

PNEUMATIC HAMMER CORE CORE # G-14

PROJECT: Galveston Island Beach Replenishment

	DEPTH		LITHOLOGY	DESCRIPTION	GRAIN SIZE (PHI) MEAN	%SAND	%MUD
	CM.	IN. CONTACT					
STATE PLANNING COORDINATES 3353948.29 552010.86 LAT./LONG COORDINATES 29°17.035° N 094°45.096° W WATER DEPTH 25'3" DATE 5/11/94 START TIME 1251 END TIME 1255 CORE DIAMETER 3" LENGTH OF BARREL 20' PENETRATION DEPTH 13'8" LENGTH RECOVERED 11'4" SUPPORT VESSEL: R/V Lonestar POSITIONING: Trimble Differential GPS ANALYSIS BY: M. Hamilton Rice University ANALYSIS METHODS: Visual Logging Auto. Settling Tube	32	12	6	Mud 10YR6/2 Slightly muddy, very fine sand 5YR4/1	2.93	95.04	4.66
	64	24	13	Clay 5Y3/1			
	96	36	26	Gradational from interlaminated clay and clayey sand to interbedded clay and clayey sand			
	128	48			3.27	44.25	55.03
	160	60	60	Slightly muddy, very fine sand with bioturbation at upper contact and disturbed clay and sand laminae 5Y5/1			
	192	72					
	224	84	78	Interlaminated clayey sand and clay S:C=30:70			
	256	96	96	Slightly muddy, very fine sand Bioturbation on lower contact	2.95	81.69	18.20
	288	108	105	Gradational from clayey sand to texturally laminated sand 5Y4/1			
	320	120					
	352	132	130	Slightly muddy, very fine sand 5Y5/1			
	384	144	132				
	416	156					
	448	168					
	480	180					
		192					



SAND



MUDDY SAND



MUDDY SAND/CLAY
INTERLAM.



