34.3 28.

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
Entered By				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RV Knorr																		4.7.7	
AP/CA/ASnyder	194-02	001			67	15.51		54	00.97	03	09	86	02	16	247	34 m			

S = 32.37.

Cloud Amount	Sea Conditions	Precipition	Ice Cover
	Rough		

Comments ML 18.

334001

334003

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
		334001	6m				✓	✓			1, 2
		334002	10				✓	✓			3, 4
		334003	1				✓	✓			5, 6

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
Entered By				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
Knorr																			
PXICAIAS	194020	022		6	7	15.72	5	4	28.71	03	09	90	8	04	01	247	54 m		505

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Z = 54

Comments

334004

ML17

334008

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	Tick Mk						
		334004	50	48		✓	✓	✓				✓	1,10	12				
		5	30	30		✓	✓	✓					2,8	3,4				
		6	20	20		✓	✓	✓				✓	5,6	5,6				
		7	10	10		✓	✓	✓					3,4	7,8				
		8	~~50~~ 1	00		✓	✓	✓				✓	7,12	9,12				

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RV Knorr																		5 5 4	
Entered By																			
BPICA/AS.	187-02	003	3	67	15.73		54	28.66		03	09	08	04	08	247	56 m			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments TOL 16 no bottles 334015

-Fired on Bottle at bottom depth-

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
		334015	BTM	502			✓	✓			

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RV Knorr	194-0200	44		6	17	18.36	5	5	18.48	03	09	08	06	01	247	71 m		579	
Entered By: BPICALAS																			

32.30

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

ML-15

334009

334014

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	TIC/TALK
		334009	BTM	65.2		✓	✓	✓				✓
		334010	50	50.5		✓	✓	✓				✓
		334011	30	30.5		✓	✓	✓				
		334012	20	20.7		✓	✓	✓				✓
		334013	10	10.5		✓	✓	✓				
		334014	1	1		✓	✓	✓				✓

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Deg.	Min.	Longitude E/W	Deg.	Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr																		5 1 3	
Entered By: BP/BA/AS	1 4 7 0 2	0 0 5	5		6 7 0 9 . 6 6			5 5 4 9 . 2 7		0 3	0 9	0 8	0 9	0 3	2 4 7	1 1 6 m			

5 32.66

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

ML 14

334016

334021

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	Tot/Tank					
		334016	100	108		✓	✓	✓				✓					
		17	50	50.6		✓	✓	✓				✓					
		18	30	30.5		✓	✓	✓									
		19	20	20.3		✓	✓	✓				✓					
		20	10	10.4		✓	✓	✓									
		21	1	0.2		✓	✓	✓				✓					

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
Entered By				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RV Knorr	194	0066			67	06.31		56	18.40	03	09	08	11	42	247	1164 m		16.05	

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments ML 13

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	T/A	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.							
	1	334022	140	155	✓	✓	✓	✓				334022						
	2	023	100	100	✓	✓	✓	✓										
	3	24	50	50	✓	✓	✓	✓										
	4	25	30	30		✓	✓	✓										
	5	26	20	20	✓	✓	✓	✓										
	6	27	10	10		✓	✓	✓										
	7	28	1	0	✓	✓	✓	✓				334028						

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude	Longitude	Yyyyyyyy Dow G.M.T.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr										5.4	
Entered By				Yr. Deg. Min	Yr. Deg. Min	Day Mo. Yr Hour Min.					
BPICA	194-02007			16 56.18	55 22.34	04 08 01 2334	0107			S: 32.05	

Cloud Amount	Sea Conditions	Precipitation	Ice Cover

Comments
ML-08

334029

334043

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Valves Out	S	O/G	Nutrients		Trace Elements Fil.	Trace Elements Unfil.	SPM Vol. Fil.	TIC/TALK		
		334029	BTM			✓	✓	✓				✓	1	
		334030	900				✓	✓				✓	2	✓
		334031	800				✓	✓				✓	3	✓
		334032	700				✓	✓				✓	4	✓
		334033	600				✓	✓				✓	5	✓
		334034	500			✓	✓	✓				✓	6	✓
		334035	400				✓	✓				✓	7	✓
		334036	300				✓	✓				✓	8	✓
		334037	200				✓	✓				✓	9	✓
		334038	100			✓	✓	✓				✓	10	✓
		334039	50			✓	✓	✓				✓	11	✓
		334040	30			✓	✓	✓					12	✓
		334041	20			✓	✓	✓				✓	13	✓
		334042	10			✓	✓	✓				✓	14	✓
		334043	1			✓	✓	✓				✓	15	✓

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Deg.	Min.	Longitude E/W	Deg.	Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
BV Knorr																			
Entered By																			
130 CA	194-020	08		66	55	.75	57	40	.54	04	09	08	06	12	247	856 m		8.56	

Wire 855 Alt 5.19
Sounder 858 17 31.41
830

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments
ML-09

334044

334057

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O+B	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	TIC/TMN						
		334044	BTM	855		✓						✓	1	✓				
		334045	800	800			✓	✓				✓	2	✓				
		334046	700	700.5			✓	✓				✓	3	✓				
		334047	600	600.5			✓	✓				✓	4	✓				
		334048	500	500.5			✓	✓				✓	5	✓				
		334049	400	400.5		✓	✓	✓				✓	6	✓				
		334050	300	300.9			✓	✓				✓	7	✓				
		334051	200	200.4			✓	✓				✓	8	✓				
		334052	100	100.4		✓	✓	✓				✓	9	✓				
		334053	50	50.6		✓	✓	✓				✓	10	✓				
		334054	30	30.6		✓	✓	✓					11	✓				
		334055	20	20.4		✓	✓	✓				✓	12	✓				
		334056	10	10.4		✓	✓	✓					13	✓				
		334057	1	0.0		✓	✓	✓				✓	14	✓				

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
Entered By				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
AV Knorr																		555	
BP CA	194-020008				67	01.24		57	24.47	07	09	08	08	07	248	803 m			

S31.52

Cloud Amount	Sea Conditions	Precipition	Ice Cover

wire out
800.5 + 10.5

Comments

ML-10 no Bottles CTD only 790

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.							
												FIRE 1 bottle, no sample.						

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude	Longitude	Messenger Down G.M.T.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr		011		N/S Deg. Min.	E/W Deg. Min.	Day Mo. Yr. Hour Min.				6.0°C	
Entered By: BPICA	1994-020			67 02.15	37 02.39	05 09 08 01 50	248	698 m			

Cloud Amount	Sea Conditions	Precipitation	Ice Cover

6 8 S WIRE 700-96.

32.02

Comments

ML-11 Please Note: ML-11 was not done as consecutive stn 009 due to mooring work. Returned to station once ML-12 was completed. ML-11 now consecutive stn # ~~010~~ 011

334058 Bottle #3 leaking on recovery Sample: 334060

334069

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	TIC/TALK			
		334058	BTM	700.5		✓	✓	✓				✓	1	✓	
		334059	600				✓	✓				✓	2	✓	
		334060	500				✓	✓				✓	3	✓	Bottle leaking on recovery.
		334061	400			✓	✓	✓				✓	4	✓	
		334062	300			✓	✓	✓				✓	5	✓	
		334063	200			✓	✓	✓				✓	6	✓	
		334064	100			✓	✓	✓				✓	7	✓	
		334065	50			✓	✓	✓				✓	8	✓	
		334066	30			✓	✓	✓					9	✓	
		334067	20			✓	✓	✓				✓	10	✓	
		334068	10			✓	✓	✓					11	✓	
		334069	1			✓	✓	✓				✓	12	✓	Sequential btl fire indicated 12 did not fire (no response when mouse clicked). Tried again & indicated 14 next btl. 12 & 13 fired

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Deg.	Min.	Longitude E/W	Deg	Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr	199	020	010		67	01.16		54	49.51	04	09	08	23	58	248	385 m		5.64	
Entered By: BP/CA																		S = 31.68	

Cloud Amount	Sea Conditions	Precipitation	Ice Cover

Comments: ML-12

334070

334078

PLEASE NOTE: Due to mooring recovery Stn ML-11 was not completed as CTD Consecutive Stn # ~~009~~ 010. Returned to Hydrolines at ML-12 → as Consecutive Stn # ~~009~~ 010 instead.

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	TTC/ALK						
		334070	Btm			✓	✓	✓				✓	1	✓				
		334071	300				✓	✓				✓	2	✓				
		334072	200			✓	✓	✓				✓	3	✓				
		334073	100			✓	✓	✓				✓	4	✓				
		334074	50			✓	✓	✓				✓	5	✓				
		334075	30			✓	✓	✓					6	✓				
		334076	20			✓	✓	✓				✓	7	✓				
		334077	10			✓	✓	✓					8	✓				
		334078	1			✓	✓	✓				✓	9	✓				

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude	Longitude	Messenger Down G.M.T.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr				N/S Deg. Min.	E/W Deg. Min.	Day Mo. Yr. Hour Min.					
Entered By: BPICA	1994-020	12		66 53.64	58 23.49	05 09 08 07 44	249	1028 m			

Cloud Amount	Sea Conditions	Precipition	Ice Cover
			DISPLAY FROZEN, okay

WIRE 1035. + 17.

66 51.19 N, 59 3.82 W } from nmea Data + nav display

Comments: ML-07 NOTE: Bottle #2 did not Sits; no sample 334080

334079

334093

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	TC/TNN			
		334079	BTM	1035.2		✓	✓	✓				✓	1	✓	
		334080	900				✓	✓				✓	2	✓	BTM. did not Sits
		334081	800				✓	✓				✓	3	✓	
		334082	700				✓	✓				✓	4	✓	
		334083	600				✓	✓				✓	5	✓	
		334084	500			✓	✓	✓				✓	6	✓	
		334085	400				✓	✓				✓	7	✓	
		334086	300				✓	✓				✓	8	✓	
		334087	200				✓	✓				✓	9	✓	
		334088	100			✓	✓	✓				✓	10	✓	
		334089	50			✓	✓	✓				✓	11	✓	
		334090	30			✓	✓	✓					12	✓	
		334091	20			✓	✓	✓				✓	13	✓	
		334092	10			✓	✓	✓					14	✓	
		334093	1			✓	✓	✓				✓	15	✓	

green light flashed no indication of firing on Seq. display

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messanger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min	Day	Mo.	Yr.	Hour	Min.					
RV Knorr	1994-020	014														m			
Entered By: BPIA																			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

ML-02 - ML-01 Upcast done first
- ML-02 Bottom cast (out of sequence)

334094

334102

ML-01 & 02 left until daylight (ice)
Julian day 250
ML-06 1st 18m day 279

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O18	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	TIC/TALK						
		334094	BTM				✓	✓										
		334095	300			✓	✓	✓				✓						
		334096	200				✓	✓				✓						
		334097	100			✓	✓	✓				✓						
		334098	50			✓	✓	✓				✓						
		334099	30			✓	✓	✓										
		334100	20			✓	✓	✓				✓						
		334101	10			✓	✓	✓										
		334102	1			✓	✓	✓				✓						

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
Entered By				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RV Knorr		018																365	
BP/CA	HH-02 ~~013~~			N	66	38.72	W	61	13.56	06	09	08	13	58	250	78 m			

Cloud Amount	Sea Conditions	Precipitation	Ice Cover

Comments

HL-01 CTD Cast only 2 Bottles Sized Surface & Bottom. 334103

- out of sequence: HL-01 cast # ~~015~~ 018 → HL-02 cast ~~017~~ 017 334104

HL01 & HL02 lost 41 day due to darkness & ice.

