

Consec. Cast # 001		Vessel NOAA Ship Miller Freese		Proj. & Leg MF 9308		Event # 18		Vessel Sta. I.D.		Instructions										Sta. Designation STA 14					
Consec. Cast #	Latitude Deg. Min.		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	Weath.	Bottom Depth, m	Sta. Name or I.D.		
001	15	73	6	56	N	155	20	58	W	26	MAY	19	30	07	00	06	01	64	71	80	18	85	2	327	STA 14
CTD Type & SN _____ Press. SN _____ Temp. SN _____ Cond. SN _____				Monitor Checks on Deck at Surface Press. _____ Temp. _____ Cond. _____ Other _____						Times JD/Time Data on _____ at Surface _____ Start Down _____ at Bottom _____ Start Up _____ at Surface _____ Data off _____				Data Location Tape/Diskette I.D. _____ File Name/Header _____ (CAST001-26 May 1999) Remarks At sed. trap/mooring site #3 v/b 322											
St. #	Bot.	T Rack	Trip Depth	Time @ Depth Trip		Monitor Values Press. Temp. Cond. Other				Conv. Mon. Values-CTD Press. Temp. Cond. Sal.				Sample Bot. Data Therm-P Avg Tw Sal.			Sal. Bot. #	Other Samp.	St. #						
1		✓	250±	37.24		253.167	4.855	31.235	32.450									32.449	06		1				
2																					2				
3																					3				
4																					4				
5																					5				
6																					6				
7																					7				
8																					8				
9																					9				
10																					10				
11																					11				
12																					12				

Initials LL/MC

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Consec. Cast # 002		Vessel		Proj. & Leg		Event# 51		Vessel Sta. I.D.		Instructions										Sta. Designation STA15														
Consec. Cast #		Latitude N or S Deg. Min.			Longitude E or W Deg.			Date JD = 146 Day Mo. Yr.			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.	
002		5738182N			1551638W			26 MAY 93			2202		0750		0681		6461		9018		872						305		STA15					
CTD Type & SN _____ Press. SN _____ Temp. SN _____ Cond. SN _____					Monitor Checks on Deck at Surface Press. _____ Temp. _____ Cond. _____ Other _____					Times JD/Time Data on _____ at Surface 2151 Start Down 2152 at Bottom 2203 Start Up _____ at Surface _____ Data off _____					Data Location Tape/Diskette I.D. _____ File Name/Header CAST002_26MAY93_2151 Remarks Prior to recovery of Sediment Trap Mooring #2																			
Pos. Bot.		T Rack		Trip Depth		Time @ Depth Trip		Monitor Values Press. Temp. Cond. Other				Conv. Mon. Values-CTD Press. Temp. Cond. Sal.				Sample Bot. Data Therm-P Avg Tw Sal.				Sal. Bot. #		Other Samp.		Pos. Bot.										
1				100		2208						92.548 5.475 31.134 31.819								31.822		26		1										
2																				2nd run		31.830				2								
3																										3								
4																										4								
5																										5								
6																										6								
7																										7								
8																										8								
9																										9								
10																										10								
11																										11								
12																										12								

Initials WPK

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Consec. Cast # 003		Vessel M F 021		Proj. & Leg M F-93-08		Event # 58		Vessel Sta. I.D.		Instructions										Sta. Designation														
Consec. Cast #		Latitude N or S Deg. Min.			Longitude E or W Deg.			Date JD = 147 Day Mo. Yr.			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.	
603		574149N			1551324W			27 MAY 93			0020		07		2068		1747		190		18872		298		STA 16									
CTD Type & SN _____ Press. SN _____ Temp. SN _____ Cond. SN _____					Monitor Checks on Deck at Surface Press. _____ Temp. _____ Cond. _____ Other _____					Times JD/Time Data on _____ at Surface _____ Start Down _____ 0010 at Bottom _____ 0020 Start Up _____ 0020 at Surface _____ Data off _____					Data Location Tape/Diskette I.D. _____ File Name/Header _____ Cast 003-27 May 0009 Remarks _____																			
Pos.		Bot.		T Rack		Trip Depth		Time @ Depth Trip		Monitor Values Press. Temp. Cond. Other				Conv. Mon. Values-CTD Press. Temp. Cond. Sal.				Sample Bot. Data Therm-P Avg Tw Sal.			Sal. Bot. #		Other Samp.		S.D.									
1						15		0027						15.650 6.589 31.391 31.109							31.47 25				1									
2																		2nd run			31.126				2									
3																									3									
4																									4									
5																									5									
6																									6									
7																									7									
8																									8									
9																									9									
10																									10									
11																									11									
12																									12									

