PORE WATER DATA SUMMARY
SUBOXIC DIAGENESIS
RC-23-07

ROBERT D. CONRAD

5 July - 8 August 1982

Guayaquil - Hawaii

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Key to Pore Water Data

Core: Sequential number designating each coring device.

RC = ROBERT D. CONRAD
23 = year 23 (1982)
07 = leg 7
BX = box core (Soutar 12"x12"x36")
PC = piston core (Lamont)

Lat: latitude
Long: longtiude
Water Depth: uncorrected sounding
Bottom Water Temp: from bottom bottle of hydrostation
Reefer Temp: temperature in refrigerated pore water lab during extrusion and centrifugation
Supernatant Temp: temperature of water overlying mud inside box core immediately after landing
Core Onboard: time between landing and initiation of extrusion and centrifugation
PW No: sequential sample number assigned to each centrifuge tube and pore water sample
Depth, cm: depth interval in core
Ca, mM: dissolved calcium,EDTA titration
Mg, mM: dissolved magnesium, EGTA titration
Fe, µM: dissolved iron, ferrozine spectrophotometry
Mn, µM: dissolved manganese, formaldozime spectrophotometry
NO_3, µM: dissolved nitrate, CuCd reduction, diazotization, spectrophotometry (AutoAnalyzer)
NO_2, µM: dissolved nitrite, diazotization, spectrophotometry (AutoAnalyzer)
PO_4, µM: dissolved phosphate, molybdate-blue spectrophotometry (AutoAnalyzer)
Si, µM: dissolved silica, molybdate-blue spectrophotometry (AutoAnalyzer)
F_c, µM: dissolved fluoride, lanthanum-alizarin complexone spectrophotometry
F_e, µM: dissolved fluoride, potentiometric F-electrode (LaF crystal)
*Fe_s, µmol/cm^3: solid-phase iron, hot 3N HCl extractable
*Mn_s, µmol/cm^3: solid-phase manganese, hot 3N HCl extractable
R, ohm: resistivity of mud, Mannheim probe

*Data quality uncertain

Core RC-23-07-50BX1 Lat 01-01.82N Long 104-24.60W Water Depth 3473 m
Bottom Water Temp ~ 4°C Reefer Temp 4-5°C Supernatant Temp 8°C Core Onboard ~ 5 hrs

PW No.	Depth cm	Ca mM	Mg mM	Fe µM	Mn µM	NO_3 µM	NO_2 µM	PO_4 µM	Si µM	F_e µM	F_c µM	$*Fe_s$ $\frac{\mu mol}{cm^3}$	$*Mn_s$ $\frac{\mu mol}{cm^3}$	R ohm
Supernatant Bottom Water		10.89	53.55			37.6	0.39	2.81	144.2	63	65.8			
193	0-1	10.78	53.41	0.4	0.1	47.9	1.47	3.55	254	56		25.3	20.8	
194	1-2	10.77	53.38	0.1	0	50.5	1.94	3.06	317	56		33.2	26.1	
195	2-3	10.82	53.21	0.1	0	40.2	11.8	3.56	423	56		31.7	21.8	
196	3-4			0	0.1	36.1	13.9	3.79	461	56	61.7	32.9	26.0	382
197	4-5			0	0	39.3	9.8	3.89	501	56		33.4	23.9	
198	5-6			0.5	1.2	46.3	2.09	3.88	534	56		33.5	24.8	405
199	6-7			0	0	45.2	1.77	3.71	519	56	61.7	44.5	32.0	
200	7-8			0	0	42.9	1.92	3.76	534	56		39.4	31.9	412
201	8-9			1.3	0	38.4	3.07	3.82	564	56		40.6	37.5	
202	9-10			0	0.1	36.3	3.31	3.86	567	56	60.8	30.6	31.5	410
203	10-12			0	2.7	34.0	2.98	4.10	592	56		40.2	38.1	
204	12-14			0	5.8	33.0	1.84		610	56		36.0	35.1	448
205	14-16			0	1.7	31.1	1.36	4.16	587	56		37.8	35.6	
206	16-18			0	18.6	29.4	1.07		612	56	60.9	45.3	38.2	460
207	18-20			0	22.3	27.5	0.84		569	56		43.9	36.3	
208	20-22			0	24.8	26.1	0.84		630	56		46.8	41.2	449
209	22-24			0	28.1	24.3	0.78		632	56	61.7	42.6	45.2	
210	24-26			0	30.7	22.5	0.63		615	56		43.3	58.3	464
211	26-29	10.81	52.89	0	28.2	21.4	0.62		600	56		43.3	62.1	
212	29-32	10.77	53.45	0	37.5	19.0	0.75		597	56		45.9	42.8	441
213	32-35			0	38.3	17.3	0.71		627	56		52.7	51.4	
214	35-38			0	37.6	15.7	0.59		612	56	60.9	45.3	46.0	476
215	38-41	10.86	53.34	0	45.5	14.8	0.59		574	56		47.3	42.0	

Description: Soupy chocolate brown mud at top to ~ 6 cm; grading to stiffer brown clay. Heavily mottled. White flecks of forams below ~ 30 cm; MnO_2 wisps and layering; disturbed interface.

*Soluble in hot 1N HCl; values probably low.

Core RC-23-07-52BX1 Lat 01-00.3SN Long 118-11.85W Water Depth 3857 m
Bottom Water Temp 1.8°C Reefer Temp 26-28°C Supernatant Temp 9½°C Core Onboard ~ 4 hrs

PW No.	Depth cm	Ca mM	Mg mM	Fe µM	Mn µM	NO_3 µM	NO_2 µM	PO_4 µM	Si µM	*F_e µM	F_c µM	**Fe_S $\frac{\mu mol}{cm^3}$	Mn_S $\frac{\mu mol}{cm^3}$	R ohm
Supernatant					0	36.2	0.046	2.76	125.8					
Bottom Water						36.6	0.41	2.69	145.4		70.7			
216	0-1				(0.9)	42.9	0.79	3.24	406	76	76.8	11.1	19.4	
217	1-2				0	45.9	0.78	2.83	504			12.9	23.9	303
218	2-3				0	46.9	0.73	3.23	584	80	79.2	12.0	24.8	
219	3-4				0	47.4	0.86	3.49	655			12.5	20.9	315
220	4-5				0	46.4	1.18	2.89	713			12.9	22.8	
221	5-6				0	45.2	1.51		824			12.3	25.6	332
222	6-7				0	42.8	2.10		814	80	79.7	14.2	26.9	
223	7-8				0	41.6	2.14	2.85	824			12.7	27.7	343
224	8-9				0	40.4	2.62		851			11.5	24.8	
225	9-10				(2.8)	40.4	2.37		854	80	78.7	13.0	26.8	341
226	10-11				0.3	38.0	2.35	3.19	889			13.1	34.6	
227	11-12				0.3	37.7	1.81		902			12.6	33.4	339
228	12-13				0.9	37.3	1.51		859	80	78.8	12.2	44.6	
229	13-14				2.8	36.3	1.56	2.96	882			10.4	40.9	356
230	14-15				4.6	35.7	1.56		877			10.2	52.7	
231	15-16				6.2	35.9	0.71		904			10.6	66.8	341
232	16-17				8.8	38.2	1.28	3.33	930			11.2	44.5	
233	17-18				11.5	35.6	0.91		982	80	80.3	11.2	47.1	320
234	18-19				11.5	35.0	0.71		967			11.0	65.3	
235	19-20				16.3	34.4	0.63	3.14	960			11.6	58.2	326
236	20-21				15.4	33.4	0.60		965	83	81.7	11.8	39.1	
237	21-22				17.8	35.4	0.95		932			11.0	29.2	335
238	22-23				19.7	35.8	1.11	3.26	927			13.1	22.6	
239	23-24				20.8	32.3	0.68		955	83	81.5	13.5	18.1	344
240	24-25				21.5	31.0	0.64		962			12.7	24.6	
241	25-26				25.2	31.0	0.69	2.84	980			13.4	24.7	333
242	26-27				24.4							12.2	34.8	
243	27-28				25.3	29.4	0.60		977	83	81.5	12.0	39.1	371
244	28-29				26.1	29.1	0.60	2.87	960			10.8	67.9	
245	29-30				26.3	28.0	0.63		940			12.8	68.1	336
246	30-31				27.9	27.4	0.59		980			10.7	60.8	
247	31-32				27.4	26.6	0.58	30.7	1008	80	80.0	13.4	53.0	327
248	32-33				28.5	26.4	0.59		975			13.7	54.5	
249	33-34				28.9	25.8	0.64		932			11.1	36.9	367
250	34-35				29.9	24.9	0.59	2.92	955	83	80.6	7.4	31.6	
251	35-36				31.5	24.2	0.63		952			10.6	16.6	353
252	36-37				31.8	23.6	0.63	2.87	1088			11.0	28.7	
253	37-38				31.9	22.3	0.69		930			12.7	26.5	405
254	38-39				31.6	21.2	0.69		957	83	81.5	13.1	18.0	
255	39-40				32.1	20.6	0.69		985			11.9	15.1	

