

ALL TIMES AND DATES
UNIVERSAL COORDINATED TIME

Consec. Cast #		Vessel		Proj. & Leg		Event #		Vessel Sta. I.D.		Instructions										Sta. Designation														
001		MILLER FREEMAN		MF 91.06 FOCI		54																												
Consec. Cast #		Latitude			Longitude			Date JD =			Time GMT		Dry Bulb		Wet Bulb		Bar. mb		SS		Wind Dir.		Wind Sp.		Cloud		Type		Weath.		Bottom Depth, m		Sta. Name or I.D.	
001		55 15 71 N			155 47 59 W			19 MAY 91			13 25		07 00		05 8		19 3		83 05		14 6		71		79 1		R9							
CTD Type & SN 91220-A				Monitor Checks				Times JD/Time				Data Location																						
Press. SN 25084				on Deck at Surface				Data on 139/1315				Tape/Diskette I.D. File Name/Header																						
Temp. SN 701				Press. _____				at Surface _____				Cast 001 Cast001-19 May 1310																						
Cond. SN 304				Temp. _____				Start Down _____				_____																						
				Cond. _____				at Bottom 1324				_____																						
				Other _____				Start Up 1329				_____																						
								at Surface 1344				Remarks																						
								Data off _____																										
Pos.		Bot. Rack		Trip Depth		Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data				Sal. Bot. #		Other Samp.		Pos.										
1		28		60		1336						59.103 4.214 30.93 32.832				Therm. 1.162						MZ/CHL		1										
2		—		—		—																		2										
3		3141		50		1338						50.048 4.762 31.261 32.674				3.018						MZ/CHL		3										
4		29		40		1340						59.704 4.838 31.311 32.662				?						MZ/CHL		4										
5		—		—		—																		5										
6		20		30		1341						59.703 4.921 31.375 32.650				3.486						MZ/CHL		6										
7		—		—		—																		7										
8		21		20		1342						59.648 4.964 31.398 32.648				4.907						MZ/CHL		8										
9		—		—		—																		9										
10		22		10		1344						9.691 5.004 31.414 32.634				4.897						MZ/CHL		10										
11		38 B				1324 1329						302.296 4.103 31.906 33.962				.337 4.11				24				11										
12		Light																						12										

CHL + MZP

Initials PW
✓ MC

Consec. Cast # 002		Vessel MILLER FREEMAN		Proj. & Leg MF 91.06 FOCI		Event #		Vessel Sta. I.D.		Instructions										Sta. Designation P9																																	
Consec. Cast #	Latitude N or S Deg. Min.		Longitude E or W Deg.		Date JD = 139 Day Mo. Yr.			Time GMT Hr. Min.		Dry Bulb		Wet Bulb		Bar. mb 1021.6		SS Vis.		Wind Dir.		Wind Sp.		Cloud Type		Weath.		Bottom Depth, m		Sta. Name or I.D.																									
	5	5	0	8	4	1	N	1	5	5	9	7	2	W	1	9	M	A	Y	9	1	1	7	3	7	0	6	0	0	5	2	2	2	2	3	8	3	0	0	1	0	7	7	1	8	0	0	P9					
CTD Type & SN 91220-A				Press. SN 25084				Temp. SN 701				Cond. SN 304				Monitor Checks										Times JD/Time				Data Location																							
																on Deck										at Surface				Data on 139				Tape/Diskette I.D.				File Name/Header															
																Press. _____														at Surface _____				Cast 002				CAST 002 - 19 MAY 1725															
																Temp. _____														Start Down _____																							
																Cond. _____														at Bottom 1737																							
																Other _____														Start Up 1737																							
																														at Surface 1752																							
																														Data off _____																							
CTD												Monitor Values												Conv. Mon. Values-CTD												Sample Bot. Data												Sal. Bot. #		Other Samp.		Pos.	
St. No.	Bot.	T Rack	Trip Depth	Time @ Depth Trip		Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm P	Avg Tw	Sal.	Sal.	Bot. #	Samp.	Pos.																																	
1	28		60	1744	1744					58.655	39.17	32.800	32.793	1.650					mz/chl	1																																	
2	—																			2																																	
3	3141		50		1746					50.117	4.530	31.099	32.715	1.885					mz/chl	3																																	
4	29		40		1747					40.20	4.303	31. —	32.698	1.641					mz/chl	4																																	
5	—																			5																																	
6	20		30		1749					29.569	4.841	31.336	32.681	2.168					mz/chl	6																																	
7	—																			7																																	
8	21		20		1750					19.666	4.957	31.407	32.666	1.631					mz/chl	8																																	
9	—																			9																																	
10	22		10		1751					9.513	5.056	31.454	32.629	0.659					mz/chl	10																																	
11	11				1757															11																																	
12	Light									30.5	4.02	31.849	33.990	0.303						12																																	