MUDDY SAND/CLAY
INTERBEDS



CLAYEY
SAND



SANDY
CLAY



SHELLY SAND



SHELL HASH

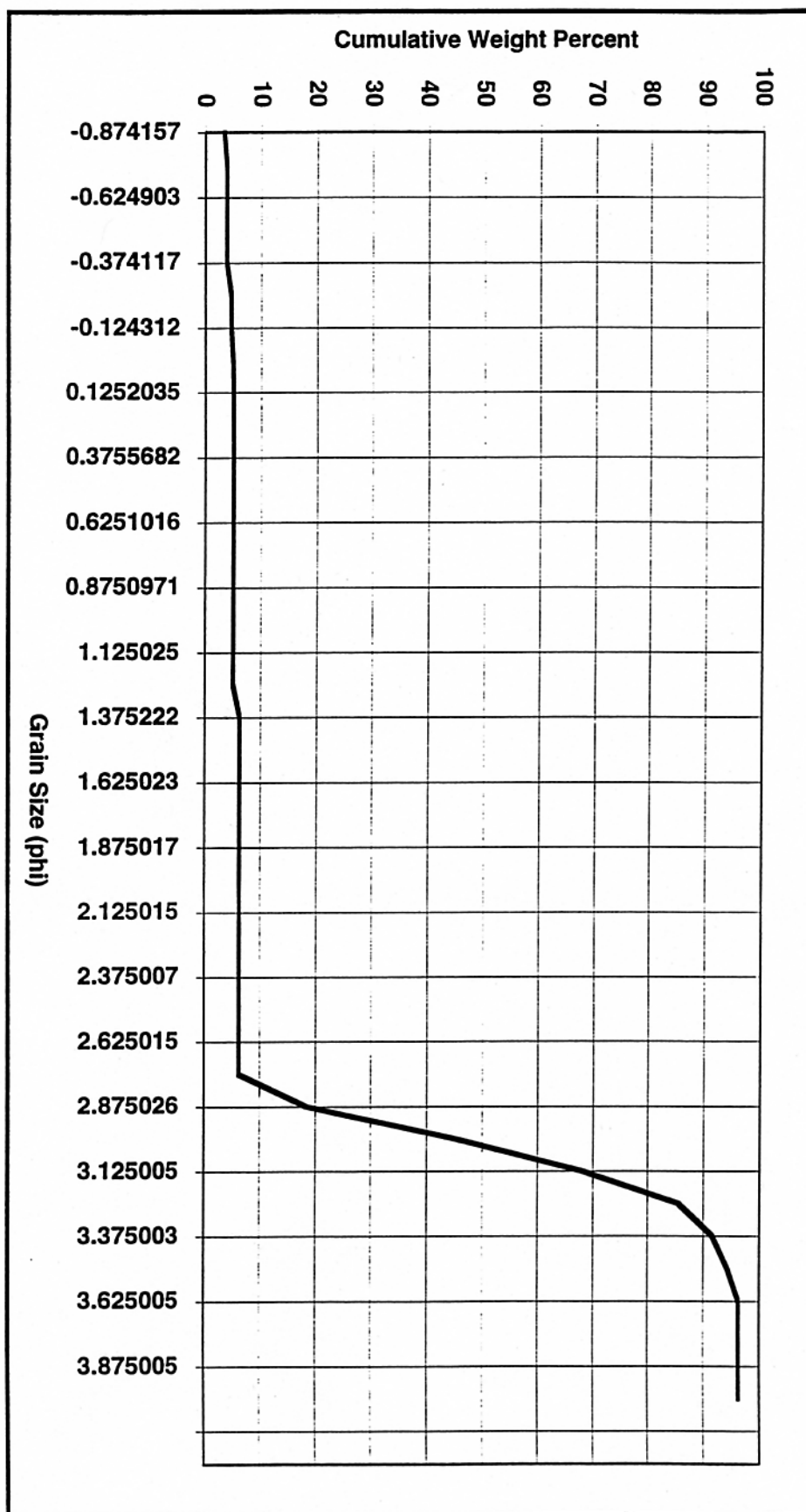


CLAY



MUD

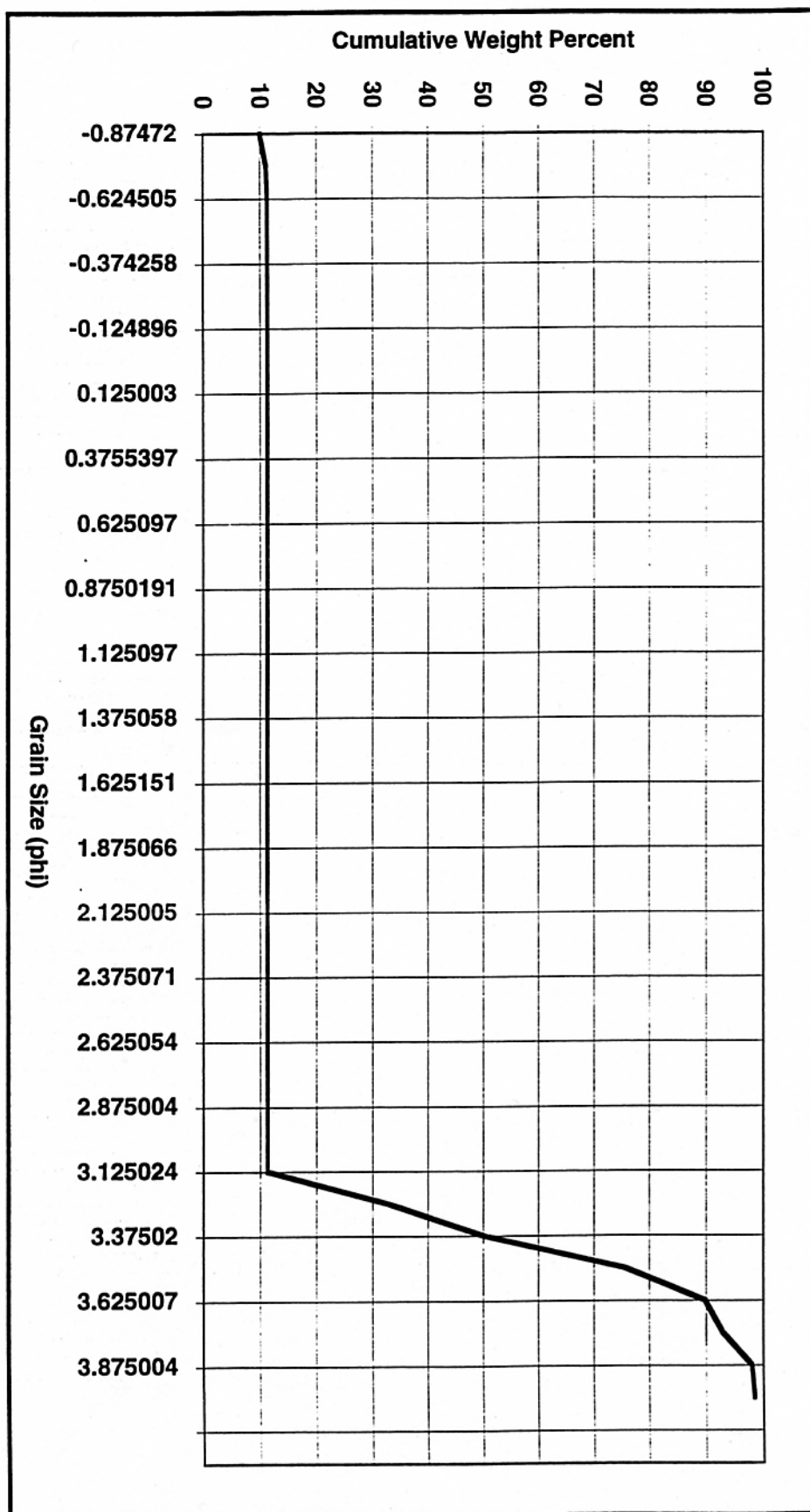
File	c	t18014.dat	Date	06-28-1994
Sample name	g-14-1'			
Data collected on	6/18/94			
Total settling time (min)	8.083333			
Settling distance (cm)	140			
Water temperature (degrees C)	21			
CUMULATIVE WEIGHT %		INDIVIDUAL WEIGHT %		
PHI	TIME(SEC)	% VALUE	RANGE	% VALUE
-0.9983899	5.160407	2.4		
-0.8741565	5.519304	3.2	-1	-0.875
-0.7497373	5.912152	3.7	-0.875	-0.75
-0.6249025	6.343801	3.7	-0.75	-0.625
-0.4996436	6.819101	3.7	-0.625	-0.5
-0.3741167	7.342902	3.7	-0.5	-0.375
-0.2495951	7.915204	4.5	-0.375	-0.25
-0.1243118	8.550557	4.5	-0.25	-0.125
2.51E-04	9.248951	4.8	-0.125	0
0.1252035	10.02496	4.9	0	0.125
0.2504074	10.88826	4.9	0.125	0.25
0.3755682	11.84856	4.9	0.25	0.375
0.5002926	12.91556	4.9	0.375	0.5
0.6251016	14.10865	4.9	0.5	0.625
0.7501019	15.44726	4.9	0.625	0.75
0.8750971	16.95067	4.9	0.75	0.875
1.000072	18.64336	4.9	0.875	1
1.125025	20.55427	4.9	1	1.125
1.250206	22.72218	4.9	1.125	1.25
1.375222	25.18113	6.1	1.25	1.375
1.500138	27.9796	6.1	1.375	1.5
1.625023	31.17583	6.1	1.5	1.625
1.750034	34.84249	6.1	1.625	1.75
1.875017	39.05711	6.1	1.75	1.875
2.000092	43.92166	6.1	1.875	2
2.125015	49.54277	6.1	2	2.125
2.250037	56.07092	6.1	2.125	2.25
2.375007	63.66588	6.1	2.25	2.375