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.							
	1	334103	BTM	68			✓	✓				BH#1						
			50															
			30															
			20															
			10															
	3	334104	1	∅			✓	✓				BH#3						

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Deg.	Min.	Longitude E/W	Deg.	Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
KV Knorr	144	020	13		65	56		59	37	28	06	09	08	04	07	250		421	
Entered By TAB/CA																911 m			

S = 30-90

Cloud Amount	Sea Conditions	Precipition	Ice Cover

915 + 15 = 930

Comments

ML-06 Out of sequence; decision to wait to do ML-01 & ML-02 until daylight - ice conditions

NOTE: Bottle #2 did not Sits; no sample 334106

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	TC/TALK		
		334105	Bottom	915			✓	✓				✓	1	334105
		334106	800				✓	✓				✓	2	Bottle #2 did not Sits
		334107	700				✓	✓				✓	3 ✓	
		334108	600				✓	✓				✓	4 ✓	
		334109	500			✓	✓	✓				✓	5 ✓	
		334110	400				✓	✓				✓	6 ✓	
		334111	300				✓	✓				✓	7 ✓	
		334112	200				✓	✓				✓	8 ✓	
		334113	100			✓	✓	✓				✓	9 ✓	
		334114	50			✓	✓	✓				✓	10 ✓	
		334115	30			✓	✓	✓					11 ✓	
		334116	20			✓	✓	✓				✓	12 ✓	
		334117	10			✓	✓	✓					13 ✓ 334118	
		334118	1			✓	✓	✓				✓	14	

- ~~[illegible]~~ silicic not analyzed to stopper until next stn.
- may not have been poisoned.

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
Entered By				N/S	Deg	Min	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
KV KNORR																			
BP/CA	1991-02	014			66	45.62		60	44.29	06	09	08	06	59	250	656m			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

640

650 Wire 111

Comments

ML-05 -Did not use Bottle #2; skipped over.
-#2 Bottle did not close.

334119

334129

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	TIC/TALK		
		334119	BTM	650		✓	✓	✓				✓	1	✓
		334120	500				✓	✓				✓	3	✓
		334121	400			✓	✓	✓				✓	4	✓
		334122	300				✓	✓				✓	5	✓
		334123	200				✓	✓				✓	6	✓
		334124	100			✓	✓	✓				✓	7	✓
		334125	50			✓	✓	✓				✓	8	✓
		334126	30			✓	✓	✓					9	✓
		334127	20			✓	✓	✓				✓	10	✓
		334128	10			✓	✓	✓					11	✓
		334129	1			✓	✓	✓				✓	12	✓

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
Entered By				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RV Knorr	1994-020	15		N	66	45.55	E	60	44.58	06	09	08	07	33	250	534 m		444	
BP / CA																			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

534

526

526.5 + 15

Comments

Ship Bottle #2 as does not fire.

MK-04

334130

334139

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	TIC/TALK						
		334130	Btm	520.5		✓	✓	✓				✓	12	✓				
		334131	400				✓	✓				✓	3	✓				
		334132	300				✓	✓				✓	4	✓				
		334133	200				✓	✓				✓	5	✓				
		334134	100			✓	✓	✓				✓	6	✓				
		334135	50			✓	✓	✓				✓	7	✓				
		334136	30			✓	✓	✓					8	✓				
		334137	20			✓	✓	✓				✓	9	✓				
		334138	10			✓	✓	✓					10	✓				
		334139	1			✓	✓	✓				✓	11	✓				

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Deg.	Min.	Longitude E/W	Deg.	Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
R/V Knorr	194-02	01	6	N	66	41.56	W	60	48.62	06	09	08	10	36	251	435 m		4.24	
Entered By																			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments MLD3

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	TIC TAlk					
	1	334146	bottom	425		✓	✓	✓				✓			334140		
	3	41	400	400			✓	✓				✓					
	4	42	300	300			✓	✓				✓					
	5	43	200	200			✓	✓				✓			334149		
	6	44	100	100		✓	✓	✓				✓					
	7	45	50	50		✓	✓	✓				✓					
	8	46	30	30		✓	✓	✓				✓					
	9	47	20	20		✓	✓	✓				✓					
	10	48	10	10		✓	✓	✓				✓					
	11	334149	1	0		✓	✓	✓				✓					

MARINE CHEMISTRY

Vessel / Entered By	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Deg.	Min.	Longitude E/W	Deg.	Min	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
R/V Knorr	197-02	017			66	40.97		60	56.41	06	09	08	11	57	251	3761 m		3.8	

Cloud Amount	Sea Conditions	Precipitation	Ice Cover

Comments MOC Bottle 4 - CTD did not indicate fired
Bottle 5 - CTD double - incremented => 4 -> 6 bottle fired until indicated 4

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	TIC TALK		Sample ID	
	1	334094	bottom	265			✓	✓						334094	
	3	95	300	300		✓	✓	✓				✓		334095	
	~~4~~	~~[illegible]~~	~~250~~				~~✓~~	~~✓~~							
5 4	~~5~~	~~[illegible]~~	200	200			✓	✓				✓		334096	CTD did not respond when 4 fired. But we think 4 did fire, 5 was fired at same z. 4 was labelled 096A 5 as 096B
	~~6~~	~~[illegible]~~	~~150~~				~~✓~~	~~✓~~							
6 ~~7~~	~~8~~ 7	97 ~~[illegible]~~	100	100		✓	✓	✓				✓		334097	
7 ~~8~~	~~9~~ 8	~~[illegible]~~	50	50		✓	✓	✓				✓		334098	
8 ~~9~~	~~10~~ 9	99 ~~[illegible]~~	30	30		✓	✓	✓						334099	
9 ~~10~~	~~11~~ 10	~~[illegible]~~	20	20		✓	✓	✓				✓		334100	
10 ~~11~~	~~12~~ 11	01 ~~[illegible]~~	10	10		✓	✓	✓						334101	
11 ~~12~~	~~13~~ 12	02 ~~[illegible]~~	1	0		✓	✓	✓				✓		334102	

MARINE CHEMISTRY

Vessel / Entered By	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S Deg. Min.	Longitude E/W Deg. Min.	Messenger Down G.M.T. Day Mo. Yr. Hour Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr / BPI CA.	194-020	19		67 28.14	63 07.49	07 09 08 07 45	251	56 m		40.9	

529.87

49

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

NL01 Northern line

334150

334154

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients			Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	TIC/TALK						
		334150	50	47.4		✓	✓	✓					✓	1, 2	maybe 3, no fire.				
		334151	30			✓	✓	✓						13	✓				
		334152	20			✓	✓	✓					✓	~~4~~	✓				
		334153	10			✓	✓	✓						5	✓				
		334154	1			✓	✓	✓					✓	6					

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Deg.	Min.	Longitude E/W	Deg.	Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr																		4 6 2	
Entered By: BPICA	199-020	20		6	7	28.17	6	2	19.58	09	09	08	7	54	251	963 m			

S: 29.54

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

~~NL~~ NL-02 Northwestline
CTD CAST ONLY - no Bottles. Decided on nutrients top + bottom

334173

334174

334175

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.		
		334173	btm	88.2			✓	✓				1 ✓	
		4	50	50.6			✓	✓				2 ✓	Silent 2, but green light on, I think
		5	1				✓	✓				3 ✓	
													yes shipped to 4
													Seg Bill fire
													#Fired 2 Nutrient total fired 4

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
Entered By				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RV Knorr	194-0202	1		N	67	37.44	W	62	43.94	07	09	08	09	48	251	134 m		406	
BPICA.																			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

NL-03

334155

334161

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Fil.	TC/TALK					
	1	334155	BTM	125		✓	✓	✓				✓					
	2	334156	100	100		✓	✓					✓					
	3	334157	50	50		✓	✓	✓				✓					
	4	334158	30	30		✓	✓	✓									
	5	334159	20	20		✓	✓	✓				✓					
	6	334160	10	10		✓	✓	✓									
	7	334161	1	6		✓	✓	✓				✓					

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Deg.	Min.	Longitude W/E	Deg.	Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV KNORR																			
Entered By																			
BP/CA	194-02022			N	67	40.58	W	62	36.63	07	09	08	11	06	251	629 m		3.07	

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

NL-04

334162

334172

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	TIC/TALK					
	1	334162	BTM	618		✓	✓	✓				✓					
	2	334163	500	500			✓	✓				✓					
	3	334164	400	400		✓	✓	✓				✓					
	4	334165	300	300			✓	✓				✓					
	5	334166	200	200			✓	✓				✓					
	6	334167	100	100		✓	✓	✓				✓					
	7	334168	50	50		✓	✓	✓				✓					
	8	334169	30	30		✓	✓	✓									
	9	334170	20	20		✓	✓	✓				✓					
	10	334171	10	10		✓	✓	✓									
	11	334172	1	0		✓	✓	✓				✓					

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Latitude Deg.	Latitude Min.	Longitude E/W	Longitude Deg.	Longitude Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
R/V Ernest	1 9 4 - 0 2 0 2 3			N	67	40.52	W	62	36.63	0 7	0 9	0 9	1 2	0 6	2 5 1	6 2 9 m		3.0	
Entered By																			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

lat: 67° 43.74 hour: 12:32 min: 32
lon: 62° 29.11 depth: 934m SST: 3.16°C

Comments NL-05 – No Bottles

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.							

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Deg.	Min.	Longitude E/W	Deg.	Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr																		3.12	
Entered By																			
BP/CA	1988-022-04				64	46.11		62	21.63	07	09	08	13	57	251	990 m			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

NL-06 334176

334190

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	T/T
	1	334176	1000	945		✓	✓	✓				✓
	2	7	900	900			✓	✓				✓
	3	8	800	800			✓	✓				✓
	4	9	700	700			✓	✓				✓
	5	80	600	600			✓	✓				✓
	6	1	500	500		✓	✓	✓				✓
	7	2	400	400			✓	✓				✓
	8	3	300	300			✓	✓				✓
	9	4	200	200			✓	✓				✓
	10	5	100	100		✓	✓	✓				✓
	11	6	50	50		✓	✓	✓				
	12	7	30	30		✓	✓	✓				
	13	8	20	20		✓	✓	✓				✓
	14	9	10	10		✓	✓	✓				
	15	334190	1	0		✓	✓	✓				✓

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
Kaan				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
Entered By	194	02	025	N	67	50.81	W	62	13.87	07	09	08	15	58	251	1108 m		2.2.4	

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments NL-07 No Bottles

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.							