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CHL + MZP, 6011A

Initials

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ALL TIMES AND DATES
UNIVERSAL COORDINATED TIME

Consec. Cast # 003		Vessel MILLER FREEMAN		Proj. & Leg MF 91.06 FOCI		Event # 1920		Vessel Sta. I.D.		Instructions										Sta. Designation			
Consec. Cast #	Latitude Deg. Min.		N or S	Longitude Deg.		E or W	Date JD = 139 Day Mo. Yr.			Time GMT Hr. Min.		Dry Bulb	Wet Bulb	Bar. mb 1024.8	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
003	54	51	40 N	156	32	45 W	19	MAY	91	21	36	10	20	82	25	17	29	00	84	61	1920		R3
CTD Type & SN 91220-A				Monitor Checks on Deck at Surface				Times JD/Time Data on _____ at Surface _____ Start Down 212615 at Bottom 213630 Start Up _____ at Surface _____ Data off _____				Data Location Tape/Diskette I.D. _____ File Name/Header Cast 003 - 19 May 2125											
Press. SN 25084				Press. _____								Remarks											
Temp. SN 701				Temp. _____																			
Cond. SN 304				Cond. _____																			
_____				Other _____																			

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	28	✓	60			60.116	4.410	31.002	32.715	V=2.215							mz/ChL	1	
2	-	✓																2	
3	3141	✓	50			49.609	4.646	31.161	32.672	V=1.382							mz/ChL	3	
4	29	✓	40			39.787	4.833	31.287	32.639	V=1.489							mz/ChL	4	
5	-	✓																5	
6	20	✓	30			29.866	5.030	31.420	32.641	V=1.489							mz/ChL	6	
7	-	✓																7	
8	21	✓	20			19.515	5.410	31.512	32.608	V=1.040							mz/ChL	8	
9	-	✓																9	
10	22	✓	10			9.587	5.192	31.553	32.608	V=0.591							mz/ChL	10	
11	38	✓		213630		304.920	4.052	31.874	33.910	V=0.376					4.06		33	11	
12	Light	✓																12	

Initials UAF
✓

Consec. Cast # 004		Vessel MILLER FREEMAN		Proj. & Leg MF 91.06 FOCI		Event #		Vessel Sta. I.D.		Instructions										Sta. Designation			
Consec. Cast #	Latitude		N or S	Longitude		E or W	Date JD = 140			Time GMT		Dry Bulb	Wet Bulb	Bar. mb 1026.1	SS	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
	Deg.	Min.		Deg.			Day	Mo.	Yr.	Hr.	Min.												
004	54	42	N	157	34	W	20	MAY	91	04	13	07	08	06	22	62	28	28	01	03	61	1446	N97
CTD Type & SN 91220-A			Monitor Checks						Times JD/Time				Data Location										
Press. SN 25084			on Deck at Surface						Data on _____				Tape/Diskette I.D. File Name/Header										
Temp. SN 701			Press. _____						at Surface _____				Cast# 04 CAST 004 20MAY0402										
Cond. SN 304			Temp. _____						Start Down 4 03 15				_____										
_____			Cond. _____						at Bottom 4 12 52				_____										
_____			Other _____						Start Up _____				_____										
_____			_____						at Surface _____				Remarks										
_____			_____						Data off _____				_____										
Pos.	Bot.	T Rack	Trip Depth	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data			Sal. Bot. #	Other Ssamp.	Pos.				
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.							
1	28		60							59.559	4.001	30.111	32.073	v=532			m2/chl	1					
2	—		✓															2					
3	3141		50							49.921	4.022	30.069	32.009	v=742			m2/chl	3					
4	29		40							39.986	4.546	30.470	31.973	v=4102			m2/chl	4					
5	—		✓															5					
6	20		30							30.091	4.568	30.482	31.971	v=4088			m2/chl	6					
7	—		✓															7					
8	21		20							19.716	4.591	30.494	31.969	v=5029			m2/chl	8					
9	—		✓															9					
10	22		10							9.949	5.114	30.909	31.948	v=7324			m2/chl	10					
11	11		60							59.571	4.009	30.121	32.078	v=542			30	11					
12	Light meter		✓															12					

