

Consec. Cast #		Vessel		Proj. & Leg		Event #	Vessel Sta. I.D.		Instructions								Sta. Designation		
Consec. Cast #		Latitude	N or S	Longitude	E or W	Date	ID =	Time	Dry	Wet	Bar.	Wind	Wind	Cloud	Bottom	Sta. Name			
		Deg.	Min.	Deg.		Day	265	GMT	Bulb	Bulb	mb	Dir.	Sp.	Type	Depth, m	or I.D			
						Mo.		Hr.		sus	Vis.								
						Yr.		Min.											
001		61° 43' 40" N		167° 44' 00" W		21	SEP 88	1607	20	18	1067300	30977			38	I001			
CTD				Monitor Checks				Times	JD/Time		Data Location								
Type & SN S830 912203				on Deck	at Surface	Data on	1604		Tape/Diskette I.D.				File Name/Header						
Press. SN 26072				Press. 34431.809 [0.003]		at Surface	1605		SEP88				21SEP1555						
Temp. SN 710				Temp. 6323.902 [2.476]		Start Down	1606												
Cond. SN 304				Cond. 3073.434		at Bottom	1607												
				Other [0.000]		Start Up	1609												
						at Surface	1610												
						Data off	1608												
Remarks																			
Cast for Recovery of Cape Rodney mooring																			
Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data			Sal.	Other	Pos.
	Bot.	Rack	Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #	Samp.	Pos.
1	No	BOTTLE TRIP																	1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials PW  
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Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation							
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 266	Time Hr.	GMT Min.	Dry Bulb	Wet Bulb	Bar. mb	Si. si.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D		
002	Surveyor																			
002642744N	1652644W		22 SEP 88	0450			4	8	361	17029514732						32	I002			
CTD Type & SN SBD 912203				Monitor Checks				Times	JD/Time	Data Location										
				on Deck	at Surface	Data on	0440	Tape/Diskette I.D. File Name/Header												
				Press.	[3.861]	at Surface	0448	SEP88 22SEP0439												
				Temp.	[13.429]	Start Down	0449													
				Cond.		at Bottom	04450													
				Other	[37.065]	Start Up	0450													
						at Surface	0450													
						Data off														
								Remarks? Only 93 points. Not turned on <B7 until 0448												
Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot.Data				Sal.	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #			
1	081		15	0858	0450					16.584	9.477	07.656			27.603	81		1		
2																		2		
3																		3		
4																		4		
5																		5		
6																		6		
7																		7		
8																		8		
9																		9		
10																		10		
11																		11		
12																		12		

Initials RBD  
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P R O J E C T  
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Consec.Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions								Sta. Designation				
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 266	Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	S. vis	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
003	62 53 96 N		16 70 61 4 W		22 SEP 88	16 22	45 22 7	20 28 27 0	08 46 1	29	I 003						

CTD  
Type & SN STD 912208

Press. SN 26072

Temp. SN 710

Cond. SN 304

Monitor Checks  
on Deck at Surface

Times JD/Time  
Data on 1621  
at Surface 1621  
Start Down 1621  
at Bottom 1620  
Start Up 1624  
at Surface 1625  
Data off 1625

Data Location

Tape/Diskette I.D.

File Name/Header

SEP88 22 SEP 1608

Remarks

SPHANBERG CM. Recovery

Pos.	Bot.	Rack	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD			Sample Bot.Data			Pos.			
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #	Samp.	
1	GST			18m	1622	1623		No Log @ dept	@ 18m	9.41			29.72			29.961	087		1
2																		2	
3																		3	
4																		4	
5																		5	
6																		6	
7																		7	
8																		8	
9																		9	
10																		10	
11																		11	
12																		12	

Initials PP

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Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation					
004	Survegar	TCE(2)																
Consec. Cast #	Latitude Deg. Min.	N or S Deg.	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 268	Time Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S. S.	V. V.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
064640254N	1721315W				24 SEP 88	04 42	3 9	30	16	29	250	1	2762	55	I 004	✓		
CTD Type & SN SBD 912203					Monitor Checks				Times		ID/Time		Data Location					
					on Deck		at Surface		Data on 0				Tape/Diskette I.D.		File Name/Header			
					Press.				at Surface 0439				SEP88		24 SEP 0435			
					Temp.				Start Down 0440									
					Cond.				at Bottom 0441									
					Other				Start Up 0443									
									at Surface 0444									
									Data off 0443									
Remarks * Salinity sample was contaminated with standard water.																		
Deployment of mooring in ANDYR ST.																		

Pos.	Bot.	Rack	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.
					Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.			
1	081				46	0442					@ 46 m	.69		32.15			*	32.518	081	1
2																			2	
3																			3	
4																			4	
5																			5	
6																			6	
7																			7	
8																			8	
9																			9	
10																			10	
11																			11	
12																			12	

Initials P  
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Not used  
for delta( $\delta$ )  
Col.

Consec. Cast # 005	Vessel <b>SURVEYOR</b>	Proj. & Leg <b>ICE (2)</b>			Event#	Vessel Sta. I.D.	Instructions						Sta. Designation <b>I005</b>		
Consec. Cast #	Latitude Deg. Min.	N or S Deg. 8	Longitude Deg.	E or W Day	Date Mo. Yr. 269	JD =	Time Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m 1005	Sta. Name or I.D I005
005654275N	1671678W	25 Sep 89	0154	44	4	2	10393401	4853	50	✓					
CTD Type & SN SBD 912203				Monitor Checks on Deck at Surface				Times	JD/Time	Data Location					
Press. SN	26072	Press.					Data on	0151	Tape/Diskette I.D.	File Name/Header					
Temp. SN	710	Temp.					at Surface	0152	SEP88	258ep0141					
Cond. SN	304	Cond.					Start Down	0153							
		Other					at Bottom	0154							
							Start Up	0155							
							at Surface	0156							
							Data off	0155							
Remarks recover Boring ST. E (?)															

Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD			Sample Bot. Data			Pos.		
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.		
1				47	0151	0154				41.457	4.514	-	31.817			31.439	87	1
2																	2	
3																	3	
4																	4	
5																	5	
6																	6	
7																	7	
8																	8	
9																	9	
10																	10	
11																	11	
12																	12	

Initials Pd  
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Consec. Cast #		Vessel			Proj. & Leg			Event #	Vessel Sta. I.D.		Instructions							Sta. Designation			
Consec. Cast #		Latitude	N or S	Longitude	E or W	Date	JD =		Time	GMT	Dry Bulb	Wet Bulb	Bar. mb	Vis	Vis	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
006	Surveyor	06 54 02	N	37 N	W	26 9 Day	135	SEP 88	04 13	40	35	10	47	34	72	08	62	35	ND1		
CTD Type & SN SBD 912208				Monitor Checks					Times		ID/Time		Data Location								
				on Deck			at Surface		Data on	04 10			Tape/Diskette I.D.			File Name/Header					
				Press.					at Surface	04 12			SEP 88			25SEP0404					
				Temp.					Start Down	04 12											
				Cond.					at Bottom	04 13											
				Other					Start Up	04 15											
									at Surface	04 17											
									Data off	04 14											
Remarks Nut. Samples Prawn from Sci. Bot. <sup>Thru</sup> <sup>Not from Nippies</sup>										FIRST CAST ON LINE ND - Bering St.											
P.S.	Nut.	T	Trip	Time @		Monitor Values				Depth Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Other Nut Samp.	P.S.	
				Bot.	Rack	Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P				Avg Tw
1	329	B.T.	27	0414	0414					27.236	4.755	-	31.650			31.652	22	329	1		
2	321	Surf	10	0416	0416					9.905	5.025		31.316					321	2		
3																		3			
4																		4			
5																		5			
6																		6			
7																		7			
8																		8			
9																		9			
10																		10			
11																		11			
12																		12			

Initials PJ  
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Consec.Cast #	Vessel	Surveylor	Proj. & Leg	ICE (Z)	Event #	Vessel Sta. I.D.	Instructions						Sta. Designation				
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	ID = 269	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S. S.	Wind Dir.	Wind Sp.	Cloud Type	W. Weath.	Bottom Depth, m	Sta. Name or I.D
007	65 40 79 N		168 20 47 W		25	SEP 88	05 05	38	241	147350	18	862		52	ND2		
CTD Type & SN		Monitor Checks						Times	JD/Time	Data Location							
SBD 912208		on Deck			at Surface			Data on	0500	Tape/Diskette I.D.			File Name/Header				
Press. SN		26072			Press.			at Surface	0503								
Temp. SN		310			Temp.			Start Down	0504	SER88			25SFN 0456				
Cond. SN		304			Cond.			at Bottom	0505								
					Other			Start Up	0506								
								at Surface	0511								
								Data off	0506								
								Remarks									

S.	NUT Bot.	T Rack	Trip Depth	Time @		Monitor Values			Depth Conv. Mon. Values-CTD				Sample Bot.Data			Sal. Bot. #	Other NUT Samp.	S.	
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.			
1	330		BOT 45	0505	0506					44.846	4.070		31.955				31.960	102	330
2	322		Surf 10	0508	0509					10.065	5.847		30.739					322	2
3																		3	
4																		4	
5																		5	
6																		6	
7																		7	
8																		8	
9																		9	
10																		10	
11																		11	
12																		12	

Initials PF  
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Consec.Cast # 008	Vessel Surveyor	Proj. & Leg ICE (2)	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation ND3				
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 269	Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	S. S.	S. S.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D
008	6541	10N	1682860	W	25	SEP 88	0559	33	20	1148	330	20	862	55	ND3		
CTD Type & SN SBD 912263					Monitor Checks				Times		JD/Time		Data Location				
					on Deck		at Surface		Data on	0552			Tape/Diskette I.D.		File Name/Header		
					Press.				at Surface	0557			SEP88		25SEP0550		
					Temp.				Start Down	0558							
					Cond.				at Bottom	0559							
					Other				Start Up	0600							
									at Surface	0603							
									Data off	0600							
									Remarks								

Pos	Nut. Bot.	T Rack	Trip Depth	Time @		Monitor Values			Depth Conv. Mon. Values-CTD			Sample Bot.Data			Sal. Bot. #	Other Samp.	Pos	
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.		
1	331		Bot 4183	0559	0600					416.975	3.451		32.199			32.209	55	331 1
2	323		Surf 10	0602	0602					9.275	6.320		30.505					323 2
3																		3
4																		4
5																		5
6																		6
7																		7
8																		8
9																		9
10																		10
11																		11
12																		12

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Consec. Cast #	Vessel	Surveor	Proj. & Leg	ICE (Z)	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation					
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 269	Time Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S. S.	V. V.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D		
009	65 42 41 N		168 37 34 W		25 SEP 88	0652	21	1210	3833018963								52	ND4		
CTD Type & SN SED 912208				Monitor Checks				Times JD/Time				Data Location								
				on Deck		at Surface		Data on 0648		Tape/Diskette I.D.		File Name/Header								
				Press.				at Surface 0650		SEP88		25SEP0643								
				Temp.				Start Down 0651												
				Cond.				at Bottom 0652												
				Other				Start Up 0653												
								at Surface 0655												
								Data off 0653												
Pos.	Bot.	T Rack	Trip Depth	Time @		Monitor Values				Depth Conv. Mon. Values-CTD				Sample Bot. Data				Sal. Bot. #	Other Samp.	P.S.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press:	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.				
1	332	BoT. 43	0652	0653						43.364	3.260	-	32.317			32.358	66	332	1	
2	324	Surf 10	0654	0655						9.854	5.999		30.660					324	2	
3																		3		
4																		4		
5																		5		
6																		6		
7																		7		
8																		8		
9																		9		
10																		10		
11																		11		
12																		12		

Initials PJ  
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Consec.Cast #	Vessel	Proj. & Leg	Event#			Vessel Sta. I.D.	Instructions								Sta. Designation		
010	Surveyor	ICE (2)													ND5		
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 269	Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	S S si si >	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
01065	43	N	16847	17	W	25 SEP 88	0751	21	10	11	38	330	18	973	53	ND5	
CTD Type & SN SBD 912205 Press. SN 26072 Temp. SN 310 Cond. SN 304						Monitor Checks on Deck                    at Surface			Times	JD/Time		Data Location					
						Press.	Data on	0742			Tape/Diskette I.D.	File Name/Header					
						Temp.	at Surface	0748			SEP88	25SEP0736					
						Cond.	Start Down	0749									
						Other	at Bottom	0751									
							Start Up	0753									
							at Surface	0755									
							Data off	0752									
											Remarks						

Pos	N/T Bot.	T Rack	Trip Depth	Time @		Monitor Values			Depth Conv. Mon. Values-CTD			Sample Bot.Data			Sal. Bot. #	Other N/T Samp.	Pos	
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.		
1	333	BoT	45	0751	0752					45.349	3.380	-	32.334			32.336	19	333 1
2	325	Surf	10	0754	0754					9.665	5.066		31.907					325 2
3																		3
4																		4
5																		5
6																		6
7																		7
8																		8
9																		9
10																		10
11																		11
12																		12

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Consec. Cast #	Vessel	Proj. & Leg	Event #				Vessel Sta. I.D.	Instructions						Sta. Designation			
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 269	Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	S S	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
011	6545	19N	16852	33W	25	SEP 88	0920	1500	11	130355	20973					46	ND6
CTD Type & SN SBD 912208				Monitor Checks on Deck                    at Surface				Times	JD/Time	Data Location							
Press. SN 26072				Press.	Data on 0913	Tape/Diskette I.D.	File Name/Header										
Temp. SN 710				Temp.	at Surface 0917												
Cond. SN 304				Cond.	Start Down 0918												
				Other	at Bottom 0920												
					Start Up 0921												
					at Surface 0923												
					Data off 0920												
Remarks																	

Pos.	Bot.	T	Trip	Time @	Monitor Values			Depth	Conv. Mon. Values-CTD			Sample Bot. Data			Sal.	Other	Pos.	
					Bot. Rack	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.
1	334		80T 37	0920 0921					37.257	3.859		30.005			31.967	69	334	1
2	326		Surf 10	0923 0923					10.053	5.251		31.037					326	2
3																		3
4																		4
5																		5
6																		6
7																		7
8																		8
9																		9
10																		10
11																		11
12																		12

Initials AD  
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Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation				
012	Surveyor	ICE (2)											I006				
Consec. Cast #	Latitude N or S	Longitude Deg.	E or W	Date Day	JD = 269	Time Hr.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D	
012	65 49 6 8 N	168 31 10 W	25 5 E	988	19 24	17	0 4	12 28	340	1064	1	56	1006	✓✓			
CTD Type & SN S3D 912268				Monitor Checks				Times	JD/Time				Data Location				
				on Deck	at Surface	Data on	1920					Tape/Diskette I.D.	File Name/Header				
				Press.		at Surface	1922					SEP88	25 SEP 1988				
				Temp.		Start Down	1923										
				Cond.		at Bottom	1924										
				Other		Start Up	1926										
						at Surface	1927										
						Data off	1926										
Remarks Recovery of Bering ST. (w - A)																	
Pos.	Bot.	T Rack	Trip Depth	Time @		Monitor Values			Depth Conv. Mon. Values-CTD			Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P			
1			46	1925	1925				46.112	3.285	-	32.264		32.274	58	1	
2																2	
3																3	
4																4	
5																5	
6																6	
7																7	
8																8	
9																9	
10																10	
11																11	
12																12	

Initials RP  
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Consec. Cast #	Vessel	Proj. & Leg	Instructions				Sta. Designation									
013	Surveyor	ICE (2)					1007									
Consec. Cast #	Latitude Deg.	N or S Deg.	Longitude Deg.	E or W Day	Date Mo.	JD = Yr.	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S u n is	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D

01 36 8 02 56 N 168 58 83 W 27 SEP 88 1 7 37 4 47 4 205 210 290 6742 59 1007

CTD Type & SN SBD 91220B Press. SN 26032 Temp. SN 710 Cond. SN 304 Other	Monitor Checks on Deck Press. Temp. Cond. Other	at Surface Data on 1734 at Surface 1735 Start Down 1736 at Bottom 1737 Start Up 1738 at Surface 1739 Data off 1738	Times JD/Time Data on 1734 at Surface 1735 Start Down 1736 at Bottom 1737 Start Up 1738 at Surface 1739 Data off 1738	Data Location Tape/Diskette I.D. SEP88 File Name/Header 27SEP1731 Remarks Recovery of Hope Canyon mooring
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Pos.	Bot.	T Rack	Trip Depth	Time @		Monitor Values				Depth	Conv.	Mon. Values-CTD	Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.	
				Depth	Trip	Press.	Temp.	Cond.	Other				Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	
1			49	1737	1738					49.465	2.414	-	32.453			32.455	81		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials AB  
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Consec. Cast #	Vessel	Proj. & Leg	Event #				Vessel Sta. I.D.	Instructions						Sta. Designation			
014	SURVEYOR	ICE (a)												NB7			
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD =	Time Hr.	GMT Min.	Dry Bulb	Wet Bulb	Bar. mb	Si. S	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D
014	67 59 83 N		169 00 27 W		27	271	18	39	45	41	05	210255	6641	57	NB7	✓✓	

CTD Type & SN SBD 912208	Monitor Checks on Deck	Times Data on at Surface	JD/Time 1835	Data Location Tape/Diskette I.D. SEP88	File Name/Header 27 SEP 1833
Press. SN 26032	at Surface	at Surface	1837		
Temp. SN 710	Press.	Start Down	1837		
Cond. SN 304	Temp.	at Bottom	1839		
	Cond.	Start Up	1840		
	Other	at Surface	1841		
		Data off	1840		
Remarks EXTRA Surface Bottle Trip, No Samples * → Salinity sample taken at Surface					

Pos.	Bot.	T	Trip	Time @		Monitor Values			Depth Conv. Mon. Values-CTD			Sample Bot. Data			Sal.	Other Samp.	Pos.	
				Bot. Depth	Trip Depth	Press.	Temp.	Cond.	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #		
1				48	1839	1840			47.815	2.402	-	32.533			* 31.455 Pd	87	327	1
2				9	1841	1842	Pd		9.078	4.079		31.454			31.455	87	328	2
3				11	1843	1843	NOT USED											3
4																		4
5																		5
6																		6
7																		7
8																		8
9																		9
10																		10
11																		11
12																		12

Initials Pd  
✓

4.082 - @ 5,7

4.051  
@  
5.3

D

Consec. Cast #	Vessel	Proj. & Leg	Event #				Vessel Sta. I.D.	Instructions							Sta. Designation	
015	SURVEY DR	JCE (2)													NB 6	
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 271	Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	Si. psi	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D
015	6 8 0 3 5 1 N		16 8 4 1 0 5 W	2	7 3 E	088	2004	5 7	5 4	0 5	1 0	2 7 2	4 7 3 2	6 0	4 1 3 6	
CTD Type & SN SBD 912208				Monitor Checks				Times		JD/Time		Data Location				
				on Deck		at Surface		Data on	2001	2011		Tape/Diskette I.D.	File Name/Header			
				Press.		Press.		at Surface	2002	2012		SEP88	27 SEP 1953			
				Temp.		Temp.		Start Down	2002	2012			27 SEP 2008			
				Cond.		Cond.		at Bottom	2004	-						
				Other		Other		Start Up	2005	-						
								at Surface	2007	-						
								Data off	2005	2012						

Remarks TRIPPED 2 BOTTLES @ BOTTOM, BROUGHT ON DECK TO RE-COCK B.T. HAD TO RESTART DOCK READ.  
27 SEP 2008. DAT DELETED. ONLY LOG EXISTS

Pos.	Bot.	T	Trip	Time @		Monitor Values				Depth Conv. Mon. Values-CTD			Sample Bot. Data			Sal.	Other Nut Samp.	S		
				Bot.	Rack	Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #
1			Bot	49		2004	2005			49.951	2.571	-	32.427				32.420	79	335	1
2			Surf	11		2013	2013			10.922	4.343		31.414						336	2
3																			3	
4																			4	
5																			5	
6																			6	
7																			7	
8																			8	
9																			9	
10																			10	
11																			11	
12																			12	

Initials PD  
✓

D

Consec.Cast # <u>016</u>		Vessel <u>SURVEYOR</u>		Proj. & Leg <u>ICE(2)</u>			Event#	Vessel Sta. I.D.		Instructions						Sta. Designation <u>N/Bogus</u>				
Consec. Cast #	Latitude Deg.		N or S	Longitude Deg.		E or W	Date Day	JD = <u>271</u>	Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D		
	016	48	05	96	N	168	28	47	W	27	SEP	88	21	16	56	5306	10315	6732	59809	S1
CTD Type & SN <u>SSD 912203</u>				Monitor Checks on Deck                                  at Surface						Times	JD/Time		Data Location							
Press. SN <u>26032</u>				Press.							Data on <u>2113</u>			Tape/Diskette I.D.	File Name/Header					
Temp. SN <u>710</u>				Temp.							at Surface <u>2114</u>			<u>SER88</u>	<u>27SEP2053</u>					
Cond. SN <u>304</u>				Cond.							Start Down <u>2114</u>									
				Other							at Bottom <u>2116</u>									
											Start Up <u>2117</u>									
											at Surface <u>2120</u>									
											Data off <u>2117</u>									
Pos.	Bot.	T	Trip	Time @		Monitor Values			Conv. Mon. Values-CTD			Sample Bot.Data			Sal.	Other Samp.	Pos.			
				Bot. Depth	Trip Depth	Press.	Temp.	Cond.	Other	Press:	Temp.	Cond.	Sal.	Therm-P				Avg Tw	Sal.	Bot. #
1				49	2116	2117			46.951	2.680	-	30.371		32.368	22	337	1			
2				10	2118	2119			9.788	4.286		31.412				338	2			
3																	3			
4																	4			
5																	5			
6																	6			
7																	7			
8																	8			
9																	9			
10																	10			
11																	11			
12																	12			

This needs S3 edit to correct Position line  
PDT

Initials PDT  
✓

Consec. Cast #	Vessel	Surveyor	Proj. & Leg	ICE (z)	Event #	Vessel Sta. I.D.	Instructions						Sta. Designation								
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 271	Time Hr. 05	Dry Bulb	Wet Bulb	Bar. mb	S. si.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D					
01	76 806 64 N		168 16 08 W		27 SEP 88	22 36	50	4506	21035508822						59	NBS					
CTD Type & SN 553 912203				Monitor Checks				Times	ID/Time	Data Location											
				on Deck		at Surface		Data on	2232	Tape/Diskette I.D.			File Name/Header								
				Press.				at Surface	2234												
				Temp.				Start Down	2234												
				Cond.				at Bottom	2236												
				Other				Start Up	2237												
								at Surface	2240												
								Data off	2237												
								Remarks													
Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Bot. #	Other Nut.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Pres	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.					
1		BOT 49		2236	2237					49.068	2.770	-	30.320			32.322	102	339	1		
2		Surf 10		2239	2239					9.852	4.531		31.196					340	2		
3																		3			
4																		4			
5																		5			
6																		6			
7																		7			
8																		8			
9																		9			
10																		10			
11																		11			
12																		12			

Initials PP  
✓ \_\_\_\_\_

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation						
018	Surveyor	ICE (2)											NB4						
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD =	Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D				
018	680927	N	1675809	W	27	27	SEP 23 51	41	3506	210350	10872	53	NB4						
CTD Type & SN SBD 912203				Monitor Checks on Deck at Surface				Times	ID/Time	Data Location									
Press. SN 26072				Press.	Data on	2345	Tape/Diskette I.D.	File Name/Header											
Temp. SN 710				Temp.	at Surface	2350	SER88	27 SEP 2339											
Cond. SN 304				Cond.	Start Down	2350													
				Other	at Bottom	2351													
					Start Up	2353													
					at Surface	2354													
					Data off	2352													
Pos.	Bot.	T	Trip	Time @	Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data			Sal.	Other	so	
	Rack	Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #	Samp.	o	
1		43	2352	2352					43.084	3.511	-	32.055				32.048	55	341	1
2		9	2353	2354					9.498	4.600		31.191						342	2
3																		3	
4																		4	
5																		5	
6																		6	
7																		7	
8																		8	
9																		9	
10																		10	
11																		11	
12																		12	

Initials PB  
✓

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation				
19	SURVEYOR	ICEL(2)											NB3				
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 272	Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	Si vi	Vis vsi	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D

019 68 13 19 N 167 35 90 W 28 S e P 88 01 11 45 38 06 38 000 12 872 50 NB3

CTD Type & SN S30 912203		Monitor Checks on Deck at Surface				Times JD/Time		Data Location	
Press. SN	210932	Press.	Temp.	Start Down	0104	Data on	Tape/Diskette I.D.	File Name/Header	
Temp. SN	310	Temp.	Cond.	at Bottom	0107	at Surface	SER88	28SEP0059	
Cond. SN	304	Cond.	Other	Start Up	0109				
				at Surface	0111				
				Data off	0112				
						Remarks			

Pos.	Bot.	T	Trip	Time @		Monitor Values			Depth	Conv. Mon. Values-CTD			Sample Bot. Data			Sal.	Bot. #	Other Samp.	Pos.
				Bot.	Rack	Depth	Trip	Press.		Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.
1				40		0112	0112			40.286	3.523	-	30.053			32.049	66	343	1
2				16		0113	0111			10.019	4.433		31.368					344	2
3																		3	
4																		4	
5																		5	
6																		6	
7																		7	
8																		8	
9																		9	
10																		10	
11																		11	
12																		12	

Initials DP  
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Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions								Sta. Designation					
Consec. Cast #	Latitude N or S Deg.	Longitude E or W Deg.	Date JD =	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S. S.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D					
020	68 12 05 N	167 14 03 W	28 02 52 41	31 07 38 00 51 28 72								46	NB2 ✓					
CTD Type & SN SBD 912203 Press. SN 26032 Temp. SN 310 Cond. SN 304				Monitor Checks on Deck at Surface Press. Temp. Cond. Other				Times JD/Time Data on 0237 at Surface 0250 Start Down 0251 at Bottom 0252 Start Up 0253 at Surface 0255 Data off 0240		Data Location Tape/Diskette I.D. SEP88 File Name/Header 28SEP0018								
Pos.	Bot.	T	Trip	Time @	Monitor Values				Depth	Conv. Mon. Values-CTD	Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.		
1				0253	0253	Press.	Temp.	Cond.	Other	35.901	4.290	-	31.864		31.861	19	345	1
2				10	0254	0255				10.058	5.260	-	30.814				346	2
3																	3	
4																	4	
5																	5	
6																	6	
7																	7	
8																	8	
9																	9	
10																	10	
11																	11	
12																	12	

Initials RJ  
✓

Consec. Cast # 001	Vessel Surveyor	Proj. & Leg ICE (2)	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation NB1						
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 272	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S vis s	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D			
021	68	19	92	N	166526	7W	28 SEP 88	0455	31	2006	240015	16872	30	NB1	✓ D				
CTD Type & SN SBD 912203				Monitor Checks on Deck                    at Surface				Times	JD/Time	Data Location									
Press. SN	26072			Press.				Data on	0452	Tape/Diskette I.D.	File Name/Header								
Temp. SN	710			Temp.				at Surface	0453	SEPT88	28SEP0355								
Cond. SN	304			Cond.				Start Down	0454										
				Other				at Bottom	0455										
								Start Up	0456										
								at Surface	0457										
								Data off	0457	Remarks									
Pos.	Bot.	T	Trip	Time @		Monitor Values			Conv. Mon. Values-CTD				Sample Bot.Data			Sal.	Bot. #	Other Samp.	Pos.
				Bot. Rack	Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.				
1			24	0455	0456				24.207	4.613	-	30.205			30.201	069	351	1	
2			10	0456	0456				10.2417	4.707	-	30.183					352	2	
3																	3		
4																	4		
5																	5		
6																	6		
7																	7		
8																	8		
9																	9		
10																	10		
11																	11		
12																	12		

Initials AB  
✓ \_\_\_\_\_

Consec. Cast # 022	Vessel Surveyor	Proj. & Leg ICE(2)	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation NAIA						
Consec. Cast #	Latitude Deg. Min. S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 272	Time Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S. S.	S. S.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D		
	02 26 854 01 N	166 20 70 W	28 SEP 88	11 09	09	04	05	64	010	18	877	29	NAIA	✓					
CTD Type & SN SBD 912208				Monitor Checks on Deck at Surface				Times	JD/Time		Data Location								
Press. SN 26072				Press.	Data on 1106	Tape/Diskette I.D.	File Name/Header												
Temp. SN 710				Temp.	at Surface 1108	SEPR88	28SEP1045												
Cond. SN 304				Cond.	Start Down 1108														
				Other	at Bottom 1109														
					Start Up 1110	Remarks													
					at Surface 1111														
					Data off 1110														
Pos.	Bot.	T	Trip	Time @		Monitor Values				Depth Conv. Mon. Values-CTD				Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.
				Bot. Rack	Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sai.	Therm-P			
1		19	1110	1110					20.179	4.875	-	30.937			30.926	58	349	1	
2		10	1111	1111					9.656	4.826		30.861					350	2	
3																		3	
4																		4	
5																		5	
6																		6	
7																		7	
8																		8	
9																		9	
10																		10	
11																		11	
12																		12	

Initials Pd  
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Consec. Cast # 023		Vessel Surveyor	Proj. & Leg ICE (2)		Event #	Vessel Sta. I.D.		Instructions								Sta. Designation NAIB				
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 272	Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	S.S. Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D			
	023	68	54	47	N	166 40 74 W	28 SEP 88	12 26	13	0806	34	335	148	77	48	NAIB				
CTD Type & SN SBD 91220B				Monitor Checks on Deck at Surface				Times		JD/Time		Data Location								
Press. SN 26072				Press.				Data on	1224			Tape/Diskette I.D.		File Name/Header						
Temp. SN 710				Temp.				at Surface	1225			SEP88		28 SEP 1214						
Cond. SN 304				Cond.				Start Down	1225											
				Other				at Bottom	1226											
								Start Up	1228											
								at Surface	1230											
								Data off	1228											
Pos.	Bot.	T	Trip	Time @		Monitor Values				Depth Conv. Mon. Values-CTD				Sample Bot. Data				Sal. Bot. #	Other Samp.	Pos.
				Bot.	Rack	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw			
1				36	1227	1007			36.174	3.983	-	31.754			31.628	46	347	1		
2				10	1228	1229			10.112	4.066		31.067					348	2		
3																	3			
4																	4			
5																	5			
6																	6			
7																	7			
8																	8			
9																	9			
10																	10			
11																	11			
12																	12			

Initials Pd  
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Consec. Cast #	Vessel	Proj. & Leg.	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation							
024	Surveyor	ICE (2)											NAZ							
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	Mo.	Yr.	ID = 272	Time Hr.	GMT Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S. Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D

024	6854	13N	167056	9W	28	S	SEP	88	1356	11	05	05	34	005	16877	46	NAZ
-----	------	-----	--------	----	----	---	-----	----	------	----	----	----	----	-----	-------	----	-----

CTD Type & SN S.P.D 91220B	Monitor Checks				Times	JD/Time	Data Location										
Press. SN 26032	on Deck		at Surface		Data on	1351	Tape/Diskette I.D.	File Name/Header									
Temp. SN 710	Press.				at Surface	1353	SEP 88	28SEP1346									
Cond. SN 304	Temp.				Start Down	1354											
	Cond.				at Bottom	1356											
	Other				Start Up	1358											
					at Surface	1400											
					Data off	1357											
							Remarks	Subsequent to increase of memory RIZ									

Pos.	Bot.	T	Trip	Time @	Monitor Values				Depth	Conv. Mon. Values-CTD			Sample Bot. Data				Sal.	Other Samp.	Pos.
					Press.	Temp.	Cond.	Other		Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #		
1				34	1357	1357				34.834	3.909	-	31.212			31.193	101	353	1
2				9	1358	1359				9.262	3.792		31.033					354	2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials   
✓ \_\_\_\_\_

Consec. Cast #	Vessel	Proj. & Leg	Event #			Vessel Sta. I.D.	Instructions								Sta. Designation		
Consec. Cast #	Latitude Deg. Min. S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 272	Time Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S <sub>1</sub> S <sub>2</sub>	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D	
025	685356 N	1673516	W	28 SEP 88	1601	05	00	0334	010188	077	48	NA3A	✓				
CTD Type & SN SBD 912203			Monitor Checks on Deck at Surface			Times	ID/Time		Data Location								
Press. SN	26072	Press.	Data on	1556	Tape/Diskette I.D.	File Name/Header											
Temp. SN	710	Temp.	at Surface	1559	SEP 88	28 SEP 1526											
Cond. SN	304	Cond.	Start Down	1559													
		Other	at Bottom	1601													
			Start Up	1602													
			at Surface	1604													
			Data off	1602													
Remarks prior to recovery of mooring R12 - Not recovered																	
Pos.	Bot.	T	Trip	Time @		Monitor Values			Depth Conv. Mon. Values-CTD			Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P			
1	357			38	1602	1602			38.190	3.185	-	32.290		32.290	100	355	1
2	358			10	1603	1604			10.069	4.102		31.006				356	2
3																3	
4																4	
5																5	
6																6	
7																7	
8																8	
9																9	
10																10	
11																11	
12																12	

Initials PG ✓

Consec. Cast #	Vessel	Proj. & Leg	Event #			Vessel Sta. I.D.	Instructions							Sta. Designation
026	Surveyor	ICE (z)												NA3B
Consec. Cast #	Latitude N or S	Longitude E or W	Date JD =	Time GMT	Dry Bulb	Wet Bulb	Bar. mb	S	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
026	68 53 03 N	167 32 68 W	273	02 35 - 10 - 15 99	210	020	10611						48	NA3B
CTD Type & SN CTD 912203				Monitor Checks			Times		JD/Time		Data Location			
				on Deck	at Surface	Data on	0232			Tape/Diskette I.D.	File Name/Header			
				Press.		at Surface	0234			SEP88	29SEP003			
				Temp.		Start Down	0234							
				Cond.		at Bottom	0235							
				Other		Start Up	0236							
						at Surface	0239							
						Data off	0236							
Remarks Subsequent to recovery of mooring R12 - resume Broken Line														

Pos.	Bot.	T	Trip	Time @		Monitor Values				Depth Conv. Mon. Values-CTD				Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.	
				Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.			
1				39	0236	0236					39.626	3.203	-	32.283			32.280	#81	357	1
2				10	0238	0239					10.395	3.961		30.960					358	2
3																			3	
4																			4	
5																			5	
6																			6	
7																			7	
8																			8	
9																			9	
10																			10	
11																			11	
12																			12	

Initials PHD  
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Consec. Cast #	Vessel	Surveyor	Proj. & Leg	ICEL(z)	Event #	Vessel Sta. I.D.	Instructions						Sta. Designation							
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 273	Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	S Si V S	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D				
027	68 54	05 N	168 02 98 W	29	SEP 88	0352	05 - 0	899	210	01008711		51	NA4	D						
CTD Type & SN 5330 912203				Monitor Checks on Deck at Surface				Times	JD/Time	Data Location										
Press. SN 260722				Press.	Data on 0349	Tape/Diskette I.D.	File Name/Header													
Temp. SN 710				Start Down 0350	SEP 88	29SEP 0346														
Cond. SN 304				at Bottom 0351																
				Start Up 0352																
				at Surface 0353	Remarks															
				Data off 0354																
Pos.	Bot.	T	Trip	Time @		Monitor Values				Depth	Conv. Mon. Values-CTD				Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.
				Rack	Depth	Depth	Trip	Press.	Temp.		Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P			
1	359			41	0354	0354			41.41B	3.063	-	32.323			32.321	087	359	1		
2	360			10	0356	0356			96.9512	3.948		30.952					360	2		
3																	3			
4																	4			
5																	5			
6																	6			
7																	7			
8																	8			
9																	9			
10																	10			
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Consec. Cast #	Vessel	Proj. & Leg	Event #				Vessel Sta. I.D.	Instructions							Sta. Designation				
028	Surveyor	ICE (z)													NA5				
Consec. Cast #	Latitude N or S	Longitude E or W	Date Day	JD = 273	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S. vs	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D			
Deg.	Deg.	Deg.	Mo.	Yr.															
028 68 53 N	168 31 S	55 W	29 SEP 88	0520	00	-1	099	210340	10731						59	NA5			
CTD Type & SN SBD 912203				Monitor Checks				Times	JD/Time	Data Location									
Press. SN 26072				on Deck	at Surface	Data on	0517	Tape/Diskette I.D.	File Name/Header										
Temp. SN 310				Press.		at Surface	0518	SEP 88	29SEP0507										
Cond. SN 304				Temp.		Start Down	0519												
				Cond.		at Bottom	0520												
				Other		Start Up	0522												
						at Surface	0524												
						Data off	0521												
Pos.	Bot.	T	Trip	Time @		Monitor Values				Depth Conv. Mon. Values-CTD				Sample Bot. Data			Sal. Bot. #	Other Aut Samp.	Pos
				Rack	Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press	Temp.	Cond.	Sal.	Therm-P			
1	361		43	0521	0521				43.027	2.713	-	32.393			32.392	679	361	1	
2	362		10	0522	0523				9.847	3.992	-	31.083					362	2	
3																	3		
4																	4		
5																	5		
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Consec. Cast #	Vessel	Proj. & Leg	Event #			Vessel Sta. I.D.	Instructions						Sta. Designation						
029	Surveyor	ICE (z)											NABA						
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	ID = 273	Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	S S S S	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D			
029	685492N		1685676W		29	SE P88	0648	00	-0	899	Z103001	0631	54	NABA					
CTD Type & SN <u>580 91220B</u>						Monitor Checks			Times			Data Location							
						on Deck			JD/Time			Tape/Diskette I.D.			File Name/Header				
						at Surface			Data on	0645		<u>SEP88</u>			<u>29SEP0640</u>				
									at Surface	0646									
									Start Down	0646									
									at Bottom	0648									
									Start Up	0649									
									at Surface	0658									
									Data off	0649									
Remarks Bottom bottle would not trip, redid cast, cast #030, No samples																			
Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data			Sal.	Other	Pos.
				Rack	Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sai.	Therm-P			
1																		1	
2																		2	
3																		3	
4																		4	
5																		5	
6																		6	
7																		7	
8																		8	
9																		9	
10																		10	
11																		11	
12																		12	

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Consec. Cast #	Vessel	Proj. & Leg	Event #			Vessel Sta. I.D.	Instructions							Sta. Designation				
030	Surveyor	ICER(3)												NAB				
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 273	Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	S vis	S vis	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
030	68 55	N	168 55	87 W	28	SE 084	0706	+01	-0599	210	3001	2631					54	NAB
CTD Type & SN 587D 91220B						Monitor Checks				Times		Data Location						
						on Deck		at Surface		JD/Time		Tape/Diskette I.D.		File Name/Header				
						Press.				Data on 0703		SEP88		29SEP0701				
						Temp.				at Surface 0704								
						Cond.				Start Down 0705								
						Other				at Bottom 0706								
										Start Up 0707								
										at Surface 0709								
										Data off 0707								
														Remarks Redo of NAB Due to Bottle Trip failure.				