2.500056	72.53645	6.1	2.375	2.5
2.625015	82.9105	6.1	2.5	2.625
2.750009	95.08424	6.1	2.625	2.75
2.875026	109.4013	18.3	2.75	2.875
3.000012	126.2651	44.7	2.875	3
3.125005	146.1695	67.8	3	3.125
3.250022	169.7019	85.4	3.125	3.25
3.375003	197.5455	91.5	3.25	3.375
3.500006	230.5401	94.3	3.375	3.5
3.625005	269.6649	96.3	3.5	3.625
3.75001	316.0943	96.3	3.625	3.75
3.875005	371.2144	96.3	3.75	3.875
4.000007	436.6894	96.3	3.875	4
SEDIMENT STATISTICS				
GROUPED MOMENT MEASURES (McBride, 1971)				
	.125 CHI	.125 PHI		
Mean	6.312372	2.937367		
Standard deviation	1.143778	0.6376517		
Skewness	-3.434305	-4.704491		
Kurtosis	14.45174	26.32232		
GRAPHIC MEASURES (Folk and Ward, 1957)				
	.125 CHI	.125 PHI		
Mean	6.551831	3.032081		
Standard deviation	0.6320448	0.4136716		
Skewness	-0.811947	-1.056264		
Kurtosis	3.158093	3.584829		
MODES				
Number	Velocity	CHI	PHI	Freq. %
1	1.081123	6.531326	3.021761	2.439034
2	0.414146	7.915645	3.802389	2.439022
3	1.217974	6.359373	2.918427	1.829275
4	0.4334231	7.850008	3.766923	1.829273
5	0.981836	6.670302	3.104009	1.829266
PARAMETERS USED				
Number of data points	1000			
Gibbs eq. constants	0.055804	0.003114	4.5	8.71E-03
Dynamic viscosity (poises)	0.01			
Acceleration of gravity (cm/s)	979.21			
Fluid density (g/ml)	0.998			
Particle density (g/cm3)	2.65			
Size conversion using Komar FORAM correction, RD	0.9859			



