.00	
5.00	0.00	0.00	
5.50	.50	.50	*
6.00	2.50	3.00	***
6.50	3.00	6.00	***
7.00	3.00	9.00	***
7.50	5.00	14.00	*****
8.00	7.00	21.00	*****
8.50	10.00	28.00	*****
9.00	12.00	38.00	*****
9.50	10.00	50.00	*****
10.00	11.00	60.00	*****
10.50	8.00	71.00	*****
11.00	8.00	79.00	*****
11.50	5.00	87.00	*****
12.00	8.00	92.00	*****
12.50		100.00	*****

MEAN ST.DEV. SKEWNESS KURTOSIS

9.21 1.56 -.19 -.55 KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI

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

PERCENTILES	MEDIAN	9.50	5TH	6.33	16TH	7.64	25TH	8.29
			75TH	10.75	84TH	11.31	95TH	*****
PCT. GRAVEL	.00	SAND	0.00	SILT (PIPETTE)	0.00	CLAY (PIPETTE)	0.00	
				(SEDIGRAPH)	21.00	(SEDIGRAPH)	79.00	
GRAVEL+SAND	.00	SILT/(SILT+CLAY)	21.00	PCT.GRAV+SAND/SILT+CLAY	.00			
LABELS SHEPARD	-CLAY	FOLK (GMS)-MUD		(SCS)-CLAY				

12/17/82

PHI	PCT. CUM PCT.	
3	0.00	
4.00	0.00	
4.50	1.00	*
5.00	0.00	
5.50	1.00	*
6.00	2.00	**
6.50	3.00	***
7.00	4.00	****
7.50	6.00	*****
8.00	7.00	*****
8.50	7.00	*****
9.00	8.00	*****
9.50	9.00	*****
10.00	12.00	*****
10.50	12.00	*****
11.00	12.00	*****
11.50	10.00	*****
12	8.00	*****
****	6.00	*****
	100.00	

MEAN ST.DEV. SKEWNESS KURTOSIS

8.99 1.61 -.21 -.20

~~KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI~~

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

PERCENTILES	MEDIAN 9.21	5TH 6.17	16TH 7.42	25TH 8.06
		75TH 10.50	84TH 11.06	95TH*****

PCT. GRAVEL	.00	SAND 0.00	SILT (PIPETTE) 0.00	CLAY (PIPETTE) 0.00
			(SEDIGRAPH) 24.00	(SEDIGRAPH) 76.00

GRAVEL+SAND .00 SILT/(SILT+CLAY) 24.00 PCT.GRAV+SAND/SILT+CLAY .00

LABELS SHEPARD -CLAY FOLK(GMS)-MUD (SCS)-CLAY

12/17/82

PHI	PCT. CUMFCT.	
4.00	0.00	0.00
4.50	0.00	0.00
5.00	1.00	1.00
5.50	.50	1.50
6.00	2.50	4.00
6.50	2.50	6.50
7.00	3.50	10.00
7.50	6.00	16.00
8.00	7.00	23.00
8.50	8.00	31.00
9.00	11.00	42.00
9.50	11.00	53.00
10.00	10.00	63.00
10.50	12.00	75.00
11.00	9.00	84.00
11.50	8.00	92.00
12.00	5.00	97.00
12.50	3.00	100.00

MEAN ST.DEV. SKEWNESS KURTOSIS

9.16 1.61 -.23 -.38

KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI

9.29 1.72 -.10 .97

FOLK GRAPHIC STATISTICAL PARAMETERS FOLK AND WARD, 1957

PERCENTILES	MEDIAN	5TH	16TH	25TH
	9.36	6.20	7.50	8.13
		75TH 10.50	84TH 11.00	95TH 11.80
PCT. GRAVEL	.00	SAND 0.00	SILT (PIPETTE) 0.00	CLAY (PIPETTE) 0.00
		(SEDIGRAPH) 23.00	(SEDIGRAPH) 23.00	(SEDIGRAPH) 77.00
GRAVEL+SAND	.00	SILT/(SILT+CLAY)	23.00 PCT.GRAV+SAND/SILT+CLAY	.00
LABELS SHEPARD -CLAY		FOLK(GMS)-MUD		(SCS)-CLAY

LAC CHASSI C1 24-25 CM SEDIGRAPH ANALYSIS

12/17/82

PHI	PCT. CUM PCT.	
0.00	0.00	
4.00	.99	*
4.50	.99	*
5.00	1.98	*
5.50	2.97	**
6.00	4.95	****
6.50	8.91	****
7.00	12.87	*****
7.50	20.79	*****
8.00	30.69	*****
8.50	42.57	*****
9.00	56.44	*****
9.50	69.31	*****
10.00	77.23	*****
10.50	84.16	****
11.00	88.12	*****
11.50	94.06	*****
1	99.50	
*****	100.00	

MEAN ST.DEV. SKEWNESS KURTOSIS

8.75	1.63	-.09	-.16	KRUMBEIN + PETTIJOHN (1938) MOMENT MEASURES FOR SIZE RANGE 4.0 TO 12.0 PHI
8.82	1.67	.03	1.07	FOLK GRAPHIC STATISTICAL PARAMETERS FOLK AND WARD, 1957

PERCENTILES	MEDIAN 8.77	5TH 5.01	16TH 7.20	25TH 7.71
		75TH 9.86	84TH 10.49	95TH 11.59
PCT. GRAVEL	.00	SAND 0.00	SILT (PIPETTE) 0.00	CLAY (PIPETTE) 0.00
			(SEDIGRAPH) 30.69	(SEDIGRAPH) 69.31
GRAVEL+SAND	.00	SILT/(SILT+CLAY)	30.69 PCT. GRAV+SAND/SILT+CLAY	.00
LABELS SHEPARD	-SILTY CLAY	FOLK(GMS)-MUD		(SCS)-CLAY