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GEOCHEMICAL DATA FOR THE STRAIT OF GEORGIA

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INTRODUCTION

Anthropogenic impacts from the Fraser River drainage basin are increasing due to population, agricultural, industrial and commercial growth. Natural hazards are of a prime concern in the region due to the potential for earthquakes and flooding, which could alter sedimentary deposits and processes. In order to evaluate natural resource potential and to understand processes that may affect environmental quality of the Lower Mainland region of B.C., the Fraser River Delta has been studied by a variety of federal, provincial, academic, private and public agencies and groups (Luternauer et al., 1994).

A Geological Survey of Canada program is underway to produce geoscience databases, maps and reports to understand the seismic vulnerability of the delta plain and to define the potential for intertidal erosion and sediment failure at the delta slope, all which threaten biological habitats and engineering structures. The GSC program was extended in 1995 to determine the pathways, sinks and fluxes of sediment-hosted metal contaminants within the Strait of Georgia. Sediment studies in the region report on contaminants in Burrard Inlet, Howe Sound and the Fraser River, calling for the need to understand anthropogenic budgets, transport pathways and sinks (BIEAP, 1995; FREMP, 1995; Delaney and Turner, 1994; Macdonald et al., 1992; McLaren, 1994; Rebel, 1994; Stronach et al., 1993; Yunker et al., 1999).

Natural and anthropogenic sources provide sediment, carbon and metals to the Strait. In order to understand sediment metal budgets and processes, it is necessary to evaluate the strength of anthropogenic and natural metal sources and to estimate depositional patterns of sediment. The data being reported in this document were collected to provide a regional view of metal and sediment fluxes in Georgia Strait.

FIELD OPERATIONS

Three gravity coring campaigns were carried out, collecting 44 cores from the study area (Figure 1, Table 1). In January, 1995, two cores were collect using the CSS Tully (cruise PGC95001). The cores were immediately subsampled and centrifuged to recover pore water. The sediment and pore water subsamples were frozen and returned to the Geological Survey of Canada Atlantic (GSCA) laboratory in Nova Scotia

In February, 1996, 16 cores were collected using the CSS Young (cruise PGC96001). The cores were offloaded from the ship at the end of each sampling day, and subsampled at a landbased laboratory in Richmond within 24 hours of collection. The subsamples were centrifuged and the pore water samples were analyzed for ammonium and sulfate content. Subsamples were frozen and returned to the GSCA laboratory in Nova Scotia. Archive core halves were wrapped with plastic film and stored in D-tubes at the GSCA core repository.

In April, 1997, 26 cores were collected using the CSS Vector (cruise PGC97002). The cores were subsampled immediately onboard ship, followed by centrifuging to recover pore water. Pore water analyses were done for ammonium and sulfate within 24 hours of collection. Subsamples were frozen and returned to the GSCA laboratory in Nova Scotia. Archive core halves were wrapped with plastic film and stored in D-tubes at the GSCA core repository.

LABORATORY OPERATIONS

Frozen wet sediment samples were shipped to the GSCA laboratory in Nova Scotia, where they were analyzed for water content, total/organic/inorganic carbon, particle size and metal concentration. Water content was determined to within \pm 2% by weighing a wet sediment sample, drying it at 60 °C overnight, and weighing the dry sample. Total carbon (organic + inorganic) was determined using a Leco WR-112 carbon analyzer. Organic carbon was determined with the same equipment after the inorganic carbon (carbonate) was removed by treating the sample with 1 M hydrochloric acid. Precision and accuracy was estimated to be \pm 0.03% based on replicate analyses of calibration standards. Grain size analyses were conducted on the sediment samples using a Coulter Counter fitted with 30 and 200 μm apertures. Relative precision was estimated to be \pm 10% based on replicate analyses. Metals were measured in freeze-dried sediment samples by extracting the metal with concentrated nitric acid at 80 °C overnight. Flame atomic absorption analyses were carried out using a Varian 250+ spectrometer for copper, zinc, nickel, chromium, manganese and iron. Flameless atomic absorption analyses were carried out using a Varian 975 spectrometer and a Varian HGA95 furnace for silver, cadmium and lead. Relative precision and accuracy limits were determined to be \pm 5% for copper, zinc, manganese, iron and lead and \pm 10% for nickel, chromium, silver and cadmium.

Dissolved ammonium was determined using a colourimetric method revised from Solarzano (1969). One mL of deionized water was placed in a 15 mL test tube, along with 100 μL of sample or standard. A 500 μL addition of phenol-ethanol solution (0.8 g phenol dissolved in 100 mL of ethanol) was made along with 500 μL of sodium nitroprusside solution (0.075 g of sodium nitroprusside in 50 mL of deionized water). Finally, 1 mL of oxidizing solution (1 mL of sodium

hypochlorite, 0.75 g trisodium citrate and 0.04 g sodium hydroxide in 50 mL of deionized water) was added to each sample. The test tubes were shaken and left to stand at room temperature for 2 hours in order for the blue colour, indicative of ammonium content, to fully develop. The colour absorbance was measured at 640 nm with a Brinkmann PC900 colourimeter. A calibration curve was acquired by measuring the absorbance of various ammonium chloride solutions. Precision and accuracy were determined to be \pm 0.2 mM.

Dissolved sulfate was measured in the pore water samples using a turbidimetric method. A 50 μ L volume of sample or standard was placed in a sample cuvette. Barium chloride (50 μ L of 300 mM solution) was added to precipitate the available sulfate. Four (4) mL of deionized water were added to dilute the sample. The turbidity of the resulting solution was measured using a Milton Roy Spectronic Mini-20 fitted with a turbidity attachment. A calibration curve was acquired by measuring the turbidity of various dilutions of standard IAPSO seawater and magnesium sulfate solutions. Precision and accuracy limits were estimated to be \pm 1 mM.

RESULTS

Core locations are represented in Figure 1 and core details are listed in Table 1. Stations are identified by a two decimal place number, where the integer refers to a core number, and the decimal number refers to the year the core was taken.

Data for normal core subsamples are included in Table 2.
Column headings are defined as:

Stn – station number

id – individual identifier for a sample

Sedz – downcore depth (cm) of the sub-sample

Water – water content (% wet weight)

T.Car. – total carbon (% dry weight)

O.Car. – organic carbon (% dry weight)

I.Car. – inorganic carbon (% dry weight)

Sand – sand content (% dry weight)

Silt – silt content (% dry weight)

Clay – clay content (% dry weight)

Mean – mean particle size (phi units)

Stdv – standard deviation of the mean particle size (phi units)

Kurt – kurtosis statistic

Skew – skewness statistic

NH4 – ammonium concentration in pore water (mM)

SO4 – sulfate concentration in pore water (mM)

Cu – copper in sediment (ppm dry weight basis)

Zn – zinc in sediment (ppm dry weight)

Ni – nickel in sediment (ppm dry weight)
Cr – chromium in sediment (ppm dry weight)
Mn – manganese in sediment (ppm dry weight)
Fe – iron in sediment (% dry weight)
Ag – silver in sediment (ppm dry weight)
Cd – cadmium in sediment (ppm dry weight)
Pb – lead in sediment (ppm dry weight)

On September 19, 1997, five cores collected in April, 1997 were re-subsampled at a 2 cm resolution, rather than the 'normal' 10 cm intervals. Data for these high resolution core subsamples are included in Table 3.

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Figure 1

Sample Locations for Gravity Cores

(number to the left of the decimal place indicates the station number;
number to the right of the decimal point indicates the collection year)

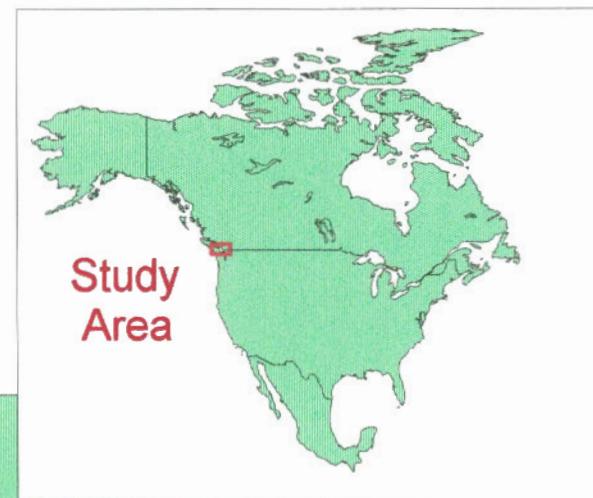
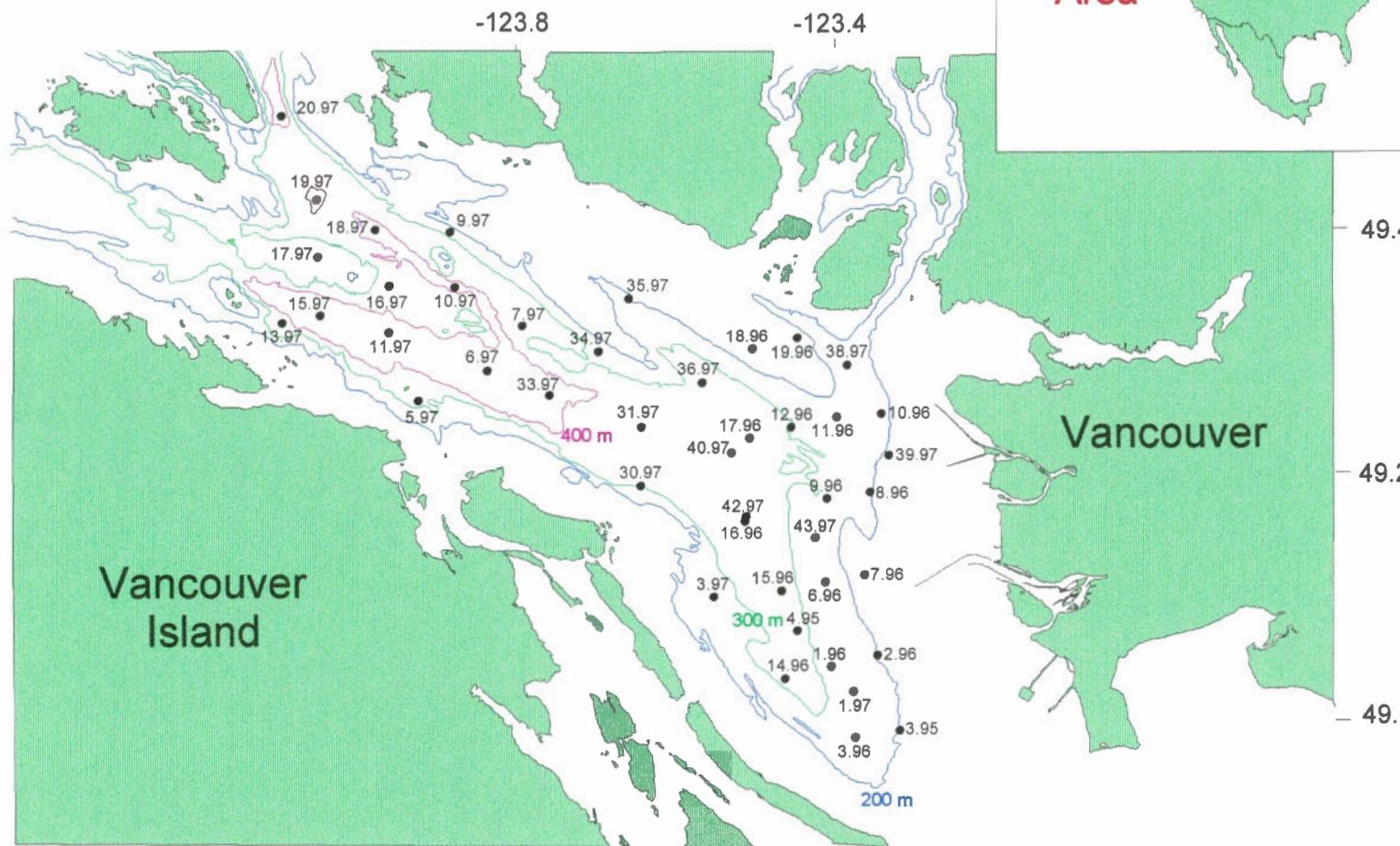


Table 1 Coring Summary

cruise	station	latitude	longitude	water depth (m)	date collected year/mo/dy
PGC95001	3.95	48.991	-123.321	199	19950117
PGC95001	4.95	49.072	-123.449	312	19950120
PGC96001	1.96	49.044	-123.407	279	19960220
PGC96001	2.96	49.052	-123.349	206	19960220
PGC96001	3.96	48.986	-123.377	220	19960221
PGC96001	6.96	49.112	-123.414	253	19960221
PGC96001	7.96	49.118	-123.365	169	19960221
PGC96001	8.96	49.185	-123.357	199	19960221
PGC96001	9.96	49.180	-123.412	274	19960222
PGC96001	10.96	49.249	-123.343	216	19960222
PGC96001	11.96	49.246	-123.400	248	19960222
PGC96001	12.96	49.238	-123.456	306	19960222
PGC96001	14.96	49.033	-123.464	338	19960222
PGC96001	15.96	49.105	-123.469	331	19960223
PGC96001	16.96	49.162	-123.515	346	19960223
PGC96001	17.96	49.230	-123.509	334	19960223
PGC96001	18.96	49.302	-123.505	159	19960223
PGC96001	19.96	49.310	-123.449	163	19960223
PGC97002	1.97	49.023	-123.379	257	19970426
PGC97002	3.97	49.100	-123.554	255	19970426
PGC97002	5.97	49.260	-123.923	307	19970426
PGC97002	6.97	49.284	-123.837	414	19970426
PGC97002	7.97	49.321	-123.793	365	19970427
PGC97002	9.97	49.398	-123.883	255	19970427
PGC97002	10.97	49.352	-123.877	417	19970427
PGC97002	11.97	49.316	-123.960	417	19970427
PGC97002	13.97	49.323	-124.093	400	19970427
PGC97002	15.97	49.330	-124.046	421	19970428
PGC97002	16.97	49.354	-123.959	338	19970428
PGC97002	17.97	49.378	-124.049	196	19970428
PGC97002	18.97	49.399	-123.977	423	19970428
PGC97002	19.97	49.424	-124.050	404	19970428
PGC97002	20.97	49.493	-124.094	417	19970428
PGC97002	30.97	49.190	-123.645	332	19970429
PGC97002	31.97	49.238	-123.644	380	19970429
PGC97002	33.97	49.264	-123.759	405	19970429
PGC97002	34.97	49.300	-123.698	288	19970429
PGC97002	35.97	49.343	-123.659	194	19970429
PGC97002	36.97	49.274	-123.568	344	19970429
PGC97002	38.97	49.288	-123.387	253	19970430
PGC97002	39.97	49.215	-123.334	180	19970430
PGC97002	40.97	49.218	-123.531	351	19970430
PGC97002	42.97	49.166	-123.513	341	19970430
PGC97002	43.97	49.148	-123.426	235	19970430

Table 2 Geochemical Data for Cores

Cruise	Stn	id	Sedz cm	Water %	T.Car. %	O.Car. %	I.Car. %	sand %	silt %	clay %	mean phi	stdv phi	kurt	skew	NH4 mM	S04 mM	Cu ppm	Zn ppm	Ni ppm	Cr ppm	Mn ppm	Fe %	Ag ppm	Cd ppm	Pb ppm
pgc95001	3.95	146901	0	49	1.51	1.32	0.19	0	58	41	7.3	1.9	1.9	0.0	0.17	27									
pgc95001	3.95	146902	10	44	1.42	1.29	0.13	2	70	28	6.7	2.0	2.0	0.4	0.59	24	24	71	27	150	307	2.58	0.18	0.09	7.0
pgc95001	3.95	146903	20	43	1.44	1.31	0.13	1	65	34	7.1	1.9	1.9	0.2	0.84	23	24	71	20	136	281	2.49	0.19	0.10	6.8
pgc95001	3.95	146904	30	45	1.46	1.29	0.17	0	69	30	7.0	1.9	2.1	0.4	1.24	21	26	74	29	142	301	2.61	0.19	0.11	8.1
pgc95001	3.95	146905	40	29	1.34	1.27	0.07	1	72	28	6.7	1.9	2.1	0.5	1.32	21									
pgc95001	3.95	146906	50	43	1.32	1.19	0.13	0	68	32	7.0	1.9	2.0	0.3	1.24	21									
pgc95001	3.95	146907	60	44	1.31	1.19	0.12	2	67	31	6.9	1.9	2.0	0.4	1.24	21	25	78	28	139	304	2.65	0.18	0.10	8.5
pgc95001	3.95	146908	70	43	1.34	1.21	0.13	1	60	40	7.3	1.9	1.8	0.1	1.46	18	25	82	29	135	284	2.56	0.20	0.09	9.1
pgc95001	3.95	146909	80	38	1.21	1.08	0.13	2	69	30	6.8	1.9	2.0	0.5	1.51	15	23	77	30	126	262	2.48	0.17	0.09	7.7
pgc95001	3.95	146910	90	39	1.24	1.07	0.17	2	75	23	6.5	1.8	2.3	0.6	1.35	9									
pgc95001	3.95	146911	100	43	1.26	1.14	0.12	1	69	30	6.8	1.9	2.0	0.5	1.46	1	25	73	30	123	299	2.48	0.17	0.07	7.5
pgc95001	3.95	146912	110	38	1.20	1.08	0.12	1	71	29	6.8	1.9	2.1	0.5	1.78	1	23	71	26	123	325	2.50	0.17	0.05	5.7
pgc95001	3.95	146913	120	43	1.30	1.16	0.14	1	66	34	7.0	2.0	1.9	0.3	2.22	1									
pgc95001	3.95	146914	130	40	1.22	1.06	0.16	1	70	29	6.8	1.9	2.1	0.5	2.37	1									
pgc95001	3.95	146915	140	41	1.29	1.17	0.12	3	69	29	6.7	2.0	2.0	0.5	2.63	1	22	71	29	119	281	2.57	0.18	0.08	6.3
pgc95001	3.95	146916	150	41	1.30	1.19	0.11	2	74	23	6.5	1.9	2.3	0.7	2.56	1	23	70	27	115	274	2.46	0.17	0.04	6.9
pgc95001	3.95	146917	160	40	1.18	0.99	0.19	1	71	28	6.7	1.9	2.0	0.5	2.93	1	23	66	27	111	281	2.43	0.18	0.04	5.7
pgc95001	4.95	146918	0	54	1.67	1.49	0.18	0	63	37	7.3	1.7	2.0	0.2	0.30	23	30	80	38	149	386	2.98	0.21	0.07	6.9
pgc95001	4.95	146919	10	55	1.69	1.47	0.22	0	63	36	7.4	1.7	2.1	0.2	0.98	20									
pgc95001	4.95	146920	20	49	1.59	1.43	0.16	1	63	36	7.3	1.8	2.0	0.2	1.73	9									
pgc95001	4.95	146921	30	54	1.82	1.66	0.16	0	65	35	7.3	1.7	2.1	0.3	2.30	4	35	87	45	151	425	3.07	0.19	0.08	9.3
pgc95001	4.95	146922	40	50	1.65	1.50	0.15	1	63	36	7.4	1.7	2.2	0.2	2.74	1									
pgc95001	4.95	146923	50	51	1.64	1.46	0.18	1	69	30	7.0	1.8	2.2	0.5	2.74	1									
pgc95001	4.95	146924	60	55	1.85	1.64	0.21	1	64	35	7.3	1.7	2.1	0.2	2.74	1									
pgc95001	4.95	146925	70	52	1.64	1.39	0.25	1	62	38	7.3	1.8	2.0	0.1	3.09	1									
pgc95001	4.95	146926	80	54	1.71	1.53	0.18	0	60	39	7.4	1.8	2.1	0.1	3.09	1									
pgc95001	4.95	146927	90	52	1.63	1.48	0.15	2	62	36	7.3	1.8	2.1	0.1	3.22	1									
pgc95001	4.95	146928	100	51	1.61	1.41	0.20	1	67	32	7.1	1.8	2.1	0.3	3.09	1									
pgc95001	4.95	146929	110	47	1.43	1.25	0.18	0	63	36	7.3	1.8	2.1	0.2	3.09	1									
pgc95001	4.95	146930	120	48	1.47	1.32	0.15	0	64	36	7.4	1.7	2.2	0.2	3.39	1									
pgc95001	4.95	146931	130	51	1.69	1.38	0.31	0	61	39	7.4	1.8	2.0	0.2	3.57	1									
pgc95001	4.95	146932	140	45	1.41	1.16	0.25	0	69	31	7.1	1.7	2.2	0.4	3.39	1									
pgc95001	4.95	146933	150	49	1.57	1.29	0.28	0	60	40	7.5	1.7	2.0	0.2	3.22	1									
pgc95001	4.95	146934	160	50	1.57	1.34	0.23	1	72	26	6.8	1.7	2.3	0.5	3.22	1									
pgc96001	1.96	141714	0	43	1.62	1.45	0.17	0	53	47	7.8	1.6	2.2	0.0	0.80	23	32	83	41	125	357	2.95	0.14	0.21	7.3
pgc96001	1.96	141715	10	47	1.59	1.38	0.21	0	71	29	7.1	1.6	2.4	0.4	1.00	23	32	83	44	124	383	3.02	0.14	0.21	7.6
pgc96001	1.96	141716	20	45	1.66	1.49	0.17	0	69	31	7.2	1.6	2.4	0.4	1.05	23	30	83	38	118	346	2.91	0.15	0.21	8.4
pgc96001	1.96	141717	30	43	1.44	1.24	0.20	1	75	23	6.7	1.7	2.5	0.5	0.95	23	30	80	33	125	334	2.79	0.13	0.20	7.6
pgc96001	1.96	141718	40	41	1.57	1.39	0.18	0	66	34	7.3	1.6	2.2	0.3	0.87	23	32	85	38	129	347	2.89	0.14	0.20	8.9
pgc96001	1.96	141719	50	46	1.52	1.35	0.17	0	64	36	7.3	1.8	2.1	0.2	0.68	23	33	90	38	131	356	3.09	0.15	0.21	8.8
pgc96001	1.96	141720	60	44	1.43	1.23	0.20	1	71	28	7.0	1.7	2.3	0.4	0.61	23	34	89	40	128	341	2.90	0.14	0.21	10.2
pgc96001	1.96	141721	70	45	1.44	1.34	0.10	3	67	30	6.9	1.9	2.1	0.3	0.61	23	31	87	39	116	325	2.79	0.14	0.22	8.3
pgc96001	1.96	141722	80	47	1.35	1.24	0.11	2	61	38	7.4	1.8	2.2	0.1	0.68	23	36	89	45	125	327	2.77	0.14	0.21	8.3
pgc96001	1.96	141723	90	43	1.36	1.19	0.17	2	64	35	7.3	1.7	2.2	0.2	0.79	23	37	86	44	149	401	2.94	0.13	0.19	8.1
pgc96001	1.96	141724	100	42	1.44	1.28	0.16	2	58	40	7.4	1.9	2.0	0.0	0.92	20	35	89	41	143	369	3.01	0.13	0.21	7.9
pgc96001	1.96	141725	110	41	1.44	1.30	0.00	0	57	43	7.6	1.7	2.1	0.0	1.09	17	34	86	43	131	349	3.05	0.14	0.19	8.1
pgc96001	1.96	141726	120	36	1.44	1.20	0.24	0	62	38	7.5	1.6	2.3	0.2	1.37	12	35	87	37	133	363	2.88	0.13	0.18	7.7
pgc96001	1.96	141727	130	39	1.43	1.25	0.18	2	66	32	7.2	1.7	2.3	0.2	1.55	10	37	92	42	132	377	3.06	0.14	0.19	8.5

