

Consec. Cast # 001		Vessel 021 MILLER FREEMAN		Proj. & Leg MF90-2 F O C I		Event# 020		Vessel Sta. I.D. STATION #1		Instructions										Sta. Designation									
Consec. Cast #	Latitude		N or S	Longitude		E or W	Date JD = 096			Time GMT		Dry Bulb	Wet Bulb	Bar. mb 1020.0	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.																			
001	59	02	N	152	06	57	W	06	APR	90	07	58	05	0	05	0	20	3	6	1	8	0	2	6	2	8	1	8	3
CTD Type & SN PMEL SBE 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 _____				DUB2: (Data_Log).SCS; 2																
Cond. SN 303			Temp. _____						Start Down _____				_____																
_____			Cond. _____						at Bottom _____				_____																
_____			Other _____						Start Up _____				_____																
_____			_____						at Surface _____				Remarks																
_____			_____						Data off _____				_____																

  

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		B	162	0755	0800	162.4	4.694	32.261							4.70	32.269	20		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials SM

Consec. Cast # 002		Vessel 021 MILLER FREEMAN		Proj. & Leg MF90-2 F O C I		Event# 070		Vessel Sta. I.D.		Instructions										Sta. Designation											
Consec. Cast #		Latitude N or S Deg. Min.			Longitude E or W Deg. Min.			Date JD = 097 Day Mo. Yr.			Time GMT Hr. Min.		Dry Bulb		Wet Bulb		Bar. mb 1018.0		S.S.	Vis.	Wind Dir.		Wind Sp.		Cloud	Type	Weath.	Bottom Depth, m		Sta. Name or I.D.	
002		5 7 5 5 5 2 N			1 5 4 3 3 2 9 W			0 7 A P R 9 0			0 5 0 7		4 1		4 0		1 8		4 5	0 3	4 3		6 6		2	2 7 6					
CTD Type & SN PMEL SBE 91220-A				Monitor Checks on Deck at Surface								Times JD/Time Data on _____ at Surface _____ Start Down 04:57 at Bottom 05:06 Start Up _____ at Surface _____ Data off _____				Data Location Tape/Diskette I.D. _____ File Name/Header DUB2:(Data_Log)SCS:3 _____ _____ 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	0		233	05:08:00	05:09:15	233	4.305	32.326									32.334	8		1											
2																				2											
3																				3											
4																				4											
5																				5											
6																				6											
7																				7											
8																				8											
9																				9											
10																				10											
11																				11											
12																				12											

Initials WP

✓

MOA

Pg. 3 of

Consec. Cast # 003		Vessel 021 MILLER FREEMAN		Proj. & Leg MF90-2 F O C I		Event # 077		Vessel Sta. I.D. LINE 7.5		Instructions CTD #3		Sta. Designation																						
Consec. Cast #		Latitude N or S			Longitude E or W			Date JD = 097 Day Mo. Yr.			Time GMT Hr. Min.		Dry Bulb		Wet Bulb		1029.0 Bar. mb		S.S.		Vis.		Wind Dir.		Wind Sp.		Cloud Type		Weath.		Bottom Depth, m		Sta. Name or I.D.	
003		574996 N			1550050 W			07 APR 90			0940		50		49		29		34		060		26		28		1		236		7.5			
CTD Type & SN PMEL SBE 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 _____				DUB2: (Data Log.SCS: 4						_____												
Cond. SN 303				Temp. _____				_____				at Bottom _____				_____						_____												
_____				Cond. _____				_____				Start Up _____				Remarks						_____												
_____				Other _____				_____				at Surface _____				_____						_____												
_____				_____				_____				Data off _____				_____						_____												

vi Q	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			100	9:48	9:53	105.8	2.683	31.654									31.668	03	1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials Am

✓

004

223 wire out

Consec. Cast # 004		Vessel 021 MILLER FREEMAN		Proj. & Leg MF90-2 F O C I		Event # 79		Vessel Sta. I.D. LINE 7.5		Instructions CTD #4				Sta. Designation																						
Consec. Cast #	Latitude		Longitude	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.												
004	57	46	08	N	154	57	01	W	07	A	P	R	90	10	50	04	P	3	7	2	9	3	10	6	0	3	2	2	8	1	3	0	9		7	5
CTD Type & SN PMEL SBE 91220-A				Monitor Checks				Times				Data Location																								
Press. SN 25084				on Deck				at Surface				Data on				Tape/Diskette I.D.				File Name/Header																
Temp. SN 701				Press.								Start Down				DUB2: (Data Log.SCS: 5																				
Cond. SN 303				Temp.								at Bottom																								
				Cond.								Start Up																								
				Other								at Surface																Remarks								
												Data off																								

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		B	200	10:54	10:59	201.5	3.349	32.226							3.34	32.234	27		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials DM