Initials WJ

✓

ALL TIMES AND DATES
UNIVERSAL COORDINATED TIME

Consec. Cast # 005		Vessel MILLER FREEMAN		Proj. & Leg MF 91.06 FOCI		Event #		Vessel Sta. I.D.		Instructions										Sta. Designation L97																													
Consec. Cast #	Latitude Deg. Min.		N or S	Longitude Deg.		E or W	Date JD = 140 Day Mo. Yr.			Time GMT Hr. Min.		Dry Bulb	Wet Bulb	Bar. mb 1028.1	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weather	Bottom Depth, m	Sta. Name or I.D.																										
005	5	4	S	0	8	0	N	1	5	7	4	9	S	5	W	2	0	M	A	Y	9	1	1	0	5	2	0	6	0	0	5	0	2	8	3	7	2	6	5	1	0	0	0	0	0	1	4	4	L97
CTD Type & SN 91220-A				Press. SN 25084				Temp. SN 701				Cond. SN 304				Monitor Checks on Deck at Surface				Press. _____				Temp. _____				Cond. _____				Other _____				Times JD/Time Data on _____ at Surface _____ Start Down 10:46:50 at Bottom 10:51:50 Start Up _____ at Surface 11:09 Data off _____				Data Location Tape/Diskette I.D. _____ File Name/Header Cast 005 Cast 005 20MAY1043				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	28		60	1102						60.939	3.661	29.923	32.186	0.532					mz/CHL	1																													
2	—		—	—																2																													
3	3/41		50	1104						50.612	3.665	29.988	32.180	0.518					mz/CHL	3																													
4	29		40	1105						40.946	3.738	29.963	32.167	0.649					mz/CHL	4																													
5	—		—	—																5																													
6	20		30	1106						30.771	3.771	29.982	32.162	0.718					mz/CHL	6																													
7	—		—	—																7																													
8	21		20	1107						20.841	4.104	30.214	32.115	1.069					mz/CHL	8																													
9	—		—	—																9																													
10	22		10	1108						10.186	4.456	30.484	32.092	1.104					mz/CHL	10																													
11	38		110	10:53:40						110.832	3.578	29.895	32.208	0.459	3.60				21	11																													
12	Light Motor		—	—																12																													