Description: Light tan carbonate ooze, heavily mottled throughout; several intervals of stiff, dry, Mn-layer. Excellent interface.

* All F^--electrode values corrected for ~ 7% desiccation.

** Hot 1N HCl soluble.

Core RC-23-07-53BX1 Lat 00.58.97N Long 124-38.07W Water Depth 4516 m
Bottom Water Temp ~ 2°C Reefer Temp 11-18°C Supernatant Temp 12°C Core Onboard ~ 24 hrs

PW No.	Depth cm	Ca mM	Mg mM	Fe µM	Mn µM	NO_3 µM	NO_2 µM	PO_4 µM	Si µM	F_e µM	F_c µM	$*Fe_s$ $\frac{\mu mol}{cm^3}$	Mn_s $\frac{\mu mol}{cm^3}$	R ohm
Supernatant					0.0	36.8	0.39	2.82	132					
Bottom Water						35.6	0.41	2.59	140.4					
256	0-1				(1.0)	50.1	0.93	3.66	316			17.0	30.7	
257	1-2				0.0	50.7	1.15	2.98	355			16.5	44.1	
258	2-3				0.0	49.7	1.09	2.80	416			16.9	35.8	
259	3-4				0.0	49.2	0.86	3.11	462			17.1	47.8	
260	4-5				0.0	48.8	0.73	2.91	490			15.8	38.2	
261	5-6				0.0	48.7	0.56	3.01	556			18.0	52.2	
262	6-7				0.0	47.4	0.73	3.05	561			14.3	42.9	
263	7-8				0.0	46.4	0.77		579			13.7	66.5	
264	8-9				0.0	45.9	0.77	3.15	600			16.8	52.5	
265	9-10				0.0	45.3	0.78		595			14.4	53.7	
266	10-11				0.0	44.5	0.66	3.23	610			14.0	61.1	
267	11-12				0.0	43.6	0.55		610			15.0	52.4	
268	12-13				0.0	41.9	0.49	3.21	633			13.8	59.3	
269	13-14				0.0	40.1	0.55		651			14.2	64.6	
270	14-15				0.0	39.3	0.48	3.20	653			13.8	107.0	
271	15-16				0.0	38.6	0.42					15.7	60.6	
272	16-17				1.0	36.5	0.66	3.20	722			17.4	61.6	
273	17-18				1.0	35.5	1.37					15.6	54.6	
274	18-19				1.4	30.8	4.47	3.31	709			17.3	41.6	
275	19-20				2.4	31.2	3.61					19.3	20.0	
276	20-21				5.8	30.9	2.31	3.27	709			18.8	18.2	
277	21-22				7.7	32.0	1.85					18.0	28.1	
278	22-23				7.9	31.9	1.44	3.20	709			16.8	45.7	
279	23-24				7.9	32.4	1.01					17.1	29.2	
280	24-25				8.4			3.15				17.7	41.5	
281	25-26				7.9	32.2	0.75		735			20.0	39.5	
282	26-27				9.5			3.15				16.8	49.3	
283	27-28				10.0	31.4	0.62					17.9	29.2	
284	28-29				10.5			3.11				20.1	26.5	
285	29-30				10.9	31.1	0.56		743			16.7	21.2	
286	30-31				11.4			3.16				17.9	22.7	
287	31-32				11.7	30.5	0.57					22.1		
288	32-33				12.0			3.08				15.6		
289	33-34				12.5	30.8	0.84		739			16.5		
290	34-35				12.5	29.7	0.60	3.23				20.1		
291	35-36				12.9	29.7	0.60		743			20.8		
292	36-37				13.0	29.3	0.55	3.12				18.2		
293	37-38				12.7	29.1	0.55		739			18.8		
294	38-39				13.3	29.0	0.56	3.14				21.4		
295	39-40				13.9	28.4	0.57		812			21.3		
296	40-41				14.7	28.2	0.53	3.03				18.2		
297	41-42				15.1	29.2	0.53		821			16.5		
298	42-43				15.6	28.0	0.57	3.02				16.1		
299	43-44				15.9	27.7	0.53		796			17.6		
300	44-45				16.3	27.6	0.48	2.93				18.1		
301	45-46				16.4	27.4	0.48		799			14.9		
302	46-47				13.4	27.3	0.48	2.98				15.8		

Description: Excellent interface; otherwise very similar to 50 & 52 BX.

* Hot 1N HCl soluble.

Core RC-23-07-54BX1 Lat 01-00.45N Long 133-41.75W Water Depth 4212 m
Bottom Water Temp ~ 2°C Reefer Temp 6→10°C Supernatant Temp 7°C Core Onboard ~ 4 hrs

