

PNEUMATIC HAMMER CORE **CORE # G-11**

PROJECT: Galveston Island Beach Replenishment

STATE PLANNING COORDINATES	DEPTH		LITHOLOGY	DESCRIPTION	GRAIN SIZE (PHI) MEAN	%SAND	%MUD
	CM.	IN. CONTACT					
3349580.87							
552968.13	32	12	3	Muddy, very fine sand 10YR5/2	3.03	83.92	15.63
LAT/LONG				Clay, bioturbation at base			
COORDINATES				with sand filled burrows			
29°17.219° N	64	24	22	Highly laminated, muddy			
094°45.911° W				very fine sand transitional			
WATER DEPTH				to cleaner sand			
21'5"	96	36	30	Clay with sandy clay laminae	3.05	98.48	1.45
DATE				5Y3/1			
5/10/94	128	48	47	Muddy, very fine sand with			
START TIME				shells concentrated in			
1826	160	60		burrows 5Y4/1			
END TIME							
1830	192	72	72	Highly laminated clay and sand	3.13	71.13	28.87
CORE DIAMETER							
3"	224	84	78	Clayey sand - laminae			
LENGTH OF BARREL				in upper section; non-			
20'	256	96		laminated cleaner sands			
PENETRATION DEPTH				near base 5Y4/1			
15'11"	288	108	110	Clay with very thin laminae	3.13	71.13	28.87
LENGTH RECOVERED				of clayey sand 5YR3/1			
13'8"	320	120					
SUPPORT VESSEL:	352	132	137	Highly laminated (textural),			
R/V Lonestar				muddy, very fine sand; lam -			
POSITIONING:	416	144		inae are rippled near base and			
Trimble Differential GPS	448	156		contain organics. 5YR5/1			
ANALYSIS BY:	480	160					
M. Hamilton							
Rice University							
ANALYSIS METHODS:							
Visual Logging							
Auto. Settling Tube							



SAND



MUDDY SAND



MUDDY SAND/CLAY
INTERLAM.