 Initials WJED
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Consec. Cast # 004		Vessel		Proj. & Leg		Event # 60		Vessel Sta. I.D.		Instructions										Sta. Designation STA 17														
Consec. Cast #		Latitude N or S Deg. Min.			Longitude E or W Deg.			Date JD = 147 Day Mo. Yr.			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.	
004		574335N			1551544W			27 MAY 93			0145		0720		068		184		61		9518		872		152		STA 17							
CTD Type & SN _____ Press. SN _____ Temp. SN _____ Cond. SN _____				Monitor Checks on Deck at Surface Press. _____ Temp. _____ Cond. _____ Other _____								Times JD/Time Data on _____ at Surface _____ Start Down _____ at Bottom _____ Start Up _____ at Surface _____ Data off _____				Data Location Tape/Diskette I.D. _____ File Name/Header CAST004-27 MAY 93 Remarks 1450/0 CHL & NUTS FOX 61 Auto																		
Pos.		Bot.		T Rack		Trip Depth		Time @ Depth Trip		Monitor Values Press. Temp. Cond. Other				Conv. Mon. Values-CTD Press. Temp. Cond. Sal.				Sample Bot. Data Therm-P Avg Tw Sal.				Sal. Bot. #		Other Samp.		Pos.								
1		25				20		0157						20.022 6.119 31.396 31.543										362		1								
2		20				10		0158						9.617 6.460 31.347 31.180										363		2								
3		30																								3								
4		2																								4								
5		LM																								5								
6		PINE																								6								
7		/																								7								
8		2				145		0145						145.789 5.408 31.197 31.928										357		8								
9		38		✓		100		014657 015147						99.755 5.548 31.175 31.792				31.834				31.834		21		358		9						
10		60				75		0153						74.633 5.727 31.310 31.788				2nd run				31.814				359		10						
11		23				50		0155						49.970 5.815 31.338 31.748												360		11						
12		28				30		0156						29.800 6.008 31.350 31.590												361		12						

Initials

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Consec. Cast # 005		Vessel NOAA Ship MILLER FREEMAN		Proj. & Leg MF-93-08		Event# 64		Vessel Sta. I.D.		Instructions										Sta. Designation STADIS							
Consec. Cast #	Latitude Deg. Min. N or S		Longitude Deg. E or W		Date JD = 147 Day Mo. Yr.			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.						
005	57	38	30	N	155	04	39	W	27	MAY	93	03	38	07	4	06	8	19	47	200	188	72	254	STADIS			
CTD Type & SN _____ Press. SN _____ Temp. SN _____ Cond. SN _____			Monitor Checks on Deck at Surface Press. _____ Temp. _____ Cond. _____ Other _____						Times JD/Time Data on _____ at Surface _____ Start Down 0329 at Bottom _____ Start Up _____ at Surface _____ Data off _____				Data Location Tape/Diskette I.D. _____ File Name/Header CAST005_27MAY0328 Remarks Fox 59 CHL & NUTS NUTS														
Stn #	Bot.	T Rack	Trip Depth	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data			Sal. Bot. #	Other Samp.	Stn #								
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.											
12	1	28	60									60.665	5.377	31.449	31.944									1			
1	2	25	50									50.539	5.451	31.120	31.847									2			
2	3	20	40									40.793	5.407	31.022	31.783									3			
3	4	30	30									30.676	5.924	31.374	31.696									4			
4	5	2	20									20.568	6.326	31.581	31.556									5			
5	6	LM	10									10.078	6.506	31.396	31.191	No bottle 1 - second cast							372	6			
6	7	1	10													after bongo for 10 m sample								7			
7	8	1	250									247.390	4.889	31.375	32.581									371	8		
8	9	2	200									200.247	5.090	31.308	32.333									370	9		
9	10	5	150									150.135	4.787	30.882	32.162									32.2202	30	369	10
10	11	60	100									100.631	5.346	31.296	32.122									32.185	368	11	
11	12	23	75									75.524	5.418	31.282	32.049									30	367	12	