PW No.	Depth cm	Ca mM	Mg mM	Fe µM	Mn µM	NO_3 µM	NO_2 µM	PO_4 µM	Si µM	F_e µM	F_c µM	* Fe_s $\frac{\mu mol}{cm^3}$	Mn_s $\frac{\mu mol}{cm^3}$	R ohm
Supernatant						33.8	0.44	2.55	127					
Bottom Water						36.6	0.38	2.74	141					
303	0-1				0.1	42.4	0.97	2.76	280			12.3	24.2	
304	1-2				0.1	44.2	0.93	2.84	372			13.2	25.1	
305	2-3				0.0	48.1	0.74	2.84	444			14.7	25.2	
306	3-4				0.0	49.2	0.71	2.85	477			13.2	30.0	
307	4-5				0.0	50.0	0.68	2.86	544			14.8	31.1	
308	5-6				0.0	49.2	1.05	3.15	594			11.8	28.2	
309	6-7				0.0	48.5	1.24	3.22	602			14.3	32.2	
310	7-8				0.0	48.9	1.27	3.21	609			13.3	28.7	
311	8-9				0.0	47.7	0.80	3.18	629			13.8	31.4	
312	9-10				0.0	46.3	0.64	3.20	652			3.7	33.5	
313	10-11				0.0	45.7	1.04	3.20	682			10.9	33.2	
314	11-12				0.1	44.1	1.29	3.22	677			14.3	31.8	
315	12-13				0.5	43.0	1.50	3.21	677			10.2	39.1	
316	13-14				2.3	42.2	1.06	3.75	694			12.5	53.6	
317	14-15				2.9	41.6	0.94	3.21	679			9.2	69.2	
318	15-16				4.5	41.5	0.89	3.21	702			11.2	56.4	
319	16-17				6.6	41.1	0.76	3.23	699			12.0	63.4	
320	17-18				8.7	40.3	0.66	3.26	699			11.4	32.7	
321	18-19				9.8	40.2	0.59	3.20	694			9.4	31.7	
322	19-20				11.1	39.1	0.61	3.25	699			11.1	42.7	
323	20-21				11.3	38.8	0.61	3.25	699			10.9	17.8	
323S	21-22											12.2	29.1	
324	22-23				12.5	38.1	0.61	3.24	702			10.1	36.0	
324S	23-24											11.9	37.5	
325	24-25				13.0	38.2	0.71	3.31	694			9.1	25.3	
325S	25-26											10.7	28.2	
326	26-27				13.0	37.5		3.31	702			10.4	15.8	
326S	27-28											10.1	11.8	
327	28-29				12.9	35.3	0.61	3.30	694			10.6	9.9	
327S	29-30											10.9	9.6	
328	30-31				13.9	34.5	0.61	3.32	699			11.1	10.6	
328S	31-32											10.7	3.8	
329	32-33				14.4	35.8	0.59	3.37	697			10.3	10.0	
329S	33-34											10.7	11.5	
330	34-35				15.0	33.8	0.61	3.36	704			8.1	11.8	
330S	35-36											8.7	11.1	
331	36-37				15.8	32.3	0.61	3.36	699			9.0	9.2	
331S	37-38											10.1	11.2	

Description: Excellent interface; otherwise very similar to 50, 52 & 53 BX. Starfish (~ 8-10 cm tip to tip) found in 2-3 cm slice.

* Hot 1N HCl soluble.

Core RC-23-07-55BX1 Lat 00-00.33N Long 140-01.26W Water Depth 4176 m
Bottom Water Temp 2°C Reefer Temp 13+9°C Supernatant Temp 11°C Core Onboard ~ 8 hrs, warm

PW No.	Depth cm	Ca mM	Mg mM	Fe µM	Mn µM	NO_3 µM	NO_2 µM	PO_4 µM	Si µM	F_e µM	F_c µM	$*Fe_s$ $\frac{\mu mol}{cm^3}$	$*Mn_s$ $\frac{\mu mol}{cm^3}$	R ohm
Supernatant Bottom Water						33.8	0.42	2.45						
332	0-1				(0.5)	39.7	0.74	2.49				8.1	6.4	
333	1-2				(0.1)	42.3	0.81	2.44				9.7	7.7	328
334	2-3				0.0	44.5	0.59	2.40				11.4	9.2	
335	3-4				0.0	46.0	0.60	2.51				11.6	9.2	351
336	4-5				0.0	47.3	0.57	2.52				12.1	8.6	
337	5-6				0.0	48.2	0.54	2.62				10.7	7.4	358
338	6-7				0.0	48.1	0.53	2.63				12.0	7.3	
339	7-8				0.0	48.7	0.52	2.71				10.3	7.6	359
340	8-9				0.0	49.3	0.51	2.71				9.9	6.4	
341	9-10				0.0	49.4	0.46	2.73				11.2	8.2	383
342	10-11				0.0	49.4	0.46	2.76				11.2	7.3	
343	11-12				0.0	50.1	0.47	2.76				11.1	7.1	393
344	12-13				0.0	49.3	0.46	2.80				11.0	7.7	
345	13-14				0.0	49.3	0.46	2.79				10.3	7.0	397
346	14-15				0.0	49.8	0.49	2.83				11.1	7.5	
347	15-16				0.0	47.4	0.45	2.71					6.0	402
348	16-17				(1.3)	48.1	0.45	2.84				9.4	6.0	
349	17-18				0.0	48.4	0.45	2.81				9.2	6.7	409
350	18-19				0.0	47.9	0.45					8.3	5.9	
351	19-20				0.0	48.4	0.45	2.80				9.1	6.0	418
352	20-21				0.0	48.5	0.45	2.92				8.2	6.1	
352S	21-22											9.2	8.9	411
353	22-23				0.0	47.4	0.45	2.81				7.8	8.6	
353S	23-24											8.2	8.9	400
354	24-25				0.0	46.1	0.45	2.91				7.5	8.5	
354S	25-26											7.6	7.4	423
355	26-27				0.0	47.2	0.47	2.89				8.7	6.0	
355S	27-28												10.3	427
356	28-29				0.0	46.5	0.49	2.92				7.5	7.6	
356S	29-30											9.4	8.7	447
357	30-31				0.0	46.1	0.49	2.90				7.6	7.8	
357S	31-32											9.7	6.5	458
358	32-33				0.0	46.7	0.51	2.90				9.0	7.3	
358S	33-34											9.4	6.5	487
359	34-35				0.0	45.2	0.56	2.81				11.2	6.3	
359S	35-36											14.9	6.7	
360	36-37				0.0	45.2	0.55	2.91				9.0	7.3	
360S	37-38													

Description: Disturbed interface (< 1 cm); otherwise similar to previous cores. The PW-subcore was dropped twice, sloshing at least the upper several centimeters; recent worm burrow at 28-29 cm.

* Hot 1N HCl soluble.

Core RC-23-07-56BX1 Lat 03-58.83S Long 140-00.64W Water Depth 4386 m
Bottom Water Temp ~ 2°C Reefer Temp 4°→3°→2°C Supernatant Temp 9°C Core Onboard ~ 2 hrs

