

PNEUMATIC HAMMER CORE CORE # G-13

PROJECT: Galveston Island Beach Replenishment

STATE PLANNING COORDINATES	DEPTH		LITHOLOGY	DESCRIPTION	GRAIN SIZE (PHI) MEAN	%SAND	%MUD
	CM.	IN.					
3352826.44							
553771.05							
LAT./LONG							
COORDINATES							
29°17.332° N							
094°45.295° W							
WATER DEPTH							
23'2"							
DATE							
5/10/94							
START TIME							
1846							
END TIME							
1902							
CORE DIAMETER							
3"							
LENGTH OF BARREL							
20'							
PENETRATION DEPTH							
16'5"							
LENGTH RECOVERED							
16'0"							
SUPPORT VESSEL:							
R/V Lonestar							
POSITIONING:							
Trimble Differential GPS							
ANALYSIS BY:							
M. Hamilton							
Rice University							
ANALYSIS METHODS:							
Visual Logging							
Auto. Settling Tube							
	32	12	7	Very muddy sand, heavy bioturbation 5YR4/1 Clay 5Y4/1	2.90	80.78	19.22
			12				
			19	Interlaminated sand and clay			
	64	24		Slightly muddy, v. fine sand with shell lag at base 5Y6/1	2.91	93.60	6.40
			34				
	96	36	40	Interlaminated clayey sand and sandy clay S:C 20:80			
				Muddy sand with mud filled burrows, heavy bioturbation 5Y5/1			
	128	48	57				
				Clay with very thin laminae of sandy clay 5Y4/1	3.04	64.24	22.01
	160	60	66				
			72	Very fine sand with mud filled burrows 5Y5/1			
	192	72	78				
			84	Interbedded clay, sandy clay, clayey sand S:C= 30:70			
	224	84					
			95	Very fine sand 5Y6/1			
	256	96	103				
				Interlaminated sandy clay, clayey sand gradational to slightly sandy clay with abundant laminae			
	288	108					
			117				
	320	120	124				
	352	132					
			144				
	384	144		Slightly sandy clay with numerous very thin, sandy clay laminae 5Y3/1	3.09	4.59	95.00
			156				
	416	156					
			168				
	448	168					
			180				
	480	180					
			192				
	480	192	192				



SAND



MUDDY SAND



MUDDY SAND/CLAY
INTERLAM.