ALL TIMES AND DATES
UNIVERSAL COORDINATED TIME

Initials Pw

✓ mc

Consec. Cast # 006		Vessel MILLER FREEMAN		Proj. & Leg MF 91.06 FOCI		Event #		Vessel Sta. I.D.		Instructions										Sta. Designation			
Consec. Cast #	Latitude N or S Deg. Min.		Longitude E or W Deg.		Date JD = 140 Day Mo. Yr.			Time GMT Hr. Min.		Dry Bulb	Wet Bulb	Bar. mb 1028.8	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.		
006	54	59	78	N	158	05	56	W	20	MAY	91	15	33	06	70	52	29	37	280	10	48	10122	J97
CTD Type & SN 91220-A			Monitor Checks						Times JD/Time				Data Location										
Press. SN 25084			on Deck at Surface						Data on 140				Tape/Diskette I.D. File Name/Header										
Temp. SN 701			Press. _____						at Surface 1526				Cast 006 Cast 006-20MAY1526										
Cond. SN 304			Temp. _____						Start Down 1527														
			Cond. _____						at Bottom 1531														
			Other _____						Start Up 1531														
									at Surface 1543				Remarks Data from 1m to 10m missing on down cast. It is available at the end of the file on the up cast Data.										
									Data off _____														
Pos. #	Bot. 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	28	60		1535					100.672	3.713	29.942	32.157	0.742				MZ/CHL 1						
2	—			✓													2						
3	3141	50		1537					51.783	3.688	29.898	32.134	0.781				MZ/CHL 3						
4	29	40		1539					41.205	3.780	29.937	32.095	0.933				MZ/CHL 4						
5	—			✓													5						
6	20	30		1540					30.376	4.059	30.139	32.066	1.138				MZ/CHL 6						
7	—			✓													7						
8	21	20		1541					20.185	4.286	30.321	32.062	1.323				MZ/CHL 8						
9	—			✓													9						
10	22	10		1542					9.927	4.538	30.504	32.035	1.411				MZ/CHL 10						
11	11	100		1532					100.442	3.689	30.099	32.346	0.405				22 11						
12	Light Motor			✓													12						

ALL TIMES AND DATES
UNIVERSAL COORDINATED TIME

CHL + MZP

Initials PW
✓ MC

Consec. Cast # 007		Vessel MILLER FREEMAN		Proj. & Leg MF 91.06 FOCI		Event # 101		Vessel Sta. I.D.		Instructions										Sta. Designation									
Consec. Cast #	Latitude N or S Deg. Min.		Longitude E or W Deg.		Date JD = Day Mo. Yr.			Time GMT Hr. Min.		Dry Bulb	Wet Bulb	Bar. mb 1029.9	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D.									
007	55	06	53	N	158	19	33	W	20	MAY	91	19	41	6	8	5	2	3	0	3	7	2	7	0	08	13	1	175	H97
CTD Type & SN 91220-A			Monitor Checks on Deck at Surface						Times 140 JD/Time Data on _____ at Surface 1932 Start Down _____ at Bottom _____ Start Up _____ at Surface _____ Data off _____						Data Location Tape/Diskette I.D. File Name/Header Cast 007 Cast 007-20MAY1930 Remarks chlor. appears to be maxed out at V = 10.000														
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	28		60									59.906	3.573	29.899	32.244	V=1.187				mZ/CHL	1								
2	—		✓																		2								
3	3141		50									50.564	3.802	30.067	32.222	V=3.057				mZ/CHL	3								
4	29		40									40.152	4.011	30.213	32.195	V=6.230				mZ/CHL	4								
5	—		✓																		5								
6	20		30									30.053	4.317	30.446	32.173	V=9.395				mZ/CHL	6								
7	—		✓																		7								
8	21		20									19.953	4.409	30.516	32.171	V=10.000				mZ/CHL	8								
9	—		✓																		9								
10	22		10									9.835	4.804	30.844	32.172	V=10.000				mZ/CHL	10								
11	11		✓									168.239	4.004	30.866	32.905	—				12	11								
12	Light Meter																				12								