Table 2 Geochemical Data for Cores

Cruise	Stn	id	Sedz cm	Water %	T.Car. %	O.Car. %	I.Car. %	sand %	silt %	clay %	mean phi	stdv phi	kurt	skew	NH4 mM	S04 mM	Cu ppm	Zn ppm	Ni ppm	Cr ppm	Mn ppm	Fe %	Ag ppm	Cd ppm	Pb ppm
pgc96001	2.96	141701	0	37	1.21	1.03	0.18	1	57	42	7.5	1.8	2.0	0.0	0.10	25	20	58	31	85	270	2.14	0.08	0.08	4.6
pgc96001	2.96	141702	3	37	1.06	0.88	0.18	3	57	41	7.3	2.0	1.9	-0.0	0.12	25	20	57	30	101	282	2.13	0.13	0.05	4.3
pgc96001	2.96	141703	5	30	0.88	0.80	0.08	4	62	34	7.0	2.0	1.8	0.2	0.20	25	21	56	34	107	304	2.16	0.09	0.05	4.8
pgc96001	2.96	141704	8	30	1.08	0.97	0.11	1	49	51	7.9	1.7	2.3	-0.3	0.24	25	21	60	32	122	290	2.17	0.11	0.18	4.8
pgc96001	2.96	141705	10	26	0.81	0.75	0.06	1	43	56	8.0	1.8	2.2	-0.4	0.22	25	18	56	32	100	267	1.95	0.09	0.17	5.1
pgc96001	2.96	141706	13	21	0.82	0.74	0.08	1	56	43	7.6	1.8	2.1	-0.1	0.18	25	19	60	40	107	278	2.13	0.09	0.19	5.8
pgc96001	2.96	141707	15	30	1.17	0.78	0.39	1	55	44	7.6	1.8	2.1	-0.1	0.20	25	21	61	37	87	273	2.16	0.07	0.21	4.8
pgc96001	2.96	141708	18	23	0.83	0.70	0.13	0	58	42	7.6	1.8	2.0	0.0	0.16	25	20	58	33	107	278	2.06	0.15	0.17	5.3
pgc96001	2.96	141709	20	25	0.66	0.58	0.08	1	60	39	7.4	1.7	2.1	0.1	0.15	25	18	52	37	103	271	2.03	0.13	0.13	3.2
pgc96001	2.96	141710	23	20	0.59	0.44	0.15	0	50	50	7.9	1.7	2.3	-0.2	0.15	25	17	48	39	107	280	1.90	0.08	0.12	3.6
pgc96001	2.96	141711	25	19	0.56	0.48	0.08	1	47	53	8.0	1.7	2.3	-0.2	0.14	25	18	49	36	112	267	1.92	0.09	0.16	2.6
pgc96001	2.96	141712	28	18	0.50	0.43	0.07	1	57	42	7.6	1.8	2.2	-0.0	0.13	25	17	48	34	92	263	1.87	0.10	0.10	2.7
pgc96001	2.96	141713	30	17	0.59	0.53	0.06	1	47	52	8.0	1.8	2.2	-0.3	0.08	25	19	49	42	102	283	1.95	0.09	0.13	3.1
pgc96001	3.96	141728	0	48	1.69	1.48	0.21	2	68	30	7.0	1.8	2.2	0.3	0.32	25	29	78	31	118	301	2.61	0.27	0.18	6.4
pgc96001	3.96	141729	10	40	1.64	1.45	0.19	0	65	35	7.3	1.7	2.2	0.2	0.65	25	30	79	29	112	319	2.80	0.25	0.19	7.2
pgc96001	3.96	141730	20	43	1.64	1.46	0.18	0	70	30	7.1	1.7	2.3	0.4	0.60	25	30	83	32	118	328	2.73	0.25	0.19	8.1
pgc96001	3.96	141731	30	37	1.52	1.34	0.18	3	66	31	7.0	1.9	2.1	0.3	0.65	25	29	78	30	106	323	2.68	0.23	0.16	8.1
pgc96001	3.96	141732	40	37	1.49	1.29	0.20	0	54	46	7.8	1.7	2.3	-0.1	0.60	25	32	84	30	116	308	2.73	0.25	0.20	9.5
pgc96001	3.96	141733	50	31	1.42	1.23	0.19	1	66	34	7.2	1.8	2.1	0.3	0.64	25	32	89	32	134	353	2.86	0.27	0.22	10.6
pgc96001	3.96	141734	60	33	1.56	1.38	0.18	1	65	34	7.3	1.7	2.1	0.3	0.71	25	31	88	31	132	332	2.82	0.29	0.21	8.9
pgc96001	3.96	141735	70	36	1.52	1.31	0.21	2	67	30	7.0	1.8	2.1	0.2	0.79	22	32	88	33	136	335	2.83	0.25	0.21	8.6
pgc96001	3.96	141736	80	44	1.37	1.18	0.19	0	60	40	7.5	1.7	2.1	0.1	0.82	20	36	86	36	135	358	2.90	0.28	0.21	7.3
pgc96001	3.96	141737	90	40	1.44	1.27	0.17	1	60	39	7.4	1.8	2.1	0.1	0.78	20	32	86	33	128	329	2.88	0.28	0.20	8.1
pgc96001	3.96	141738	100	41	1.48	1.32	0.16	1	66	33	7.2	1.7	2.2	0.3	0.81	21	30	81	31	121	329	2.85	0.26	0.18	7.7
pgc96001	3.96	141739	110	39	1.43	1.23	0.20	2	66	32	7.1	1.8	2.2	0.2	0.65	22	30	83	27	126	318	2.83	0.28	0.20	7.5
pgc96001	6.96	141740	0	38	1.61	1.36	0.25	1	66	33	7.3	1.7	2.3	0.2	0.14	25	34	82	35	128	352	2.84	0.23	0.20	6.8
pgc96001	6.96	141741	10	42	1.54	1.35	0.19	0	55	45	7.7	1.8	2.1	-0.1	0.28	25	35	82	33	127	372	2.89	0.24	0.20	7.2
pgc96001	6.96	141742	20	34	1.46	1.31	0.15	2	65	33	7.2	1.8	2.1	0.2	0.44	25	32	78	31	117	339	2.73	0.26	0.18	6.6
pgc96001	6.96	141743	30	38	1.44	1.28	0.16	1	54	46	7.7	1.8	2.0	-0.1	0.42	25	36	77	38	130	349	2.82	0.26	0.18	8.6
pgc96001	6.96	141744	40	34	1.45	1.20	0.25	1	65	34	7.2	1.8	2.0	0.2	0.11	25	33	75	38	116	344	2.67	0.20	0.19	6.6
pgc96001	6.96	141745	50	34	1.26	1.13	0.13	2	64	35	7.3	1.8	2.1	0.2	0.38	23	31	73	37	110	319	2.49	0.22	0.19	6.1
pgc96001	6.96	141746	60	39	1.37	1.18	0.19	1	64	35	7.4	1.7	2.3	0.2	0.55	21	33	80	39	120	323	2.82	0.25	0.19	8.1
pgc96001	6.96	141747	70	40	1.23	1.03	0.20	0	64	36	7.4	1.7	2.1	0.3	0.58	19	37	78	43	120	351	2.79	0.24	0.18	7.0
pgc96001	6.96	141748	80	30	1.20	1.01	0.19	2	58	40	7.4	1.9	2.0	0.0	0.60	18	35	74	41	120	329	2.66	0.22	0.18	6.2
pgc96001	7.96	141749	0	36	1.26	1.06	0.20	4	66	30	6.8	2.0	2.0	0.3	0.14	25	32	70	34	120	371	2.80	0.15	0.18	4.7
pgc96001	7.96	141750	10	31	1.20	0.98	0.22	1	71	28	7.0	1.7	2.3	0.4	0.17	22	36	77	37	130	388	2.84	0.15	0.16	5.2
pgc96001	7.96	141751	20	30	1.21	1.03	0.18	2	65	34	7.2	1.8	2.2	0.2	0.51	20	35	76	40	120	386	2.84	0.15	0.20	5.9
pgc96001	7.96	141752	30	28	1.20	0.97	0.23	2	71	27	6.9	1.8	2.3	0.4	0.84	15	32	73	36	118	367	2.81	0.15	0.17	5.3
pgc96001	7.96	141753	40	33	1.19	0.97	0.22	1	70	29	7.0	1.8	2.3	0.4	1.34	17	34	76	37	120	379	2.81	0.14	0.20	6.7
pgc96001	7.96	141754	50	35	1.25	1.04	0.21	1	70	29	7.0	1.7	2.3	0.4	1.48	9	34	78	38	122	382	2.91	0.14	0.20	7.6
pgc96001	7.96	141755	60	28	1.11	0.92	0.19	0	70	30	7.1	1.7	2.3	0.4	1.50	7	34	77	40	120	391	2.93	0.15	0.21	6.7
pgc96001	7.96	141756	70	33	1.12	0.92	0.20	1	71	29	7.0	1.7	2.3	0.5	1.41	6	35	79	41	117	376	2.88	0.14	0.22	6.5
pgc96001	7.96	141757	80	31	1.10	0.90	0.20	0	71	29	7.1	1.6	2.4	0.5	1.38	6	33	79	37	122	377	2.82	0.13	0.20	5.3
pgc96001	7.96	141758	90	27	1.13	0.94	0.19	0	73	27	7.0	1.6	2.4	0.5	1.60	6	36	78	40	119	372	2.80	0.13	0.23	6.1
pgc96001	7.96	141759	100	28	1.04	0.82	0.22	0	71	28	7.0	1.7	2.3	0.5	1.51	4	36	79	39	117	389	2.95	0.13	0.21	6.6
pgc96001	7.96	141760	110	30	1.00	0.81	0.19	0	73	27	7.0	1.7	2.4	0.4	1.61	4	35	78	36	122	410	3.02	0.13	0.22	5.1

Table 2 Geochemical Data for Cores

Cruise	Stn	id	Sedz cm	Water %	T.Car. %	O.Car. %	I.Car. %	sand %	silt %	clay %	mean phi	stdv phi	kurt	skew	NH4 mM	S04 mM	Cu ppm	Zn ppm	Ni ppm	Cr ppm	Mn ppm	Fe %	Ag ppm	Cd ppm	Pb ppm
pgc96001	8.96	141761	0	45	1.61	1.45	0.16	0	56	43	7.7	1.7	2.1	0.0	0.25	22	37	85	42	145	409	3.34	0.18	0.17	7.0
pgc96001	8.96	141762	10	42	1.58	1.37	0.21	2	63	35	7.3	1.8	2.2	0.1	0.65	22	38	85	43	143	408	3.33	0.17	0.18	7.2
pgc96001	8.96	141763	20	42	1.63	1.48	0.15	1	64	35	7.3	1.7	2.3	0.2	0.75	21	36	87	40	146	374	3.18	0.06	0.00	7.9
pgc96001	8.96	141764	30	43	1.55	1.35	0.20	1	63	35	7.3	1.7	2.3	0.2	0.60	22	38	86	40	145	398	3.22	0.16	0.18	7.7
pgc96001	8.96	141765	40	48	1.54	1.34	0.20	0	66	34	7.4	1.5	2.4	0.3	0.51	22	39	90	44	155	399	3.25	0.16	0.17	8.0
pgc96001	8.96	141766	50	43	1.58	1.41	0.17	1	69	30	7.2	1.6	2.5	0.3	0.62	22	37	87	42	141	363	3.07	0.16	0.18	8.3
pgc96001	8.96	141767	60	45	1.47	1.28	0.19	1	62	37	7.5	1.6	2.4	0.1	0.61	22	40	95	46	150	384	3.24	0.17	0.20	8.6
pgc96001	8.96	141768	70	43	1.39	1.25	0.14	0	65	35	7.4	1.6	2.3	0.3	0.58	21	40	95	46	143	413	3.25	0.17	0.22	8.7
pgc96001	8.96	141769	80	41	1.44	1.27	0.17	1	63	36	7.4	1.6	2.3	0.2	0.64	20	40	96	42	138	419	3.30	0.15	0.20	8.5
pgc96001	8.96	141770	90	42	1.41	1.26	0.15	2	65	33	7.2	1.7	2.3	0.2	0.90	18	38	90	42	147	380	3.11	0.13	0.19	8.1
pgc96001	8.96	141771	100	44	1.41	1.28	0.13	0	60	40	7.6	1.6	2.4	0.1	1.01	15	41	91	46	156	403	3.12	0.13	0.19	7.0
pgc96001	9.96	141772	0	42	1.79	1.62	0.17	0	62	37	7.6	1.5	2.6	0.2	0.39	24	34	83	36	135	399	3.03	0.12	0.16	6.2
pgc96001	9.96	141773	10	44	1.64	1.47	0.17	1	64	35	7.3	1.7	2.3	0.2	0.82	21	36	87	40	144	400	3.13	0.13	0.17	6.6
pgc96001	9.96	141774	20	44	1.69	1.53	0.16	1	66	32	7.3	1.6	2.5	0.1	1.24	17	37	90	39	140	411	3.18	0.14	0.17	7.2
pgc96001	9.96	141775	30	40	1.50	1.44	0.06	1	65	35	7.3	1.6	2.3	0.2	1.58	17	34	85	37	137	400	2.97	0.13	0.16	6.8
pgc96001	9.96	141776	40	46	1.58	1.45	0.13	0	67	33	7.3	1.6	2.3	0.3	1.68	16	37	87	41	145	435	3.09	0.13	0.18	7.2
pgc96001	9.96	141777	50	40	1.56	1.40	0.16	0	67	32	7.3	1.5	2.4	0.3	1.67	15	40	94	46	151	424	3.23	0.13	0.17	8.3
pgc96001	9.96	141778	60	43	1.54	1.45	0.09	0	67	32	7.3	1.6	2.3	0.3	1.64	15	36	92	42	137	402	3.17	0.13	0.19	8.3
pgc96001	9.96	141779	70	40	1.61	1.51	0.10	1	58	41	7.6	1.6	2.2	0.1	1.56	16	38	96	47	138	413	3.26	0.14	0.17	8.5
pgc96001	9.96	141780	80	42	1.56	1.43	0.13	1	67	32	7.2	1.7	2.3	0.2	1.63	14	38	95	43	145	405	3.14	0.14	0.19	8.2
pgc96001	9.96	141781	90	33	1.52	1.40	0.12	1	62	37	7.4	1.8	2.2	0.1	1.69	14	39	97	41	142	400	3.29	0.15	0.19	7.6
pgc96001	9.96	141782	100	33	1.45	1.31	0.14	0	62	38	7.5	1.6	2.2	0.3	1.56	15	40	96	43	140	413	3.35	0.14	0.17	7.3
pgc96001	9.96	141783	110	32	1.50	1.40	0.10	1	66	34	7.4	1.6	2.3	0.3	1.66	14	38	95	44	140	394	3.26	0.14	0.16	7.8
pgc96001	10.96	141784	0	38	1.73	1.52	0.21	1	61	38	7.5	1.6	2.4	0.0	0.26	25	37	87	38	138	376	3.18	0.27	0.29	7.8
pgc96001	10.96	141785	10	47	1.90	1.70	0.20	2	60	39	7.5	1.7	2.5	-0.1	0.36	24	42	99	41	148	394	3.40	0.29	0.34	11.4
pgc96001	10.96	141786	20	35	1.55	1.55	0.00	2	60	38	7.5	1.7	2.4	-0.0	0.47	23	38	90	34	128	342	2.86	0.28	0.35	9.4
pgc96001	10.96	141787	30	46	1.42	1.35	0.07	1	55	44	7.8	1.6	2.6	-0.1	0.41	24	43	107	49	149	421	3.59	0.30	0.31	9.6
pgc96001	10.96	141788	40	44	1.45	1.36	0.09	3	60	38	7.4	1.7	2.4	-0.1	0.54	24	43	105	45	151	411	3.71	0.29	0.31	9.4
pgc96001	10.96	141789	50	42	1.46	1.36	0.10	1	61	39	7.6	1.6	2.6	0.0	0.55	24	40	100	42	136	381	3.34	0.29	0.30	9.4
pgc96001	10.96	141790	60	44	1.37	1.33	0.04	1	62	37	7.5	1.6	2.5	0.0	0.59	22	41	100	42	142	439	3.79	0.30	0.32	7.6
pgc96001	10.96	141791	70	34	1.39	1.28	0.11	1	62	37	7.4	1.7	2.3	0.1	0.54	23	42	96	44	148	406	3.41	0.28	0.34	8.0
pgc96001	10.96	141792	80	43	1.24	1.14	0.10	2	63	35	7.3	1.8	2.3	-0.0	0.64	19	42	94	44	151	430	3.52	0.31	0.30	7.2
pgc96001	10.96	141793	90	46	1.12	1.04	0.08	1	58	41	7.6	1.6	2.4	-0.1	0.68	19	43	92	47	154	438	3.55	0.29	0.31	6.8
pgc96001	10.96	141794	100	46	1.15	1.05	0.10	2	55	43	7.6	1.7	2.6	-0.3	0.78	20	40	87	48	148	420	3.47	0.28	0.31	6.8
pgc96001	10.96	141795	110	45	1.13	1.05	0.08	2	60	38	7.4	1.7	2.3	-0.1	0.83	18	41	88	44	143	425	3.44	0.30	0.31	6.6
pgc96001	10.96	141796	120	47	1.03	0.99	0.04	1	60	39	7.6	1.5	2.5	0.1	1.10	14	40	86	43	143	432	3.51	0.30	0.30	6.2
pgc96001	10.96	141797	130	40	0.94	0.83	0.11	2	55	44	7.7	1.7	2.4	-0.2	1.21	10	43	87	52	157	472	3.67	0.24	0.32	6.2
pgc96001	10.96	141798	140	38	0.88	0.78	0.10	0	59	41	7.7	1.5	2.4	0.1	1.35	7	45	87	55	150	484	3.50	0.22	0.32	5.5
pgc96001	10.96	141799	150	43	0.98	0.83	0.15	1	61	38	7.5	1.6	2.5	0.0	1.50	1	42	85	49	137	466	3.40	0.29	0.32	5.1
pgc96001	10.96	141800	160	41	0.98	0.91	0.07	0	56	44	7.8	1.5	2.5	0.0	1.70	1	43	91	47	153	489	3.55	0.32	0.32	4.7
pgc96001	11.96	141801	0	47	1.76	1.57	0.19	0	57	43	7.8	1.5	2.4	0.1	0.03	25	42	100	39	124	461	3.27	0.28	0.15	10.4
pgc96001	11.96	141802	10	48	1.55	1.45	0.10	0	51	48	8.0	1.5	2.6	-0.1	0.08	24	45	112	45	149	461	3.40	0.17	0.15	10.9
pgc96001	11.96	141803	20	47	1.48	1.38	0.10	1	59	40	7.6	1.6	2.6	-0.1	0.15	24	45	109	51	156	472	3.50	0.33	0.18	10.2
pgc96001	11.96	141804	30	45	1.53	1.42	0.11	1	55	44	7.8	1.5	2.7	-0.1	0.22	23	45	109	52	161	437	3.49	0.33	0.18	9.8
pgc96001	11.96	141805	40	48	1.37	1.29	0.08	1	59	40	7.6	1.6	2.6	-0.1	0.25	24	46	106	57	154	442	3.57	0.31	0.16	9.0
pgc96001	11.96	141806	50	51	1.44	1.35	0.09	0	53	47	7.9	1.5	2.5	-0.1	0.30	25	46	108	55	149	437	3.43	0.34	0.22	10.3