Initials _____

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Consec. Cast # 006		Vessel NOAA Ship MILLER FREEMAN		Proj. & Leg MF-93-08		Event # 69		Vessel Sta. I.D.		Instructions										Sta. Designation STA019									
Consec. Cast #		Latitude N or S		Longitude E or W		Date JD = 147		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.	
006		573327N		1545278W		27 MAY 93		0555		0715		068		2147		185		168		72		2275		TA19					
CTD Type & SN _____ Press. SN _____ Temp. SN _____ Cond. SN _____				Monitor Checks on Deck at Surface Press. _____ Temp. _____ Cond. _____ Other _____				Times JD/Time Data on _____ at Surface _____ Start Down 0548 at Bottom 0556 Start Up _____ at Surface _____ Data off _____				Data Location Tape/Diskette I.D. _____ File Name/Header STA006_27MAY930547 Remarks Chl = auto FOX 57 18 Auto																	
Pos.		Bot. Rack		Trip Depth		Time @ Depth Trip		Monitor Values Press. Temp. Cond. Other				Conv. Mon. Values-CTD Press. Temp. Cond. Sal.				Sample Bot. Data Therm-P Avg Tw Sal.				Sal. Bot. #		Other Samp.		Pos.					
1		25		40								40.655 5.406 31.236 32.025												1					
2		20		30								30.756 5.876 31.517 31.901										375		2					
3		30		20								21.152 6.589 32.007 31.781										374		3					
4		2		10								10.183 6.605 32.006 31.771										373		4					
5		LM																						5					
6		41		250								215.418 4.819 31.159 32.117										381		6					
7		38		200		055720 060820						199.578 4.819 31.135 32.397										32.443 18		380		7			
8		2		150								150.459 5.148 31.306 32.298								2nd run		32.401		379		8			
9		5		100								100.167 5.242 31.295 32.221												378		9			
10		80		75								75.314 5.303 31.310 32.192												377		10			
11		23		60								60.906 5.324 31.293 32.159														11			
12		28		50								50.377 5.122 31.049 32.081												376		12			