MUDDY SAND/CLAY
INTERBEDS



CLAYEY
SAND



SANDY
CLAY



SHELLY SAND



SHELL HASH

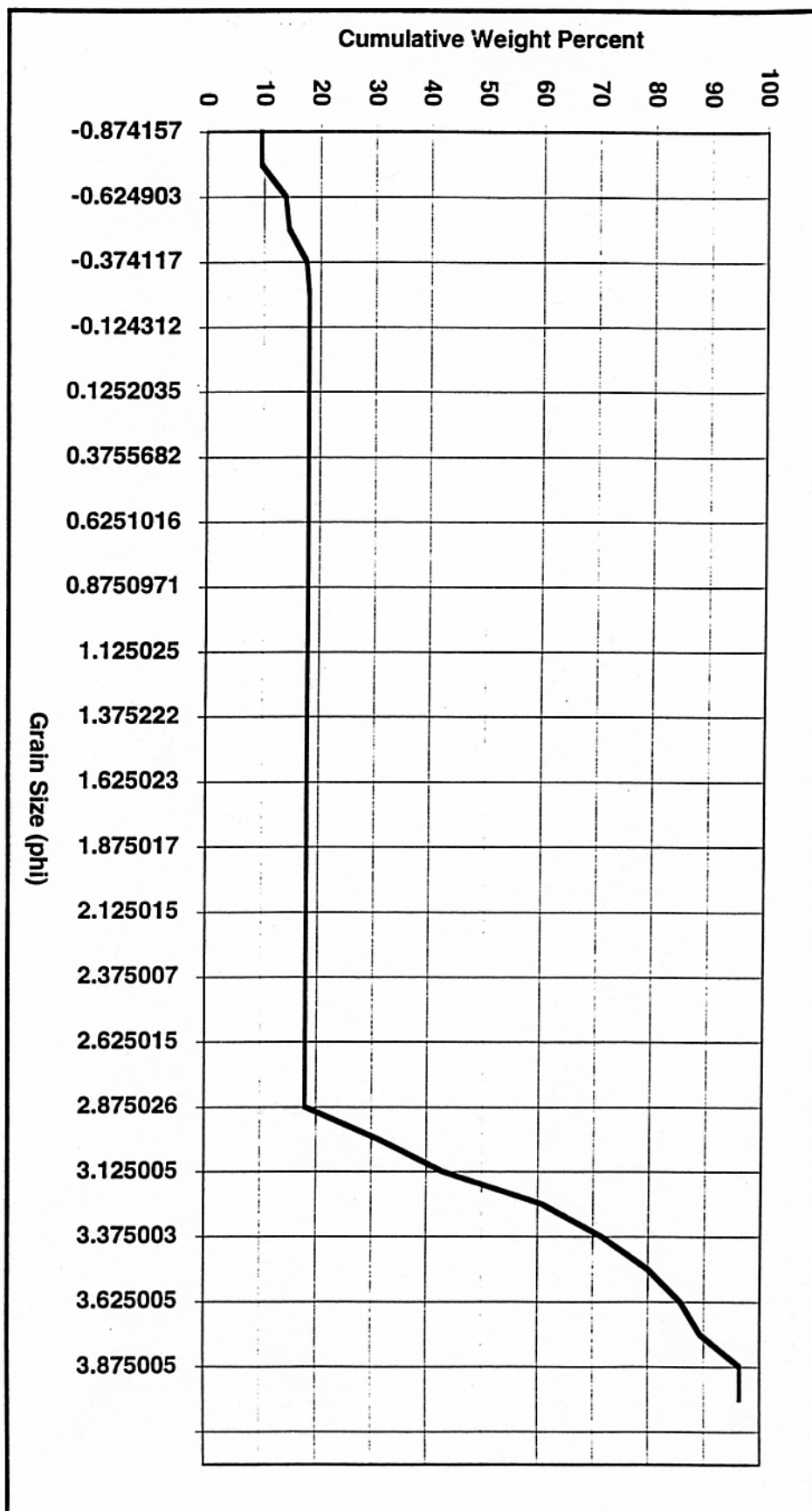


CLAY



MUD

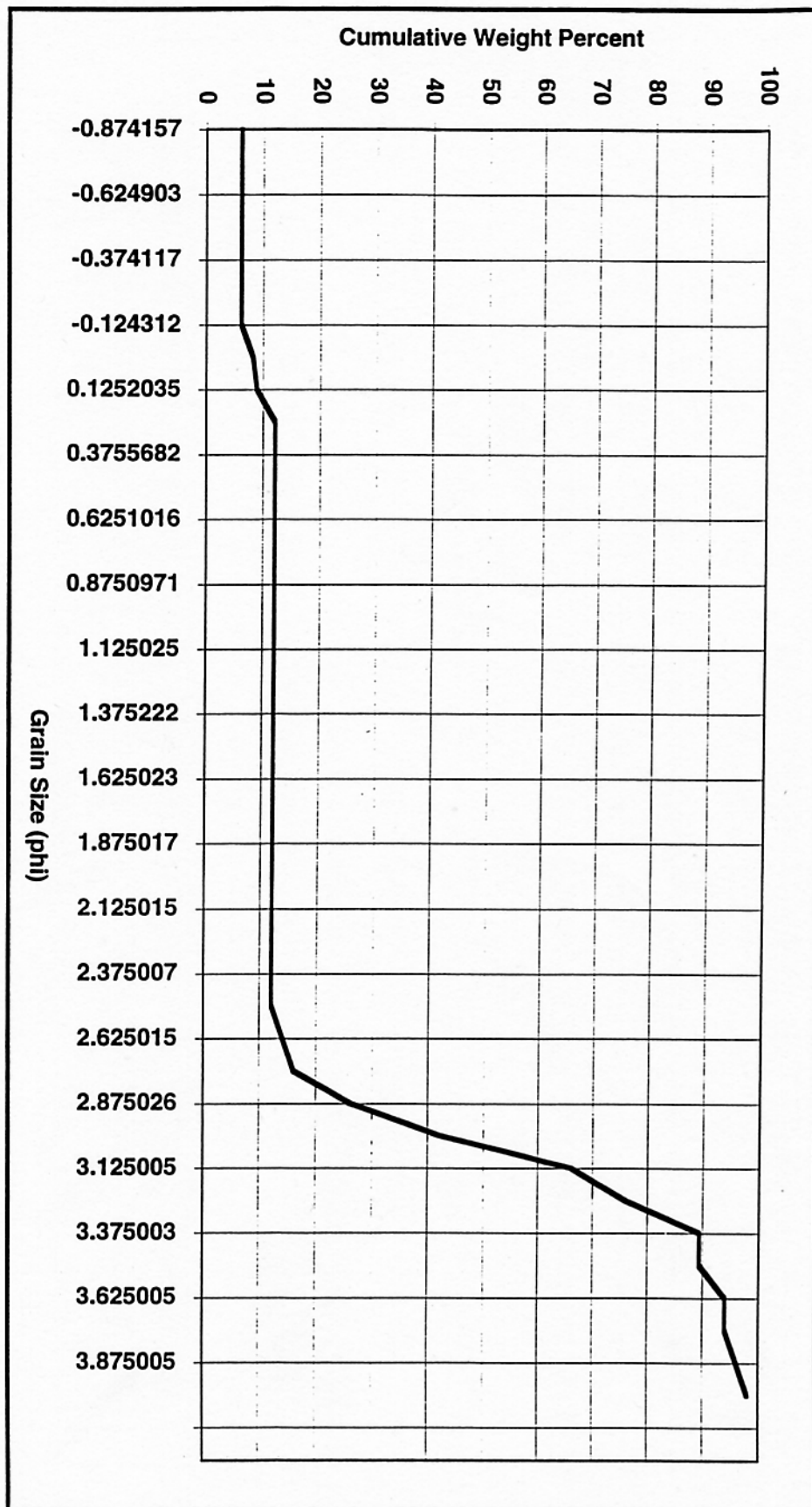
File	c	t14013.dat	Date	06-26-1994
Sample name	g-13-0.4'			
Date collected on	6/27/94			
Total settling time (min)	8.083333			
Settling distance (cm)	140			
Water temperature (degrees C)	21			
	CUMULATIVE WEIGHT %		INDIVIDUAL WEIGHT %	
PHI	TIME(SEC)	% VALUE	RANGE	% VALUE
-0.9983899	5.160407	9.4		
-0.8741565	5.519304	9.4	-1.1	-0.875
-0.7497373	5.912152	9.4	-0.875	-0.75
-0.6249025	6.343801	13.7	-0.75	-0.625
-0.4996436	6.819101	14.3	-0.625	-0.5
-0.3741167	7.342902	17.4	-0.5	-0.375
-0.2495951	7.915204	17.9	-0.375	-0.25
-0.1243118	8.550557	17.9	-0.25	-0.125
2.51E-04	9.248951	17.9	-0.125	0
0.1252035	10.02496	17.9	0	0.125
0.2504074	10.88826	17.9	0.125	0.25