MUDDY SAND/CLAY
INTERBEDS



CLAYEY
SAND



SANDY
CLAY



SHELLY SAND



SHELL HASH



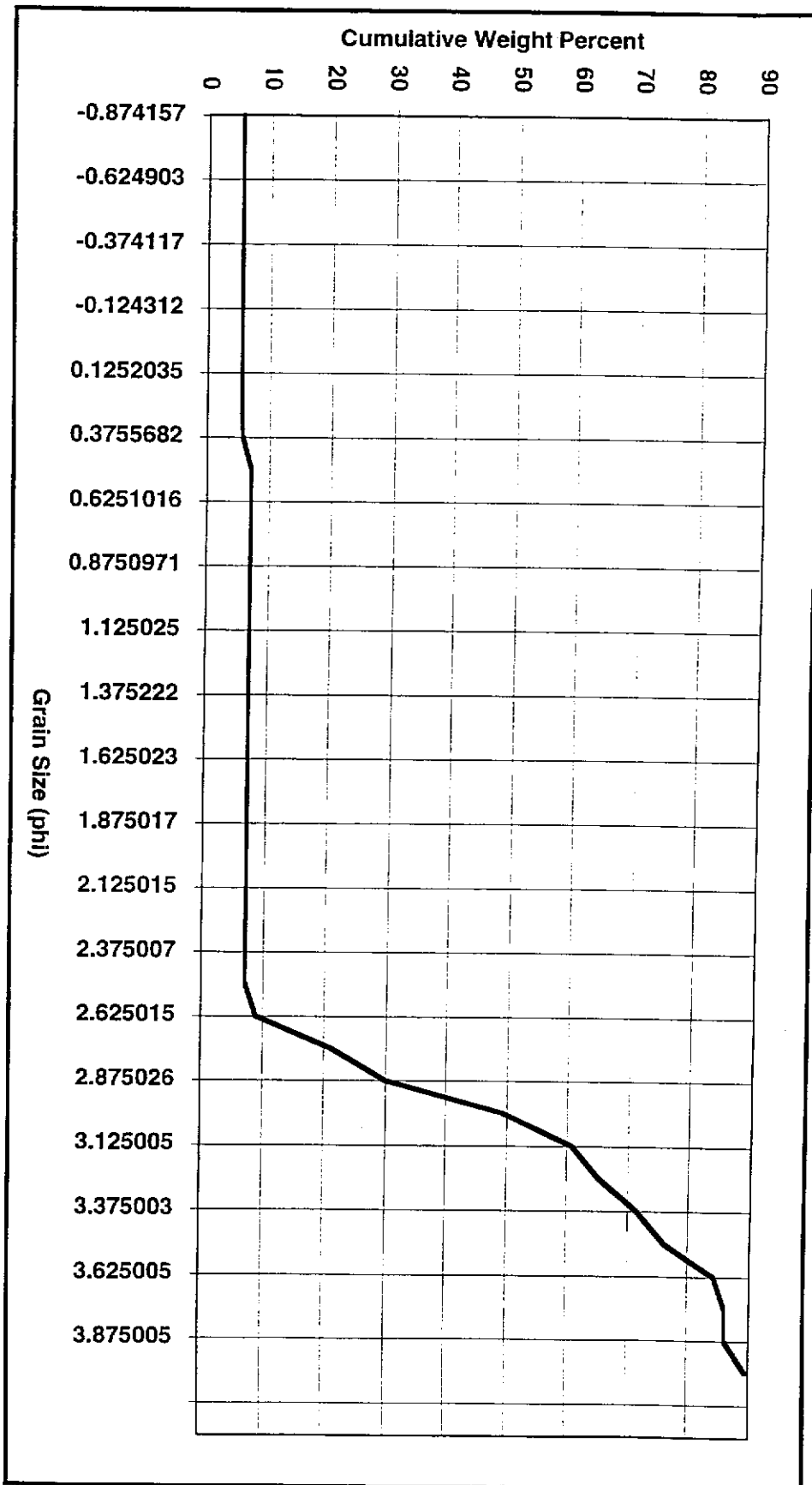
CLAY



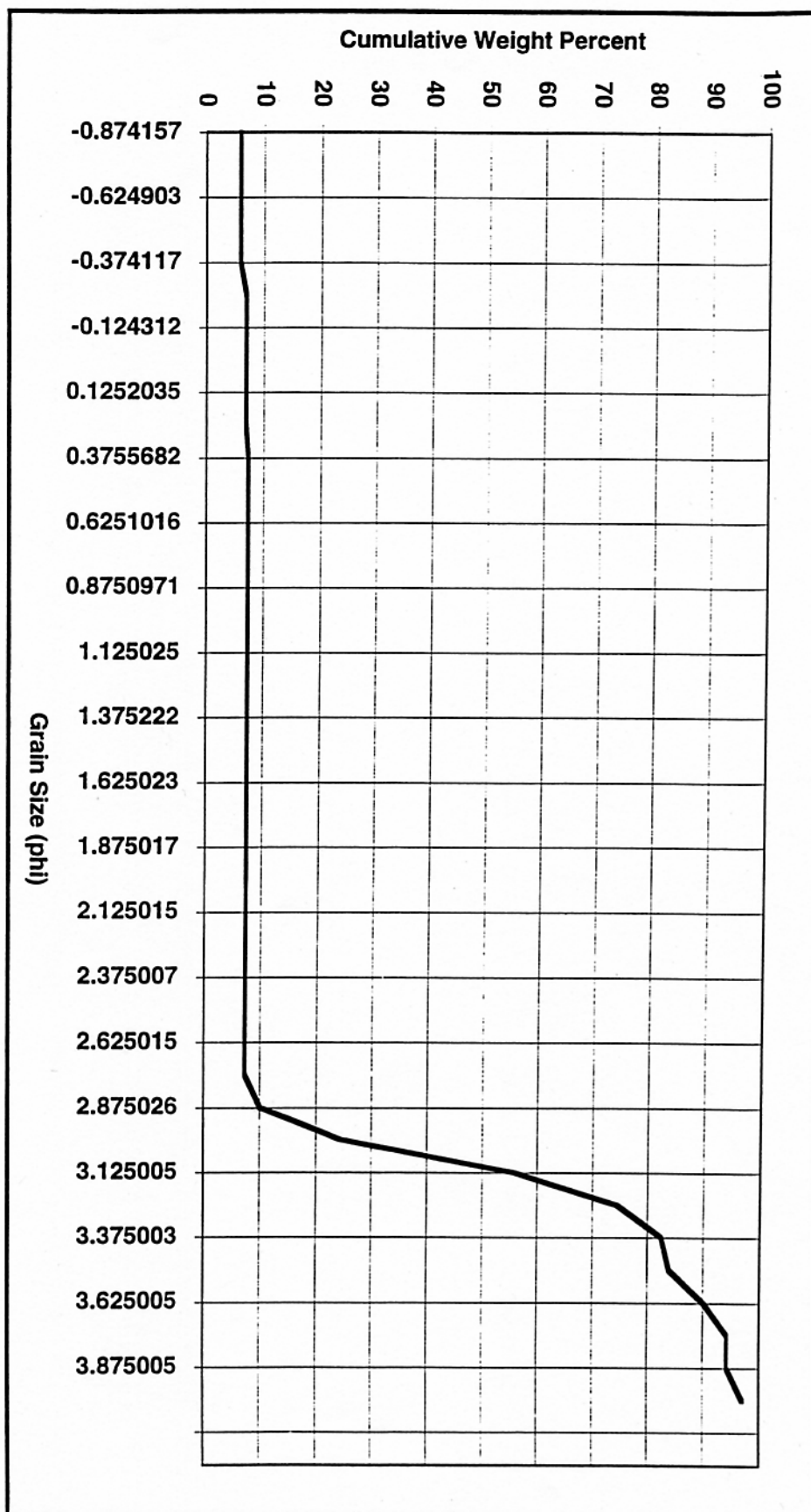
MUD

[illegible]