Table 2 Geochemical Data for Cores

Cruise	Stn	id	Sedz cm	Water %	T.Car. %	O.Car. %	I.Car. %	sand %	silt %	clay %	mean phi	stdv phi	kurt	skew	NH4 mM	S04 mM	Cu ppm	Zn ppm	Ni ppm	Cr ppm	Mn ppm	Fe %	Ag ppm	Cd ppm	Pb ppm
pgc96001	11.96	141807	60	46	1.22	1.15	0.07	1	56	43	7.7	1.6	2.5	-0.1	0.40	23	41	92	50	151	443	3.53	0.28	0.19	6.3
pgc96001	11.96	141808	70	42	1.40	1.31	0.09	1	58	41	7.6	1.6	2.6	-0.2	0.42	22	42	99	46	135	424	3.35	0.30	0.12	7.8
pgc96001	11.96	141809	80	48	1.01	0.93	0.08	1	50	49	7.9	1.6	2.5	-0.3	0.56	22	44	94	55	160	497	3.53	0.32	0.15	6.2
pgc96001	11.96	141810	90	50	1.14	1.07	0.07	1	53	46	7.8	1.7	2.6	-0.3	0.70	19	41	94	56	164	488	3.63	0.34	0.16	5.5
pgc96001	11.96	141811	100	49	1.12	1.06	0.06	2	52	47	7.7	1.7	2.5	-0.3	0.84	20	38	90	50	147	462	3.49	0.32	0.16	5.1
pgc96001	11.96	141812	110	53	1.16	1.09	0.07	2	51	48	7.7	1.8	2.3	-0.3	0.93	18	37	90	55	138	475	3.47	0.32	0.15	5.2
pgc96001	11.96	141813	120	49	1.19	1.11	0.08	2	54	44	7.7	1.7	2.4	-0.2	1.07	17	37	91	42	155	481	3.53	0.32	0.15	5.8
pgc96001	11.96	141814	130	54	1.28	1.22	0.06	1	53	46	7.9	1.5	2.7	-0.1	1.17	14	33	88	41	136	430	3.49	0.34	0.13	4.4
pgc96001	11.96	141815	140	51	1.20	1.04	0.16	2	57	41	7.5	1.8	2.3	-0.2	1.27	15	35	89	40	130	448	3.45	0.33	0.14	4.7
pgc96001	11.96	141816	150	49	1.20	1.13	0.07	1	54	45	7.8	1.6	2.6	-0.2	1.39	13	37	90	42	145	438	3.44	0.32	0.17	4.9
pgc96001	12.96	141817	0	50	1.84	1.74	0.10	2	66	32	7.2	1.7	2.5	0.0	0.29	24	40	101	38	146	461	3.53	0.31	0.14	9.0
pgc96001	12.96	141818	10	52	1.76	1.70	0.06	2	64	34	7.3	1.6	2.5	-0.0	0.42	24	39	102	37	137	433	3.40	0.32	0.15	9.2
pgc96001	12.96	141819	20	54	1.70	1.60	0.10	1	59	39	7.5	1.6	2.5	-0.1	0.54	23	41	105	41	148	463	3.46	0.32	0.18	10.7
pgc96001	12.96	141820	30	57	1.64	1.55	0.09	1	61	37	7.5	1.6	2.6	-0.1	0.66	22	40	106	39	144	468	3.44	0.31	0.15	10.7
pgc96001	12.96	141821	40	53	1.66	1.58	0.08	1	62	37	7.5	1.6	2.5	-0.0	0.74	22	41	109	34	142	436	3.37	0.31	0.16	10.7
pgc96001	12.96	141822	50	54	1.53	1.49	0.04	1	57	41	7.6	1.6	2.5	-0.2	0.74	21	41	106	43	142	426	3.33	0.30	0.13	9.0
pgc96001	12.96	141823	60	54	1.54	1.47	0.07	1	62	38	7.5	1.5	2.5	0.1	0.69	22	42	105	46	158	457	3.31	0.30	0.13	8.7
pgc96001	12.96	141824	70	50	1.53	1.43	0.10	1	60	39	7.5	1.6	2.5	-0.1	0.90	20	40	95	45	146	394	3.08	0.27	0.14	8.5
pgc96001	12.96	141825	80	52	1.50	1.44	0.06	1	57	42	7.6	1.5	2.7	-0.2	1.09	20	45	104	46	157	420	3.33	0.31	0.13	8.4
pgc96001	12.96	141826	90	52	1.57	1.39	0.18	1	58	42	7.7	1.5	2.6	-0.0	1.39	18	44	106	46	155	426	3.40	0.32	0.15	8.1
pgc96001	12.96	141827	100	56	1.47	1.28	0.19	1	56	44	7.8	1.6	2.4	-0.1	1.70	18	43	104	47	136	443	3.52	0.30	0.14	7.8
pgc96001	12.96	141828	110	55	1.42	1.25	0.17	0	59	41	7.7	1.4	2.4	0.2	2.10	16	41	101	42	146	429	3.54	0.29	0.14	7.6
pgc96001	12.96	141829	120	52	1.41	1.26	0.15	1	55	44	7.8	1.6	2.5	-0.1	2.51	14	40	94	44	131	408	3.20	0.27	0.14	7.6
pgc96001	14.96	141830	0	51	1.75	1.56	0.19	2	64	34	7.1	1.8	2.1	0.2	0.20	24	34	88	41	125	446	3.03	0.16	0.20	6.9
pgc96001	14.96	141831	10	52	1.79	1.58	0.21	2	64	35	7.3	1.7	2.4	0.0	0.20	21	36	90	40	128	444	3.05	0.16	0.24	6.3
pgc96001	14.96	141832	20	48	1.62	1.46	0.16	2	66	32	7.1	1.7	2.3	0.1	0.62	19	39	93	39	136	485	3.24	0.16	0.25	7.0
pgc96001	14.96	141833	30	49	1.79	1.60	0.19	0	58	42	7.6	1.7	2.1	0.0	1.24	16	35	89	35	139	464	3.11	0.17	0.26	7.4
pgc96001	14.96	141834	40	48	1.63	1.45	0.18	0	67	33	7.3	1.5	2.4	0.3	1.62	11	36	90	37	137	491	3.08	0.16	0.37	7.4
pgc96001	14.96	141835	50	51	1.66	1.50	0.16	2	64	33	7.1	1.8	2.2	0.1	2.01	5	38	95	37	144	501	3.17	0.15	0.30	8.8
pgc96001	14.96	141836	60	44	1.63	1.42	0.21	2	64	34	7.1	1.7	2.2	0.1	2.46	3	37	94	39	152	510	3.17	0.15	0.32	8.1
pgc96001	14.96	141837	70	52	1.60	1.41	0.19	0	58	42	7.7	1.5	2.2	0.1	2.81	2	41	104	44	150	531	3.36	0.14	0.27	9.6
pgc96001	14.96	141838	80	52	1.59	1.43	0.16	0	60	40	7.6	1.6	2.2	0.1	2.79	1	39	98	39	152	512	3.26	0.15	0.28	8.9
pgc96001	14.96	141839	90	48	1.53	1.35	0.18	0	64	36	7.4	1.7	2.2	0.2	2.44	2	39	101	38	143	566	3.23	0.14	0.27	8.3
pgc96001	15.96	141840	0	48	1.64	1.45	0.19	1	66	33	7.2	1.7	2.2	0.2	0.60	22	31	80	30	66	407	2.87	0.14	0.24	6.4
pgc96001	15.96	141841	10	35	1.73	1.41	0.32	0	64	36	7.4	1.6	2.3	0.2	1.05	17	33	82	34	67	466	2.95	0.15	0.25	6.4
pgc96001	15.96	141842	20	50	1.69	1.47	0.22	0	65	34	7.3	1.6	2.3	0.2	1.65	14	35	87	39	69	409	2.94	0.15	0.26	7.2
pgc96001	15.96	141843	30	52	1.76	1.60	0.16	0	71	29	7.1	1.6	2.4	0.4	1.89	10	34	83	35	66	385	2.75	0.16	0.26	7.1
pgc96001	15.96	141844	40	38	1.49	1.32	0.17	0	67	33	7.2	1.7	2.2	0.3	2.90	1	32	79	35	55	372	2.60	0.16	0.28	6.8
pgc96001	15.96	141845	50	43	1.66	1.47	0.19	1	70	30	7.1	1.6	2.4	0.3	2.13	1	37	94	45	66	424	3.06	0.16	0.26	8.5
pgc96001	15.96	141846	60	44	1.60	1.41	0.19	2	67	31	7.1	1.7	2.2	0.2	2.22	1	36	92	38	63	417	2.95	0.16	0.31	8.7
pgc96001	15.96	141847	70	42	1.62	1.45	0.17	0	67	32	7.2	1.6	2.2	0.3	2.03	1	37	92	39	62	413	3.01	0.17	0.27	8.6
pgc96001	15.96	141848	80	46	1.51	1.32	0.19	2	68	31	7.1	1.7	2.2	0.2	2.23	1	39	95	43	66	415	3.00	0.16	0.27	8.8
pgc96001	15.96	141849	90	40	1.47	1.24	0.23	1	69	31	7.1	1.7	2.2	0.3	1.92	1	36	89	42	63	390	2.84	0.16	0.43	7.9
pgc96001	15.96	141850	100	45	1.39	1.20	0.19	1	62	37	7.4	1.7	2.3	0.1	1.98	1	36	91	38	60	375	2.74	0.17	0.29	8.3
pgc96001	15.96	141851	110	39	1.48	1.39	0.09	1	66	33	7.2	1.8	2.2	0.3	1.94	1	34	90	37	57	340	2.72	0.17	0.25	7.5
pgc96001	15.96	141852	120	42	1.43	1.34	0.09	1	73	25	6.8	1.7	2.3	0.5	1.95	1	35	92	43	62	377	2.92	0.17	0.25	7.5
pgc96001	15.96	141853	130	38	1.42	1.34	0.08	1	67	32	7.2	1.7	2.2	0.3	1.89	1	36	99	42	61	357	2.82	0.18	0.26	7.2

Table 2 Geochemical Data for Cores

Cruise	Stn	id	Sedz cm	Water %	T.Car. %	O.Car. %	I.Car. %	sand %	silt %	clay %	mean phi	stdv phi	kurt	skew	NH4 mM	S04 mM	Cu ppm	Zn ppm	Ni ppm	Cr ppm	Mn ppm	Fe %	Ag ppm	Cd ppm	Pb ppm
pgc96001	16.96	141854	0	57	1.79	1.66	0.13	1	61	38	7.5	1.7	2.2	0.1	0.39	25	38	94	44	64	485	3.06	0.22	0.16	7.5
pgc96001	16.96	141855	10	52	1.75	1.63	0.12	0	47	52	8.0	1.7	2.2	-0.2	0.34	25	37	92	44	60	421	3.06	0.26	0.17	7.9
pgc96001	16.96	141856	20	51	1.68	1.61	0.07	0	59	41	7.6	1.6	2.2	0.1	0.33	25	40	100	44	61	472	3.17	0.26	0.17	9.6
pgc96001	16.96	141857	30	52	1.60	1.51	0.09	0	60	40	7.6	1.5	2.3	0.1	0.44	25	41	105	47	61	465	3.20	0.26	0.17	9.4
pgc96001	16.96	141858	40	55	1.48	1.40	0.08	0	64	35	7.4	1.6	2.3	0.2	0.49	25	39	100	47	56	416	3.01	0.25	0.18	8.8
pgc96001	16.96	141859	50	44	1.51	1.47	0.04	0	60	40	7.7	1.5	2.4	0.1	0.52	25	42	103	50	61	483	3.28	0.26	0.18	8.5
pgc96001	16.96	141860	60	51	1.47	1.40	0.07	1	60	39	7.5	1.7	2.3	0.1	0.60	25	42	99	50	57	447	3.12	0.25	0.18	7.9
pgc96001	16.96	141861	70	49	1.47	1.37	0.10	1	57	42	7.6	1.7	2.3	-0.0	0.58	22	41	97	47	60	442	3.10	0.25	0.17	7.1
pgc96001	16.96	141862	80	43	1.53	1.47	0.06	2	60	38	7.4	1.8	2.2	-0.0	0.56	22	42	98	39	68	497	3.21	0.25	0.16	7.2
pgc96001	16.96	141863	90	51	1.41	1.33	0.08	0	57	43	7.7	1.6	2.2	0.1	0.61	22	40	93	41	62	434	3.09	0.26	0.16	6.5
pgc96001	16.96	141864	100	45	1.48	1.40	0.08	0	56	44	7.8	1.6	2.3	-0.0	0.68	23	39	93	40	69	462	3.17	0.26	0.15	7.2
pgc96001	16.96	141865	110	44	1.41	1.28	0.13	2	60	39	7.4	1.8	2.1	-0.1	0.74	22	39	90	44	62	454	3.18	0.25	0.19	6.4
pgc96001	16.96	141866	120	51	1.43	1.35	0.08	1	61	37	7.4	1.7	2.3	-0.0	0.69	22	35	82	34	61	405	2.88	0.25	0.16	5.5
pgc96001	17.96	141867	0	57	1.88	1.75	0.13	1	57	42	7.7	1.6	2.6	-0.1	0.28	25	37	92	35	63	423	3.11	0.22	0.14	7.6
pgc96001	17.96	141868	10	53	1.86	1.72	0.14	1	58	40	7.5	1.7	2.3	-0.1	0.43	25	38	94	37	63	406	3.06	0.24	0.15	8.8
pgc96001	17.96	141869	20	55	1.69	1.58	0.11	0	55	45	7.8	1.6	2.2	0.0	0.35	25	41	101	40	67	429	3.19	0.24	0.15	8.4
pgc96001	17.96	141870	30	51	1.63	1.56	0.07	0	55	45	7.8	1.6	2.3	-0.0	0.37	25	43	102	44	103	418	3.19	0.24	0.13	8.8
pgc96001	17.96	141871	40	53	1.60	1.53	0.07	0	58	42	7.7	1.6	2.3	0.1	0.38	25	41	98	42	100	429	3.13	0.24	0.13	8.4
pgc96001	17.96	141872	50	48	1.65	1.55	0.10	1	64	35	7.5	1.6	2.5	0.2	0.37	25	42	100	44	103	426	3.13	0.25	0.11	9.1
pgc96001	17.96	141873	60	53	1.54	1.47	0.07	1	54	45	7.8	1.7	2.2	-0.1	0.65	25	41	96	40	97	399	3.11	0.25	0.13	8.0
pgc96001	17.96	141874	70	49	1.56	1.49	0.07	1	58	41	7.7	1.6	2.4	0.0	0.56	25	42	96	41	98	417	3.10	0.24	0.15	8.4
pgc96001	17.96	141875	80	53	1.59	1.50	0.09	0	60	40	7.6	1.6	2.3	0.1	0.39	24	40	91	42	97	391	3.07	0.23	0.13	7.4
pgc96001	17.96	141876	90	52	1.53	1.39	0.14	1	58	41	7.7	1.6	2.4	0.0	0.38	25	42	92	40	95	408	3.15	0.22	0.12	7.6
pgc96001	17.96	141877	100	53	1.54	1.42	0.12	0	55	45	7.8	1.6	2.3	0.0	0.52	24	41	94	36	94	413	3.20	0.23	0.12	7.6
pgc96001	17.96	141878	110	53	1.45	1.39	0.06	0	57	42	7.8	1.5	2.3	0.1	0.73	22	41	89	37	94	417	3.28	0.22	0.11	7.0
pgc96001	17.96	141879	120	56	1.50	1.44	0.06	1	56	43	7.7	1.6	2.4	-0.0	0.82	22	38	84	39	89	419	3.11	0.25	0.10	7.2
pgc96001	17.96	141880	130	51	1.49	1.35	0.14	1	55	44	7.8	1.6	2.4	-0.0	0.93	19	42	104	40	102	430	3.17	0.25	0.11	7.1
pgc96001	18.96	141881	0	53	1.66	1.51	0.15	0	45	55	8.2	1.5	2.6	-0.3	0.27	24	48	109	33	185	459	3.60	0.27	0.12	13.6
pgc96001	18.96	141882	10	53	1.55	1.43	0.12	0	42	58	8.3	1.4	2.8	-0.3	0.22	24	47	110	33	190	446	3.72	0.30	0.11	13.8
pgc96001	18.96	141883	20	54	1.36	1.28	0.08	0	43	57	8.3	1.4	2.8	-0.3	0.37	24	46	107	47	177	465	3.54	0.27	0.09	9.3
pgc96001	18.96	141884	30												0.30	25									
pgc96001	18.96	141885	40	56	1.09	1.02	0.07	0	45	55	8.2	1.5	2.7	-0.3	0.33	24	39	92	46	167	475	3.65	0.30	0.12	6.2
pgc96001	18.96	141886	50	53	1.12	1.03	0.09	0	44	56	8.3	1.4	2.6	-0.2	0.29	24	37	90	45	161	461	3.64	0.34	0.14	6.0
pgc96001	18.96	141887	60	51	1.14	1.04	0.10	0	44	56	8.2	1.5	2.6	-0.2	0.47	24	32	81	42	156	421	3.34	0.29	0.13	5.4
pgc96001	18.96	141888	70	56	1.13	1.03	0.10	0	38	62	8.4	1.5	2.7	-0.5	0.44	24	33	85	42	161	421	3.52	0.34	0.15	5.2
pgc96001	18.96	141889	80	50	1.12	1.02	0.10	0	42	58	8.3	1.4	2.6	-0.2	0.59	22	34	87	45	151	437	3.48	0.33	0.13	6.4
pgc96001	18.96	141890	90	50	1.66	1.66	0.00	0	46	53	8.1	1.5	2.7	-0.2	0.60	21	31	81	41	155	405	3.70	0.44	0.15	5.0
pgc96001	18.96	141891	100	52	1.15	1.04	0.11	1	45	54	8.1	1.5	2.7	-0.3	0.63	22	33	86	44	153	433	3.59	0.36	0.14	6.0
pgc96001	18.96	141892	110	51	1.19	1.06	0.13	1	48	51	8.0	1.6	2.6	-0.3	0.76	22	33	88	41	150	436	3.55	0.39	0.11	5.9
pgc96001	18.96	141893	120	53	1.16	1.08	0.08	1	48	52	8.1	1.5	2.7	-0.2	0.74	22	34	87	42	162	433	3.60	0.37	0.14	5.3
pgc96001	18.96	141894	130	52	1.11	1.03	0.08	1	50	49	7.9	1.7	2.6	-0.3	0.80	21	34	84	41	160	429	3.63	0.32	0.19	5.8
pgc96001	19.96	141895	0	54	1.65	1.52	0.13	1	51	48	7.8	1.7	2.5	-0.3	0.21	25	51	112	42	162	446	3.63	0.28	0.11	14.7
pgc96001	19.96	141896	10	50	1.56	1.44	0.12	1	50	49	7.9	1.7	2.6	-0.3	0.33	24	54	114	44	165	474	3.77	0.29	0.13	15.7
pgc96001	19.96	141897	20	50	1.39	1.31	0.08	1	47	52	8.0	1.6	2.7	-0.4	0.36	25	52	113	39	144	476	3.85	0.29	0.15	13.6
pgc96001	19.96	141898	30	55	1.32	1.23	0.09	1	44	56	8.2	1.5	2.7	-0.4	0.43	24	46	104	43	149	445	3.62	0.30	0.11	10.5
pgc96001	19.96	141899	40	51	1.10	1.02	0.08	1	47	52	8.1	1.6	2.7	-0.3	0.43	24	44	93	43	149	489	3.77	0.30	0.15	8.7