ALL TIMES AND DATES
UNIVERSAL COORDINATED TIME

NOTE: Winch Rate is not steady and is uncertain. Problems with Winch Readout

CHL + mZP

Very Dense Phytoplankton — see sample 6027A


Initials PW

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Consec. Cast # 008		Vessel MILLER FREEMAN		Proj. & Leg MF 91.06 FOCI		Event # 147		Vessel Sta. I.D.		Instructions										Sta. Designation							
Consec. Cast #	Latitude Deg. Min. S		Longitude Deg. E or W		Date JD = Day Mo. Yr.			Time GMT Hr. Min.		Dry Bulb	Wet Bulb	Bar. mb 1028.1	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.						
008	56	23	55	N	157	00	79	W	22	MAY	91	09	50	08	00	07	02	8	37	21	008	000	171	D13			
CTD Type & SN 91220-A		Press. SN 25084		Temp. SN 701		Cond. SN 304		Monitor Checks on Deck at Surface				Times JD/Time Data on _____ at Surface _____ Start Down 0944 at Bottom 0949 Start Up 0950 at Surface 1005 Data off _____				Data Location Tape/Diskette I.D. File Name/Header Cast 008 Cast 008 - 22 May 0942											
								Press. _____				Temp. _____				Cond. _____				Other _____				Remarks			
Pos.	Bot.	T Rack	Trip Depth	Time @ Depth Trip		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data				Sal. Bot. #	Other Samp.	Pos.							
				Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.													
1	28		60	0959														m ² /chl	1								
2	—			/															2								
3	3141		50	10:00														m ² /chl	3								
4	29		40	10:01														m ² /chl	4								
5	—			/															5								
6	20		30	10:02														m ² /chl	6								
7	—			/															7								
8	21		20	10:03														m ² /chl	8								
9	—			/															9								
10	22		10	10:04														m ² /chl	10								
11	38 B	B	150	09:51:06 09:56:21														02	11								
12	Light Meter		/	/															12								

ALL TIMES AND DATES
UNIVERSAL COORDINATED TIME


Initials

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Consec. Cast # 009		Vessel MILLER FREEMAN		Proj. & Leg MF 91.06 FOCI		Event #		Vessel Sta. I.D.		Instructions										Sta. Designation F13					
Consec. Cast #	Latitude Deg. Min. S		Longitude Deg. W		Date JD = Day Mo. Yr.			Time GMT Hr. Min.		Dry Bulb	Wet Bulb	Bar. mb 1024.5	S.S.	Vis.	Wind Dir.	Wired Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D.					
009	56	16	33	N	156	47	10	W	22	MAY	91	11	21	06	5	06	02	93	8	190	100	000	6075	F13	
CTD Type & SN 91220-A			Press. SN 25084			Temp. SN 701			Cond. SN 304			Monitor Checks on Deck at Surface				Times JD/Time Data on _____ at Surface 1122 Start Down 1123 at Bottom 1125 Start Up 1125 at Surface 1126 Data off _____				Data Location Tape/Diskette I.D. _____ File Name/Header Cast 009 Cast 009 22 MAY 1120				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	28		60		1127					60.915	4.235	30.219	31.971	1.309				m2/CHL	1						
2	—				—														2						
3	31/41		50		1128					50.588	4.612	30.534	31.979	5.293				m2/CHL	3						
4	29		40		1129					40.749	4.668	30.579	31.981	6.094				m2/CHL	4						
5	—				—														5						
6	20		30		1130					30.659	4.827	30.718	31.993	10.000				m2/CHL	6						
7	—				—														7						
8	21		20		1131					20.519	4.865	30.746	31.993	9.717				m2/CHL	8						
9	—				—														9						
10	22		10		1132					10.709	5.224	31.040	31.992	10.000				m2/CHL	10						
11	11		60		1126					60.898	4.229	30.215	31.215	1.235				08	11						
12	Light				—														12						