70011

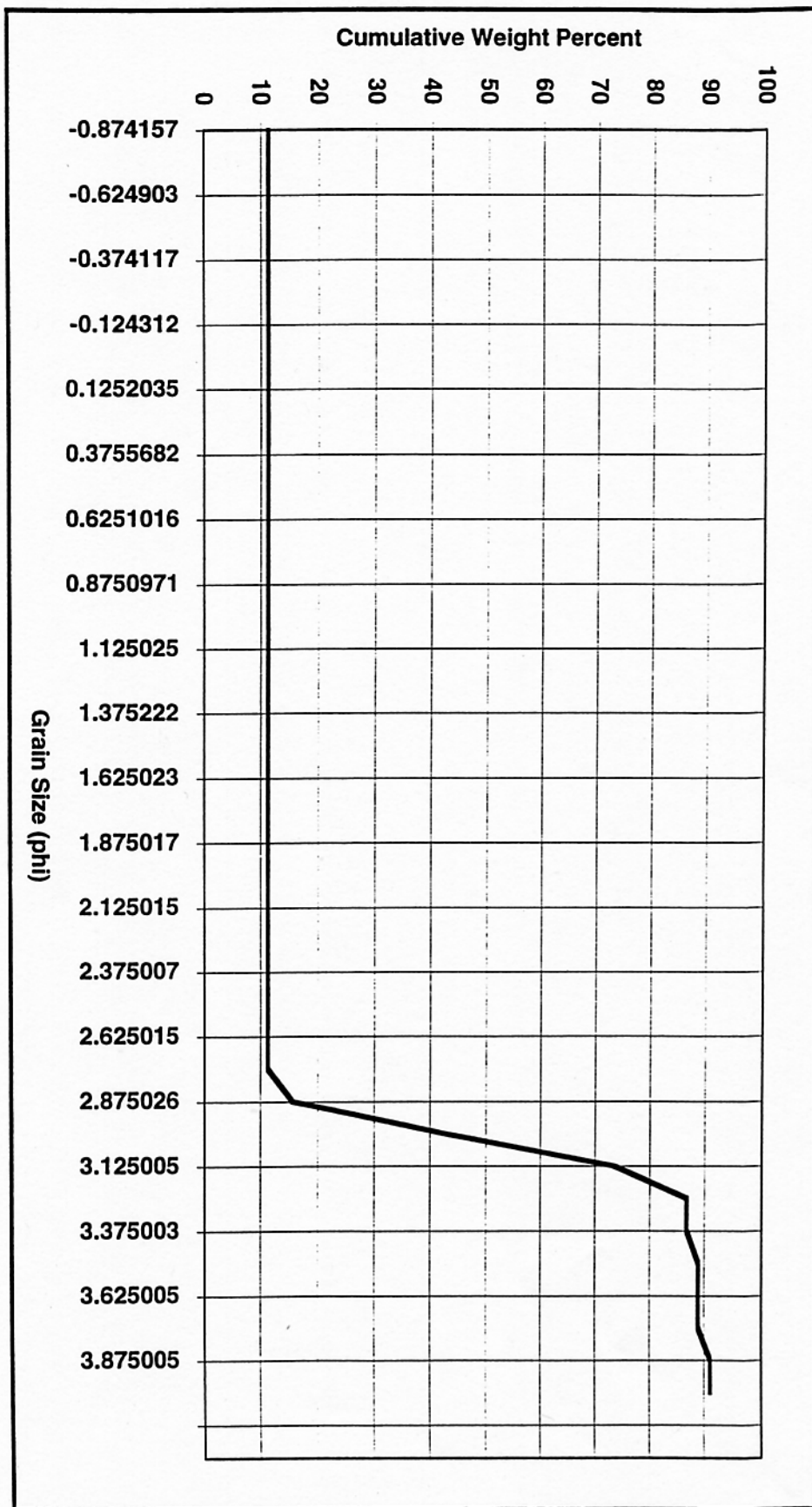


File	a	T80011.dat	Date	06-28-1994
Sample name	g-11-7.5'			
Date collected on	6/16/94			
Total settling time (min)	8.083333			
Settling distance (cm)	140			
Water temperature (degrees C)	21			
	CUMULATIVE WEIGHT %		INDIVIDUAL WEIGHT %	
PHI	TIME(SEC)	% VALUE	RANGE	% VALUE
-0.9983899	5.160407	11.1		
-0.8741565	5.519304	11.1	-1	-0.875
-0.7497373	5.912152	11.1	-0.875	-0.75
-0.6249025	6.343801	11.1	-0.75	-0.625
-0.4996436	6.819101	11.1	-0.625	-0.5
-0.3741167	7.342902	11.1	-0.5	-0.375
-0.2495951	7.915204	11.1	-0.375	-0.25
-0.1243118	8.550557	11.1	-0.25	-0.125
2.51E-04	9.248951	11.1	-0.125	0
0.1252035	10.02496	11.1	0	0.125
0.2504074	10.88826	11.1	0.125	0.25
0.3755682	11.84856	11.1	0.25	0.375
0.5002926	12.91556	11.1	0.375	0.5
0.6251016	14.10865	11.1	0.5	0.625
0.7501019	15.44726	11.1	0.625	0.75
0.8750971	16.95067	11.1	0.75	0.875
1.000072	18.64336	11.1	0.875	1
1.125025	20.55427	11.1	1	1.125
1.250206	22.72218	11.1	1.125	1.25
1.375222	25.18113	11.1	1.25	1.375
1.500138	27.9796	11.1	1.375	1.5
1.625023	31.17583	11.1	1.5	1.625
1.750034	34.84249	11.1	1.625	1.75
1.875017	39.05711	11.1	1.75	1.875
2.000092	43.92166	11.1	1.875	2
2.125015	49.54277	11.1	2	2.125
2.250037	56.07092	11.1	2.125	2.25
2.375007	63.66588	11.1	2.25	2.375
2.500056	72.53645	11.1	2.375	2.5
2.625015	82.9105	11.1	2.5	2.625
2.750009	95.08424	11.1	2.625	2.75
2.875026	109.4013	15.6	2.75	2.875
3.000012	126.2651	42.2	2.875	3
3.125005	146.1695	73.3	3	3.125
3.250022	169.7019	86.7	3.125	3.25
3.375003	197.5455	86.7	3.25	3.375
3.500006	230.5401	88.9	3.375	3.5
3.625005	269.6649	88.9	3.5	3.625
3.75001	316.0943	88.9	3.625	3.75
3.875005	371.2144	91.1	3.75	3.875
4.000007	436.6894	91.1	3.875	4
SEDIMENT STATISTICS				
GROUPED MOMENT MEASURES (McBride, 1971)				
		.125 CHI	.125 PHI	
Mean		6.619398	3.05875	
Standard deviation		0.3627837	0.1750767	
Skewness		2.186395	2.271564	
Kurtosis		9.427509	10.40363	
GRAPHIC MEASURES (Folk and Ward, 1957)				
		.125 CHI	.125 PHI	
Mean		6.519403	3.012786	
Standard deviation		1.659973	2.00287	
Skewness		-0.496812	-0.5839785	
Kurtosis		17.12411	36.51675	
MODES				
Number	Velocity	CHI	PHI	Freq. %
1	1.640112	5.930061	2.651831	4.444451
2	0.861671	6.858647	3.213814	4.444443
3	0.5867069	7.413145	3.527627	4.444439
4	1.042093	6.584372	3.053284	3.333324
5	1.097566	6.509549	3.008773	2.222231
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			