Pos	Bot.	T Rack	Trip Depth	Time @		Monitor Values				Dept Conv. Mon. Values-CTD				Sample Bot. Data				Sal. Bot. #	Other Samp.	Pos
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.				
1	363		44	0706	0706					43.961	2.342	-	32.497			32.495	22	363	1	
2	364		10	0708	0708					9.862	3.714		31.053					364	2	
3																			3	
4																			4	
5																			5	
6																			6	
7																			7	
8																			8	
9																			9	
10																			10	
11																			11	
12																			12	

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Consec. Cast #	Vessel	Surveyor	Proj. & Leg	ICE (2)	Event #	Vessel Sta. I.D.	Instructions						Sta. Designation			
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 273	Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	S. S.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D
031	70 30 65 N		167 26 30 W		29 SEP 88	1800 - 30 - 40 973027022782									49	I008
CTD Type & SN SBD 912203 Press. SN 26072 Temp. SN 710 Cond. SN 304						Monitor Checks on Deck                      at Surface			Times	ID/Time		Data Location				
						Press.	Start Down	1755	Data on	1755	Tape/Diskette I.D.	File Name/Header				
						Temp.	at Bottom	1758	at Surface	1758	SEP 88	29 SEP 1952				
						Cond.	Start Up	1800								
						Other	at Surface	1801								
							Data off	1801								

Remarks Deployment of mooring @  
HANNA Trough

Pos.	Bot.	T	Trip	Time @		Monitor Values				Depth Conv. Mon. Values-CTD				Sample Bot. Data			Sal.	Other Samp.	Pos.
				Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #	
1				40	1800	1801					39.868	1.023	-	32,430			32.424	102	1
2				40	1801	1801												2	
3																		3	
4																		4	
5																		5	
6																		6	
7																		7	
8																		8	
9																		9	
10																		10	
11																		11	
12																		12	

Initials RJ ✓ \_\_\_\_\_

Consec. Cast #	Vessel	Proj. & Leg	Event #				Vessel Sta. I.D.	Instructions								Sta. Designation			
Consec. Cast #	Latitude N or S	Longitude E or W	Date Day	JD = 273	Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	S. S.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D					
032	70 30	01/N	168 59	34W	29 SEP 88	22 16 - 37	- 5	7 0 0	48	280	14762	40	NP26						
CTD Type & SN SBD 91220B				Monitor Checks on Deck at Surface				Times		JD/Time		Data Location							
				Press.				Data on	2210			Tape/Diskette I.D.		File Name/Header					
				Temp.				at Surface	2214			SEP 88		29 SEP 2005					
				Cond.				Start Down	2215										
				Other				at Bottom	2216										
								Start Up	2217										
								at Surface	2219										
								Data off	2217										
Pos.	Bot.	T	Trip	Time @		Monitor Values				Depth Conv. Mon. Values-CTD				Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.
				Bot. Rack	Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sai.	Therm-P			
1			32	2016	2016				32.485	1.091	-	32.531			32.528	055	365	1	
2			9	2218	2218				9.107	-0.431	-	29.857					366	2	
3																	3		
4																	4		
5																	5		
6																	6		
7																	7		
8																	8		
9																	9		
10																	10		
11																	11		
12																	12		

Initials Pd✓

Consec. Cast # 033		Vessel Surveyor		Proj. & Leg TGF(z)		Event #	Vessel Sta. I.D.		Instructions								Sta. Designation NP27	
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 073	Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	S. si	S. si	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
	0 3 3	7 0 1 9	0 6 N	1 6 8 5 8 0 3 W	2 9	SEP 88	2 3 3 4	- 2 5	- 2 4	0 1	4 8	2 6 0 1	2 5 6 1	4 0	NP27	✓		
CTD Type & SN SBD 91220.B				Monitor Checks on Deck                    at Surface				Times		ID/Time		Data Location						
Press. SN 26072				Press.				Data on	2332			Tape/Diskette I.D.		File Name/Header				
Temp. SN 310				Temp.				at Surface	2332			SEP88		29SEP2319				
Cond. SN 304				Cond.				Start Down	2332									
				Other				at Bottom	2334									
								Start Up	2335									
								at Surface	2337									
								Data off	2335									
Pos.	Bot.	T	Trip	Time @		Monitor Values			Depth Conv. Mon. Values-CTD				Sample Bot.Data			Sal.	Other Samp.	Pos.
				Rack	Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.			
1	367			36	2335	2335			35.678	0.262	-	32.483			32.478	066	367	1
2	368			10	2336	2336			9.450	-0.705	-	29.361					368	2
3																	3	
4																	4	
5																	5	
6																	6	
7																	7	
8																	8	
9																	9	
10																	10	
11																	11	
12																	12	

Initials AD  
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Consec. Cast # 034		Vessel Surveyor	Proj. & Leg ICE (2)		Event #	Vessel Sta. I.D.	Instructions							Sta. Designation NP08						
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 274	Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	S S S S	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D				
034	70 08 91' N		168 59 64 W		30 SEP 88	00 51	- 15 - 2	0 0 2	410 250 1 0 2 6 1						38	NP08				
CTD Type & SN SBD 91220B				Monitor Checks on Deck at Surface				Times	JD/Time	Data Location										
Press. SN 26072				Press.	Data on 0048	Tape/Diskette I.D.	File Name/Header													
Temp. SN 710				Temp.	at Surface 0049	SEP 88	30 SEP 0044													
Cond. SN 304				Cond.	Start Down 0050															
				Other	at Bottom 0051															
					Start Up 0051															
					at Surface 0053															
					Data off 0051															
Remarks 5.19 - .848 @ 5.6 - .847																				
Pos.	Bot.	T	Trip	Time @		Monitor Values				Depth Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Other	Pos.
				Rack	Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw			
1				33	0051	0051			33.514	0.217	-	30.494				32.486	102	369	1	
2				9	0052	0052			9.364	-0.844	-	29.324						370	2	
3																		3		
4																		4		
5																		5		
6																		6		
7																		7		
8																		8		
9																		9		
10																		10		
11																		11		
12																		12		

Initials FAD  
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Consec. Cast # <u>035</u>		Vessel <u>SURVEYOR</u>	Proj. & Leg <u>JCE(z)</u>		Event #	Vessel Sta. I.D.		Instructions								Sta. Designation <u>NP29</u>		
Consec. Cast #	Latitude	N or S	Longitude	E or W	Date Day	JD = <u>274</u>	Time GMT Hr.	Dry Bulb Min.	Wet Bulb	Bar. mb	<u>S</u>	<u>vis</u>	Wind Dir.	Wind Sp.	Cloud Type	W. Weath.	Bottom Depth, m	Sta. Name or I.D
	Deg. Min.	Deg.			Mo.	Yr.												
0 3 5 1 6 9 5 9 9 4 N	1 6 8 5 8 6 7 W		3 0 S E	0 8 8 0 2 0 4 - 2 0 - 2 0 0 3 4 8 2 1 5 0 8 2 6 1												3 9	NP29 ✓	
CTD Type & SN <u>SBD 912203</u>			Monitor Checks on Deck at Surface					Times	JD/Time	Data Location								
Press. SN <u>26072</u>	Press.	Press.	Temp.	Temp.	Start Down	<u>0202</u>	Data on	<u>0202</u>	Tape/Diskette I.D.	File Name/Header								
Temp. SN <u>710</u>	Temp.	Temp.	Cond.	Cond.	at Bottom	<u>0203</u>	at Surface	<u>0203</u>	<u>SEP88</u>	<u>30SEP0200</u>								
Cond. SN <u>304</u>	Cond.	Cond.	Other	Other	Start Up	<u>0204</u>	at Surface	<u>0204</u>	Remarks -987@3.4 -.956 5.2									
Pos.	Bot.	T	Trip	Time @	Monitor Values				Depth	Conv. Mon. Values-CTD	Sample Bot. Data				Sal.	Other Samp.	Pos.	
	Rack		Depth	Depth	Press.	Temp.	Cond.	Other		Press. <u>35.19.7</u>	Temp. <u>0.064</u>	Cond. <u>-</u>	Sal. <u>30.185</u>	Therm-P	Avg Tw	Sal.	Bot. #	
1			35	0204 0204										32.180	022	371	1	
2			11	0206 0206						10.883	-0.856	-	29.434				372	2
3																	3	
4																	4	
5																	5	
6																	6	
7																	7	
8																	8	
9																	9	
10																	10	
11																	11	
12																	12	

Initials PJ  
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Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation							
036	Surveyor	ICE(2)											NP30							
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 294	Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	S. si	V. vis	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D		
036	69 49 23 N		168 58 23 W		30 SEP 88	0322	-10	-10	03	48	26	01	4762	48	NP30					
CTD Type & SN 530 912203				Monitor Checks				Times JD/Time				Data Location								
				on Deck		at Surface		Data on 0319		Tape/Diskette I.D.			File Name/Header							
				Press.				at Surface 0320		SEP 88			30 SEP 0313							
				Temp.				Start Down 0321												
				Cond.				at Bottom 0322												
				Other				Start Up 0323												
								at Surface												
								Data off 0323												
Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data			Sal.	Other	Pos.	
				Bot.	Rack	Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw		Sal.
1			43	0322	0323					42.814	1.674	-	32.585				32.585	079	373	1
2			9	0324	0324					9.204	0.602	-	30.877						374	2
3																			3	
4																			4	
5																			5	
6																			6	
7																			7	
8																			8	
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Initials PP  
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Consec. Cast # 037		Vessel Survived or		Proj. & Leg ICE (2)		Event #	Vessel Sta. I.D.		Instructions								Sta. Designation NP31			
Consec. Cast #	Latitude Deg.		N or S	Longitude Deg.		E or W	Date Day	JD = 274	Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	S. si	S. si	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
	69	38	N	169	03	49	W	30 SEP 88	04 29	-1	0 - 1	504	38	23	51	46	61	53	NP31	
CTD Type & SN SBD 912203				Monitor Checks on Deck at Surface					Times		JD/Time		Data Location							
Press. SN 26072									Data on	0426			Tape/Diskette I.D.		File Name/Header					
Temp. SN 310									at Surface	0428			SER88		30SEP0419					
Cond. SN 304									Start Down	0428										
									at Bottom	0429										
									Start Up	0430										
									at Surface	0432										
									Data off	0430										
Remarks																				
Pos.	Bot.	T	Trip	Time @		Monitor Values			Depth Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Other	Pos.	
				Bot.	Rack	Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.				Therm-P
1				58	0429	0429				50.142	1.988	-	32.625				32.625	081	375	1
2				9	0431	0431				9.054	30.063	-	31.640						376	2
3																			3	
4																			4	
5																			5	
6																			6	
7																			7	
8																			8	
9																			9	
10																			10	
11																			11	
12																			12	

Initials PJ  
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Consec. Cast #	Vessel	Proj. & Leg	Event #				Vessel Sta. I.D.	Instructions								Sta. Designation				
038	Surveyor	ICF(z)														NP32				
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 274	Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	S vis	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D				
038	69 30	N	44		30	SEP 88	06 05	-1 5	-1 9	0 4	38 220	17661	53	NP32						
CTD Type & SN SBD 912203				Monitor Checks on Deck at Surface				Times	JD/Time	Data Location										
Press. SN	26072			Press.				Data on	0600	Tape/Diskette I.D.	File Name/Header									
Temp. SN	710			Temp.				at Surface	0603	SEPT88	30SEP0554									
Cond. SN	304			Cond.				Start Down	0603											
				Other				at Bottom	0605											
								Start Up	0605											
								at Surface	0608											
								Data off	0605											
Remarks																				
Pos.	Bot.	T	Trip	Time @		Monitor Values				Depth	Conv. Mon. Values-CTD				Sample Bot.Data			Sal.	Other Samp.	Pos.
				Rack	Depth	Depth	Trip	Press.	Temp.		Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P			
1				49	0605	0605			49.030	2.177	-	32.548				32.543	087	377	1	
2				10	0606	0607			9.546	3.167	-	31.612						378	2	
3																		3		
4																		4		
5																		5		
6																		6		
7																		7		
8																		8		
9																		9		
10																		10		
11																		11		
12																		12		

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Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation						
039	Surveyor	ICE (z)											NP33						
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 274	Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	S.S. Vis.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D			
039	69 20 39 N		168 56 61 W		30 SEP 88	07 57	-15 -20 00	13821220761							53	NP33			
CTD Type & SN SPID 912203				Monitor Checks on Deck at Surface				Times	JD/Time	Data Location									
Press. SN	26072	Press.		Data on	0753	Tape/Diskette I.D.	File Name/Header												
Temp. SN	310	Temp.		at Surface	0756	SEP88	30SEP0704												
Cond. SN	304	Cond.		Start Down	0756														
		Other		at Bottom	0757														
				Start Up	0758	Remarks													
				at Surface	0801														
				Data off	0758														
Pos.	Bot.	T	Trip	Time @	Monitor Values			Depth Conv. Mon. Values-CTD				Sample Bot. Data			Sal.	Other	Pos.		
	Rack	Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #	Samp.		
1		49	0757	0757					49.440	2.626	-	32.407				32.403	019	379	1
2		10	0800	0800					10.248	3.471	-	31.210						380	2
3																		3	
4																		4	
5																		5	
6																		6	
7																		7	
8																		8	
9																		9	
10																		10	
11																		11	
12																		12	

Initials PDP  
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Consec. Cast # 040	Vessel Surveyor	Proj. & Leg ICE(z)	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation NP34								
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 271	Time Hr.	GMT Min.	Dry Bulb	Wet Bulb	Bar. mb	S. si	S. si	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D			
	0 4 0 6 9 0 9 6 4 N		1 6 8 5 8 4 5 W		3 0	SE	P 8 8	0 9	2 9	- 1	3 0 0	2 0	4 3 8	2 1	2 2 0 7 6 1	5 3	NP34				
CTD				Monitor Checks				Times				Data Location									
Type & SN SBD 912203				on Deck at Surface				JD/Time				Tape/Diskette I.D.				File Name/Header					
Press. SN 26072				Press.				Data on 0926				SEP88				30SEP0918					
Temp. SN 710				Temp.				at Surface 0927													
Cond. SN 304				Cond.				Start Down 0928													
				Other				at Bottom 0929													
								Start Up 0930													
								at Surface 0932													
								Data off 0930													
Remarks																					
Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot.Data				Sal.	Bot. #	Other NUT Samp.	Pos.
				Rack	Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw				
1			50	0929	0930				49.713	2.251	-	32.513			32.513	069	381	1			
2			10	0931	0931				9.847	3.667	-	31.115					382	2			
3																		3			
4																		4			
5																		5			
6																		6			
7																		7			
8																		8			
9																		9			
10																		10			
11																		11			
12																		12			

Initials AB  
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Consec. Cast # 041		Vessel Surveyor		Proj. & Leg ICF (2)		Event #	Vessel Sta. I.D.		Instructions								Sta. Designation NP 35	
Consec. Cast #	Latitude N or S		Longitude E or W		Date Day	JD = 274	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S. S. >	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D	
	Deg.	Min.	Deg.		Mo.	Yr.										54	NP 35 ✓✓	
041690004N		1685624W		30 SEP 88		1052	20	0206	38	225	20	762						
CTD Type & SN 5830 91220B				Monitor Checks on Deck at Surface				Times	JD/Time	Data Location								
Press. SN 26032				Press.				Data on	1049	Tape/Diskette I.D.				File Name/Header				
Temp. SN 710				Temp.				at Surface	1049	SEP 88				30 SEP 1044				
Cond. SN 304				Cond.				Start Down	1050									
				Other				at Bottom	1052									
								Start Up	1052									
								at Surface	1055									
								Data off	1054									
Pos.	Bot.	T	Trip	Time @	Monitor Values				Depth	Conv. Mon. Values-CTD	Sample Bot. Data				Sal.	Other	Pos.	
	Rack		Depth	Depth	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #	Samp.	
1			15	1052					44.532	2.235	—	30.514			32.514	058	383	1
2			11	1054					11.564	3.666	—	31.057					384	2
3																		3
4																		4
5																		5
6																		6
7																		7
8																		8
9																		9
10																		10
11																		11
12																		12

Initials PDP ✓

Consec. Cast #	Vessel	Proj. & Leg	Event#		Vessel Sta. I.D.		Instructions						Sta. Designation								
042	Surveyor	ICE (z)											1009								
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 274	Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	S. vis	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D				
042	69 30	N	168 39	52 W	30	SEP 88	17 27	10	05	06	36	215	208	64	53	1009					
CTD				Monitor Checks				Times				JD/Time				Data Location					
Type & SN SBD 912208				on Deck at Surface				Data on				1724				Tape/Diskette I.D.					
Press. SN 26032				Press.				at Surface				1725				File Name/Header					
Temp. SN 710				Temp.				Start Down				1726				SEP 88					
Cond. SN 304				Cond.				at Bottom				1727				30SEP 1719					
				Other				Start Up				1728									
								at Surface				1729									
								Data off				1728									
Remarks Deployment of moorings @ Icy Cape																					
Pos.	Bot.	T	Trip	Time @		Monitor Values				Depth Conv. Mon. Values-CTD				Sample Bot.Data				Sal.	Other	Samp.	P
				Rack	Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw				
1		47	1727	1727					47.298	2.045	-	32.544			32.537	81		1			
2		47	1728	1728					47.332	2.042	-	32.542						2			
3																		3			
4																		4			
5																		5			
6																		6			
7																		7			
8																		8			
9																		9			
10																		10			
11																		11			
12																		12			

Initials Pd  
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Consec. Cast #	Vessel	Proj. & Leg	Event#				Vessel Sta. I.D.	Instructions								Sta. Designation			
043	Surveyor	ICE (2)														NQI			
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 275	Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	S. S.	S. S.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D		
043	70 17 21	N	164 38 01	W	01 OCT 88	0500	03	00	07	1120	08864	43							
CTD				Monitor Checks				Times				Data Location							
Type & SN SBD 912203				on Deck				JD/Time				Tape/Diskette I.D.				File Name/Header			
Press. SN 26072				at Surface				Data on 0455				SER88				01 OCT 0445			
Temp. SN 310				Press.				at Surface 0457											
Cond. SN 304				Temp.				Start Down 0459											
				Cond.				at Bottom 0500											
				Other				Start Up 0501											
								at Surface 0503											
								Data off 0501											
Remarks first Cast in the ice																			
Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data			Sal.	Other Samp.	Pos.
				Rack	Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P			
1				39	0500	0500			38.992	0.911	-	32.373			32.366	081	450	1	
2				10	0502	0502			9.993	-1.367	-	28.707					449	2	
3																	3		
4																	4		
5																	5		
6																	6		
7																	7		
8																	8		
9																	9		
10																	10		
11																	11		
12																	12		

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Consec. Cast # 044			Vessel Surveyor		Proj. & Leg ICE(z)		Event #	Vessel Sta. I.D.		Instructions								Sta. Designation NQZ		
Consec. Cast #	Latitude		N or S	Longitude		E or W	Date Day	JD = 275	Time GMT Hr. Min.		Dry Bulb	Wet Bulb	Bar. mb	S. Vis.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Weath.	Depth, m	Sta. Name or I.D
	Deg.	Min.	S	Deg.			Mo.	Yr.												
044	70	16	99 N	16	43	79 W	01	OCT 88	05	38	00	00	07	11	1800	4864	44	NQZ		
CTD Type & SN SBD 91220B				Monitor Checks					Times		JD/Time		Data Location							
				on Deck		at Surface			Data on	0534			Tape/Diskette I.D.			File Name/Header				
				Press.					at Surface	0535			SEP88			01Oct0525				
				Temp.					Start Down	0536										
				Cond.					at Bottom	0538										
				Other					Start Up	0538										
									at Surface	0541										
									Data off	0538										
Pos.	Bot.	T	Trip	Time @		Monitor Values				Depth Conv. Mon. Values-CTD				Sample Bot. Data				Sal. Bot. #	Other Samp.	S. Pos.
				Bot.	Rack	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw			
1				39	0538	0538				38.7070.896	-	32.379				32.370	087	451	1	
2				10	0540	0540				9.666	-1.259	-	28.689						452	2
3																			3	
4																			4	
5																			5	
6																			6	
7																			7	
8																			8	
9																			9	
10																			10	
11																			11	
12																			12	

Initials PD  
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Consec. Cast #		Vessel Surveyor		Proj. & Leg ICF(z)		Event#	Vessel Sta. I.D.		Instructions								Sta. Designation NQ3		
Consec. Cast #	Latitude N or S		Longitude E or W		Date JD = 275		Time GMT Hr. Min.		Dry Bulb	Wet Bulb	Bar. mb	S. si	V. si	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
045	Deg.	Min.	Deg.		Day	Mo.	Yr.											44	NQ3
045 70 18 88 N		164 38 33 W		01 OCT 88		06 59		00	00	06	31	21	014	863				✓✓	
CTD Type & SN SBD 912203		Monitor Checks						Times		JD/Time		Data Location							
Press. SN 26072		on Deck			at Surface			Data on 0655				Tape/Diskette I.D.				File Name/Header			
Temp. SN 710		Press.						at Surface 0657				SEP 88				D1 OCT 0555			
Cond. SN 304		Temp.						Start Down 0657											
		Cond.						at Bottom 0659											
		Other						Start Up 0700											
								at Surface 0702											
								Data off 0659											

Pos.	Bot.	T Rack	Trip Depth	Time @		Monitor Values				Depth Conv. Mon. Values-CTD				Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.			
1			39	0659	0659					38.816	1.082	-	30.367			32.359	079	453	1
2			10	0701	0701					9.916	-1.239	-	28.709					454	2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials PP  
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Consec. Cast # <u>046</u>	Vessel <u>Surveyor</u>	Proj. & Leg <u>ICE(2)</u>	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation <u>NQ4</u>				
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = <u>275</u>	Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	S. vis	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D

046 70 20.6 N 164 40.48 W 01 OCT 88 07 41 0 0 0 0 0 6 31 21 21 14 86 3 44 NQ4 ✓

CTD Type & SN <u>SBD 912203</u> Press. SN <u>26032</u> Temp. SN <u>710</u> Cond. SN <u>304</u>	Monitor Checks on Deck at Surface Press. Temp. Cond. Other	Times Data on <u>0736</u> at Surface <u>0739</u> Start Down <u>0739</u> at Bottom <u>0741</u> Start Up <u>0742</u> at Surface <u>0745</u> Data off <u>0742</u>	JD/Time <u>0736</u> <u>0739</u> <u>0741</u> <u>0742</u> <u>0745</u> <u>0742</u>	Data Location Tape/Diskette I.D. <u>SEP88</u> File Name/Header <u>01OCT0725</u>
			Remarks	

Pos.	Bot.	T Rack	Trip Depth	Time @		Monitor Values				Depth Conv. Mon. Values-CTD				Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.			
1			39	0742	0742					39.486	1.227	-	32.360			32.349	022	455	1
2			10	0744	0744					9.870	-1.233	-	28.692					456	2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials PD ✓

70 70.60 164 40.48

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Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation							
047	Surveyor	ICE (z)											NQ5							
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 275	Time Hr.	GMT Min.	Dry Bulb	Wet Bulb	Bar. mb	S	S	Vis.	Wind Dir.	Wind Sp.	Cloud Type	W eath.	Bottom Depth, m	Sta. Name or I.D
047701961	N		1644325W		01	OCT 89	08	49	00	00	06	31	185	148	63	44	NQ5			
CTD Type & SN SBD 912203				Monitor Checks				Times				JD/Time				Data Location				
				on Deck		at Surface		Data on		0848						Tape/Diskette I.D.		File Name/Header		
				Press.				at Surface		0848						SEPT88		01 OCT 834		
				Temp.				Start Down		0848										
				Cond.				at Bottom		0849										
				Other				Start Up		0850										
								at Surface		0852										
								Data off		0850										
s.	Bot.	T	Trip Depth	Time @		Monitor Values				Depth Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #		022	
1			40	0849	0850					40.660	1.802	-	32.310				32.302	102	457	1
2			9	0851	0851					9.434	-1.142	-	28.751						458	2
3																			3	
4																			4	
5																			5	
6																			6	
7																			7	
8																			8	
9																			9	
10																			10	
11																			11	
12																			12	

Initials PdP  
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Consec. Cast #	Vessel Surveyor	Proj. & Leg ICF(z)	Event#	Vessel Sta. I.D.	Instructions								Sta. Designation NQB						
Consec. Cast #	Latitude Deg. Min.	N or S Deg.	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 275	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S vi	S vi	Wind Dir.	Wind Sp.	Cloud Type	Weath. 34	Bottom Depth, m	Sta. Name or I.D	
0487020112N	1644731W				01 OCT 88	0923	10	0	0	6	32	180	1286	45	14	NQB			
CTD Type & SN SBD 912203				Monitor Checks on Deck at Surface				Times JD/Time				Data Location							
Press. SN 26032				Press.				Data on 0920	Tape/Diskette I.D. SEPSS				File Name/Header 01 OCT 0915						
Temp. SN 710				Temp.				at Surface 0922											
Cond. SN 304				Cond.				Start Down 0923											
				Other				at Bottom 0924											
								Start Up 0926											
								Data off 0924											
												Remarks							
Pos.	Bot.	T	Trip	Time @		Monitor Values			Depth Conv. Mon. Values-CTD				Sample Bot. Data			Sal.	Other	Pos.	
	Rack	Depth	Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #	Samp.	Pos.
1		H1	0923	0924						41.148	1.937	-	32.298			32.290	055	459	1
2		10	0925	0925						9.794	-0.743	-	29.055					460	2
3																		3	
4																		4	
5																		5	
6																		6	
7																		7	
8																		8	
9																		9	
10																		10	
11																		11	
12																		12	

Initials PD  
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Consec. Cast #	Vessel	Sunrayor	Proj. & Leg	ICE(2)	Event #	Vessel Sta. I.D.	Instructions							Sta. Designation				
Consec. Cast #	Latitude	N or S	Longitude	E or W	Date JD =		Time GMT	Dry Bulb	Wet Bulb	Bar. mb	Si. vis.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D		
	Deg. Min.		Deg.		Day Mo. Yr.		Hr. Min.											
049	49 70 20	40 N	164 50 07	W	01 Oct 88	09 53	10	0 0 06	32 18 01	28 63	44							
CTD Type & SN <u>STD 912208</u>				Monitor Checks				Times	JD/Time	Data Location								
				on Deck		at Surface		Data on	0947	Tape/Diskette I.D.			File Name/Header					
				Press.				at Surface	0951	<u>SEP 88</u>			<u>01 OCT 0943</u>					
				Temp.				Start Down	0951									
				Cond.				at Bottom	0953									
				Other				Start Up	0954									
								at Surface	0956									
								Data off	0954									
								Remarks										

Pos.	Bot.	T	Trip	Time @	Monitor Values				depth Conv. Mon. Values-CTD			Sample Bot. Data			Sal. Bot. #	Other Samp.	Sg	
					Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.			
1				39 0953 0954					38.989	2.264	-	32.278			32.270	66	461	1
2				10 0955 0956					18.054	-0.618	-	29.120					462	2
3																		3
4																		4
5																		5
6																		6
7																		7
8																		8
9																		9
10																		10
11																		11
12																		12

Initials PB ✓

Consec. Cast # 050	Vessel Surveyor	Proj. & Leg ICE (2)	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation NQ8				
Consec. Cast #	Latitude N or S Deg. Min. S	Longitude E or W Deg.	Date JD = Day Mo. Yr. 275	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S. Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D NQ8			
050	70 30 70 N	164 53 61 W	01 OCT 88	10 28	10	00 06	32 180	12 863					44				
CTD Type & SN SBD 912203 Press. SN 26032 Temp. SN 310 Cond. SN 304				Monitor Checks on Deck at Surface			Times	JD/Time			Data Location						
				Press.	Start Down	1020	Data on	1020	Tape/Diskette I.D.	File Name/Header							
				Temp.	at Bottom	1025	at Surface	1025	SEP88	01 OCT 1013							
				Cond.	Start Up	1026	Start Down	1026									
				Other	at Surface	1028	at Bottom	1028									
					Data off	1030	Start Up	1028	Remarks								
						1028	at Surface	1030									
Pos.	Bot.	T Rack	Trip Depth	Time @		Monitor Values			depth Conv. Mon. Values-CTD			Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P			
1			40	1028	1028				39.506	2.4144	-	32.272		32.257	019	463	1
2			10	1029	1030				9.709	-0.682	-	29.173				464	2
3																3	
4																4	
5																5	
6																6	
7																7	
8																8	
9																9	
10																10	
11																11	
12																12	

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Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation					
051	SURVEYOR	ICE (2)											NQ9					
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 275	Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	vis vis	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D	
051	70 21 16 N		164 56 33 W		01	OCT 88	10 55	10	0	0 0 6	12	Z	001	0763	45	NQ9		
CTD Type & SN <u>SD 912208</u>				Monitor Checks on Deck                    at Surface				Times                    JD/Time				Data Location						
Press. SN <u>26073</u>				Press.				Data on <u>1052</u>	Tape/Diskette I.D. <u>SEP88</u>				File Name/Header <u>11OCT1045</u>					
Temp. SN <u>710</u>				Temp.				at Surface <u>1053</u>										
Cond. SN <u>304</u>				Cond.				Start Down <u>1053</u>										
				Other				at Bottom <u>1055</u>										
								Start Up <u>1056</u>										
								at Surface <u>1057</u>										
								Data off <u>1056</u>										
Pos.	Bot.	T Rack	Trip Depth	Time @		Monitor Values			Depth Conv. Mon. Values-CTD				Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw			
1			41	1055	1055				41.313	2.328	-	32.278			32.272	069	465	1
2			9	1056	1057				9.322	-0.650	-	29.129					466	2
3																	3	
4																	4	
5																	5	
6																	6	
7																	7	
8																	8	
9																	9	
10																	10	
11																	11	
12																	12	

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Consec. Cast # 052	Vessel Surveyor	Proj. & Leg ICE(z)	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation NQ10							
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 275	Time GMT Hr.	Dry Bulb Min.	Wet Bulb	Bar. mb	S.S. Vis.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D				
052	70 21 53 N		164 59 25 W		01	OCT 88	1127	10	0006	12200	10763				45	NQ10				
CTD Type & SN 580 912203				Monitor Checks on Deck                    at Surface				Times		JD/Time		Data Location								
								Data on	1125			Tape/Diskette I.D.	File Name/Header							
								at Surface	1125			SEP88	01/OCT/1122							
								Start Down	1126											
								at Bottom	1127											
								Start Up	1128											
								at Surface	1130											
								Data off	1128											
Remarks																				
Pos.	Bot.	T	Trip	Time @		Monitor Values				Depth Conv. Mon. Values-CTD				Sample Bot. Data			Sal.	Other	Samp.	Pos.
				Bot.	Rack	Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.				
1			41	1127	1128					41.144	2.252	-	32.282			32.277	058	467	1	
2			10	1129	1129					9.903	-0.703	-	29.078					468	2	
3																		3		
4																		4		
5																		5		
6																		6		
7																		7		
8																		8		
9																		9		
10																		10		
11																		11		
12																		12		

Initials RL  
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Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation						
053	Surveyor	ICE (2)											NQ11						
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 275	Time Hr.	GMT Min.	Dry Bulb	Wet Bulb	Bar. mb	S. S.	V. is.	Wind Dir.	Wind Sp.	Cloud Type	W. eath.	Bottom Depth, m	Sta. Name or I.D
053	70 22 06 N		165 03 68 W		01	Oct 88	1201	08	07	05	13	285	10	773	45				
CTD Type & SN SBD 912208				Monitor Checks on Deck at Surface				Times		JD/Time		Data Location							
Press. SN 26072				Press.				Data on	1155			Tape/Diskette I.D.		File Name/Header					
Temp. SN 310				Temp.				at Surface	1159			SEP88		01 Oct 1145					
Cond. SN 304				Cond.				Start Down	1200										
								at Bottom	1201										
								Start Up	1201										
								at Surface	1203										
								Data off	1201										
Remarks																			
Pos.	Bot.	T	Trip	Time @		Monitor Values				Depth Conv. Mon. Values-CTD				Sample Bot. Data			Sal.	Other Samp.	Pos.
				Bot.	Rack	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P			
1				41	1201	1201			41.298	2.251	-	32.282			32.276	046	469	1	
2				10	1202	1202			9.573	-0.299	-	29.333					470	2	
3																	3		
4																	4		
5																	5		
6																	6		
7																	7		
8																	8		
9																	9		
10																	10		
11																	11		
12																	12		

Initials PJ  
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Consec. Cast #	Vessel	Proj. & Leg	Instructions										Sta. Designation								
054	Surveyor	ICE (2)											NQ12								
Consec. Cast #	Latitude	N or S	Longitude	E or W	Date	JD =	Time	GMT	Dry	Wet	Bar.	S	S	Wind Dir.	Wind Sp.	Cloud	Type	Bottom Depth, m	Sta. Name or I.D		
	Deg.	Min.	Deg.		Day	Mo. Yr.	Hr.	Min.	Bulb	Bulb	mb		Vis.								
054	70 23 92 N		165 05 19 W		01 Oct 88		1231		08	06051	328508773							16	NQ12		
CTD Type & SN SBD 91220B				Monitor Checks					Times	JD/Time		Data Location									
				on Deck		at Surface			Data on	1225		Tape/Diskette I.D.		File Name/Header							
				Press.					at Surface	1228		SEP88		01 OCT 1212							
				Temp.					Start Down	1229											
				Cond.					at Bottom	1231											
				Other					Start Up	1231											
									at Surface	1233											
									Data off	1231											
Pos.	Bot.	T	Trip	Time @		Monitor Values				Depth Conv. Mon. Values-CTD				Sample Bot.Data			Sal.	Other Samp.	Pos.		
				Rack	Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P				Avg Tw	Sal.
1				41	1231	1231			41.369	2.262	—	32.282			32.275	101	471	1			
2				10	1233	1233			9.707	-0.259	—	29.338					472	2			
3																		3			
4																		4			
5																		5			
6																		6			
7																		7			
8																		8			
9																		9			
10																		10			
II																		II			
I2																		I2			