ALL TIMES AND DATES
UNIVERSAL COORDINATED TIME

Initials

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Consec. Cast # 010		Vessel MILLER FREEMAN		Proj. & Leg MF 91.06 FOCI		Event # 173		Vessel Sta. I.D.		Instructions						Sta. Designation											
Consec. Cast #	Latitude Deg. Min. S		Longitude Deg. E or W		Date JD = 143 Day Mo. Yr.			Time GMT Hr. Min.		Dry Bulb	Wet Bulb	Bar. mb 1032.0	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D.							
010	55	54	00	N	156	00	11	W	23	MAY	91	06	00	6	5	5	7	3	2	28	24	01	03	61	00	85	152
CTD Type & SN 91220-A				Monitor Checks on Deck at Surface				Times JD/Time Data on _____ at Surface _____ Start Down 05 57 25 at Bottom 06 00 30 Start Up _____ at Surface _____ Data off _____				Data Location Tape/Diskette I.D. _____ File Name/Header _____ Cast 010 Cast 010-23MAY0557 Remarks (CLOUDMETER MAXED OUT AT 10.00 VOLTS															
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	28	✓	60			60.829	4.749	31.076	32.398	V=1.631									nut chl/m ²	1							
2	—	✓				49.793	4.766	31.026	32.397	V=									nut chl/m ²	2							
3	3/41	✓	50			↓	↓	↓	↓	V=1.289									nut chl/m ²	3							
4	29	✓	40			39.906	4.821	31.064	32.394	V=1.719									nut chl/m ²	4							
5	—	✓																		5							
6	20	✓	30			29.841	4.912	31.131	32.387	V=1.650									nut chl/m ²	6							
7	—	✓																		7							
8	21	✓	20			19.467	5.221	31.309	32.297	V=9.126									nut chl/m ²	8							
9	—	✓																		9							
10	22		10			9.553	5.347	31.375	32.254	V=10.00									nut chl/m ²	10							
11	11	✓	75			0.518	4.692	30.969	32.391	V=1.206									28 nuts	11							
12	Light Data	✓																		12							

ALL TIMES AND DATES
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Initials WF

✓

Consec. Cast # 011		Vessel MILLER FREEMAN		Proj. & Leg MF 91.06 FOCI		Event #		Vessel Sta. I.D.		Instructions										Sta. Designation FOX 155 / K12											
Consec. Cast #	Latitude N or S Deg. Min.		Longitude E or W Deg.		Date JD = Day Mo. Yr.			Time GMT Hr. Min.		Dry Bulb	Wet Bulb	Bar. mb 1032.2	SS	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.										
011	55	55	50	N	156	20	8	7	W	23	MAY	91	09	41	06	00	50	3	23	72	25	18	5	1	1	0	23	2	K12		
CTD Type & SN 91220-A			Press. SN 25084			Temp. SN 701			Cond. SN 304			Monitor Checks on Deck at Surface Press. _____ Temp. _____ Cond. _____ Other _____					Times 143 JD/Time Data on _____ at Surface 0932 Start Down 0934 at Bottom 0941 Start Up 0943 at Surface _____ Data off 0953					Data Location Tape/Diskette I.D. _____ File Name/Header Cast 011 Cast 011 23 MAY 0932					Remarks Values for bottle #38 are not avg. but were read directly from the display - log sample avg. not working				
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	28		60																												
2	—																														
3	3/41		50																												
4	29		40																												
5	—																														
6	20		30																												
7	—																														
8	21		20																												
9	—																														
10	22		10																												
11	38	B	200		0945					200.1	4.393		32.846	0.322	4.42		06														
12	Light																														

ALL TIMES AND DATES
UNIVERSAL COORDINATED TIME

CAST aborted @ 0953 - problem w/ CTD logging files - only one sample taken @ 200 m
Cast continued #011B on next page - to 60 m depth

Initials

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ALL TIMES AND DATES
UNIVERSAL COORDINATED TIME

Pg. 11A of

Continuation of CAST#011

Consec. Cast # <u>011A</u>		Vessel <u>MILLER FREEMAN</u>		Proj. & Leg <u>MF 91.06 FOCI</u>		Event #		Vessel Sta. I.D.		Instructions										Sta. Designation <u>FOX 135 / K12</u>					
Consec. Cast # <u>13</u>	Latitude Deg. Min. S		Longitude Deg. E or W		Date JD = Day Mo. Yr.			Time GMT Hr. Min.		Dry Bulb	Wet Bulb	Bar. mb <u>1032.2</u>	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.				
<u>011</u>	<u>55</u>	<u>55</u>	<u>50</u>	<u>N</u>	<u>156</u>	<u>00</u>	<u>87</u>	<u>W</u>	<u>23</u>	<u>MAY</u>	<u>91</u>	<u>09</u>	<u>41</u>	<u>06</u>	<u>00</u>	<u>05</u>	<u>03</u>	<u>23</u>	<u>72</u>	<u>25</u>	<u>18</u>	<u>51</u>	<u>10</u>	<u>232</u>	<u>K12</u>