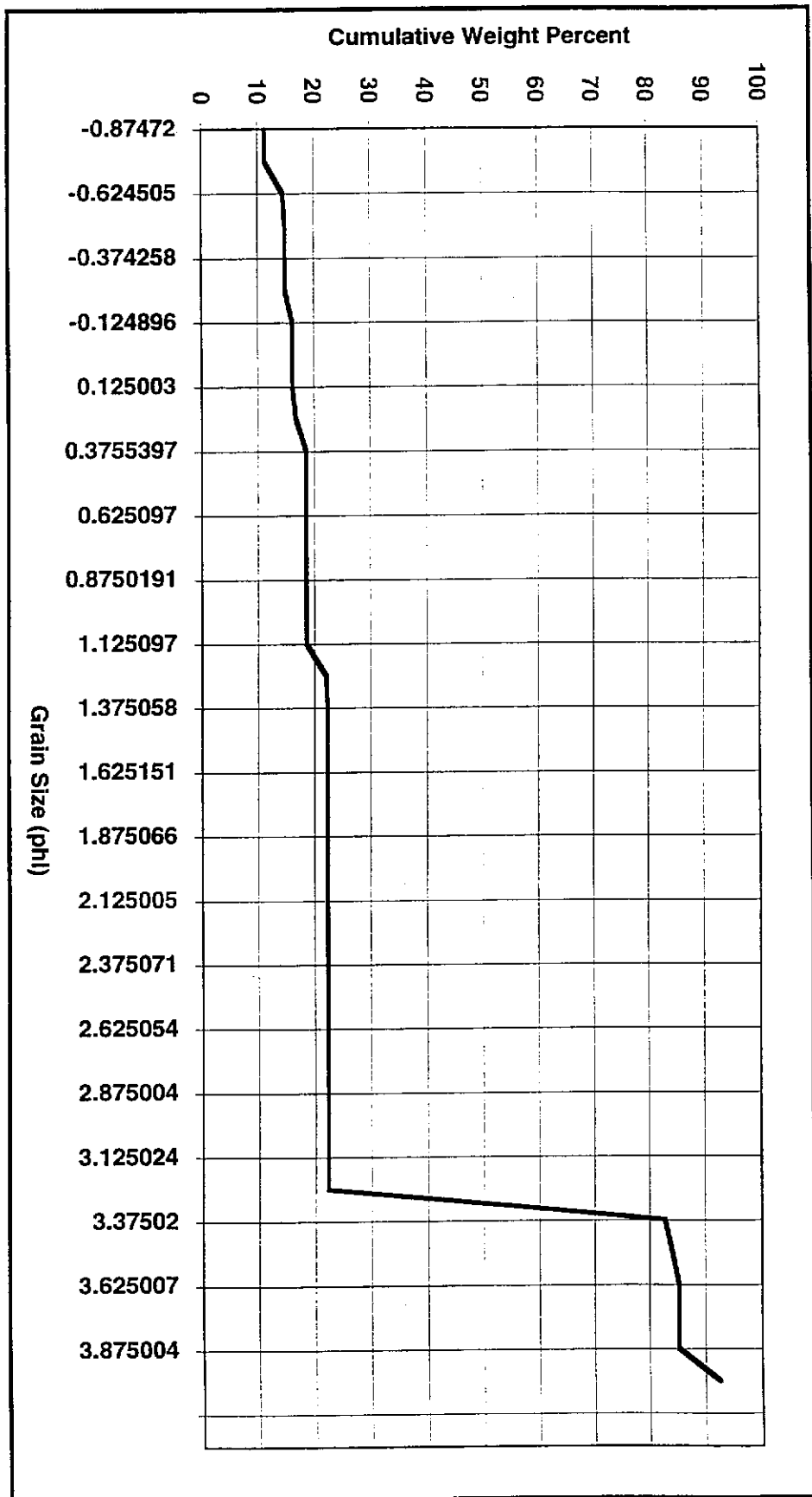
18014

File	c	t19014.dat	Date	05-28-1994
Sample name	g-14-4"			
Data collected on	6/17/94			
Total settling time (min)	8.066667			
Settling distance (cm)	140			
Water temperature (degrees C)	21			
	CUMULATIVE WEIGHT %		INDIVIDUAL WEIGHT %	
PHI	TIME(SEC)	% VALUE	RANGE	% VALUE
-0.9987372	5.159447	8.5		
-0.8747199	5.517604	9.8	-1	-0.875
-0.7490318	5.914483	11	-0.875	-0.75
-0.6245047	6.345241	11.2	-0.75	-0.625
-0.4995278	6.819561	11.2	-0.625	-0.5
-0.3742583	7.342282	11.2	-0.5	-0.375
-0.2499682	7.913404	11.2	-0.375	-0.25
-0.1248957	8.547447	11.2	-0.25	-0.125
3.00E-04	9.249241	11.2	-0.125	0
0.125003	10.02365	11.2	0	0.125
0.2506482	10.89001	11.2	0.125	0.25
0.3755397	11.84833	11.2	0.25	0.375
0.5000237	12.91313	11.2	0.375	0.5
0.625097	14.1086	11.2	0.5	0.625
0.7502809	15.44929	11.2	0.625	0.75
0.8750191	16.94968	11.2	0.75	0.875
1.000091	18.64364	11.2	0.875	1
1.125097	20.55544	11.2	1	1.125
1.250028	22.71888	11.2	1.125	1.25
1.375058	25.17768	11.2	1.25	1.375
1.500153	27.97997	11.2	1.375	1.5
1.625151	31.17932	11.2	1.5	1.625
1.750058	34.84326	11.2	1.625	1.75
1.875066	39.05887	11.2	1.75	1.875
2.00001	43.91824	11.2	1.875	2
2.125005	49.54228	11.2	2	2.125
2.250048	56.07149	11.2	2.125	2.25
2.375071	63.67005	11.2	2.25	2.375
2.500061	72.53685	11.2	2.375	2.5