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
R/V Knorr				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
Entered By	194-02	026		W	67	55.10	W	62	03.31	07	09	08	17	34	251	1406 m		4.04	

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments NL 08

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	DIC/TALK					
	1	334191	bottom	1415			✓	✓				✓	334191				
	2	92	1200	1200			✓	✓									
	3	93	1000	1000		✓	✓	✓				✓					
	4	94	800	800			✓	✓									
	5	95	600	600			✓	✓				✓					
	6	96	400	400			✓	✓									
	7	97	200	200			✓	✓				✓					
	8	98	100	100		✓	✓	✓				✓					
	9	99	50	50		✓	✓	✓				✓					
	10	200	30	30		✓	✓	✓									
	11	01	20	20		✓	✓	✓				✓					
	12	02	10	10		✓	✓	✓									
	13	03	1	0		✓	✓	✓				✓	334203				

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Deg.	Min.	Longitude E/W	Deg.	Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
R/V Knorr																		4.10	
Entered By	1 9 4 - 0 2 0 2 7			N	6 8 0 2 . 8 5		W	6 1 4 6 . 2 3		0 7	0 9	0 8	2 0	0 8	2 5 1	1 6 4 4 m			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments NL09 Missed the 200m cast depth so gave which 200m instead. Caught the instable layer, thus the 265m bottle

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2 18	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	TIC/TALK					
	1	334204	bottom	1640			✓	✓				✓					334204
	2	05	1400	1400		✓	✓	✓				✓					
	3	06	1200	1200			✓	✓				✓					
	4	07	1000	1000			✓	✓				✓					
	5	08	800	800			✓	✓				✓					
	6	09	600	600			✓	✓				✓					
	7	210	400	400			✓	✓				✓					
	8	11	300	265			✓	✓				✓					
	9	12	200	200			✓	✓				✓					
	10	13	100	100		✓	✓	✓				✓					
	11	14	50	50		✓	✓	✓				✓					
	12	15	30	30		✓	✓	✓									334218
	13	16	20	20		✓	✓	✓				✓					
	14	17	10	10		✓	✓	✓									
	15	18	1	0		✓	✓	✓				✓					

possibly bad tip for 1 bottle. may have been blocked

new tip

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
R/V Knorr				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
Entered By	194-02	028		N	68	10.74	W	61	29.36	07	09	08	23	03	251	1690 m		397	

1670

S 30.65

Wire 1710.4 + alt 14.

P 1715

Cloud Amount	Sea Conditions	Precipitation	Ice Cover
		+ 29 (29)	

Comments NL-10

Trouble with rosette. Several levels did not fire. We relabelled rosette to align original numbers with their original depths. So e.g., 334128 is at 200 m. 29 at 100 m. Robbie Laird replaced conductor cable to rosette command box on CTD rosette.

Cast 29

CAST #1 (28)

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2 /K	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	TIC/TAK			
	Yes	334219	bottom				✓	✓				✓	1 ✓		334219
	No	220	1600				✓	✓				✓	2 ✓	did not close	
	Y	21	1400			✓	✓	✓				✓	3 ✓		
	Y	22	1200				✓	✓				✓	4 ✓		
	Y	23	1000				✓	✓				✓	5 ✓		
	Y	24	800				✓	✓				✓	6 ✓		
	Y	25	600				✓	✓				✓	7 ✓		
Y	N	26	400				✓	✓				✓	8 ✓	(may not have fired)	(short file)
Y	N	27	300				✓	✓				✓	9	skipped too many increments of	
	Y	28	200				✓	✓				✓	10 ✓	bottle 8	200
	Y	29	100			✓	✓	✓				✓	11 ✓	9	
Y	N	230	50			✓	✓	✓				✓	12	10	fired 3 times, + 1
Y	N	31	30			✓	✓	✓					13	11	fired 5 time nothing
Y	N	32	20			✓	✓	✓				✓	14	12	fired 1 no rep.
Y	N	33	10			✓	✓	✓					15	13	
Y	N	34	1			✓	✓	✓				✓	16	14 ✓	334234
													Relabelled to this &		we sampled to keep numbers

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
R/V Knorr	1 9 4 - 0 2	0 3 0		N	6 8	1 8 · 4 4	W	6 1	1 2 · 0 4	0 8	0 9	0 8	0 3	5 0	2 5 2	1 6 8 1 m		3 9 1	
Entered By																			

S = 30.63

1660 Live alt
1700 +

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments VL-11

Cast after repairs to CTD/Rosette cables.

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2 lb	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	TC/TIC					
		334235	bottom				✓	✓				✓	12 ✓		2 fired in hanger		334235
		36	1600				✓	✓				✓	3 ✓				
		37	1400			✓	✓	✓				✓	4 ✓				
		38	1200				✓	✓				✓	5 ✓				
		39	1000				✓	✓				✓	6 ✓				
		240	800				✓	✓				✓	7 ✓				
		41	600				✓	✓				✓	8 ✓				
		42	400				✓	✓				✓	9 ✓				
		43	300				✓	✓				✓	10 ✓				
		44	200				✓	✓				✓	11 ✓				
		45	100			✓	✓	✓				✓	12 ✓				
		46	50			✓	✓	✓				✓	13 ✓				
		47	30			✓	✓	✓					14 ✓				
		48	20			✓	✓	✓				✓	15 ✓				334250
		49	10			✓	✓	✓				✓	16 ✓		fired but hungry		
		250	1			✓	✓	✓				✓	17 ✓				

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S Deg. Min.	Longitude E/W Deg. Min.	Messenger Down G.M.T. Day Mo. Yr. Hour Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr										361	
Entered By											
BP/CA -	1994-020	31		68 23.65	60 29.95	08 09 08 07 15	252	1590 m			

1575 S=30.61

1600+ 18.

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

#NL-12 min T -1.73

334251

334265

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	Tile TALK		
		334251	BTM				✓	✓					1,2	✓
		334252	1400				✓	✓					3	✓
		334253	1200				✓	✓					4	✓
		334254	1000			✓	✓	✓				✓	5	✓
		334255	800				✓	✓					6	✓
		334256	600				✓	✓					7	✓
		334257	400				✓	✓					8	✓
		334258	300				✓	✓					9	✓
		334259	200			✓	✓	✓				✓	10	✓
		334260	100			✓	✓	✓				✓	11	✓
		334261	50			✓	✓	✓				✓	12	✓
		334262	30			✓	✓	✓					13	✓
		334263	20			✓	✓	✓				✓	14	✓
		334264	10			✓	✓	✓					15	✓
		334265	1			✓	✓	✓				✓	16	✓

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
Entered By				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RV Knorr																		3.9.2	
BP/CA	194-0203	2		N	68	24.40	W	60	09.07	08	09	08	09	36	252	1438 m			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

NL-13 CTD CAST ONLY - NO BOTTLES.

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.						

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RV Knorr																		4.0	
Entered By																			
BPCA	194-6	20	33	N	68	27.57	W	59	59.49	08	09	08	11	03	252	1254 m			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

lat & lon incorrect (new system problems)
Refer to SBE data header

Comments

NL-14 CTD CAST ONLY - NO BOTTLES.

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.							

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RV Knorr	199-020	34		N	68	29.79	W	59	49.40	08	09	08	13	06	252	878 m		361	
Entered By: BP/CA																			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

NL-15

334266

334274

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	TC/TALK
	1	334266	BTM	855		✓	✓	✓				✓
	3	334267	600	600			✓	✓				
	4	334268	400	400			✓	✓				
	5	334269	300	300			✓	✓				
	6	334270	200	200		✓	✓	✓				✓
	7	334271	100	100		✓	✓	✓				✓
	8	334272	50	50		✓	✓	✓				✓
	9	334273	20	20		✓	✓	✓				✓
	10	334274	1	0		✓	✓	✓				✓

FOR NL15 to NL19 Craig thinks he might not have poisoned properly. Needed new tip.

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
R/V Knorr	1994-02	075		N	68	11.61	W	69	27.43	08	09	08	14	43	252	582 m		3.64	
Entered By																			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments NL-16, no bottles

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.							

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
R/V Knorr																		3.5	
Entered By	1	9	4	0	2	0	3	6	N	6	8	3	2	.35	W	5	9	2	0	.30	0	8	0	9	0	8	1	5	4	4	2	5	2	5	0	7 m	

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments ML-17

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2 Is	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	DIC/TALK						
	1	774775	bottom	500		✓	✓	✓				✓						
	3	76	400	400			✓	✓										
	4	77	300	300			✓	✓										
	5	78	200	200		✓	✓	✓				✓						
	6	79	100	100		✓	✓	✓				✓						
	7	80	50	50		✓	✓	✓				✓						
	8	81	20	20		✓	✓	✓				✓						
	9	82	1	0		✓	✓	✓				✓						

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
R/V Knorr				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
Entered By	194	0203	7	N	68	34.17	W	59	05.87	08	09	08	17	08	252	299 m		3.8	

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments ML 18

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2 18	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	TC/TOC					
	1	334283	bottom	290		✓	✓	✓				✓					
	3	84	200	200		✓	✓	✓				✓					334283
	4	85	100	100		✓	✓	✓				✓					
	5	86	50	50		✓	✓	✓				✓					
	6	87	20	20		✓	✓	✓				✓					
	7	88	1	0		✓	✓	✓				✓					
																	334288

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
Entered By				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
R/V Knorr	194-02	078		N	68	29.45	W	58	23.44	08	09	08	19	26	252	311 m		4.25	

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments ML 19

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	TC/DIC
	1	334289	bottom	305		✓	✓	✓				✓
	2	90	200	200		✓	✓	✓				✓
	3	91	100	100		✓	✓	✓				✓
	4	92	50	50		✓	✓	✓				✓
	5	93	20	20		✓	✓	✓				✓
	6	94	1	0		✓	✓	✓				✓

334289

334294

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
Entered By																			
RP/CA	199-020	39			68	44.71		57	41.71	08	09	08	21	40	252	303 m		475	

Cloud Amount	Sea Conditions	Precipition	Ice Cover

290

S 32,19

29047.8 m

Comments

NL-20

water extremely clear.

- see CTD @ 50m

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	TIC/TALK						
		334295	BTM	290.		✓	✓	✓				✓	1,2 ✓	334295				
		334296	200			✓	✓	✓				✓	3 ✓					
		334297	100			✓	✓	✓				✓	4 ✓					
		334298	50			✓	✓	✓				✓	5 ✓					
		334299	20			✓	✓	✓				✓	6 ✓					
		334300	1			✓	✓	✓				✓	7	334300				

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Deg.	Min.	Longitude E/W	Deg.	Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr																		589	
Entered By																			
BPICA/AS	194-02	040			68	49.93		56	59.74	09	09	08	01	23	252	284 m			

284
270

S = 32.49
275 + 8.5

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments NL21

334301

334306

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	TIS/TRACKS		
		334301	btm	275		✓	✓	✓				✓	1,2	✓
		2	200			✓	✓	✓				✓	3	✓
		3	100			✓	✓	✓				✓	4	✓
		4	50			✓	✓	✓				✓	5	✓
		5	20			✓	✓	✓				✓	6	✓
		6	1			✓	✓	✓				✓	7	✓

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
KN Knorr																		552	
Entered By																			
BPICAIAS	194-02	04	1		68	55.08		51	17.62	09	09	08	02	15	252	167 m			

S 32.91

169.7 8.5

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

NL-22

334307

334312

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	TA/TALK						
		334307	BTM	160.2		✓	✓	✓				✓	12 ✓					
		334308	100			✓	✓	✓				✓	3 ✓	←	add	T/T	$+O_2$	
		334309	~~100~~ 50			✓	✓	✓				✓	4 ✓					
		334310	30			✓	✓	✓				✓	5 ✓					
		334311	20			✓	✓	✓				✓	6 ✓					
		334312	1			✓	✓	✓				✓	7					

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RV Knorr																		5 6 9	
Entered By																			
BPICALAS	194-020	42		69	00	35	55	35	100	09	09	08	04	29	253	136 m			

32.04

125

125 + 9.8.