Table 2 Geochemical Data for Cores

Cruise	Stn	id	Sedz cm	Water %	T.Car. %	O.Car. %	I.Car. %	sand %	silt %	clay %	mean phi	stdv phi	kurt	skew	NH4 mM	S04 mM	Cu ppm	Zn ppm	Ni ppm	Cr ppm	Mn ppm	Fe %	Ag ppm	Cd ppm	Pb ppm
pgc96001	19.96	141900	50	53	1.06	0.95	0.11	1	48	52	8.0	1.6	2.7	-0.3	0.50	24	38	89	41	142	489	3.66	0.29	0.14	6.7
pgc96001	19.96	141901	60	52	1.08	0.99	0.09	0	46	54	8.1	1.4	2.7	-0.2	0.54	24	37	90	42	141	469	3.72	0.31	0.12	7.1
pgc96001	19.96	141902	70	52	1.12	1.00	0.12	0	46	53	8.1	1.5	2.5	-0.3	0.63	24	36	86	37	138	485	3.79	0.34	0.13	6.3
pgc96001	19.96	141903	80	54	1.08	0.99	0.09	1	46	53	8.1	1.5	2.7	-0.3	0.72	23	39	92	52	153	510	3.71	0.33	0.13	6.3
pgc96001	19.96	141904	90	53	1.08	1.00	0.08	1	49	50	8.0	1.6	2.7	-0.3	0.73	23	36	87	50	139	465	3.61	0.32	0.09	4.9
pgc96001	19.96	141905	100	54	1.13	1.04	0.09	1	47	52	8.0	1.5	2.7	-0.3	0.85	23	35	89	51	125	427	3.57	0.30	0.10	6.2
pgc96001	19.96	141906	110	51	1.12	1.00	0.12	0	46	54	8.1	1.5	2.6	-0.3	0.86	22	36	87	49	137	432	3.54	0.32	0.10	6.0
pgc96001	19.96	141907	120	50	1.04	0.93	0.11	1	52	48	7.9	1.6	2.4	-0.2	0.92	22	35	88	46	123	440	3.49	0.32	0.11	5.5
pgc96001	19.96	141908	130	50	1.09	0.98	0.11	0	48	52	8.1	1.5	2.5	-0.1	1.02	21	36	90	46	130	434	3.61	0.34	0.15	6.1
pgc96001	19.96	141909	140	53	1.12	1.00	0.12	0	51	49	8.0	1.5	2.5	-0.1	1.04	19	34	85	47	115	406	3.41	0.31	0.11	5.9
pgc97002	1.97	185001	0	47	1.55	1.43	0.12	1	62	38	7.4	1.8	2.0	0.1	1.00	22	29	76	38	134	367	2.82	0.16	0.26	7.1
pgc97002	1.97	185002	10	48	1.53	1.41	0.12	0	68	32	7.1	1.9	2.0	0.4	1.79	14	30	77	34	141	353	2.86	0.16	0.32	6.5
pgc97002	1.97	185003	20	51	1.60	1.46	0.14	0	69	31	7.1	1.8	2.2	0.5	2.33	4	31	80	40	140	372	2.96	0.18	0.21	6.2
pgc97002	1.97	185004	30	49	1.57	1.43	0.14	0	60	40	7.4	1.8	2.0	0.1	2.98	0	31	79	39	138	409	2.97	0.17	0.24	6.2
pgc97002	1.97	185005	40	46	1.57	1.42	0.15	0	64	36	7.3	1.8	2.0	0.2	3.02	0	32	80	38	138	378	2.94	0.16	0.21	6.6
pgc97002	1.97	185006	50	47	1.53	1.39	0.14	0	63	37	7.3	1.8	2.0	0.2	3.38	0	30	81	38	135	402	2.91	0.17	0.23	6.6
pgc97002	1.97	185007	60	49	1.66	1.49	0.17	0	66	34	7.2	1.8	2.0	0.3	3.45	0	31	81	37	135	389	2.89	0.16	0.29	6.8
pgc97002	1.97	185008	70	48	1.57	1.41	0.16	0	59	41	7.5	1.8	2.0	0.1	3.70	0	34	85	40	132	399	2.92	0.15	0.26	7.2
pgc97002	1.97	185009	80	46	1.48	1.31	0.17	0	53	47	7.7	1.9	1.8	-0.1	3.64	0	31	80	36	125	373	2.80	0.14	0.28	7.3
pgc97002	1.97	185010	90	48	1.66	1.52	0.14	0	63	36	7.3	1.8	2.0	0.2	3.61	0	41	101	45	132	366	2.79	0.15	0.24	7.2
pgc97002	1.97	185011	100	45	1.53	1.37	0.16	0	62	37	7.4	1.8	2.0	0.2	3.64	0	30	75	41	115	374	2.73	0.15	0.37	6.9
pgc97002	1.97	185012	110	47	1.48	1.32	0.16	0	67	33	7.1	1.8	2.0	0.3	3.89	0	32	81	38	133	391	2.93	0.14	0.31	7.5
pgc97002	1.97	185013	120	47	1.47	1.34	0.13	0	68	32	7.1	1.8	2.1	0.3	3.84	0	30	80	36	122	357	2.80	0.14	0.29	7.3
pgc97002	1.97	185014	130	48	1.54	1.42	0.12	1	55	44	7.6	1.9	1.9	-0.1	3.85	0	36	90	39	128	378	2.98	0.14	0.29	8.8
pgc97002	1.97	185015	140	47	1.56	1.39	0.17	1	64	35	7.2	1.9	2.0	0.2	3.58	0	34	86	41	127	376	2.88	0.14	0.29	8.4
pgc97002	1.97	185016	150	48	1.47	1.31	0.16	0	58	42	7.5	1.8	1.9	0.0	4.03	0	30	81	37	119	386	2.87	0.13	0.28	7.9
pgc97002	5.97	185017	0	67	1.65	1.51	0.14	0	35	65	8.4	1.6	2.8	-0.6	0.18	26	47	109	51	133	1024	3.51	0.13	0.42	11.0
pgc97002	5.97	185018	10	61	1.68	1.43	0.25	0	34	66	8.4	1.6	2.9	-0.7	0.26	26	45	97	50	133	974	3.46	0.19	0.57	5.3
pgc97002	5.97	185019	20	60	1.64	1.51	0.13	0	25	75	8.8	1.5	3.5	-0.9	0.38	26	41	91	53	127	1048	3.30	0.19	0.48	6.9
pgc97002	5.97	185020	30	58	1.73	1.56	0.17	0	29	71	8.6	1.5	3.2	-0.7	0.45	26	41	96	55	129	1019	3.32	0.20	0.45	6.0
pgc97002	5.97	185021	40	57	1.60	1.58	0.02	0	27	73	8.7	1.4	3.4	-0.8	0.48	25	38	86	49	128	1030	3.16	0.15	0.33	4.9
pgc97002	5.97	185022	50	60	1.51	1.45	0.06	0	32	68	8.6	1.5	3.0	-0.7	0.55	23	46	102	51	135	890	3.36	0.16	0.55	5.8
pgc97002	5.97	185023	60	62	1.51	1.42	0.09	0	35	64	8.4	1.6	3.0	-0.7	0.51	25	40	94	47	126	827	3.24	0.19	0.49	5.1
pgc97002	5.97	185024	70	64	1.38	1.30	0.08	1	31	68	8.5	1.6	3.2	-0.8	0.53	24	43	97	56	125	744	3.26	0.20	0.56	5.5
pgc97002	5.97	185025	80	64	1.39	1.29	0.10	0	31	69	8.5	1.6	3.1	-0.8	0.52	22	38	88	43	118	726	3.16	0.22	0.44	4.9
pgc97002	5.97	185026	90	64	1.37	1.31	0.06	1	38	62	8.2	1.8	2.6	-0.7	0.56	23	40	97	51	130	752	3.33	0.19	0.48	5.1
pgc97002	5.97	185027	100	65	1.31	1.27	0.04	1	34	65	8.4	1.7	2.8	-0.7	0.62	21	39	89	48	124	741	3.22	0.20	0.47	6.2
pgc97002	5.97	185028	110	67	1.33	1.26	0.07	1	32	67	8.4	1.7	3.2	-0.8	0.56	23	39	89	45	112	780	3.05	0.19	0.42	5.8
pgc97002	5.97	185029	120	64	1.30	1.25	0.05	0	31	69	8.5	1.5	3.1	-0.7	0.65	23	45	102	51	127	830	3.38	0.19	0.44	5.4
pgc97002	5.97	185030	130	63	1.32	1.24	0.08	0	28	72	8.6	1.5	3.3	-0.8	0.70	22	46	102	55	113	777	3.03	0.21	0.40	3.9
pgc97002	5.97	185031	140	63	1.32	1.24	0.08	0	29	70	8.6	1.5	3.2	-0.8	0.66	22	41	94	46	115	873	3.32	0.18	0.47	5.5
pgc97002	5.97	185032	150	60	1.33	1.25	0.08	1	33	66	8.4	1.6	3.1	-0.7	0.71	21	40	94	51	118	809	3.32	0.20	0.39	4.9
pgc97002	6.97	185033	0	69	1.52	1.36	0.16	1	37	62	8.3	1.6	3.1	-0.7	1.06	20	39	89	43	114	3388	3.59	0.07	0.39	8.1
pgc97002	6.97	185034	10	68	1.50	1.38	0.12	0	34	66	8.5	1.4	3.1	-0.5	1.12	21	38	91	47	122	2987	3.16	0.09	0.43	7.3
pgc97002	6.97	185035	20	68	1.40	1.27	0.13	0	36	64	8.4	1.4	3.1	-0.5	1.14	20	38	86	49	122	3088	3.42	0.08	0.54	6.2
pgc97002	6.97	185036	30	67	1.38	1.24	0.14	0	37	62	8.3	1.4	3.1	-0.5	1.07	20	40	90	45	117	3186	3.36	0.08	0.44	5.0
pgc97002	6.97	185037	40	67	1.38	1.23	0.15	0	37	63	8.4	1.4	3.3	-0.5	1.09	20	36	87	47	115	3124	3.44	0.11	0.49	5.5

Table 2 Geochemical Data for Cores

Cruise	Stn	id	Sedz cm	Water %	T.Car. %	O.Car. %	I.Car. %	sand %	silt %	clay %	mean phi	stdv phi	kurt	skew	NH4 mM	S04 mM	Cu ppm	Zn ppm	Ni ppm	Cr ppm	Mn ppm	Fe %	Ag ppm	Cd ppm	Pb ppm		
pgc97002	6.97	185038	50	64	1.36	1.22	0.14	0	36	63	8.4	1.4	3.1	-0.5	1.20	20	34	84	47	118	2252	3.28	0.08	0.45	5.4		
pgc97002	6.97	185039	60	64	1.35	1.23	0.12	0	33	67	8.5	1.4	3.3	-0.7	1.21	19	33	81	43	111	1736	3.19	0.09	0.42	3.9		
pgc97002	6.97	185040	70	59	1.40	1.28	0.12	0	37	62	8.4	1.5	3.1	-0.5	1.36	19	33	82	46	111	2085	3.01	0.09	0.43	4.4		
pgc97002	6.97	185041	80	60	1.40	1.30	0.10	0	39	61	8.3	1.4	3.1	-0.5	1.46	19	34	85	46	103	1956	3.26	0.09	0.44	4.6		
pgc97002	6.97	185042	90	65	1.44	1.33	0.11	0	38	62	8.3	1.5	3.0	-0.5	1.53	19	34	82	49	118	1649	3.21	0.10	0.42	5.2		
pgc97002	6.97	185043	100	62	1.39	1.30	0.09	0	35	64	8.4	1.5	3.2	-0.6	1.57	18	37	87	56	122	2123	3.48	0.12	0.69	5.0		
pgc97002	6.97	185044	110	64	1.44	1.35	0.09	0	31	69	8.6	1.4	3.4	-0.6	1.61	16	37	90	52	110	2285	3.33	0.11	0.41	4.3		
pgc97002	6.97	185045	120	61	1.44	1.34	0.10	2	40	58	8.1	1.7	3.0	-0.7	1.46	16	31	76	46	105	2237	3.05	0.10	0.40	4.4		
pgc97002	6.97	185046	130	60	1.46	1.36	0.10	0	36	64	8.4	1.4	3.2	-0.6	1.61	15	31	74	41	100	2442	2.83	0.09	0.37	3.8		
pgc97002	6.97	185047	140	64	1.39	1.30	0.09	0	34	66	8.5	1.4	3.1	-0.5	1.65	16	32	79	47	105	1935	3.24	0.12	0.45	4.1		
pgc97002	6.97	185048	150	60	1.48	1.31	0.17	0	36	64	8.4	1.5	3.0	-0.6	1.84	15	33	82	43	91	5387	2.85	0.07	0.35	3.9		
pgc97002	7.97	185049	0	65	1.52	1.44	0.08	0	34	66	8.4	1.6	3.2	-0.8	0.10	26	47	102	51	141	1160	3.56	0.21	0.43	10.1		
pgc97002	7.97	185050	10	65	1.38	1.28	0.10	1	34	65	8.4	1.5	3.5	-0.8	0.12	26	45	99	53	169	880	3.57	0.21	0.45	6.2		
pgc97002	7.97	185051	20	64	1.31	1.19	0.12	1	38	61	8.2	1.7	3.0	-0.7	0.21	26	38	90	48	161	855	3.53	0.22	0.59	5.1		
pgc97002	7.97	185052	30	63	1.37	1.22	0.15	0	34	66	8.5	1.5	3.2	-0.7	0.28	26	36	89	51	158	955	3.57	0.25	0.50	5.2		
pgc97002	7.97	185053	40	58	1.38	1.24	0.14	0	36	64	8.4	1.5	3.2	-0.7	0.42	23	34	81	48	136	1845	3.28	0.24	0.34	5.6		
pgc97002	7.97	185054	50	58	1.37	1.25	0.12	1	37	62	8.3	1.6	3.1	-0.7	0.50	22	42	100	50	158	855	3.40	0.25	0.46	5.0		
pgc97002	7.97	185055	60	64	1.37	1.23	0.14	0	38	62	8.3	1.6	3.0	-0.7	0.65	22	40	99	54	165	925	3.63	0.26	0.47	5.4		
pgc97002	7.97	185056	70	64	1.32	1.18	0.14	0	34	66	8.5	1.4	3.2	-0.6	0.68	22	34	83	51	147	705	3.27	0.26	0.50	5.2		
pgc97002	7.97	185057	80	61	1.27	1.15	0.12	0	32	68	8.5	1.3	3.5	-0.6	0.81	20	40	92	49	152	715	3.24	0.26	0.58	5.2		
pgc97002	7.97	185058	90	57	1.32	1.20	0.12	0	34	66	8.5	1.4	3.3	-0.6	0.88	21	35	85	50	147	930	3.37	0.21	0.53	5.0		
pgc97002	7.97	185059	100	57	1.40	1.28	0.12	0	36	64	8.4	1.4	3.1	-0.5	0.98	17	37	87	47	146	855	3.07	0.23	0.40	4.3		
pgc97002	7.97	185060	110	59	1.37	1.24	0.13	0	30	70	8.6	1.4	3.6	-0.8	1.05	17	39	92	52	159	1000	3.10	0.18	0.31	5.3		
pgc97002	7.97	185061	120	63	1.28	1.15	0.13	0	29	71	8.6	1.3	3.9	-0.6	1.09	17	37	88	50	160	865	3.26	0.26	0.38	4.7		
pgc97002	7.97	185062	130	60	1.29	1.17	0.12	1	36	64	8.4	1.5	3.3	-0.7	1.23	16	39	92	49	165	935	3.28	0.22	0.38	4.5		
pgc97002	7.97	185063	140	57	1.38	1.27	0.11	0	29	71	8.6	1.3	3.8	-0.7	1.39	17	33	83	49	150	995	3.10	0.23	0.29	5.1		
pgc97002	7.97	185064	150	58	1.36	1.23	0.13	0	30	70	8.6	1.4	3.4	-0.8	1.37	14	34	83	53	155	805	3.21	0.27	0.50	4.1		
pgc97002	9.97	185065	0	65	1.28	1.18	0.10	0	32	68	8.6	1.4	3.0	-0.5	0.22	21	37	89	49	168	525	3.39	0.20	0.33	5.4		
pgc97002	9.97	185066	10	58	1.12	1.05	0.07	1	38	61	8.3	1.7	2.9	-0.6	0.27	22	35	84	45	148	460	3.15	0.23	0.27	4.6		
pgc97002	9.97	185067	20	57	1.20	1.11	0.09	0	31	69	8.6	1.4	3.3	-0.7	0.34	21	35	83	49	151	460	3.13	0.27	0.39	4.8		
pgc97002	9.97	185068	30	58	1.36	1.26	0.10	0	31	69	8.5	1.5	3.7	-0.8	0.39	15	41	89	50	159	500	3.05	0.24	0.25	5.0		
pgc97002	9.97	185069	40	55	1.30	1.19	0.11	1	33	67	8.5	1.5	3.3	-0.7	0.38	21	39	90	53	165	590	3.97	0.26	0.54	4.5		
pgc97002	9.97	185070	50	58	1.28	1.16	0.12	0	33	67	8.5	1.4	3.2	-0.6	0.39	17	39	92	52	170	530	3.37	0.34	0.36	4.1		
pgc97002	9.97	185071	60	57	1.30	1.15	0.15	1	37	62	8.4	1.5	3.1	-0.6	0.51	22	37	87	45	155	495	3.29	0.29	0.36	4.2		
pgc97002	9.97	185072	70	58	1.25	1.13	0.12	0	33	67	8.5	1.5	3.1	-0.6	0.45	17	35	83	46	158	465	3.19	0.33	0.38	4.2		
pgc97002	9.97	185073	80	57	1.24	1.13	0.11	1	32	67	8.5	1.5	3.4	-0.8	0.60	17	42	96	51	163	615	3.44	0.23	0.21	4.5		
pgc97002	9.97	185074	90	59	1.21	1.10	0.11	0	32	67	8.6	1.4	3.1	-0.6	0.49	20	42	97	48	161	510	3.54	0.33	0.47	4.5		
pgc97002	9.97	185075	100	58	1.15	1.06	0.09	0	33	67	8.5	1.5	3.2	-0.7	0.50	21	39	92	48	171	525	3.63	0.28	0.39	4.5		
pgc97002	9.97	185076	110	57	1.18	1.10	0.08	1	32	67	8.5	1.5	3.3	-0.7	0.56	19	42	96	47	167	495	3.49	0.26	0.41	4.3		
pgc97002	9.97	185077	120	62	1.16	1.09	0.07	0	33	67	8.5	1.4	3.3	-0.7	0.53	21	43	95	46	160	470	3.45	0.27	0.53	4.2		
pgc97002	9.97	185078	130	65	1.18	1.09	0.09	0	34	65	8.4	1.5	3.2	-0.7	0.57	21	36	86	43	157	455	3.43	0.31	0.38	4.3		
pgc97002	9.97	185079	140	62	1.16	1.07	0.09	0	33	67	8.5	1.4	3.0	-0.6	0.62	21	36	86	43	155	485	3.48	0.33	0.31	4.4		
pgc97002	9.97	185080	150	62	1.12	1.02	0.10	1	36	63	8.4	1.6	3.1	-0.7	0.62	21	40	94	52	161	515	3.41	0.28	0.38	4.7		
pgc97002	3.97	n1-0	0		1.46	1.34	0.12										0.09	17	42	102	54	100	590	3.51			
pgc97002	3.97	n1-5	5		1.33	1.20	0.13										0.14	21	44	112	54	101	573	3.48			
pgc97002	3.97	n1-10	10		1.25	1.14	0.11										0.22	22	45	109	53	101	571	3.43			
pgc97002	3.97	n1-15	15		1.29	1.11	0.18										0.21	21	45	109	57	101	609	3.66			