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Consec.Cast #		Vessel		Proj. & Leg		Event#	Vessel Sta. I.D.		Instructions						Sta. Designation					
Consec. Cast #	055	SURVEYOR		ICE (a)											2010					
Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 275		Time Hr.	GMT Min.	Dry Bulb	Wet Bulb	Bar. mb	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D				
055701946N	N	1645077W	W	01 OCT 88	1806	-12-150	8	2735008862	44	1010										
CTD Type & SN SBD 912203		Monitor Checks				Times	ID/Time		Data Location											
Press. SN 26032		on Deck	at Surface	Data on	1802	Tape/Diskette I.D.	File Name/Header													
Temp. SN 310		Press.		at Surface	1805	SET88	01 OCT 1759													
Cond. SN 304		Temp.		Start Down	1805															
		Cond.		at Bottom	1806															
		Other		Start Up	1807															
				at Surface	1808															
				Data off	1806															
Time @				Monitor Values				Depth Conv. Mon. Values-CTD				Sample Bot.Data			Sal.	Other				
Pos.	Bot.	T	Trip	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #	Samp.	Pos.	
1				40	1806	1806				40,040	2.616	-	32,240				32.234	81		1
2																			2	
3																			3	
4																			4	
5																			5	
6																			6	
7																			7	
8																			8	
9																			9	
10																			10	
11																			11	
12																			12	

Initials PJ  
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Consec.Cast #	Vessel Surveyor	Proj. & Leg ICE(2)	Event#	Vessel Sta. I.D.	Instructions								Sta. Designation NR12							
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 275	Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	S. vis	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D			
056	70 20 02 N		164 59 90 W		01 OCT	222208	- 18	- 19	1037	268	10837				45	MR 12				
CTD Type & SN 580 912208				Monitor Checks on Deck at Surface				Times	JD/Time	Data Location										
Press. SN 26072				Press.	Press.	Data on 2205	Tape/Diskette I.D. SEP88	File Name/Header 01 OCT 2202												
Temp. SN 710				Temp.	Temp.	at Surface 2207														
Cond. SN 304				Cond.	Cond.	Start Down 2207														
				Other	Other	at Bottom 2208														
						Start Up 2209														
						at Surface 2211														
						Data off 2209														
Remarks																				
Pos.	Bot.	Rack	T	Trip @		Monitor Values				depth Conv. Mon. Values-CTD				Sample Bot. Data				Sal. Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.				
1				41	2208	2209				42.173	2.894	-	32.224		32.220	087	473	1		
2				9	2210	2210				9.110	1.411	-	30.121				471	2		
3																	3			
4																	4			
5																	5			
6																	6			
7																	7			
8																	8			
9																	9			
10																	10			
11																	11			
12																	12			

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Consec.Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions								Sta. Designation						
057	Surveyor	ICE(z)											NR11						
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 275	Time GMT	Dry Bulb	Wet Bulb	Bar. mb	S. vis	Wind Dir.	Wind Sp.	Cloud Type	Weath. Weath.	Bottom Depth, m	Sta. Name or I.D		
057	70 12 89 N		165 01 97 W		01 OCT 88	23 14 - 18	- 1 9 1 1 2	10268	10837	43							✓		
CTD Type & SN SBD 912203					Monitor Checks				Times				Data Location						
Press. SN 26072					on Deck		at Surface		Data on 2310		ID/Time		Tape/Diskette I.D.		File Name/Header				
Temp. SN 710					Press.				at Surface 2312				SEP88		01 OCT 2306				
Cond. SN 304					Temp.				Start Down 2312										
					Cond.				at Bottom 2314										
					Other				Start Up 2314										
									at Surface 2316										
									Data off 2314										
Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Monitor Values				Conv. Mon. Values-CTD				Sample Bot.Data				Sal. Bot. #	Other Samp.	Pos.
1			39	2311 2314	Press.	Temp.	Cond.	Other	Press-	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	32.153	079	475	1
2			9	2315 2315					38.629 2.654	-	32.153							476	2
3									9.326 0.999	-	29.832							3	
4																		4	
5																		5	
6																		6	
7																		7	
8																		8	
9																		9	
10																		10	
11																		11	
12																		12	

Initials PB  
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Consec. Cast # 058	Vessel Surveyor	Proj. & Leg ICE (2)	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation HR10								
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 276	Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	S. si	V. is	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D				
058	70 05	14 N	164 59	98 W	02	OCT 88	00 14	-10 -1	61	2	38	26	01 4	862	42	NR10					
CTD Type & SN SBD 912203				Monitor Checks on Deck at Surface				Times	JD/Time	Data Location											
				Press.	Data on 0010	Tape/Diskette I.D.	File Name/Header														
				Temp.	at Surface 0012	SEP 88	02OCT0007														
				Cond.	Start Down 0013																
				Other	at Bottom 0014																
					Start Up 0014	Remarks															
					at Surface 0016																
					Data off 0014																
Pos.	Bot.	T Rack	Trip Depth	Time @		Monitor Values				Depth	Conv. Mon. Values-CTD				Sample Bot. Data				Sal. Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other		Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.				
1			38	0014	0014					38.170.2.044.	-	32.097.			32.098	022	477	1			
2			10	0015	0005					9.937.-1.185.	-	29.580.					478	2			
3																	3				
4																	4				
5																	5				
6																	6				
7																	7				
8																	8				
9																	9				
10																	10				
11																	11				
12																	12				

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Consec.Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions								Sta. Designation				
Consec. Cast #	Latitude N or S	Longitude E or W	Date JD =	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S. vis.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D				
059	69 57 06 N	164 59 71 W	276 020CT88	01 20 - 08 - 20	12 38	270 10 862	40	NR9									
Monitor Checks				Times	Data Location												
on Deck at Surface				JD/Time	Tape/Diskette I.D. File Name/Header												
Press. SN	26032	Press.		Data on 0117	020CT011												
Temp. SN	310	Temp.		at Surface 0118													
Cond. SN	304	Cond.		Start Down 0119													
		Other		at Bottom 0120													
				Start Up 0120													
				at Surface 0122													
				Data off 0120													
Remarks																	
Pos.	Bot.	T Rack	Trip Depth	Time @		Monitor Values			Conv. Mon. Values-CTD			Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P			
1			37	0120	0120				36.737	2.866	-	31.936		31.938	102	1	
2			9	0121	0121				9.241	-0.436	-	29.970				2	
3																3	
4																4	
5																5	
6																6	
7																7	
8																8	
9																9	
10																10	
11																11	
12																12	

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Consec. Cast #	<u>060</u>	Vessel	<u>Surveyor</u>		Proj. & Leg	<u>ICE (2)</u>	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation	<u>NR8</u>			
Consec. Cast #	Latitude		N or S	Longitude	E or W	Date	JD =	Time	GMT	Dry	Wet	Bar.	S.	S.	Wind	Wind	Cloud	Type	Bottom	Sta. Name or I.D	
	Deg.	Min.		Deg.		Day	Mo. Yr.	Hr. Min.		Bulb	Bulb	mb	si	si	Dir.	Sp.	Type	Weath.	Depth, m		
060	69	50	N	164	59	81	W	020CT	88	0226	00 - 15	13	38	260	10761	10761	38	NR8	✓		
CTD Type & SN <u>SB3 912203</u>				Monitor Checks				Times		JD/Time		Data Location									
				on Deck		at Surface		Data on		0224		Tape/Diskette I.D.				File Name/Header					
				Press.				at Surface		0225		<u>SEP88</u>				<u>020CT0215</u>					
				Temp.				Start Down		0226											
				Cond.				at Bottom		0226											
				Other				Start Up		0227											
								at Surface		0229											
								Data off		0207											
Pos.	Bot.	T	Trip	Time @		Monitor Values				Depth Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Bot. #	Other Samp.	Pos.
				Bot.	Rack	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw				
1				34	0226	0227			33.999	1.826	-	31.850			31.849	.055	481	1			
2				9	0228	0228			9.146	0.586	-	30.270					482	2			
3																		3			
4																		4			
5																		5			
6																		6			
7																		7			
8																		8			
9																		9			
10																		10			
11																		11			
12																		12			

Initials PB  
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Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation							
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 276	Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	S ur f ace	S ub s e a t	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D		
061	69 43 03 N		164 59 94 W		02 OCT 88	0341	00	-1	01.3	210	2401	0661	36	NR7						
CTD Type & SN SBD 912208				Monitor Checks on Deck at Surface				Times JD/Time				Data Location								
Press. SN 26072				Press.				Data on 0337	Tape/Diskette I.D. SEP 88				File Name/Header 02 OCT 0323							
Temp. SN 310				Temp.				at Surface 0340												
Cond. SN 304				Cond.				Start Down 0341												
				Other				at Bottom 0341												
								Start Up 0342												
								at Surface 0344												
								Data off 0342												
Pos.	Bot.	T Rack	Trip Depth	Time @		Monitor Values				Depth Conv. Mon. Values-CTD				Sample Bot. Data				Sal. Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.				
1			32	0342	0342				32.892	1.517	—	31.447			31.448	066	483	1		
2			9	0343	0344				8.690	-0.197	—	30.050					484	2		
3																		3		
4																		4		
5																		5		
6																		6		
7																		7		
8																		8		
9																		9		
10																		10		
11																		11		
12																		12		

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Consec. Cast #	Vessel	Surveyor	Proj. & Leg	TCE (Z)	Event #	Vessel Sta. I.D.	Instructions						Sta. Designation		
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 276	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	Wind Dir. 10	Wind Sp. 07	Cloud Type 24	Bottom Depth, m 34	Sta. Name or I.D NRL
062	69°34' S	O N	164°58' E	W	20 OCT 88	0442	02	-1	0132	20	07	56	1	34	NRL ✓
CTD Type & SN SBD 912203				Monitor Checks on Deck at Surface				Times	JD/Time	Data Location					
Press. SN	26072	Press.	Temp.	Data on	0438	Tape/Diskette I.D.	File Name/Header								
Temp. SN	310	Temp.	Cond.	at Surface	0441	SEPT88	02OCT0434								
Cond. SN	304	Cond.	Other	Start Down	0441										
				at Bottom	0442										
				Start Up	0443										
				at Surface	0445										
				Data off	0443	Remarks									

Pos.	Bot.	T Rack	Trip Depth	Time @		Monitor Values				Depth Conv. Mon. Values-CTD			Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.	
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.			
1			31	0442	0443					31.070	2.248	-	31.159			31.161	019	485	1
2			10	0444	0444					10.076	0.593	-	30.806					486	2
3																		3	
4																		4	
5																		5	
6																		6	
7																		7	
8																		8	
9																		9	
10																		10	
11																		11	
12																		12	

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Consec. Cast #	Vessel	Surveyor	Proj. & Leg	ICE (2)	Event #	Vessel Sta. I.D.	Instructions						Sta. Designation				
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 276	Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	S. vis.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D	
	063 69 26	76 N	165 01 34 W	02 OCT 88	0558	02 - 02	1318	200	08651						33	NR5	
CTD Type & SN SBD 91220B				Monitor Checks				Times	JD/Time	Data Location							
				on Deck		at Surface		Data on	0554	Tape/Diskette I.D.						File Name/Header	
				Press.				at Surface	0556								
				Temp.				Start Down	0557								
				Cond.				at Bottom	0558								
				Other				Start Up	0559								
								at Surface	0600								
								Data off	0558								
Remarks																	

Pos.	Bot.	T Rack	Trip Depth	Time @		Monitor Values				Conv. Mon. Values-CTD			Sample Bot. Data			Sal. Bot. #	Other Samp.	P	
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.			
1			28	0558	0558					27.880	2.952	-	31.285			31.285	069	487	1
2			11	0529	0530					10.786	2.977	-	31.285					488	2
3																		3	
4																		4	
5																		5	
6																		6	
7																		7	
8																		8	
9																		9	
10																		10	
11																		11	
12																		12	

Initials PB  
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Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation						
064	Survegator	ICE (2)											NR4						
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 276	Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	S. vi	s. si	Wind Dir.	Wind Sp.	Cloud Type	W eath.	Bottom Depth, m	Sta. Name or I.D	
064	69 20 07 N		165 00 27 W		020	OCT 88	07 04	02	-02	13	1	8	190	0757		34	NR4		
CTD Type & SN 580 91220B				Monitor Checks on Deck at Surface				Times	JD/Time	Data Location									
Press. SN 26072				Press.	Data on 0701	Tape/Diskette I.D. SE788	File Name/Header 02 OCT 0653												
Temp. SN 310				Temp.	at Surface 0702														
Cond. SN 304				Cond.	Start Down 0703	Remarks													
				Other	at Bottom 0704														
					Start Up 0705														
					at Surface 0706														
					Data off 0707														
Pos.	Bot.	T	Trip	Time @		Monitor Values			Depth Conv. Mon. Values-CTD				Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.	
				Bot. Depth	Trip Depth	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw				Sal.
1				26	0704	0704				26.294	3417	—	31.190			31.188	058	489	1
2				10	0705	0706				10.021	3.408	—	31.074					490	2
3																		3	
4																		4	
5																		5	
6																		6	
7																		7	
8																		8	
9																		9	
10																		10	
11																		11	
12																		12	

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Consec. Cast #		Vessel	Proj. & Leg		Event #	Vessel Sta. I.D.	Instructions								Sta. Designation						
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	ID = 276	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S. Si	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D				
	065691196	N	1645973	W	020CT88	0811	07	0612	18187	10757						25	NR3				
CTD Type & SN <del>SET 88</del> 912203 Press. SN 26072 Temp. SN 710 Cond. SN 304				Monitor Checks on Deck at Surface Press. Temp. Cond. Other				Times Data on 0808 at Surface 0809 Start Down 0810 at Bottom 0811 Start Up 0812 at Surface 0813 Data off 0812		JD/Time		Data Location Tape/Diskette I.D. SET 88 File Name/Header 020CT0802									
Pos.	Bot.	T	Trip	Time @	Monitor Values				Depth Conv. Mon. Values-CTD		Sample Bot. Data				Sal. Bot. #	Other Samp.	Pos.				
					Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.				
1					20	0811	0811				20.162	3.298	-	30.911				30.906	046	491	1
2					10	0813	0813				10.077	3.282	-	30.911					492		2
3																				3	
4																				4	
5																				5	
6																				6	
7																				7	
8																				8	
9																				9	
10																				10	
11																				11	
12																				12	

Initials Pof  
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Consec. Cast #	Vessel	Surveyor	Proj. & Leg	ICE(2)	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation			
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 276	Time Hr.	GMT Min.	Dry Bulb	Wet Bulb	Bar. mb	S. si	S. si	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D
	066 69 04 85 N		164 59 90 W		02 OCT 88	09 19	03		02 12 18 17 41 10 00							20	NRZ	
CTD Type & SN SBD 912203		Monitor Checks on Deck at Surface						Times	JD/Time		Data Location							
Press. SN 26072								Data on	0915	Tape/Diskette I.D.								
Temp. SN 710								at Surface	0918	File Name/Header								
Cond. SN 304								Start Down	0918	SER 88								
								at Bottom	0919									
								Start Up	0919									
								at Surface	0922									
								Data off	0919	Remarks Last cast on line, water depth = 20m								
Pos.	Bot.	T	Trip	Time @		Monitor Values			Depth Conv. Mon. Values-CTD			Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.	
				Bot. Depth	Trip Depth	Press.	Temp.	Cond.	Other	Press:	Temp.	Cond.	Sal.	Therm-P				Avg Tw
1				15	0919	0920			15.172	3.054	-	30.904			30.898	101	493	1
2				10	0921	0921			9.631	2.981	-	30.869					494	2
3																		3
4																		4
5																		5
6																		6
7																		7
8																		8
9																		9
10																		10
11																		11
12																		12

Initials PDP  
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Consec. Cast #	Vessel	Proj. & Leg	Event #		Vessel Sta. I.D.		Instructions						Sta. Designation									
067	Surveyor	JCE (2)											NS1									
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 277	Time Hr.	GMT Min.	Dry Bulb	Wet Bulb	Bar. mb	S. si	S. si	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D			
067	70 30 84	N	162 46 75	W	030	c + 880120	10	01	04	1821512862	2							40	NS1			
CTD Type & SN SBD 912208				Monitor Checks				Times		JD/Time		Data Location										
				on Deck		at Surface		Data on	0114			Tape/Diskette I.D.		File Name/Header								
				Press.				at Surface	0118			SEP88		03OCT0101								
				Temp.				Start Down	0119													
				Cond.				at Bottom	0120													
				Other				Start Up	0121													
								at Surface	0123													
								Data off	0121			Remarks										
Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Trip	Press.	Temp.	Cond.	Other	Depth	Conv. Mon. Values-CTD	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Sal. Bot. #	Other Samp.	Pos.	
1			35	0121	0121					35.590	-0.113	-	31.763					32.757	081	495	1	
2			10	0122	0122					9.548	-1.538	-	29.511					<del>guess</del>		496	2	
3																	31.757	<del>mc read</del>		3		
4																					4	
5																						5
6																						6
7																						7
8																						8
9																						9
10																						10
11																						11
12																						12

Initials Paf  
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Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation				
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 277	Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	S. vis.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D	
068	70 35 39 N		162 59 88 W		030C	188	02 54	-05 -1	203 18 220	10 862					41	WS2	
CTD Type & SN SBD 912203				Monitor Checks on Deck at Surface				Times	JD/Time	Data Location							
Press. SN 26072				Press.	Data on 0252	Tape/Diskette I.D.	File Name/Header										
Temp. SN 710				Temp.	at Surface 0253	030CT0241											
Cond. SN 304				Cond.	Start Down 0253												
				Other	at Bottom 0254												
					Start Up 0255												
					at Surface 0256												
					Data off 0255												
						Remarks											
Pos.	Bot.	T	Trip	Time @		Monitor Values			Conv. Mon. Values-CTD			Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.
				Bot. Depth	Trip Depth	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P			
1				36	0254	0255			36.390	0.569	-	31.971		31.972	101	49.7	1
2				10	0255	0255			9.221	-1.452	-	29.281				498	2
3																3	
4																4	
5																5	
6																6	
7																7	
8																8	
9																9	
10																10	
11																11	
12																12	

Initials PB  
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Consec. Cast # <u>069</u>		Vessel <u>Surveyor</u>	Proj. & Leg <u>ICE(z)</u>		Event #	Vessel Sta. I.D.		Instructions						Sta. Designation <u>NS3</u>					
Consec. Cast #	Latitude <u>N</u> Deg. <u>069</u> Min. <u>70</u> N or S		Longitude <u>E</u> Deg. <u>163</u> Min. <u>21</u> E or W	Date <u>JD =</u> Day <u>277</u> Mo. <u>Oct</u> Yr. <u>88</u>	Time GMT Hr. <u>04</u> Min. <u>12</u>	Dry Bulb <u>-06</u>	Wet Bulb <u>-06</u>	Bar. mb <u>03</u>	S. S. V. s. i. >	Wind Dir. <u>180</u>	Wind Sp. <u>260</u>	Cloud Type <u>088</u>	W. eath. <u>62</u>	Bottom Depth, m <u>43</u>	Sta. Name or I.D <u>NS3</u>				
<u>CTD</u> Type & SN <u>580 91220B</u>		Monitor Checks on Deck at Surface				Times	JD/Time	Data Location											
Press. SN <u>26072</u>		Press.	Temp.	Cond.	Other	Data on <u>0809</u>		Tape/Diskette I.D. <u>SEP88</u>	File Name/Header <u>03OCT0401</u>										
Temp. SN <u>710</u>						at Surface <u>0410</u>													
Cond. SN <u>304</u>						Start Down <u>0410</u>													
						at Bottom <u>0412</u>													
						Start Up <u>0412</u>													
						at Surface <u>0415</u>													
						Data off <u>0412</u>													
Remarks																			
Pos.	Bot.	T Rack	Trip Depth	Time @		Monitor Values				Depth Conv. Mon. Values-CTD				Sample Bot. Data			Sal. Bot. #	Other Samp.	F.S.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.			
1			<u>39</u>	<u>0412</u>	<u>0412</u>					<u>38.610</u>	<u>1.587</u>	<u>-</u>	<u>32.238</u>		<u>32.235</u>	<u>79</u>	<u>409</u>	<u>1</u>	
2			<u>10</u>	<u>0414</u>	<u>0414</u>					<u>10.090</u>	<u>-0.938</u>	<u>-</u>	<u>29.059</u>				<u>500</u>	<u>2</u>	
3																		<u>3</u>	
4																		<u>4</u>	
5																		<u>5</u>	
6																		<u>6</u>	
7																		<u>7</u>	
8																		<u>8</u>	
9																		<u>9</u>	
10																		<u>10</u>	
11																		<u>11</u>	
12																		<u>12</u>	

Initials AD ✓

Consec. Cast #		Vessel		Proj. & Leg		Event #	Vessel Sta. I.D.		Instructions								Sta. Designation		
Consec. Cast #	Latitude		N or S	Longitude	E or W	Date	JD =	Time	GMT	Dry Bulb	Wet Bulb	Bar. mb	S. S.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
	Deg.	Min.		Deg. (31,48)	W	Day	277	Hr.	Min.				S.						
070	70	34	N	163	21	48	W	030	CT	88	0507	-06	-1	003	18	250	10872	41	NS4
CTD					Monitor Checks					Times		JD/Time		Data Location					
Type & SN 580 912203					on Deck		at Surface			Data on	0504			Tape/Diskette I.D.		File Name/Header			
Press. SN 26032					Press.					at Surface	0505			SER88		030CT0500			
Temp. SN 710					Temp.					Start Down	0506								
Cond. SN 304					Cond.					at Bottom	0507								
					Other					Start Up	0508								
										at Surface	0510								
										Data off	0508								
Pos.	Bot.	T	Trip	Time @		Monitor Values				Depth Conv. Mon. Values-CTD				Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.
				Rack	Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P			
1				37	0507	0502			36.615	1.587	—	32.204			32.206	022	501	1	
2				11	0509	0509			10.622	-0.951	—	29.058					502	2	
3																		3	
4																		4	
5																		5	
6																		6	
7																		7	
8																		8	
9																		9	
10																		10	
11																		11	
12																		12	

Initials Pd  
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Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation					
071	SURVEYOR	ICE (2)											NS5-					
Consec. Cast #	Latitude N or S	Longitude E or W	Date JD =	Time GMT	Dry Bulb	Wet Bulb	Bar. mb	S. vis.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D					
071	70 32 69 N	1634 455 W	03 Oct 88 0636	-10 -150 437	290	18 872	43						NS5					
CTD Type & SN SBD 912203 Press. SN 26032 Temp. SN 310 Cond. SN 304				Monitor Checks on Deck at Surface Press. Temp. Cond. Other				Times	JD/Time	Data Location								
								Data on	0632	Tape/Diskette I.D.	File Name/Header							
								at Surface	0633									
								Start Down	0634	SEP88	03 Oct 0630							
								at Bottom	0636									
								Start Up	0636									
								at Surface	0638									
								Data off	0636	Remarks								
Pos.	Bot.	T Rack	Trip Depth	Time @		Monitor Values			Depth Conv. Mon. Values-CTD				Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw			
1			38	0636	0636					38.035	1.099	—	32.354		32.349	102	503	1
2			10	0637	0637					10.433	-1.154	—	29.061				504	2
3																	3	
4																	4	
5																	5	
6																	6	
7																	7	
8																	8	
9																	9	
10																	10	
11																	11	
12																	12	

Initials Pd  
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Consec. Cast # 072	Vessel Surveyor	Proj. & Leg ICE(2)	Event #	Vessel Sta. I.D.	Instructions										Sta. Designation NS 6			
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD =	Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	Si. si.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D		
072	70 32 40 N		16 40 54 7 W		03 04 188	08 05 - 40	-4 3 05 28 31 01 88 71								45	NS6 ✓		
CTD Type & SN SSD 912203				Monitor Checks on Deck at Surface				Times	JD/Time	Data Location								
				Press.	Temp.	Cond.	Other	Data on	0759	Tape/Diskette I.D. File Name/Header								
								at Surface	0803	SEP88 03OCT0753								
								Start Down	0803									
								at Bottom	0805									
								Start Up	0805									
								at Surface	0806									
								Data off	0805	Remarks Bottles DIDN'T TRIP, Cast redone as NS6B								
Pos.	Bot. Rack	T	Trip	Time @		Monitor Values			DEPTH Conv. Mon. Values-CTD				Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw			
1		40	0805	0805				39.942	2.021		32.293	NO	SAMPLES				1	
2		10	0806	0807				10.141	-1.009		29.097						2	
3																	3	
4																	4	
5																	5	
6																	6	
7																	7	
8																	8	
9																	9	
10																	10	
11																	11	
12																	12	

Initials RP  
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Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation											
073	Surveyor	FCF(z)				NS6B											
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date JD = Day Mo. Yr.	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S. S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Wearh.	Bottom Depth, m	Sta. Name or I.D

073 70 32 43 N / 164 06 67 W 03 OCT 88 08 15 - 40 - 43 052831018871 45 NS6B ✓

CTD Type & SN SBD 912203 Press. SN 26032 Temp. SN 710 Cond. SN 304	Monitor Checks on Deck      at Surface	Times      JD/Time Data on 0811 at Surface 0812 Start Down 0812 at Bottom 0815 Start Up 0816 at Surface 0819 Data off 0815	Data Location Tape/Diskette I.D.      File Name/Header SEP88      03 OCT 88
	Press. Temp. Cond. Other		Remarks

Pos.	Bot.	T	Trip	Time @		Monitor Values			Depth Conv. Mon. Values-CTD				Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.		
				Bot.	Rack	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw			
1				40		0815	0815					40.207.	2.037.	-	32.094.			32.285	055	505
2				10		0818	0818					9.787.	-1.039.	-	29.082.				506	2
3																			3	
4																			4	
5																			5	
6																			6	
7																			7	
8																			8	
9																			9	
10																			10	
11																			11	
12																			12	

Initials Pat ✓

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation							
074	Surveyor	ICE(z)											NS7							
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date JD = Day Mo. Yr.	Time Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	Si. vis.	Wind Dir.	Wind Sp.	Cloud C.	Type V.	Bottom Depth, m	Sta. Name or I.D.				
074	70 32 30 N		16 42 82 W		03 OCT 88	0956 - 39 - 44	06	28 34 52	0871						46	NS7				
CTD Type & SN SBD 91220B					Monitor Checks				Times JD/Time				Data Location							
					on Deck	at Surface	Data on	0941					Tape/Diskette I.D.	File Name/Header						
					Press.		at Surface	0954					SEP88	03 OCT 0935						
					Temp.		Start Down	0956												
					Cond.		at Bottom	0956												
					Other		Start Up	0957												
							at Surface	0957												
							Data off	0958												
Remarks Need to get rid of V2 part when press. & cond. frozen. (1st 1637 recs)																				
Pos.	Bot.	Tack	Trip	Time @		Monitor Values				DEPTH Conv. Mon. Values-CTD				Sample Bot. Data				Sal. Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.				
1			40	0956	0957					39.254	2.589	—	32.249			32.245	066	507	1	
2			10	0957	0957					10.441	-1.216	—	29.008					508	2	
3																		3		
4																		4		
5																		5		
6																		6		
7																		7		
8																		8		
9																		9		
10																		10		
11																		11		
12																		12		

Initials PD ✓

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation				
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD =	Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	S.S. Vis	Wind Dir.	Wind Sp.	Cloud Type	W eath.	Bottom Depth, m	Sta. Name or I.D
075	70 33 47 N		164 50 10 W		030	CT8811	48 - 75	- 8008	4701222871	46						NS 8	

CTD  
Type & SNSBD 912203

Press. SN 26072

Temp. SN 710

Cond. SN 304

### Monitor Checks

on Deck at Surface

Press. \_\_\_\_\_

Temp. \_\_\_\_\_

Cond. \_\_\_\_\_

Other \_\_\_\_\_

Times JD/Time

Data on 1139 / 1145

at Surface 1140 / 1146

Start Down 1146

at Bottom 1148

Start Up 1148

at Surface 1150

Data off 1148

### Data Location

Tape/Diskette I.D.

File Name/Header

SEP88

03 OCT 1128

Remarks

Pos.	Bot.	Rack	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.
					Depth	Depth	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.			
1					40	1148	1148				39.707	2.631	—	32.283			32.278	019	509	1
2					11	1150	1150				10.907	-1.192	—	29.039					510	2
3																			3	
4																			4	
5																			5	
6																			6	
7																			7	
8																			8	
9																			9	
10																			10	
11																			11	
12																			12	

Initials

PJ



11:40

STOPPED  
data

Consec. Cast # 076	Vessel <u>Surveyor</u>	Proj. & Leg <u>ICE (a)</u>	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation <u>PZ1</u>								
Consec. Cast #	Latitude Deg.	N or S Deg.	Longitude Deg.	E or W Day	Date Mo. Yr.	JD = 278	Time Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S. S.	V. Vis.	Wind Dir.	Wind Sp.	Cloud Type	Wheath. Weath.	Bottom Depth, m	Sta. Name or I.D			
076	70 20	76 N	163 25 99 W	04	OCT 88	02 06 - 70 - 75 12	2800008872										32	PZ1			
CTD Type & SN 912203 (SPD) Press. SN 26072 Temp. SN 710 Cond. SN 304					Monitor Checks on Deck at Surface				Times	JD/Time	Data Location Tape/Diskette I.D. File Name/Header										
									Data on	020109	32 27+5										
									at Surface	020400											
									Start Down	020500											
									at Bottom	020656											
									Start Up	0211											
									at Surface	0215											
									Data off	021459											
									Remarks 59% unstable @ samples greater ice on surface												

Pos.	Bot.	Rack	T	Trip	Time @		Monitor Values				Depth Conv. Mon. Values-CTD				Sample Bot. Data				Sal. Bot. #	Other Samp.	Pos.
					Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.				
1			27		0208	34553.102	6108.895	8235.879			27.846	0.870		30.613	?	Doesn't agree with	31.988	081	511	1	
2			12.2		0213	34506.883	5783.598	8265.094			12.261	-1.566		33.401	*{ ?	with				2	
3			5.0		021429	34484.902	5781.832	8172.133			4.878	-1.579		32.438	*	20f6			512	3	
4																	Must have been a lot of horizontal variability / connection			4	
5																				5	
6																				6	
7																				7	
8																				8	
9																				9	
10																				10	
11																				11	
12																				12	

Initials CD

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PHOTO

1 -1375

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Consec. Cast # 077		Vessel SURVEYOR		Proj. & Leg TCE (2)		Event #	Vessel Sta. I.D.		Instructions * values indicate CTD touched bottom; no sediment in cond. pump - last								Sta. Designation P72				
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 278	Time Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	Si Si >	Wind Dir.	Wind Sp.	Cloud Type	Wearh.	Bottom Depth, m	Sta. Name or I.D				
077	30 21 25 N		16 34 48 27 W		04 OCT 88	04 18 - 85 - 90	12 28 01 51 08 72									37	P72				
CTD Type & SN SBD 912208		Monitor Checks				Times		JD/Time		Data Location											
Press. SN 26072		on Deck at Surface				Data on 278		041258		Tape/Diskette I.D. 041156											
Temp. SN 310		Press. 34469.132 [0.007] · 34471.426 [0.714] ·				at Surface		041405		File Name/Header 040888											
Cond. SN 304		Temp. 5081.715 [-7.371] · 5781.926 [-1.580] ·				Start Down		0415 0416		04 OCT 0411											
		Cond. 3246.387 · 3849.848				at Bottom		0418													
		Other [0.540] · [29.323]				Start Up		0421													
						at Surface		0423													
						Data off															
Remarks press. sensor port frozen during first descent, so brought CTD back to surface and started back down at 041657(2) [data was on during entire sequence]																					
Pos.	Bot.	T	Trip	Time @		Monitor Values				Depth	Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Other	Pos.
				Bot.	Rack	Depth	Trip	Press.	Temp.		Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw			
1				041823	34573.164	6249.824	8399.684		34.796	1.897		31.138	NO TRIP						—	—	1
2				042011	34481.887	5787.871	8354.945		4.085	-1.533		34.465							513	2	
3																				3	
4																				4	
5																				5	
6																				6	
7																				7	
8																				8	
9																				9	
10																				10	
11																				11	
12																				12	

Initials CD

Edit out ✓ \*

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Consec. Cast # 078		Vessel <u>SURVEYOR</u>		Proj. & Leg <u>TCE(2)</u>		Event#	Vessel Sta. I.D.		Instructions							Sta. Designation <u>P73</u>					
Consec. Cast #	Latitude	N or S	Longitude	E or W	Date	JD = 278	Time	GMT	Dry	Wet	Bar.	Si	Wind	Wind	Cloud	Type	Bottom Depth, m	Sta. Name or I.D			
	Deg.	Min.	Deg.		Day	Mo. Yr.	Hr.	Min.	Bulb	Bulb	mb	vi	Dir.	Sp.	Cloud	Weath.					
078	70	20	87N	164	11	09W	040	OCT 88	05	50	-80	-82	12	28	040	10872	41	P73			
Monitor Checks																					
on Deck						at Surface						Times		JD/Time		Data Location					
												Data on	238	054737			Tape/Diskette I.D.		File Name/Header		
												at Surface	0544	(0547)	SEP88		04 OCT 0516				
												Start Down	054825								
												at Bottom	055009								
												Start Up	055113								
												at Surface	0553								
												Data off	055010								
Remarks STARTED LOGGING DATA AFTER CBIRD PRESS SENSOR HAD UNFROZEN IN THE CH <sub>2</sub> O + CBIRD BROUGHT BACK NEAR THE CSURFACE NUTS																					
Pos.	Bot.	T	Trip	Time @		Monitor Values				DEPTH Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Other	Samp.	P
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #				
1		36		055039	34579.465	6376.211	8538.652		36.213	2.803		31.555			32.196	101	514	1	-0.641		
2		5		055248	34485.344	5865.738	8789.988		4.505	-0.933		37.886	17	.				515	2	3	
3																			4		
4																			5		
5																			6		
6																			7		
7																			8		
8																			9		
9																			10		
10																			11		
11																			12		
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Consec. Cast # 079		Vessel SURVEYOR		Proj. & Leg ICE(2)		Event #	Vessel Sta. I.D.		Instructions							Sta. Designation P74			
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 278	Time GMT Hr.	Dry Bulb Min.	Wet Bulb	Bar. mb	S. vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D		
	079	7021	07N	16428	72W	040CT88	0708-55	-69	122805010872							43	P74		
CTD Type & SN SBD 91220B				Monitor Checks on Deck at Surface				Times JD/Time		Data Location 38									
Press. SN 26032				Press. 34470.965 [0.13]		34477.043 [1.903]		Data on 278 / 070626		Tape/Diskette I.D.	File Name/Header								
Temp. SN 710				Temp. 5330.254 [-5.356]		6033.922 [0.325]		at Surface 0704		SEP88	04 OCT 0642								
Cond. SN 304				Cond. 3073.527		8333.055		Start Down 070712											
				Other [0.000]		[32.076]		at Bottom 070843											
								Start Up 070930											
								at Surface 0711											
								Data off 070844											
Remarks SAME PROC AS STA. P74																			
Pos.	Bot.	T	Trip	Time @		Monitor Values				DEPTH Conv. Mon. Values-CTD				Sample Bot.Data			Sal.	Other	No.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #	Other Samp.	No.
1				38	070909	34585.172	6405.328	8505.098		38.177	-3.010		31.088			32.141	79	516	1
2				5	071105	34486.516	6034.570	8403.633		4.730	-0.323		32.950				517		2
3																		3	
4																		4	
5																		5	
6																		6	
7																		7	
8																		8	
9																		9	
10																		10	
11																		11	
12																		12	

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80-85; Entered in app. Pg. 80 of \_\_\_\_\_

Consec.Cast # 080		Vessel SURVEYOR		Proj. & Leg ICE(2)		Event#	Vessel Sta. I.D.		Instructions order in program (Program uses file thus in appseq order)		Sta. Designation P75									
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 278	Time Hr.	GMT Min.	Dry Bulb	Wet Bulb	Bar. mb	S vi	Wind Dir.	Wind Sp.	Cloud Type	W eath.	Bottom Depth, m	Sta. Name or I.D		
080	70 21.19N		164 50.03W	040	OCT 88	08 14 - 57 - 63 1	22	0801010571	0444		12.1	S						P75		
CTD Type & SN SBD 912203		Monitor Checks on Deck Co at Surface Press. 34470.887 [-0.63] . 34475.941 [1.635] . Temp. 710 Cond. 304						Times JD/Time Data on 278 0804 at Surface 0812 Start Down 0813 at Bottom 0814:30 Start Up 0815:30 at Surface 0818 Data off 0819:44		Data Location Tape/Diskette I.D. SEP88 File Name/Header 04oct0759										
								Remarks CTD. cell froze when it was raised out. Pressure cell froze had to thaw at ~3m deep for a couple of minutes Nut.												
#	Bot.	T	Trip	Time @		Monitor Values				Depth Conv. Mon. Values-CTD				Sample Bot.Data				Sal.	Other Bot. #	P.S.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #			
1				0814	0814	34586.161.8497.309.6383.930.		38.602.	2.859.		31.173.			31.960	022	518	1			
2					0817	34487.910.8370.563.6014.973.		5.502	1.649.		31.087.					519	2			
3																	3			
4																	4			
5																	5			
6																	6			
7																	7			
8																	8			
9																	9			
10																	10			
11																	11			
12																	12			

Initials Salo

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Consec. Cast #		Vessel		Proj. & Leg		Event #	Vessel Sta. I.D.		Instructions						Sta. Designation					
081	SURVEYOR			ICE (2)						2202 #6					PZ6					
Consec. Cast #	Latitude N or S	Deg.	Longitude E or W	Deg.	Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	Si vis	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D		
081	70 21.00 N		165 10 95 W		040	OCT	88	09 32	- 5	7 - 6	8 1	2 28	010	10871	1	45	PZ6			
CTD Type & SN SBD 912203									Monitor Checks			Times JD/Time			Data Location					
									on Deck	at Surface	Data on	278   0935	Tape/Diskette I.D.	File Name/Header						
									Press. SN 26072	Press. OOPS	at Surface	0923	SEP888	04 Oct 0920						
									Temp. SN 710	34476.418 [1.883]	Start Down	0930								
									Cond. SN 304	Temp. 6031.945 [0.595]	at Bottom	0932								
									Cond. 8153.777 [30.132]	Start Up	0932.40									
									Other	at Surface	0935	Remarks Cond. cell break before 3 started the data file								
										Data off	0932.12									
Pos.	Bot.	T	Trip	Time @	Monitor Values				Conv. Mon. Values-CTD			Sample Bot. Data				Sal.	Other Samp.	Pos.		
	Bot.	Rack	Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #	Samp.		
1				0932	34586.297-8498.961-6380.148.					38.6666	2.838	.	31.392			32.003	102	520	1	
2				0934	34483.707-8438.977-6076.875					4.199	0.634	.	32.727				521		2	
3																			3	
4																			4	
5																			5	
6																			6	
7																			7	
8																			8	
9																			9	
10																			10	
11																			11	
12																			12	

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Consec. Cast #		Vessel		Proj. & Leg		Event #	Vessel Sta. I.D.		Instructions							Sta. Designation	
Consec. Cast #		Latitude	N or S	Longitude	E or W	Date JD = 278	Time GMT	Dry Bulb	Wet Bulb	Bar. mb	Si	Vis	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D
Deg.	Min.	Deg.	Deg.	Deg.	Day	Mo. Yr.	Hr. Min.	Bulb	Bulb	mb	si	Vis	Dir.	Sp.	Type	Weath.	
082	70 21.0	N	165 34.0	W	04 OCT 88	1055	-45 -52	1	11280	1008872					45	RZ7	
CTD Type & SN		SBD 912203		Monitor Checks						Times	JD/Time	Data Location					
Press. SN		26072		on Deck			at Surface			Data on	278 1050	Tape/Diskette I.D.	File Name/Header				
Temp. SN		710		Press. 34471,074 [-0.30]			34479,664 [2.720]			at Surface	1052	SEP88	04 OCT 1044				
Cond. SN		304		Temp. 5175,066 [-6.483]			6234,547 [1.766]			Start Down	1053:30						
				Cond. 3073,652 [0.00]			8427,988 [31.595]			at Bottom	1055:40						
				Other						Start Up	1056						
										at Surface	1058:30						
										Data off	1055:44						
Remarks CTD. Cell freezing. Something odd w/ depth calc. or deck, ~ every 7th Wine L 30° aft?																	