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

NL-23

334313

334317

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	TIC/TALK						
		334313	BTM			✓	✓	✓				✓	1,2	✓				
		334314	100			✓	✓	✓				✓	3	✓				
		334315	50			✓	✓	✓				✓	4	✓				
		334316	20			✓	✓	✓				✓	5	✓				
		334317	1			✓	✓	✓				✓	6	✓				

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
Entered By																			
BP/CA/AS	194-02043				69	05.60		54	53.4160	09	08	06	38	253		178 m		5.78	

165

S=32.94

170416.2

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

NL-24

334318

334323

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	Tie/Tank						
		334318	BTM	170.4		✓	✓	✓				✓	1,2	✓				
		334319	150				✓	✓					3	✓				
		334320	100			✓	✓	✓				✓	4	✓				
		334321	50			✓	✓	✓				✓	5	✓				
		334322	~~300~~ 25			✓	✓	✓				✓	6	✓				
		334323	1			✓	✓	✓				✓	7	✓				

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Deg.	Min.	Longitude E/W	Deg.	Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr																		5 8 2	
Entered By																			
BP/CA/AS	194-020	44			69	10.00		54	18.01	09	09	08	06	37	253	169 m			

33.02

10012+9

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

~~BM~~ NL-25

334324

334328

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	Tic/Talk						
		334324	BTM	100.2		✓	✓	✓				✓	1,2	✓				
		334325	~~10~~ 050			✓	✓	✓				✓	3	✓				
		334326	350			✓	✓	✓				✓	4	✓				
		334327	20			✓	✓	✓				✓	5	✓				
		334328	1			✓	✓	✓				✓	6					

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Latitude Deg.	Latitude Min.	Longitude E/W	Longitude Deg.	Longitude Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr																		5 7 6	
Entered By																			
BP/CA/AS	1991-020	45		N	66	15.00	W	54	39.90	10	09	08	03	22	254	75 m			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

CS + 7.7 alt

31.93

Comments

SHL-17

334329

334332

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	TC/TALK						
		334329	BTM	65		✓	✓	✓				✓	1,2	✓				
		334330	50	50		✓	✓	✓				✓	3	✓				
		334331	30 (30)			✓	✓	✓				✓	4	✓				
		334332	1			✓	✓	✓				✓	5					

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
Entered By																			
BP/CA/AS	1994-020	46			66	14.99		55	19.64	10	09	08	05	27	254	197 m		5.6 2	

Cloud Amount	Sea Conditions	Precipition	Ice Cover

~~185~~ S: 32.31
190 + 9

Comments

CTD CAST ONLY
SHK-16
NO BOTTLES.

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.						
												FIRE 1+2		no samples			

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RV Knorr																		6 2 5	
Entered By																			
BP/CA/AS	194-02	047			66	15.04		55	59.55	10	09	08	07	29	254	152m			

32,38

140

140.6+6.3

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

SHL-15

334333

334337

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	TIC/TALK						
		334333	BTM	140.6		✓	✓	✓				✓	1, 2	✓				
		334334	100			✓	✓	✓				✓	3	✓				
		334335	50			✓	✓	✓				✓	4	✓				
		334336	20			✓	✓	✓				✓	5	✓				
		334337	1			✓	✓	✓				✓	6	✓				

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RV Knorr																			
Entered By																			
TP/CA/AS	194-02	048			66	14.96		56	20.04	10	09	08	8	47		177 m		625	

Cloud Amount	Sea Conditions	Precipition	Ice Cover

160

170.4 + 9.3

S = 32.34

Comments

SAL-14 CTD CAST ONLY

NO BOTTLES.

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.			
												1	Fire #1	
														Salinity from primary sensor way off at start
														way off period
														throws off oxygen as well
														cells cleaned, possibly blocked during downcast, clearing at 50m.

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RV KNOTT	194-02	049		N	66	15.01	W	56	39.40	00	09	08	10	20	254	575 m		6.60	
Entered By: TP/CA/AS.																			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments: Bottle #2 double fired w/ #1, but was labeled 334339
Bottle #6 failed to trip - labeled 343 but actually was 342
SML-13 TIC/TALK 334345 drawing after nuts + O2 done to confirm

334338 — Did not reclose
334345 — 2 labelled; fired 1,2 at btms

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	TIC/TALK		Bottle	old #	depth	new #
	1/2	334338	BTM	575		✓	✓	✓				✓		1	338	575	38
	3	334339	500	500			✓	✓						2	39	575	
	4	334340	400	400			✓	✓						3	40	500	39
	5	334341	200	200		✓	✓	✓				✓		4	41	400	40
	6	334342	100	100		✓	✓	✓				✓		5	42	200	41
	7	334343	50	50		✓	✓	✓				✓		6	43	100	42
	8	334344	20	20		✓	✓	✓				✓		7	44	50	43
	9	334345	1	1		✓	✓	✓				✓		8	x	20	44
														9	–	1	45

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
Entered By				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RV Knorr																		6.3	
TOPICALAS	194-020	50		N	66	14.94	W	56	59.35	10	09	08	12	37	254	647 m			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

334346

SAL-12

334353

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	TA/TALK
	1/2	334346	BTM	645		✓	✓	✓				✓
	3	334347	600	600			✓	✓				
	4	334348	400	400			✓	✓				
	5	334349	200	200		✓	✓	✓				✓
	6	334350	100	100		✓	✓	✓				✓
	7	334351	50	50		✓	✓	✓				✓
	8	334352	20	20		✓	✓	✓				✓
	9	334353	1	0		✓	✓	✓				✓

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RV Knorr																			
Entered By																			
BP/CA/AS	197-03051			N	66	14.58	W	57	19.31	10	09	08	14	20	254	636 m		6.48	

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

SML-11

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	TIC/TALK						
	1/2	334354	BTM	635		✓	✓	✓				✓			334361			
	3	334355	600	600			✓	✓										
	4	334356	400	400			✓	✓										
	5	334357	200	200		✓	✓	✓				✓						
	6	334358	100	100		✓	✓	✓				✓						
	7	334359	50	50		✓	✓	✓				✓						
	8	334360	20	20		✓	✓	✓				✓			334354			
	9	334361	1	0		✓	✓	✓				✓						

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Latitude Deg.	Latitude Min.	Longitude E/W	Longitude Deg.	Longitude Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
KV Knorr																			
Entered By																			
BP/CA/AS.	1994-02052			N	66	14.98	W	57	34.39	10	09	08	15	59	254	1574 m		4.3.5	

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

SHH-10 CTD CAST ONLY

NO BOTTLES

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.							

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RV Knorr																		4.10	
Entered By																			
BPICAIAS	1999-030	53		N	66	14.99	W	57	59.06	10	09	98	17	29	254	579 m			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

SMK-09

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	TIC/TALK					
	1/2	334362	BTM	575		✓	✓	✓				✓	1,2		334362		
	3	334363	500	500			✓	✓					3				
	4	334364	400	400			✓	✓					4				
	5	334365	200	200		✓	✓	✓				✓	5		334369		
	6	334366	100	100		✓	✓	✓				✓					
	7	334367	50	50		✓	✓	✓				✓					
	8	334368	20	20		✓	✓	✓				✓					
	9	334369	1	0		✓	✓	✓				✓					

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
R/V Iceberg																		4.0.1	
Entered By	194-02	054		N	66	15.05	W	58	18.98	10	09	08	19	11	254	627 m			

31.41

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments CML-08 - No Bottles

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.							
													fixed 1 at btm					

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
R/V Knorr				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
Entered By	194-020	55		N	66	15.19	W	58	39.93	00	09	08	20	39	254	559 m		426	

Cloud Amount	Sea Conditions	Precipition	Ice Cover

S 31.13

545

55 53.8.2

Comments ONL-07

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	Tc/Tank				
		334370	bottom	5553		✓	✓	✓				✓	1	✓		
		71	500	500			✓	✓					2	✓		
		72	400	400.3			✓	✓					3	✓		
		73	200	200.7		✓	✓	✓				✓	4	✓		
		74	100	100.1		✓	✓	✓				✓	5	✓		
		75	50	50.1		✓	✓	✓				✓	6	✓		
		76	20	20.5		✓	✓	✓				✓	7	✓		
		334377	1	0		✓	✓	✓				✓	8	✓		

334370

334377

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
R/V Kaare				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
Entered By	194	02056		N	66	15.10	W	58	58.91	10	09	08	22	16	254	647 m		409	

31.35

630

650+11.3

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments SMC-06, no bottles

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.							
				650								fire	1 btl.					

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Latitude Deg.	Latitude Min.	Longitude E/W	Longitude Deg.	Longitude Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
R/V Knorr																		4.20	
Entered By	194-02	057		N	66	14.88	W	59	25.18	16	09	80	20	06	255	683 m			

S=31.18

Cloud Amount	Sea Conditions	Precipition	Ice Cover

680 + 9.6
680

Comments SML-05

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2 K	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	TC/TALK					
		334378	bottom	680.1		✓	✓	✓				✓	1	✓			334378
		79	600	599.7			✓	✓					2	✓			
		80	400	400.1			✓	✓					3	✓			
		81	200	199.6		✓	✓	✓				✓	4	✓			
		82	100	99.6		✓	✓	✓				✓	5	✓			
		83	50	50.0		✓	✓	✓				✓	6	✓			
		84	20	19.6		✓	✓	✓				✓	7	✓			
		334385	1	surface 6.0		✓	✓	✓				✓	8				334385

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
KU knorr				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.				428	
Entered By																			
JSPICALAS	1941-02	058			66	15.01		59	51.99	11	09	08	04	01	255	602 m			

31.18

585

595.1 716.8

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

SKL-04 CTD CAST ONLY.

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
				594.9							

fire btl #1, no sample

$\Delta S_{2-1} \sim -0.006$ consistently now.

smaller at deeper depths

2 is noisier sensor: mainly in conductivity.

At btm, < 0.0001

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RV KNORR																			
Entered By																			
BP/CA/AS	194-02	059			66	14.99		60	18.54	11	09	08	05	47	255	442 m		434	

S = 31.17

425

435.5 + 9.3

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

SHL-03

334386

334393

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	TIC/TALK						
		334386	BTM	435.5		✓	✓	✓				✓	1	✓				
		334387	400	400.1			✓	✓					2	✓				
		334388	300	300.5			✓	✓					3	✓				
		334389	200	200.2		✓	✓	✓				✓	4	✓				
		334390	100	100.3		✓	✓	✓				✓	5	✓				
		334391	50	50.4		✓	✓	✓				✓	6	✓				
		334392	20	20.4		✓	✓	✓				✓	7	✓				
		334393	1			✓	✓	✓				✓	8	✓				

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RV Knorr																			
Entered By																			
BP/CA/AS	1941-02	0060				14.98		66	44.92	11	09	08	07	40	255	463 m		4.4.4	

Cloud Amount	Sea Conditions	Precipition	Ice Cover

390

400.3+9.3

S= 30.94

Comments

SHL-02 CTD CAST ONLY.

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.							
				400.3							filter	#1	@ btm.					