Table 2 Geochemical Data for Cores

Cruise	Stn	id	Sedz cm	Water %	T.Car. %	O.Car. %	I.Car. %	sand %	silt %	clay %	mean phi	stdv phi	kurt	skew	NH4 mM	S04 mM	Cu ppm	Zn ppm	Ni ppm	Cr ppm	Mn ppm	Fe %	Ag ppm	Cd ppm	Pb ppm
pgc97002	3.97	n1-20	20		1.32	1.12	0.20								0.23	20	45	108	52	95	657	3.64			
pgc97002	3.97	n1-25	25		1.29	1.13	0.16								0.20	23	44	107	52	99	635	3.44			
pgc97002	3.97	n1	30		1.19	1.09	0.10								0.19	22	43	108	54	96	610	3.42			
pgc97002	3.97	n1	35		1.23	1.11	0.12								0.23	21	42	95	52	88	588	3.32			
pgc97002	3.97	n1	40		1.31	1.14	0.17								0.21	20	39	91	50	86	591	3.39			
pgc97002	3.97	n1	45		1.22	1.12	0.10								0.23	19	38	89	57	85	567	3.32			
pgc97002	3.97	n1	50		1.17	1.09	0.08								0.29	23	38	89	55	78	570	3.43			
pgc97002	3.97	n1	55		1.13	1.03	0.10								0.30	21	36	88	50	77	539	3.35			
pgc97002	3.97	n1	60		1.19	1.03	0.16								0.37	20	35	87	55	76	543	3.37			
pgc97002	3.97	n1	65		1.17	1.02	0.15								0.39	19	36	87	50	74	530	3.30			
pgc97002	3.97	n1	70		1.21	1.04	0.17								0.43	22	35	88	50	74	543	3.31			
pgc97002	3.97	n1	75		1.22	1.05	0.17								0.47	23	35	86	51	73	558	3.37			
pgc97002	3.97	n1	80		1.24	1.08	0.16								0.54	20	35	87	50	75	525	3.23			
pgc97002	3.97	n1	85		1.23	1.08	0.15								0.57	21	34	86	50	69	518	3.26			
pgc97002	3.97	n1	90		1.26	1.14	0.12								0.66	19	34	89	49	66	516	3.20			
pgc97002	3.97	n1	95		1.28	1.14	0.14								0.59	19	33	86	49	64	533	3.32			
pgc97002	3.97	n1	100		1.26	1.16	0.10								0.62	17	35	88	43	76	558	3.29			
pgc97002	11.97	n2	0		1.85	1.69	0.16								0.15	20	48	137	54	150	7005	3.70			
pgc97002	11.97	n2	5		1.88	1.67	0.21								0.12	21	48	135	53	147	8508	3.65			
pgc97002	11.97	n2	10		1.82	1.63	0.19								0.12	22	50	128	52	142	6758	3.71			
pgc97002	11.97	n2	15		1.68	1.55	0.13								0.13	20	46	117	53	131	5489	3.64			
pgc97002	11.97	n2	20		1.66	1.51	0.15								0.16	20	45	112	56	128	6599	3.56			
pgc97002	11.97	n2	25		1.65	1.45	0.20								0.21	21	42	100	51	136	7813	3.56			
pgc97002	11.97	n2	30		6.32	1.39	4.93								0.18	19	40	97	53	131	4638	3.54			
pgc97002	11.97	n2	35		1.52	1.39	0.13								0.21	18	39	94	53	130	5086	3.52			
pgc97002	11.97	n2	40		1.53	1.40	0.13								0.23	19	37	92	51	130	4873	3.56			
pgc97002	11.97	n2	45		1.48	1.33	0.15								0.25	20	37	92	56	124	5137	3.60			
pgc97002	11.97	n2	50		1.43	1.28	0.15								0.28	19	37	90	56	135	5042	3.46			
pgc97002	11.97	n2	55		1.41	1.24	0.17								0.34	20	36	85	51	117	5363	3.25			
pgc97002	11.97	n2	60		1.40	1.26	0.14								0.37	18	35	88	52	121	4803	3.29			
pgc97002	11.97	n2	65		1.42	1.30	0.12								0.38	20	36	90	51	126	4258	3.46			
pgc97002	11.97	n2	70		1.40	1.28	0.12								0.48	19	36	90	54	123	4026	3.58			
pgc97002	11.97	n2	75		1.42	1.29	0.13								0.53	20	35	88	51	118	3469	3.31			
pgc97002	11.97	n2	80		1.44	1.29	0.15								0.58	19	36	91	50	111	3650	3.30			
pgc97002	11.97	n2	85		1.50	1.36	0.14								0.58	20	35	92	50	119	3530	3.35			
pgc97002	11.97	n2	90		1.54	1.39	0.15								0.68	20	35	90	47	118	4798	3.40			
pgc97002	10.97	185081	0	68	1.71	1.55	0.16	0	40	60	8.3	1.4	3.0	-0.4	0.43	26	54	129	55	145	4150	3.89	0.18	0.35	12.7
pgc97002	10.97	185082	10	68	1.59	1.45	0.14	0	32	68	8.5	1.4	3.4	-0.6	0.52	26	48	110	45	140	3950	4.06	0.12	0.53	9.8
pgc97002	10.97	185083	20	69	1.56	1.38	0.18	0	36	64	8.4	1.4	3.2	-0.5	0.53	26	42	98	53	132	5455	3.40	0.14	0.32	9.4
pgc97002	10.97	185084	30	66	1.44	1.30	0.14	0	34	66	8.5	1.4	3.0	-0.5	0.66	25	38	90	45	134	3285	3.32	0.09	0.44	5.6
pgc97002	10.97	185085	40	67	1.38	1.26	0.12	0	37	63	8.4	1.4	3.1	-0.5	0.73	24	38	89	47	130	2815	3.31	0.09	0.42	6.1
pgc97002	10.97	185086	50	65	1.41	1.26	0.15	0	34	66	8.4	1.5	3.4	-0.7	0.80	24	39	91	48	131	3470	3.52	0.10	0.43	6.0
pgc97002	10.97	185087	60	65	1.43	1.33	0.10	0	33	67	8.5	1.4	3.2	-0.5	0.97	22	37	89	46	133	3460	3.50	0.10	0.39	5.2
pgc97002	10.97	185088	70	68	1.46	1.34	0.12	0	32	68	8.5	1.4	3.2	-0.6	0.98	21	34	88	46	123	2665	3.26	0.11	0.37	5.5
pgc97002	10.97	185089	80	65	1.49	1.38	0.11	0	34	66	8.5	1.5	3.2	-0.7	1.01	21	36	88	47	133	2195	3.96	0.11	0.57	5.4
pgc97002	10.97	185090	90	57	1.61	1.29	0.32	0	34	66	8.5	1.4	3.2	-0.6	1.16	21	41	94	42	132	6140	3.18	0.09	0.32	5.4
pgc97002	10.97	185091	100	65	1.48	1.35	0.13	0	32	68	8.5	1.4	3.2	-0.6	1.29	20	35	88	40	138	2460	3.38	0.11	0.45	5.3
pgc97002	10.97	185092	110	66	1.43	1.25	0.18	1	31	68	8.5	1.4	3.6	-0.7	1.28	19	35	87	41	140	5480	3.55	0.10	0.45	5.4

Table 2 Geochemical Data for Cores

Cruise	Stn	id	Sedz cm	Water %	T.Car. %	O.Car. %	I.Car. %	sand %	silt %	clay %	mean phi	stdv phi	kurt	skew	NH4 mM	S04 mM	Cu ppm	Zn ppm	Ni ppm	Cr ppm	Mn ppm	Fe %	Ag ppm	Cd ppm	Pb ppm
pgc97002	10.97	185093	120	67	1.43	1.32	0.11	0	34	66	8.5	1.5	3.3	-0.7	1.30	17	37	90	48	141	2505	3.40	0.10	0.39	5.4
pgc97002	10.97	185094	130	68	1.46	1.31	0.15	0	34	66	8.5	1.4	3.1	-0.6	1.31	17	34	85	41	136	2645	3.27	0.11	0.46	5.2
pgc97002	10.97	185095	140	68	1.41	1.29	0.12	1	32	67	8.5	1.4	3.4	-0.7	1.34	17	36	89	45	143	3260	3.39	0.12	0.44	5.0
pgc97002	10.97	185096	150	68	1.43	1.28	0.15	0	35	65	8.4	1.5	3.3	-0.7	1.47	17	37	88	43	143	3450	3.34	0.12	0.39	5.1
pgc97002	15.97	185097	0	71	1.99	1.78	0.21	0	30	70	8.6	1.4	3.7	-0.8	0.43	26	49	125	45	152	7324	3.43	0.11	0.35	12.3
pgc97002	15.97	185098	10	70	1.83	1.63	0.20	1	33	66	8.4	1.6	3.4	-0.8	0.60	24	50	113	40	145	7763	3.19	0.10	0.37	9.8
pgc97002	15.97	185099	20	71	1.73	1.56	0.17	0	29	71	8.6	1.4	3.4	-0.7	0.72	23	53	117	58	149	6360	4.22	0.12	0.42	8.4
pgc97002	15.97	185100	30	71	1.65	1.46	0.19	0	30	70	8.6	1.4	3.5	-0.7	0.79	23	51	108	56	148	6459	3.52	0.12	0.45	7.6
pgc97002	15.97	185101	40	70	1.87	1.44	0.43	0	32	68	8.5	1.4	3.4	-0.7	0.91	22	43	93	48	146	7162	3.59	0.10	0.48	6.0
pgc97002	15.97	185102	50	70	1.55	1.35	0.20	0	31	69	8.5	1.5	3.4	-0.7	0.91	21	35	86	49	136	4030	3.13	0.12	0.40	5.2
pgc97002	15.97	185103	60	69	1.55	1.40	0.15	0	30	70	8.6	1.4	3.5	-0.8	1.08	21	37	90	50	142	4810	3.35	0.12	0.42	5.2
pgc97002	15.97	185104	70	68	1.59	1.40	0.19	1	34	65	8.3	1.7	3.0	-0.8	1.17	20	38	89	51	131	4233	3.27	0.12	0.61	4.3
pgc97002	15.97	185105	80	67	1.59	1.42	0.17	0	29	70	8.6	1.4	3.4	-0.8	1.13	20	37	89	48	128	4623	3.09	0.13	0.38	4.2
pgc97002	15.97	185106	90	62	1.83	1.33	0.50	0	35	65	8.3	1.6	3.2	-0.8	0.97	19	34	82	40	126	10878	2.98	0.09	0.30	4.6
pgc97002	15.97	185107	100	60	1.62	1.35	0.27	0	31	69	8.5	1.5	3.5	-0.8	0.95	18	35	83	46	122	4949	3.69	0.13	0.46	4.7
pgc97002	15.97	185108	110	68	1.58	1.39	0.19	0	27	73	8.7	1.2	3.4	-0.5	1.42	17	34	83	47	123	8198	3.08	0.12	0.44	4.6
pgc97002	15.97	185109	120	68	1.56	1.39	0.17	0	32	68	8.5	1.5	3.7	-0.8	1.40	16	35	80	43	130	4337	3.03	0.13	0.42	5.0
pgc97002	15.97	185110	130	68	1.57	1.41	0.16	0	27	72	8.7	1.4	3.6	-0.8	1.46	17	41	97	50	141	5088	3.45	0.13	0.34	5.2
pgc97002	15.97	185111	140	68	1.60	1.40	0.20	1	30	70	8.6	1.4	4.0	-0.8	1.54	16	42	96	53	130	5841	3.09	0.12	0.42	4.6
pgc97002	15.97	185112	150	70	1.57	1.37	0.20	0	32	68	8.4	1.5	3.5	-0.8	1.55	16	37	85	45	134	5293	3.17	0.12	0.40	4.6
pgc97002	16.97	185113	0	69	1.84	1.68	0.16	1	29	71	8.5	1.5	3.9	-0.9	0.18	24	55	128	48	141	1412	4.08	0.20	0.48	12.0
pgc97002	16.97	185114	10	68	1.65	1.53	0.12	1	28	71	8.6	1.5	4.1	-1.0	0.21	24	54	116	46	135	1499	3.60	0.20	0.49	10.6
pgc97002	16.97	185115	20	67	1.51	1.40	0.11	1	29	70	8.6	1.5	3.9	-1.0	0.24	24	46	99	55	139	1055	3.99	0.21	0.56	7.7
pgc97002	16.97	185116	30	70	1.46	1.34	0.12	0	28	72	8.6	1.4	3.7	-0.8	0.34	25	37	88	50	140	395	3.35	0.23	0.31	5.6
pgc97002	16.97	185117	40	67	1.55	1.40	0.15	0	28	71	8.6	1.4	3.7	-0.8	0.40	24	40	94	48	126	2620	4.16	0.22	0.54	6.2
pgc97002	16.97	185118	50	68	1.60	1.33	0.27	0	26	74	8.7	1.4	3.7	-0.9	0.47	26	41	94	51	131	2234	3.39	0.22	0.68	6.4
pgc97002	16.97	185119	60	63	1.46	1.41	0.05	0	25	75	8.7	1.4	4.0	-1.0	0.55	25	40	95	47	135	3465	3.31	0.22	0.50	5.8
pgc97002	16.97	185120	70	67	1.49	1.35	0.14	0	26	74	8.7	1.2	3.4	-0.6	0.60	24	40	89	47	122	1768	3.09	0.24	1.24	5.4
pgc97002	16.97	185121	80	66	1.47	1.32	0.15	0	30	70	8.6	1.4	3.6	-0.8	0.62	24	39	92	49	129	2688	3.46	0.25	0.63	6.1
pgc97002	16.97	185122	90	65	1.41	1.30	0.11	1	29	70	8.6	1.5	3.6	-0.9	0.65	22	36	89	50	121	2313	3.10	0.22	0.59	5.0
pgc97002	16.97	185123	100	66	1.46	1.33	0.13	0	30	70	8.5	1.5	3.5	-0.8	0.70	21	43	102	56	133	2337	3.45	0.24	0.82	6.0
pgc97002	16.97	185124	110	67	1.47	1.33	0.14	0	33	67	8.5	1.5	3.1	-0.7	0.75	22	37	94	47	124	2015	3.18	0.24	0.68	5.6
pgc97002	17.97	185125	0	49	0.83	0.77	0.06	1	32	68	8.4	1.7	3.2	-0.9	0.04	25	50	110	48	129	1023	3.87	0.22	0.47	13.5
pgc97002	17.97	185126	10	52	0.94	0.88	0.06	0	32	68	8.4	1.6	3.2	-0.9	0.07	25	36	86	48	119	1010	3.33	0.32	0.33	4.5
pgc97002	17.97	185127	20	45	0.84	0.76	0.08	0	34	66	8.4	1.6	3.0	-0.8	0.09	25	31	75	41	105	431	3.05	0.22	0.36	3.8
pgc97002	17.97	185128	30	39	0.55	0.41	0.14	1	38	62	8.3	1.6	2.8	-0.6	0.06	25	50	75	37	110	314	3.29	0.08	0.01	3.5
pgc97002	17.97	185129	40	37	0.42	0.29	0.13	0	58	42	7.6	1.7	2.0	0.1	0.08	25	52	70	25	100	529	2.86	0.07	0.01	2.7
pgc97002	17.97	185130	50	35	0.44	0.32	0.12	0	63	37	7.3	1.8	2.0	0.2	0.07	25	48	69	26	101	503	3.22	0.06	0.00	2.5
pgc97002	17.97	185131	60	41	0.58	0.41	0.18	1	39	60	8.3	1.6	2.7	-0.6	0.10	25	46	69	24	113	531	3.10	0.07	0.01	3.1
pgc97002	17.97	185132	70	38	0.47	0.33	0.14	1	56	44	7.7	1.7	2.1	-0.1	0.09	25	45	67	27	103	526	3.16	0.07	0.01	2.4
pgc97002	18.97	185133	0	70	1.90	1.76	0.14	1	38	62	8.2	1.7	2.7	-0.7	0.26	26	48	126	39	122	2863	3.22	0.36	0.61	13.8
pgc97002	18.97	185134	10	66	1.50	1.38	0.12	0	34	66	8.4	1.6	3.3	-0.8	0.34	26	54	123	37	120	2509	3.08	0.45	0.67	10.1
pgc97002	18.97	185135	20	68	1.49	1.32	0.17	1	34	65	8.4	1.5	3.4	-0.8	0.45	25	38	88	40	123	2994	3.05	0.46	0.72	5.8
pgc97002	18.97	185136	30	67	1.41	1.27	0.14	0	30	70	8.5	1.5	3.6	-0.9	0.50	25	39	91	41	130	2368	3.34	0.50	0.76	6.3
pgc97002	18.97	185137	40	67	1.43	1.29	0.14	1	43	57	8.1	1.6	3.1	-0.6	0.53	24	44	99	47	124	2235	3.41	0.22	0.74	5.6
pgc97002	18.97	185138	50	67	1.48	1.35	0.13	0	36	64	8.4	1.4	3.3	-0.6	0.57	23	40	97	46	127	2267	3.51	0.26	0.75	5.9