0.3755682	11.84856	17.9	0.25	0.375
0.5002926	12.91556	17.9	0.375	0.5
0.6251016	14.10885	17.9	0.5	0.625
0.7501019	15.44726	17.9	0.625	0.75
0.8750971	16.95067	17.9	0.75	0.875
1.000072	18.64336	17.9	0.875	1
1.125025	20.55427	17.9	1	1.125
1.250206	22.72218	17.9	1.125	1.25
1.375222	25.18113	17.9	1.25	1.375
1.500138	27.9796	17.9	1.375	1.5
1.625023	31.17583	17.9	1.5	1.625
1.750034	34.84249	17.9	1.625	1.75
1.875017	39.05711	17.9	1.75	1.875
2.000092	43.92166	17.9	1.875	2
2.125015	49.54277	17.9	2	2.125
2.250037	56.07092	17.9	2.125	2.25
2.375007	63.66588	17.9	2.25	2.375
2.500056	72.53645	17.9	2.375	2.5
2.625015	82.9105	17.9	2.5	2.625
2.750009	95.08424	17.9	2.625	2.75
2.875026	109.4013	17.9	2.75	2.875
3.000012	126.2851	31	2.875	3
3.125005	146.1695	42.9	3	3.125
3.250022	169.7019	60.7	3.125	3.25
3.375003	197.5455	71.4	3.25	3.375
3.500006	230.5401	79.8	3.375	3.5
3.625005	269.6649	85.7	3.5	3.625
3.75001	316.0943	89.3	3.625	3.75
3.875005	371.2144	96.4	3.75	3.875
4.000007	436.6894	96.4	3.875	4
SEDIMENT STATISTICS				
GROUPED MOMENT MEASURES (McBride, 1971)				
	.125 CHI	.125 PHI		
Mean	6.879807	2.90273		
Standard deviation	0.3006362	1.169588		
Skewness	7.08E-02	-2.477447		
Kurtosis	1.891437	7.670355		
GRAPHIC MEASURES (Folk and Ward, 1957)				
	.125 CHI	.125 PHI		
Mean	4.00289	-0.3837441		
Standard deviation	3.976748	5.00071		
Skewness	-0.9321227	-1.025013		
Kurtosis	4.071328	8.977757		
MODES				
Number	Velocity	CHI	PHI	Freq. %
1	1.1879	6.395442	2.940253	7.142854
2	0.377827	8.048059	3.873598	5.357162
3	0.8800603	6.828182	3.196176	5.357161
4	1.330229	6.232181	2.840786	5.357144
5	1.577376	5.98633	2.687536	5.357144
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			