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RV Knorr	1994-02	06	1		66	14.99		61	11.62	11	09	1994	3	1	255	164 m		3 8 6	
Entered By: BPICAIAS																			

S = 30.74

170

175.6 +5.9

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

SKL-01

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	TC/TALK					
		334394	BOM	175.6		✓	✓	✓				✓	1	✓			
		334395	150	150.4		✓	✓	✓				✓	2	✓			
		334396	100	100.6		✓	✓	✓				✓	3	✓	Upper 150 m		
		334397	50	50.4		✓	✓	✓				✓	4	✓			
		334398	20	20.2		✓	✓	✓				✓	5	✓	$S_2 - S_1 \sim 0.005$		
		334399	1	surf		✓	✓	✓				✓	6	✓			

Note bottles were not labelled for 334395-96

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RV Knorr																		285	
Entered By																			
BPICALAS	1994-02	062			64	12.13		63	11.77	11	09	08	23	19	255	212 m			

S = 30.98

200

0004 7.3

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

NLSW-01

334400

334404

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	TIC/TALK			
		334400	BTM	200		✓	✓	✓				✓	1	✓	primary sensor salinity log
		334401	100	100		✓	✓	✓				✓	2	✓	
		334402	50	50.2		✓	✓	✓				✓	3	✓	
		334403	20	20.0		✓	✓	✓				✓	4	✓	at about 50m comes into line with all #2
		334404	1	0.2		✓	✓	✓				✓	5		

Critter blocking flow

Robbie Laird

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Deg.	Min.	Longitude E/W	Deg.	Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
R.V. KNORR																		332	
Entered By																			
BPICALAS.	194-02063				64	41.78		62	52.72	12	09	08	00	59	256	FA 146 m	31.12		

Cloud Amount	Sea Conditions	Precipition	Ice Cover

130. 135+7.5

Comments

334405

NLSW-02

334409

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2 &	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	TIC/TALK			
		334405	BTM	135.0		✓	✓	✓				no	1	✓	
		334406	100	100.0		✓	✓	✓				no	2	✓	
		334407	50	50.0		✓	✓	✓				no	3	✓	Alt, like last station,
		334408	20	20.1		✓	✓	✓				no	4	✓	picked up btm
		334409	1	0		✓	—	✓				no	5	✓	as a it was 100m
															off.

MARINE CHEMISTRY

Vessel / Entered By	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S Deg. Min.	Longitude E/W Deg. Min.	Messenger Down G.M.T. Day Mo. Yr. Hour Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
R/V Knorr / BPICAIAS	199-02	064		63 59.64	62 33.65	11 09 08 0238	256	157 m	S 31.11	383	

Cloud Amount	Sea Conditions	Precipition	Ice Cover

146 +9.2

Comments

-no TR/TRACK

NLSW-03

334410

334414

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.		
		334410	BTM	145		✓	✓	✓				1	✓
		334411	100	100		✓	✓	✓				2	✓
		334412	50	050		✓	✓	✓				3	✓
		334413	20	20		✓	✓	✓				4	✓
		334414	1	0		✓	—	✓				5	✓

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
Entered By				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RU Knorr																		409	
BPCATAS	194-02065				63	50.43		62	14.35	12	09	08	04	16	256	187 m	31.22		

Cloud Amount	Sea Conditions	Precipition	Ice Cover

170

180-46.1

Comments → NOTICE/TALK

334415

NKSW-04

334419

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.			
		334415	BTM	180		✓	✓	✓				1	✓	
		334416	100	99.6		✓	✓	✓				2	✓	Again, all along this
		334417	50	49.4		✓	✓	✓				3	✓	line altimeter locks
		334418	20	19.4		✓	✓	✓				4	✓	in at 10 m off bottom
		334419	1			✓	✓	✓				5	✓	

Vents on rosette open during cast!

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RV Knorr																		3 5 9	
Entered By																			
BPICAIAS	1994-02	0616			63	43.12		61	55.17	12	09	08	0558		256	202 m			

31.26

165

190.5 + 9.7

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

NO TIC/TALK

NH5W-05

334420

334424

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O2 & S	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.							
		334420	BTM	190.5		✓	—	✓			1	✓						
		334421	100	100.7		✓	—	✓			2	✓						
		334422	50	50.5		✓	—	✓			3	✓			locked in at 100			
		334423	20	20.5		✓	—	✓			4	✓						
		334424	1			✓	—	✓			5							

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RV Knorr		067			63	35.91		61	36.06	12	09	08	07	34		218 m		4.6	
Entered By: BPICAIAS																			

31.07

200

205.6 + 9.6

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

NLSW-06 NO TIC/TALK

334425

334430

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.							
		334425	BTM	205.6		✓	✓	✓			1	✓						
		334426	100	100.4		/	✓	✓			2	✓						
		334427	~~100~~ 50	50.4		✓	✓	✓			3	✓	Picked up btm from 100m off.					
		334428	~~35~~ 30	30.4		✓	✓	✓			4	✓						
		334429	20	20.4		✓	✓	✓			5	✓						
		334430	1	0		✓	✓	/			6	✓						

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RV Knorr																		3.6	
Entered By																			
BP/CD/AS	194-02	068		N	63	28.69	W	61	16.66	12	09	08	09	10	256	3041 m			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

NLSW-07

USS TIC/TALK

334431

334436

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	TIC/TALK
	1	334431	BTM	298		✓	✓	✓				✓
	2	334432	200	200		✓	✓	✓				✓
	3	334433	100	100		✓	✓	✓				✓
	4	334434	50	50		✓	✓	✓				✓
	5	334435	20	20		✓	✓	✓				✓
	6	334436	1	0		✓	✓	✓				✓

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
Entered By				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RV Knorr																			
BP/CA/AS	194-02069			N	43	24.53	W	60	57.55	12	09	81	05	11	256	372 m			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments NOTICHALK

NH3W-08

334437

334442

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
	1	334437	BTM	361		✓	✓	✓			
	2	334438	200	200		✓	✓	✓			
	3	334439	100	100		✓	✓	✓			
	4	334440	50	50		✓	✓	✓			
	5	334441	20	20		✓	✓	✓			
	6	334442	1	0		✓	✓	✓			

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
Entered By: BP/CAAS	198-D2070			N	62	14.32	W	60	38.53	12	09	08	12	34	256	374 m		4.5	

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

NO TC/TALK

NLSW-09

334443

334449

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
	1	334443	BTM	370		✓	✓	✓			
	2	334444	~~400~~ 300	300			✓	✓			
	3	334445	200	200		✓	✓	✓			
	4	334446	100	100		✓	✓	✓			
	5	334447	50	50		✓	✓	✓			
	6	334448	20	20		✓	✓	✓			
	7	334449	1	6		✓	✓	✓			

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
Entered By				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RV Knorr																		660	
BPICAIAS.	194-02	071		N	63	07.17	W	60	19.17	12	09	08	14	24	256	713 m			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

NO TIC/TALK

334450

NASW-10

334457

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O2%	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
	1	334450	BTM	710		✓	✓	✓			
	2	334451	600	600			✓	✓			
	3	334452	400	400			✓	✓			
	4	334453	200	200		✓	✓	✓			
	5	334454	100	100		✓	✓	✓			
	6	334455	50	50		✓	✓	✓			
	7	334456	20	20		✓	✓	✓			
	8	334457	1	0		✓	✓	✓			

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
R/V Knorr				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
Entered By	1 9 4 - 0 2 0 7 2			N	62	59.96	W	59	59.98	12	09	08	16	27	256	1127 m		6.0	

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

MLSW-11 (sample #s 334458 & 334459 not used)

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
						18					
	1	334460	bottom	1140		✓	✓	✓			
	2	61	800	800		✓	✓	✓			
	3	62	600	600		✓	✓	✓			
	4	63	400	400		✓	✓	✓			
	5	64	200	200		✓	✓	✓			
	6	65	100	100		✓	✓	✓			
	7	66	50	50		✓	✓	✓			
	8	67	20	20		✓	✓	✓			
	9	334468	1	0		✓	✓	✓			

334460

334468

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
R/V Keorr	194-02	073		N	67	42.80	W	59	14.54	12	09	08	20	28	256	994 m		6.41	
Entered By																			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

NLSW-12

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
	1	334469	bottom	1005		✓	✓	✓			
	2	70	800	800		✱	✓	✓			
	3	71	600	600		✱	✓	✓			
	4	72	400	400		✱	✓	✓			
	5	73	200	200		✓	✓	✓			
	6	74	100	100		✓	✓	✓			
	7	75	50	50		✓	✓	✓			
	8	76	20	20		✓	✓	✓			
	9	334477	1	0		✓	✓	✓			

334469

334477

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
R/V Knorr				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
Entered By	1994-02	0074		N	62	34.61	W	58	52.26	12	09	08	22	57	256	1329 m		658	

3230

Cloud Amount	Sea Conditions	Precipition	Ice Cover

1300

Started @ 1329 finished 1371

Sounder 1357

wire + dot 1400 + 16

Comments

NLSW - 13

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.						
		334478	1000	1000		✓	✓	✓				1	✓				
		79	500	1999			✓	✓				2	✓				334478
		80	600	600.1			✓	✓				3	✓				
		81	400	400.0			✓	✓				4	✓				
		82	200	200.2		✓	✓	✓				5	✓				
		83	100	100		✓	✓	✓				6	✓				
		84	50	50		✓	✓	✓				7	✓				
		85	20	20.0		✓	✓	✓				8	✓				
		334486	1	0		✓	✓	✓				9					
																	334486

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Deg.	Min.	Longitude E/W	Deg.	Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
R/V Ikaite	1	94-02075		N	62	25.79	W	58	26.67	12	09	08	01		257	2055 m		5 9 4	
Entered By																			

W+R = 2121
Sounder 2055
66

2000

2110 + 11.4

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments NLSW-14

Btm picked up ~35 off bottom

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.						
		334487	~~1000~~	1006.2		✓	✓	✓			1	✓					
		88	800	799.9			✓	✓			2	✓					334487
		89	600	599.7			✓	✓			3	✓					
		90	400	399.7			✓	✓			4	✓					
		91	200	200.0		✓	✓	✓			5	✓					
		92	100	99.8		✓	✓	✓			6	✓					
		93	50	50		✓	✓	✓			7	✓					
		94	20	20.2		✓	✓	✓			8	✓					
		334495	1	0		✓	✓	✓			9	✓					
																	334495

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
Vessel: R/V Knorr Entered By: BPICA/AS.	194-HB2076				62	12.08		57	52.11	13	09	08	05	46	257	2437 m		790	

S= 33.51

2426

2505.4 + 16.2.