Table 2 Geochemical Data for Cores

Cruise	Stn	id	Sedz cm	Water %	T.Car. %	O.Car. %	I.Car. %	sand %	silt %	clay %	mean phi	stdv phi	kurt	skew	NH4 mM	S04 mM	Cu ppm	Zn ppm	Ni ppm	Cr ppm	Mn ppm	Fe %	Ag ppm	Cd ppm	Pb ppm	
pgc97002	18.97	185139	60	68	1.72	1.31	0.41	0	34	66	8.5	1.4	2.9	-0.5	0.61	23	40	90	49	123	2141	3.18	0.22	0.76	5.0	
pgc97002	18.97	185140	70	68	1.45	1.32	0.13	0	30	70	8.5	1.4	3.6	-0.7	0.65	23	38	91	48	133	1936	3.45	0.23	0.86	5.7	
pgc97002	18.97	185141	80	68	1.50	1.33	0.17	0	30	69	8.6	1.4	3.5	-0.7	0.65	22	34	81	45	116	3109	2.86	0.24	0.76	4.8	
pgc97002	18.97	185142	90	67	1.50	1.38	0.12	0	28	71	8.6	1.4	3.8	-0.8	0.66	22	35	85	46	120	2569	2.95	0.27	0.84	5.2	
pgc97002	18.97	185143	100	69	1.45	1.29	0.16	1	35	64	8.4	1.5	3.4	-0.7	0.78	22	37	91	50	128	2750	3.21	0.24	0.68	5.7	
pgc97002	18.97	185144	110	68	1.38	1.25	0.13	0	33	66	8.4	1.5	3.4	-0.8	0.85	21	34	81	46	115	2851	2.91	0.28	0.73	5.7	
pgc97002	18.97	185145	120	69	1.38	1.25	0.13	0	36	64	8.4	1.5	3.0	-0.6	0.90	23	39	92	52	124	2994	3.25	0.26	0.77	5.6	
pgc97002	18.97	185146	130	66	1.38	1.25	0.13	0	32	68	8.5	1.4	3.4	-0.7	0.93	20	35	83	43	110	2170	2.89	0.22	0.73	5.3	
pgc97002	18.97	185147	140	64	1.32	1.19	0.13	1	33	67	8.4	1.5	3.5	-0.8	0.94	22	34	78	40	108	1686	2.77	0.26	0.86	4.5	
pgc97002	18.97	185148	150	67	1.43	1.31	0.12	1	28	72	8.7	1.4	3.8	-0.8	0.99	22	37	86	43	110	1751	3.03	0.31	0.89	11.2	
pgc97002	19.97	185149	0	73	2.09	1.92	0.17	0	31	69	8.5	1.5	3.4	-0.8	0.22	27	49	120	42	126	4717	3.44	0.19	0.50	14.1	
pgc97002	19.97	185150	10	73	2.02	1.79	0.23	0	32	68	8.5	1.5	3.3	-0.7	0.36	26	51	130	44	131	6073	3.56	0.20	0.57	14.3	
pgc97002	19.97	185151	20	70	1.90	1.72	0.18	1	34	65	8.3	1.7	3.2	-0.8	0.45	27	52	132	53	141	5006	3.53	0.23	0.52	12.9	
pgc97002	19.97	185152	30	71	1.84	1.66	0.18	0	33	67	8.5	1.5	3.4	-0.8	0.68	22	54	129	51	141	5186	3.56	0.24	0.61	10.9	
pgc97002	19.97	185153	40	71	1.87	1.61	0.26	0	32	68	8.5	1.4	3.5	-0.7	0.74	24	51	117	49	124	6607	3.40	0.23	0.52	10.9	
pgc97002	19.97	185154	50	74	1.59	1.42	0.17	1	33	66	8.4	1.6	3.6	-0.8	0.81	22	47	99	50	127	5226	3.34	0.25	0.58	8.4	
pgc97002	19.97	185155	60	70	1.55	1.34	0.21	1	31	69	8.5	1.5	3.8	-0.8	0.89	22	42	94	47	131	4701	3.33	0.23	0.73	7.6	
pgc97002	19.97	185156	70	69	1.50	1.32	0.18	0	31	68	8.5	1.5	3.6	-0.8	0.87	21	44	96	49	136	5910	3.37	0.23	0.67	6.6	
pgc97002	19.97	185157	80	71	1.47	1.29	0.18	0	25	75	8.7	1.4	4.2	-0.9	1.07	19	39	89	49	132	5390	3.17	0.24	0.60	5.5	
pgc97002	19.97	185158	90	68	1.43	1.29	0.14	1	29	71	8.6	1.4	3.9	-0.8	1.16	19	40	94	50	134	3042	3.30	0.24	0.64	6.3	
pgc97002	19.97	185159	100	69	1.42	1.25	0.17	0	31	69	8.6	1.4	3.5	-0.7	1.16	17	42	91	41	111	2896	2.64	0.23	0.66	4.7	
pgc97002	19.97	185160	110	67	1.49	1.31	0.18	1	33	66	8.4	1.5	3.6	-0.8	1.20	17	37	86	45	131	2767	3.08	0.25	0.74	5.6	
pgc97002	19.97	185161	120	69	1.50	1.31	0.19	1	33	67	8.4	1.5	3.5	-0.8	1.27	16	37	83	47	140	3335	3.05	0.26	0.78	5.8	
pgc97002	19.97	185162	130	70	1.59	1.35	0.24	1	30	69	8.6	1.4	3.7	-0.7	1.32	16	36	86	48	133	4122	3.11	0.92	0.56	5.6	
pgc97002	19.97	185163	140	69	1.58	1.32	0.26	0	35	65	8.4	1.6	3.2	-0.7	1.34	16	40	95	52	143	4634	3.44	0.29	0.69	6.0	
pgc97002	19.97	185164	150	69	1.56	1.38	0.18	0	33	66	8.5	1.4	3.3	-0.6	1.43	15	36	86	43	126	3919	3.08	0.24	0.74	5.5	
pgc97002	20.97	185165	0	65	1.44	1.28	0.16	0	35	65	8.4	1.5	3.1	-0.6	0.15	26	41	98	48	129	1792	3.86	0.10	0.85	5.8	
pgc97002	20.97	185166	10	62	1.25	1.12	0.13	0	32	68	8.5	1.5	3.2	-0.7	0.19	26	35	101	50	114	1963	4.05	0.09	0.71	5.0	
pgc97002	20.97	185167	20	59	1.42	1.25	0.17	0	27	73	8.7	1.4	3.7	-0.9	0.24	27	38	102	50	141	2213	3.80	0.12	0.63	5.2	
pgc97002	20.97	185168	30	57	1.25	1.11	0.14	0	27	72	8.7	1.4	3.5	-0.7	0.29	26	40	97	51	137	2277	3.91	0.16	0.86	5.5	
pgc97002	20.97	185169	40	57	1.27	1.14	0.13	0	28	72	8.6	1.5	3.7	-0.9	0.34	25	42	93	49	124	3507	2.99	0.14	0.63	5.6	
pgc97002	20.97	185170	50	59	1.26	1.09	0.17	0	31	69	8.5	1.6	3.2	-0.8	0.39	24	39	93	51	134	2618	3.50	0.16	0.70	5.2	
pgc97002	20.97	185171	60	59	1.25	1.11	0.14	0	27	75	8.7	1.4	4.0	-1.0	0.39	23	44	95	47	134	2186	3.41	0.14	0.75	5.5	
pgc97002	20.97	185172	70	56	1.30	1.15	0.15	1	26	74	8.7	1.5	4.1	-1.0	0.41	22	42	88	44	143	1802	2.86	0.12	0.68	5.4	
pgc97002	20.97	185173	80	58	1.29	1.14	0.15	0	27	73	8.7	1.3	3.4	-0.7	0.47	24	41	93	50	148	1815	3.39	0.15	0.77	5.8	
pgc97002	20.97	185174	90	59	1.24	1.09	0.15	1	30	70	8.6	1.6	3.7	-0.9	0.52	24	41	92	44	145	2131	3.31	0.21	0.82	5.3	
pgc97002	13.97	n3	0		2.28	2.11	0.17									0.20	22	51	144	42	111	9243	3.59			
pgc97002	13.97	n3	5		2.19	2.05	0.14									0.27	23	52	153	37	112	8374	3.51			
pgc97002	13.97	n3	10		2.11	1.96	0.15									0.34	24	52	145	43	112	7427	3.56			
pgc97002	13.97	n3	15		2.08	1.92	0.16									0.40	23	50	133	41	110	6687	3.52			
pgc97002	13.97	n3	20		1.91	1.79	0.12									0.42	23	49	123	38	103	6206	3.52			
pgc97002	13.97	n3	25		1.89	1.69	0.20									0.50	24	47	111	46	104	7717	3.50			
pgc97002	13.97	n3	30		1.82	1.68	0.14									0.50	22	42	101	42	104	5602	3.47			
pgc97002	13.97	n3	35		1.86	1.71	0.15									0.55	20	42	108	43	100	7245	3.53			
pgc97002	13.97	n3	40		1.75	1.58	0.17									0.60	20	41	99	37	108	5953	3.43			
pgc97002	13.97	n3	45		1.75	1.59	0.16									0.71	19	41	97	41	108	6598	3.40			
pgc97002	13.97	n3	50		1.69	1.54	0.15									0.71	19	41	97	49	110	6909	3.63			

Table 2 Geochemical Data for Cores

Cruise	Stn	id	Sedz cm	Water %	T.Car. %	O.Car. %	I.Car. %	sand %	silt %	clay %	mean phi	stdv phi	kurt	skew	NH4 mM	S04 mM	Cu ppm	Zn ppm	Ni ppm	Cr ppm	Mn ppm	Fe %	Ag ppm	Cd ppm	Pb ppm
pgc97002	13.97	n3	55		1.64	1.52	0.12								0.81	18	38	96	44	99	6381	3.66			
pgc97002	13.97	n3	60		1.63	1.48	0.15								0.85	18	37	94	43	101	6934	3.51			
pgc97002	13.97	n3	65		1.62	1.57	0.05								0.88	18	38	97	46	97	4222	3.54			
pgc97002	13.97	n3	70		1.65	1.57	0.08								0.89	17	39	98	43	102	4566	3.66			
pgc97002	13.97	n3	75		1.76	1.48	0.28								0.98	18	38	97	40	91	4535	3.46			
pgc97002	13.97	n3	80		1.62	1.54	0.08								1.05	19	37	98	45	93	4084	3.45			
pgc97002	13.97	n3	85		1.63	1.55	0.08								1.10	17	37	97	43	92	4030	3.47			
pgc97002	30.97	185175	0	68	1.73	1.55	0.18	0	37	63	8.4	1.5	3.2	-0.6	0.22	24	48	112	47	148	1096	3.41	0.14	0.39	13.5
pgc97002	30.97	185176	10	64	1.42	1.31	0.11	0	39	61	8.3	1.6	3.0	-0.6	0.16	26	42	96	44	135	695	3.36	0.12	0.41	9.2
pgc97002	30.97	185177	20	62	1.29	1.19	0.10	1	38	61	8.3	1.6	2.9	-0.6	0.19	27	37	86	40	136	653	3.28	0.13	0.40	6.2
pgc97002	30.97	185178	30	57	1.28	1.21	0.07	1	39	60	8.2	1.6	3.0	-0.6	0.26	26	31	82	39	127	636	3.39	0.12	0.29	4.8
pgc97002	30.97	185179	40	53	1.35	1.23	0.12	1	41	58	8.1	1.7	2.8	-0.6	0.33	26	35	87	41	135	638	3.45	0.13	0.43	5.4
pgc97002	30.97	185180	50	60	1.17	1.09	0.08	0	40	60	8.2	1.6	2.9	-0.5	0.34	27	35	88	49	147	605	3.55	0.13	0.55	5.0
pgc97002	30.97	185181	60	57	1.19	1.10	0.09	0	38	62	8.3	1.6	2.8	-0.6	0.36	25	35	88	55	148	579	3.52	0.16	0.43	3.9
pgc97002	30.97	185182	70	55	1.26	1.11	0.15	1	38	62	8.3	1.6	2.9	-0.6	0.49	23	36	85	48	136	578	3.33	0.18	0.50	4.2
pgc97002	30.97	185183	80	62	1.12	1.05	0.07	1	36	63	8.3	1.6	3.0	-0.7	0.44	25	35	87	52	137	576	3.47	0.17	0.49	5.4
pgc97002	30.97	185184	90	62	1.13	1.04	0.09	1	39	61	8.3	1.6	3.0	-0.6	0.49	25	43	100	51	158	654	3.75	0.19	0.37	4.9
pgc97002	30.97	185185	100	63	1.12	1.01	0.11	0	31	69	8.5	1.5	3.2	-0.7	0.52	26	37	86	47	134	556	3.21	0.16	0.40	4.5
pgc97002	30.97	185186	110	63	1.12	1.03	0.09	0	41	59	8.3	1.4	2.8	-0.4	0.45	24	39	88	45	142	609	3.31	0.17	0.40	5.0
pgc97002	30.97	185187	120	61	1.13	1.03	0.10	0	33	67	8.5	1.5	3.3	-0.8	0.47	24	40	93	47	143	651	3.48	0.16	0.43	5.1
pgc97002	30.97	185188	130	61	1.11	1.02	0.09	0	33	67	8.5	1.5	3.1	-0.7	0.50	24	37	87	50	132	602	3.36	0.17	0.44	4.6
pgc97002	30.97	185189	140	61	1.09	1.00	0.09	0	37	63	8.4	1.4	2.8	-0.4	0.52	23	36	85	45	125	654	3.51	0.16	0.40	4.5
pgc97002	30.97	185190	150	58	1.11	1.03	0.08	0	35	64	8.4	1.6	2.9	-0.7	0.54	23	37	84	45	125	601	3.09	0.17	0.40	4.6
pgc97002	33.97	185191	0	67	1.70	1.56	0.14	1	35	64	8.4	1.5	3.5	-0.7	0.09	25	41	98	35	123	1740	3.03	0.31	0.23	11.8
pgc97002	33.97	185192	10	65	1.62	1.49	0.13	0	43	56	8.2	1.5	2.9	-0.4	0.10	25	45	112	38	144	1546	3.30	0.31	0.25	11.7
pgc97002	33.97	185193	20	66	1.60	1.45	0.15	1	40	59	8.3	1.5	3.1	-0.5	0.13	26	45	104	48	146	1267	3.37	0.28	0.23	9.4
pgc97002	33.97	185194	30	66	1.49	1.37	0.12	0	44	56	8.2	1.5	2.9	-0.4	0.16	26	46	101	47	141	1117	3.59	0.26	0.22	8.8
pgc97002	33.97	185195	40	66	1.42	1.34	0.08	0	37	63	8.4	1.4	3.0	-0.5	0.23	24	43	93	47	127	1262	3.45	0.25	0.25	7.2
pgc97002	33.97	185196	50	67	1.41	1.31	0.10	0	36	64	8.5	1.4	3.0	-0.5	0.30	26	36	81	42	116	1381	3.15	0.25	0.26	6.0
pgc97002	33.97	185197	60	61	1.32	1.19	0.13	1	40	58	8.2	1.6	3.1	-0.6	0.39	25	43	92	53	135	1479	3.50	0.26	0.29	6.5
pgc97002	33.97	185198	70	63	1.30	1.19	0.11	1	38	61	8.3	1.6	3.2	-0.6	0.43	24	36	82	47	132	1146	3.40	0.25	0.25	4.5
pgc97002	33.97	185199	80	64	1.30	1.17	0.13	0	42	58	8.3	1.4	2.8	-0.2	0.40	25	36	85	47	136	1042	3.56	0.24	0.23	5.1
pgc97002	33.97	185200	90	64	1.40	1.23	0.17	1	44	56	8.1	1.6	2.8	-0.5	0.52	24	35	82	48	138	2243	3.45	0.24	0.24	5.3
pgc97002	33.97	185201	100	62	1.36	1.23	0.13	1	47	53	8.0	1.6	2.8	-0.5	0.62	22	34	82	45	120	943	3.28	0.24	0.22	4.1
pgc97002	33.97	185202	110	61	1.38	1.22	0.16	0	39	61	8.3	1.5	3.1	-0.6	0.71	21	35	82	43	120	977	3.12	0.24	0.25	4.6
pgc97002	33.97	185203	120	62	1.39	1.22	0.17	0	42	58	8.2	1.5	2.8	-0.4	0.90	21	33	77	40	124	1038	3.18	0.24	0.29	4.4
pgc97002	33.97	185204	130	65	1.42	1.25	0.17	0	38	62	8.4	1.4	2.7	-0.3	0.91	20	34	81	41	130	1099	3.33	0.25	0.30	4.7
pgc97002	33.97	185205	140	63	1.41	1.25	0.16	0	42	58	8.2	1.5	2.9	-0.4	1.06	18	36	84	44	130	935	3.26	0.24	0.27	4.8
pgc97002	33.97	185206	150	64	1.46	1.28	0.18	0	41	58	8.2	1.5	2.9	-0.5	1.14	18	36	86	46	137	999	3.45	0.25	0.28	4.9
pgc97002	34.97	185207	0	66	1.76	1.53	0.23	0	40	60	8.3	1.5	3.0	-0.5	0.09	25	47	109	46	141	517	3.33	0.27	0.18	14.3
pgc97002	34.97	185208	10	59	1.06	0.94	0.12	1	32	67	8.5	1.5	3.5	-0.7	0.25	25	40	90	53	151	420	3.43	0.24	0.16	5.4
pgc97002	34.97	185209	20	62	1.01	0.90	0.11	0	44	56	8.2	1.5	2.6	-0.3	0.27	25	42	97	51	162	456	3.72	0.24	0.17	6.0
pgc97002	34.97	185210	30	59	0.96	0.84	0.11	0	41	59	8.3	1.4	2.6	-0.3	0.27	25	40	91	53	147	461	3.71	0.25	0.19	5.6
pgc97002	34.97	185211	40	57	0.96	0.86	0.10	0	41	59	8.3	1.5	2.9	-0.5	0.33	25	37	86	49	133	411	3.32	0.24	0.16	5.3
pgc97002	34.97	185212	50	56	0.95	0.86	0.09	0	38	61	8.4	1.4	2.8	-0.4	0.32	25	42	94	52	138	455	3.53	0.24	0.16	5.9
pgc97002	34.97	185213	60	58	0.91	0.80	0.11	0	38	62	8.4	1.5	2.8	-0.4	0.34	24	40	94	49	157	473	3.61	0.33	0.23	6.0
pgc97002	34.97	185214	70	58	0.93	0.83	0.10	0	39	61	8.3	1.5	2.7	-0.4	0.36	24	41	95	55	155	460	3.59	0.34	0.24	6.0