Initials _____

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Consec. Cast # 007		Vessel		Proj. & Leg MP 9308		Event # 201		Vessel Sta. I.D.		Instructions										Sta. Designation														
Consec. Cast #		Latitude Deg. Min. 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		Weath.		Bottom Depth, m		Sta. Name or I.D.	
007		55 55 51 N			156 15 00 W			29 MAY 13			14 59		6 8		6 2		2 1		38		270		121		10		Z 23		STA 58					
CTD Type & SN _____ Press. SN _____ Temp. SN _____ Cond. SN _____					Monitor Checks on Deck at Surface Press. _____ 805 Temp. _____ 6.186 Cond. _____ 31.639 Other _____ 31.766					Times JD/Time Data on _____ at Surface _____ Start Down _____ at Bottom _____ Start Up _____ at Surface _____ Data off _____					Data Location Tape/Diskette I.D. _____ File Name/Header CAY007-29 May Remarks Line 17 FOX154 NUTS																			
Pos. Bot.		T Rack		Trip Depth		Time @ Depth Trip		Monitor Values Press. Temp. Cond. Other				Conv. Mon. Values-CTD Press. Temp. Cond. Sal.				Sample Bot. Data Therm-P Avg Tw Sal.			Sal. Bot. #		Other Samp.		Pos.											
1				200		00:30						200.986 5.506 32.528 33.315				33.351			10		1219		1											
2		38 ✓		200								150.945 4.759 31.082 32.420				33.336					1227		3											
3		2		150								100.367 4.769 30.810 32.121				33.336					1226		4											
4		5		100								75.145 5.036 30.940 32.025									1225		5											
5		60		75								60.596 5.048 30.884 31.957				m2 xchl					1224		6											
6		23		60								50.443 5.101 30.902 31.931				m2 xchl					1223		7											
7		28		50								40.243 5.166 30.923 31.899				m2 xchl					1222		8											
8		25		40								30.469 5.291 30.982 31.851				m2 xchl					1221		9											
9		20		30								20.432 5.848 31.385 31.784				m2 xchl					1220		10											
10		30		20								10.624 6.021 31.522 31.780				m2 xchl					1219		11											
11		2		10																			12											

Initials U/MC

Consec. Cast # 008		Vessel		Proj. & Leg MF-93-08		Event # 204		Vessel Sta. I.D.		Instructions										Sta. Designation																		
Consec. Cast #		Latitude Deg. Min.		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		Weath.		Bottom Depth, m		Sta. Name or I.D.	
808		5556		08 N		15621		05 W		29 MAY 93			163307		0065		2138		2801		20/0												232		STA 59			
CTD Type & SN 91220-				Press. SN 25084				Temp. SN 701				Cond. SN 303				Monitor Checks on Deck at Surface				Times JD/Time Data on _____ at Surface _____ Start Down _____ at Bottom _____ Start Up _____ at Surface _____ Data off _____				Data Location Tape/Diskette I.D. _____ File Name/Header cast008-29 May				Remarks										
Pos.		Bot.		T Rack		Trip Depth		Time @ Depth Trip		Monitor Values Press. Temp. Cond. Other				Conv. Mon. Values-CTD Press. Temp. Cond. Sal. -				Sample Bot. Data Therm-P Avg Tw Sal.				Sal. Bot. #		Other Samp.		Pos.												
1						200								200.757 5.297 32.156 33.098										1238		1												
2						150								150.431 4.706 30.912 32.275										1237		2												
3						100								100.051 5.011 30.982 32.085								32.124 35		1236		3												
4						75								75.375 4.983 30.857 31.982								2nd run 32.098		1235		4												
5						60								59.983 5.078 30.885 31.930								m2/ch1		1234		5												
6						50								50.682 5.139 30.901 31.894								m2/ch1		1233		6												
7						40								40.154 5.362 31.025 31.829								m2/ch1		1232		7												
8						30								30.056 5.476 31.100 31.810								m2/ch1		1231		8												
9						20								20.256 5.722 31.250 31.752								m2/ch1		1230		9												
10						10								10.206 6.070 31.512 31.723								m2/ch1		1229		10												
11																										11												
12																										12												

Initials LYAC

29 May 0447

Consec. Cast # 009		Vessel MILLER PERFORMA		Proj. & Leg MR-93-08		Event #		Vessel Sta. I.D.		Instructions										Sta. Designation STA 60												
Consec. Cast #		Latitude N or S		Longitude E or W		Date JD = 149 Day Mo. Yr.			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.	
009		55 56 47 N		156 25 93 W		29 MAY 93			20 04		08 00		07 02		13 7		280		080		0		207		STA 60							
CTD Type & SN 91220-				Monitor Checks				Times JD/Time				Data Location																				
Press. SN 25084				on Deck				Data on				Tape/Diskette I.D.																				
Temp. SN 701				at Surface				at Surface 1957				File Name/Header																				
Cond. SN 303				Press. _____				Start Down 1957				CAST009-29MAY1956																				
				Temp. _____				at Bottom _____				Remarks CHL & MZ: 10, 20, 30, 40, 50, 60																				
				Cond. _____				Start Up _____				NUTS: 10, 20, 30, 50, 75, 100, 150, 200																				
				Other _____				at Surface _____																								
								Data off _____																								