  

Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data			Sal.	Other Samp.	Pos.
				Bot.	Rack	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P			
1				1056	34587,902	6481,750	8683,781		39.225	3.551		32.163		32.163	055	522	1		
2				1058	34489,066	6209,491	8316,125		5.940	1.586		30.621				523	2		
3																	3		
4																	4		
5																	5		
6																	6		
7																	7		
8																	8		
9																	9		
10																	10		
11																	11		
12																	12		

Initials Salo

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Consec. Cast # 083	Vessel SURVEYOR	Proj. & Leg TOE(2)	Event #	Vessel Sta. I.D.	Instructions R202 #8	Sta. Designation P78														
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 278	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S. S. Vis.	V. Vis.	Wind Dir.	Wind Sp.	Cloud Type	Wearth.	Bottom Depth, m	Sta. Name or I.D		
083	70 21.14 N		165 57.69 W		04 Oct 88	1208	-45 -50	1	1	1	28	0300	08872	45	P78					
CTD Type & SN SBD 912203				Monitor Checks on Deck at Surface				Times JD/Time		Data Location										
Press. SN 26072				Press. 34470.629 [-051]. 34478.234 [2.507].				Data on 278 1153		Tape/Diskette I.D.	File Name/Header									
Temp. SN 710				Temp. 5497.094 [-4.312]. 6430.215 [3.187].				at Surface 1204		SEP88	04 Oct 1147									
Cond. SN 304				Cond. 3126.875 [0.149]. 8519.308 [31.008].				Start Down 1206												
				Other				at Bottom 1208												
								Start Up 1208:50												
								at Surface 12												
								Data off 1208:05												
								Remarks: didn't ask them to engine the CTD; it was obvious it would just freeze up. Large pressure offset (-.07) - started too early.												
Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Other	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #	Samp.		
1				✓	1208	34587.988	6537.637	8721.598		39.338	3.942		32.135			32.129	066	524	1	
2				✓	1212	34489.684	6428.684	8518.453		6.290	3.177		31.008					525	2	
3																		3		
4																		4		
5																		5		
6																		6		
7																		7		
8																		8		
9																		9		
10																		10		
11																		11		
12																		12		

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Rosette was  
Frozen - more  
delays

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Consec. Cast # 084	Vessel <u>Surveyor</u>	Proj. & Leg <u>Ice(2)</u>	Event #	Vessel Sta. I.D.	Instructions <u>R202#9</u>	Sta. Designation <u>PZ9</u>											
Consec. Cast #	Latitude Deg. Min.	N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 278	Time Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	Vis vis	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D	
	84 70 21 05 N		166 17 96 W		04 Oct 88	13 30	-31	-401	02805008	872				46	PZ9		
CTD Type & SN 5bd 912203				Monitor Checks on Deck at Surface				Times	JD/Time	Data Location							
Press. SN 26072				Press. 34471, 348 [-0.020], 34479, 707 [2.696],	Data on 278 1323:45	Tape/Diskette I.D. File Name/Header											
Temp. SN 710				Temp. 5675, 449 [-2491], 6372, 121 [2.774],	at Surface 1327	Sep 88 04 Oct 1321											
Cond. SN 304				Cond. 3075, 100 [0.000], 8502, 438 [31.220],	Start Down 1328												
				Other	at Bottom 1330												
					Start Up 1332												
					at Surface 1334												
					Data off 1335:47												
					Remarks Can sensor frozen wire A 15° aft												

Pos. #	Bot.	T Rack	Trip Depth	Time @ Depth	Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data				Sal. Bot. #	Other Samp.	Pos. #
					Depth	Trip	Press.	Temp.	Cond.	Other	Press.→	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.		
1				1331	34593, 047, 6522, 031, 8708, 574					40,893	3,830		32,121			32,110	019	526	1
2				1333	34488, 023, 6373, 535, 8491, 023,					5,519	2,776		31,133					527	2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials Salo  
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Consec. Cast # 85		Vessel Surveyor		Proj. & Leg See (2)			Event #	Vessel Sta. I.D.		Instructions R202 # 10							Sta. Designation PZ10					
Consec. Cast #	Latitude Deg.		N or S	Longitude Deg.		E or W	Date Day Mo. Yr.	JD = 278	Time Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	Vis. Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D			
	85	70	21	07	N	166	39	99	W	04	Oct	20	14	43	-	20	-	30	102	02011877	46	PZ10
CTD Type & SN <u>3bd 912203</u>				Monitor Checks on Deck at Surface								Times	JD/Time	Data Location								
Press. SN <u>26072</u>				Press. <u>34476.793 [-0.017]</u> , <u>34480.668 [2.840]</u> .								Data on	<u>278 / 1438</u>	Tape/Diskette I.D.	File Name/Header							
Temp. SN <u>710</u>				Temp. <u>5590.707 [-3.083]</u> , <u>6327.184 [2.455]</u> .								at Surface	<u>1440.50</u>	<u>Sep88</u>	<u>04 Oct 1437</u>							
Cond. SN <u>304</u>				Cond. <u>3083.762 [0.021]</u> , <u>8465.777 [31.200]</u> .								Start Down	<u>1441.30</u>									
				Other _____								at Bottom	<u>1443</u>									
												Start Up	<u>1443.40</u>									
												at Surface	<u>1446</u>									
												Data off	<u>1443</u>									
												Remarks										
Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data			Sal.	Other Samp.	Pos.			
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.						
1				✓	1443	34593.859	6319.230	8520.359		40.956	2.396		32.344			32.327	069	528	1			
2				✓	1446	34487.852	6324.809	8452.539		5.247	2.440		31.109					529	2			
3																			3			
4																			4			
5																			5			
6																			6			
7																			7			
8																			8			
9																			9			
10																			10			
11																			11			
12																			12			

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Consec.Cast # <u>86</u>		Vessel <u>Surveyor</u>		Proj. & Leg <u>J01 (2)</u>			Event #	Vessel Sta. I.D.		Instructions <u>R202#11</u>						Sta. Designation <u>PZ11/PY1</u>	
Consec. Cast #	Latitude <u>N</u> Deg. Min. N or S		Longitude <u>E</u> Deg. Deg.		Date <u>JD = 278</u> Day Mo. Yr.	Time <u>GMT</u> Hr. Min.	Dry <u>Bulb</u>	Wet <u>Bulb</u>	Bar. <u>mb</u>	<u>S</u>	<u>S</u>	Wind <u>Dir.</u>	Wind <u>Sp.</u>	Cloud <u>Type</u>	Bottom <u>Weath.</u>	Depth, m	Sta. Name or I.D.
	86 70 20.68 N		167 02 73 W		04 Oct 88	1606 - 28 - 40	10 28 01 51 48 77 00 50										45m
CTD Type & SN <u>5hd 912203</u>		✓ Monitor Checks on Deck at Surface						Times JD/Time		Data Location							
Press. SN <u>26072</u>		Press. <u>34471.438 [-0.062]</u> · <u>34479.668 [2.607]</u>						Data on <u>278 / 1557</u>		Tape/Diskette I.D. <u>5ep88</u>	File Name/Header <u>04Sep 1553</u>						
Temp. SN <u>710</u>		Temp. <u>5528.824 [-2.907]</u> · <u>5990.980 [0.030]</u>						at Surface <u>1603:40</u>									
Cond. SN <u>304</u>		Cond. <u>3074.418 [0.000]</u> · <u>8160.797 [30.745]</u>						Start Down <u>1604:40</u>									
		Other						at Bottom <u>1606:06</u>									
								Start Up <u>1607</u>									
								at Surface <u>1610</u>									
								Data off <u>1606:28</u>									

Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD			Sample Bot.Data			Sal.	Other Samp.	Pos.	
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.			
1				✓	1606	34606000	6166156	8478.156		45.124	1.289		32.490			32.483	58	530	1
2				✓	1608	34529758	6079.410	8242.324		19.615	0.656		30.875 (in gradient)						2
3				✓	1609	34486.883	5987.227	8155.871		5.272	-0.025		30.732					531	3
4																		4	
5																		5	
6																		6	
7																		7	
8																		8	
9																		9	
10																		10	
11																		11	
12																		12	

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Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation						
87	Surveyor	Ice (2)		R002#12									PY2						
Consec. Cast #	Latitude Deg.	Longitude Deg.	Date or Day	JD = 278	Time Hr.	Dry Bulb	Wet Bulb	Bar. mb	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D					
	87 70 27.27 N	166 47.38 W	04 Oct	88 18 22 - 42 - 55 1	0 28 00 02 28 72 00 48														
CTD Type & SN 5bd 912203 Press. SN 26072 Temp. SN 710 Cond. SN 304				Monitor Checks on Deck ✓ at Surface ✓				Times JD/Time Data on 278 / 1814 at Surface 1818:43 Start Down 1819:30 at Bottom 1823 Start Up 1823 at Surface 1825 Data off 1828:42				Data Location Tape/Diskette I.D. 5ep88 File Name/Header 04Oct1808							
												Remarks Cond. cell frozen, had to thaw it. pressure at surface.							
Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot.Data			Sal.	Other Samp.	Pos.
				Bot. Depth	Trip Depth	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.			
1				1823	34595.973.6396.953.8634.152.			41.891. 2.949.		32.295.			32.291	46	532	1			
2				1824	34484.946.6328.148.8461.918.			4.287. 2.470.		31.174.					533	2			
3																3			
4																4			
5																5			
6																6			
7																7			
8																8			
9																9			
10																10			
11																11			
12																12			

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Consec. Cast # 088		Vessel <b>SURVEYOR</b>		Proj. & Leg <b>IC.E (2)</b>		Event #	Vessel Sta. I.D.		Instructions <b>RADA *13</b>								Sta. Designation <b>PY3</b>			
Consec. Cast #	Latitude	N or S	Longitude	E or W	Date	JD = 278	Time	GMT	Dry	Wet	Bar.	Wind	Wind	Cloud	Type	Bottom	Sta. Name or I.D			
	Deg. Min.	Deg.	Deg.		Day Mo. Yr.	Hr. Min.	Bulb	Bulb	mb	Dir.	Sp.	Dir.	Sp.	Cloud	Depth, m					
088	70 32 21 N		166 29 60 W		04 OCT 88	19 58 - 46 - 53 10	38	00522871								46	PY3			
CTD Type & SN <u>SBD 912203</u>				Monitor Checks				Times	JD/Time		Data Location <sup>41</sup>									
				on Deck	at Surface	Data on	278 / 195659			Tape/Diskette I.D.	File Name/Header									
				Press. SN <u>216072</u>	at Surface	at Surface	195141			<u>SEP88</u>	<u>04 OCT 1988</u>									
				Temp. SN <u>710</u>	Start Down	195649														
				Cond. SN <u>304</u>	at Bottom	195848														
				Cond. 3075.320	Start Up	1959														
				Other <u>[0.000]</u>	at Surface	Data off	195849			Remarks	<u>8986</u>									
Pos.	Bot.	T	Trip	Time @	Monitor Values				Depth	Conv.	Mon.	Values-CTD	Sample Bot. Data			Sal.	Other	Pos.		
	Rack		Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #	Samp.	Pos.	
1				407	195902	34592.328	6498.641	8678.895	0	40.828	3.669	.	32.004				31.999	087	534	1
2																			2	
3				2	200210	34477.461	6381.332	8492.879	.	2.140	2.839	.	31.099						535	3
4																			4	
5																			5	
6																			6	
7																			7	
8																			8	
9																			9	
10																			10	
11																			11	
12																			12	

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Consec. Cast # 089	Vessel Surveyor	Proj. & Leg Se (2)	Event #	Vessel Sta. I.D.	Instructions R202#14	Sta. Designation PYY															
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 278	Time Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S. vis	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D					
	0 8 9 7 0 3 6 4 5 N		1 6 6 2 1 3 4 W		0 4 0 C T 8 8	2 2 4 3 - 1 5 - 3 1 1	0 3 8 0 4 0 1 4 8 7 1								4 2	P YY					
CTD Type & SN 5bd 91220B		Monitor Checks on Deck at Surface				Times	JD/Time	Data Location 33													
Press. SN	26072	Press. 34436.233 [1.933] →				Data on 278 / 224033		Tape/Diskette I.D. Sep 88													
Temp. SN	710	Temp. 6336.012 [2.517] →				at Surface	223929	File Name/Header 04 OCT 2231													
Cond. SN	304	Cond. 8454.746 →				Start Down	224146														
						at Bottom	224308														
						Start Up	224428														
		Other [31.056] →				at Surface	Data off 224309	Remarks 9.023													
Pos	Bot.	T	Trip	Time @	Monitor Values				Depth	Conv.	Mon.	Values-CTD	Sample Bot. Data			Sal.	Other	Pos			
	Bot.	Rack	Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #	Other Samp.	Pos		
1				2243342	34582.930 6494.188	8691.043				37.708	3.638		32.156				32.135	081	536	1	
2																				2	
3				224604	34485.789 6340.141	8457.781				5.025	2.546		31.055							537	3
4																					4
5																					5
6																					6
7																					7
8																					8
9																					9
10																					10
11																					11
12																					12

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Consec. Cast # 090		Vessel <b>SURVEYOR</b>	Proj. & Leg <b>ICE (a)</b>		Event #	Vessel Sta. I.D.		Instructions <b>RADA #15</b>						Sta. Designation <b>P45</b>			
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 279	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	5 <sup>s</sup> 6 <sup>s</sup>	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D
090	70 37 15 N		166 12 82 W		05 OCT 88	0020 - 55 - 60	10 07 020	12 872								41	P45
CTD Type & SN SBD 91220B		Monitor Checks on Deck at Surface				Times	JD/Time	Data Location 36									
Press. SN 26072		Press. 34471.109 [0.007] · 34480.164 [3.049]				Data on 239	001528	Tape/Diskette I.D. SET88						File Name/Header 04 OCT 2359			
Temp. SN 710		Temp. 60587.38 [0.134] · 5792.348 [-1.500]				at Surface	001420										
Cond. SN 304		Cond. 3033.570 3810.004				Start Down	001640										
		Other [0.000] · [28.854]				at Bottom	002015										
						Start Up	002101										
						at Surface	002609										
						Data off	002017										
Remarks 8.886 PLANKTON SAMPLE STATION																	

Pos.	Bot.	T	Trip	Time @		Monitor Values				Depth Conv. Mon. Values-CTD				Sample Bot. Data			Sal.	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #		
1				002039		34579.4846352.2388574.523				36.365	2.634		32.050			31.971	101	538	1
2				002309		345239306188488	8257.387			17.696	1.449		30.234						2
3				002508		34485.0865788.332	7806410			4.631	-1.530		28.849					539	3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

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Consec. Cast # 091		Vessel <b>SURVEYOR</b>		Proj. & Leg <b>ICE (2)</b>		Event #	Vessel Sta. I.D.		Instructions								Sta. Designation <b>PX1</b>				
Consec. Cast #	Latitude Deg.		N or S	Longitude Deg.		E or W	Date Day Mo. Yr.	JD = 279	Time Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	S.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D		
091	70	35.07	N	166	21	34	W	050CT88	03 39 - 22 - 40	10	0731506771							44	PX1		
CTD Type & SN SBD 91220B				Monitor Checks on Deck at Surface					Times	JD/Time		Data Location				39					
Press. SN	26072			Press. 34472.336	[0.016]	34473.223	[1.611]	Data on	033615		Tape/Diskette I.D.	File Name/Header									
Temp. SN	710			Temp. 5820.555	[-1.380]	6381.563	[2.891]	at Surface	033555		SEP88	050CT0324									
Cond. SN	304			Cond. 3075.191	8499.984	Start Down	033709														
				Other [0.000]	[31.134]	at Bottom	033906		Start Up	034015											
						at Surface	0355		at Surface	033915		Remarks	9.037								
						Data off															
Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.					
1				033739	34589.813	6491.820	8691.184		39.434	3.622		32.165			32.142	79	540	1			
2				✓														2			
3				034206	34487.164	6384.566	8490.492		4.923	2.864		31.052						541	3		
4																		4			
5																		5			
6																		6			
7																		7			
8																		8			
9																		9			
10																		10			
11																		11			
12																		12			

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Consec. Cast # 092	Vessel <b>SURVEYOR</b>	Proj. & Leg <b>ICE (2)</b>	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation <b>PX2</b>							
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 279	Time Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S. S. S.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D				
092	70 35 29 N		166 43 85 W		05 OCT 88	05 07 - 32 - 15 10	1804008762								49	PX2				
<b>CTD</b> Type & SN <b>580 912203</b> Press. SN <b>26072</b> Temp. SN <b>710</b> Cond. SN <b>304</b>  Monitor Checks on Deck at Surface Press. <b>34431.538 [0.005]</b> · <b>34478.496 [2.353]</b> Temp. <b>32883.30 [8.516]</b> · <b>6319.633 [2.396]</b> Cond. <b>30354.38</b> · <b>8447.496</b> Other <b>[0.000]</b> · <b>[31.102]</b>																<b>Times</b> Data on <b>279 / 050324</b> at Surface <b>050444</b> Start Down <b>050623</b> at Bottom <b>050755</b> Start Up <b>050910</b> at Surface <b>0512</b> Data off <b>050806</b>		<b>Data Location</b> Tape/Diskette I.D. <b>SEP88</b> File Name/Header <b>05OCT0454</b>  Remarks <b>8.899</b>		
Pos.	Bot.	T	Trip	Time @		Monitor Values				DEPTH Conv. Mon. Values-CTD				Sample Bot. Data			Sal.	Other Samp.	Pos.	
	Rack		Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #			
1					050830	34605.930	6488.242	8681.031		45.081	3.595		32.094				32.089	22	542	1
2																			2	
3					051100	34486.242	6320.461	8449.063		4.885	2.410		31.110						543	3
4																			4	
5																			5	
6																			6	
7																			7	
8																			8	
9																			9	
10																			10	
11																			11	
12																			12	

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Consec.Cast #		Vessel		Proj. & Leg		Event#	Vessel Sta. I.D.		Instructions								Sta. Designation			
093		SURVEYOR		ICE (2)																
Consec. Cast #		Latitude	N or S	Longitude	E or W	Date	JD = 279	Time	GMT	Dry	Wet	Bar.	Si	Vis	Wind	Wind	Cloud	Type	Bottom Depth, m	Sta. Name or I.D
		Deg.	Min.	Deg.		Day	Mo. Yr.	Hr.	Min.	Bulb	Bulb	mb	si	si	Dir.	Sp.	Cloud	Type	Weath.	
093		70 35.93 N		167 05.22 W		050	OCT 88	06 21	- 32 - 42	1018	33005762	54								RX3
CTD Type & SN SBD 912203		Monitor Checks				Times		JD/Time		Data Location <sup>49</sup>										
Press. SN 26072		on Deck at Surface				Data on 279				Tape/Diskette I.D.				File Name/Header						
Temp. SN 710		Press. 34431.043 [0.029] · 34476.750 [1.939]				at Surface		061815		SEP88				05OCT010						
Cond. SN 304		Temp. 5454.086 [-4.049] · 6010.418 [0.140]				Start Down		061922												
		Cond. 3073.605 8183.510				at Bottom		062100												
		Other [0.000] · [30.829]				Start Up		062150												
						at Surface		062421		Remarks										
						Data off		062105												
Pos	Bot.	T Rack	Trip Depth	Time @		Monitor Values				DEPTH Conv. Mon. Values-CTD				Sample Bot.Data				Sal. Bot. #	Other Samp.	Pos
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.				
1				062127	34618.020	6153.473	84416.680		49.380	1.197		32.277			32.267	102	544	1		
2				062344	34486.488	6008.703	8180.570		5.175	0.140		30.815					545	2		
3																		3		
4																		4		
5																		5		
6																		6		
7																		7		
8																		8		
9																		9		
10																		10		
11																		11		
12																		12		

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Consec. Cast # 094	Vessel <b>SURVEYOR</b>	Proj. & Leg <b>ICE (2)</b>	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation <b>PX4</b>							
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 279	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S. S.	V. is.	Wind Dir.	Wind Sp.	Cloud Type	W eath.	Bottom Depth, m	Sta. Name or I.D		
094	70 34.73 N		167 30.15 W		05 OCT 88	07 52 - 35 - 42	11 18 33 50 67 62	0055												
CTD Type & SN SBD 912203					Monitor Checks ✓ on Deck [ -0.98 ]. at Surface				Times ID/Time				Data Location							
Press. SN 26032					Press. 34470.555 [-0.098]. 34470.660 [-0.07]. 34477.336 [2.183].				Data on 279 0747				Tape/Diskette I.D. File Name/Header							
Temp. SN 710					549.830 [-4.168]. Temp. 6029.176 [2.286]. 3073.598 [9.008].				at Surface 0749:30				SEP88 05 OCT 0733							
Cond. SN 304					Cond. 3073.664 [0.000]. Other				Start Down 0750:30											
									at Bottom 0752:50											
									Start Up 0753											
									at Surface 0755											
									Data off 0753:05				Remarks 9.034 Pressure down to -0.09 before cast WURL 410' oft							
Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Other	Pos.
				Bot. Rack	Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw			
1				✓✓	0753	34619.668	5943.710	8298.590		49.973	-0.355		32.446			32.433	055	546	1	
2				✓	0755	34482.863	5985.703	8126.934		4.002	-0.063		30.463					547	2	
3																		3		
4																		4		
5																		5		
6																		6		
7																		7		
8																		8		
9																		9		
10																		10		
11																		11		
12																		12		

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Consec. Cast # 095	Vessel <b>SURVEYOR</b>	Proj. & Leg <b>ICE (2)</b>	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation <b>PX5</b>					
Consec. Cast #	Latitude N or S	Longitude E or W	Date JD = 279	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	Si. vis.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Weath.	Bottom Depth, m	Sta. Name or I.D				
095	70 35 39 N	167 52 50 W	05 Oct 88	09 15 - 30 - 48	11 18	34 00 67 61	06 48											
CTD Type & SNSBD 91220B Press. SN 26072 Temp. SN 710 Cond. SN 304				Monitor Checks ✓ ✓ PreB ✓ on Deck at Surface Press. 34470.629 [-0.02] 34477.668 [2.335] Temp. 5687.086 [-2.379] 5911.109 [-0.603] Cond. 3073.762 [0.002] 2032.117 [30.074]				Times JD/Time Data on 279 / 0910:55 at Surface 0913 Start Down 0913:30 at Bottom 0915 Start Up 0916:30 at Surface 0918 Data off 0915:54		Data Location Tape/Diskette I.D. SEP88 File Name/Header 05 Oct 0903 Remarks 8.970 Water 20° aft								
Pos.	Bot.	T Rack	Trip Depth	Time @		Monitor Values				DEPTH Conv. Mon. Values-CTD			Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw			
1				✓	0916	34599.020 5883.785	8260.438	43.116	-0.807	32.551			32.541	60	548	1		
2				✓	0918	34484.660 5924.043	8040.906	41.675	-0.502	30.093					549	2		
3																3		
4																4		
5																5		
6																6		
7																7		
8																8		
9																9		
10																10		
11																11		
12																12		

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Consec. Cast # 096		Vessel <u>SURVEYOR</u>		Proj. & Leg <u>TCE (2)</u>		Event #	Vessel Sta. I.D.		Instructions							Sta. Designation <u>PX6/PWI</u>				
Consec. Cast #	Latitude Deg. Min.		N or S	Longitude Deg.		E or W	Date Day Mo. Yr.	JD = 279	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	<u>Si</u> <u>Si</u>	<u>Vis</u>	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D	
096	70	35	10N	168	13	95	W	05 OCT 88	10 27 - 31	- 47	1	21	8	335	0676	10045	PX6			
CTD Type & SNSBD 91220B				Monitor Checks ✓ on Deck ✓ at Surface					Times	ID/Time	Data Location									
Press. SN 26072				Press. 34470.641 [-0.013] · 34478.785 [2.941] ·					Data on 279	1024	Tape/Diskette I.D. SEP88									
Temp. SN 310				Temp. 5804.359 [-1.601] · 5871.617 [-0.907] ·					at Surface	1025:39	File Name/Header 05 Oct 1018									
Cond. SN				Cond. 3074.449 [0.000] · 7992.148 [29.923] ·					Start Down	1026										
				Other					at Bottom	1027										
									Start Up	1029										
									at Surface	1030										
									Data off	1027:58	Remarks 8,967 Wind 10-15° off									
S.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot.Data				Sal.	Other Samp.	P.S.
				Bot.	Rack	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw			
1				✓	1028	34591.813	6171.164	8476.145	40.656	1.330		32.432			32.395	019	550	1		
2				✓	1030	34485.207	5872.809	7966.441	4.819	-0.891		29.757					551	2		
3																		3		
4																		4		
5																		5		
6																		6		
7																		7		
8																		8		
9																		9		
10																		10		
11																		11		
12																		12		

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Consec. Cast #		Vessel		Proj. & Leg		Event #	Vessel Sta. I.D.		Instructions							Sta. Designation	
097	SURVEYOR			ICE (2)												PW2	
Consec. Cast #	Latitude	N or S	Longitude	E or W	Date	JD = 279	Time	GMT	Dry Bulb	Wet Bulb	Bar. mb	Si vis.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D
	Deg.	Min.	Deg.		Day	Mo. Yr.	Hr.	Min.									42
097	70 40.61	N	167 59.67	W	050	OCT 88	1158	-40	-50	0121	8345	0266	10047	PW2			
CTD Type & SN		SBD 91220B	Monitor Checks						Times	JD/Time	Data Location						
Press. SN	26072		on Deck	at Surface	Data on	279 / 1153	Tape/Diskette I.D.	File Name/Header									
Temp. SN	710		Press. 34470.965 [-0.050]	34476.918 [1.918]	at Surface	1155	SEPT88	05 Oct 1144									
Cond. SN	304		Temp. 5858.688 [-0.449]	6016.211 [0.120]	Start Down	1156											
			Cond. 3073.949 [0.000]	8258.838 [31.376]	at Bottom	1158											
					Start Up	1159											
					at Surface	1202											
					Data off	1158.22											
					Remarks	9.019 T as high as 16° Wise Ano°											

Pos.	Bot.	T Rack	Trip Depth	Time @		Monitor Values				DEPTH Conv. Mon. Values-CTD				Sample Bot. Data				Sal. Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.				
1				✓	1158	34596.418	5896.086	8271.46%		42.061	-0.713		32.562			32.556	069	552	1	
2				✓	1201	34487.715	6034.758	8225.82%		5.527	0.334		31.058					553	2	
3																			3	
4																			4	
5																			5	
6																			6	
7																			7	
8																			8	
9																			9	
10																			10	
11																			11	
12																			12	

Initials UAB  
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Consec. Cast #	98	Vessel	Surveyor		Proj. & Leg	See (2)		Event #	Vessel Sta. I.D.	Instructions								Sta. Designation	PW3
Consec. Cast #	Latitude		N or S	Longitude	E or W	Date	JD = 279	Time	GMT	Dry	Wet	Bar.	Visi	Wind	Wind	Cloud	Type	Bottom	Sta. Name
	Deg.	Min.	Deg.	Deg.	Day	Mo.	Yr.	Hr.	Min.	Bulb	Bulb	mb	visi	Dir.	Sp.	Cloud	Type	Depth, m	or I.D
	98	7046.04N		16742.89W	050	OCT	88	13	21	-40	-5°01'21.8	+0056	0056						
CTD					Monitor Checks		Times		JD/Time		Data Location								
Type & SN	5bd 912203		✓ on Deck		at Surface		Data on 279 / 1318		at Surface		Tape/Diskette I.D. File Name/Header								
Press. SN	26072								1314 / 1318		50p88 05 Oct 1306								
Temp. SN	710		Press. 34471.703 (-031) · 34477.496 (1.869)						Start Down										
Cond. SN	304		Temp. 6135.512 (1.580) · 6103.734 (0.825)						at Bottom		1321								
			Cond. 3079.129 (0.000) · 8292.051 (31.192)						Start Up		1322								
			Other						at Surface		13								
									Data off		1321:20								
Remarks 9.024. Brought CTD out of water; wind 10 A few germs, we still had way on.																			