PW No.	Depth cm	Ca mM	Mg mM	Fe µM	Mn µM	NO_3 µM	NO_2 µM	PO_4 µM	Si µM	*Fe µM	Fc µM	**Fe_S $\frac{\mu mol}{cm^3}$	**Mn_S $\frac{\mu mol}{cm^3}$	R ohm
Supernatant						34.1		2.39	123.0		70.9			
Bottom Water						34.6	0.42		123.5					
361	0-1				0	40.2	0.65	1.97	223	62	60.1	17.6	11.6	
362	1-2				(5.5)	42.7	0.66	1.99	277	62	61.4	15.5	10.5	450
363	2-3				0	43.9	0.51	2.09	318	64	60.1	16.7	11.4	
364	3-4				0	49.2	0.55	2.09	341	64	61.3	16.6	11.3	483
365	4-5				0	47.5	0.43	2.09	367	64	61.3	15.8	9.5	
366	5-6				0	47.6	0.45	2.13	392	64	61.9	18.7	11.7	516
367	6-7				0	47.9	0.47	2.16	402	64	61.7	15.0	9.1	
368	7-8				0	48.3	0.48	2.18	405			15.1	9.4	551
369	8-9				0	49.1	0.46	2.17	420	64	62.3	14.1	8.3	
370	9-10				0	49.0	0.46	2.17	443			14.1	8.3	550
371	10-11				0	48.3	0.45	2.16	423	64	66.7	15.4	8.6	
372	11-12				0	49.4	0.44	2.17	425			16.0	10.1	532
373	12-13				0	48.8	0.44	2.17	436	64	62.6	40.6	21.4	
374	13-14				0	49.9	0.44	2.17	431			18.3	9.0	518
375	14-15				0	49.5	0.40	2.21	428	64	61.7	17.8	6.9	
376	15-16				0	49.8	0.40	2.17	438			9.7	8.7	501
377	16-17				0	50.7	0.42	2.16	431	62	61.6	15.1	9.5	
378	17-18				0	49.9	0.41	2.17	428			16.4	9.2	501
379	18-19				0	50.7	0.39	2.16	420	64	61.3	15.0	9.0	
380	19-20				0	50.1	0.41	2.20	433			24.9	14.6	498
381	20-21				0	50.1	0.38	2.17	443	62	61.4	15.1	9.0	
382	21-22				0	50.4	0.44	2.17	436			17.3	12.0	498
382S	22-23											18.3	11.9	
383	23-24				0	50.1	0.45	2.18	436	64	63.3	15.5	8.9	479
383S	24-25											20.7	12.5	
384	25-26				0.2	51.0	0.44	2.17	446			18.1	11.4	479
384S	26-27											25.0	14.8	
385	27-28				0.6	51.4	0.44	2.17	454	64	59.8	26.6	15.5	480
385S	28-29											24.3	12.7	
386	29-30				0	51.5	0.44	2.16	451			29.9	16.7	474
386S	30-31											38.1	23.2	
387	31-32				0	51.4	0.45	2.13	451	62	61.4	46.5	27.3	493
387S	32-33											45.4	26.8	
388	33-34				0.3	52.0	0.45	2.09	454			60.8	33.7	
388S	34-35											56.2	16.4	

Description: Disturbed interface (< 1 cm); very similar to previous cores except presence of small Mn-nodules (1-2 cm diameter) at 0-2 cm, 12-13 cm, 22-23 cm and µ-nodules at 13-15 cm, 16-17 cm, 24-25 cm, 26-30 cm, and a layer of many µ-nodules at bottom of subcore ~ 35 cm. Bottom 4 cm is gelatinous brown mud.

* All F^--electrode values corrected for ~ 7% sample desiccation.

** Hot 1N HCl soluble.

Core RC-23-07-58BX1 Lat 01-33.26S Long 140-00.8ZW Water Depth 4211 m
Bottom Water Temp ~ 2°C Reefer Temp 3°→2°→1.5°C Supernatant Temp 10°C Core Onboard ~ 2 hrs.

PW No.	Depth cm	Ca mM	Mg mM	Fe µM	Mn µM	NO_3 µM	NO_2 µM	PO_4 µM	Si µM	Fe_e µM	Fe_c µM	*Fe_s $\frac{\mu mol}{cm^3}$	Mn_s $\frac{\mu mol}{cm^3}$	R ohm
Supernatant Bottom Water						35.8	0.46	2.53	124.5					
389	0-1					49.3	1.87	2.94	258	66	63.6	7.8	10.9	
390	1-2				0.1	53.0	1.21	2.69	321	66	63.3	8.7	15.6	384
391	2-3				0	55.7	0.97	2.63	357	66	67.3	8.9	12.2	
392	3-4				0	56.2	0.92	2.63	407	66	66.3	9.2	13.7	452
393	4-5				0	56.0	1.15	2.74	435	66	64.1	8.5	17.7	
394	5-6				0	56.1	1.02	2.79	466	66	66.0	7.9	11.8	450
395	6-7				0	54.2	0.92	2.86	493	66	67.0	8.8	12.7	
396	7-8				0	53.3	0.79	2.96	493			8.8	14.7	484
397	8-9				0	52.1	0.63	2.94	534	69	73.6	8.4	13.9	
398	9-10				0	52.5	0.62	2.95	526			8.8	17.4	472
399	10-11				0	52.4	0.62	2.96	577	69	65.3	8.7	14.8	
400	11-12				0	52.1	0.63	3.02	577			8.2	12.0	489
401	12-13				0	52.1	0.60	3.00	584	69	66.5	7.9	13.7	
402	13-14				0	51.1	0.57	3.04	589			8.6	14.1	493
403	14-15				0	50.8	0.56	3.05	592	69	66.7	8.2	13.7	
404	15-16				0			3.06				7.4	10.6	502
405	16-17				0	50.5	0.54	3.09	607	69	67.6	10.1	11.5	
406	17-18				0			3.15				8.1	11.1	501
407	18-19				(1.5)	49.7	0.51	3.17	610	69	66.5	7.5	14.5	
408	19-20				0			3.19				6.8	11.6	489
409	20-21				0	49.2	0.48	3.20	612	69	72.3	6.5	17.7	
410	21-22				0	49.2	0.49	3.20				6.5	14.9	481
410S	22-23											7.4	14.1	
411	23-24				0	48.6	0.49	3.19	620	69	68.8	7.4	18.9	483
411S	24-25											7.6	29.1	
412	25-26				0			3.20				6.4	29.6	497
412S	26-27											6.8	43.4	
413	27-28				0	47.7	0.49	3.18	625	69	70.5	7.2	26.8	526
413S	28-29											7.3	22.1	
414	29-30				0	46.8	0.48	3.42	617			6.9	12.9	561
414S	30-31											9.4		
415	31-32				0	45.9	0.48	3.22	622	69	68.2	7.1		
415S	32-33											8.9		

Description: Excellent interface, otherwise similar to previous cores except 56BX1.

*Hot 1N HCl soluble.

Core RC-23-07-60BX1 Lat 00-29.99N Long 139-58.94W Water Depth 4224 m
Bottom Water Temp ~ 2°C Reefer Temp 3.5 → 9°C Supernatsint Temp 9°C Core Onboard ~ 5 hrs