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

NLSW-15

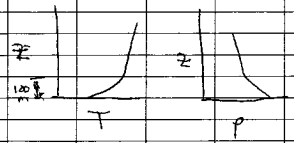
~~[illegible]~~

334496

334504

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.		
		334496	~~[illegible]~~ 1000	1000.4		✓	✓	✓			1	✓	
		334497	800	800.3			✓	✓			2	✓	
		334498	600	600.7			✓	✓			3	✓	~ 200 - 400m
		334499	400	400.5			✓	✓			4	✓	
		334500	200	200.4		✓	✓	✓			5	✓	possible interleaving
		334501	100	100.2		✓	✓	✓			6	✓	
		334502	50	50.4		✓	✓	✓			7	✓	about 50m off picked up
		334503	20	20.6		✓	✓	✓			8	✓	by alt.
		334504	1	1		✓	✓	✓			9	✓	

near bttm



MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
Entered By				N/s	Deg.	Min.	E/w	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RV Knorr																		7.9.4	
BPICAIAS	1994-020077			N	61	58.18	W	57	15.59	09	09	05	09	48	257	2532 m			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

NLSW-16

334505

334513

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
	1	334505	~~1500~~/1000	1000		✓	✓	✓			
	2	334506	800	800			✓	✓			
	3	334507	600	600			✓	✓			
	4	334508	400	400			✓	✓			
	5	334509	200	200		✓	✓	✓			
	6	334510	100	100		✓	✓	✓			
	7	334511	50	50		✓	✓	✓			
	8	334512	20	20		✓	✓	✓			
	9	334513	1	0		✓	✓	✓			

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RV Knorr																		7.8/6	
Entered By																			
BPICAIAS	194-02	078		N	61	57.83	W	67	14.98	13	09	08	13	53	257	2480 m			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

NASE-01

Probe #2 mistrip at ~2300 m (keyboard stuck accidentally). Shifted numbers before drawing samples

334514

334523

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O2/Sal	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
2	1	334514	BTM	2559			✓	✓			
	3	334515	1000	1000		✓	✓	✓			
	4	334516	800	800			✓	✓			
	5	334517	600	600			✓	✓			
	6	334518	400	400			✓	✓			
	7	334519	200	200		✓	✓	✓			
	8	334520	100	100		✓	✓	✓			
	9	334521	50	50		✓	✓	✓			
	10	334522	20	20		✓	✓	✓			
	11	334523	1	6		✓					

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
R/V Ikaarc				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
Entered By	1 0 4 - 0 2	0 7 9		N	6 2	2 4 . 9 5	W	5 6	1 2 . 1 5	1 3	0 9	0 8	1 7	5 6	2 5 7	2 5 4 0 m		7.5.4	

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments NLSE 02

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2 18	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.						
	1	334524	bottom	2635			✓	✓			1	✓					
	2	25	1000	1000		✓	✓	✓			2	✓					334524
	3	26	800	800			✓	✓			3	✓					
	4	27	600	600			✓	✓			4	✓					
		28	400	400			✓	✓			5	✓					
		29	200	200.4		✓	✓	✓			6	✓					
		30	100	100.2		✓	✓	✓			7	✓					
		31	50	50.3		✓	✓	✓			8	✓					
		32	20	20.3		✓	✓	✓			9	✓					
		334533	1	1		✓	✓	✓			10						334533

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S Deg. Min.	Longitude E/W Deg. Min.	Messenger Down G.M.T. Day Mo. Yr. Hour Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
R/V Knorr											
Entered By											
	194-02	080		N62 38.11	W75 40.113	13 09 08 21 52	257	2399 m		745	

S = 33.26

Cloud Amount	Sea Conditions	Precipition	Ice Cover

2400 W + A
2493 + 9

Comments NLSE03

Alt @ ~40 m

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.		
		334534	bottom	2493			✓	✓			1	✓	
		35	1000	1000		✓	✓	✓			2	✓	
		36	800	800			✓	✓			3	✓	
		37	600	600			✓	✓			4	✓	
		38	400	400			✓	✓			5	✓	
		39	200	199.8		✓	✓	✓			6	✓	
		40	100	100.0		✓	✓	✓			7	✓	
		41	50	50		✓	✓	✓			8	✓	
		42	20	20		✓	✓	✓			9	✓	
		334543	1	1		✓	✓	✓			10	✓	

at bottom of profile

Staircase of T

334534

334543

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Deg.	Min.	Longitude E/W	Deg.	Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr																		620	
Entered By																			
BP/CA/AS	1994-020	81		62	51	49	55	8	43	14	09	08	01	42	257	2331 m			

32.64

Cloud Amount	Sea Conditions	Precipition	Ice Cover

(2330)

P=2412.5.

2360 W+A 2405.24 101

Comments

334544

btm seen at +45 m

NISE-04

334553

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O18/O16	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
		334544	BTM	2405.2			✓	✓		1	✓
		334545	1000	1000.		✓	✓	✓		2	✓
		334546	800	800			✓	✓		3	✓
		334547	600	600			✓	✓		4	✓
		334548	400	400			✓	✓		5	✓
		334549	200	200		✓	✓	✓		6	✓
		334550	100	100		✓	✓	✓		7	✓
		334551	50	50		✓	✓	✓		8	✓
		334552	20	20		✓	✓	✓		9	✓
		334553	1	1		✓	✓	✓		10	✓

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
Entered By																		695	
BPICAIAS	194-02	082			63	00.05		54	47.73	18	09	08	04	47	257	1728 m			

S = 33.20

1720

1775, 1+ 12.5

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

334554

MLSE-05

334563

picked up litter at 70m

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
		334554	BTM	1775			✓	✓		1	✓
		334555	1000	1000.		✓	✓	✓		2	✓
		334556	800	800			✓	✓		3	✓
		334557	600	600.			✓	✓		4	✓
		334558	400	400			✓	✓		5	✓
		334559	200	200		✓	✓	✓		6	✓
		334560	100	100		✓	✓	✓		7	✓
		334561	50	50		✓	✓	✓		8	✓
		334562	20	20		✓	✓	✓		9	✓
		334563	1	1		✓	✓	✓		10	✓

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Deg.	Min.	Longitude E/W	Deg.	Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr																		6 8 4	
Entered By																			
TSP/CAIAS	194-62	083			63	07.53		54	30.10	10	9	08	07	23	257	1412 m			

33.18

1400

W+A

1440 at 10.

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

NLSE-06

334564

334572

picked up btm at 160m off.

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	Oxs	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
		334564	BTM	1440		✓	✓	✓		1	✓
		334565	800	800			✓	✓		2	✓
		334566	600	600			✓	✓		3	✓
		334567	400	400			✓	✓		4	✓
		334568	200	200		✓	✓	✓		5	✓
		334569	100	100		✓	✓	✓		6	✓
		334570	50	56		✓	✓	✓		7	✓
		334571	20	20		✓	✓	✓		8	✓
		334572	1	1		✓	✓	✓		9	✓

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Deg.	Min.	Longitude E/W	Deg.	Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RUNNER																			
Entered By																			
BPCA	1947	02084		N	62	14	W	54	12	14	09	08	10	00	258	1157 m		5.23	

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

NASE-07

334573

334581

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
	1	334573	BTM	1185		✓	✓	✓			
	2	334574	800	800			✓	✓			
	3	334575	600	600			✓	✓			
	4	334576	400	400			✓	✓			
	5	334577	200	200		✓	✓	✓			
	6	334578	100	100		✓	✓	✓			
	7	334579	50	50		✓	✓	✓			
	8	334580	20	20		✓	✓	✓			
	9	334581	1	0		✓	✓	✓			

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
Entered By				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RV Knorr																		4.9	
BPICAICh	1994-020085			N	62	15.22	W	54	11.48	14	09	08	12	26	257	1013 m			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

334582

NKSE-08 Bottles 7, 8 and 9 - top valve not completely closed during cast.

334590

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2 ^{18}O	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
	1	334582	PSTM	1055		✓	✓	✓			
	2	334583	800	800			✓	✓			
	3	334584	600	600			✓	✓			
	4	334585	400	400			✓	✓			
	5	334586	200	200		✓	✓	✓			
	6	334587	100	100		✓	✓	✓			
	7	334588	50	50		✓	✓	✓			
	8	334589	20	20		✓	✓	✓			
	9	334590	1	0		✓	✓	✓			

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
R/V Kaiyo																			
Entered By	194-02	0816		N	63	38.16	W	53	36.13	14	09	08	1437		257	1165 m		451	

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments NLSE - 09 Bottle #6 failed to fire - trip line caught in base clamp.

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2 ✓	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.						
	1	334591	bottom	1206		✓	✓	✓									334591
	2	92	800	800			✓	✓									
	3	93	600	600			✓	✓									
	4	94	400	400			✓	✓									
	5	95	200	200		✓	✓	✓									
	6	96	100	100		✓	✓	✓									
	7	97	50	50		✓	✓	✓									
	8	98	20	20		✓	✓	✓									
	9	334599	1	0		✓	✓	✓									334599

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Latitude Deg.	Latitude Min.	Longitude E/W	Longitude Deg.	Longitude Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
R/V Knorr																			
Entered By	1994-020	87		N	63	37.51	W	57	18.02	14	09	08	17	11	257	1194 m		4.09	

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments NLSE-10

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2 18	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
	1	334600	bottom	1200		✓	✓	✓			
	2	01	800	800			✓	✓			
	3	02	600	600			✓	✓			
	4	03	400	400			✓	✓			
	5	04	200	200		✓	✓	✓			
	6	05	100	100		✓	✓	✓			
	7	06	50	50		✓	✓	✓			
	8	07	20	20		✓	✓	✓			
	9	08	1	0		✓	✓	✓			

334600

334608

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
R/V Knorr	142-02	083			63	45.74		52	39.93	14	09	08	19	47	257	1400m		4.42	
Entered By																			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments NLSE-11

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients			Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
	1	334609	bottom	128		✓	✓	✓				
	2	10	100	100		✓	✓	✓				
	3	11	50	50		✓	✓	✓				
	4	12	20	20		✓	✓	✓				
	5	334613	1	0		✓	✓	✓				

334609

334613

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
Entered By																			
RMC/CA/AS	194-02	089			63	32.71		52	41.61	14	09	08	21	27	257	48 m		4.5 6	

30.47

40.75

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments NLSE-12 Nutrients only - no O18 bottles left.

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.					
		334614	btm	40.4			✓	✓								
		15	30 bo	30.4			✓	✓								
		16	20	20.6			✓	✓								
		17	5	5.4			✓	✓								

334614

334617

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
Entered By				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
R.V. Knorr																		458	
BPICALAS	1994-020	910		N	63	59.98	W	52	23.47	14	09	08	23	14	257	105 m			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

29.70
30.22

Comments

Depth changed to -85m during cast

NNSE - 13

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.						
		334618	BTM	73.4			✓	✓			1	✓					
		334619	50	50.0			—	✓			2	✓					
		334620	20	20.0			—	✓			3	✓					
		334621	5	5			✓	✓			4	✓					

334618

334621

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RV Knorr	1994-02	0911		N	65	02.05	W	161	40.67	18	09	08	13	30	242	179 m		3.60	

Entered By: BPICA/CA.

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

SL-01

334622

334626

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
	1	334622	BTM	172			✓	✓			
	2	334623	100	100			✓	✓			
	3	334624	50	50			✓	✓			
	4	334625	20	20			✓	✓			
	5	334626	1	0			✓	✓			

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
Entered By																			
BP/CA/CL	194-02	092		N	65	02.14	W	62	02.28	18	09	08	16	21	262	2658 – m		2.64	

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

SL-02 CTD CAST - NO BOTTLES.

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.							