S	Bot.	T	Trip	Depth	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot.Data				Sal.	Bot. #	Other Samp.	S
					Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.					
1					✓	1321	34623.223	5966.203	8321.055		50.830	-0.187		32490	.			32.482	058	554	1	
2					✓	1324	34490.281	6116.945	8307.191		6.178	0.917		31.224						555	2	
3																					3	
4																					4	
5																					5	
6																					6	
7																					7	
8																					8	
9																					9	
10																					10	
11																					11	
12																					12	

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Consec. Cast # 99		Vessel SURVEYOR		Proj. & Leg			Event #	Vessel Sta. I.D.		Instructions							Sta. Designation PW4		
Consec. Cast #	Latitude N or S		Longitude E or W		Date Day	JD = 279		Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	Si	Vis	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D	
	Deg.	Min.	Deg.		Mo.	Yr.	Min.										48m		
	99	705134N	1673239W		05	Oct	88	1433	-35	-40	12	18	33	00256	10053	PW4			
CTD Type & SN 5bd 912203		Monitor Checks ✓ on Deck at Surface							Times	JD/Time	Data Location								
Press. SN 26072		Press. 34471.306 (-0.079), 34477.363 (1.962)							Data on 279	1435130	Tape/Diskette I.D.	File Name/Header							
Temp. SN 710		Temp. 5957.207 (-0.493), 6075.066 (0.616)							at Surface	1430135	5088	05 Oct 1418							
Cond. SN 304		Cond. 3073.555 (0.000), 3077.781 (31.393)							Start Down	1431									
									at Bottom	1433									
									Start Up	1434									
									at Surface	1438									
									Data off	1433131									
S	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD			Sample Bot.Data				Sal. Bot. #	Other Samp.	P
				Bot. Depth	Trip Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P			
1				✓	1433	34615.914	6179.063	8480.648	4874610	1.384	.	32.415			32.396	046	556	1	
2				✓	1437	34489.438	6080.453	8278.980	5.995	0.654	.	31.226					557	2	
3																	3		
4																	4		
5																	5		
6																	6		
7																	7		
8																	8		
9																	9		
10																	10		
11																	11		
12																	12		

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Consec. Cast # 100	Vessel <u>Surveyor</u>	Proj. & Leg <u>See (2)</u>	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation <u>PW5</u>		
Consec. Cast #	Latitude N or S Deg. Min. S	Longitude E or W Deg. GPS-	Date JD = 279 Day Mo. Yr.	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	<u>Si</u>	<u>Si</u>	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m 47	Sta. Name or I.D PW5	
100	70 56.63 N	167 10 25 W	05 Oct 88	1602 - 20 - 35	1	21 88	00	66	2004	00	66	2004	7	42	
CTD Type & SN <u>5bcd 912203</u> Press. SN <u>26072</u> Temp. SN <u>710</u> Cond. SN <u>304</u>				<u>Monitor Checks</u> ✓ on Deck at Surface Press. <u>34471.547 (-0.001)</u> Temp. <u>5884.793 (-0.653)</u> Cond. <u>3073.676 (0.002)</u> Start Down <u>1601:20</u> at Bottom <u>1602</u> Start Up <u>1603:20</u> at Surface <u>1605</u> Data off <u>1608:52</u>				<u>Times JD/Time</u> Data on <u>279 / 1558</u> at Surface <u>1600</u> Start Down <u>1601:20</u> at Bottom <u>1602</u> Start Up <u>1603:20</u> at Surface <u>1605</u> Data off <u>1608:52</u>				<u>Data Location</u> Tape/Diskette I.D. <u>50088</u> File Name/Header <u>05 Oct 1553</u> Remarks <u>8.948</u>			

Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot.Data			Sal.	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.			
1				✓	1603	34597.867	6357.777	8606.777		42.406	2.671		32.316			32.312	87	558	1
2				✓	1605	34485.742	6069.699	8168.652		4.792	0.584		30.248					559	2
3																		3	
4																		4	
5																		5	
6																		6	
7																		7	
8																		8	
9																		9	
10																		10	
11																		11	
12																		12	

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Consec. Cast # 101		Vessel <u>Surveyor</u>		Proj. & Leg <u>See (2)</u>		Event #	Vessel Sta. I.D.		Instructions								Sta. Designation <u>PW6</u>			
Consec. Cast #	Latitude Deg.		N or S	Longitude Deg.		E or W	Date Day Mo. Yr.	JD = 279	Time Hr.	GMT Min.	Dry Bulb	Wet Bulb	Bar. mb	Vis Vis	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
101	71	01	87 N	166	57	02 W	05	OCT 88	17	13	- 1	8 - 35	1	20828002	772	47	PW6			
CTD Type & SN Shd 9/2203				Monitor Checks ✓ on Deck at Surface						Times JD/Time		Data Location								
										Data on 279 / 1706	at Surface 1710		Tape/Diskette I.D. Sep 88		File Name/Header 05 Oct 1702					
										at Surface	1710									
										Start Down	1711									
										at Bottom	1713									
										Start Up	1714									
										at Surface	1716									
										Data off	1713:14									
										Remarks 9,036 but #s already - .02 just after the 1st 10. 4150 aft										
Pos	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data			Sal.	Other Samp.	Pos	
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.				
1				✓	1713	34599.918	6330.625	8589.598		43.044	2,477		32,340		32.339	100	560	1		
2				✓	1715	34485.848	6118.566	8230.184		4.731	0.935		30,477				561	2		
3																	3			
4																	4			
5																	5			
6																	6			
7																	7			
8																	8			
9																	9			
10																	10			
11																	11			
12																	12			

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Consec.Cast # 102		Vessel Surveyor	Proj. & Leg See (2)			Event#	Vessel Sta. I.D.		Instructions							Sta. Designation PW7					
Consec. Cast #	Latitude Deg.		N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 279		Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	Si. Si.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D		
102	71	06	33	N	166	41	03	W	05 Oct 88	18	46	-	11	-	20	120800000066	20046	PW7			
CTD Type & SN		5bd 912203		Monitor Checks ✓ on Deck at Surface						Times	JD/Time	Data Location									
Press. SN		26072		Press. 34471.703 (-0.017), 34477.000 (1.778)						Data on 279 / 1844		Tape/Diskette I.D.			File Name/Header						
Temp. SN		710		Temp. 5819.512 (-1.700), 6065.293 (0.551)						at Surface	1845.30	Sep 88			05 Oct 1842						
Cond. SN		304		Cond. 3073.938 (0.009), 8252.750 (30.840)						Start Down	1845.50										
				Other						at Bottom	1846+										
										Start Up	1847.50										
										at Surface	1849										
										Data off	1847.16										
S.	Bot.	T	Trip	Time @		Monitor Values					DEPTH Conv. Mon. Values-CTD				Sample Bot.Data			Sal.	Bot. #	Other Samp.	Pos.
				Bot.	Rack	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw				
1				✓	1847	34596.262	6343.242	8591.551		41.783	2.567		32.276			32.269	75	562	1		
2				✓	1849	34487.574	6134.609	8232.918		5.295	1.055		30.386					563	2		
3																			3		
4																			4		
5																			5		
6																			6		
7																			7		
8																			8		
9																			9		
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Consec. Cast # <b>103</b>		Vessel <b>Surveyor</b>	Proj. & Leg <b>Jce (2)</b>			Event #	Vessel Sta. I.D.		Instructions							Sta. Designation <b>PW8A</b>		
Consec. Cast #	Latitude N or S		Longitude E or W		Date JD = 279	Time GMT		Dry Bulb	Wet Bulb	Bar. mb	S. si	V. si	Wind Dir.	Wind Sp.	Cloud Type	Bottom Weath.	Depth, m	Sta. Name or I.D
	Deg.	Min.	Deg.		Day Mo. Yr.	Hr. Min.											✓	
163710955N	1663625W	05 Oct 2029 - 05	-20	120818008662	46	PW8A												
CTD Type & SN <b>5bd 91220B</b>		Monitor Checks				Times		JD/Time		Data Location <b>41</b>								
Press. SN <b>26072</b>		on Deck at Surface				Data on <b>279 / 202616</b>				Tape/Diskette I.D. <b>Sept 08</b>								
Temp. SN <b>710</b>		Press. <b>34471.176 [-0.053]</b> · <b>34473.883 [2.217]</b>				at Surface		<b>202312</b>		File Name/Header <b>05 OCT 2011</b>								
Cond. SN <b>304</b>		Temp. <b>5900.379 [-0.880]</b> · <b>5790.184 [-1.517]</b>				Start Down		<b>202816</b>										
		Cond. <b>3033.875</b> <b>3848.358</b>				at Bottom		<b>202956</b>										
		Other <b>[0.000]</b> <b>[29.241]</b>				Start Up		<b>203050</b>										
						at Surface		<b>20315</b>										
						Data off		<b>203009</b>										
Remarks <b>PLANKTON TOW HELD OPS</b>																		

S.	Bot.	T Rack	Trip Depth	Time @		Monitor Values				DEPTH Conv. Mon. Values-CTD				Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press:	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.			
1				203 1/3024	34594.410	6248.559	8533.066			41.334	1.887		32.407			32.397	078	564	1
2				203 1/3020	34530.977	6246.223	8335.980			20.000	1.867		30.564						2
3				203 1/3353	34485.777	5791.121	7848.820			4.813	-1.509		29.232					565	3
4																		4	
5																		5	
6																		6	
7																		7	
8																		8	
9																		9	
10																		10	
11																		11	
12																		12	

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Consec. Cast # 104		Vessel <b>SURVEYOR</b>		Proj. & Leg <b>ICE (2)</b>		Event #	Vessel Sta. I.D.		Instructions							Sta. Designation <b>PW83</b>			
Consec. Cast #	Latitude	N or S	Longitude	E or W	Date	JD = 279	Time	GMT	Dry Bulb	Wet Bulb	Bar. mb	Si. ss	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Weath.	Depth, m	Sta. Name or I.D
	Deg.	Min.	Deg.		Day	Mo. Yr.	Hr.	Min.											
104	71	1012N	1663483W	050CT	880037	-39	-50	12	1815008762								46	PW83	
CTD Type & SNSBD 91220B		Monitor Checks						Times	JD/Time		Data Location 41								
Press. SN 26032		on Deck at Surface						Data on	279/003023		Tape/Diskette I.D.	File Name/Header							
Temp. SN 710		Press. 34471.324 [-0.067], 34478.668 [2.408].						at Surface	003428		SEP88	06OCT0000							
Cond. SN 304		Start Down 003513						Start Down											
		Temp. 6350.492 [2.551], 5804766 [-1.410].						at Bottom	003758										
		Cond. 3073.789 7859.492						Start Up	003912										
		Other [0.000], [29.239].						at Surface			Remarks								
								Data off	003811										
Pos.	Bot.	T Rack	Trip Depth	Time @		Monitor Values				DEPTH Conv. Mon. Values-CTD				Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.			
1				100383	34593.7546258.988.8539.406.				41.026	1.964.		32.390.			32.365	081	566	1	
2																		2	
3				100412	34485.1485805.430.7859.953.				4.547	-1.395.		29.243.					567	3	
4																		4	
5																		5	
6																		6	
7																		7	
8																		8	
9																		9	
10																		10	
11																		11	
12																		12	

Initials CD  
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Consec. Cast # 105		Vessel <u>SURVEYOR</u>		Proj. & Leg <u>ICE, (2)</u>		Event #	Vessel Sta. I.D.		Instructions								Sta. Designation <u>PVI</u>				
Consec. Cast #	Latitude	N or S	Longitude	E or W	Date	JD = 280	Time	GMT	Dry	Wet	Bar.	Si	Vis	Wind Dir.	Wind Sp.	Cloud	Type	Bottom Weath.	Depth, m	Sta. Name or I.D	
	Deg.	Min.	Deg.		Day	Mo.	Hr.	Min.	Bulb	Bulb	mb										
105	71	10.28 N	166 44.01 W		06 OCT	8801	134	-30	-40	12	18	150	10862					47	PVI		
CTD		71 10.3	Monitor Checks						Times	JD/Time	Data Location								42	PVI	
Type & SN		SBD 91220B	on Deck at Surface						Data on	280 / 012900	Tape/Diskette I.D.	File Name/Header									
Press. SN		26072							at Surface	013050	<u>SEP88</u>	<u>OLOCTO124</u>									
Temp. SN		710							Start Down	013205											
Cond. SN		304							at Bottom	013416											
									Start Up	013523											
									at Surface	013429	Remarks	9.064									
									Data off												
S.	Bot.	T	Trip	Time @		Monitor Values				DEPTH Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Other Samp.	Pos	
				Bot. Depth	Trip Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw				Sal.
1				013450	344597.574	6267.426	8546.609		42.401	2.024		32.397			32.381	101	568	1			
2				✓														2			
3				013806	34485.707	5817.059	7886.535		4.813	-1.310		29.397						569	3		
4																		4			
5																		5			
6																		6			
7																		7			
8																		8			
9																		9			
10																		10			
11																		11			
12																		12			

Initials CD  
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Consec. Cast # 106		Vessel <b>SURVEYOR</b>		Proj. & Leg <b>ICE (a)</b>			Event #	Vessel Sta. I.D.		Instructions								Sta. Designation <b>PV2</b>		
Consec. Cast #	Latitude Deg.		N or S	Longitude Deg.	E or W	Date Day	JD = 280	Time GMT Hr.	Dry Bulb Min.	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D	
106	71	10	91 N	167 05' 87"	W	06	OCT 88 02	45 - 38	- 45	12	18	140	10862	47	PV2					
				Monitor Checks				Times	JD/Time	Data Location 42										
				on Deck		at Surface		Data on	024045	Tape/Diskette I.D. File Name/Header										
				Press. 34431.593 [0.006]		34436.488 [1.622]		at Surface	024247	SEP 88 06 OCT 02 36										
				Temp. 56.82723 [-2.446]		59.22.699 [-0.488]		Start Down	024350											
				Cond. 3033.362		8032.207		at Bottom	024555											
				Other [0.000]		[30.011]		Start Up	024300											
								at Surface	0250	Remarks 8,929										
								Data off	024600											
Pos.	Bot.	T	Trip	Time @		Monitor Values				DEPTH	Conv. Mon. Values-CTD				Sample Bot. Data			Sal.	Other Samp.	Pos.
				Bot.	Rack	Depth	Depth	Trip	Press.		Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.			
1				024649	34597.32	6254781.8536.332			42.171	1.933		32.392				32.386	079	570	1	
2																			2	
3				024939	34486.953	5921.633	8026.695		5.128	-0.515		29.982						571	3	
4																			4	
5																			5	
6																			6	
7																			7	
8																			8	
9																			9	
10																			10	
11																			11	
12																			12	

Initials CD  
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Consec. Cast #		Vessel	Proj. & Leg		Event #	Vessel Sta. I.D.	Instructions								Sta. Designation					
107		SURVEYOR	ICE (2)													PV3				
Consec. Cast #		Latitude N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 280	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	Si	Si	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D			
10771	1006 N	16729 00 W	06	OCT	880358	-25-30	1218	12508862	47	PV3										
CTD		Monitor Checks				Times		JD/Time		Data Location										
Type & SN SBD 912203		on Deck at Surface				Data on 280 / 035436				Tape/Diskette I.D.				File Name/Header						
Press. SN 26032		Press. 34431.801 [0.009]				at Surface 035615				SEP 88				06 OCT 0346						
Temp. SN 310		34436.805 [1.644]				Start Down 035720														
Cond. SN 304		Temp. 6687.055 [4.862] 6072.281 [0.600]				at Bottom 035846														
		Cond. 3073.621 8198.016				Start Up 035930														
		Other [0.000] : [30.510] :				Data off 035856				Remarks 8.927 20° AFT				NUTS						
P. s.	Bot.	T Rack	Trip Depth	Time @		Monitor Values				DEPTH Conv. Mon. Values-CTD				Sample Bot. Data				Sal. Bot. #	Other Samp.	P. s.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.				
1				,035915	34600.129 6160.609 8471.063		43.057	1.249		32.464			32.461	22	572	1				
2				040132	34487.043 6069.547 8213.738		5.090	0.613		30.668					573	2				
3																3				
4																4				
5																5				
6																6				
7																7				
8																8				
9																9				
10																10				
11																11				
12																12				

Initials CD  
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Consec. Cast # 108		Vessel <u>Surveyor</u>	Proj. & Leg <u>Jce (2)</u>			Event #	Vessel Sta. I.D.		Instructions								Sta. Designation <u>PV4</u>							
Consec. Cast #	Latitude Deg. Min. N or S		Longitude Deg.		E or W	Date Day Mo. Yr.	JD = 280	Time Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S. vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D						
	108	71	10	06	N	167	51	48	W	0	60	C	T	88	05	10 - 15 - 28	12	17	34	00	47	62	48	PV4
CTD Type & SN 5bd 912203		Monitor Checks on Deck at Surface						Times	JD/Time		Data Location 43													
Press. SN 26072		Press. 34432.254 [0.045] 34478.598 [0.043]						Data on	280 / 050534	Tape/Diskette I.D. Sep 88														
Temp. SN 710		Temp. 6199.793 [1.385] 6086.887 [0.694]						at Surface	050348	File Name/Header 060CT0453														
Cond. SN 304		Cond. 3073.473 8235.645						Start Down	050856															
		Other [0.000] [30.363]						at Bottom	051032															
								Start Up	051124															
								at Surface	051359															
								Data off	051044															
								Remarks 9.083 20° ANGLE																
Pos.	Bot.	T Rack	Trip Depth	Time @		Monitor Values				DEPTH Conv. Mon. Values-CTD				Sample Bot. Data				Sal. Bot. #	Other Samp.	Pos.				
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.								
1				051103	34601.355	6071.348	8406.059		43.272	0.596		32.512			32.501	102	574	1						
2				051328	34487.785	6094.313	8242.859		5.133	0.721		30.716					575	2						
3																		3						
4																		4						
5																		5						
6																		6						
7																		7						
8																		8						
9																		9						
10																		10						
11																		11						
12																		12						

Initials CD  
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Consec. Cast # 109		Vessel <u>SURVEYOR</u>		Proj. & Leg <u>ICE (2)</u>		Event #	Vessel Sta. I.D.		Instructions								Sta. Designation <u>PW1</u>				
Consec. Cast #	Latitude N or S		Longitude E or W		Date	JD = 280	Time GMT	Dry Bulb	Wet Bulb	Bar. mb	S.	S.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D				
	Deg.	Min.	Deg.		Day	Mo. Yr.	Hr. Min.														
109	7	109	7	8 N	167	52	28 W	06	OCT	88	07	13	-	20	-	26	12	17	13002767	48	PW1
CTD Type & SNSBD 91220B					Monitor Checks					Times	ID/Time		Data Location 43								
					on Deck	at Surface				Data on	280	/030925	Tape/Diskette I.D.	File Name/Header							
					Press. SN	26072					at Surface	031103		<u>SEP88</u>	<u>06OCT0305</u>						
					Temp. SN	710					Start Down	031216									
					Cond. SN	304					at Bottom	031335									
											Start Up	0315									
											at Surface	031803									
											Data off	031345									
											Remarks 8.903 PLANKTON TOWS										
Pos.	Bot.	T	Trip	Time @		Monitor Values				DEPTH Conv. Mon. Values-CTD				Sample Bot. Data				Sal. Bot. #	Other Samp.	Pos.	
				Bot. Rack	Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw				Sal.
1				071433	34599.063	6095.859	8409.066		42.910	0.625		32.507			32.504	55	576	1			
2				071612	34534.629	6134.563	8319.113		21.247	1.062		31.200							2		
3				071730	34486.484	6092.906	8245.930		5.121	0.754		30.818							577	3	
4																			4		
5																			5		
6																			6		
7																			7		
8																			8		
9																			9		
10																			10		
11																			11		
12																			12		

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Consec. Cast #	Vessel	Proj. & Leg	Event #				Vessel Sta. I.D.	Instructions								Sta. Designation			
110	SURVEYOR	ICE (a)														Pu2			
Consec. Cast #	Latitude	N or S	Longitude	E or W	Date	JD = 280	Time	GMT	Dry Bulb	Wet Bulb	Bar. mb	Vis	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D		
	Deg. Min.	Deg.			Day Mo. Yr.		Hr. Min.												
110	71 14	95 N	167 33	97 W	06 Oct 88	08 31	- 28	- 38	1	1	1	1	171300	087670	048	Pu2	43m		
CTD Type & SNSBD 91220B				✓ Monitor Checks on Deck at Surface				Times	JD/Time	Data Location									
Press. SN	26032						Data on	280 / 0827:50	Tape/Diskette I.D.	File Name/Header									
Temp. SN	710						at Surface	0829	SEP88	06 Oct 824									
Cond. SN	304						Start Down	0830											
							at Bottom	0831											
							Start Up	0832											
							at Surface	0834											
							Data off	0831:27	Remarks	8.997									
Pos.	Bot.	T	Trip	Time @		Monitor Values				d/ Conv. Mon. Values-CTD				Sample Bot.Data			Sal. Bot. #	Other Samp.	Pos
				Bot.	Rack	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P			
1				✓✓	0831	34601,054	6179,801	8489,055	43.815	44.277	1.389	32.474			32.469	066	578	1	
2				✓	0833	34485,527	617,074	8267,992	4.911	4.962	0.930	30.849					579	2	
3																	3		
4																	4		
5																	5		
6																	6		
7																	7		
8																	8		
9																	9		
10																	10		
11																	11		
12																	12		

Initials LAD

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Consec. Cast # III		Vessel <u>Surveyde</u>		Proj. & Leg <u>Jce (2)</u>			Event #	Vessel Sta. I.D.		Instructions							Sta. Designation <u>P43</u>						
Consec. Cast #	Latitude		N or S	Longitude		E or W	Date	JD = 280	Time		Dry	Wet	Bar.	S	S	Wind	Wind	Cloud	Type	Bottom	Sta. Name or I.D		
	Deg.	Min.		Deg.			Day	Mo.	Hr.	Min.	Bulb	Bulb	mb	Vis	Dir.	Sp.		Weath.	Depth, m				
111	71	19	9	1	N	167	20	1	2W	060	C	T	88	09	35	-3	2	-4	1	1	2	17125067670048	P43
CTD Type & SN <u>5bet 9122013</u>			Monitor Checks ✓ on Deck at Surface								Times		JD/Time		Data Location								
Press. SN <u>26072</u>			Press. 34470.719 (-0.018) - 34478.984 (2.824).								Data on 280 / 093130				Tape/Diskette I.D. <u>50188</u>								
Temp. SN <u>710</u>			Temp. 5493.715 (-3.818) - 6032.980 (0.348).								at Surface		0932:40		File Name/Header <u>06 Oct 0926</u>								
Cond. SN <u>304</u>			Cond. 3073.621 (0.00) - 8179.000 (30.623).								Start Down		0934										
			Other _____								at Bottom		0935:30										
											Start Up		0936:40										
											at Surface		0938										
											Data off		0935:51										
Remarks 8.959																							

P o	Bot.	T	Trip	Time @	Monitor Values				Conv. Mon. Values-CTD				Sample Bot.Data				Sal.	Bot. #	Other Samp.	Pos			
					Bot.	Rack	Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.			
1				✓	0936		34600.477	6097.242		8428.348.				433554.						32.492	019	580	1
2				✓	0938		34486.313	6106.035		8255.038.				44.007.	0.784.		32.530					581	2
3														5.224									3
4														5.278.	0.844.		30.808.						4
5																						5	
6																						6	
7																						7	
8																						8	
9																						9	
10																						10	
11																						11	
12																						12	

Initials UAO

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Consec. Cast # 112	Vessel <u>Surveyor</u>	Proj. & Leg <u>See C2)</u>	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation <u>Pu4</u>												
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 280	Time Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	Si Si	Vis Vis	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D						
112	71 24 46 N		167 06 37 W	060	Oct 88	1042	-28 -40	1	217115087670048									43m							
CTD Type & SN Shd 91220B										Monitor Checks ✓ on Deck at Surface										Times JD/Time				Data Location	
										Data on 280/1039										Tape/Diskette I.D.				File Name/Header	
										at Surface 1040										Sep 88				06 Oct 1031	
										Start Down 1041															
										at Bottom 1042:40															
										Start Up 1043:30															
										at Surface 1045															
										Data off 1042:59										Remarks 8.993					
Other _____																									

Pos.	Bot.	T	Trip	Depth	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data				Sal. Bot. #	Other Samp.	Pos.
					Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.				
1					✓	1043	34597.730	6184.430	8489.145		42.687						32.452	069	582	1	
2					✓	1045	34486.113	6079.965	8211.254		43.132	1.422		32.4160					583	2	
3																				3	
4																				4	
5																				5	
6																				6	
7																				7	
8																				8	
9																				9	
10																				10	
11																				11	
12																				12	

Initials URD  
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Consec.Cast #	Vessel	Proj. & Leg See (2)			Event#	Vessel Sta. I.D.		Instructions						Sta. Designation									
Consec. Cast #	Latitude		N or S	Longitude	E or W	Date	JD = 280	Time		Dry	Wet	Bar.	S.	S.	Wind	Wind	Cloud	Type	Bottom	Sta. Name			
	Deg.	Min.		Deg.		Day	Mo.	Hr.	Min.	Bulb	Bulb	mb	Vis.	Vis.	Dir.	Sp.	Cloud	Wheath.	Depth, m	or I.D			
113	71	30.02	N	166	49.21	W	06 Oct	12	34	-4	5	-5	2	1	1	17090067	670047		Pu5				
CTD Type & SN				5bd 91220B				Monitor Checks ✓				Times JD/Time				Data Location							
Press. SN				26072				on Deck at Surface				Data on 280/1220				Tape/Diskette I.D.				File Name/Header			
Temp. SN				710				Press. 34470.238 (-0.002) 34473.430 (+2.374)				at Surface 1224				Sep 28				06 Oct 1216			
Cond. SN				304				Temp. 5492.441 (-3.716) 5892.398 (-0.740)				Start Down 1232.20											
								Cond. 3073.652 (0.000) 7994.461 (29.887)				at Bottom 1234.30											
								Other				Start Up 1235											
												at Surface 1238											
												Data off 1234:45											
Remarks 8.977 Had to go to ~10m to unfreeze pressure port; took ~6 minutes																							
Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot.Data				Sal.	Other	Pos.			
				Rack	Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw				Sal.	Bot. #	Samp.
1				✓	1235	34595.914	6238.941	8520.082		42.121	1.818		32.352			32.346	058	584	1				
2				✓	1237	34488.055	5888.957	7992.098		5.852	5.912	-0.767	29.883					585		2			
3																			3				
4																			4				
5																			5				
6																			6				
7																			7				
8																			8				
9																			9				
10																			10				
11																			11				
12																			12				

Initials LAO



Consec. Cast # 114		Vessel Surveyor	Proj. & Leg Ice (2)		Event #	Vessel Sta. I.D.		Instructions								Sta. Designation PL5B				
Consec. Cast #	Latitude N or S		Longitude E or W		Date JD = 280	Time GMT	Dry Bulb	Wet Bulb	Bar. mb	$\frac{S}{S}$	$\frac{V}{V}$	Wind Dir.	Wind Sp.	Cloud	Type	Bottom Depth, m	Sta. Name or I.D			
	Deg.	Min.	Deg.		Day Mo. Yr.	Hr. Min.														
114	71	29	87	N	166 49 49 W	06 Oct 88	21 27 - 42 - 63	101804008762								47	PL5B			
CTD Type & SN 5bd 91220B		Monitor Checks				Times	JD/Time		Data Location				42							
Press. SN 26072		on Deck at Surface				Data on	280/212147		Tape/Diskette I.D.	File Name/Header										
Temp. SN 710		Press. 34471.082 [0.007] 34436.746 [1.969]				at Surface	212515		5bd 91220B	06 OCT 2106										
Cond. SN 304		Temp. 6097.359 [0.438] 5910.480 [-0.604]				Start Down	212625													
		Cond. 3074.078 8012393				at Bottom	212754													
		Other [0.000] [29.926]				Start Up	212924													
						at Surface	213206													
						Data off	212758													
Remarks 9.012 - 2 <sup>nd</sup> CAST @ PL5B - PL5B AFTER HELD OPS -																				
Pos	Bot.	T	Trip	Time @		Monitor Values				DEPTH Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Other Samp.	Pos
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #			
1				212844	34597.0826255.0948531.570				42.307	1.935		32.344			32.334	046	586	1		
2																		2		
3				213132	34484.0475912.0048014.176				4.335	-0.593		29.924						587	3	
4																		4		
5																		5		
6																		6		
7																		7		
8																		8		
9																		9		
10																		10		
11																		11		
12																		12		

Initials CD  
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Consec. Cast # 115		Vessel Surveyor		Proj. & Leg TCE (2)			Event #	Vessel Sta. I.D.		Instructions								Sta. Designation PTI			
Consec. Cast #		Latitude	N or S	Longitude	E or W	Date	JD = 280	Time	GMT	Dry	Wet	Bar.	S.	S.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Weath.	Depth, m	Sta. Name or I.D	
Deg.		Deg.		Deg.		Day	Mo.	Hr.	Min.	Bulb	Bulb	mb	S.	S.	Dir.	Sp.	Cloud	Type	Weath.		
115	71	20	15N	166	46	92W	060	OCT	88	23	38	-03	-40	009	180	251	4862	48	PTI		
CTD				Monitor Checks								Times		ID/Time		Data Location				43	
Type & SNSBD 912205				on Deck at Surface								Data on		280/231815		Tape/Diskette I.D.		File Name/Header			
Press. SN 26032				Press. 34431.063 [0.006], 34438.543 [2.598]								at Surface		233815		SEP88		06OCT2315			
Temp. SN 310				Temp. 5624.215 [-2.523], 5393.820 [-1.4166]								Start Down		233700							
Cond. SN 304				Cond. 3033.945 3861.363								at Bottom		233818							
				Other [0.000] [29.310]								Start Up		233922							
												at Surface		233819		Remarks 8.934					
												Data off		233819							
NUTS																					
Pos.	Bot.	T	Trip	Time @		Monitor Values				DEPTH Conv. Mon. Values-CTD				Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.		
				Bot.	Rack	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P				Avg Tw	Sal.
1				23904	34599.688	6230.043	8519.711		43.269	1.752		32.414			32.384	081	588	1			
2				23410	34533.504	6245.973	8364.625		21.025	1.864		30.831							2		
3				23424	34488.641	5815.801	7878.172		5.956	-1.316		29.372						589	3		
4																			4		
5																			5		
6																			6		
7																			7		
8																			8		
9																			9		
10																			10		
11																			11		
12																			12		

Initials CD  
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Consec. Cast # 116		Vessel <b>SURVEYOR</b>		Proj. & Leg <b>ICE (2)</b>			Event #	Vessel Sta. I.D.		Instructions								Sta. Designation <b>PT2</b>	
Consec. Cast #	Latitude Deg.		N or S	Longitude Deg.		E or W	Date Day Mo. Yr.	JD = 281	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	Si. si.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D
116	71	14	20 N	166	00	42 W	07	OCT 88	01 32 - 22 - 42 09	18 35 50	08 86 2	47							PT2
CTD Type & SN <b>SBD 912203</b>				Monitor Checks on Deck at Surface				Times JD/Time		Data Location <b>42</b>									
Press. SN <b>26072</b>				Press. 34471.338 [0.025] · 34473.379 [-1.393]				Data on 281 / 012400		Tape/Diskette I.D. <b>SET 88</b>				File Name/Header <b>07OCT017</b>					
Temp. SN <b>310</b>				Temp. 6335.086 [2.567] · 5830.805 [-1.218]				at Surface 012856											
Cond. SN <b>304</b>				Cond. 3075.641 3909.723				Start Down 013008											
				Other [0.000] · [29.518]				at Bottom 013207											
								Start Up 013348											
								at Surface 0137											
								Data off 013246											
<b>REMARKS</b>																			
Pos.	Bot.	T Rack	Trip Depth	Time @		Monitor Values				DEPTH Conv. Mon. Values-CTD				Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.			
1				013306	34597.699	6202.824	8503.094		42.166	1.555		32.458		32.431	101	590	1		
2																	2		
3				013652	34486.824	5836.195	7911.895		4.923	-1.174		29.505					591	3	
4																		4	
5																		5	
6																		6	
7																		7	
8																		8	
9																		9	
10																		10	
11																		11	
12																		12	

Initials SD  
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Consec. Cast #		Vessel		Proj. & Leg		Event #	Vessel Sta. I.D.		Instructions								Sta. Designation				
117		SURVEYOR		ICE (a)													PT3				
Consec. Cast #	Latitude		N or S	Longitude		E or W	Date	JD = 281	Time		Dry Bulb	Wet Bulb	Bar. mb	Si	Vis	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
	Deg.	Min.		Deg.			Day	Mo. Yr.	Hr.	Min.											
117	71	09	07 N	167	14	87 W	07	OCT 88	02	52	-26	-320	91801010867							47	PT3
CTD Type & SN SBD 912208				Monitor Checks on Deck at Surface								Times		JD/Time		Data Location				42	
Press. SN 26072				Press. 34471813 [0.013], 34478402 [2.169].								Data on	024554	Tape/Diskette I.D.	File Name/Header				421154		
Temp. SN 310				Temp. 6463.449 [1.388], 5950.895 [0.298]								at Surface	024904	SEP88	07 OCT 0241				126		
Cond. SN 304				Cond. 3035.402 8056.098								Start Down	025000						280		
												at Bottom	025234								
												Start Up	025350								
												at Surface	025237	Remarks 8976							
												Data off									
Pos.	Bot.	T	Trip	Time @	Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Other Samp.	Pos.		
	Bot.	Rack	Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #				
1				025319	34599.0556287.3058557.590.	42.691	2.168			32.357				32.342	079	592	1				
2				v														2			
3				025701	34486.81359459538046.488.	49.63	-0.333			29.988								593	3		
4																			4		
5																			5		
6																			6		
7																			7		
8																			8		
9																			9		
10																			10		
11																			11		
12																			12		

Initials CD  
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Consec.Cast # 118		Vessel <b>SURVEYOR</b>		Proj. & Leg <b>ICE (2)</b>			Event#	Vessel Sta. I.D.		Instructions								Sta. Designation <b>PT4</b>			
Consec. Cast #	Latitude Deg.		N or S	Longitude Deg.		E or W	Date Day	JD = 281	Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	S. vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D		
118	71	04	07	167	30	11	W	07 OCT 88	0406	-39	-450	927	035	168	77	47	PT4				
CTD Type & SN SBD 912203				Monitor Checks on Deck at Surface					Times	JD/Time	Data Location 42										
Press. SN 26072				Press. 34471.113 [ -0.002 ] : 34476.793 [ 1.840 ] .					Data on 281	040147	Tape/Diskette I.D. File Name/Header										
Temp. SN 710				Temp. 6414.377 [ 2.898 ] : 6084.355 [ 0.627 ] .					at Surface	040316	SEP88 07 OCT 0353										
Cond. SN 304				Cond. 3035.223 8205.426					Start Down	040447											
									at Bottom	040601											
									Start Up	040730											
									at Surface	0417											
									Data off	040610											
									Remarks 8.955 DURING 1ST DESCENT NEITHER BOTTLE TRAPPED; RE-DID CAST (USING SAME LOG FILE) [TRIGGER ON ROSETTE NOT RESET]												
Pos.	Bot.	T	Trip	Time @		Monitor Values				DEPTH Conv. Mon. Values-CTD				Sample Bot.Data				Sal.	Other	P.S.	
	Rack	Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #	Samp.	Pos.			
1				0414 040709	345997936274.188	8549.570			43.102	2.073		32.376				32.366	22	594	1		
2				041626 040921	34490934.6057.801	8185.605			6.523	0.491		30.493						595	2		
3																			3		
4																			4		
5																			5		
6																			6		
7																			7		
8																			8		
9																			9		
10																			10		
11																			11		
12																			12		

Initials CD

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Consec. Cast # 119		Vessel <b>SURVEYOR</b>	Proj. & Leg <b>ICE (2)</b>		Event #	Vessel Sta. I.D.		Instructions								Sta. Designation <b>PT5</b>				
Consec. Cast #	Latitude N or S	Longitude E or W	Date JD = 281	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	Si. Vis.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D							
Deg.	Min.	Deg.	Day Mo. Yr.																	
119	70 58 43 N	167 45 39 W	07 OCT 88	05 29	-39	-45	09	27	02	50	08	87	49	PT5						
CTD Type & SN 5BD 912203		Monitor Checks on Deck at Surface				Times	JD/Time	Data Location 44												
Press. SN	26072	Press. 34471.020 [0.005]	34477.793 [0.192]	Data on 281/052258	at Surface 052418	Tape/Diskette I.D. SEP88	File Name/Header 07 OCT 0514													
Temp. SN	710	Temp 6168.363 [1.528]	6150.012 [1.171]	Start Down 052344	at Bottom 052906															
Cond. SN	304	Cond. 3073.563	8300.070	Start Up 053005	at Surface 053203															
		Other [0.000]	[30.898]	Data off 052921																
Remarks CTD TAKEN OUT OF WATER DUE TO TOO MUCH WEIGH ON																				
Pos.	Bot.	T	Trip	Time @		Monitor Values				DEPTH Conv. Mon. Values-CTD				Sample Bot. Data			Sal.	Other Samp.	NUTS	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.				
1				052947	34606.102	6148.641	8457.180		45.439	1.161		32.418		32.410	102	596	1			
2				053134	34485.453	6173.730	8306.984		4.731	1.343		30.809				597	2			
3																	3			
4																	4			
5																	5			
6																	6			
7																	7			
8																	8			
9																	9			
10																	10			
11																	11			
12																	12			

Initials SD  
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Consec. Cast # 120		Vessel <b>SURVEYOR</b>		Proj. & Leg <b>ICE (2)</b>		Event #	Vessel Sta. I.D.		Instructions								Sta. Designation <b>PT6</b>	
Consec. Cast #	Latitude N or S	Longitude E or W	Date Day	JD = 281	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	Si. Vis.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D				
Deg.	Deg.	Deg.	Mo.	Yr.														
120	70 53 87 N	168 01 83 W	07 OCT 88	06 51	-35 -43	09 27	0051 2877	51										
CTD Type & SN SBD 91220B		Monitor Checks on Deck at Surface				Times	JD/Time	Data Location <sup>46</sup> Tape/Diskette I.D. File Name/Header										
Press. SN	26072	Press. 34470.137 [-0.003]	Start Down	064906	SEP 88	07 OCT 0631												
Temp. SN	710	Temp. 5851358 [-0.156]	at Bottom	065000														
Cond. SN	304	Cond. 3073465	Start Up	065132														
		Other [0.000]	at Surface	065233														
			Data off	0655														
				065135														
Remarks CTD CAST TAKEN AFTER "PLANKTON TOU"																		

Pos.	Bot.	T	Trip	Time @		Monitor Values				DEPTH Conv. Mon. Values-CTD				Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.	NUTS
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.				
1				1065217		34607.898	6039.902	8389.766		46.193	0.282		32.586			32.546	55	598	1	
2				1065424		34486.031	5862.141	7968.242		5.223	-0.967		29.856					599	2	
3																			3	
4																			4	
5																			5	
6																			6	
7																			7	
8																			8	
9																			9	
10																			10	
11																			11	
12																			12	

Initials CJ  
✓

Consec. Cast #		Vessel		Proj. & Leg		Event #		Vessel Sta. I.D.		Instructions								Sta. Designation			
121		<b>SURVEYOR</b>		10E(2)														PT3/Psi			
Consec. Cast #		Latitude	N or S	Longitude	E or W	Date	JD = 281	Time	GMT	Dry	Wet	Bar.	Wind	Wind	Cloud	Type	Bottom Depth, m	Sta. Name or I.D			
		Deg.	Min.	Deg.		Day	Mo. Yr.	Hr.	Min.	Bulb	Bulb	mb	Dir.	Sp.	Cloud	Wearh.					
121		70 50	05 N	168 11	69 W	07 OCT	88	07	52 - 34 - 42	09	27 35 51	12 87	70048	PT3					43		
CTD Type & SN		SBD 91220B		Monitor Checks								Times		JD/Time		Data Location					
Press. SN		26032		on Deck at Surface								Data on	281 / 0745			Tape/Diskette I.D.		File Name/Header			
Temp. SN		310		34470.543 (-0.093), 34470.293 (-0.005), 34476.488 (2.221), 5454.598 (-4.192), 5391.211 (-4.591), 5825.129 (-1.269), 3073.492 (8.001), Cond. 3073.449 (8.000), 7922.098 (29.689), Other								at Surface	0747			SEP88		07 Oct 0736			
Cond. SN		304										Start Down	0750:30								
												at Bottom	0752:30								
												Start Up	0753+								
												at Surface	0756								
												Data off	0752:48								
												Remarks 8.951 Pressure went up to 15 while on deck. See? T = -5°. Pressure post frozen surface T = -1.3; went to 13m to thaw it out, all this in file									
P	Bot.	Rack	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Other	P
					Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #			
1					✓	0753	34597.781, 6274.125, 8536.641			42.802,			32.253,			32.244	066	600	1		
2					✓	0755	34486.574, 5824.730, 7922.520			43.247,	2.071,							601	2		
3										5.465,									3		
4										5.521,	-1.253,		29.694,							4	
5																			5		
6																			6		
7																			7		
8																			8		
9																			9		
10																			10		
11																			11		
12																			12		

Initials 690

Consec. Cast #		Vessel	Proj. & Leg		Event #	Vessel Sta. I.D.		Instructions						Sta. Designation		
122		Surveyor	See (2)											P52		
Consec. Cast #		Latitude	N or S	Longitude	E or W	Date	JD = 281	Time	Dry	Wet	Bar.	S.	Wind	Wind	Bottom	Sta. Name
		Deg.	Min.	Deg.		Day	Mo. Yr.	GMT Hr.	Bulb	Bulb	mb	Vis.	Dir.	Sp.	Depth, m	or I.D.
122		70 50.50 N		168 32.62 W		07 Oct	88	0854	-32	-40	0927	020	1087	70041		P52
CTD Type & SN		Shd 91220B		Monitor Checks ✓ on Deck at Surface				Times JD/Time		Data Location						
Press. SN	26072	Press. 34470.633 (-0.025) · 34476.003 (1.827) ·				Data on	281 / 0847	JD/Time		Tape/Diskette I.D.		File Name/Header				
Temp. SN	710	Temp. 6909.781 (3.726) · 5897.676 (-0.684) ·				at Surface	0850			Sep88		07 Oct 0841				
Cond. SN	304	Cond. 3073.580 (0.003) · 8094.918 (30.782) ·				Start Down	0853									
		Other _____				at Bottom	0854.30									
						Start Up	0855.20									
						at Surface	0857									
						Data off	0854.51									
Remarks 9/135 Had to throw out pressure port at 10 m.																