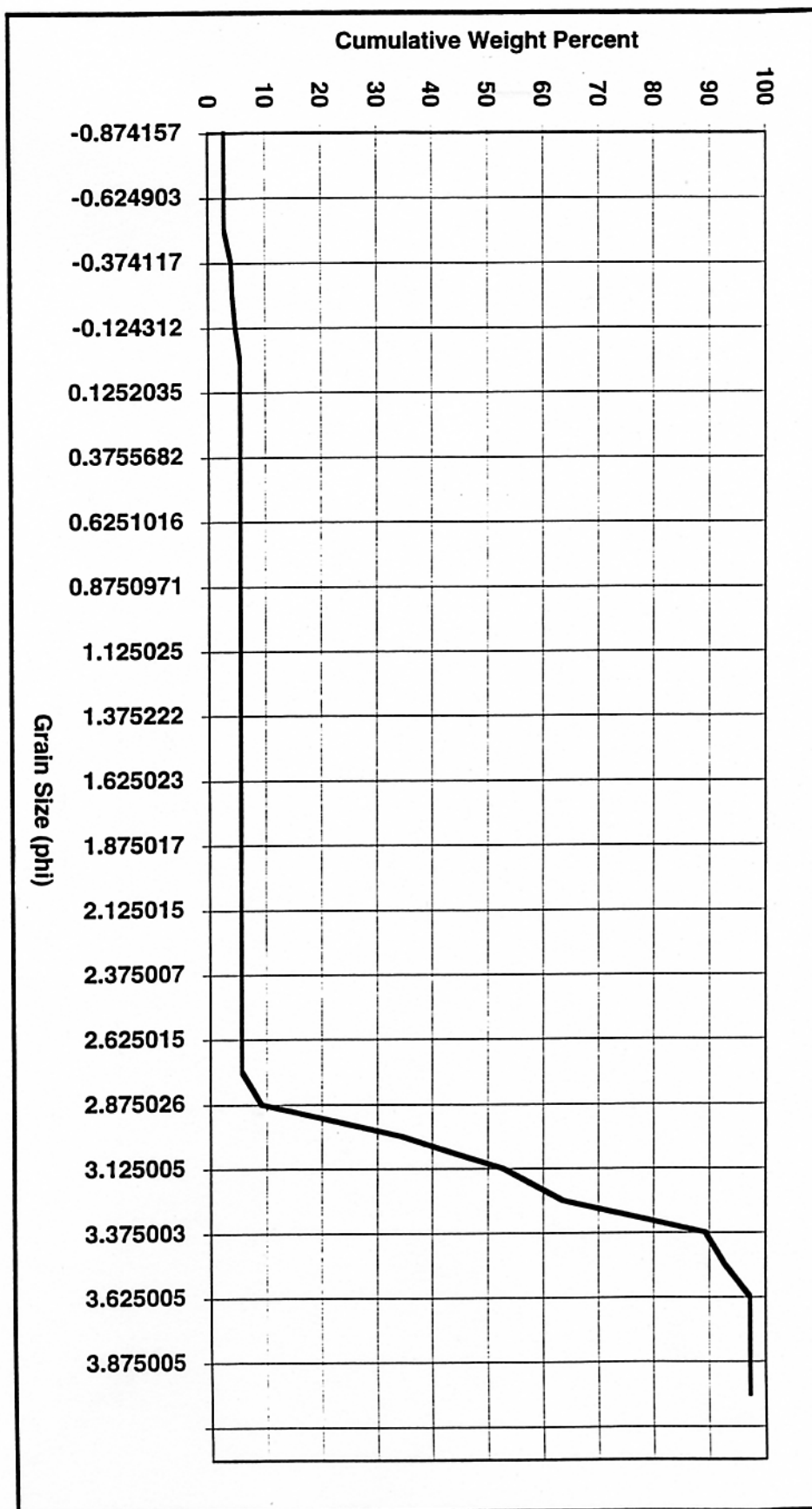
14013

File	a	t15013.dat	Date	06-28-1994
Sample name	g-13-2'			
Data collected on	6/27/94			
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	6		
-0.8741565	5.519304	6	-1	-0.875
-0.7497373	5.912152	6	-0.875	-0.75
-0.6249025	6.343801	6	-0.75	-0.625
-0.4996436	6.819101	6	-0.625	-0.5
-0.3741167	7.342902	6	-0.5	-0.375
-0.2495951	7.915204	6	-0.375	-0.25
-0.1243118	8.550557	6	-0.25	-0.125
2.51E-04	9.248951	8	-0.125	0
0.1252035	10.02496	8.7	0	0.125
0.2504074	10.88826	12	0.125	0.25
0.3755682	11.84856	12	0.25	0.375
0.5002926	12.91556	12	0.375	0.5
0.6251016	14.10865	12	0.5	0.625
0.7501019	15.44726	12	0.625	0.75
0.8750971	16.95067	12	0.75	0.875
1.000072	18.64336	12	0.875	1
1.125025	20.55427	12	1	1.125
1.250206	22.72218	12	1.125	1.25
1.375222	25.18113	12	1.25	1.375
1.500138	27.9796	12	1.375	1.5
1.625023	31.17583	12	1.5	1.625
1.750034	34.84249	12	1.625	1.75
1.875017	39.05711	12	1.75	1.875
2.000092	43.92166	12	1.875	2
2.125015	49.54277	12	2	2.125
2.250037	56.07092	12	2.125	2.25
2.375007	63.66588	12	2.25	2.375
2.500056	72.53645	12	2.375	2.5
2.625015	82.9105	14	2.5	2.625
2.750009	95.08424	16	2.625	2.75
2.875026	109.4013	26	2.75	2.875
3.000012	126.2651	42	2.875	3
3.125005	146.1695	66	3	3.125
3.250022	169.7019	76	3.125	3.25
3.375003	197.5455	89.4	3.25	3.375
3.500006	230.6401	89.4	3.375	3.5
3.625005	269.6649	94	3.5	3.625
3.75001	316.0943	94	3.625	3.75
3.875005	371.2144	96	3.75	3.875
4.000007	436.6894	98	3.875	4
SEDIDAT STATISTICS				
GROUPED MOMENT MEASURES (McBride, 1971)				
Mean		.125 CHI	.125 PHI	
Standard deviation		6.420942	2.911005	
Skewness		1.055139	0.7902433	
Kurtosis		-2.51398	-2.851873	
		9.860318	10.83734	
GRAPHIC MEASURES (Folk and Ward, 1957)				
Mean		.125 CHI	.125 PHI	
Standard deviation		6.481676	2.984947	
Skewness		1.704737	1.842253	
Kurtosis		-0.9340304	-1.591038	
		6.333088	12.51251	
MODES				
Number	Velocity	CH	PHI	Freq. %
1	8.018328	3.640555	.9143023	4.000005 ;
2	0.9341741	6.742093	3.14608	3.000011 ;
3	0.457464	7.772126	3.724887	3.000008 ;
4	4.44092	4.492998	1.637696	3.000001 ;
5	1.749453	5.836952	2.592201	2.999992 ;
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			