PW No.	Depth cm	Ca mM	Mg mM	Fe µM	Mn µM	NO_3 µM	NO_2 µM	PO_4 µM	Si µM	F_e µM	F_c µM	$*Fe_s$ $\frac{\mu mol}{cm^3}$	Mn_s $\frac{\mu mol}{cm^3}$	R ohm
Supernatant Bottom Water						36.1	0.51	2.59	131					
416	0-1				0.2	45.0	1.27	2.67	295			9.3	13.3	
417	1-2				0.0	50.1	1.41	2.58	377			12.1	15.7	394
418	2-3				0.0	50.9	1.42	2.67	424			12.7	16.2	
419	3-4				0.2	51.3	1.16	2.57	470			10.9	14.5	402
420	4-5				0.0	50.8	0.85	2.68	496			14.7	15.5	
421	5-6				0.0	52.2	0.79	2.73	524			13.1	15.9	424
422	6-7				0.0	51.6	0.74	2.84	544			13.3	13.4	
423	7-8				0.0	51.5	0.80	2.89	549			14.1	19.0	437
424	8-9				0.0	52.3	0.69	2.91	589				15.9	
425	9-10				0.0	51.5	0.68	2.93	597			15.7	19.6	470
426	10-11				0.0	50.1	0.61	2.91	609			18.9	14.2	
427	11-12				0.0	52.0	0.60	2.93	604			12.0	14.3	485
428	12-13				0.0	50.5	0.57	3.13	617			13.7	16.3	
429	13-14				0.0	50.7	0.55	2.95	624			12.0	24.7	482
430	14-15				0.0	50.3	0.57	2.85	634			12.8	20.5	
431	15-16				0.0	50.1	0.57	2.90	692			10.6	17.2	516
432	16-17				0.0	50.0	0.56	2.91	607			9.8	18.2	
433	17-18				0.0	50.1	0.55	3.00	599			9.4	15.0	500
434	18-19				0.0	49.3	0.55	2.98	607			10.7	19.6	
435	19-20				0.0	48.8	0.55	2.96	614			9.4	20.9	492
436	20-21				0.0	48.6	0.55	2.97	617			10.7	19.0	
437	21-22				0.0	47.9	0.55	2.96	614			9.1	22.7	495
437S	22-23												28.2	
438	23-24				0.0	47.8	0.58	2.97	617			7.6	36.1	497
438S	24-25											9.8	26.2	
439	25-26				0.0	47.1	0.64	2.96	614			8.4	40.6	503
439S	26-27											8.6	36.3	
440	27-28				0.0	46.4	0.56	2.96	632			9.7		549
440S	28-29											9.2		
441	29-30				0.0	45.8	0.55	2.91	619			12.7	27.4	619
441S	30-31											8.8		
442	31-32				0.0	45.6	0.55	2.92	624			10.0	24.7	

Description: Excellent interface; PW subcore was badly disturbed during set-up.

* Hot 1N HCl soluble.

Core RC-23-07-61BX1 Lat 00-54.4N Long 140-02.2W Water Depth 4328 m
Bottom Water Temp ~ 2°C Reefer Temp 2.5°C Supernatant Temp 8°C Core Onboard 16 hrs.
(Note: core warmed for ~8 hrs, recooled for 3 hrs)

PW No.	Depth cm	Ca mM	Mg mM	Fe µM	Mn µM	NO_3 µM	NO_2 µM	PO_4 µM	Si µM	F_e µM	F_c µM	Fe_s µmol/cm³	Mn_s µmol/cm³	R ohm
Supernatant Bottom Water														
443	0-1				0.0	43.8	0.80	3.25	271		59.4	18.2	21.2	
444	1-2				0.0	48.4	1.47	2.93	382		59.7	20.5	23.2	332
445	2-3				0.0	50.2	2.09	2.98	453		60.2	19.2	22.0	
446	3-4				0.0	50.1	2.34	2.88	492		61.8	23.7	28.5	364
447	4-5				0.0	49.8	2.40	2.93	523		60.8	20.6	26.8	
448	5-6				0.0	50.0	1.61	2.88	547		60.8	22.6	29.1	378
449	6-7				0.0	52.4	1.37	2.90	571		62.7	22.2	27.2	
450	7-8				0.0	48.8	1.42	2.96	571		60.6	19.6	25.2	407
451	8-9				0.0	48.3	1.45	2.87	592		61.8	17.6	24.5	
452	9-10				0.0	48.1	1.31	2.86	597		62.5	19.8	24.2	418
453	10-11				0.3	47.8	1.41	3.08	617			17.4	23.7	
454	11-12				0.0	46.7	1.27	2.96	617		63.1	20.5	25.5	429
455	12-13				0.1	46.2	1.18	3.13	621			17.7	24.7	
456	13-14				0.0	46.8	1.26	2.96	619		62.6	16.7	21.7	435
457	14-15				0.0	45.2	1.09	3.16	619			19.9	27.4	
458	15-16				0.0	44.8	1.05	2.88	643		65.6	18.5	28.0	445
459	16-17				0.0	45.0	0.91	2.97	638			27.6	102.5	
460	17-18				0.0	44.1	0.85	2.98	628		62.7	19.4	57.0	441
461	18-19				0.0	43.3	0.88	2.99	638			13.7	57.7	
462	19-20				0.0	42.7	0.75	3.17	640		64.8	15.5	74.2	448
463	20-21				0.0	40.4	0.66	2.99	621			13.1	79.0	
464	21-22				0.6	41.4	0.69	3.14	638		89.4	18.5	105.6	450
464S	22-23											19.0	83.0	
465	23-24				0.9	41.2	0.72	3.05	643			17.0	74.9	448
465S	24-25											17.9	40.4	
466	25-26				1.6	39.8	0.77	3.06	652		63.5	16.0	23.0	457
466S	26-27											15.8	17.5	
467	27-28				3.3	39.1	0.77	3.11	621			14.7	14.8	483
467S	28-29											16.2	11.6	
468	29-30				5.3	38.3	0.82	3.11	638		62.7	15.1	10.8	547
468S	30-31											16.4	12.7	
469	31-32				7.3	37.4	0.81	3.10	623			14.6	9.7	499
469S	32-33											14.3	8.2	
470	33-34				9.2	37.3	0.83	3.14	628		62.5	15.8	9.4	516
470S	34-35											16.1	8.2	
471	35-36				11.2	35.8	0.82	3.20	625			13.1	11.1	644
471S	36-37											22.9	15.1	
472	37-38				12.5	34.9	0.82	3.57	625		61.3			

Description: Excellent interface.

Core RC-23-07-62BX2 Lat 02-00.69N Long 140-00.96W Water Depth 4258 m
Bottom Water Temp ~ 2°C Reefer Temp 2-3°C Supernatant Temp 9°C Core Onboard ~ 30 hrs(~ 2°C)

PW No.	Depth cm	Ca mM	Mg mM	Fe µM	Mn µM	NO_3 µM	NO_2 µM	PO_4 µM	Si µM	F_e µM	F_c µM	Fe_s µmol/cm³	Mn_s µmol/cm³	R ohm
Supernatant								2.60	120.5					
Bottom Water						36.7	0.44	2.60	132.2		73.1			
505	0-1				0.2	59.6	2.59	3.55	230			16.9	19.2	
506	1-2				0.0	64.8	3.73	2.64	302			16.6	18.9	
507	2-3				0.0	64.1	2.76	2.62	356			23.3	21.7	
508	3-4				0.0	61.6	1.53	2.67	378			22.9	25.4	
509	4-5				0.0	58.3	0.71	2.74	416			19.9	20.3	
510	5-6				0.0	56.3	0.61	2.68	425			19.5	22.5	
511	6-7				0.0	55.5	0.56	2.85	447			18.3	18.1	
512	7-8				0.0	54.0	0.60	2.91	447			19.3	22.1	
513	8-9				0.0	54.0	0.61	2.92	492			19.6	22.8	
514	9-10				0.0	53.9	0.73	3.00	492			16.0	19.4	
515	10-11				0.0	53.3	0.84	2.82	499			18.0	22.2	
516	11-12				0.0	53.1	0.60	2.96	494			15.4	21.4	
517	12-13				0.0	52.7	0.51	2.87	513			14.4	20.2	
518	13-14				0.0	52.8	0.65	2.85	510			17.3	25.2	
519	14-15				0.0	52.8	0.44	3.03	510			14.3	15.4	
520	15-16				0.0	52.5	0.46	3.08	510			15.0	21.7	
521	16-17				0.0	52.4	0.49	3.14	510			16.7	19.0	
522	17-18				0.0	52.2	0.47	2.91				13.8	14.4	
523	18-19				0.0	46.0	0.46	3.10	518			14.3	17.3	
524	19-20				0.0	51.1	0.46	2.89	492			13.1	17.4	
525	20-21				0.0	51.6	0.46	3.13	510			15.3	14.6	
526	21-22				0.0	51.8	0.47	2.96	508			15.5	16.4	
527	22-23				0.0	51.8	0.46	3.18	513			15.9	14.6	
528	23-24				0.0	51.2	0.46	3.18	499			14.6	13.4	
528S	24-25											15.1	17.0	
529	25-26				0.0	51.2	0.46	3.18	523			18.6	15.4	
529S	26-27											17.4	14.1	
530	27-28				0.0	51.3	0.51	3.07				12.7	10.0	
530S	28-29											13.7	8.9	
531	29-30				0.0	48.1	0.50	3.15	518			14.2	10.6	
531S	30-31											14.3	8.7	

Description: Excellent interface.