Pos.	Bot.	T Rack	Trip Depth	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data			Sal. Bot. #	Other	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.			
1	25		40							40.329	5.265	30.961	31.848					1242	1
2	20		30							29.570	5.375	31.028	31.824					1241	2
3	30		20							19.985	5.557	31.158	31.804					1240	3
4	2		10							10.347	6.011	31.477	31.739					1239	4
5	LM																		5
6	TRIGGER																		6
7	1		200		2004					201.038	5.106	32.174	32.837					1248	7
8	2		150							149.595	4.766	30.891	32.192					1247	8
9	38	✓	100		200728					100.779	5.089	31.009	32.041			32.090	32	1246	9
10	60		75							74.882	5.137	30.949	31.940					1245	10
11	23		60							59.753	5.160	30.952	31.928					1244	11
12	28		50							50.346	5.246	30.973	31.874					1243	12

Initials



Consec. Cast #		Vessel		Proj. & Leg		Event #		Vessel Sta. I.D.		Instructions										Sta. Designation																	
Consec. Cast #		Latitude		Longitude		Date		Time		Dry Bulb		Wet Bulb		Bar. mb		S.S.		Wind Dir.		Wind Sp.		Cloud		Type		Bottom Depth, m		Sta. Name or I.D.									
010		562419N		1565489W		30 MAY 93		0247		105		090		020		28		260		100		/0		119		STA 6											
CTD Type & SN		91220-		Monitor Checks				Times				Data Location																									
Press. SN		25084		on Deck				Data on				Tape/Diskette I.D.																									
Temp. SN		701		at Surface				at Surface				File Name/Header																									
Cond. SN		303		Press.				Start Down				Remarks																									
				Temp.				at Bottom				CHL/MZ: 10, 20, 30, 40, 50, 60																									
				Cond.				Start Up				NUTS: 10, 20, 30, 50, 75, 100, 125																									
				Other				Data off				LINE 16, STA 149																									
Pos.		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		25		40														40.326		5.762		31.296		31.756								1252		1			
2		20		30														30.335		5.918		31.405		31.736								1251		2			
3		30		20														20.298		6.251		31.666		31.720								1250		3			
4		2		10														9.828		6.670		32.008		31.713								1249		4			
5		LM																																5			
6		PINGER																																6			
7																																		7			
8		2		125														110.566		4.911		30.737		31.895								1257		8			
9		38		100		024816												99.752		4.871		30.686		31.880				31.970		19		1256		9			
10		30		75														75.141		5.039		30.775		31.833								1255		10			
11		23		60														60.438		5.491		31.108		31.791								1254		11			
12		28		50														50.229		5.662		31.219		31.759								1253		12			