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RV Knorr	194-02093			N	65	02.04	W	61	24.67	18	09	08	13	54	262	266 m		3.05	
Entered By: BRICAICH																			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

SL-03

334627

334632

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
	1	334627	BTM	256			✓	✓			
	2	334628	200	200			✓	✓			
	3	334629	100	100			✓	✓			
	4	334630	50	50			✓	✓			
	5	334631	20	20			✓	✓			
	6	334632	1	0			✓	✓			

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RV Knorr																			
Entered By																			
TOPICATCR.	1991-02	0914			65	02.09		60	46.32	18	04	08	21	30	216	2816 m		3.3.4	

S = 31.30

Cloud Amount	Sea Conditions	Precipition	Ice Cover

270 ± W
28.5 + 8.5

Comments

SL-04 NO BOTTLES - CTD Cast only

Strong winds over last 24h

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.							
				280.5								fired 1 btl.						

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Deg.	Min.	Longitude E/W	Deg.	Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV knorr																		4 0 8	
Entered By																			
BPICAICh	1991-02095				66	01.97		60	8.29	18	09	08	23	50	262	3333 m		31.40	

Cloud Amount	Sea Conditions	Precipition	Ice Cover

320

W + A
325.1 + 7

Comments

SL-05

334633

334639

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
		334633	BTM	325.1			✓	✓	1	✓	
		334634	300	300			✓	✓	2	✓	
		334635	200	200			✓	✓	3	✓	
		334636	100	100			✓	✓	4	✓	
		334637	50	50			✓	✓	5	✓	
		334638	20	20			✓	✓	6	✓	
		334639	1	1			✓	✓	7	✓	

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RV Knorr																		3 4 9	
Entered By																			
BPICAICL	194-02	0916			65	02.02		59	30.07	19	09	08	02	19	263	424 m		S 31.14	

Cloud Amount	Sea Conditions	Precipition	Ice Cover

410

415 + 9.1

Comments

SL-06 NO BOTTLES – CTD Cast only

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.						
				415					fire 1 bottle								

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Deg.	Min.	Longitude E/W	Deg.	Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr																		400	
Entered By																			
BP/CA/CL	1994-020	97			65	02.02		58	52.21	19	09	08	04	48	263	465 m		31.27	

Cloud Amount	Sea Conditions	Precipition	Ice Cover

480

465 + 9.9

Comments

334640

Sh-07

Conductivity cell 2 noisier than 1
some spiking on this cast.

334646

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
		334640	BTM	465			✓	✓	1	✓	
		334641	400	400			✓	✓	2	✓	
		334642	200	200			✓	✓	3	✓	
		334643	100	100			✓	✓	4	✓	
		334644	50	50			✓	✓	5	✓	
		334645	20	20			✓	✓	6	✓	
		334646	1	1			✓	✓	7	✓	

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
Entered By																			
BP/CA/CL	194-02	0098			65	01.91		58	32.86	19	09	08	06	45	263	507 m		493	

31.92

Cloud Amount	Sea Conditions	Precipition	Ice Cover

503+9. 495

Comments

SL-08 NO BOTTLES - CTD Cast only

C2 noisy
cfc1

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.							
				503							fue #1							

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
Entered By																			
BP/CA/CL	1994-020	099			66	02.00		58	13.39	19	09	08	04	00	263	613 m		542	

32.12

600

613.5 ± 10.

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

SL-09

334647 Cell 2, worse this cast.

334654 ~~very bad near btm upcast indicate possible~~

Otherwise cell.

T affected on up trace as well. Connector!

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.					
		334647	BTM	6135			✓	✓	1	✓						
		334648	500	500			✓	✓	2	✓						
		334649	400	400			✓	✓	3	✓						
		334650	200	200			✓	✓	4	✓						
		334651	100	100			✓	✓	5	✓						
		334652	50	50			✓	✓	6	✓						
		334653	20	20			✓	✓	7	✓						
		334654	1	1			✓	✓	8	✓						

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RV Knorr																			
Entered By																			
BPICAICL	1992-02	100		N	65 01.98		W	57 54.55		19	09	08	10	09	263	678 m		5.41	

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

SL-10 No Bottles - CTD Cast only

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.							

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RV Knorr																		5.12	
Entered By																			
BP/CA/CL	1994-02	101		N	65	11.90	W	57	29.01	19	09	08	12	03	263	716 m			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

SL-11

334655

334662

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
	1	334655	BTM	725			✓	✓			
	2	334656	600	600			✓	✓			
	3	334657	400	400			✓	✓			
	4	334658	200	200			✓	✓			
	5	334659	100	100			✓	✓			
	6	334660	50	50			✓	✓			
	7	334661	20	20			✓	✓			
	8	334662	1	0			✓	✓			

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
Entered By																			
BPICAICH	1941-021	02		W	65	01.98	W	57	03.39	19	09	08	14	02	266	3709m		408	

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

SH-12 NO BOTTLES - CTD CAST ONLY.

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.							

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Deg.	Min.	Longitude E/W	Deg.	Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr																			
Entered By																			
BP/CA/CL	1994-082	103		N	65	02.04	W	57	37.95	19	09	08	15	53	263	645 m		5.78	

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

SL-13

334663

334670

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
	1	334663	BTM	650			✓	✓			
	2	334664	600	600			✓	✓			
	3	334665	400	400			✓	✓			
	4	334666	200	200			✓	✓			
	5	334667	100	100			✓	✓			
	6	334668	50	50			✓	✓			
	7	334669	20	20			✓	✓			
	8	334670	1	0			✓	✓			

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
Entered By																			
BPICAICL	1993-02	104		N	65	02.02	W	56	12.47	19	09	08	17	49	263	771 m		4.7.7	

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

SL-14 NO BOTTLES - CTD CAST ONLY.

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.							

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
Entered By																			
BPICAICL	194-02	0005		N	65	01.90	W	55	47.74	19	09	08	19	46	263	821 m		54.3	

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

SL-15

334671

334678

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
	1	334671	BOTM	838			✓	✓			
	2	334672	600	600			✓	✓			
	3	334673	400	400			✓	✓			
	4	334674	200	200			✓	✓			
	5	334675	100	100			✓	✓			
	6	334676	50	50			✓	✓			
	7	334677	20	20			✓	✓			
	8	334678	1	0			✓	✓			

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Deg.	Min.	Longitude E/W	Deg.	Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr																			
Entered By																			
BPICA-ICL	1991-021	06			65	02.00		55	22.09	19	07	08	22	15	263	7644 m		5.10	

31.87

750

790+8 m

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

SL-16 CTD CAST ONLY - NO BOTTLES

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
				790							fire 1

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Latitude Deg.	Latitude Min.	Longitude E/W	Longitude Deg.	Longitude Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr																		~~6.47~~	
Entered By																			
BPICAICL	1994-021	07		N	65	02.09	W	55	02.59	20	09	08	00	08	264	649 m			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

6 640 ~~6.48~~ 4.76

660+8.5 31.53

Comments

SL-17

334679

334686

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
		334679	BTM	660	1		✓	✓	✓		
		334680	600	600	2		✓	✓	✓		
		334681	400	400	3		✓	✓	✓		
		334682	200	200	4		✓	✓	✓		
		334683	100	100	5		✓	✓	✓		
		334684	50	050	6		✓	✓	✓		
		334685	20	20	7		✓	✓	✓		
		334686	1	0	8		✓	✓	✓		

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Latitude Deg.	Latitude Min.	Longitude E/W	Longitude Deg.	Longitude Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr																		551	
Entered By																			
BPICAICh	1994-021	108		N	65	01.99	W	54	43.39	20	09	08	02	02	264	358 m			

31.72

Cloud Amount	Sea Conditions	Precipition	Ice Cover

345

360 + 10.

Comments

SL-18 CTD CAST ONLY - NO BOTTLES.

Cl s spike ~75 m & O_2

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
									fuel #1		

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Latitude Deg.	Latitude Min.	Longitude E/W	Longitude Deg.	Longitude Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
R/V Knorr	194-02	109		N	65	02.00	W	147	47.27	26	09	08	03	33	266	147 m		5 3 7	
Entered By																			

31.88

Cloud Amount	Sea Conditions	Precipition	Ice Cover

140

140 ± 5

Comments SL 19

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.						
		334687	bottom	140			✓	✓	1	✓							334687
		88	100	100			✓	✓	2	✓							
		89	50	50			✓	✓	3	✓							
		90	20	30			✓	✓	4	✓	30						
		334691	1	1			✓	✓	5	✓							334691

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Latitude Deg.	Latitude Min.	Longitude E/W	Longitude Deg.	Longitude Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
R/V Knorr																			
Entered By																			
	194-02	110			65	02.00		53	58.68	26	09	08	05	46	264	90 m		4.9 6	

Cloud Amount	Sea Conditions	Precipition	Ice Cover

80

31.70

80.6+7.5

Comments SL20 - No Bubbles

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients	Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
				080				fire btl #1		

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Deg.	Min.	Longitude E/W	Deg.	Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
R/V Knorr																		5.0	
Entered By																			
	1994-02	111						65	02.03	20	09	08	07	15	260	81 m			

31,58

70

704.7

Cloud Amount	Sea Conditions	Precipition	Ice Cover
			53 33.16

Comments SL21

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
		334692	bottom	70			✓	✓	1	✓	
		3	50	50			✓	✓	2	✓	
		4	20	30			✓	✓	3	✓	
		334695	1	1			✓	✓	4	✓	

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
R/V Knorr																			
Entered By	194-02	112		N	65	42.53	W	54	30.142	09	09	08	12	54		111 m		3.5	

Cloud Amount	Sea Conditions	Precipitation	Ice Cover

Comments Sill N-08 No bottles

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.							

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RV Knorr																			
Entered By																			
BP/CA/CL	194-021	12				.			.							m			

Cloud Amount	Sea Conditions	Precipitation	Ice Cover
		113	

Comments

334696

Still NL-07

334699

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
		334696	BTM				✓	✓			
		334697	50				✓	✓			
		334698	20				✓	✓			
		334699	1				✓	✓			

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
Entered By																			
BPICA/CL	1991-021	4				•			•							m			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

Stn NL-06 CTD CAST - No Bottles.

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.							

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
R/V Knorr	1994-021	18		N	65	52.59	W	55	00.14	20	09	08	15	44		1115 m		5.81	
Entered By																			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments Sill N-07

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.					
	1	334696	100m	105			✓	✓								334696
	2	97	50	50			✓	✓								
	3	98	20	20			✓	✓								
	4	334699	1	0			✓	✓								334699

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
Entered By				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
R/V Knorr	194-02	114		N	65	52.50	W	55	20.06	20	09	08	17	25		1130 m		5.6 7	

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments SIGLN-06

Nu Bubles

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.							

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
Entered By				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
Kd Knorr																			
BP/CA/CL	1994-021	15				.			.							m			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

Sill NL-05

334700

334705

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
		334700	TSTM				✓	✓			
		334701	200				✓	✓			
		334702	100				✓	✓			
		334703	50				✓	✓			
		334704	20				✓	✓			
		334705	1				✓	✓			

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
R/V Knorr	1994-021	15		N	65	52.46	W	55	59.952	09	09	08	19	01		480 m		6.08	
Entered By																			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments SILCN-05

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.					
	1	334700	bottom	483			✓	✓								334700
	2	01	200	200			✓	✓								
	3	02	100	100			✓	✓								
	4	03	50	50			✓	✓								
	5	04	20	20			✓	✓								
	6	334705	1	0			✓	✓								334705

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Latitude Deg.	Latitude Min.	Longitude E/W	Longitude Deg.	Longitude Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV KNORR																			
Entered By																			
RPICACL	1994-02	11	5		65	57.59		56	29.91	20	09	08	21	00	264	616 m		5 8 3	

Cloud Amount	Sea Conditions	Precipition	Ice Cover

600 32.26

620.5 + 7

Comments

Sill NL-04 CTD CAST - NO BOTTLES.