Table 2 Geochemical Data for Cores

Cruise	Stn	id	Sedz cm	Water %	T.Car. %	O.Car. %	I.Car. %	sand %	silt %	clay %	mean phi	stdv phi	kurt	skew	NH4 mM	S04 mM	Cu ppm	Zn ppm	Ni ppm	Cr ppm	Mn ppm	Fe %	Ag ppm	Cd ppm	Pb ppm
pgc97002	34.97	185215	80	58	0.93	0.81	0.12	0	41	58	8.3	1.5	2.9	-0.4	0.35	24	39	91	44	148	443	3.52	0.25	0.19	6.0
pgc97002	34.97	185216	90	58	0.93	0.83	0.10	1	36	63	8.3	1.6	3.1	-0.7	0.36	24	41	94	49	158	452	3.65	0.26	0.22	6.0
pgc97002	34.97	185217	100	58	0.94	0.86	0.08	0	39	61	8.4	1.4	2.8	-0.4	0.39	24	41	95	49	149	451	3.78	0.30	0.23	6.6
pgc97002	34.97	185218	110	57	0.95	0.84	0.11	0	33	67	8.5	1.3	3.2	-0.5	0.38	24	39	93	47	141	434	3.57	0.25	0.24	5.4
pgc97002	34.97	185219	120	58	0.90	0.82	0.08	1	37	62	8.3	1.5	3.1	-0.6	0.42	24	36	89	47	138	424	3.56	0.27	0.18	5.3
pgc97002	34.97	185220	130	57	0.91	0.83	0.08	0	32	68	8.5	1.4	3.2	-0.6	0.42	24	41	97	50	157	470	3.87	0.25	0.23	6.0
pgc97002	34.97	185221	140	57	0.93	0.85	0.08	0	32	68	8.6	1.4	3.2	-0.6	0.45	24	42	93	48	144	447	3.53	0.23	0.23	6.2
pgc97002	34.97	185222	150	57	0.89	0.80	0.09	0	40	60	8.3	1.5	2.8	-0.4	0.46	24	38	90	44	135	431	3.56	0.24	0.19	6.4
pgc97002	35.97	185223	0	59	1.17	1.08	0.09	0	37	63	8.4	1.5	3.1	-0.6	0.23	25	44	100	43	138	478	3.65	0.26	0.23	9.7
pgc97002	35.97	185224	10	55	1.05	0.96	0.10	0	44	55	8.1	1.7	2.6	-0.5	0.19	25	35	83	36	117	405	3.40	0.22	0.28	5.1
pgc97002	35.97	185225	20	53	1.07	0.98	0.09	0	38	62	8.4	1.4	2.8	-0.4	0.24	24	35	84	44	133	415	3.34	0.21	0.15	5.6
pgc97002	35.97	185226	30	55	1.02	0.96	0.06	0	38	62	8.3	1.5	3.0	-0.5	0.23	25	37	88	46	133	437	3.30	0.22	0.28	6.0
pgc97002	35.97	185227	40	57	0.97	0.89	0.08	1	35	64	8.3	1.6	3.2	-0.7	0.27	25	38	87	44	141	425	3.53	0.23	0.21	5.4
pgc97002	35.97	185228	50	56	1.00	0.92	0.08	0	37	62	8.4	1.5	3.1	-0.6	0.33	25	40	94	42	142	443	3.78	0.23	0.34	5.7
pgc97002	35.97	185229	60	59	1.42	1.33	0.09	1	39	60	8.3	1.5	3.1	-0.5	0.17	25	50	109	45	141	659	3.75	0.25	0.28	10.2
pgc97002	35.97	185230	70	60	1.29	1.20	0.09	0	32	68	8.6	1.2	2.9	-0.3	0.16	25	41	92	40	142	578	3.66	0.22	0.32	7.2
pgc97002	35.97	185231	80	59	1.26	1.17	0.09	0	37	63	8.4	1.4	3.0	-0.5	0.15	25	40	91	43	147	512	3.66	0.22	0.33	6.3
pgc97002	35.97	185232	90	58	1.28	1.21	0.07	1	38	61	8.3	1.4	3.1	-0.5	0.27	24	39	92	42	137	510	3.53	0.21	0.52	6.8
pgc97002	35.97	185233	100	61	1.28	1.20	0.08	0	40	60	8.3	1.4	2.8	-0.3	0.38	25	38	89	49	134	507	3.50	0.10	0.31	5.6
pgc97002	35.97	185234	110	60	1.29	1.21	0.08	1	39	60	8.3	1.5	3.1	-0.5	0.36	25	35	87	50	128	505	3.36	0.11	0.30	5.8
pgc97002	35.97	185235	120	56	1.21	1.13	0.08	0	38	62	8.4	1.4	2.9	-0.4	0.41	24	37	92	54	134	526	3.63	0.09	0.32	5.8
pgc97002	35.97	185236	130	56	1.28	1.21	0.07	0	37	63	8.4	1.4	3.0	-0.4	0.50	24	37	90	48	131	558	3.63	0.10	0.29	5.8
pgc97002	35.97	185237	140	59	1.23	1.13	0.10	0	40	60	8.3	1.4	2.9	-0.4	0.68	23	35	85	48	130	496	3.42	0.10	0.31	5.9
pgc97002	35.97	185238	150	61	1.26	1.15	0.11	1	42	58	8.2	1.5	3.0	-0.5	0.78	21	34	86	49	129	483	3.46	0.10	0.33	5.1
pgc97002	36.97	185239	0	62	1.67	1.53	0.14	0	43	57	8.2	1.4	2.3	-0.2	0.35	23	42	97	45	136	477	3.40	0.11	0.25	11.7
pgc97002	36.97	185240	10	61	1.57	1.46	0.11	1	48	52	8.0	1.6	2.6	-0.3	0.32	22	40	97	48	128	454	3.25	0.12	0.24	11.7
pgc97002	36.97	185241	20	60	1.52	1.42	0.10	0	42	58	8.3	1.4	2.3	-0.1	0.40	22	44	103	50	159	493	3.43	0.11	0.25	11.3
pgc97002	36.97	185242	30	59	1.49	1.38	0.11	0	45	55	8.2	1.5	2.5	-0.2	0.48	23	43	102	49	154	504	3.48	0.11	0.25	10.0
pgc97002	36.97	185243	40	58	1.54	1.44	0.10	0	53	47	7.9	1.6	2.3	-0.1	0.58	22	43	102	51	157	461	3.47	0.11	0.25	9.8
pgc97002	36.97	185244	50	60	1.48	1.37	0.11	0	53	47	7.8	1.6	2.5	-0.2	0.63	22	42	97	51	143	448	3.33	0.11	0.23	8.9
pgc97002	36.97	185245	60	59	1.39	1.26	0.13	1	52	48	7.8	1.7	2.3	-0.2	0.72	23	47	103	48	150	508	3.78	0.11	0.25	9.6
pgc97002	36.97	185246	70	59	1.36	1.26	0.10	0	50	50	8.0	1.5	2.3	-0.0	0.85	22	44	98	47	140	492	3.63	0.11	0.24	8.6
pgc97002	36.97	185247	80	62	1.31	1.22	0.09	1	46	54	8.1	1.6	2.5	-0.4	0.95	21	42	92	48	139	474	3.42	0.12	0.23	8.0
pgc97002	36.97	185248	90	60	1.32	1.22	0.10	0	49	51	8.0	1.6	2.5	-0.2	1.05	18	41	89	44	134	502	3.59	0.11	0.22	7.5
pgc97002	36.97	185249	100	61	1.32	1.21	0.11	0	50	50	8.0	1.5	2.5	-0.1	1.21	18	37	86	44	140	489	3.37	0.12	0.24	7.0
pgc97002	36.97	185250	110	58	1.26	1.15	0.11	0	49	51	8.0	1.6	2.5	-0.3	1.34	17	38	84	52	142	540	3.49	0.13	0.21	6.7
pgc97002	36.97	185251	120	57	1.20	1.09	0.11	0	42	57	8.2	1.5	2.5	-0.3	1.56	16	41	87	49	147	532	3.31	0.13	0.22	6.0
pgc97002	36.97	185252	130	58	1.26	1.14	0.12	0	47	53	8.1	1.5	2.5	-0.2	1.58	16	41	89	52	154	546	3.45	0.13	0.25	5.0
pgc97002	36.97	185253	140	58	1.20	1.07	0.13	0	48	52	8.1	1.5	2.6	-0.2	1.67	14	38	84	48	142	511	3.32	0.12	0.25	5.1
pgc97002	36.97	185254	150	60	1.22	1.10	0.12	0	49	51	8.0	1.6	2.5	-0.2	1.87	14	37	88	52	166	517	3.41	0.12	0.27	4.7
pgc97002	31.97	n5	0	1.90	1.59	0.31									0.30	22	39	101	47	145	896	3.50			
pgc97002	31.97	n5	5	1.83	1.64	0.19									0.31	20	39	103	46	148	777	3.43			
pgc97002	31.97	n5	10	1.77	1.61	0.16									0.29	20	40	107	49	148	688	3.38			
pgc97002	31.97	n5	15	1.71	1.49	0.22									0.29	17	41	109	45	146	685	3.34			
pgc97002	31.97	n5	20	1.62	1.44	0.18									0.28	19	41	114	43	148	645	3.40			
pgc97002	31.97	n5	25	1.60	1.40	0.20									0.25	20	41	116	49	145	628	3.40			
pgc97002	31.97	n5	30	1.58	1.40	0.18									0.23	19	42	117	47	151	609	3.34			

Table 2 Geochemical Data for Cores

Cruise	Stn	id	Sedz cm	Water %	T.Car. %	O.Car. %	I.Car. %	sand %	silt %	clay %	mean phi	stdv phi	kurt	skew	NH4 mM	S04 mM	Cu ppm	Zn ppm	Ni ppm	Cr ppm	Mn ppm	Fe %	Ag ppm	Cd ppm	Pb ppm
pgc97002	31.97	n5	35		1.53	1.31	0.22								0.27	19	42	112	49	137	615	3.40			
pgc97002	31.97	n5	40		1.55	1.37	0.18								0.25	18	42	113	47	147	633	3.35			
pgc97002	31.97	n5	45		1.53	1.37	0.16								0.27	21	42	115	45	145	669	3.33			
pgc97002	31.97	n5	50		1.55	1.37	0.18								0.25	20	43	114	49	136	641	3.48			
pgc97002	31.97	n5	55		1.53	1.35	0.18								0.30	21	44	110	43	133	629	3.52			
pgc97002	31.97	n5	60		1.51	1.29	0.22								0.33	22	44	111	47	128	636	3.64			
pgc97002	31.97	n5	65		1.51	1.33	0.18								0.31	18	42	110	40	118	653	3.54			
pgc97002	31.97	n5	70		1.45	1.27	0.18								0.37	21	43	109	40	119	675	3.55			
pgc97002	31.97	n5	75		1.42	1.22	0.20								0.48	18	41	103	46	113	640	3.52			
pgc97002	31.97	n5	80		1.45	1.26	0.19								0.43	21	41	102	40	118	637	3.43			
pgc97002	31.97	n5	85		1.41	1.24	0.17								0.45	20	41	100	42	117	632	3.47			
pgc97002	31.97	n5	90		1.38	1.23	0.15								0.43	18	41	101	44	116	648	3.48			
pgc97002	38.97	185255	0	56	1.59	1.44	0.15	1	57	42	7.7	1.7	2.4	-0.1	0.30	26	53	102	47	163	490	3.50	0.22	0.21	10.4
pgc97002	38.97	185256	10	57	1.56	1.43	0.13	0	45	55	8.1	1.6	2.4	-0.2	0.34	26	58	113	48	172	469	3.67	0.24	0.23	11.5
pgc97002	38.97	185257	20	55	1.40	1.29	0.11	2	52	47	7.7	1.8	2.4	-0.3	0.32	26	55	117	55	167	472	3.59	0.22	0.22	14.2
pgc97002	38.97	185258	30	58	1.40	1.25	0.15	0	49	51	8.0	1.6	2.5	-0.2	0.34	26	55	118	59	179	484	3.66	0.23	0.22	11.7
pgc97002	38.97	185259	40	54	1.41	1.26	0.15	0	44	56	8.2	1.5	2.4	-0.2	0.48	24	50	112	54	176	457	3.60	0.19	0.59	9.3
pgc97002	38.97	185260	50	54	1.37	1.23	0.14	0	51	49	7.9	1.6	2.5	-0.2	0.49	24	51	110	50	159	465	3.48	0.19	0.22	10.4
pgc97002	38.97	185261	60	53	1.24	1.10	0.14	1	50	49	7.9	1.7	2.5	-0.3	0.58	25	50	104	51	159	492	3.60	0.21	0.19	7.1
pgc97002	38.97	185262	70	55	1.22	1.07	0.15	0	55	45	7.8	1.5	2.4	-0.0	0.67	23	43	91	42	140	427	3.23	0.22	0.18	7.9
pgc97002	38.97	185263	80	54	1.16	1.03	0.13	0	50	50	8.0	1.4	2.4	-0.0	0.69	22	47	97	48	155	453	3.53	0.23	0.19	6.9
pgc97002	38.97	185264	90	54	1.16	1.05	0.11	0	50	50	8.0	1.6	2.5	-0.2	0.74	21	45	93	46	156	440	3.45	0.22	0.19	6.8
pgc97002	38.97	185265	100	52	1.10	0.99	0.11	0	48	52	8.0	1.5	2.6	-0.2	0.80	21	41	90	50	151	438	3.49	0.21	0.20	6.9
pgc97002	38.97	185266	110	50	1.00	0.91	0.09	0	48	52	8.0	1.5	2.5	-0.2	0.89	20	44	93	51	159	482	3.68	0.19	0.19	6.8
pgc97002	38.97	185267	120	49	0.85	0.74	0.11	0	40	59	8.3	1.5	2.9	-0.4	0.94	19	48	93	54	179	521	3.63	0.22	0.20	5.2
pgc97002	38.97	185268	130	52	1.04	0.93	0.11	1	42	58	8.2	1.6	2.9	-0.5	0.94	19	42	89	44	146	465	3.57	0.20	0.18	5.0
pgc97002	38.97	185269	140	55	1.06	0.94	0.12	0	46	53	8.1	1.5	2.6	-0.3	1.03	20	41	90	47	147	460	3.55	0.20	0.20	4.8
pgc97002	38.97	185270	150	54	1.12	0.98	0.14	1	49	50	7.9	1.6	2.5	-0.3	1.14	19	39	87	51	142	479	3.63	0.17	0.18	4.4
pgc97002	39.97	185271	0	57	1.61	1.45	0.16	1	57	43	7.6	1.7	2.2	-0.0	0.09	23	52	102	56	166	435	3.62	0.22	0.21	8.9
pgc97002	39.97	185272	10	52	1.56	1.39	0.17	0	63	37	7.5	1.6	2.3	0.2	0.25	25	41	91	47	149	402	3.33	0.18	0.16	7.6
pgc97002	39.97	185273	20	51	1.47	1.30	0.17	0	59	41	7.6	1.7	2.1	0.1	0.19	21	42	93	47	151	409	3.31	0.17	0.16	8.3
pgc97002	39.97	185274	30	50	1.46	1.28	0.18	0	61	39	7.5	1.6	2.2	0.1	0.21	24	43	97	49	154	403	3.35	0.16	0.18	8.9
pgc97002	39.97	185275	40	45	1.60	1.43	0.17	1	65	34	7.4	1.6	2.4	0.2	0.17	24	47	104	46	158	422	3.46	0.16	0.20	9.1
pgc97002	39.97	185276	50	45	1.36	1.23	0.13	0	63	37	7.5	1.6	2.3	0.2	0.24	23	44	101	49	155	421	3.37	0.20	0.17	8.9
pgc97002	39.97	185277	57	50	1.37	1.21	0.16	0	61	39	7.6	1.6	2.2	0.3	0.28	23	46	105	52	162	419	3.41	0.27	0.21	9.2
pgc97002	40.97	185278	0	62	1.77	1.62	0.15	0	56	44	7.8	1.5	2.2	0.1	0.30	25	36	84	35	119	466	2.94	0.17	0.16	8.2
pgc97002	40.97	185279	10	62	1.67	1.52	0.15	0	49	51	8.0	1.6	2.3	-0.2	0.49	25	39	94	36	136	494	3.28	0.18	0.18	9.0
pgc97002	40.97	185280	20	60	1.70	1.55	0.15	0	56	44	7.8	1.5	2.2	0.2	0.43	25	40	97	38	140	526	3.36	0.21	0.17	9.6
pgc97002	40.97	185281	30	60	1.55	1.43	0.12	0	48	52	8.0	1.5	2.2	-0.1	0.47	25	44	109	42	150	501	3.46	0.21	0.18	10.2
pgc97002	40.97	185282	40	59	1.60	1.48	0.12	0	58	42	7.7	1.6	2.3	0.0	0.47	25	40	105	39	139	468	3.37	0.20	0.16	9.5
pgc97002	40.97	185283	50	58	1.49	1.37	0.12	0	52	48	7.9	1.5	2.2	0.0	0.45	25	42	109	45	156	510	3.91	0.24	0.15	9.2
pgc97002	40.97	185284	60	58	1.50	1.39	0.11	0	52	48	7.9	1.5	2.1	0.0	0.52	26	39	99	38	140	466	3.43	0.21	0.15	8.6
pgc97002	40.97	185285	70	56	1.48	1.36	0.12	1	62	38	7.5	1.6	2.3	0.1	0.56	23	42	102	43	154	504	3.50	0.20	0.14	9.1
pgc97002	40.97	185286	80	57	1.46	1.36	0.10	0	49	51	8.0	1.5	2.2	-0.0	0.67	22	39	95	39	134	478	3.21	0.21	0.18	7.5
pgc97002	40.97	185287	90	59	1.56	1.43	0.13	0	56	44	7.8	1.5	2.3	0.0	0.74	21	42	99	34	138	438	3.12	0.23	0.24	7.5
pgc97002	40.97	185288	100	61	1.50	1.39	0.11	0	54	46	7.9	1.5	2.3	-0.0	0.81	25	40	97	36	131	513	3.41	0.23	0.17	8.5
pgc97002	40.97	185289	110	58	1.46	1.32	0.14	0	52	48	7.9	1.6	2.3	-0.1	0.92	21	36	86	31	127	466	3.13	0.23	0.14	7.5