Core RC-23-07-62PC1 Lat 02-01.00N Long 139-59.32W Water Depth 4258 m
Bottom Water Temp ~ 2°C

IW No.	Depth cm	Ca mM	Mg mM	Fe µM	Mn µM	NO_3 µM	NO_2 µM	PO_4 µM	Si µM	* F_e µM	F_c µM	** Fe_s $\frac{\mu mol}{cm^3}$	** Mn_s $\frac{\mu mol}{cm^3}$	R ohm
Supernatant Bottom Water														
473	0-15	10.11	53.42	1.1	0.1	49.4	1.04	2.85	492	62	60.8	19.7	26.5	
474	15-30	10.22	53.36		0	50.3	0.71	3.14	530			19.5	18.5	
475	30-45	10.25	53.26		0	49.6	0.61	3.18	539			14.5	8.8	
476	45-60				0.1	48.3	0.57	3.17	547	64	64.1	13.8	10.4	
477	60-75			0.1	1.5	46.7	0.57	3.04	547			27.5	14.5	
478	75-90				5.5	45.1	0.70	3.03	551			33.5	22.9	
479	90-105				9.8	43.7	0.71	2.92	566			42.5	39.4	
480	105-120				13.4	42.2	0.70	3.28	570			37.9	33.8	
481	120-135			0	20.4	41.3	0.70	2.82	568	67	67.3	16.7	12.7	
482	135-150				20.2	40.4	0.93	2.81	559			19.0	17.2	
483	150-165				20.6	39.0	0.82	2.76	573			30.2	27.4	
484	165-180				22.3	38.2	0.71	2.69	573			44.5	37.6	
485	200-215	10.05	53.26	0	24.5	36.3	0.64	2.66	573	69	69.1	28.0	19.6	
486	230-245				25.4	35.0	0.68	2.62	568			33.1	40.0	
487	260-275				21.9	33.1	0.64	2.67	563	69	68.1	41.9	49.3	
488	290-305				19.6	31.7	0.68	2.48	561			13.8	28.0	
489	330-345			0	16.2	29.4	0.70	2.72	563	72	68.1	23.3	21.4	
490	370-385				13.4	27.0	0.59	2.73	570			20.9	12.4	
491	410-425				11.5	24.1	0.54	2.84	568	72	70.7	30.2	23.7	
492	450-465				12.0	22.6	0.67	2.77	561			29.4	25.7	
493	500-515			1.3	13.2	21.3	0.91	2.66	544			15.5	17.4	
494	550-565				15.4	18.6	0.76	2.49	563			14.0	12.8	
495	600-615	10.05	53.31		15.9	15.4	0.62	2.61	559	77	73.6	9.8	11.8	
496	650-665				16.4	13.0	0.70	2.62	556			9.4	14.5	
497	700-715			0.1	18.6	11.0	0.58	2.49	573			13.5	14.4	
498	750-765				22.6	9.33	0.57	2.36	573	80	78.5	34.4	25.9	
499	800-815				22.6	7.63	0.55	2.23	573			16.0	14.8	
500	850-865				23.4	6.34	0.50	2.24	582	83	79.3	24.9	37.6	
501	900-915			0	24.7	4.78	0.50	2.17	582			25.7	54.4	
502	950-965				28.4	3.81	0.65	2.18	580	80	81.9	28.0	23.3	
503	1000-1015				27.6	2.39	0.96	2.11	561			37.0	57.5	
504	1050-1065	10.51	53.24	0	29.7	2.01	1.26	2.02	563	80	78.7	29.0	33.0	

Description: Calcareous ooze throughout, with mottling and discernible Mn-banding. Core onboard ~ 0015L 7/28, extruded and packed in air and into reefer by 0315L (~2°C). Centrifuged and filtered at ~ 0°C, 1300L 7/28.

* F^--electrode values corrected for ~ 3% sample desiccation.

** Not corrected for compaction.

Core RC-23-07-64BX1 Lat 04-00.28N Long 139-59.49W Water Depth 4232 m
Bottom Water Temp~ 2°C Reefer Temp 3°-9°-6°C Supernatant Temp 9°C Core Onboard ~ 12 hrs (@2°C except for extr.)

PW No.	Depth cm	Ca mM	Mg mM	Fe µM	Mn µM	NO_3 µM	NO_2 µM	PO_4 µM	Si µM	Fe_e µM	Fe_c µM	Fe_s µmol/cm³	Mn_s µmol/cm³	R ohm
Supernatant Bottom Water						37.1	0.37	2.66	125.2					
532	0-1				0.0	47.2	4.73	2.88	222			20.8	20.6	
533	1-2				0.1	52.2	4.02	2.45	275			20.8	19.3	
534	2-3				0.1	52.6	1.25	2.46	325			21.3	19.2	
535	3-4				0.0	53.1	0.91	2.63	355			25.5	21.3	
536	4-5				0.0	53.3	0.78	2.59	380			22.5	20.3	
537	5-6				0.0	52.5	0.79	2.62	400			24.2	20.3	
538	6-7				0.0	52.3	0.69	2.70	422			25.3	22.5	
539	7-8				0.0	52.1	0.65	2.69	424			23.1	21.8	
540A	8-9				0.0	52.1	0.58	2.61	449			21.5	19.8	
540B	9-10				0.0	52.6	0.53	2.62	449			19.5	18.8	
541	10-11				0.0	52.7	0.52	2.77	452			19.2	18.4	
542	11-12				0.0	52.7	0.52		454			22.9	21.3	
543	12-13				0.0	51.2	0.49	2.78	449			20.7	21.9	
544	13-14				0.0			2.79				18.6	26.1	
545	14-15				0.0	52.7	0.49	2.79	472			16.9	26.5	
546	15-16				0.0	52.8	0.50	2.78	474			20.4	25.1	
547	16-17				0.0			2.78				12.3	22.2	
548	17-18				0.0	53.1	0.50	2.84	512			17.9	17.8	
549	18-19				0.0	53.2	0.47	2.84	519			16.5	14.1	
550	19-20				0.0	53.0	0.48	2.83				19.0	15.4	
551	20-21				0.0	53.0	0.47	2.83	529			18.8	15.8	
551S	21-22											19.1	13.3	
552	22-23				0.0	53.1	0.48	2.88	524			18.0	15.1	
552S	23-24											21.4	16.0	
553	24-25				0.0	53.0	0.48	2.88	524			18.4	15.0	
553S	25-26											17.9	20.6	
554	26-27				0.0	53.1	0.47	2.88	522			18.0	13.7	
554S	27-28											14.7	9.6	
555	28-29				0.0	53.2	0.51	2.87	539			18.6	13.5	
555S	29-30											16.9	10.9	
556	30-31				0.0	53.0	0.46	2.83	539			16.3	13.7	
556S	31-32											15.5	10.3	
557	32-33				0.0	53.3	0.46	2.80	549			13.7	11.6	
557S	33-34											12.4	9.6	
558	34-35				0.0	53.6	0.51	2.86	529			9.9	8.6	
558S	35-36											10.9	9.5	
559	36-37				0.0	52.8	0.49	2.83	554			13.1	12.1	
559S	37-38											12.4	11.0	
560	38-39				0.0	53.8	0.77	2.98				11.6	12.9	
560S	39-40											13.9	10.9	
561	40-41				0.0	53.6	0.49	2.88	547			14.6	11.4	

Description: Excellent interface.