90011

File	a	t90011.dat	Date	06-28-1994
Sample name	g-11-12.5'			
Data collected on	6/15/94			
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	5.7		
-0.8741565	5.519304	5.7	-1	-0.875
-0.7497373	5.912152	5.7	-0.875	-0.75
-0.6249025	6.343801	5.7	-0.75	-0.625
-0.4996436	6.819101	5.7	-0.625	-0.5
-0.3741167	7.342902	5.7	-0.5	-0.375
-0.2495951	7.915204	6.7	-0.375	-0.25
-0.1243118	8.550557	6.7	-0.25	-0.125
2.51E-04	9.248951	6.7	-0.125	0
0.1252035	10.02496	6.7	0	0.125
0.2504074	10.88826	6.7	0.125	0.25
0.3755682	11.84856	7.1	0.25	0.375
0.5002926	12.91556	7.1	0.375	0.5
0.6251016	14.10865	7.1	0.5	0.625
0.7501019	15.44726	7.1	0.625	0.75
0.8750971	16.95087	7.1	0.75	0.875
1.000072	18.64336	7.1	0.875	1
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1.625023	31.17583	7.1	1.5	1.625
1.750034	34.84249	7.1	1.625	1.75
1.875017	39.05711	7.1	1.75	1.875
2.000092	43.92166	7.1	1.875	2
2.125015	49.54277	7.1	2	2.125
2.250037	56.07092	7.1	2.125	2.25
2.375007	63.66588	7.1	2.25	2.375
2.500056	72.53645	7.1	2.375	2.5
2.625015	82.9105	7.1	2.5	2.625
2.750009	95.08424	7.1	2.625	2.75
2.875026	109.4013	10	2.75	2.875
3.000012	126.2651	24.3	2.875	3
3.125005	146.1695	55.7	3	3.125
3.250022	169.7019	74.4	3.125	3.25
3.375003	197.5455	82.4	3.25	3.375
3.500006	230.5401	83.8	3.375	3.5
3.625005	269.6649	90	3.5	3.625
3.75001	316.0943	94.3	3.625	3.75
3.875005	371.2144	94.3	3.75	3.875
4.000007	436.6894	97.1	3.875	4
SEDIDAT STATISTICS				
GROUPED MOMENT MEASURES (McBride, 1971)				
Mean		.125 CHI	.125 PHI	
Standard deviation		6.750613	3.129376	
Skewness		0.7194274	0.4767467	
Kurtosis		-2.930982	-4.755199	
		22.0946	35.45941	
GRAPHIC MEASURES (Folk and Ward, 1957)				
Mean		.125 CHI	.125 PHI	
Standard deviation		6.723638	3.133219	
Skewness		1.616003	1.76831	
Kurtosis		-2.176538	-5.21522	
		9.825273	19.34387	
MODES				
Number	Velocity	CHI	PHI	
		PHI	Freq. %	
1	3.137606	4.994192	2.016647	2.857154 ::
2	0.8440344	6.888483	3.231044	2.85714 ::
3	1.042093	6.584372	3.053284	2.85714 ::
4	1.271629	6.297178	2.880595	2.142865 ::
5	2.032815	5.620377	2.450713	2.142865 ::
PARAMETERS USED				
Number of data points	1000			
Gibbs eq. constants	0.055804	0.003114	4.5	8.71E-03
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80011

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1/3 2/3 3/3