15013

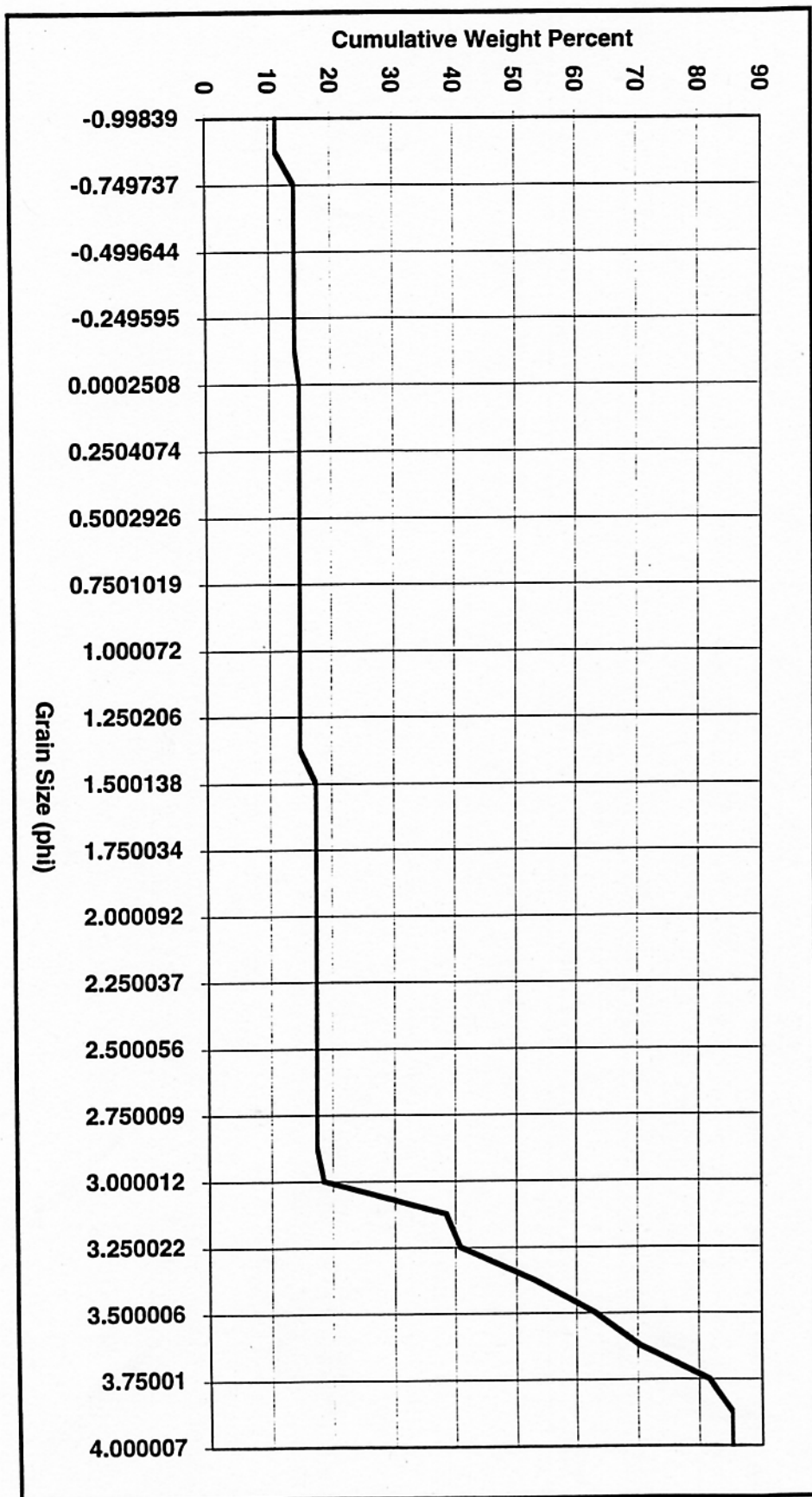


File	a	t16013.dat	Date	06-28-1994
Sample name	g-13-5'			
Data collected on	6/14/94			
Total settling time (min)	8.083333			
Settling distance (cm)	140			
Water temperature (degrees C)	21			
CUMULATIVE WEIGHT %		INDIVIDUAL WEIGHT %		
PHI	TIME(SEC)	% VALUE	RANGE	% VALUE
-0.9983899	5.160407	2.7		
-0.8741565	5.519304	2.7	-1	-0.875
-0.7497373	5.912152	2.7	-0.875	-0.75
-0.6249025	6.343801	2.7	-0.75	-0.625
-0.4996436	6.819101	2.7	-0.625	-0.5
-0.3741167	7.342902	3.9	-0.5	-0.375
-0.2495951	7.915204	4.1	-0.375	-0.25
-0.1243118	8.550557	4.6	-0.25	-0.125
2.51E-04	9.248951	5.4	-0.125	0
0.1252035	10.02496	5.4	0	0.125
0.2504074	10.88826	5.4	0.125	0.25
0.3755682	11.84856	5.4	0.25	0.375
0.5002926	12.91556	5.4	0.375	0.5
0.6251016	14.10865	5.4	0.5	0.625
0.7501019	15.44726	5.4	0.625	0.75
0.8750971	16.95067	5.4	0.75	0.875
1.000072	18.64336	5.4	0.875	1
1.125025	20.55427	5.4	1	1.125
1.250206	22.72218	5.4	1.125	1.25
1.375222	25.18113	5.4	1.25	1.375
1.500138	27.9796	5.4	1.375	1.5
1.625023	31.17583	5.4	1.5	1.625
1.750034	34.84249	5.4	1.625	1.75
1.875017	39.05711	5.4	1.75	1.875
2.000092	43.92166	5.4	1.875	2
2.125015	49.54277	5.4	2	2.125