* ^C was used to exit program instead of X

Initials

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Consec. Cast #		Vessel		Proj. & Leg		Event #		Vessel Sta. I.D.		Instructions										Sta. Designation							
Consec. Cast #		Latitude		Longitude		Date JD =		Time GMT		Dry Bulb		Wet Bulb		Bar. mb		S.S.		Wind Dir.		Wind Sp.		Cloud Type		Bottom Depth, m		Sta. Name or I.D.	
01	1562148N	1565182W	30	MAY	93	03	53	10	90	95	20	28	26	50	90	-0	131	STA 67									
CTD Type & SN		91220-		Monitor Checks				Times JD/Time		Data Location																	
Press. SN		25084		on Deck				Data on		Tape/Diskette I.D.		File Name/Header															
Temp. SN		701		at Surface				at Surface		0348		CAST011-30MAY0338															
Cond. SN		303		Press.				Start Down		0348																	
				Temp.				at Bottom																			
				Cond.				Start Up				Remarks CHL/MZ: 10, 20, 30, 40, 50, 60															
				Other				Data off				NUTS: 10, 20, 30, 50, 75, 100, 125															
												LINE 16 STA 048 15 NUTS															
St. No.	Bot.	T Rack	Trip Depth	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data			Sal. Bot. #	Other Samp.	St. No.								
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.											
1	25		40							40.262	5.207	30.898	31.831					1261	1								
2	20		30							30.159	5.378	31.019	31.811					1260	2								
3	30		20							20.305	5.576	31.152	31.779					1259	3								
4	2		10							9.992	5.997	31.482	31.758					1258	4								
5	LM																		5								
6	RINGER																		6								
7	/																		7								
8	2		125							125.427	4.758	30.607	31.885					1266	8								
9	5		100							100.262	4.908	30.705	31.866					1265	9								
10	60		75							74.685	4.985	30.754	31.861				31.933	15	1264	10							
11	23		60							60.290	5.037	30.782	31.851						1263	11							
12	28		50							49.971	5.127	30.842	31.838						1262	12							

Initials

Consec. Cast # <div style="text-align: center;">012</div>		Vessel		Proj. & Leg MF-93-08		Event# 256		Vessel Sta. I.D.		Instructions										Sta. Designation																	
Consec. Cast #	Latitude		N or S	Longitude		E or W	Date JD = 150			Time GMT		Dry Bulb	Wet Bulb	Bar. mb 1013.6	S S	V S	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.														
	Deg.	Min.		Deg.	Day		Mo.	Yr.	Hr.	Min.																											
012	56	39	N	156	34	W	30	M	A	Y	93	14	26	9	0	8	1	1	8	2	8	2	9	0	1	2	0	-	0	1	5	3	9	T	4	7	5

CTD Type & SN 91220- Press. SN 25084 Temp. SN 701 Cond. SN 303		Monitor Checks		Times JD/Time		Data Location	
		on Deck	at Surface	Data on _____ at Surface _____ Start Down _____ at Bottom _____ Start Up _____ at Surface _____ Data off _____	Tape/Diskette I.D. _____ File Name/Header <u>cast012 -</u>		
		Press. _____	_____	Remarks <div style="text-align: right;">Station 75, haul 2.</div>			
		Temp. _____	_____				
		Cond. _____	_____				
		Other _____	_____				

Pos. D	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			60							60.483	5.660	31.158	31.687					MZ	1
2			50							50.245	5.616	31.165	31.666					MZ	2
3			40							40.300	5.762	31.204	31.652					MZ	3
4			30							30.258	5.906	31.272	31.621					MZ	4
5			20							20.424	6.024	31.337	31.566					MZ	5
6			10							10.333	6.434	31.507	31.380					MZ	6
7			—																7
8			—																8
9			10							10.386	6.387	31.480	31.393				31.398	22	9
10																	31.381		1
11																			1
12																			1

Consec. Cast # 013			Vessel		Proj. & Leg MF-93-08		Event# 211		Vessel Sta. I.D.		Instructions					Sta. Designation												
Consec. Cast #		Latitude Deg. Min. N or S			Longitude Deg. E or W			Date JD = Day Mo. Yr.			Time GMT Hr. Min.		Dry Bulb		Wet Bulb		Bar. mb 1017.8		S.S. Vis.		Wind Dir. Sp.		Cloud Type Weath.		Bottom Depth, m		Sta. Name or I.D.	
013		5640 18 N			15634 52 W			30 MAY 93			1632		87		84		172		828506140		157		075					
CTD Type & SN 91220-				Monitor Checks on Deck at Surface				Times JD/Time Data on _____ at Surface _____ Start Down _____ at Bottom _____ Start Up _____ at Surface _____ Data off _____				Data Location Tape/Diskette I.D. _____ File Name/Header Cast 013 - 30 May																
Press. SN 25084 701				Press. _____				Press. _____				Remarks w/o 101 75.2																
Temp. SN 303				Temp. _____				Temp. _____																				
Cond. SN				Cond. _____				Cond. _____																				
Other _____				Other _____				Other _____																				
S. Bot.		T Rack		Trip Depth		Time @ Depth Trip		Monitor Values Press. Temp. Cond. Other				Conv. Mon. Values-CTD Press. Temp. Cond. Sal.				Sample Bot. Data Therm-P Avg Tw Sal.			Sal. Bot. #		Other Samp.		S. Bot.					
1		✓		31.45								101.810 5.395 31.084 31.833							31.873 03				1					
2																							2					
3																							3					
4																							4					
5																							5					
6																							6					
7																							7					
8																							8					
9																							9					
10																							10					
11																							11					
12																							12					

