

Consec. Cast # 001		Vessel MILLER FREEMAN		Proj. & Leg MF 91 07		Event # 46		Vessel Sta. I.D.		Instructions										Sta. Designation											
Consec. Cast #		Latitude N or S			Longitude E or W			Date JD = 147 Day Mo. Yr.			Time GMT Hr. Min.		Dry Bulb		Wet Bulb		Bar. mb 1005.2		S.S.	Vis.	Wind Dir.		Wind Sp.		Cloud	Type	Weath.	Bottom Depth, m		Sta. Name or I.D.	
001		55 08 27 N			157 51 46 W			27 MAY 91			05 19 06		00 60		00 60		00 53		5	35	150		24		68	1	0077		1 E		
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 001						CAST001-27may0516									
Cond. SN 304				Temp. _____				_____				at Bottom _____				_____						DUB2: (DATA LOG)									
_____				Cond. _____				_____				Start Up _____				Remarks						_____									
_____				Other _____				_____				at Surface _____				_____						_____									
_____				_____				_____				Data off _____				_____						_____									
Pos.		Bot.	T Rack	Trip Depth	Time @		Monitor Values				Conv. Mon. Values-CTD				Sample Bot. Data			Sal. Bot. #	Other Samp.	Pos.											
1		28		60			Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.		1												
2		✓																	2												
3		29		50															3												
4		3141		40															4												
5		—																	5												
6		20		30															6												
7		—																	7												
8		21		20															8												
9		—																	9												
10		22		70							72.363	3.647	29.923	32.193	v = .508			8	10												
11		11																	11												
12		light meter																	12												

Initials WF

✓

ALL TIMES AND DATES
UNIVERSAL COORDINATED TIME

Consec. Cast # 002		Vessel MILLER FREEMAN		Proj. & Leg MF 91 07		Event # 48		Vessel Sta. I.D.		Instructions										Sta. Designation						
Consec. Cast #	Latitude		N or S	Longitude		E or W	Date JD = 147			Time GMT		Dry Bulb	Wet Bulb	Bar. mb 1004.7	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.															
002	55	05	N	157	51	90	W	27	MAY	91	06	23	06	00	06	00	05	35	16	52	27	81	0074		1D	
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 002												CAST002-27May0619		
Cond. SN 304			Temp. _____			_____			Start Down 06:19:20			_____												DUB2: (DATA LOG)		
_____			Cond. _____			_____			at Bottom			_____												Remarks		
_____			Other _____			_____			Start Up			_____												_____		
_____			_____			_____			at Surface			_____												_____		
_____			_____			_____			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	28																	1	
2																		2	
3	29																	3	
4	3144																	4	
5																		5	
6	20																	6	
7																		7	
8	21																	8	
9																		9	
10	22		30															10	
11	11																	11	
12	light meter																	12	

Initials WJ

✓

 ALL TIMES AND DATES
 UNIVERSAL COORDINATED TIME

Consec. Cast # 003		Vessel MILLER FREEMAN		Proj. & Leg MF 91 07		Event # 50		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 1003.7		S.S.	Vis.	Wind Dir.		Wind Sp.		Cloud Type		Weath.		Bottom Depth, m		Sta. Name or I.D.	
003		55 03 94 N			157 48 34 W			27 MAY 91			07 22		06 00		05 06		04 35		24	01	97		81		00 74				1C			
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 003				CAST 003-27 May 0718												
Cond. SN 304				Temp. _____								Start Down 071920								DUB2: (DATA LOG)												
				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										59.901	3.816	30.045	32.178	v=0.840		MZ	1
2																				2
3	3141		50										60.006	3.818	30.042	32.178	v=0.898		MZ	3
4	29		40										39.944	3.818	30.038	32.178	v=0.986		MZ	4
5																				5
6	20		30										30.073	3.855	30.063	32.175	v=0.918		MZ	6
7																				7
8	21		20										19.920	5.160	31.041	32.050	v=1.753		MZ	8
9																				9
10	22		10										9.851	5.302	31.140	32.031	v=2.070		MZ	10
11	11		60										59.865	3.818	30.046	32.177	v=0.815		06	11
12	light meter																			12

Initials WPF

✓

ALL TIMES AND DATES
UNIVERSAL COORDINATED TIME

Consec. Cast # 005		Vessel MILLER FREEMAN		Proj. & Leg MF 91 07		Event# 53		Vessel Sta. I.D.		Instructions										Sta. Designation							
Consec. Cast #	Latitude			N or S	Longitude			E or W	Date JD = 147			Time GMT		Dry Bulb	Wet Bulb	Bar. mb 1004.1	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.															
005	5	5	00	41	N	15	7	41	67	W	27	MAY	91	08	50	06	00	05	10	43	5	20	01	88	81	0071	1A
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. _____				Temp. _____				Start Down _____				CAST 005				CAST 005-27MAY 0846							
Cond. SN 304				Temp. _____				Cond. _____				at Bottom _____								DUB2: (DATA LOG)							
				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 Samp.	Pos.
				Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.			
1	28	60				60.984	3.640	29.938	32.225								mZ	1	
2	—																	2	
3	3141	50				51.597	3.603	29.873	32.189	0.430							mZ	3	
4	29	40				40.919	3.609	29.871	32.186	0.425							mZ	4	
5	—																	5	
6	20	30				30.784	3.683	29.905	32.158	0.762							mZ	6	
7	—																	7	
8	21	21				20.513	4.268	30.369	32.135	1.792							mZ	8	
9	—																	9	
10	22	10				10.831	4.838	30.843	32.137								mZ	10	
11	11	60				60.975	3.636	29.432	32.221	0.410							22	11	
12	light meter																	12	