  

Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data			Sal.	Other	S.	
				Rack	Trip Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P				Avg Tw
1				✓	0855	34578.152	6066.984	8523.105	36.078	2.020		32.171			32.171	019	602	1		
2				✓	0856	34487.133	5891.215	8089.004	36.452								603		2	
3									5.339										3	
4									5.394	-0.751		30.811								4
5																				5
6																				6
7																				7
8																				8
9																				9
10																				10
11																				11
12																				12

Initials 120

✓

Consec. Cast # 123	Vessel Surveyor	Proj. & Leg JUL 21	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation P53							
Consec. Cast #	Latitude Deg. Min. S	N or S Deg.	Longitude or W	E or W Day Mo. Yr.	JD = 281	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S. S.	V. V.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D			
123	70 49.59 N		168 48.50 W	07 Oct 88	1020	-40 -45	0927	0100	7877	0038						33 m				
CTD Type & SN Shd 91220B				✓ Monitor Checks ✓ on Deck at Surface				Times JD/Time		Data Location										
Press. SN	26072	Press. 341470.234 (-0.052), 34477.301 (0.013),				Data on 281 / 1012	Tape/Diskette I.D. File Name/Header													
Temp. SN	710	Temp. 5536.734 (-4.031), 5988.113 (-0.017),				at Surface 1016.50	Sep 88 07 Oct 1006													
Cond. SN	304	Cond. 3073.719 (0.000), 8247.449 (31.619),				Start Down 1018														
		Other				at Bottom 1020														
						Start Up 1020/45														
						at Surface 1023														
						Data off 1020/07														
Remarks In ice; Shifted position 9.005. Flawed pressure at surface																				
Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Other Samp.	Pos.
				Bot. Depth	Trip Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw			
1				✓	1020	34569.574	6267.219	8514.395	33.270	2.021		32.096			32.091	069	604	1		
2				✓	1022	34486.371	5983.813	8240.313	33.623								605	2		
3									5.291									3		
4									5.346	-0.056		31.577							4	
5																		5		
6																		6		
7																		7		
8																		8		
9																		9		
10																		10		
11																		11		
12																		12		

Initials (A)



Consec. Cast # 124	Vessel <u>Surveyor</u>	Proj. & Leg <u>See C2)</u>	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation <u>PP 25</u>						
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 281	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S. S.	V. is	Wind Dir.	Wind Sp.	Cloud Type	W eath.	Bottom Depth, m	Sta. Name or I.D	
124	70 40	70 N	168 58	59 W	07 Oct 88	1223	-35	-4	809	37005	1687	20039	PP 25					34m	
CTD Type & SN <u>5hd 91270B</u> Press. SN <u>26072</u> Temp. SN <u>710</u> Cond. SN <u>304</u>				✓✓ Monitor Checks on Deck at Surface Press. <u>34470,742 (-0.040)</u> , <u>34477,727 (2.044)</u> , Temp. <u>5668,789 (-24.8)</u> , <u>5826,914 (-1.251)</u> , Cond. <u>3073,828 (0.080)</u> , <u>8018,074 (30.630)</u> . Other _____				Times JD/Time Data on <u>281 / 1218</u> at Surface <u>1220</u> Start Down <u>1221:10</u> at Bottom <u>1223</u> Start Up <u>1224:30</u> at Surface <u>1228</u> Data off <u>1223:41</u>				Data Location Tape/Diskette I.D. <u>5ep88</u> File Name/Header <u>07 Oct 1211</u> Remarks <u>8.977. Not badly frozen: cleared</u> <u>in surface water</u>							

Pos.	Bot.	T	Trip	Time @	Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Other Samp.	P	
					Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #		
1				✓✓	1224	34572,379,6228,961,8488,203,					34.030, 34.382,	1.746,		32.123,			32.115	058	606	1
2				✓✓	1227	34486,762,5850,081,8051,469,					5.309, 5.363,	-1.051,		30.752,					607	2
3																				3
4																				4
5																				5
6																				6
7																				7
8																				8
9																				9
10																				10
11																				11
12																				12

Initials ut

✓

Consec. Cast # 125	Vessel <u>SURVEYOR</u>	Proj. & Leg <u>See (2)</u>	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation <u>PP26</u>						
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 281	Time Hr. Min.	GMT	Dry Bulb	Wet Bulb	Bar. mb	Vis	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D		
125	70 30 07 N		168 58 86 W		07 Oct 88	14 15	45 - 5	209	370151	48620039						34 m			
CTD Type & SNS bld 91220B				Monitor Checks on Deck at Surface					Times	JD/Time	Data Location								
									Data on 281	1412	Tape/Diskette I.D. <u>59088</u>	File Name/Header <u>07 Oct 1405</u>							
									at Surface	1413:30									
									Start Down	1414									
									at Bottom	1415:40									
									Start Up	1416:40									
									at Surface	1419									
									Data off	1415:59									
									Remarks 9.030 W 17° 65° 4 ft										
Pos	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot.Data			Sal. Bot. #	Other Samp.	Pos
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.			
1				✓✓	1416	34573.773	6241.824	8505.594		34.230				32.195		32.174	087	608	1
2				✓	1418	34488.844	5804.129	7924.934		34.584	1.842			29.871				609	2
3																		3	
4																		4	
5																		5	
6																		6	
7																		7	
8																		8	
9																		9	
10																		10	
11																		11	
12																		12	

Initials UAO  
✓

Consec. Cast # 126	Vessel <i>Surveyor</i>	Proj. & Leg <i>see (2)</i>	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation <i>PP27</i>							
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 281	Time Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	<i>s.s.</i>	<i>vis.</i>	Wind Dir.	Wind Sp.	Cloud Type	W eath.	Bottom Depth, m	Sta. Name or I.D		
1 26 7 0 19 38 N	168 58 07 W				07 Oct 88	1603 - 40 - 48 09	37 01 01 88 62 00 40										35m 20° 5'			
CTD Type & SN 5bd 912003				Monitor Checks ✓ on Deck ✓ at Surface				Times	JD/Time	Data Location										
Press. SN 26072				Press. 34472.012 (-0.035), 34477.586 (1.873),				Data on 281	1558	Tape/Diskette I.D. File Name/Header										
Temp. SN 710				Temp. 6071.438 (0.741), 5803.639 (-1.424),				at Surface	1600	Sep 88										
Cond. SN 3074				Cond. 3075.563 (0.000), 7919.313 (29.845),				Start Down	1601:40	07 Oct 1548										
				Other				at Bottom	1603											
								Start Up	1603:40											
								at Surface	1606											
								Data off	1603:16	Remarks 9.088										
P. S.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data				Sal. Bot. #	Other Samp.	Pos.
				Bot. Depth	Trip Depth	Press.	Temp.	Cond.	Other	at/ Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.				
1				✓	1603	34578.694	6148.613	8461.031		35.639					32.447	100	610	1		
2				✓	1604	34532.199	6210.381	8473.492		36.008	1.161								2	
3				✓	1605	34487.392	5802.383	7921.246		20.301					32.134			611	3	
4										5.013									4	
5										5.064	-1.434								5	
6																			6	
7																			7	
8																			8	
9																			9	
10																			10	
11																			11	
12																			12	

Initials VRD  
✓

35m  
20°  
5'

3 bottles

Consec. Cast # 127	Vessel <u>Surveyor</u>	Proj. & Leg <u>See (2)</u>	Event#	Vessel Sta. I.D.	Instructions								Sta. Designation <u>PP28</u>						
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 281	Time Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	vis vis	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D			
127	70 09.69	N	168 57.65	W	07 Oct 88	1804	-35	-45	09	48050	18872	0038	PP28	33					
CTD Type & SN <u>5bd 912203</u>				Monitor Checks ✓ on Deck at Surface				Times JD/Time Data on 281/ 1800 at Surface 1802 Start Down 1803 at Bottom 1804 Start Up 1805 at Surface 1806:50 Data off 1804:20				Data Location Tape/Diskette I.D. <u>5ep 88</u> File Name/Header <u>07Oct1750</u> Remarks 9.034							
Press. SN <u>26072</u>	Temp. SN <u>710</u>	Cond. SN <u>304</u>	Press. <u>34471.066 (-0.087)</u> , <u>34478.246 (2.339)</u> . <u>Temp. 5620.492 (-2.851)</u> , <u>5813.871 (-1.335)</u> . <u>Cond. 3075.992 (0.050)</u> , <u>7914.922 (29.669)</u> .	Other															
Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Trip	Press.	Temp.	Cond.	Other	d / Conv. Mon. Values-CTD	Press.	Temp.	Cond.	Sal.	Sample Bot. Data	Sal. Bot. #	Other Samp.	Pos.	
1				✓	1804	34571.578	6155.906	8457.637		33.855				30.375		32.364	75	612	1
2				✓	1806	34490.277	5812.832	7903.473		34.005	1.212							613	2
3										6.001									3
4										6.062	-1.340			29.598					4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials CA6  
✓

Consec.Cast #		Vessel	Proj. & Leg		Event #	Vessel Sta. I.D.	Instructions						Sta. Designation										
Consec. Cast #		<u>Surveyor</u>	<u>Ice (2)</u>										<u>PP29</u>										
Consec. Cast #		Latitude	N or S	Longitude	E or W	Date	JD = 281	Time	GMT	Dry	Wet	Bar.	S.	S.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D			
Deg.	Min.	Deg.	Deg.	Deg.	Day	Mo.	Yr.	Hr.	Min.	Bulb	Bulb	mb	>	>									
128	70 00	14 N		168 57 90 W	07 Oct	1957	-23	-37	103804010862										37	PP29			
CTD Type & SN				5bd 912203				Monitor Checks				Times JD/Time				Data Location							
Press. SN				26072				on Deck at Surface				Data on 281 / 194906				Tape/Diskette I.D.				File Name/Header			
Temp. SN				710				Press. 34431.012 [0.003], 34483.254 [3.917].				at Surface 195019 195546				5ep88				07 Oct 1921			
Cond. SN				304				Temp. 3020.681 [3.253], 53944.92 [-1.434].				Start Down 195408											
								Cond. 3033.922 3905.391				at Bottom 195321											
								Other [0.000] [29.760]				Start Up 195840											
								Data off 195325				at Surface 200053				Remarks 9.015 press sensor was foreign upon							
												Data off 195325				entry - started cast when press							
																appeared unknown, but press sensor seemed quickly during descent -							
																				so withdrew it,			
																				brought it			
																				back to surface			
																				at 195546 +			
																				start rapid			
																				@ 195611			
Pos.	Bot.	T	Trip	Time @		Monitor Values				DEPTH Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Other	Pos.			
	Rack			Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #	Samp.	P.				
1				195809		34567.984	6080.754	8396.828		32.656	0.664		32.353			32.341	078	614	1				
2																			2				
3				200020		34485.762	5793.516	7904.340		4.714	-1.487		29.755						615	3			
4																			4				
5																			5				
6																			6				
7																			7				
8																			8				
9																			9				
10																			10				
11																			11				
12																			12				

Initials CD

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Consec. Cast # 129		Vessel Surveyor	Proj. & Leg Sco (2)		Event #	Vessel Sta. I.D.		Instructions								Sta. Designation PP30					
Consec. Cast #	Latitude N or S		Longitude E or W		Date JD = 281	Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	Si. vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D					
	Deg.	Min.	Deg.		Day Mo. Yr.	Min.															
129	69	49	35	N	168	57	98	W	07	OCT	18	21	41	-2	3	-3	4	103803014862	46	PP30	
CTD Type & SN 5bd 91220B		Monitor Checks								Times		JD/Time		Data Location "1							
		on Deck				at Surface				Data on	281/213902	Tape/Diskette I.D.	File Name/Header								
Press. SN 26072										at Surface	213920	50088	07OCT2130								
Temp. SN 710		Press. 34431.156 [ -0.010 ]				34480.238 [ 3.035 ]				Start Down	214019										
Cond. SN 304		Temp. 6632.637 [ 4.880 ]				5943.219 [ -0.346 ]				at Bottom	214140										
		Cond. 3033.828				8110.426				Start Up	2143										
		Other [ 0.000 ]				[ 30.605 ]				at Surface	214546	Remarks 8.972									
										Data off	214144	20° 4									
Pos	Bot.	T	Trip	Time @		Monitor Values				DEPTH Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Bot. #	Other Samp.	Pos
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.					
1				214237	34597.8166077.910	8427.934			42.390	0.643		32.676			32.664	073	616	1			
2				/														2			
3				214513	34484.109	5956.988	8123.145		4.467	-0.261		30.645					617	3			
4																		4			
5																		5			
6																		6			
7																		7			
8																		8			
9																		9			
10																		10			
11																		11			
12																		12			

Initials SC  
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Consec. Cast # 130	Vessel Surveyor	Proj. & Leg Ice (2)	Event#	Vessel Sta. I.D.	Instructions										Sta. Designation PP31				
Consec. Cast #	Latitude N or S	Longitude E or W	Date JD = 281	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	Si Vis	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D					
	Deg. Min. S	Deg.	Day Mo. Yr.																
130 69 40 42 N	168 58 58 W	07 Oct 88	23 11 - 21 - 30	10 3802315863									54	PP31					
CTD Type & SN 5bd 91220B Press. SN 26072 Temp. SN 710 Cond. SN 304				Monitor Checks *heat lamp on Deck at Surface Press. 34471.004 [0.035] · 34479.168 [2.541]. Temp. 2607.016 [1.296] · 6206.930 [1.590]. Cond. 3073.910 8431.086 Other [0.000] · [31.353].				Times JD/Time		Data Location 49 Tape/Diskette I.D. File Name/Header 50P88 07 OCT 2258 Remarks 9.040 15° 4									
<b>NUTS</b>																			
Pos.	Bot.	T Rack	Trip Depth	Time @		Monitor Values				DEPTH Conv. Mon. Values-CTD				Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.			
1				231320	34617.836 6286.316 8586.547.				49.266	2.160.		32.639.			32.630	81	618	1	
2																		2	
3				231550	34485.793 6210.684 8433.625.				4.824.	1.614.		31.750.					619	3	
4																		4	
5																		5	
6																		6	
7																		7	
8																		8	
9																		9	
10																		10	
11																		11	
12																		12	

Initials CD  
✓

Consec. Cast # 131		Vessel <u>Surveyor</u>	Proj. & Leg <u>Jce (2)</u>		Event #	Vessel Sta. I.D.		Instructions								Sta. Designation <u>PP32</u>				
Consec. Cast #	Latitude N or S		Longitude E or W		Date JD = 282	Time GMT	Dry Bulb	Wet Bulb	Bar. mb	S.	S.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Weath.	Bottom Depth, m	Sta. Name or I.D			
	Deg.	Min.	Deg.		Day Mo. Yr.	Hr. Min.														
131	69	29.97N	168	58.80W	08 Oct 88	0057 - 21	-29	11	3802515862						53	PP32				
CTD Type & SN <u>5bd 91220B</u>		Monitor Checks				Times	JD/Time		Data Location <sup>48</sup>											
		on Deck at Surface				Data on	282/005225		Tape/Diskette I.D.		File Name/Header									
Press. SN <u>26072</u>		Press. <u>34478.4802.003</u>				at Surface	005408		<u>50788</u>		<u>08OCT0042</u>									
Temp. SN <u>710</u>		Temp. <u>6208.4261.594</u>				Start Down	005515													
Cond. SN <u>304</u>		Cond. <u>8409.355</u>				at Bottom	005744													
		Other <u>[31.531]</u>				Start Up	005927													
						at Surface	005346		Remarks 9.057											
<b>NUTS</b>																				
S.	Bot.	T	Trip	Time @		Monitor Values				DEPTH Conv. Mon. Values-CTD				Sample Bot. Data				Sal. Bot. #	Other Samp.	S.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.				
1				<u>005531</u>	<u>34615.0906284.316</u>	<u>8581.773</u>		<u>48.227</u>	<u>2.145</u>		<u>32.609</u>		<u>32,600</u>	<u>101</u>	<u>620</u>	<u>1</u>				
2																<u>2</u>				
3				<u>010204</u>	<u>34484.9776206.387</u>	<u>8407.629</u>		<u>4.779</u>	<u>1.583</u>		<u>31.532</u>					<u>621</u>	<u>3</u>			
4																	<u>4</u>			
5																	<u>5</u>			
6																	<u>6</u>			
7																	<u>7</u>			
8																	<u>8</u>			
9																	<u>9</u>			
10																	<u>10</u>			
11																	<u>11</u>			
12																	<u>12</u>			

Initials CD  
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Consec.Cast #		Vessel <u>SURVEYOR</u>		Proj. & Leg <u>ICE(2)</u>		Event#	Vessel Sta. I.D.		Instructions							Sta. Designation <u>PP33</u>				
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 282	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S. si	V. si	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D		
132	132 69 19 49 N		168 57 19 W		080 CT 88	0252 - 20 - 25 1	238 0251 6 862										53	PP33		
CTD Type & SN SBD 912203		Monitor Checks on Deck at Surface						Times	JD/Time	Data Location 53										
Press. SN 26072								Data on	282 / 024632	Tape/Diskette I.D. SEP88										
Temp. SN 710								at Surface	024802	File Name/Header 080CT0233										
Cond. SN 304								Start Down	024914											
								at Bottom	= 025225											
								Start Up	025440											
								at Surface	025755											
								Data off	025235											
								Remarks COLORSCOPE PINGED ON FALSE BOTTOM; INDICATED DEPTH OF 53 m, ACTUAL DEPTH WAS; 48 m. CTD ON BOTTOM												
								NUTS												
Pos.	Bot.	T	Trip	Time @		Monitor Values				DEPTH Conv. Mon. Values-CTD			Sample Bot.Data				Sal.	Other	Pos.	
				Bot. Depth	Trip Depth	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.				Bot. #
1				025425	34605.962.6348.316.8612.004				44.705	2.605		32.435			32.418	079	622	1		
2																		2		
3				025714	34488.113.6255.102.8463.348				5.139	1.936		31.695						623	3	
4																			4	
5																			5	
6																			6	
7																			7	
8																			8	
9																			9	
10																			10	
11																			11	
12																			12	

Initials CD  
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Consec. Cast # 133		Vessel <b>SURVEYOR</b>		Proj. & Leg <b>ICE (2)</b>		Event #	Vessel Sta. I.D.		Instructions								Sta. Designation <b>PP34</b>			
Consec. Cast #	Latitude N or S		Longitude E or W		Date Day Mo. Yr.	JD = 282	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S. S. V.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D			
	Deg.	Min.	Deg.													53	PP34			
133690976N		1685819W		08 OCT 88		0427 - 04 - 20	1	338025	08862											
CTD Type & SN SBD 912208		Monitor Checks on Deck at Surface		Times		JD/Time	Data Location		48		Tape/Diskette I.D.		File Name/Header							
Press. SN	26072		Press. 34472.246 [0.004]	34483.355 [3.889]		Data on 282	042314				SEP88		08 OCT 0414							
Temp. SN	710		Temp. 6504.625 [3.726]	6296.441 [2.233]		at Surface	042444													
Cond. SN	304		Cond. 3073.953	8441.102		Start Down	042555													
			Other [0.000]	[31.203]		at Bottom	042710													
						Start Up	042822													
						at Surface	043149													
						Data off	042315													
<b>Remarks 9.064</b> <b>PRIOR TO PLANKTON TOWS</b>																				
Pos.	Bot.	T	Trip	Time @		Monitor Values				DEPTH Conv. Mon. Values-CTD				Sample Bot. Data			Sal.	Other Samp.	Pos.	NUTS
				Bot.	Rack	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P				Avg Tw
1				042607	34618.914	6346.602	8607.589		49.151	2.590		32.403			32.396	22	625	1		
2				042943	34542.875	6324.055	8524.418		23.724	2.434		31.784							2	
3				043121	34489.086	6299.367	8442.605		5.487	2.241		31.196							3	
4																			4	
5																			5	
6																			6	
7																			7	
8																			8	
9																			9	
10																			10	
11																			11	
12																			12	

Initials CD  
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Consec. Cast # 134		Vessel <b>SURVEYOR</b>		Proj. & Leg <b>ICE (2)</b>		Event #	Vessel Sta. I.D.		Instructions								Sta. Designation <b>PP35</b>		
Consec. Cast #	Latitude N or S		Longitude E or W		Date JD = 282		Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	Si. si.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Weath.	Depth, m	Sta. Name or I.D	
	Deg.	Min.	Deg.		Day Mo. Yr.														
134	68	59	89	N	168	57	98W	080CT88	0625	-08	-16	1438	0201	0862	54	PP35			
CTD Type & SN SBD 912203		Monitor Checks x heat lamp on Deck at Surface						Times		JD/Time		Data Location 49							
Press. SN	26032								Data on 282	062137	Tape/Diskette I.D.	File Name/Header							
Temp. SN	310		Press. 34473.633 [0.003], 34439.563 [2.054],						at Surface	062258	SET88	080CT0609							
Cond. SN	304		Temp. 6962.331 [7.403], 6346203 [2.1602],						Start Down	062358									
			Cond. 3074.168, 8464.930						at Bottom	062525									
			Other [0.000], [31.080]						Start Up	062722									
									at Surface	062932	Remarks 9.167								
									Data off	062531									
<b>NUTS</b>																			
Pos.	Bot.	T Rack	Trip Depth	Time @		Monitor Values				DEPTH Conv. Mon. Values-CTD				Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.			
1				062643	34620.457, 6326.215, 8598.215,				49.310, 2.446,		32.459,			32452	102	624	1		
2																	2		
3				062859	34489.305, 6349.387, 8467.066				5.000, 2.610,		31.077,					627	3		
4																	4		
5																	5		
6																	6		
7																	7		
8																	8		
9																	9		
10																	10		
11																	11		
12																	12		

Initials CD  
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Consec. Cast # 135		Vessel <b>SURVEYOR</b>		Proj. & Leg <b>T0E(2)</b>		Event #	Vessel Sta. I.D.		Instructions								Sta. Designation <b>PA6</b>			
Consec. Cast #	Latitude N or S		Longitude E or W		Date Day Mo. Yr.	JD = 282	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S. vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D			
	Deg.	Min.	Deg.																	
135	68	54	16	N	169	01 01 W	08 OCT 88	07 37	- 07 - 15	13 38	015	10 86	2	54	PA6					
CTD		Monitor Checks								Times	JD/Time	Data Location								
Type & SN SBD 912203		on Deck				at Surface				Data on	282/073319	Tape/Diskette I.D.				File Name/Header				
Press. SN 26072										at Surface	073444	SEP88				08 OCT 0718				
Temp. SN 710										Start Down	073539									
Cond. SN 304										at Bottom	073715									
										Start Up	073824									
										at Surface	074122									
										Data off	073317	Remarks 8.999								
Pos.	Bot.	T	Trip	Time @		Monitor Values				DEPTH Conv. Mon. Values-CTD				Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.	NUTS
				Depth	Trip	Press.	Temp.	Cond.	Other	Press:	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.				
1				073808	34618.188	6309.426	8588.578		49.284	2.326		32.489			32.481	055	628	1		
2				074049	34486.570	6358.551	8478.113		47.27	2.677		31.118				629		2		
3																		3		
4																		4		
5																		5		
6																		6		
7																		7		
8																		8		
9																		9		
10																		10		
11																		11		
12																		12		

Initials CD  
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Consec. Cast # 136		Vessel <b>SURVEYOR</b>		Proj. & Leg <b>TCE (2)</b>		Event #	Vessel Sta. I.D.		Instructions							Sta. Designation <b>PA5</b>			
Consec. Cast #	Latitude N or S		Longitude E or W		Date	JD = 282	Time GMT	Dry Bulb	Wet Bulb	Bar. mb	S.	S.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D		
	Deg.	Min.	Deg.		Day	Mo. Yr.	Hr. Min.										50m		
136	68	54.08N	168	32.24W	08 Oct	88	09 26	-12	-25	15	38	34	010	8620055	PA5				
CTD Type & SN <b>SBD 912203</b>		Monitor Checks on Deck at Surface				Times	JD/Time		Data Location										
Press. SN <b>26072</b>						Data on 282	0921	Tape/Diskette I.D. <b>SEP88</b>							File Name/Header <b>08 Oct 0914</b>				
Temp. SN <b>310</b>						at Surface	0924												
Cond. SN <b>304</b>						Start Down	0924:30												
						at Bottom	0926:30												
						Start Up	0927												
						at Surface	0929												
						Data off	0926:22												
						Remarks 9.053													
Pos	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data			Sal.	Other Samp.	Pos
				Depth	Trip	Press.	Temp.	Cond.	Other	cl/	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw			
1				✓	0926	34621.094	6322.527	8598.668		50.100	2.419		32.429		32.479	066	630	1	
2				✓	0928	34486.184	6358.980	8473.867		50.637							631	2	
3																		3	
4																		4	
5																		5	
6																		6	
7																		7	
8																		8	
9																		9	
10																		10	
11																		11	
12																		12	

Initials 600

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bottles 142

Consec. Cast # 137		Vessel <b>SURVEYOR</b>		Proj. & Leg <b>ICE (2)</b>		Event#	Vessel Sta. I.D.	Instructions								Sta. Designation <b>PA4</b>				
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 282	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	<i>Si</i> <i>vi</i>	<i>Vis</i>	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D		
137	68 54 02 N		168 01 45 W	0	10 8 Oct 88		1 1 1 7 - 0 4 - 1	6 1 5 3 8 3 2 0 1 P 8 6 2	0 0 5 1								46 m			
CTD Type & SN SBD 91220B		Monitor Checks on Deck at Surface						Times	JD/Time	Data Location										
Press. SN 26072		Press. 34472.121 (-0.035), 34481.867 (3.163),						Data on	282 / 1114:36	Tape/Diskette I.D.	File Name/Header									
Temp. SN 710		Temp. 6205.457 (1.395), 6373.445 (2.782),						at Surface	1115:45	SEP88	08Oct1106									
Cond. SN 304		Cond. 3073.953 (0.080), 8553.121 (31.185),						Start Down	1116											
								at Bottom	1117											
								Start Up	1118:30											
								at Surface	1120											
								Data off	1117:48	Remarks 9,030										
Pos	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Other Samp.	Pos
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #			
1				✓	1118	34610.137, 6362.078, 8619.320,			46.372, 46.767	2.702,		32.402,		32.394	019	632	1			
2				✓	1120	34486.938, 6372.608, 8476.211,			4.998, 5.051,	2.779,		31.002,				633	2			
3																	3			
4																	4			
5																	5			
6																	6			
7																	7			
8																	8			
9																	9			
10																	10			
11																	11			
12																	12			

Initials 120

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bottles #2

Consec. Cast # 138		Vessel <b>SURVEYOR</b>		Proj. & Leg <b>ICE(2)</b>		Event #	Vessel Sta. I.D.		Instructions								Sta. Designation <b>PA3</b>		
Consec. Cast #	Latitude N or S		Longitude E or W		Date JD = 282		Time GMT	Dry Bulb	Wet Bulb	Bar. mb	S.	S.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D		
	Deg.	Min.	Deg.		Day Mo. Yr.	Hr. Min.													
138	68	54	77	N	167 37 25 W	08 Oct 88	12 59 - 05	- 15	15	1538330	18	8620048					43m		
CTD Type & SN SBD 91220B					Monitor Checks ✓ on Deck at Surface				Times	JD/Time	Data Location								
									Data on	282/ 1254	Tape/Diskette I.D.	File Name/Header							
									at Surface	1256:30	SEP88	08 Oct 1246							
									Start Down	1257									
									at Bottom	1259:									
									Start Up	1300									
									at Surface	1302:30									
									Data off	1259:25	Remarks	9,065							
Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.			
1				✓	1259	34599,602,6381,641	8626,424		42,842					32,325	069	634	1		
2				✓✓	1302	34489,273,6233,539	8454,209		43,300	2,842						635	2		
3									5,466								3		
4									5,524	2,491							4		
5																	5		
6																	6		
7																	7		
8																	8		
9																	9		
10																	10		
11																	11		
12																	12		

Initials VRD

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Consec. Cast # 139		Vessel <b>SURVEYOR</b>			Proj. & Leg <b>ICE (2)</b>		Event #	Vessel Sta. I.D.		Instructions							Sta. Designation <b>TAA2</b>				
Consec. Cast #		Latitude	N or S	Longitude	E or W	Date	JD = 282	Time	GMT	Dry	Wet	Bar.	S.	S.	Wind	Wind	Cloud	Type	Wheath.	Bottom	Sta. Name or I.D
		Deg.	Min.	Deg.		Day	Mo. Yr.	Hr. Min.	Bulb	Bulb	mb	S.	V.	Dir.	Sp.	Cloud	Type	Weath.	Depth, m		
139		68 54	25N	16 70 60	2W	08	OCT 88	14 46	+ 0 2	- 0 P	1	6	38	33	02086	20045				40m	TAA2
CTD Type & SN SBD 91220B		Monitor Checks on Deck at Surface						Times JD/Time		Data Location											
Press. SN 26072		Press. 34472.902 (-0.015) · 34481.008 (3.717) ·						Data on 282 / 1442		Tape/Diskette I.D.		File Name/Header									
Temp. SN 710		Temp. 1467.627 (3.527) · 6342.316 (2.549) ·						at Surface 1444		SEP88		08Oct1435									
Cond. SN 304		Cond. 3077.387 (0.050) · 8545.676 (31.298) ·						Start Down 1445													
		Other						at Bottom 1446:40													
								Start Up 1447:20													
								at Surface 1450													
								Data off 1446:54													
										Remarks 9.069											

Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Other	Pos.
				Bot. Rack	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #	Samp.	
1				✓	1447	34590.617	6368.031	8635.879		3.9.646 · 40.069 ·	2.958 ·		32.306 ·				32.292	058	636	1
2				✓/	1449	34491.243	6340.020	8462.207		6.146 · 6.212 ·	2.543 ·		31.097 ·						637	2
3																				3
4																				4
5																				5
6																				6
7																				7
8																				8
9																				9
10																				10
II																				11
12																				12

Initials U60

Consec. Cast # 140		Vessel <b>SURVEYOR</b>	Proj. & Leg <b>ICE (2)</b>		Event #	Vessel Sta. I.D.	Instructions								Sta. Designation <b>PAIB</b>				
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 282	Time Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	Si Si	Vis	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D	
140	68 53.85 N		166 40.2 W		08 Oct 88	1629	00 - 06	17	38 28 00 P 862	46							41 m 20 5		
CTD Type & SN SBD 91220B		Monitor Checks on Deck at Surface						Times JD/Time		Data Location									
Press. SN 26072		Press. 34472.332 (-0.080), 34480.766 (2.664),						Data on 282/ 1626		Tape/Diskette I.D.				File Name/Header					
Temp. SN 710		Temp. 6025.785 (0.384), 6164.066 (1.275),						at Surface 1628		SEP88				18 Oct 1610					
Cond. SN 304		Cond. 3073.672 (0.000), 8295.871 (30.714)						Start Down 1628:20											
		Other						at Bottom 1629											
								Start Up 1630											
								at Surface 1632											
								Data off 1629:26											
										Remarks 9,085									
Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.			
1				✓	1629	34595.957	6447.660	8663.844		41.436					32.210	46	638	1	
2				✓	1631	34458.324	6167.738	8277.926		41.898	3.309							639	2
3				✗		didn't log	20 m	values		5.270								3	
4					1630				20 m	2.76		31.08						4	
5									(From change)	1 m averages. Little								5	
6									w/ depth)									6	
7																		7	
8																		8	
9																		9	
10																		10	
11																		11	
12																		12	

Initials UZO

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Consec. Cast # 141		Vessel <u>SURVEYOR</u>		Proj. & Leg <u>ICE (2)</u>		Event #	Vessel Sta. I.D.		Instructions							Sta. Designation <u>PAIA</u>					
Consec. Cast #	Latitude Deg.		N or S	Longitude Deg.		E or W	Date Day	Mo.	Yr.	JD = 282	Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	<u>s</u> <u>s</u>	<u>v</u> <u>s</u>	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D
141	68	54	46 N	166	19	88 W	08	Oct	88	1903 + 04 - 01 18	36330	13977	0024	PAIA	19m						
CTD Type & SN SBD 91220B				Monitor Checks on Deck at Surface						Times JD/Time		Data Location									
Press. SN 26072				Press. 34472.277 (-0.066), 34479.258 (2.237)						Data on 282/1900		Tape/Diskette I.D.		File Name/Header							
Temp. SN 710				Temp. 6169.309 (1.395), 6069.770 (0.593)						at Surface 1902		SEP 88		08 OCT 1850							
Cond. SN 304				Cond. 3073.660 (0.000), 8257.789 (31.009)						Start Down 1902:30											
				Other						at Bottom 1903											
										Start Up 1904											
										at Surface 1905:30											
										Data off 1903:40											
												Remarks 9.089									
Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.					
1				✓	1903	34530.508	634.863	8576.766		19.428	3.218	31.505			31.278	87	640	1			
2				✓	1905	34487.793	6118.375	8234.058		19.635									2		
3										5.080	1.016	30.497		No sample; bottle did not close					3		
4																			4		
5																			5		
6																			6		
7																			7		
8																			8		
9																			9		
10																			10		
11																			11		
12																			12		

Initials UAO

Consec. Cast # 142		Vessel SURVEYOR		Proj. & Leg ICE (2)		Event #	Vessel Sta. I.D.		Instructions								Sta. Designation PC 13				
Consec. Cast #		Latitude	N or S	Longitude	E or W	Date JD = 283	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S. S. V.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D				
Deg.	Min.	Deg.	Deg.	Day	Mo.	Yr.															
142	67	15	6	1	N	164 01 70 W 09 Oct 88	14 05 - 09	-	20 24	383201	88620018						13 m				
CTD				✓ Monitor Checks ✓				Times JD/Time				Data Location									
Type & SN SBD 91220R				on Deck at Surface				Data on 283 / 1400				Tape/Diskette I.D.				File Name/Header					
Press. SN 26072								at Surface 1408:40				SEP88				09 Oct 1353					
Temp. SN 710								Start Down 1404:20													
Cond. SN 304								at Bottom 1405:20													
								Start Up 1406:30													
								at Surface 1407+													
								Data off 1405:37													
Other												Remarks 9.099									
Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Other Samp.	Pos.	
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #				
1				✓	1405	34513.113	6701.891	P574.074		13,366.						29.550	081	833	1		
2				✓	1407	34490.162	6302.187	P073.051		13,500.	5,092.	29.736							834	2	
3										5.506.										3	
4										5.561.	3.304.	27.959.									4
5																				5	
6																				6	
7																				7	
8																				8	
9																				9	
10																				10	
11																				11	
12																				12	