2.625054	82.91396	11.2	2.5	2.625
2.750031	95.08652	11.2	2.625	2.75
2.875004	109.3985	11.2	2.75	2.875
3.000021	126.2683	11.2	2.875	3
3.125024	146.1729	11.2	3	3.125
3.250015	169.7004	32.7	3.125	3.25
3.37502	197.5495	50	3.25	3.375
3.500002	230.539	75.5	3.375	3.5
3.625007	269.6655	89.8	3.5	3.625
3.750002	316.0908	92.9	3.625	3.75
3.875004	371.2139	98	3.75	3.875
4.000007	436.6891	98.5	3.875	4
SEDIMENT STATISTICS				
GROUPED MOMENT MEASURES (McBride, 1971)				
	.125 CHI	.125 PHI		
Mean	6.873868	3.277222		
Standard deviation	1.366159	0.749238		
Skewness	-3.292263	-5.02776		
Kurtosis	13.02855	28.06854		
GRAPHIC MEASURES (Folk and Ward, 1957)				
	.125 CHI	.125 PHI		
Mean	7.130448	3.367128		
Standard deviation	1.679055	1.822207		
Skewness	-0.6540528	-1.095911		
Kurtosis	7.999603	16.25355		
MODES				
Number	Velocity	CHI	PHI	Freq. %
1	0.9300842	6.748423	3.149776	2.551021
2	0.8634514	6.855669	3.212092	2.040814
3	0.3984245	7.971478	3.832469	2.040813
4	0.6471056	7.271783	3.44882	2.040813
5	0.7213371	7.11511	3.360569	2.040813
PARAMETERS USED				
Number of data points	1000			
Gibbs eq. constants	0.055804	0.003114	4.5	8.71E-03
Dynamic viscosity (poises)	0.01			
Acceleration of gravity (cm/s)	979.21			
Fluid density (g/ml)	0.998			
Particle density (g/cm3)	2.65			
Size conversion using Komer FORAM correction, RD	0.9859			