Consec. Cast #		Vessel		Proj. & Leg		Event #		Vessel Sta. I.D.		Instructions										Sta. Designation						
014				MF-93-08																						
Consec. Cast #	Latitude		N or S	Longitude		E or W	Date JD =		Time GMT		Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.				
014	56	40	N	156	34	77	W	30	M	A	Y	93	17	37	8	5	8	1	17	28	29	00	81	40	168	STA 76
CTD Type & SN			91220-		Monitor Checks				Times		JD/Time		Data Location													
Press. SN			25084		on Deck				Data on				Tape/Diskette I.D.													
Temp. SN			701		at Surface				at Surface				File Name/Header													
Cond. SN			303		Press.				Start Down				cast 014 - 30 May													
					Temp.				at Bottom																	
					Cond.				Start Up				Remarks													
					Other				Data off																	
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										101.249	5.354	31.095	31.885			31.950	13	1								
2																31.899		2								
3																2nd run		3								
4																		4								
5																		5								
6																		6								
7																		7								
8																		8								
9																		9								
10																		10								
11																		11								
12																		12								

Initials u/me

Consec. Cast # <u>015</u>		Vessel		Proj. & Leg MF-93-08		Event # 262		Vessel Sta. I.D.		Instructions										Sta. Designation																										
Consec. Cast #	Latitude		N or S	Longitude		E or W	Date JD = <u>150</u>			Time GMT		Dry Bulb	Wet Bulb	Bar. mb	S.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.																																				
015	5	64	0	5	2	N	1	5	6	3	4	7	4	W	3	0	M	A	Y	9	3	1	8	3	8	9	5	9	0	1	7	2	8	2	6	5	0	6	1	4	0	1	5	6	7	6

CTD Type & SN <u>91220-</u>		Monitor Checks				Times JD/Time		Data Location	
Press. SN <u>25084</u>		on Deck		at Surface		Data on _____		Tape/Diskette I.D. _____	
Temp. SN <u>701</u>		Press. _____		_____		at Surface _____		File Name/Header _____	
Cond. SN <u>303</u>		Temp. _____		_____		Start Down _____		_____	
_____		Cond. _____		_____		at Bottom _____		_____	
_____		Other _____		_____		Start Up _____		_____	
_____		_____		_____		at Surface _____		Remarks _____	
_____		_____		_____		Data off _____		_____	

Stn.	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												5.512	-4.891	31.839	31.327				68		1
2																					2
3																					3
4																					4
5																					5
6																					6
7																					7
8																					8
9																					9
10																					10
11																					11
12																					12