Initials WAD  
✓

Consec. Cast # 143	Vessel <u>SURVEYOR</u>	Proj. & Leg <u>ICE(2)</u>	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation <u>PC 12</u>						
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 283	Time Hr.	GMT Min.	Dry Bulb	Wet Bulb	Bar. mb	Si si	Vis	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
143	67151	ON	1642581	W	09 Oct 88	16	10	-15	-20	25	33	320	16	862	0025	PC 12	20m		
CTD Type & SNSBD 91220B					✓ Monitor Checks ✓ on Deck at Surface					Times	JD/Time	Data Location							
Press. SN 26072					Press. 34471.273 (-0.016) - 34477.121 (1.710)					Data on 283/1606		Tape/Diskette I.D.	File Name/Header						
Temp. SN 710					Temp. 5799.070 (-1.470) - 6407.102 (3.038)					at Surface	1608:20	<u>SEP88</u>	<u>09Oct1552</u>						
Cond. SN 304					Cond. 3073.445 (0.050) - 3275.855 (29.083)					Start Down	1609								
					Other					at Bottom	1609:45								
										Start Up	1610:30								
										at Surface	1612								
										Data off	1609:55								
										Remarks 9.055 Long wait for deck sat update after had started 90° but before I pushed CTD									

Pos	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Other	Pos
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #	Samp.		
1				✓✓	1610	34533.504	6549.910	8693.188		20.966						31.607	101	835	1	
2				✓✓	1611	34485.715	6393.309	8295.418		21.170	3.996		31.820						836	2
3										4.902										3
4										4.972	2.905		28.981							4
5																				5
6																				6
7																				7
8																				8
9																				9
10																				10
11																				11
12																				12

Initials Uto

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Consec. Cast # 144		Vessel <b>SURVEYOR</b>		Proj. & Leg <b>ICE(2)</b>		Event #	Vessel Sta. I.D.		Instructions								Sta. Designation <b>PC11</b>			
Consec. Cast #	Latitude Deg. Min.		N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 283	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	Si Si	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D			
144	67	14	60N	164	49	73W	09 Oct 88	1730 - 04	- 12	25	38	3457	10571	0032	PC11					
CTD Type & SN SBD 91220B				✓ Monitor Checks on Deck at Surface				Times	JD/Time		Data Location									
								Data on 283/1728			Tape/Diskette I.D.	File Name/Header								
								at Surface	1729:30		<u>SEP88</u>	<u>09 Oct 1726</u>								
								Start Down	1730											
								at Bottom	1730:40											
								Start Up	1731:20											
								at Surface	1733											
								Data off	1730:46											
Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot.Data				Sal.	Other	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #			
1			✓ ✓	1731	34557.313	6355.441	8625.289		29.745	29.036	2.654	32.516		32.485	79	837	1			
2			✓ ✓	1732	34481.074	6476.156	8516.801		31.829	3.424	3.512	30.670				838	2			
3																	3			
4																	4			
5																	5			
6																	6			
7																	7			
8																	8			
9																	9			
10																	10			
11																	11			
12																	12			

Initials UO

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80  
27m

The program was a tape new binary  
1700 file saved in it bin.dat

Consec.Cast # 145		Vessel <b>SURVEYOR</b>		Proj. & Leg <b>ICE (2)</b>		Event#	Vessel Sta. I.D.		Instructions								Sta. Designation <b>PC10</b>			
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 283	Time GMT Hr.	Dry Bulb Min.	Wet Bulb	Bar. mb	Si. Si	Vis	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D		
145	67 14 98 N		165 14 75 W		09 Oct 88	19 15 00	900 3	26 38	320 08	56 1	0032						27m			
CTD Type & SN SBD 912203		Monitor Checks ✓ on Deck at Surface						Times	JD/Time	Data Location										
Press. SN 26072								Data on 283	1912:54	Tape/Diskette I.D.	File Name/Header									
Temp. SN 710		Press. 34472.156 (-0.077) · 34479.844 (2.568) ·						at Surface	1914	SEP88	09 Oct 1905									
Cond. SN 304		Temp. 6047.930 (0.482) · 6375.160 (2.805) ·						Start Down	1914:30											
		Cond. 3073.641 (0.050) · 8485.125 (31.008) ·						at Bottom	1915:30											
		Other						Start Up	1916:30	Remarks										
								at Surface	1917											
								Data off	1915:57											
S.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot.Data				Sal.	Other Samp.	Pos
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.				
1				✓✓	1916	34553.359	6429.141	8616.324		27.225			31.904		31.591	022	839	1		
2				✓✓	1917	34486.840	6374.863	8459.695		27.500	3.178						840	2		
3																		3		
4																		4		
5																		5		
6																		6		
7																		7		
8																		8		
9																		9		
10																		10		
11																		11		
12																		12		

Initials LAO

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Consec. Cast # 146		Vessel <b>SURVEYOR</b>	Proj. & Leg <b>ICE 6</b>		Event #	Vessel Sta. I.D.		Instructions								Sta. Designation <b>PC9</b>			
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 283	Time Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S. S.	V. si	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D		
146	67 15.00 N		165 40 11 W		09 Oct 88	205401	15 00	127	38310	10661						33	PC9		
CTD Type & SNS SBD 912203					Monitor Checks				Times	JD/Time	Data Location				28				
Press. SN 26072					on Deck	at Surface	Data on	283 / 205046	Tape/Diskette I.D.	File Name/Header									
Temp. SN 710					Press. 34431.977 [0.000]		at Surface	205220	SEP88	09 OCT 2040									
Cond. SN 304					Temp. 6219.504 [1784]		Start Down	205342											
					Cond. 3073.492		at Bottom	205459											
					Other [0.000]		Start Up	205608											
							at Surface	205803	Remarks 9.186										
							Data off	205502											
<b>NUTS</b>																			
Pos.	Bot.	T Rack	Trip Depth	Time @		Monitor Values				D/ Conv. Mon. Values-CTD				Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.			
1				/205544	34557.273	6436.719	8567.250		28.657 28.947	3.233		31.396			31.389	102	841	1	
2																		2	
3				/205723	34486.703	6392.145	8505.086		5.005 5.005	2.916		31.136						842	3
4																		4	
5																		5	
6																		6	
7																		7	
8																		8	
9																		9	
10																		10	
11																		11	
12																		12	

Initials CD  
✓

Consec. Cast #		Vessel		Proj. & Leg		Event #	Vessel Sta. I.D.		Instructions							Sta. Designation				
147	SURVEYOR		ICE (a)													PC8				
Consec. Cast #	Latitude	N or S	Longitude	E or W	Date	JD =	Time	Dry	Wet	Bar.	S	S	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D			
	Deg.	Min.	Deg.		Day	Mo. Yr.	GMT Hr. Min.	Bulb	Bulb	mb	Vis	Vis								
147	67	15	59N	166	05	09W	09 Oct P8	22	30021	00	32	7	3831014661			37	PC8			
CTD Type & SN SBD 91220B				Monitor Checks				Times		JD/Time		Data Location				32				
				on Deck		at Surface		Data on		283/222325		Tape/Diskette I.D.		File Name/Header						
				Press. 34472.383 [0.006]		34484.176 [3.309]		at Surface		222832		SEP88		09OCT2217						
				Temp. 6467.008 [4.670]		6462.371 [3.412]		Start Down		222923										
				Cond. 3073.590		8552.633		at Bottom		223030										
				Other [0.000]		[31.096]		Start Up		223145										
								at Surface		223024										
								Data off												
								Remarks 9.183												
Pos	Bot.	T	Trip	Time @		Monitor Values				DEPTH Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Other Samp.	Pos
				Bot.	Rack	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw			
1				323129	34570.358	6461.754	8552.758		32.932	3.410		31.089			31.081	055	843	1		
2																		2		
3				323320	34489.027	6463.668	8552.477		5.281	3.422		31.086						844	3	
4																		4		
5																		5		
6																		6		
7																		7		
8																		8		
9																		9		
10																		10		
11																		11		
12																		12		

Initials CD  
✓

Consec. Cast # 148		Vessel <u>SURVEYOR</u>		Proj. & Leg <u>ICE (2)</u>		Event #	Vessel Sta. I.D.		Instructions								Sta. Designation <u>PC7</u>				
Consec. Cast #	Latitude Deg. Min.		N or S	Longitude Deg.		E or W	Date Day Mo. Yr.	JD = 284	Time Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S. S.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D		
148	67	15	00 N	29	30	W	10 Oct 88	0055020	000	028	282	8	2	829	208661		42	PC7			
CTD Type & SN SBD 91220B				Monitor Checks				Times		JD/Time		Data Location				37					
				on Deck at Surface				Data on 283		004634		Tape/Diskette I.D.				File Name/Header					
				Press. 34472.563 [-0.008] 34482.281 [3.289]				at Surface		004900		<u>SE788</u>				<u>10OCT0034</u>					
				Temp. 6740.000 [5.256] 6471.242 [3.477]				Start Down		005000											
				Cond. 3073.570 8558.898				at Bottom		005151											
				Other [0.000] [31.095]				Start Up		005343											
								at Surface		005624											
								Data off		005154											
Remarks 9.199 Delay btwn PC8 & PC7 due to Blue Nose Initiation-																					
Pos.	Bot.	T	Trip	Time @		Monitor Values				JD / Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.					
1				005212	31585.492	6528.875	8667.043		37.912	3.881		31.688			31.682	66	845	1			
2									38.296										2		
3				005545	34488.887	6476.145	8562.021		5.202	3.519		31.090							846	3	
4																			4		
5																			5		
6																			6		
7																			7		
8																			8		
9																			9		
10																			10		
11																			11		
12																			12		

Initials CD  
✓

Consec. Cast #		Vessel		Proj. & Leg		Event #	Vessel Sta. I.D.		Instructions								Sta. Designation				
Consec.	Cast #	Latitude	N or S	Longitude	E or W	Date	JD = 284	Time	GMT	Dry	Wet	Bar.	Si	Vis	Wind	Wind	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
		Deg.	Min.	Deg.		Day	Mo.	Hr.	Min.	Bulb	Bulb	mb	ss		Dir.	Sp.					
149		14 6 7	14 3 8 N	166 54.1	11 W	100	OCT	88	02 36 0 0	- 0 5 2	9 3 8 2 8 0	06 6 6 1								43	PC6
CTD Type & SN SBD 91220B Press. SN 26072 Temp. SN 710 Cond. SN 304												Monitor Checks on Deck at Surface Press. 34472.340 [0.008] 34478.594 [2.305] Temp. 3128.277 [6.644] 6396.043 [2.946] Cond. 30733.62 8500.797 Other [0.000] [31.069]		Times JD/Time Data on 284 / 023215 at Surface 023405 Start Down 023510 at Bottom 023648 Start Up 023818 at Surface 024102 Data off 023702		Data Location Tape/Diskette I.D. SER88 File Name/Header 100CT0224 _____ _____ Remarks CTD CAST PRIOR TO NET TOWS					
Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Other	Pos.	
		Rack	Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #	Samp.			
1				✓ 23° 51'	34586.711	6503.918	8680.988			38.385			31.989				31.972	019	847	1	
2										38.775	3.705									2	
3				✓ 24° 23'	34484.129	6396.539	8500.223			3.971			31.061						848	3	
4																				4	
5																				5	
6																				6	
7																				7	
8																				8	
9																				9	
10																				10	
11																				11	
12																				12	

 Initials CD  
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Consec.Cast # 150		Vessel <b>SURVEYOR</b>	Proj. & Leg <b>ICE (2)</b>		Event#	Vessel Sta. I.D.		Instructions								Sta. Designation <b>PC5</b>				
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 284	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S. vis.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D				
150	67 15.0	N	167 19.0	3W	10 OCT 88	04 41 - 02 - 07 29	28 25 50 87 61								42	PC5				
CTD Type & SN S50 912203		Monitor Checks on Deck at Surface				Times	JD/Time	Data Location 37												
Press. SN	26032	Press. 34472.652 [0.021] 34482.043 [3.208]				Data on 284 / 043812		Tape/Diskette I.D. SEP88												
Temp. SN	710	Temp. 7562.922 [10.690] 6341.309 [2.555]				at Surface 043922		File Name/Header 100CT0429												
Cond. SN	304	Cond. 3073.691 8439.848				Start Down 044018														
		Other [0.000] [30.876]				at Bottom 044110														
						Start Up 044232														
						at Surface 044420														
						Data off 044113														
						Remarks 9.194								NUTS						
Pos.	Bot.	T	Trip	Time @		Monitor Values				3/ Conv. Mon. Values-CTD				Sample Bot.Data				Sal.	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #			
1				644200	34586.254 6520.359	8698.742			38.105 38.498	3.815		32.044			32.017	69	849	1		
2																		2		
3				044352	34485.688 6341.148	8439.344			4.348 4.392	2.555		30.876						850	3	
4																		4		
5																		5		
6																		6		
7																		7		
8																		8		
9																		9		
10																		10		
11																		11		
12																		12		

Initials SD  
✓

Consec. Cast # 151		Vessel <b>SURVEYOR</b>		Proj. & Leg <b>ICE (2)</b>		Event #	Vessel Sta. I.D.		Instructions								Sta. Designation <b>PC4</b>							
Consec. Cast #	Latitude N or S		Longitude E or W		Date Day Mo. Yr.	JD = 284	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	<i>Si</i>	<i>Vis</i>	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D						
	Deg.	Min.	Deg.																					
151	67	13	80	N	167	44	60	W	100	OCT	88	06	24	-	02	-	05	30	28	21	008	421	41	PC4
CTD Type & SNS <b>SBD 91220B</b>					Monitor Checks on Deck at Surface					Times	JD/Time		Data Location					36						
Press. SN	26072				Press. 34472.820 [0.021]	34478.496 [0.350]				Data on	284	061809	Tape/Diskette I.D.	File Name/Header										
Temp. SN	710				Temp. 6264.254 [2.312]	6497.711 [3.666]				at Surface	062225		<b>SET88</b>	10OCT0612										
Cond. SN	304				Cond. 3033.656	8560.828				Start Down	062323													
					Other [0.000]	[30.933]				at Bottom	062425													
										Start Up	062538													
										at Surface	062342													
										Data off	062428		Remarks 9.228											
Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data				Sal. Bot. #	Other Samp.	Pos.				
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.								
1				0625	34581.617	6515.125	8694.246		36.401 36.370	3.785		32.036				32.029	58	851	1					
2				0627	34487.152	6497.590	8560.289		4.761 4.809	3.666		30.931							2					
3				0627	34487.152	6497.590	8560.289											852	3					
4																			4					
5																			5					
6																			6					
7																			7					
8																			8					
9																			9					
10																			10					
11																			11					
12																			12					

Initials CD  
✓

Consec. Cast # 152		Vessel <b>SURVEYOR</b>		Proj. & Leg <b>ICE (a)</b>			Event #	Vessel Sta. I.D.		Instructions								Sta. Designation <b>PCB</b>			
Consec. Cast #	Latitude	N or S	Longitude	E or W	Date	JD = 284		Time	GMT	Dry	Wet	Bar.	Si	Wind	Wind	Cloud	Type	Bottom	Sta. Name or I.D		
	Deg.	Min.	Deg.		Day	Mo.	Yr.	Hr.	Min.	Bulb	Bulb	mb	si	Dir.	Sp.	Cloud	Type	Depth, m			
152	67	14.54 N	168° 08' 93W		10 Oct	88	07	50	-02	-04	29	28	21	00	08	42	1	41	PCB		
CTD Type & SNSBD 91220B		✓✓✓ Monitor Checks ✓ on Deck at Surface								Times	JD/Time	Data Location 3b									
Press. SN 26072		Press. 34472.164 (-0.099) 34479.719 (2.829)								Data on 284 / 0745		Tape/Diskette I.D. File Name/Header									
Temp. SN 710		Temp. 6079.680 (0.693) 6503.328 (3.706)								at Surface	0748										
Cond. SN 304		Cond. 3108.055 (0.075) 8586.480 (31.077)								Start Down	0749										
		Other								at Bottom	0750										
										Start Up	0750.40										
										at Surface	0753										
										Data off	0750.02	Remarks 9.132 10° aft									
Pos	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Bot. #	Other Samp.	Pos
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.					
1				✓(✓)	0750	34582.746	6566.191	8708.738		36.901			31.822			31.812	046	853	1		
2				✓	0752	34486.648	6506.379	8574.430		37.275	4.141							854	2		
3										4.806									3		
4										4.854	3.723		31.003							4	
5																			5		
6																			6		
7																			7		
8																			8		
9																			9		
10																			10		
11																			11		
12																			12		

Initials UAD

Consec. Cast # 153		Vessel <b>SURVEYOR</b>		Proj. & Leg <b>ICE (2)</b>		Event #	Vessel Sta. I.D.		Instructions								Sta. Designation <b>PC2</b>				
Consec. Cast #	Latitude N or S		Longitude E or W		Date JD = 284	Time GMT		Dry Bulb	Wet Bulb	Bar. mb	Si. si.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Weath.	Depth, m	Sta. Name or I.D			
	Deg.	Min.	Deg.		Day Mo. Yr.	Hr. Min.															
153	67	15 29 N	168	33 66 W	10 Oct 88 09	16	1	1	1	30	028	10008367	0046	PC2	41 m						
CTD Type & SNSBD 91220B		✓ Monitor Checks ✓ on Deck at Surface						Times JD/Time		Data Location											
Press. SN 26072		Press. 34472.836 (-0.028) 34478.898 (1.996)						Data on 284/0913:45		Tape/Diskette I.D. File Name/Header											
Temp. SN 710		Temp. 6751.719 (5.313) 6462.902 (3.419)						at Surface 0914:40		SEP88 10 Oct 0906											
Cond. SN 304		Cond. 3073.996 (0.000) 8614.477 (31.423)						Start Down 0915													
		Other						at Bottom 0916:30													
								Start Up 0917:25													
								at Surface 0918													
								Data off 0916:43		Remarks 9.216 10° aft											
S.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Bot. #	Other Samp.	P.S.
				Bot.	Rack	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw				
1				✓	917	34596.368	6521.070	8698.262	41.411	3.826		32.030			32.023	087	855	1			
2				✓	919	34487.457	6465.605	8567.434	41.831								856	2			
3																		3			
4																		4			
5																		5			
6																		6			
7																		7			
8																		8			
9																		9			
10																		10			
11																		11			
12																		12			

Initials LAD  
✓

Consec. Cast # 154	Vessel <b>SURVEYOR</b>	Proj. & Leg <b>TCE (2)</b>	Event #	Vessel Sta. I.D.	Instructions										Sta. Designation <b>PC1</b>				
Consec. Cast #	Latitude N or S	Longitude E or W	Date JD = 284	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	Si. vis	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D						
154	67 15.24 N	168 58.71 W	10 Oct 88	1047	08	0231	12833004	8620049				44m							
CTD Type & SNSBD 912203				✓ Monitor Checks ✓ on Deck at Surface				Times	JD/Time	Data Location									
Press. SN	26032	Press. 34472.578 (-0.017)	34481.750 (2.947)	Data on	284/1043	Tape/Diskette I.D.	File Name/Header												
Temp. SN	710	Temp. 6718.852 (+1.961)	6439.977 (3.218)	at Surface	1045:20	SEPT88	10 Oct 1034												
Cond. SN	304	Cond. 3073.525 (0.600)	8573.668 (31.323)	Start Down	1046														
		Other		at Bottom	1047:25														
				Start Up	1048:20	Remarks	9.181												
				at Surface	1050														
				Data off	1047:38														
Pos.	Bot.	T	Trip	Time @		Monitor Values				d/ Conv. Mon. Values-CTD				Sample Bot.Data			Sal. Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.			
1			✓	1047	34603.867	6490.035	8685.996		44.032			32.128		32.123	100	857	1		
2			✓	1049	34488.137	64135.137	8552.449		44.479	3.608						858	2		
3																	3		
4																	4		
5																	5		
6																	6		
7																	7		
8																	8		
9																	9		
10																	10		
11																	11		
12																	12		

Initials UJ  
✓

Consec. Cast # 155	Vessel <u>Surveyor</u>	Proj. & Leg <u>Jce (2)</u>	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation PD 6					
Consec. Cast #	Latitude N or S Deg. Min. S	Longitude E or W Deg.	Date JD = 285 Day Mo. Yr.	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	Vis	Wind Dir.	Wind Sp.	Cloud Type	Bottom Weath.	Depth, m	Sta. Name or I.D				
155654471N	1685348W	11 Oct 88	0224 - 02 - 06	2927150	18862	47	P06											
CTD Type & SN Sbd 912203 Press. SN 26072 Temp. SN 710 Cond. SN 304				Monitor Checks on Deck at Surface Press. 34473.828 [0.004] 34478.895 [2.138] Temp. 6725.484 [4.282] 6139.758 [1.099] Cond. 3090.305 8441.238 Other [0.005] [32.348]				Times Data on at Surface		JD/Time 021919	Data Location Tape/Diskette I.D. 50038			File Name/Header 11OCT0216				
				Start Down at Bottom		022040												
				Start Up at Surface		022430												
				Data off		022525												
				Data on at Surface		022816												
				Start Down at Bottom		022436												
				Start Up at Surface		022816												
				Data off		022436												
Pos	Bot.	T	Trip Depth	Time @		Monitor Values			Conv. Mon. Values-CTD			Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos	
				Depth	Trip	Press.	Temp.	Cond.	Other	JD	Press.	Temp.	Cond.	Sal.				Therm-P
1				022453	34600.977	6118.309	8429.602		43.051			32.381			32.377	081	859	1
2									43.502	0.939								2
3				022453	34485.738	6132.254	8433.891		4.217			32.334				860	3	
4									4.261	1.057							4	
5																	5	
6																	6	
7																	7	
8																	8	
9																	9	
10																	10	
11																	11	
12																	12	

Initials CD  
✓

Consec. Cast # 156	Vessel Surveyor	Proj. & Leg See (2)	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation P05							
Consec. Cast #	Latitude Deg. Min.	N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 285	Time Hr.	GMT Min.	Dry Bulb	Wet Bulb	Bar. mb	Si Si	Vis	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D		
	156 65 43.7 3 N		168 46 99 W		11 Oct 88	03	16	00 0	- 0	329	27240	12862					53	P05		
CTD Type & SN 5bd 91220B					Monitor Checks				Times	JD/Time	Data Location									
					on Deck	at Surface	Data on	285 / 030951			Tape/Diskette I.D.	48								
					Press. SN 26072	Press. 34472.121 [0.005]	34479.332 [2.505]	at Surface	031049		File Name/Header	47								
					Temp. SN 710	Temp. 6300.910 [2.199]	6091.742 [0.743]	Start Down	031358			5ep088								
					Cond. SN 304	Cond. 3033.534	8406.258	at Bottom	031610											
						Other [0.000]	[32.378]	Start Up	031709											
							at Surface	032004			Remarks 9.189									
							Data off	031612			CAST PRIOR TO NET TOW									
Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data				Sal. Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.				
1				031641	34614.027	6094.324	8410.781		47.652 48.132	0.763		32.378			32.373	55	861	1		
2																		2		
3				031927	34486.336	6092.691	8407.141		4.770 4.818	0.751		32.379					862	3		
4																		4		
5																		5		
6																		6		
7																		7		
8																		8		
9																		9		
10																		10		
11																		11		
12																		12		

Initials CD  
✓

Consec. Cast # 157		Vessel <u>Surveyor</u>	Proj. & Leg <u>Jce (2)</u>			Event #	Vessel Sta. I.D.		Instructions							Sta. Designation <u>P04</u>			
Consec. Cast #	Latitude N or S		Longitude E or W		Date JD = 285		Time GMT	Dry Bulb	Wet Bulb	Bar. mb	S.	S.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Weath.	Depth, m	Sta. Name or I.D	
	Deg.	Min.	Deg.		Day	Mo.	Hr. Min.												
157	65	41	91	N	168	36	73	W	11 Oct 88	045700	-0	2	2827	185148	62	52	P04		
CTD Type & SN <u>5bd 91220B</u>		Monitor Checks						Times	JD/Time	Data Location <sup>47</sup> <sub>46</sub>									
Press. SN <u>26072</u>		on Deck at Surface						Data on 285	045106	Tape/Diskette I.D. File Name/Header									
Temp. SN <u>710</u>		Press. <u>34472.031</u> [0.003] <u>34482.129</u> [3.368]						at Surface	<u>045227</u> <sup>045304</sup>	<u>5008P</u> <u>11OCT0444</u>									
Cond. SN <u>304</u>		Temp. <u>6867.703</u> [5.313] <u>6159.766</u> [1.227]						Start Down	<u>045604</u>										
		Cond. <u>3093.578</u> <u>8449.965</u>						at Bottom	<u>045716</u>										
		Other <u>[0.000]</u> <u>[32.303]</u>						Start Up	<u>045812</u>										
								at Surface	<u>045718</u>										
								Data off	<u>045718</u>										
								Remarks 9.157 045252° out of the water (CTD against ship)											
Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.			
1				045744	34610.387	6158.215	8452.980		46.664			32.304			32.299	79	853	1	
2									47.133	1.231									2
3				045929	34486.078	6158.027	8450.465		4.616			32.305						854	3
4									4.662	1.230									4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials CD  
✓

Consec. Cast #		Vessel	Proj. & Leg Surveyor Jce (a)			Event #	Vessel Sta. I.D.		Instructions								Sta. Designation				
Consec. Cast #		Latitude N or S	Longitude E or W	Date Day Mo. Yr.	JD = 285		Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	Si. vis	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D				
158		Deg. Min.	Deg.													54	P03				
158 65 40 43 N		168 26 58 W		11 Oct 88		05 50 00	4 - 0 3 2	8 38 160	148 62												
CTD Type & SN 5bd 91220B		Monitor Checks				Times	JD/Time	Data Location 49													
Press. SN 26072		on Deck		at Surface		Data on	285/054725	Tape/Diskette I.D. File Name/Header													
Temp. SN 710		Press. 34472.078 [0.005]		34478.688 [2.325]		at Surface	054843	<u>5ep88</u> 11OCT0538													
Cond. SN 304		Temp. 6301.656 [1.951]		6214.898 [1.647]		Start Down	054930														
		Cond. 3073.629		8486.430		at Bottom	055058														
		Other [0.000]		[32.226]		Start Up	055201														
						at Surface	055349	Remarks 9.198 CTD PRIOR TO NET TOWS													
						Data off	055103														
Pos	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Bot. #	Other Samp.	Pos
				Bot.	Rack	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw				
1				055136	34621.117	6210.785	8486.227		50.067	1.614		32.235			32.232	101	866	1			
2									50.572									2			
3				055317	34487.289	6215.664	8486.559		4.909			32.222					866	3			
4																		4			
5																		5			
6																		6			
7																		7			
8																		8			
9																		9			
10																		10			
11																		11			
12																		12			

Initials CD  
✓

Consec. Cast #		Vessel	Proj. & Leg			Event #	Vessel Sta. I.D.		Instructions								Sta. Designation			
Consec. Cast #		Sueyfore	Ice (2)															P02		
Latitude		N or S	Longitude		E or W	Date	JD = 285	Time	GMT	Dry	Wet	Bar.	Si	Vis	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
Deg.	Min.	Deg.	Deg.	Deg.	Day	Mo.	Yr.	Hr.	Min.	Bulb	Bulb	mb	si	si						
159	6541	15N	168	1994	W	11	OCT	2807	1800	2 - 01	28	28	16012	862					50	P02
CTD		5bd 91220B		Monitor Checks				Times		JD/Time		Data Location				45				
Type & SN	Press. SN	26072		on Deck		at Surface		Data on	285/071418			Tape/Diskette I.D.	File Name/Header							
Temp. SN	Cond. SN	710		Press. 34432.152 [0.009]		34438.586 [2.149]		at Surface	071525			5ep88	11OCT0705							
				Temp. 6788393 [5.925]		6370922 [2.764]		Start Down	071630											
				Cond. 3073.590		8574.875		at Bottom	071802											
				Other [0.000]		[31942]		Start Up	0719											
								at Surface	071803											
								Data off												
Pos.	Bot.	T	Trip	Time @		Monitor Values				JD / Conv. Mon. Values-CTD			Sample Bot. Data			Sal.	Bot. #	Other Samp.	Pos.	
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw					Sal.
1				071828	34607.3556367.598	8576.957			45.348 45.804	2.740		31.961			31.958	102	867	1		
2																		2		
3				0718051	34486.2116371.316	8574.838			4.624 4.670	2.766		31.937						868	3	
4																		4		
5																		5		
6																		6		
7																		7		
8																		8		
9																		9		
10																		10		
11																		11		
12																		12		

Initials CD

✓ \_\_\_\_\_

Consec. Cast # 160	Vessel <u>Surveyor</u>	Proj. & Leg <u>Jee (2)</u>	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation PO1							
Consec. Cast #	Latitude Deg. Min.	N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 285	Time Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S. ss	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D			
	160 65 41.28		168 07 75		11 Oct 88	08 14	10 - 1	2 28	28 140	12 862	00	23				20-18	PO1			
CTD Type & SN <u>5bd 91220B</u>		✓ Monitor Checks ✓ on Deck at Surface						Times	JD/Time	Data Location										
Press. SN <u>26072</u>		Press. 34472.047 (-0.005) 34479.262 (2.711)						Data on	285 / 0809:40	Tape/Diskette I.D.	File Name/Header									
Temp. SN <u>710</u>		Temp. 6164.367 (1.317) 6459.320 (3.392)						at Surface	0812:30	<u>5ep88</u>	<u>11Oct0759</u>									
Cond. SN <u>304</u>		Cond. 3073.605 (0.000) 8571.023 (31.085)						Start Down	0813											
		Other						at Bottom	0814:1											
								Start Up	0815											
								at Surface	0816:30											
								Data off	0814:06											
								Remarks <u>9.118 / Pressures steady here (no drift) =&gt;</u> <u>possibly drift was caused by wave??</u> <u>15° aft / Carol says 25°</u>												
Pos.	Bot.	T Rack	Trip Depth	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data				Sal. Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.				
1				✓✓	0814	34529.387	6461.406	8572.313		19.346					31.277	22	869	1		
2				✓✓	0816	34489.336	64160.438	8570.797		19.439	3.407		31.279					870	2	
3										5.097									3	
4										5.147	3.397		31.279							4
5																			5	
6																			6	
7																			7	
8																			8	
9																			9	
10																			10	
11																			11	
12																			12	

Initials UD

✓

Consec.Cast # 161		Vessel Surveyor		Proj. & Leg TCE(2)		Event#	Vessel Sta. I.D.		Instructions								Sta. Designation PE1			
Consec. Cast #		Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 286	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	Si. si.	Vis	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D	
161	640290N	1722496W		12 OCT 88	053501501020090000541													55	PE1	
CTD Type & SNSBD 91220.B		Monitor Checks						Times	JD/Time	Data Location								50		
Press. SN	26072	x heat lamp on Deck				Data on	286 / 053108			Tape/Diskette I.D.	File Name/Header									
Temp. SN	310					at Surface	053253			SEP88	12 OCT 88									
Cond. SN	304	Press. 34474.066 [0.025]	34485.316 [3.382]			Start Down	053406													
		Temp. 3291.699 [8.798]	6480.066 [3.543]			at Bottom	053538													
		Cond. 3033.918	8661.055			Start Up	053645													
		Other [6.000]	[31.984]			at Surface	053849													
						Data off	053542													
Remarks 9.124 * very little sample left when Beginning of Anadyr Strait casts; transects run east - Cast prior to net tows																				
Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot.Data				Sal.	Other	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	JD	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.			
1				053612	34626.332	6155.957	8479.307		51.123	1.214		32.575		*	32.496	081	871	1		
2									51.633									2		
3				053817	34488.727	6481.750	8662.605		5.081	3.551		31.986						872	3	
4																		4		
5																		5		
6																		6		
7																		7		
8																		8		
9																		9		
10																		10		
11																		11		
12																		12		

Initials CD  
✓

Consec.Cast # 162		Vessel <b>SURVEYOR</b>		Proj. & Leg <b>ICE(2)</b>			Event#	Vessel Sta. I.D.		Instructions							Sta. Designation <b>PE2</b>		
Consec. Cast #		Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 286	Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	S. vis.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D		
162	6359	71	N	1721620	W	120	OCT 88 0656	030	020	190700000541						56	PE2		
CTD Type & SN SBD 912203		Monitor Checks on Deck at Surface Press. 34432.234 [0.003] 34479.219 [2.135] Temp. 6283.414 [2.199] 6484.105 [3.578] Cond. 3073.480 8662.371 Other [0.000] [31982]								Times Data on 286 / 065255 at Surface 065347 Start Down 065443 at Bottom 065615 Start Up 065717 at Surface 065929 Data off 065618		JD/Time 065255 065347 065443 065615 065717 065929 065618		Data Location 51 Tape/Diskette I.D. SEP88		File Name/Header 120CT0640			
														Remarks 9.060					
Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD			Sample Bot.Data			Sal.	Other	Pos.	
	Rack	Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #	Samp.		
1				065647	34626.371	6094.250	8433.105		51.655 52.169	0.762		32.596				32.592	55	873	1
2																		2	
3				065900	34485.504	6483.934	8662.844		4.498 4.539	3.567		31.975						874	3
4																		4	
5																		5	
6																		6	
7																		7	
8																		8	
9																		9	
10																		10	
11																		11	
12																		12	

Initials SD  
✓

Consec. Cast # 163		Vessel <b>SURVEYOR</b>	Proj. & Leg <b>TCE(2)</b>			Event#	Vessel Sta. I.D.		Instructions							Sta. Designation <b>PE3</b>				
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 286 Mo. Yr.	Time Hr.	GMT Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S. Vis	Wind Dir.	Wind Sp.	Cloud Type	W.eath.	Bottom Depth, m	Sta. Name or I.D		
163	63 58	10 N	172 08	30 W	12 OCT	88	07	38	030	025	2007	000005	41				57	PE3		
CTD Type & SN SBD 912203		Monitor Checks on Deck at Surface						Times		ID/Time	Data Location									
Press. SN 26072								Data on 286		073403										
Temp. SN 710								at Surface		073610										
Cond. SN 304								Start Down		073704										
								at Bottom		073836										
								Start Up		074007										
								at Surface		074245										
								Data off		073841										
								Remarks 9.079 20° S												
Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Other Samp.	Pos.
				Bot.	Rack	Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P			
1					073918	34622.844	6090.445	8432.965		50.491	0.735		32.624				32.620	079	875	1
2																			2	
3					074208	34483.621	6439.020	8637.629		4.849	3.250		32.050						876	3
4																			4	
5																			5	
6																			6	
7																			7	
8																			8	
9																			9	
10																			10	
11																			11	
12																			12	

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Consec. Cast # 164		Vessel <u>SURVEYOR</u>		Proj. & Leg <u>ICE (2)</u>			Event #	Vessel Sta. I.D.		Instructions							Sta. Designation <u>PE4</u>		
Consec. Cast #	Latitude Deg. Min.		N or S	Longitude Deg.		E or W	Date Day Mo. Yr.	JD = 286	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	Vis vis	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
164	63	53	N	17	20	11	12 0 CT	88 08 35	03 20 25	19	170350 2444	10052	PE4	47					
CTD Type & SN SBD 91220B				Monitor Checks on Deck ✓ at Surface					Times	JD/Time	Data Location								
Press. SN 26072				Press. 344.721.563 (-0.024) 344.81.641 (3.118)					Data on	286/0831:40	Tape/Diskette I.D.	File Name/Header							
Temp. SN 710				Temp. 6437.324 (3.232) 6483.012 (3.561)					at Surface	0832:50	<u>SEP88</u>	12 Oct 0826							
Cond. SN 304				Cond. 3075.758 (0.000) 8639.445 (31.748)					Start Down	0834:10									
				Other					at Bottom	0835:30									
									Start Up	0836:40	Remarks	9.056							
									at Surface	0839:30	30° - 35° aft								
									Data off	0835:45									
Pos.	Bot.	T	Trip	Time @		Monitor Values				d/ Conv. Mon. Values-CTD			Sample Bot. Data			Sal. Bot. #	Other Samp.	P/S	
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw				Sal.
1				✓	0836	34611.082	5978.090	8320.238	48.021	-0.112	32.392	32.388	401	877	1				
2				✓	0839	34487.012	6482.953	8639.773	4.885	4.933	31.710	31.710	878		2				
3															3				
4															4				
5															5				
6															6				
7															7				
8															8				
9															9				
10															10				
11															11				
12															12				

\* 418 m values from Readlog calculations.  
→ processed L 2 times in 6 ID's, which fouled up the log file.