2.250037	56.07092	5.4	2.125	2.25
2.375007	63.66588	5.4	2.25	2.375
2.500056	72.53645	5.4	2.375	2.5
2.625015	82.9105	5.4	2.5	2.625
2.750009	95.08424	5.4	2.625	2.75
2.875026	109.4013	8.9	2.75	2.875
3.000012	126.2651	34.2	2.875	3
3.125005	146.1695	52.7	3	3.125
3.250022	169.7019	63.5	3.125	3.25
3.375003	197.5455	89.2	3.25	3.375
3.500006	230.5401	92.8	3.375	3.5
3.625005	269.6649	97.3	3.5	3.625
3.75001	316.0943	97.3	3.625	3.75
3.875005	371.2144	97.3	3.75	3.875
4.000007	436.6894	97.3	3.875	4
SEDIMENT STATISTICS				
GROUPED MOMENT MEASURES (McBride, 1971)				
		.125 CHI	.125 PHI	
Mean		6.654392	3.044926	
Standard deviation		0.8050393	0.6000614	
Skewness		-3.936455	-4.787175	
Kurtosis		21.55531	27.03878	
GRAPHIC MEASURES (Folk and Ward, 1957)				
		.125 CHI	.125 PHI	
Mean		6.68491	3.110622	
Standard deviation		0.8763472	0.6405916	
Skewness		-1.629492	-2.392911	
Kurtosis		3.112283	4.056187	
MODES				
Number	Velocity	CHI	PHI	Freq. %
1	0.7759672	7.009789	3.300663	4.054058 ;
2	1.005783	6.635537	3.083536	3.378378 ;
3	1.192809	6.389493	2.936659	2.702713 ;
4	0.8747266	6.836952	3.201258	2.027035 ;
5	1.093408	6.515024	3.012042	2.027035 ;
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			