Core RC-23-07-66BX2 Lat 08-02.76N Long 140-00.00W Water Depth 4879 m
Bottom Water Temp ~ 1.5°C Reefer Temp 2°C Supernatant Temp 7°C Core Onboard ~ 20 hrs

PW No.	Depth cm	Ca mM	Mg mM	Fe µM	Mn µM	NO_3 µM	NO_2 µM	PO_4 µM	Si µM	F_e µM	F_c µM	Fe_s µmol/cm³	Mn_s µmol/cm³	R ohm
Supernatant Bottom Water						37.4	0.49	2.68	129					
578	0-1				0.0	40.0	2.59	2.09	160			24.5	18.9	
579	1-2				0.0	41.0	2.29	1.84	174			33.1	24.7	355
580	2-3				0.0	41.6	0.95	1.96	185			31.4	24.0	
581	3-4				0.0	42.0	0.77	2.00	191			27.9	20.5	383
582	4-5				0.0	42.2	0.62	2.06	196			34.9	29.2	
583	5-6				0.0	41.5	0.60	2.02	200			34.0	32.0	411
584	6-7				0.0	41.8	0.55	2.06	216			34.7	34.3	
585	7-8				0.0	41.9	0.54	2.05	221			43.0	46.9	440
586	8-9				0.0	42.3	0.55	2.12	226			37.2	43.4	
587	9-10				0.0	42.5	0.54	2.10	226			37.9	43.0	410
588	10-11				0.0	42.5	0.54	2.15	233			34.0	36.1	
589	11-12				0.0	43.1	0.51	2.02	241			36.6	49.7	399
590	12-13				0.0	43.2	0.49	2.08	236			33.3	47.3	
591	13-14				0.0	43.2	0.48	2.20	243			41.9	64.1	418
592	14-15				0.0	43.3	0.52	2.28	243			33.9	58.8	
593	15-16				0.0	43.8	0.51	2.24	246			33.6	53.2	423
594	16-17				0.0	43.7	0.51	2.32	243			30.8	49.2	
595	17-18				0.0	43.8	0.51	2.26	246			46.1	74.2	417
596	18-19				0.0	43.9	0.51	2.27	248			28.1	50.0	
597	19-20				0.0	43.9	0.50	2.32	251			28.2	47.0	439
598	20-21				0.0	44.3	0.49	2.38	256			35.1	54.4	
599	21-22				0.0	44.6	0.49	2.35	256			33.3	59.5	
600	22-23				0.0	45.2	0.51	2.35	253			30.5	55.4	
601	23-24				0.0	45.3	0.52	2.42	266			33.1	52.7	

Description: Interface disturbed (< 1 cm); light brown gelatinous mud @ 0-5 cm; dry brown crumbly clay 5 cm to bottom.

Core RC-23-07-66PC1 Lat 08-18.50N Long 139-58.38W Water Depth 4997 m
Bottom Water Temp ~ 1.5°C

PW No.	Depth cm	Ca mM	Mg mM	Fe µM	Mn µM	NO_3 µM	NO_2 µM	PO_4 µM	Si µM	*Fe µM	F_C µM	Fe_S µmol/cm³	Mn_S µmol/cm³	R ohm
Supernatant Bottom Water														
562	0-15	10.50	53.18	0.2	0	47.5	0.60	2.60	320	67	68.1	55.1	27.2	
563	15-30	10.35	53.38	0.2	0	49.6	0.56	2.65	351	67	68.2	57.5	26.2	
564	30-45	10.37	53.17	0.1	0	51.0	0.59	2.47	364	69	65.3	35.7	14.8	
565	45-60			0.7	1.3	51.2	0.53	1.46	391			52.7	18.8	
566	60-75			0.1	0.2	51.1	0.53	2.51	389	67	64.6	42.5	20.3	
567	75-90	10.73	53.46	0.8	0.7	51.2	0.51	2.68	386	67	67.7	54.7	24.9	
568	90-105			0.8	0.6	51.3	0.53	2.66	404	67	66.9	45.3	25.6	
569	105-120			0.9	0.3	50.9	0.55	2.75	414	69	66.8	39.3	24.4	
570	120-135	10.71	52.66	0.6	0.2	50.6	0.55	2.67	424	67	65.5	55.0	39.6	
571	135-150					50.8	0.55		434	67	67.6	58.6	60.2	
572	150-165			0.9	1.2	50.3	0.54	3.14	434	67	64.0	48.5	58.5	
573	165-180	10.64	52.95	0.6	0.3	50.2	0.63	2.96	434	67	66.9	52.1	58.9	
574	180-195				0.3	50.3	0.56	2.72	434	67	65.0	44.0	37.0	
575	195-210					50.3	0.62		451	67	66.9	45.4	41.9	
576	210-225											45.1	26.8	
577	230-245	10.92	52.81	0	1.7	49.5	0.74	2.32	456	69	66.9	26.9	11.9	

Description: Low-carbonate clay throughout. Extruded on board ~ 1 hr; in reefer @ 2°C for 12 hrs; spun @ 11 k for 6 mins @ 1°C.

*F^--electrode values corrected for ~ 3% sample desiccation.

Core RC-23-07-68BX1 Lat 12-08.3N Long 140-01.8W Water Depth 4851 m
Bottom Water Temp ~1.5°C Reefer Temp ~ 28°C Supernatant Temp 9.5°C Core Onboard ~ 33 hrs

PW No.	Depth cm	Ca mM	Mg mM	Fe µM	Mn µM	NO_3 µM	NO_2 µM	PO_4 µM	Si µM	F_e µM	F_c µM	Fe_s $\frac{\mu mol}{cm^3}$	Mn_s $\frac{\mu mol}{cm^3}$	R ohm
Supernatant Bottom Water						36.1	0.66	2.37						
637	0-1					39.5	1.00	2.42						
638	1-2					40.0	0.87	2.43						
639	2-3					40.6	0.71	2.61						250
640	3-4					41.3	0.69	2.68						
641	4-5					42.3	0.68	2.67						253
642	5-6					42.5	0.68	3.11						
643	6-7					43.3	0.66	2.82						263
644	7-8					43.4	0.66	2.80						
645	8-9					44.1	0.65	2.81						263
646	9-10					44.7	0.62	2.80						
647	10-11					44.7	0.61	2.85						265
648	12-12					44.8	0.64	2.95						
649	12-13					45.2	0.63	2.81						266
650	13-14					46.0	0.67	3.28						
651	14-15					46.1	0.62	2.91						275
652	15-16					46.8	0.63	3.14						
653	16-17					46.9	0.60	2.85						278
654	17-18					47.5	0.60	2.87						
655	18-19					48.3	0.60	2.90						289
656	19-20					49.1	0.70	3.35						
657	20-21					49.1	0.61	2.96						290
658	21-22					49.5	0.63	2.95						
659	22-23					49.7	0.67	3.03						
659S	23-24													339
660	24-25					48.2	0.60	2.78						
660S	25-26													288
661	26-27					48.9	0.59	2.83						
661S	27-28													327
662	28-29					48.9	0.61	2.92						
662S	29-30													317
663	30-31					48.6	0.60	2.84						
663S	31-32													295
664	32-33					48.8	0.59	2.80						
664S	33-34													313
665	34-35					48.8	0.59	2.85						
665S	35-36													313
666	36-37					48.9	0.59	2.78						
666S	37-38													318
667	38-39					48.6	0.60	2.71						
667S	39-40													

Description: Disturbed interface.