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Consec. Cast # 165		Vessel <b>SURVEYOR</b>	Proj. & Leg <b>TCE (2)</b>			Event #	Vessel Sta. I.D.		Instructions								Sta. Designation <b>PES5</b>			
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 286	Time Hr.	GMT Min.	Dry Bulb	Wet Bulb	Bar. mb	Si vis	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D		
165	63 51.62 N		171 53.50 W		12 OCT 88	09	16	34	25	19	07	04	00	26	41	39	PES5			
CTD Type & SN SBD 91220B		Monitor Checks on Deck at Surface						Times	JD/Time	Data Location										
Press. SN 26072		Press. 34472.625 (-0.010) 34481.469 (3.047)						Data on	286/0913:50	Tape/Diskette I.D.	File Name/Header									
Temp. SN 710		Temp. 6758.020 (5.328) 6508.684 (3.737)						at Surface	0915	<u>SER88</u>	<u>12 Oct 0908</u>									
Cond. SN 304		Cond. 3073.836 (0.000) 8696.699 (31.920)						Start Down	0915:30											
		Other						at Bottom	0916:30											
								Start Up	0917:40											
								at Surface	0916:55											
								Data off	0916:55											
								15° aft ~		Remarks 9.040										
Pos.	Bot.	T Rack	Trip Depth	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data				Sal. Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.				
1				✓	0917	34574.770	6021.855	8349.109		34.306					32.335	102	879	1		
2				✓	0919	34486.488	6510.520	8656.203		34.646	0.227							880	2	
3										4.729									3	
4										4.776	3.756								4	
5																			5	
6																			6	
7																			7	
8																			8	
9																			9	
10																			10	
11																			11	
12																			12	

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Consec. Cast # 166		Vessel <u>SURVEYOR</u>		Proj. & Leg <u>ICE (a)</u>		Event #	Vessel Sta. I.D.		Instructions						Sta. Designation <u>PE6</u>					
Consec. Cast #	Latitude Deg.		N or S	Longitude Deg.		E or W	Date Day	JD = 286 Mo.	Time Hr.	GMT Min.	Dry Bulb	Wet Bulb	Bar. mb	Si vi S	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D	
	166	63	47	24	N	171	48	86	W	120	OCT	88	1030	0300	25	1907	0000	64	10031	PE6
CTD Type & SN SBD 912203		Monitor Checks ✓ on Deck at Surface						Times		JD/Time		Data Location								
Press. SN 26072								Data on 286/1027:36				Tape/Diskette I.D.		File Name/Header						
Temp. SN 710								at Surface 1028:45				SEP88		12Oct1019						
Cond. SN 304								Start Down 1029:15												
								at Bottom 1030:20												
								Start Up 1031:25												
								at Surface 1033												
								Data off 1030:30												
								20° aft 56° aft												
Pos.	Bot.	T	Trip	Time @		Monitor Values			Conv. Mon. Values-CTD		Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.				
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.				Therm-P	Avg Tw	Sal.	
1			✓	1030	34551.977	6184.621	8455.266		26.181	1.463		32.135		32.117	022	821	1			
2			✓	1032	34489.027	6541.902	8670.027		26.440							882	2			
3									5.265								3			
4									5.316	3.967		31.645					4			
5																	5			
6																	6			
7																	7			
8																	8			
9																	9			
10																	10			
11																	11			
12																	12			

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Consec. Cast #		Vessel		Proj. & Leg		Event #	Vessel Sta. I.D.		Instructions								Sta. Designation				
167		SURVEYOR		ICE (2)													PG1				
Consec. Cast #	Latitude		N or S	Longitude		E or W	Date	JD = 287	Time		Dry Bulb	Wet Bulb	Bar. mb	S.S.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Weath.	Depth, m	Sta. Name or I.D	
	Deg.	Min.		Deg.			Day	Mo. Yr.	Hr. Min.												
167	63	19	61	N	168	41	09	W	13	OCT	88	00	57	02	80	12	17	1832504551	28	PG1	
CTD				Monitor Checks								Times		JD/Time		Data Location				24	
Type & SN SBD 912203				on Deck				at Surface				Data on		287/005245		Tape/Diskette I.D.		File Name/Header			
Press. SN 26032				Press. 34436.530 [0.012]				34480.934 [2.104]				at Surface		005502		SEP88		13 OCT 0043			
Temp. SN 710				Temp. 6643.109 [4.244]				6556.676 [4.037]				Start Down		005605							
Cond. SN 304				Cond. 3033.996				8652.535				at Bottom		005720							
				Other [0.000]				[31.381]				Start Up		005821							
												at Surface		010046							
												Data off		005723							
Remarks 9.130 EASTBOUND TRANSECT ACROSS SPANBERG STRAIT																					
Pos.	Bot.	T Rack	Trip Depth	Time @		Monitor Values				JD/ Conv. Mon. Values-CTD				Sample Bot. Data				Sal. Bot. #	Other Samp.	Pos.	
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.					
1				005752	34547.746	6551.012	8658.465		24.378			31.467			31.458	081	883	1			
2									24.619	4.035								884	2		
3				010004	34489.340	6542.316	8640.012		4.897			31.364							3		
4									4.945	3.973									4		
5																			5		
6																			6		
7																			7		
8																			8		
9																			9		
10																			10		
11																			11		
12																			12		

Initials CD  
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Consec. Cast # 168		Vessel <u>SURVEYOR</u>		Proj. & Leg <u>ICE (2)</u>		Event #	Vessel Sta. I.D.		Instructions								Sta. Designation <u>PG2</u>		
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 287	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S. si	S.S. si	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D		
168	63 21	N	168 15 82	W	13 OCT 88	02 42 01 3 - 0 4 1	16 18 33 8 03 4 5 1									26	PG2		
CTD Type & SN <u>SBD 912203</u> Press. SN <u>26072</u> Temp. SN <u>310</u> Cond. SN <u>304</u>				Monitor Checks on Deck at Surface Press. <u>34433.477</u> [−0.006] <u>34480.930</u> [6.593] Temp. <u>62503.855</u> [1.984] <u>6597.224</u> [4.356] Cond. <u>30316.258</u> <u>8632.746</u> Other <u>[0.000]</u> <u>[30937]</u>				Times		JD/Time	Data Location								
				Data on <u>287</u> / <u>023804</u> at Surface <u>023958</u> Start Down <u>024102</u> at Bottom <u>024218</u> Start Up <u>024331</u> at Surface <u>024546</u> Data off <u>024223</u>		JD/Time	Tape/Diskette I.D. <u>SEP88</u>		File Name/Header <u>13 OCT 0228</u>										
				Remarks CTD CASTS PRIOR TO NET TOWS															
Pos.	Bot. Rack	T	Trip Depth	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.			
1				024303	34537.578	6669.984	8755.281		21.511			31.567			31.563	055	885	1	
2									21.323	4.862									2
3				024509	34487.602	6597.801	8635.531		4.594			30.947					886	3	
4																		4	
5																		5	
6																		6	
7																		7	
8																		8	
9																		9	
10																		10	
11																		11	
12																		12	

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Consec. Cast # 169		Vessel <u>SURVEYOR</u>		Proj. & Leg <u>ICE (a)</u>		Event #	Vessel Sta. I.D.		Instructions								Sta. Designation <u>PG3</u>								
Consec. Cast #	Latitude Deg. Min.		N or S	Longitude Deg.		E or W	Date Day Mo. Yr.	JD = 287	Time Hr. Min.	GMT	Dry Bulb	Wet Bulb	Bar. mb	Si. si	Vis	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D				
	1696323	46	N	16751	70	W	13	OCT 88	04	49	01	2	-02	16	18	00000531		34	PG3						
CTD Type & SN SBD 91220B				Monitor Checks								Times		ID/Time		Data Location				29	<del>100?</del> no				
				on Deck				at Surface				Data on		287/044617		Tape/Diskette I.D.		File Name/Header							
												at Surface		044737		<u>SEP88</u>		<u>13 OCT 0438</u>							
												Start Down		044821											
												at Bottom		044909											
												Start Up		0450											
												at Surface		045752											
												Data off		044916											
												Remarks 9,104 - ROSETTE TRIGGER HADN'T BEEN RE-SET, SO IT WAS BROUGHT ON DECK, TRIGGER RE-SET, AND CTD CAST REPEATED TO TRIP BOTTLES													
Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Other	P.S.					
				Bot. Depth	Trip Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw				Sal.	Bot. #	Samp.		
1				045552 044949	34564.879	6574457	8693.180		30.639 30.941	4.199		31.626				31.622	79	887	1						
2																			2						
3				045719 045114	34488.168	6574461	8690.934		4.879 4.923	4.198		31.617								3					
4																			4						
5																			5						
6																			6						
7																			7						
8																			8						
9																			9						
10																			10						
11																			11						
12																			12						

Initials CD

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EVERYTHING  
IN SAME  
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Consec. Cast # 170		Vessel <b>SURVEYOR</b>	Proj. & Leg <b>ICE (2)</b>			Event #	Vessel Sta. I.D.		Instructions							Sta. Designation <b>PG4</b>				
Consec. Cast #	Latitude N or S		Longitude E or W		Date JD = 287		Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	Si. S	Si. S	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D			
	Deg.	Min.	Deg.		Day Mo. Yr.															
170	63	24	58	N	167	23	18	W	13	OCT	88	06	51	01	4000	0	29	PG4		
CTD		Monitor Checks						Times		JD/Time		Data Location				24				
Type & SN SBD 912203		on Deck at Surface						Data on 287 /		at Surface 065026		Tape/Diskette I.D.		File Name/Header						
Press. SN 26072		Press. 34432.059 [0.049] 34477.883 [1.899]						at Surface		Start Down		SEP88		13OCT0637						
Temp. SN 310		Temp. 6430.188 [3.510] 6651.160 [4.736]						at Bottom		at Bottom 065158										
Cond. SN 304		Cond. 3073.602 8718.117						Start Up		065311										
		Other [0.000] [31.356]						at Surface		065446		Remarks 9.025								
								Data off		065202										
Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data			Sal.	Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.				
1				065245	34545.488	6681.688	8745.277		24.565 24.807	4.944		31.399			31.388	101	889	1		
2																		2		
3				065417	34487.672	6649.320	8715.012		5.208 5.158	4.723		31.342						890	3	
4																		4		
5																		5		
6																		6		
7																		7		
8																		8		
9																		9		
10																		10		
II																		II		
I2																		I2		

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Consec. Cast # 171		Vessel <b>SURVEYOR</b>	Proj. & Leg <b>ICE (2)</b>		Event #	Vessel Sta. I.D.		Instructions								Sta. Designation <b>P65</b>				
Consec. Cast #	Latitude N or S		Longitude E or W	Date Day Mo. Yr.	JD = 287	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	S.	Wind Dir.	Wind Sp.	Cloud Type	W.eath.	Bottom Depth, m	Sta. Name or I.D			
	Deg.	Min.	Deg.																	
171	63	24.59 N	167	08	42 W	13 Oct 88 07 58	12	05	15	18	300	06	53	100	26	P65				
CTD Type & SNSBD 912203		✓ Monitor Checks ✓ on Deck at Surface						Times	JD/Time	Data Location										
Press. SN 26072		Press. 34472.645 (-0.010) 34479.461 (2.263)						Data on 287/0755		Tape/Diskette I.D. SEP88										
Temp. SN 710		Temp. 16278.383 (2.016) 16503.754 (3.706)						at Surface	0756	File Name/Header 13 Oct 0750										
Cond. SN 304		Cond. 3074.063 (0.003) 8569.430 (30.712)						Start Down	0756:45											
		Other						at Bottom	0757:40											
								Start Up	0758:30											
								at Surface	0759:50											
								Data off	0757:57	Remarks 35° aft										
Pos.	Bot.	T Rack	Trip Depth	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data				Sal. Bot. #	Other Samp.	P.S.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.				
1				✓	0758	34535.719	6698.359	8753.141		21.162					31.315	102	891	1		
2				✓	0759	34486.363	6512.789	8516.813		21.370	5.057							892	2	
3										4.657									3	
4										4.703	3.772									4
5																			5	
6																			6	
7																			7	
8																			8	
9																			9	
10																			10	
11																			11	
12																			12	

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Consec.Cast # 172		Vessel <b>SURVEYOR</b>		Proj. & Leg <b>ICE (a)</b>		Event #	Vessel Sta. I.D.		Instructions								Sta. Designation <b>PG6</b>			
Consec. Cast #	Latitude Deg.		N or S	Longitude Deg.		E or W	Date Day	JD = 287	Time GMT Hr.	Dry Bulb	Wet Bulb	Bar. mb	S.S. Si	S.S. Si	Wind Dir.	Wind Sp.	Cloud Type	Weath. Weath.	Bottom Depth, m	Sta. Name or I.D
172	63	25	N	166	46	67	W	13 OCT 88	09 59	12	02	151	8260	06531					22 m	PG6
CTD Type & SNSBD 912203				✓ Monitor Checks ✓ on Deck at Surface						Times		JD/Time		Data Location						
Press. SN 26072				Press. 34473.023 (0.001) 34478.141 (2.091)						Data on 287 / 0954:50				Tape/Diskette I.D.		File Name/Header				
Temp. SN 710				Temp. 16576.176 (4.353) 16544.574 (3.985)						at Surface 0957				<b>SET88</b>		13oct0950				
Cond. SN 304				Cond. 3074.008 (0.667) 8462.367 (29.525)						Start Down 0957:45										
				Other						at Bottom 0959										
										Start Up 0959:40										
										at Surface 1001:20										
										Data off 0959:00		10° aft								
Pos	Bot.	T Rack	Trip Depth	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot.Data				Sal.	Other Bot. #	Pos
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.				
1				✓	0959	34539.031	6816.379	8841.129		22.156					31.195	022	893	1		
2				✓	1000	34486.441	6539.711	8411.098		22.374	5.863		31.403					894	2	
3										4.454									3	
4										4.497	3.958		29.313							4
5																			5	
6																			6	
7																			7	
8																			8	
9																			9	
10																			10	
11																			11	
12																			12	

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Consec. Cast # 173		Vessel <u>Surveyor</u>	Proj. & Leg <u>See (2)</u>		Event #	Vessel Sta. I.D.		Instructions								Sta. Designation <u>P67</u>					
Consec. Cast #	Latitude Deg. Min.		N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 287	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D			
173	63	27	N	1662232	E	13 Oct 88	1146	20	06	14	1800	0053	1	0026	P67	21m					
CTD Type & SN 5bd 912203		✓ Monitor Checks ✓ on Deck at Surface						Times	JD/Time		Data Location										
Press. SN 26070		Press. 34473.352 (-0.017) 34479.547 (2006)						Data on 287/1143			Tape/Diskette I.D.		File Name/Header								
Temp. SN 710		Temp. 6707.984 (5.163) 6504.824 (3.718)						at Surface	1144:15		50988		13 Oct 1136								
Cond. SN 304		Cond. 3074.066 (0.600) 8425.473 (29.547)						Start Down	1145												
		Other						at Bottom	1146												
								Start Up	1147												
								at Surface	1148:30												
								Data off	1146:16		Remarks 9.033 10° aft										
Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.					
1				✓	1146	34537.949	6832.711	8870.594		21.626					31.284	066	895	1			
2				✓	1148	34487.594	6508.988	8370.773		21.839	5.973							896	2		
3										4.765									3		
4										4.812	3.719								4		
5																			5		
6																			6		
7																			7		
8																			8		
9																			9		
10																			10		
11																			11		
12																			12		

Initials (AD)  
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Consec. Cast # 174		Vessel <u>Surveyor</u>	Proj. & Leg <u>See (2)</u>			Event#	Vessel Sta. I.D.		Instructions							Sta. Designation <u>P68</u>				
Consec. Cast #	Latitude N or S		Longitude E or W		Date JD = 287		Time GMT	Dry Bulb	Wet Bulb	Bar. mb	S. vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D			
	Deg.	Min.	Deg.		Day Mo. Yr.	Hr. Min.														
174	63	27	49	166	00	30	130	c188	1322	22	10	1318	18002	63	10025	20m	P68			
CTD Type & SN		5bd 912203		✓ Monitor Checks ✓ on Deck at Surface				Times JD/Time		Data Location										
Press. SN		26072		Press. 34478.969 (-0.040) 34478.949 (2.069)				Data on	287/1319:20	Tape/Diskette I.D.		File Name/Header								
Temp. SN		710		Temp. 16788.973 (6.024) 16536.152 (3.937)				at Surface	1320:30	34288		13 Oct 1311								
Cond. SN		304		Cond. 3073840 (0.500) 2418.145 (29.258)				Start Down	1321											
				Other				at Bottom	1322											
								Start Up	1323											
								at Surface	1322:24											
								Data off	15° aft											
Pos	Bot.	T Rack	Trip Depth	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos	
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.				
1				✓	1322	34534.430	6816.570	82588.63		20.612					31.521	019	961	1		
2				✓	1324	34487.074	6479.645	8336.242		20.1815	5.864		31.560					962	2	
3										4.705									3	
4										4.751	3.539		29.025							4
5																			5	
6																			6	
7																			7	
8																			8	
9																			9	
10																			10	
11																			11	
12																			12	

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Consec. Cast # 175	Vessel <u>Surveyor</u>	Proj. & Leg <u>Jce (2)</u>	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation PG9					
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 287	Time Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S. Vis.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D		
	175 63 30 01		165 38 69		13 Oct 88	1500	30	25	1907	Calm	641			24	PG9			
CTD Type & SN Shd 912203				Monitor Checks ✓✓ on Deck at Surface				Times	JD/Time	Data Location								
								Data on	287 1456:45	Tape/Diskette I.D.	File Name/Header							
								at Surface	1458:16	Sep88	13 Oct 1450							
								Start Down	1459									
								at Bottom	1500									
								Start Up	1501									
								at Surface	1502:40									
								Data off	1500:24	Remarks	9,073							
Pos.	Bot.	T Rack	Trip Depth	Time @		Monitor Values			Conv. Mon. Values-CTD				Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw			
1				✓	1500	34532.430	6851.965	8859.031		19.990	6.104		31.339		31.322	069	963	1
2				✓	1502	34485.582	6495.672	8309.031		20.193							964	2
3										4.236								3
4										4.279	3.651		28.613					4
5																		5
6																		6
7																		7
8																		8
9																		9
10																		10
11																		11
12																		12

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Consec. Cast # 176		Vessel <i>Surveyor</i>	Proj. & Leg Lec(2)			Event #	Vessel Sta. I.D.	Instructions								Sta. Designation PG10				
Consec. Cast #	Latitude Deg.		N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 287	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S <sub>1</sub> S <sub>2</sub> S <sub>3</sub>	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D			
	Deg.	Min.		Deg.																
	176	63	31	20	165	16	14	130	c.t	80	1705	25	15	1	218180027770015	PG10 25				
CTD Type & SN		<i>Shel 91220 B</i>						Monitor Checks		Times JD/Time			Data Location							
								on Deck	at Surface	Data on	287 / 1657:45		Tape/Diskette I.D.	File Name/Header						
Press. SN		26072						Press. 34472.617 (-0.044)	34479.156 (2.192)	at Surface	1700:14		5ep88	13Oct1650						
Temp. SN		710						Temp. 6586.031 (3.922)	6640.121 (4.650)	Start Down	1705	1700:50								
Cond. SN		304						Cond. 3073.805 (0.000)	8399.199 (28.506)	at Bottom	1705									
								Other		Start Up	1706:15									
									at Surface	1707										
									Data off	1705:40										
Remarks 9.020 / Depth was 15 m, though fatho. showed 25 m Hit bottom, came back up & re-started																				
Pos.	Bot.	T	Trip	Time @		Monitor Values					Conv. Mon. Values-CTD				Sample Bot.Data			Sal.	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #			
1				✓	1705	34513918	6706645	8517.309		13.809	5.112		29.200			29.168	58	965	1	
2				✓	1706	34488.293	6701230	8466.234		13.945								966	2	
3										5.194									3	
4										5.245	5.079		28.812							4
5																			5	
6																			6	
7																			7	
8																			8	
9																			9	
10																			10	
11																			11	
12																			12	

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Consec. Cast # 177		Vessel <u>SURVEYOR</u>	Proj. & Leg Ice (2)			Event #	Vessel Sta. I.D.	Instructions							Sta. Designation PH1					
Consec. Cast #	Latitude N or S		Longitude E or W	Date JD = 287	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	Si vi	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D						
	Deg.	Min.	Deg.	Day Mo. Yr.																
177	63	16.35	165	13 13	13 Oct 88	19 20	35	231	227	305	12767	0013	PH1							
CTD Type & SN 5bd 912203		✓ Monitor Checks ✓ on Deck at Surface					Times	JD/Time	Data Location											
Press. SN 26072		Press. 34471.984 (-0.010) 34478.445 (2.077)					Data on 287 / 1917		Tape/Diskette I.D.	File Name/Header										
Temp. SN 710		Temp. 6415.977 (3.2041) 6382.375 (2.858)					at Surface	1918:42	2ep88	13 Oct 1911										
Cond. SN 304		Cond. 3073.637 (0.000) 8060.730 (27.115)					Start Down	1919:20												
		Other					at Bottom	1920:07												
							Start Up	1921												
							at Surface	1922												
							Data off	1920:27												
Remarks 8.957: Depth appears to be 12.6; pressure stopped increasing at this depth.																				
Pos. #	Bot.	T	Trip	Time @		Monitor Values					Conv. Mon. Values-CTD				Sample Bot. Data			Sal.	Other Samp.	S o
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #			
1				✓	✓	1920	34509.431	6665.832	8559.020		12.492				29.834		29.830	046	967	1
2				✓		1921	34487.742	6620.547	8482.340		12.614	4.831							968	2
3											5.333								3	
4											5.325	4.536			29.470					4
5																			5	
6																			6	
7																			7	
8																			8	
9																			9	
10																			10	
11																			11	
12																			12	

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Consec. Cast # 178		Vessel <u>Surveyor</u>	Proj. & Leg Jce (2)			Event #	Vessel Sta. I.D.		Instructions								Sta. Designation <u>P/H2</u>			
Consec. Cast #	Latitude Deg. Min.		N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 287	Time Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S <sub>s</sub>	S <sub>v</sub>	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D	
	178632386	N		1651372	W	13 Oct 88	20	400320	1111	12	228325	15	867					12	P/H2	
CTD Type & SN <u>5bcd 91220B</u>		Monitor Checks on Deck at Surface				Times JD/Time		Data Location												
Press. SN <u>26072</u>		Press. 34471.844 [0.000]				Data on <u>287/203732</u>		Tape/Diskette I.D. <u>5e988</u>												
Temp. SN <u>710</u>		344807338 [29160]				at Surface <u>203837</u>		File Name/Header <u>130CT2027</u>												
Cond. SN <u>304</u>		Temp. 6166.051 [1.278]				Start Down <u>203944</u>														
		655160 [4.046]				at Bottom <u>204025</u>														
		Cond. 3033.492				Start Up <u>204135</u>														
		8289.879				at Surface <u>204311</u>														
		Other [0.000] [28.180]				Data off <u>204026</u>		Remarks 8.973												
Pos.	Bot.	T Rack	Trip Depth	Time @		Monitor Values				JD / Conv. Mon. Values-CTD				Sample Bot. Data				Sal. Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.				
1				204059	34502.992	6652.609	8473.457		10.361 10.465	4.742		29.165			29.041	81	970	1		
2																		2		
3				204237	34486.281	6536.582	8270.273		4.772 4.820	3.938		28.091						969	3	
4																		4		
5																		5		
6																		6		
7																		7		
8																		8		
9																		9		
10																		10		
11																		11		
12																		12		

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Consec. Cast # 179		Vessel <u>Surveyor</u>	Proj. & Leg <u>1 Oct 21</u>		Event #	Vessel Sta. I.D.	Instructions								Sta. Designation <u>PH3</u>						
Consec. Cast #	Latitude Deg. Min.		N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 287	Time Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S. vi	S. vi	Wind Dir.	Wind Sp.	Cloud Type	Bottom Weath.	Depth, m	Sta. Name or I.D		
179	63	30	86N	165	15	41W	13 Oct P.P. 21	54	03	40	15	12	28	325	14762	16	PH3				
CTD Type & SN 3bd 91220B		Monitor Checks on Deck at Surface								Times	JD/Time	Data Location									
Press. SN	26072										Data on	215100	Tape/Diskette I.D.	File Name/Header							
Temp. SN	710		Press. 34432.063 [0.006] 34439.734 [2.515]								at Surface	215210	5ep 88	13 OCT 2142							
Cond. SN	304		Temp. 6175.988 [1.368] 6584.801 [4.271]								Start Down	215309									
			Cond. 3074.660 8215.059								at Bottom	215404									
			Other [0.000] [27.335]								Start Up	215515									
											at Surface	215604	Remarks 9.018								
											Data off	215408									
Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Bol. #	Other Samp.	Pos.
				Rack	Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw				
1				215450	34514.590	6691.789	8525.639		14.321	5.011		29.381				29.353	055971	1			
2									14.361									2			
3				215638	34487.008	6591.027	8237.145		4.950	4.321		27.481						972	3		
4																		4			
5																		5			
6																		6			
7																		7			
8																		8			
9																		9			
10																		10			
11																		11			
12																		12			

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Consec. Cast # 180		Vessel <i>Surveyor</i>	Proj. & Leg <i>Ice (a)</i>			Event #	Vessel Sta. I.D.		Instructions								Sta. Designation <i>PH4</i>				
Consec. Cast #	Latitude Deg.		N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 287	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S S	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D				
	Deg.	Min.		Deg.																	
	18 06 33 89 0 N			165 15 54 W		13 Oct 88	23	17 04 20 15	13 28 33 50 87 62							19	<i>PH4</i>				
CTD Type & SN 5bd 91220B		Monitor Checks on Deck at Surface						Times	JD/Time	Data Location 46 14											
Press. SN 26072		Press. 34473.063 [-0.005] 34479.035 [1.938]						Data on	287/231243	Tape/Diskette I.D.	File Name/Header										
Temp. SN 710		Temp. 6549.066 [4.105] 6563.340 [4.136]						at Surface	231432	<i>Sep 88</i>	<i>13 OCT 2305</i>										
Cond. SN 304		Cond. 3033.699 8060.887						Start Down	231544												
		Other [0.000] [26.1166]						at Bottom	231302												
								Start Up	231812	Remarks	9.089										
								at Surface	232008												
								Data off	231705												
Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot.Data				Sal.	Bot. #	Other Samp.	Pos.
				Bot. Depth	Trip Depth	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.					
1				231744	34524.459 6737.480	8551.477			17.160 17.336	5.326		29.331			29.325	079	973	1			
2																		2			
3				231933	34488.145 6564.074	8673.875			4.950 5.001	4.127		26.261						974	3		
4																		4			
5																		5			
6																		6			
7																		7			
8																		8			
9																		9			
10																		10			
11																		11			
12																		12			

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Consec. Cast # 181		Vessel <i>Surveyor</i>	Proj. & Leg <i>100(2)</i>		Event #	Vessel Sta. I.D.		Instructions								Sta. Designation <i>PH5</i>					
Consec. Cast #	Latitude N or S		Longitude E or W	Date Day	JD = 288	Time GMT Hr.	Dry Bulb Min.	Wet Bulb	Bar. mb	<i>Si</i>	<i>Vis</i>	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D				
	Deg.	Min.	Deg.	Mo.	Yr.																
181	63	46.26	N	165	17.25	W	14 Oct	88	0035	017	014	13	1800000862			19	PH5				
CTD Type & SN <i>5bd 91220B</i>		Monitor Checks on Deck at Surface				Times	ID/Time		Data Location												
Press. SN <i>26072</i>		Press. <i>34473.043 [0.012]</i> 34478.754 [1.826]				Data on <i>288</i>	<i>003035</i>		Tape/Diskette I.D.	<i>47</i> <i>14.3</i>		File Name/Header									
Temp. SN <i>710</i>		Temp. <i>3528.000 [10.274]</i> 6474.133 [3.493]				at Surface	<i>003221</i>		<i>Sep 88</i>	<i>14 OCT 0017</i>											
Cond. SN <i>304</i>		Cond. <i>3074.156</i> 8091.727				Start Down	<i>003314</i>														
		Other <i>[0.000] [26.883]</i>				at Bottom	<i>003514</i>														
						Start Up	<i>003626</i>														
						at Surface	<i>003901</i>														
						Data off	<i>003515</i>		Remarks <i>9.061</i>												
Pos.	Bot.	T	Trip	Time @		Monitor Values				D/ Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.					
1				<i>003602</i>	<i>34525.629</i>	<i>6796.832</i>	<i>8666.848</i>		<i>13.504</i> <i>13.677</i>	<i>5.729</i>		<i>29.979</i>			<i>29.972</i>	<i>101</i>	<i>975</i>	1			
2																		2			
3				<i>003820</i>	<i>34488.164</i>	<i>6494.652</i>	<i>8142.367</i>		<i>4.938</i> <i>4.986</i>	<i>3.642</i>		<i>27.261</i>					<i>976</i>	3			
4																		4			
5																		5			
6																		6			
7																		7			
8																		8			
9																		9			
10																		10			
11																		11			
12																		12			

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Consec. Cast #		Vessel		Proj. & Leg		Event #		Vessel Sta. I.D.		Instructions								Sta. Designation			
Consec.	Cast #	Latitude	N or S	Longitude	E or W	Date	JD = 288	Time	GMT	Dry	Wet	Bar.	S.	Wind	Wind	Cloud	Bottom	Sta. Name			
		Deg.	Min.	Deg.		Day	Mo. Yr.	Hr. Min.	Bulb	Bulb	mb	si	Dir.	Sp.	Type	Depth, m	or I.D				
182	Surveyor	182635356N		1651786W		14 Oct 88	01 520400	0201	131800000	762							19	PH6			
CTD Type & SN		5bd 912208		Monitor Checks				Times		JD/Time		Data Location									
Press. SN		26072		on Deck		at Surface		Data on	288 / 014833			Tape/Diskette I.D.		File Name/Header							
Temp. SN		710		Press. 34473.066 [ -0.003 ]		34478.055 [ 1.593 ]		at Surface		014951		Sep 88		14 OCT 0141							
Cond. SN		304		Temp. 7318.566 [ 9.176 ]		6379.859 [ 2.843 ]		Start Down		015103											
				Cond. 3093.397		8099.707		at Bottom		015248											
				Other [ 0.000 ]		[ 23.559 ]		Start Up		015411											
								Data off		015252		Remarks									
Pos.	Bot.	Rack	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Bot. #	Other Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.					
1				015334	34525.082	6814.609	8727.055		17.445			30.403			30.388	102	977	1			
2									17.617	5.851									2		
3				015528	34487.691	6381.063	8106.215		4.949			27.609						978	3		
4									4.997	2.835									4		
5																			5		
6																			6		
7																			7		
8																			8		
9																			9		
10																			10		
11																			11		
12																			12		

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Consec. Cast # 183	Vessel Surveyor	Proj. & Leg 1 col(2)	Event#	Vessel Sta. I.D.	Instructions										Sta. Designation PH7							
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day	JD = 288 Mo. Yr.	Time Hr.	GMT Min.	Dry Bulb	Wet Bulb	Bar. mb	S. si.	S. si. >	Wind Dir.	Wind Sp. 1	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D			
183	64 02	60 N	165 18 00	W	140	OCT 28	03	32	02	40	15	13	18	00	00	07	62	19	PH7			
CTD Type & SN 5bd 91200B				Monitor Checks					Times					JD/Time					Data Location			
Press. SN 26072				on Deck at Surface					Data on at Surface					032641					Tape/Diskette I.D.	File Name/Header		
Temp. SN 70				Press. 344732.358 [-0.004] 34478.445 [1932]					Start Down at Bottom					032931					Sep 88	14 OCT 0320		
Cond. SN 304				Temp. 3469.395 [10.202] 6584.430 [4.233]					Start Up at Surface					033036								
				Cond. 3033.570 8247.961					Data off					033205								
				Other [0.000] [27.620]										033317								
														033529								
														033209								
																			Remarks 9.071			
Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Other Samp.	Pos.		
				Rack	Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw				Sal.	Bot. #
1				033249	34524.824	6757.223	8718.188		17.444	5.459		30.677				30.653	22	979	1			
2									17.616										2			
3				033448	34487.680	6584.402	8247.078		4.872	4.267		27.612							980	3		
4																			4			
5																			5			
6																			6			
7																			7			
8																			8			
9																			9			
10																			10			
11																			11			
12																			12			

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Consec. Cast # 184	Vessel <u>Surveyor</u>	Proj. & Leg <u>Ice (a)</u>	Event #	Vessel Sta. I.D.	Instructions								Sta. Designation <u>PH8</u>							
Consec. Cast #	Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 288	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	Wind Dir. S. vs. Vs.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D					
184641009N	1651901W		14 Oct 88	04 48	01 500	07 14	1800000531							19	PH8					
CTD Type & SN		<u>5bd 912203</u>	DARK		Monitor Checks on Deck at Surface		Times	ID/Time	Data Location											
Press. SN	26072						Data on	288/044548	Tape/Diskette I.D.	File Name/Header										
Temp. SN	716						at Surface	044657	<u>Sep 88</u>	<u>14 OCT 0436</u>										
Cond. SN	304						Start Down	044746												
							at Bottom	044832												
							Start Up	044950												
							at Surface	045116												
							Data off	044834												
									Remarks	9.042										
Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data			Sal.	Bot. #	Other Samp.	Pos.
				Rack	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw				
1				044918	34524.988	6741.488	8711.953		17.666						30.677	66	981	1		
2								17.840	5.352		30.720							2		
3				045036	34487.020	6492.027	8255.523		4.914									982	3	
4								4.963	3.627		28.228							4		
5																		5		
6																		6		
7																		7		
8																		8		
9																		9		
10																		10		
11																		11		
12																		12		

Initials CD  
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Consec. Cast # 185		Vessel SURVEYOR	Proj. & Leg Ice (2)			Event #	Vessel Sta. I.D.		Instructions								Sta. Designation PH9			
Consec. Cast #		Latitude Deg.	N or S	Longitude Deg.	E or W	Date Day Mo. Yr.	JD = 288	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S. vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D		
185	64 17 84 N	165 19 81 W		140	OCT	8 06 08 01	1500 714	1828008641									21	PH9		
CTD Type & SN 5bd 91220B		Monitor Checks				Times		JD/Time		Data Location										
Press. SN 26072		on Deck at Surface				Data on 288		060440		Tape/Diskette I.D.		File Name/Header								
Temp. SN 710		Press. 34432.082 [0.028] 34439.133 [2.292]				at Surface		060612		Sep 88		14OCT0555								
Cond. SN 304		Temp. 64233.93 [3.134] 6408.469 [3.033]				Start Down		060709												
		Cond. 3073.602 8335.992				at Bottom		060808												
		Other [0.000] [29.470]				Start Up		060914												
						at Surface		061100												
						Data off		060811												
Remarks																				
Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data				Sal. Bot. #	Other Samp.	Pos.
				Rack	Trip Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw			
1				060848	34530.578	6648.727	8620.176		19.540	4.715		30.484				30.423	19	984	1	
2									19.734										2	
3				061034	34487.102	6479.230	8379.832		5.007			29.573							983	3
4																			4	
5																			5	
6																			6	
7																			7	
8																			8	
9																			9	
10																			10	
11																			11	
12																			12	

Initials CD  
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Consec. Cast # 186		Vessel Surveyor	Proj. & Leg Ice (2)		Event #	Vessel Sta. I.D.		Instructions							Sta. Designation PH10					
Consec. Cast #	Latitude Deg.		N or S	Longitude Deg.		E or W	Date Day	JD = 288 Mo.	Time Hr.	Dry Bulb	Wet Bulb	Bar. mb	S.S. Vis.	Wind Dir.	Wind Sp.	Cloud Type	Bottom Depth, m	Sta. Name or I.D		
	186	6	4	26	36	N	165	20	98	W	14	Oct	8807	3501	6006	1418	03504742	21	PH10	
CTD Type & SN		5bd 912203		Monitor Checks				Times		JD/Time		Data Location				16				
Press. SN		26072		on Deck		at Surface		Data on 288		073248		Tape/Diskette I.D.		File Name/Header						
Temp. SN		710		Press. 34472.129 [0.024]		34479.316 [0.331]		at Surface		073409		500388		14OCT0735						
Cond. SN		304		Temp. 65316.441 [3.361]		6445.777 [3.277]		Start Down		073456										
				Cond. 3074.391		8255.754		at Bottom		073548										
				Other [0.000]		[28.522]		Start Up		073655										
								at Surface		073830										
								Data off		073551										
Pos.	Bot.	T	Trip	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data				Sal.	Other	P.S.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #			
1				073630	34529.426	6684.855	8702.766		19.207			30.995			30.990	069	985	1		
2									19.393	4.965									2	
3				073759	34486.309	6915.094	8794.582		4.538			30.165						986	3	
4																			4	
5																			5	
6																			6	
7																			7	
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9																			9	
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