16013

File	a	t17013.dat	Date	06-28-1994
Sample name	g-13-12'			
Data collected on	6/27/94			
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	11.1		
-0.8741585	5.519304	11.1	-1	-0.875
-0.7497373	5.912152	14.1	-0.875	-0.75
-0.6249025	6.343801	14.1	-0.75	-0.625
-0.4996436	6.819101	14.1	-0.625	-0.5
-0.3741167	7.342902	14.1	-0.5	-0.375
-0.2495951	7.915204	14.1	-0.375	-0.25
-0.1243118	8.550557	14.1	-0.25	-0.125
2.51E-04	9.248951	14.8	-0.125	0
0.1252035	10.02496	14.8	0	0.125
0.2504074	10.88826	14.8	0.125	0.25
0.3755682	11.84856	14.8	0.25	0.375
0.5002926	12.91556	14.8	0.375	0.5
0.6251016	14.10865	14.8	0.5	0.625
0.7501019	15.44726	14.8	0.625	0.75
0.8750971	16.95067	14.8	0.75	0.875
1.000072	18.64336	14.8	0.875	1
1.125025	20.55427	14.8	1	1.125
1.250206	22.72218	14.8	1.125	1.25
1.375222	25.18113	14.8	1.25	1.375
1.500138	27.9796	17.4	1.375	1.5
1.625023	31.17583	17.4	1.5	1.625
1.750034	34.84249	17.4	1.625	1.75
1.875017	39.05711	17.4	1.75	1.875
2.000092	43.92166	17.4	1.875	2
2.125015	49.54277	17.4	2	2.125
2.250037	56.07092	17.4	2.125	2.25
2.375007	63.66588	17.4	2.25	2.375
2.500056	72.53645	17.4	2.375	2.5
2.625015	82.9105	17.4	2.5	2.625
2.750009	95.08424	17.4	2.625	2.75
2.875026	109.4013	17.4	2.75	2.875
3.000012	126.2651	18.5	2.875	3
3.125005	146.1695	38.4	3	3.125
3.250022	169.7019	40.7	3.125	3.25
3.375003	197.5455	53	3.25	3.375
3.500006	230.5401	63	3.375	3.5
3.625005	269.6649	70.4	3.5	3.625
3.75001	316.0943	81.5	3.625	3.75
3.875005	371.2144	85.2	3.75	3.875
4.000007	436.6894	85.2	3.875	4
SEDIDAT STATISTICS				
GROUPED MOMENT MEASURES (McBride, 1971)				
		.125 CHI	.125 PHI	
Mean		6.504014	3.094213	
Standard deviation		2.008692	0.9661573	
Skewness		-1.768926	-3.108579	
Kurtosis		4.72444	12.24787	
GRAPHIC MEASURES (Folk and Ward, 1957)				
		.125 CHI	.125 PHI	
Mean		6.35203	2.830258	
Standard deviation		1.87842	1.38307	
Skewness		-0.6169754	-0.7158977	
Kurtosis		2.585078	3.692658	
MODES				
Number	Velocity	CHI	PHI	Freq. %
1	0.9719185	6.684949	3.112615	7.407397
2	1.077089	6.536719	3.024974	5.555557
3	0.2912813	8.423371	4.073247	5.555542
4	0.3097208	8.334816	4.026406	5.555538
5	0.3404007	8.19855	3.954018	5.555538
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			



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