19014



File	c	t20014.dat	Date	06-28-1994
Sample name	g-14-8.7'			
Date collected on	6/13/84			
Total settling time (min)	8.066667			
Settling distance (cm)	140			
Water temperature (degrees C)	21			
	CUMULATIVE WEIGHT %		INDIVIDUAL WEIGHT %	
PHI	TIME(SEC)	% VALUE	RANGE	% VALUE
-0.9987372	5.159447	11.1		
-0.8747199	5.517604	11.1		
-0.7490318	5.914483	11.1	-0.875	-0.75
-0.6245047	6.345241	14.4	-0.75	-0.625
-0.4995278	6.819561	14.8	-0.625	-0.5
-0.3742583	7.342282	14.8	-0.5	-0.375
-0.2499682	7.913404	14.8	-0.375	-0.25
-0.1248957	8.547447	16.1	-0.25	-0.125
3.00E-04	9.249241	16.1	-0.125	0
0.125003	10.02365	16.1	0	0.125
0.2506482	10.89001	16.7	0.125	0.25
0.3755397	11.84833	18.5	0.25	0.375
0.5000237	12.91313	18.5	0.375	0.5
0.625097	14.1086	18.5	0.5	0.625
0.7502809	15.44929	18.5	0.625	0.75
0.8750191	16.84968	18.5	0.75	0.875
1.000091	18.64364	18.5	0.875	1
1.125097	20.55544	18.5	1	1.125
1.250028	22.71888	22	1.125	1.25
1.375058	25.17768	22.2	1.25	1.375
1.500153	27.97997	22.2	1.375	1.5
1.625151	31.17932	22.2	1.5	1.625
1.750058	34.84326	22.2	1.625	1.75
1.875066	39.05887	22.2	1.75	1.875
2.00001	43.91824	22.2	1.875	2
2.125005	49.54228	22.2	2	2.125
2.250048	56.07149	22.2	2.125	2.25
2.375071	63.67005	22.2	2.25	2.375
2.500061	72.53685	22.2	2.375	2.5
2.625054	82.91396	22.2	2.5	2.625
2.750031	95.08652	22.2	2.625	2.75
2.875004	109.3985	22.2	2.75	2.875
3.000021	126.2663	22.2	2.875	3
3.125024	146.1729	22.2	3	3.125
3.250015	169.7004	22.2	3.125	3.25
3.37502	197.5495	82.7	3.25	3.375
3.500002	230.539	84	3.375	3.5
3.625007	269.6655	85.2	3.5	3.625
3.750002	316.0908	85.2	3.625	3.75
3.875004	371.2139	85.2	3.75	3.875
4.000007	436.6891	92.6	3.875	4
SEDIDAT STATISTICS				
GROUPED MOMENT MEASURES (McBride, 1971)				
	.125 CHI	.125 PHI		
Mean	6.462341	2.952684		
Standard deviation	1.498047	1.139528		
Skewness	-2.187442	-2.25916		
Kurtosis	6.129206	6.79001		
GRAPHIC MEASURES (Folk and Ward, 1957)				
	.125 CHI	.125 PHI		
Mean	5.543977	2.154163		
Standard deviation	2.769287	2.861048		
Skewness	-0.924051	-1.026849		
Kurtosis	15.03851	31.33693		
MODES				
Number	Velocity	CHI	PHI	Freq. %
1	0.7672578	7.026073	3.309957	14.81481 ;
2	0.3403014	8.198971	3.954242	5.55558 ;
3	0.3275835	8.253922	3.98348	5.555542 ;
4	0.3320967	8.234181	3.972984	3.70372 ;
5	0.408554	7.935257	3.812964	3.70372 ;
PARAMETERS USED				
Number of data points	1000			
Gibbs eq. constants	0.055804	0.003114	4.5	8.71E-03
Dynamic viscosity (poises)	0.01			
Acceleration of gravity (cm/s)	979.21			
Fluid density (g/ml)	0.998			
Particle density (g/cm3)	2.65			
Size conversion using Kormer FORAM correction, AD				
	0.9859			



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