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
				620.5					Fire 1		

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Deg.	Min.	Longitude E/W	Deg.	Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
KV Knorr																		5.9.7	
Entered By																			
BPICA/CL	1994-021	17		N	65	52.45	W	16	59.88	20	09	08	23	02	264	656 m			

32.24

640

660.1 + 9

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

Sill NL-03

334706

334712

"Student with primary S @ ~550m, affected O_2 major spikes Cl @ btm

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
		334706	BTM	660.1			✓	✓	1	✓	
		334707	400	400			✓	✓	2	✓	
		334708	200	200			✓	✓	3	✓	
		334709	100	100			—	✓	4	✓	
		334710	50	50			✓	✓	5	✓	
		334711	20	20			—	✓	6	✓	
		334712	1	1			✓	✓	7	✓	

change of S of ~0.1 lead to change of O_2 sat of 10%

O_2 not back

possibly in syncline at 475

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Latitude Deg.	Latitude Min.	Longitude E/W	Longitude Deg.	Longitude Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV knorr																		560	
Entered By																			
BP/CA/CL	1984-02	118		N	65	52.50	W	57	30.00	24	09	08	01	15	265	608 m			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

590

605.1 + 10.5

Comments

Sill NL-02 CTD CAST - NO BOTTLES Looks like interleaving of AW + WGCW

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
				605.1					fired #1		

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Deg.	Min.	Longitude E/W	Deg.	Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr																		9 3 8	
Entered By																			
BRICAIL	TRH-02	1 1 9			65	52.56		58	00.29	21	09	08	03	12	2645	5546 m			

31.17

535

5403+9 (Dan Kelly Interested compile profile with intrusion

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

Sill NL-01

334713

334720

Intrusive layer here as well

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.						
		334713	BTM	540			✓	✓		✓				Take extra nuts		ah	
		334714	400	400			✓	✓		✓				300m			
		334715	300	300			✓	✓		✓							
		334716	200	200			✓	✓		✓							
		334717	100	100			✓	✓		✓							
		334718	50	50			✓	✓		✓							
		334719	20	20			✓	✓		✓							
		334720	1	1			✓	✓									

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Latitude Deg.	Latitude Min.	Longitude E/W	Longitude Deg.	Longitude Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV knorr																		544	
Entered By BP/CA/CL	1991-002	120			65	30.08		58	00.11	24	09	08	06	33	265	551 m			

31.96

540

548.579

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

Sill sta01

334721

334727

Strong Interleaving

~140m thick BBL

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
		334721	BBL	548.5			✓	✓	1	✓	
		334722	400	400			✓	✓	2	✓	
		334723	200	200			✓	✓	3	✓	
		334724	100	100			✓	✓	4	✓	
		334725	50	50			✓	✓	5	✓	
		334726	20	20			✓	✓	6	✓	
		334727	1	1			✓	✓	7	✓	

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Deg.	Min.	Longitude E/W	Deg.	Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
KV Knorr																			
Entered By																			
BP/CA/CL	1994-02	12	0	N	65	30.01	W	57	30.11	21	09	90	854		265	606 m		5.3.3	

32.13

590

6153 + 6

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

Sill Sh-02 CTD CAST - NO BOTTLES.

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
				6153					fire	#1	

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Deg.	Min.	Longitude E/W	Deg.	Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr																		5.28	
Entered By																			
BPICAICL.	194-02	12		N	65	30.02	W	57	00.05	21	09	08	11	06		~~[illegible]~~ 646 m			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

Sill SL-03

334728

334734

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
	1	334728	BTM	646			✓	✓			
	2	334729	400	400			✓	✓			
	3	334730	200	200			✓	✓			
	4	334731	100	100			✓	✓			
	5	334732	50	50			✓	✓			
	6	334733	20	20			✓	✓			
	7	334734	1	0			✓	✓			

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Deg.	Min.	Longitude E/W	Deg.	Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr																			
Entered By																			
BPICAICL	1994-021	23		N	65	30.16	W	56	30.28	21	09	08	13	46		677 m		5.82	

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

Stn SN04 CTD/CAST - NO BOTTLES

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.							

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Deg.	Min.	Longitude E/W	Deg.	Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
R.V. Knorr																			
Entered By																			
BPICAICL	1994-02	12		N	65	20.06	W	55	59.862	10	08	15	54			718 m		57.0	

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

334735

Sill SL-05

334741

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
	1	334735	BTM	723			✓	✓			
	2	334736	400	400			✓	✓			
	3	334737	200	200			✓	✓			
	4	334738	100	100			✓	✓			
	5	334739	50	50			✓	✓			
	6	334740	20	20			✓	✓			
	7	334741	1	0			✓	✓			

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Latitude Deg.	Latitude Min.	Longitude E/W	Longitude Deg.	Longitude Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
KV Knorr																		4.6	
Entered By																			
BPICACL	1994-02	125		N	65	10.00	W	55	29.90	21	09	08	18	08		618 m			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

Still SL-06 CTD CAST - NO BOTTLES.

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.						

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Deg.	Min.	Longitude E/W	Deg.	Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr				N	65	30.11	W	55	00.04	21	08	08	20	09		1383 m		4.67	
Entered By: BP/CA/CL	1994-03-12	6																	

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

Sill SL-07

334742

334746

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
	1	334742	BTM	133			✓	✓			
	2	334743	100	100			✓	✓			
	3	334744	50	50			✓	✓			
	4	334745	20	20			✓	✓			
	5	334746	1	0			✓	✓			

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Latitude Deg.	Latitude Min.	Longitude E/W	Longitude Deg.	Longitude Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr	194-02	127			65	30.06		54	30.27	21	09	08	21	53	266	1111 m		555	
Entered By																			

31.89

Cloud Amount	Sea Conditions	Precipition	Ice Cover

100.24 9

Comments

SILL SL08

Called it 01

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
				100.2					fire	#1	

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S Deg. Min.	Longitude E/W Deg. Min.	Messenger Down G.M.T. Day Mo. Yr. Hour Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
KN Knorr										4 3 1	
Entered By											
BP/CA/CL	1991-02	128		64 35.98	56 59.95	22 09 08 06 55	266	800 m			

32-04

790

810.3 + 10

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

334747 NOTE: DEPTHS 50 & 1 are double labeled.

NLSC-02

334480 ← DOUBLE LABEL.

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	
		334747	BTM	810.3			✓	✓		1 ✓		
		334748	600	600			✓	✓		2 ✓		
		334749	400	400			✓	✓		3 ✓		
		334750	200	200			✓	✓		4 ✓		
		334751	100	100			✓	✓		5 ✓		
DOUBLE LABEL		334478	50	50			✓	✓		6 ✓		NOTE! Have to reuse old labels — Samples are
		334479	20	20			✓	✓		7 ✓		double labeled from now on!
		334480	1	1			✓	✓		8 ✓		

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
Entered By				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
RV Knorr	1994-02	129		N	64	23.92	W	57	00.16	22	09	08	09	02		773 m		4.82	
BPICA ICL																			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

NZSB-03

334481

334488

NOTE: Samples have old ID numbers clearly labeled.

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	
~~bottle~~	label	334481	BTM	780			✓	✓				1
		334482	600	600			✓	✓				2
		334483	400	400			✓	✓				3
		334484	200	200			✓	✓				4
		334485	100	100			✓	✓				5
		334486	50	50			✓	✓				6
		334487	20	20			✓	✓				7
		334488	1	0			✓	✓				8

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Deg.	Min.	Longitude E/W	Deg.	Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr																		419	
Entered By																			
BPICACL	1994-02	130		N	64	11.95	W	57	00.10	22	09	08	11	09		714 m			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

~~AHC~~ 334489

NHSC-04 334496

NOTE: Samples have used labels - Double labeled.

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	
DOUBLE		334489	BTM	720			✓	✓				1
HARBELS		334490	600	600			✓	✓				2
		334491	400	400			✓	✓				3
		334492	200	200			✓	✓				4
		334493	100	100			✓	✓				5
		334494	50	50			✓	✓				6
		334495	20	20			✓	✓				7
		334496	0	0			✓	✓				8

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Deg.	Min.	Longitude E/W	Deg.	Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr																		382	
Entered By																			
BP/CA/CL	1994-02	131		N	64	00.08	W	57	00.25	21	09	08	13	17		899 m			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

334497 NOTE: Samples have used IDs - doubly labelled.

NLSC-05

334505

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
Doubly Labelled		334497	BTM	919			✓	✓			1
		334498	800	800			✓	✓			2
		334499	600	600			✓	✓			3
		334500	400	400			✓	✓			4
		334501	200	200			✓	✓			5
		334502	100	100			✓	✓			6
		334503	50	50			✓	✓			7
		334504	20	20			✓	✓			8
		334505	1	0			✓	✓			9

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude N/S	Latitude Deg.	Latitude Min.	Longitude E/W	Longitude Deg.	Longitude Min.	Messenger Down G.M.T. Day	Mo.	Yr.	Hour	Min.	Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
RV Knorr																		52.1	
Entered By																			
BPICACL	194-02	132		N	63	47.98	W	56	59.88	22	09	08	15	37		1218 m			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments

NBSC-06

334506 NOTE! Samples→used labels – double labelled

334515

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.	
Double		334506	BTM	1245			✓	✓				1
Labelled		334507	1000	1000			✓	✓				2
		334508	800	800			✓	✓				3
		334509	600	600			✓	✓				4
		334510	400	400			✓	✓				5
		334511	200	200			✓	✓				6
		334512	100	100			✓	✓				7
		334513	50	50			✓	✓				8
		334514	20	20			✓	✓				9
		334515	1	0			✓	✓				10

MARINE CHEMISTRY

Vessel	Expedition No.	Consec. Station Number	No. Cast	Latitude			Longitude			Messenger Down G.M.T.					Julian Day	Sounding Depth	Wire Angle	Surface Temperature	Sediment Grab
				N/S	Deg.	Min.	E/W	Deg.	Min.	Day	Mo.	Yr.	Hour	Min.					
R/V Knorr	194-02	13	3	N	63	35.97	W	56	59.942	22	09	08	18	20		1547 m		5.8	1
Entered By																			

Cloud Amount	Sea Conditions	Precipition	Ice Cover

Comments NLSC-07

Bottles have double labels

Sampler Type	Sampler No.	Sample Identifier	Desired Depth	Metres Out	S	O_2	Nutrients		Trace Elements Filt.	Trace Elements Unfilt.	SPM Vol. Filt.
	1	334516	bottom	1585			✓	✓			
	2	7	1000	1000			✓	✓			
	3	8	800	800			✓	✓			
	4	9	600	600			✓	✓			
	5	10	400	400			✓	✓			
	6	1	200	200			✓	✓			
	7	2	100	100			✓	✓			
	8	3	50	50			✓	✓			
	9	4	20	20			✓	✓			
	10	334525	1	0			✓	✓			

Double Labels

334516

334525