Initials PW/WF

✓

ALL TIMES AND DATES
UNIVERSAL COORDINATED TIME

Consec. Cast # 006		Vessel MILLER FREEMAN		Proj. & Leg MF 91 07		Event # 85		Vessel Sta. I.D.		Instructions BPR Sta. 23/28										Sta. Designation									
Consec. Cast #	Latitude Deg. Min.		N or S	Longitude Deg.		E or W	Date JD = 148 Day Mo. Yr.			Time GMT Hr. Min.		Dry Bulb	Wet Bulb	Bar. mb 986.7	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.						
006	53	25	79	N	157	12	61	W	28	MAY	91	01	12	6	2	5	7	8	7	5	7	2	20	22	9	22	4	700	BPR 23
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 00:57:30 at Bottom _____ Start Up _____ at Surface _____ Data off _____				Data Location Tape/Diskette I.D. cast 6 File Name/Header CAST 006-28 May 0056 DUB2: (DATA LOG) Remarks Fluorometer data appears on the screen. no Fluorometer or light meter on this cast!																	
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																			1										
2																			2										
3																			3										
4																			4										
5																			5										
6																			6										
7																			7										
8																			8										
9																			9										
10	38	B	500	01:12:35	01:19:					480.958	3.602	31.722	34.170					02	10										
11																			11										
12																			12										

V = 10.000

Initials **WF**

✓

ALL TIMES AND DATES
UNIVERSAL COORDINATED TIME

Consec. Cast # 008		Vessel MILLER FREEMAN		Proj. & Leg MF 91 07		Event # 131		Vessel Sta. I.D.		Instructions										Sta. Designation												
Consec. Cast #		Latitude N or S Deg. Min.			Longitude E or W Deg.			Date JD = 149 Day Mo. Yr.			Time GMT Hr. Min.		Dry Bulb		Wet Bulb		Bar. mb 1004.9		S.S.	Vis.	Wind Dir.		Wind Sp.		Cloud Type		Weath.		Bottom Depth, m		Sta. Name or I.D.	
008		520125 N			1584463 W			29 MAY 91			113707		1060		0547		255166		11	4700	B		PR		26							
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 1123 Start Down 11 at Bottom 1138 Start Up 1144 at Surface _____ Data off _____				Data Location Tape/Diskette I.D. File Name/Header Cast 8 CAST008-29MAY 1122 DUB2: (DATA LOG)				Remarks				
Pos.	Bot.	T Rack	Trip Depth	Time @ Depth Trip		Monitor Values Sal 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																			1													
2																			2													
3																			3													
4																			4													
5																			5													
6																			6													
7																			7													
8																			8													
9																			9													
10	38	B	500	1143.40	1138.40					497.806	3.553	31.690	34.174					24	10													
11																			11													
12																			12													

 Initials (P)
 ✓

 ALL TIMES AND DATES
 UNIVERSAL COORDINATED TIME

Consec. Cast # 009		Vessel MILLER FREEMAN		Proj. & Leg MF 91 07		Event # 155		Vessel Sta. I.D.		Instructions BPR 24										Sta. Designation												
Consec. Cast #		Latitude N or S Deg. Min.			Longitude E or W Deg.			Date JD = 150 Day Mo. Yr.			Time GMT Hr. Min.		Dry Bulb		Wet Bulb		Bar. mb 997.1		S.S.	Vis.	Wind Dir.		Wind Sp.		Cloud Type		Weath.		Bottom Depth, m		Sta. Name or I.D.	
009		54 16 74 N			158 31 07 W			30 MAY 91			06 31		60		50		97		38	270	16		76		11661							
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 009 CAST 009-30 may 0613														
Cond. SN 304						Temp. _____						Start Down 06:14:20						_____														
						Cond. _____						at Bottom _____						DUB2: (DATA LOG)														
						Other _____						Start Up _____						Remarks no fluorometer or light meter														
												at Surface _____						ST. 11 seeing Floro data on the screen?														
						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																							1									
2																							2									
3																							3									
4																							4									
5																							5									
6																							6									
7																							7									
8																							8									
9																							9									
10																							10									
11	38	B	625	06:31:00	06:38:22					636.880	3.420	31.698	34.250					21					11									
12																							12									

Initials WF
✓

ALL TIMES AND DATES
COORDINATED TIME