Consec. Cast # <u>016</u>		Vessel		Proj. & Leg MF-93-08		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.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.													
	Deg.	Min.		Deg.	Day		Mo.	Yr.	Hr.	Min.																										
016	56	09	03	N	156	05	25	W	31	M	AY	93	13	53	9	8	9	0	1	1	1	8	0	6	0	0	8	3	0	0	2	8	3	0	8	9
CTD Type & SN <u>91220-</u>			Monitor Checks										Times JD/Time		Data Location																					
Press. SN <u>25084</u>			on Deck					at Surface					Data on _____		Tape/Diskette I.D.					File Name/Header																
Temp. SN <u>701</u>			Press. _____					_____					at Surface _____		_____					_____																
Cond. SN <u>303</u>			Temp. _____					_____					Start Down _____		_____					_____																
_____			Cond. _____					_____					at Bottom _____		_____					_____																
_____			Other _____					_____					Start Up _____		_____					_____																
_____			_____					_____					at Surface _____		_____					_____																
_____			_____					_____					Data off _____		_____					_____																
_____			_____					_____					_____		Remarks					w/o 101																
_____			_____					_____					_____		_____					STA 89 - haul 1																

Stn. No.	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			60							60.447	5.456	31.203	31.931					MZ	1
2			50							50.525	5.590	31.254	31.867					MZ	2
3			40							40.379	5.804	31.300	31.721					MZ	3
4			30							30.305	6.133	31.532	31.676					MZ	4
5			20							20.166	6.341	31.690	31.663					MZ	5
6			10							9.973	6.677	31.966	31.660					MZ	6
7			10							10.066	6.651	31.945	31.662						7
8																			8
9																			9
10																			10
11																			11
12																			12

Consec. Cast #		Vessel		Proj. & Leg		Event #		Vessel Sta. I.D.		Instructions										Sta. Designation						
017				MF-93-08																						
Consec. Cast #	Latitude		N or S	Longitude		E or W	Date JD =		Time GMT		Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.				
017	56	08	79	W	156	05	86	W	31	M	A	Y	93	15	14	11	11	100	11	28	08	01	02	00	239	089
CTD Type & SN				91220-				Monitor Checks				Times JD/Time				Data Location										
Press. SN				25084				on Deck				Data on				Tape/Diskette I.D.										
Temp. SN				701				at Surface				at Surface				File Name/Header										
Cond. SN				303				Press.				Start Down				Cast 017-31 May										
				Temp.				at Bottom																		
				Cond.				Start Up				Remarks														
				Other				Data off				w/o 100m				89 half 5.										

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		✓	50	10:04						50.401	5.541	31.211	31.864				33		1
2																		2	
3																		3	
4																		4	
5																		5	
6																		6	
7																		7	
8																		8	
9																		9	
10																		10	
11																		11	
12																		12	

Initials

✓

Consec. Cast # 018		Vessel		Proj. & Leg MF-93-08		Event# 3/7		Vessel Sta. I.D.		Instructions										Sta. Designation																
Consec. Cast #		Latitude Deg. Min.		N or S		Longitude Deg.		E or W		Date JD = Day Mo. Yr.			Time GMT Hr. Min.		Dry Bulb		Wet Bulb		Bar. mb 1010.5		S.S.		Vis.		Wind Dir.		Wind Sp.		Cloud Type		Weath.		Bottom Depth, m		Sta. Name or I.D.	
018		560876		N		1560576		W		31 MAY 93			1625		105		98		11		28		085		10		200		334		89					
CTD Type & SN 91220-				Monitor Checks on Deck at Surface				Times JD/Time Data on _____ at Surface _____ Start Down _____ at Bottom _____ Start Up _____ at Surface _____ Data off _____				Data Location Tape/Diskette I.D. _____ File Name/Header Cast 018 - 31 May																								
Press. SN 25084				Press. _____				Temp. _____				Cond. _____				Other _____				Remarks u/o 107 Sta 89, haul 8																
Pos.		Bot.		T Rack		Trip Depth		Time @ Depth Trip		Monitor Values Press. Temp. Cond. Other				Conv. Mon. Values-CTD Press. Temp. Cond. Sal.				Sample Bot. Data Therm-P Avg Tw Sal.				Sal. Bot. #		Other Samp.		Pos.										
1														17.623 6.568 31.876 31.659										09		1										
2																										2										
3																										3										
4																										4										
5																										5										
6																										6										
7																										7										
8																										8										
9																										9										
10																										10										
11																										11										
12																										12										