Core RC-23-07-68PC1 Lat 12-25.78N Long 140-03.22W Water Depth 4793 m
Bottom Water Temp ~ 1.5°C

PW No.	Depth cm	Ca mM	Mg mM	Fe µM	Mn µM	NO_3 µM	NO_2 µM	PO_4 µM	Si µM	F_e µM	F_c µM	Fe_s $\frac{\mu mol}{cm^3}$	Mn_s $\frac{\mu mol}{cm^3}$	R ohm
Supernatant Bottom Water														
602	0-15	10.32	52.95		0	44.2	0.68	2.22	288	66	65.5			
603	15-30	10.27	52.96		0	45.5	0.60	2.27	313					
604	30-45	10.53	52.80		0.3	44.3	0.50	2.23	316	66	66.9			
605	45-60				1.1	45.8	0.60	2.33	323					
606	60-75				1.1	47.2	0.56	2.27	341					
607	75-90				0.5	47.5	0.55	2.35	341	66	66.5			
608	90-105				0		0.47	2.23	341					
609	105-120				0		0.49	2.18	341					
610	120-135				0		0.55	2.15	346	64	65.6			
611	135-150				0	47.3	0.56	2.09	343					
612	150-165	10.45	53.45		0	48.8	0.56	2.11	360					
613	165-180				0.3	42.1	0.50	1.94	358					
614	180-195				0.3	46.5	0.56	1.86	365					
615	195-210				0	48.5	0.56	1.77	365	64	64.3			
616	225-240				0.1	48.4	0.56	1.73	385					
617	240-255				0	48.7	0.56	1.62	385					
618	270-285				0.5	50.1	0.55	1.56	385					
619	285-300				0	49.3	0.55	1.61	385	59	59.8			
620	320-335	10.36	52.91		0	49.2	0.55	1.29	383					
621	335-350				0	49.4	0.55	1.34	395					
622	370-385				0	49.6	0.54	1.43	393	59	60.4			
623	385-400				0	49.5	0.56	1.43	393					
624	420-435				0	49.6	0.58	1.39	395					
625	435-450				0	50.1	0.55		398	57	59.2			
626	470-485				1.0	49.5	0.52	1.27	408					
627	485-500				0	50.0	0.55	1.25	405					
628	520-535	10.29	53.01		0	49.5	0.55	1.21	415					
629	535-550				0	50.3	0.54	1.24	418	57	57.7			
630	570-585				0	50.1	0.54	1.12	413					
631	585-600				0	50.0	0.55	1.13	415					
632	620-635				0	50.1	0.55	1.12	413	57	58.7			
633	635-650				0	50.1	0.55	1.12	418					
634	670-685				0	50.2	0.55	1.07	420	57	59.1			
635	685-700				0	50.2	0.54	1.06	423					
636	720-735	10.94	52.41		0	50.2	0.55	1.08	413	57	58.2			
637	735-750				0	50.6	0.54	1.08	415					

Description: Siliceous ooze; small Mn-nodule @ very top 2 cm; smaller µ-nodules noted down to 45 cm; on board ~ 3:30 pm 8/1; packed, extr. on deck and into reefer by 5 pm 8/1 @ 2°C); cent. & filtered ~ 7-10 pm 8/3; spun @ 8500 rpm x 6 min. @ 1°C.

Core RC-23-07-69PC1 Lat 17-40.1W Long 139-59.6W Water Depth 5475 m
Bottom Water Temp ~ 1.5°C

PW No.	Depth cm	Ca mM	Mg mM	Fe µM	Mn µM	NO_3 µM	NO_2 µM	PO_4 µM	Si µM	F_e µM	F_c µM	Fe_s $\frac{\mu mol}{cm^3}$	Mn_s $\frac{\mu mol}{cm^3}$	R ohm
Supernatant Bottom Water														
668	0-15	10.22	52.31		0.0	38.9	0.61	1.70	200	64	64.2			
669	15-30	10.05	52.69		0.0	39.2	0.60	1.81	200					
670	30-45	10.17	52.60		0.0	40.1	0.60	1.81	202					
671	45-60				0.0	40.7	0.61	1.83	205	64	63.4			
672	60-75				0.0	40.8	0.60	1.93	210					
673	75-90				0.0	40.7	0.63	1.88	205					
674	90-105				0.0	41.7	0.61	1.99	271	*74	*72.6			
675	105-120				0.0	41.9	0.62	2.11	273					
676	120-135				0.0	41.6	0.63	2.26	271					
677	135-150				0.0	42.8	0.63	2.31	271	*77	*76.5			
678	150-165	10.00	51.71		0.0	42.8	0.64	2.27	271					
679	165-180				0.0	42.9	0.65	2.26	271					
680	180-195				0.0	42.8	0.64	2.09	225	66	65.2			
681	195-210				0.0	43.5	0.63	2.14	225					
682	210-225				0.0	43.7	0.64	2.10	225					
683	225-240				0.0	44.2	0.65	2.15	225					
684	240-255				0.0	44.1	0.65	2.14	228					
685	255-270				0.0	43.6	0.64	2.13	225	64	64.7			
686	270-285	10.20	52.62		0.0	44.2	0.65	2.14	225					
687	285-300				0.0	44.4	0.65	2.14	225					
688	300-315				0.0	44.9	0.66		230					
689	315-330				0.0	44.9	0.66		225					
690	330-345				0.0	44.9	0.66		223	66	64.9			
691	345-360				0.0	44.9	0.68		223					
692	360-375				0.0	45.7			220					
694	390-405	10.23	52.92		0.0	45.6			213					
695	405-420				0.0	45.5	0.58	1.98	215	64	63.1			
696	420-435				0.0	45.6	0.58	2.14	215					
697	435-450				0.2	45.6	0.58	1.94	210					
700	480-495				1.1	46.1	0.58	1.89	225	*74	*72.4			
704-709	540-630	10.23	52.03		0.0	47.3	0.58	1.84	207	66	67.6			
714-715	710-740				0.4	48.4	0.64	1.83	205	64	63.2			
716-723	760-940	10.04	51.93		0.0	49.1	0.62	1.80	215	66	65.6			

Description: Red clay; very stiff and dry; on board ~ 0630 am 8/3; extr. & packed on deck & in reefer @ 0945 8/3 (@ 2°C); cent. & filtered 2-4 pm 8/4; cent. @ 7500-8500 rpm @ 1°C.

*Centrifuged warm.