CTD Type & SN <u>91220-A</u> Press. SN <u>25084</u> Temp. SN <u>701</u> Cond. SN <u>304</u>		Monitor Checks		Times JD/Time		Data Location	
		on Deck	at Surface	Data on		Tape/Diskette I.D.	File Name/Header
		Press. _____	_____	at Surface <u>0955</u>			
		Temp. _____	_____	Start Down <u>0956</u>			
		Cond. _____	_____	at Bottom _____			
		Other _____	_____	Start Up _____			
				at Surface _____			
				Data off _____			
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	Avg Tw	Sal.				
1	28		60		<u>0957</u>							<u>57.619</u>	<u>4.666</u>	<u>30.659</u>	<u>32.066</u>	<u>2.524</u>			nut CHL/MZ	1
2	—				✓															2
3	3/41		50		<u>0958</u>							<u>49.740</u>	<u>4.714</u>	<u>30.689</u>	<u>32.060</u>	<u>3.818</u>			nut CHL/MZ	3
4	29		40		<u>0959</u>							<u>39.759</u>	<u>4.777</u>	<u>30.730</u>	<u>32.051</u>	<u>4.268</u>			nut CHL/MZ	4
5	—				✓															5
6	20		30		<u>1000</u>							<u>29.980</u>	<u>4.801</u>	<u>30.742</u>	<u>32.046</u>	<u>5.542</u>			nut CHL/MZ	6
7	—				✓															7
8	21		20		<u>1001</u>							<u>19.790</u>	<u>4.915</u>	<u>30.813</u>	<u>32.021</u>	<u>10.000</u>			nut CHL/MZ	8
9	—				✓															9
10	22		10		<u>1002</u>							<u>9.904</u>	<u>5.522</u>	<u>30.010</u>	<u>31.307</u>	<u>10.000</u>			nut CHL/MZ	10
11	11																			11
12	Light Metric																			12

Initials

✓

Consec. Cast # 012		Vessel MILLER FREEMAN		Proj. & Leg MF 91.06 FOCI		Event #		Vessel Sta. I.D.		Instructions										Sta. Designation FOX 158 J11			
Consec. Cast #	Latitude Deg. Min.		N or S	Longitude Deg. Min.		E or W	Date JD = Day Mo. Yr.			Time GMT Hr. Min.		Dry Bulb	Wet Bulb	Bar. mb 1032.2	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
012	55	58	06 N	156	38	06 W	23	MAY	91	11	35	05	00	04	23	23	72	20	12	52	10	192	J11
CTD Type & SN 91220-A			Monitor Checks on Deck at Surface			Times 143 JD/Time Data on _____ at Surface _____ Start Down 1137 at Bottom 1144 Start Up 1144 at Surface 1152 Data off _____			Data Location Tape/Diskette I.D. _____ File Name/Header Cast 012 CAST012-23MAY1135 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	28		60		1147					60.360	4.639	30.636	32.066	3.198			NUT OHL/MZ		1				
2	—																		2				
3	31/41		50		1148					50.028	4.681	30.662	32.060	4.590			NUT OHL/MZ		3				
4	29		40		1149					40.496	4.731	30.696	32.055	6.514			NUT OHL/MZ		4				
5	—																		5				
6	20		30		1150					30.341	4.787	30.734	32.051	5.566			NUT OHL/MZ		6				
7	—																		7				
8	21		20		1150					20.815	4.898	30.815	32.041	7.021			NUT OHL/MZ		8				
9	—																		9				
10	22		10		1151					10.546	4.967	30.861	32.034	8.857			NUT OHL/MZ		10				
11	11		185		1144					185.429	3.887	30.331	32.382				25 nut		11				
12	Light Meter																		12				

Initials

✓

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