Table 2 Geochemical Data for Cores

Cruise	Stn	id	Sedz cm	Water %	T.Car. %	O.Car. %	I.Car. %	sand %	silt %	clay %	mean phi	stdv phi	kurt	skew	NH4 mM	SO4 mM	Cu ppm	Zn ppm	Ni ppm	Cr ppm	Mn ppm	Fe %	Ag ppm	Cd ppm	Pb ppm
pgc97002	40.97	185290	120	60	1.45	1.34	0.11	0	53	47	7.9	1.6	2.2	-0.1	1.01	21	37	84	37	128	493	3.22	0.23	0.15	6.9
pgc97002	40.97	185291	130	58	1.39	1.29	0.10	0	55	45	7.8	1.7	2.1	0.0	1.12	20	34	80	37	125	450	3.05	0.23	0.15	5.7
pgc97002	40.97	185292	140	59	1.47	1.37	0.10	0	61	39	7.6	1.6	2.1	0.2	1.26	21	33	80	37	125	444	3.12	0.20	0.14	5.3
pgc97002	40.97	185293	150	55	1.42	1.35	0.07	1	48	51	7.9	1.7	2.4	-0.2	1.30	18	35	86	38	134	497	3.35	0.25	0.16	6.2
pgc97002	42.97	185294	0	56	1.62	1.47	0.15	0	60	40	7.5	1.8	2.1	0.1	0.34	26	38	97	38	146	440	3.43	0.20	0.16	9.7
pgc97002	42.97	185295	10	59	1.63	1.48	0.15	0	59	41	7.6	1.7	2.1	0.2	0.45	27	37	97	37	141	459	3.35	0.24	0.15	10.7
pgc97002	42.97	185296	20	55	1.53	1.43	0.10	0	58	45	7.8	1.6	2.1	0.1	0.54	27	38	99	41	138	462	3.28	0.23	0.15	10.2
pgc97002	42.97	185297	30	54	1.54	1.39	0.15	1	51	48	7.8	1.7	2.2	-0.2	0.51	25	39	103	39	152	482	3.37	0.23	0.15	10.7
pgc97002	42.97	185298	40	51	1.48	1.38	0.10	0	61	39	7.5	1.7	2.1	0.2	0.54	26	37	94	37	124	416	3.03	0.19	0.16	10.0
pgc97002	42.97	185299	50	51	1.49	1.36	0.13	2	62	36	7.3	1.8	2.1	0.1	0.59	25	41	95	38	138	460	3.18	0.19	0.12	8.8
pgc97002	42.97	185300	60	54	1.58	1.47	0.11	0	58	42	7.7	1.6	2.2	0.1	0.52	21	39	92	37	146	472	3.15	0.23	0.13	9.5
pgc97002	42.97	185301	70	53	1.56	1.43	0.13	1	60	39	7.4	1.8	2.1	-0.0	0.59	27	43	99	46	151	473	3.38	0.58	0.14	10.4
pgc97002	42.97	185302	80	53	1.41	1.24	0.17	0	55	45	7.8	1.5	2.2	0.1	0.72	25	43	95	43	157	448	3.38	0.19	0.12	8.9
pgc97002	42.97	185303	90	57	1.50	1.34	0.16	0	62	38	7.6	1.6	2.2	0.2	0.77	24	43	97	44	145	426	3.25	0.23	0.15	8.8
pgc97002	42.97	185304	100	52	1.42	1.27	0.15	1	56	43	7.7	1.7	2.4	-0.2	0.78	24	39	91	40	142	422	3.29	0.17	0.13	8.3
pgc97002	42.97	185305	110	51	1.38	1.25	0.13	1	58	42	7.7	1.6	2.3	0.0	0.74	24	37	83	38	124	377	2.92	0.15	0.14	7.1
pgc97002	42.97	185306	120	55	1.38	1.23	0.15	0	53	47	7.9	1.6	2.0	0.0	0.89	24	36	82	37	125	408	3.05	0.16	0.13	7.7
pgc97002	42.97	185307	130	56	1.38	1.22	0.16	1	58	41	7.5	1.8	2.1	-0.0	1.05	22	39	86	39	134	437	3.27	0.18	0.15	8.1
pgc97002	42.97	185308	140	53	1.35	1.20	0.15	1	60	39	7.5	1.7	2.2	0.0	1.13	21	32	75	37	116	375	2.80	0.15	0.14	6.5
pgc97002	42.97	185309	150	56	1.42	1.27	0.15	0	57	44	7.7	1.6	2.1	0.1	1.21	19	33	79	39	134	403	3.01	0.17	0.22	6.8
pgc97002	43.97	185310	0	49	1.58	1.39	0.19	1	63	37	7.3	1.8	2.1	0.1	0.18	25	40	82	40	135	360	2.83	0.13	0.26	7.0
pgc97002	43.97	185311	10	49	1.46	1.25	0.21	0	67	33	7.2	1.8	2.1	0.3	0.56	25	39	82	43	137	370	2.98	0.12	0.24	7.0
pgc97002	43.97	185312	20	49	1.47	1.29	0.18	1	65	35	7.3	1.7	2.2	0.2	0.61	25	34	76	34	121	314	2.67	0.12	0.23	7.5
pgc97002	43.97	185313	30	47	1.50	1.31	0.19	0	65	35	7.3	1.7	2.1	0.2	0.59	25	40	90	43	160	390	3.21	0.13	0.26	9.2
pgc97002	43.97	185314	40	47	1.40	1.24	0.16	2	70	28	6.9	1.8	2.2	0.4	0.47	25	41	92	44	159	372	3.18	0.14	0.31	8.6
pgc97002	43.97	185315	50	46	1.30	1.14	0.16	1	71	28	6.9	1.8	2.2	0.4	0.39	25	44	92	44	152	377	2.99	0.13	0.30	8.6
pgc97002	43.97	185316	60	44	1.35	1.17	0.18	0	66	34	7.2	1.7	2.1	0.3	0.40	25	45	98	45	167	386	3.16	0.13	0.27	8.8
pgc97002	43.97	185317	70	43	1.30	1.12	0.18	0	64	36	7.3	1.7	2.1	0.2	0.35	25	46	94	51	168	406	3.36	0.17	0.29	8.1
pgc97002	43.97	185318	80	46	1.39	1.20	0.19	0	68	32	7.2	1.7	2.2	0.3	0.35	25	40	90	43	154	355	2.91	0.11	0.27	8.2
pgc97002	43.97	185319	90	45	1.35	1.19	0.16	0	65	35	7.3	1.7	2.1	0.3	0.45	25	42	88	43	159	378	3.09	0.10	0.29	7.6
pgc97002	43.97	185320	100	43	1.27	1.06	0.21	0	65	34	7.3	1.7	2.2	0.2	0.58	25	37	85	43	148	364	3.12	0.11	0.25	7.3
pgc97002	43.97	185321	110	46	1.31	1.14	0.17	0	70	30	7.2	1.6	2.3	0.4	0.69	23	40	88	45	142	361	3.06	0.11	0.26	7.9
pgc97002	43.97	185322	120	50	1.29	1.11	0.18	0	71	29	7.0	1.7	2.2	0.4	0.71	23	38	86	40	131	348	3.00	0.10	0.24	7.9
pgc97002	43.97	185323	130	43	1.23	1.05	0.18	0	61	39	7.4	1.8	2.0	0.1	0.74	25	41	87	38	148	365	3.02	0.10	0.23	6.7
pgc97002	43.97	185324	140	44	1.21	1.06	0.15	0	60	40	7.4	1.8	2.0	0.1	0.75	23	39	84	43	134	358	3.08	0.10	0.48	6.5
pgc97002	43.97	185325	150	45	1.27	1.08	0.19	1	70	29	7.0	1.7	2.2	0.4	0.82	23	39	84	41	138	355	3.07	0.11	0.21	7.1

Table 3 Geochemical Data for High Resolution Subsamples

Cruise	Stn	id	Sed_z cm	Water %	T.Car. %	O.Car. %	I.Car. %	Cu ppm	Zn ppm	Ni ppm	Cr ppm	Mn ppm	Fe %
pgc97002	15	61301	0	69	1.99	1.70	0.29	50	139	41	45	8050	3.51
pgc97002	15	61302	2	70	2.03	1.70	0.33	47	124	34	39	9600	3.24
pgc97002	15	61303	4	68	2.14	1.66	0.48	51	133	48	40	13970	3.40
pgc97002	15	61304	6	69	2.10	1.64	0.46	49	127	43	40	12540	3.48
pgc97002	15	61305	8	69	1.99	1.64	0.35	50	129	50	43	9600	3.52
pgc97002	15	61306	10	69	1.95	1.58	0.37	50	129	48	38	10520	3.34
pgc97002	15	61307	12	68	1.86	1.58	0.28	50	121	45	37	7450	3.42
pgc97002	15	61308	14	70	1.81	1.51	0.30	48	115	45	41	8030	3.42
pgc97002	15	61309	16	69	1.82	1.48	0.34	45	111	48	36	9660	3.38
pgc97002	15	61310	18	69	1.77	1.47	0.30	45	106	52	32	8300	3.52
pgc97002	15	61311	20	69	1.76	1.44	0.32	44	104	43	37	9300	3.45
pgc97002	15	61312	22	70	1.72	1.42	0.30	46	108	40	32	8620	3.39
pgc97002	15	61313	24	70	1.71	1.45	0.26	45	102	49	34	6920	3.52
pgc97002	15	61314	26	69	1.67	1.45	0.22	43	100	45	38	5920	3.38
pgc97002	15	61315	28	67	1.70	1.42	0.28	43	102	51	34	7000	3.60
pgc97002	15	61316	30	69	1.72	1.43	0.29	41	99	47	32	9560	3.42
pgc97002	15	61317	32	67	1.64	1.44	0.20	42	98	49	34	6270	3.42
pgc97002	15	61318	34	67	1.65	1.42	0.23	40	97	51	36	7870	3.54
pgc97002	15	61319	36	67	1.70	1.41	0.29	42	100	50	31	8740	3.61
pgc97002	15	61320	38	68	1.63	1.41	0.22	41	98	46	27	7830	3.65
pgc97002	15	61321	40	69	1.68	1.36	0.32	41	99	53	27	9080	3.60
pgc97002	15	61322	42	67	1.66	1.36	0.30	39	97	44	24	8830	3.64
pgc97002	15	61323	44	67	1.65	1.34	0.31	41	99	49	48	9480	3.65
pgc97002	15	61324	46	66	1.59	1.37	0.22	39	96	48	39	5860	3.48
pgc97002	15	61325	48	67	1.56	1.37	0.19	41	99	48	37	5007	3.56
pgc97002	18	61326	0	67	1.84	1.75	0.09	50	138	45	39	4219	3.69
pgc97002	18	61327	2	69	1.89	1.72	0.17	52	143	49	38	3650	3.85
pgc97002	18	61328	4	66	1.87	1.70	0.17	52	148	51	35	3692	3.71
pgc97002	18	61329	6	67	1.87	1.64	0.23	53	145	46	31	3438	3.74
pgc97002	18	61330	8	68	1.71	1.57	0.14	51	130	51	26	2776	3.70
pgc97002	18	61331	10	68	1.66	1.53	0.13	51	123	45	30	3223	3.64
pgc97002	18	61332	12	66	1.56	1.43	0.13	47	109	55	27	3085	3.59
pgc97002	18	61333	14	67	1.56	1.40	0.16	47	107	50	33	3620	3.63
pgc97002	18	61334	16	68	1.49	1.37	0.12	42	101	49	36	3681	3.50
pgc97002	18	61335	18	67	1.45	1.33	0.12	41	97	49	28	2960	3.59
pgc97002	18	61336	20	67	1.43	1.31	0.12	41	97	48	31	2644	3.54
pgc97002	18	61337	22	67	1.43	1.28	0.15	40	96	53	26	2606	3.74
pgc97002	18	61338	24	66	1.40	1.24	0.16	40	96	46	23	2844	3.75
pgc97002	18	61339	26	66	1.38	1.25	0.13	39	95	50	19	2734	3.64
pgc97002	18	61340	28	64	1.39	1.26	0.13	40	98	48	16	2831	3.64
pgc97002	18	61341	30	66	1.37	1.25	0.12	38	96	47	11	2842	3.51
pgc97002	18	61342	32	65	1.39	1.23	0.16	39	94	52	13	3168	3.65
pgc97002	18	61343	34	65	1.35	1.24	0.11	40	96	53	36	2642	3.55
pgc97002	18	61344	36	66	1.38	1.25	0.13	39	95	48	36	2473	3.50
pgc97002	18	61345	38	67	1.36	1.25	0.11	39	95	46	34	2374	3.79
pgc97002	18	61346	40	66	1.41	1.28	0.13	39	95	49	27	2526	3.56
pgc97002	18	61347	42	68	1.44	1.28	0.16	39	96	48	26	2470	3.71
pgc97002	18	61348	44	67	1.41	1.31	0.10	38	95	45	23	2948	3.45

Table 3 Geochemical Data for High Resolution Subsamples

Cruise	Stn	id	Sed_z cm	Water %	T.Car. %	O.Car. %	I.Car. %	Cu ppm	Zn ppm	Ni ppm	Cr ppm	Mn ppm	Fe %
pgc97002	33	61349	0	61	1.79	1.64	0.15	40	106	37	39	4324	3.46
pgc97002	33	61350	2	62	1.71	1.60	0.11	42	114	40	42	2729	3.51
pgc97002	33	61351	4	64	1.63	1.46	0.17	44	125	49	56	1846	3.84
pgc97002	33	61352	6	65	1.60	1.47	0.13	45	125	51	43	1658	3.73
pgc97002	33	61353	8	64	1.73	1.52	0.21	44	117	49	45	1584	3.78
pgc97002	33	61354	10	65	1.57	1.47	0.10	44	120	52	42	1463	3.70
pgc97002	33	61355	12	64	1.60	1.50	0.10	44	118	51	48	1280	3.61
pgc97002	33	61356	14	65	1.60	1.49	0.11	43	114	51	46	1422	3.65
pgc97002	33	61357	16	65	1.58	1.47	0.11	43	113	54	40	1163	3.59
pgc97002	33	61358	18	67	1.57	1.43	0.14	42	113	46	37	1123	3.57
pgc97002	33	61359	20	64	1.56	1.40	0.16	42	108	48	33	1342	3.67
pgc97002	33	61360	22	65	1.49	1.38	0.11	42	106	46	30	1634	3.55
pgc97002	33	61361	24	66	1.49	1.36	0.13	44	106	43	50	1568	3.61
pgc97002	33	61362	26	64	1.46	1.34	0.12	43	107	50	40	1601	3.66
pgc97002	33	61363	28	64	1.45	1.30	0.15	41	100	44	45	1196	3.50
pgc97002	33	61364	30	64	1.42	1.27	0.15	41	99	42	37	1104	3.59
pgc97002	33	61365	32	64	1.44	1.32	0.12	42	100	48	34	1153	3.55
pgc97002	33	61366	34	64	1.37	1.28	0.09	40	94	46	33	1638	3.36
pgc97002	33	61367	36	65	1.38	1.26	0.12	41	93	41	31	1547	3.61
pgc97002	33	61368	38	64	1.40	1.27	0.13	38	91	45	30	1150	3.36
pgc97002	33	61369	40	64	1.42	1.29	0.13	40	91	44	27	1486	3.60
pgc97002	33	61370	42	65	1.39	1.31	0.08	38	90	45	25	1451	3.57
pgc97002	33	61371	44	62	1.40	1.32	0.08	39	93	47	38	1398	3.64
pgc97002	33	61372	46	65	1.38	1.27	0.11	37	92	51	38	1462	3.66
pgc97002	33	61373	48	63	1.35	1.24	0.11	37	90	54	34	1469	3.58
pgc97002	19	61374	0	70	1.99	1.82	0.17	48	128	48	34	4834	3.49
pgc97002	19	61375	2	70	2.04	1.89	0.15	48	132	48	27	4741	3.50
pgc97002	19	61376	4	70	1.95	1.77	0.18	48	133	52	24	5354	3.47
pgc97002	19	61377	6	71	1.93	1.78	0.15	49	134	45	19	5890	3.55
pgc97002	19	61378	8	71	1.93	1.69	0.24	49	132	54	12	7530	3.74
pgc97002	19	61379	10	71	1.96	1.72	0.24	48	133	55	12	7700	3.60
pgc97002	19	61380	12	71	2.05	1.77	0.28	49	135	51	9	10460	3.56
pgc97002	19	61381	14	70	2.09	1.73	0.36	49	139	51	50	10980	3.72
pgc97002	19	61382	16	70	1.92	1.77	0.15	50	147	57	51	6650	3.63
pgc97002	19	61383	18	69	1.87	1.72	0.15	51	152	54	46	5278	3.55
pgc97002	19	61384	20	70	1.87	1.68	0.19	50	140	52	37	5206	3.58
pgc97002	19	61385	22	69	1.84	1.68	0.16	50	135	51	36	5219	3.50
pgc97002	19	61386	24	69	1.83	1.71	0.12	49	133	53	34	5790	3.70
pgc97002	19	61387	26	69	1.83	1.67	0.16	51	136	58	19	7480	3.62
pgc97002	19	61388	28	70	1.91	1.66	0.25	51	135	53	23	8860	3.71
pgc97002	19	61389	30	68	1.86	1.67	0.19	50	134	50	20	9650	3.75
pgc97002	19	61390	32	70	1.83	1.67	0.16	50	128	51	8	5647	3.52
pgc97002	19	61391	34	69	1.78	1.64	0.14	50	127	51	47	5770	3.49
pgc97002	19	61392	36	69	1.74	1.61	0.13	50	126	51	46	5770	3.69
pgc97002	19	61393	38	71	1.76	1.64	0.12	50	127	55	37	4625	3.49
pgc97002	19	61394	40	70	1.70	1.43	0.27	49	123	48	33	7040	3.52

Table 3 Geochemical Data for High Resolution Subsamples

Cruise	Stn	id	Sed_z cm	Water %	T.Car. %	O.Car. %	I.Car. %	Cu ppm	Zn ppm	Ni ppm	Cr ppm	Mn ppm	Fe %
pgc97002	42	61395	0	56	1.53	1.51	0.02	37	91	40		445	3.31
pgc97002	42	61396	2	57	1.65	1.49	0.16	35	90	33		433	3.24
pgc97002	42	61397	4	56	1.61	1.47	0.14	35	94	40	48	447	3.18
pgc97002	42	61398	6	46	1.60	1.42	0.18	36	96	42	45	412	3.21
pgc97002	42	61399	8	55	1.54	1.38	0.16	35	91	38	52	430	3.25
pgc97002	42	61400	10	57	1.57	1.37	0.20	35	95	42	30	429	3.17
pgc97002	42	134901	12	56	1.60	1.40	0.20	35	96	43	28	474	3.22
pgc97002	42	134902	14	57	1.58	1.38	0.20	37	98	40	34	460	3.20
pgc97002	42	134903	16	56	1.62	1.39	0.23	36	99	41	41	467	3.36
pgc97002	42	134904	18	56	1.59	1.39	0.20	35	99	42	31	479	3.32
pgc97002	42	134905	20	57	1.58	1.38	0.20	37	100	43	35	461	3.30
pgc97002	42	134906	22	56	1.62	1.36	0.26	38	103	39	37	482	3.32
pgc97002	42	134907	24	54	1.53	1.35	0.18	39	100	43	33	483	3.37
pgc97002	42	134908	26	53	1.58	1.32	0.26	37	95	39	27	470	3.23
pgc97002	42	134909	28	53	1.55	1.31	0.24	38	98	41	21	508	3.29
pgc97002	42	134910	30	55	1.52	1.32	0.20	38	101	44	10	489	3.35
pgc97002	42	134911	32	55	1.48	1.25	0.23	38	100	42	11	499	3.35
pgc97002	42	134912	34	52	1.51	1.22	0.29	38	102	39	15	484	3.20
pgc97002	42	134913	36	55	1.45	1.21	0.24	40	104	42	13	478	3.20
pgc97002	42	134914	38	53	1.45	1.22	0.23	39	101	42	10	497	3.26
pgc97002	42	134915	40	53	1.43	1.22	0.21	38	98	41	1	479	3.29
pgc97002	42	134916	42	52	1.45	1.25	0.20	38	98	41		481	3.17
pgc97002	42	134917	44	52	1.50	1.24	0.26	41	99	40	9	503	3.32
pgc97002	42	134918	46	53	1.47	1.20	0.27	41	100	44	26	494	3.46
pgc97002	42	134919	48	52	1.45	1.22	0.23	39	99	41	2	501	3.41