005  
286  
wire out 287

Consec. Cast # <u>005</u>		Vessel <u>021</u> <u>MILLER FREEMAN</u>		Proj. & Leg <u>MF90-2</u> <u>F O C I</u>		Event# <u>80</u>		Vessel Sta. I.D. <u>LINE 7.5</u>		Instructions <u>CTD #5</u>				Sta. Designation																						
Consec. Cast #	Latitude <u>N</u> Deg. Min. S			Longitude <u>E</u> Deg. <u>W</u>			Date JD = <u>097</u> Day Mo. Yr.			Time GMT Hr. Min.		Dry Bulb	Wet Bulb	Bar. mb <u>1029.8</u>	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.													
	<u>005</u>	<u>57</u>	<u>44</u>	<u>21</u>	<u>N</u>	<u>154</u>	<u>50</u>	<u>31</u>	<u>W</u>	<u>07</u>	<u>A</u>	<u>P</u>	<u>R</u>	<u>90</u>	<u>11</u>	<u>59</u>	<u>3</u>	<u>8</u>	<u>3</u>	<u>7</u>	<u>3</u>	<u>0</u>	<u>3</u>	<u>8</u>	<u>0</u>	<u>5</u>	<u>0</u>	<u>3</u>	<u>4</u>	<u>2</u>	<u>3</u>	<u>1</u>	<u>2</u>	<u>4</u>	<u>5</u>	<u>7</u>
CTD Type & SN <u>PMEL SBE 91220-A</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 _____				DUB2: (Data Log.SCS: <u>6</u>						_____														
Cond. SN <u>303</u>				Temp. _____				_____				at Bottom <u>11:51</u>				_____						_____														
_____				Cond. _____				_____				Start Up _____				Remarks						_____														
_____				Other _____				_____				at Surface _____				_____						_____														
_____				_____				_____				Data off _____				_____						_____														

  

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			<u>223</u>	<u>11:59</u>	<u>12:01</u>	<u>229.0</u>	<u>4.564</u>	<u>32.683</u>								<u>32.678</u>	<u>29</u>		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials DM

223 wire out

Consec. Cast # 006		Vessel 021 MILLER FREEMAN		Proj. & Leg MF90-2 F O C I		Event # 81		Vessel Sta. I.D. LINE 7.5		Instructions CTD #6										Sta. Designation																									
Consec. Cast #	Latitude			Longitude	E or W	Date JD = 097			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.	S			Deg.	Day	Mo.	Yr.	Hr.													Min.																						
006	5	7	4	1	6	6	N	1	5	4	3	7	1	W	0	7	A	P	R	9	0	1	2	5	6	4	1	3	6	3	0	3	8	0	4	5	2	7	2	3	1	2	2	7	7.5
CTD PMEL SBE 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 _____				DUB2: (Data_Log.SCS; 7																																	
Cond. SN 303				Temp. _____				Start Down 12:50				_____																																	
_____				Cond. _____				at Bottom 12:56				_____																																	
_____				Other _____				Start Up _____				Remarks																																	
_____				_____				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			205	12:56	12:57	209.2	4.663	32.789								32.786	15	1																											
2																		2																											
3																		3																											
4																		4																											
5																		5																											
6																		6																											
7																		7																											
8																		8																											
9																		9																											
10																		10																											
11																		11																											
12																		12																											

Initials DM

wire out 205

Consec. Cast # <b>007</b>			Vessel 021 MILLER FREEMAN			Proj. & Leg MF90-2 F O C I			Event# <b>82</b>			Vessel Sta. I.D.			Instructions <b>CTD # 7</b>										Sta. Designation						
Consec. Cast #		Latitude N or S Deg. Min.			Longitude E or W Deg.			Date JD = <b>97</b> Day Mo. Yr.			Time GMT Hr. Min.		Dry Bulb		Wet Bulb		Bar. mb <b>1029.9</b>		S.S.	Vis.	Wind Dir.		Wind Sp.		Cloud	Type	Weath.	Bottom Depth, m		Sta. Name or I.D.	
007		573915 N			1543716 W			07 APR 90			1353		39		38		30		38	04	53		43		33	1	223		75		
CTD Type & SN <u>PMEL SBE 91220-A</u> Press. SN <u>25084</u> Temp. SN <u>701</u> Cond. SN <u>303</u>					<b>Monitor Checks</b> on Deck                      at Surface Press. _____ Temp. _____ Cond. _____ Other _____					<b>Times</b> JD/Time Data on _____ at Surface <u>13:46</u> Start Down <u>13:47</u> at Bottom <u>13:53</u> Start Up _____ at Surface _____ Data off _____					<b>Data Location</b> Tape/Diskette I.D. _____      File Name/Header _____ DUB2: (Data Log.SCS: <u>8</u> ) _____ _____ _____ Remarks _____																

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		B	180	13:56	14:01	185.3	4.578	32.710								4.57	32.714	24		1
2																				2
3																				3
4																				4
5																				5
6																				6
7																				7
8																				8
9																				9
10																				10
11																				11
12																				12

Initials Em  
 ✓

no wire out 201 wire out

Consec. Cast # 008				Vessel 021 MILLER FREEMAN				Proj. & Leg MF90-2 F O C I				Event # 95		Vessel Sta. I.D. LINE 7.5				Instructions CTD#8				Sta. Designation										
Consec. Cast #		Latitude N or S Deg. Min.			Longitude E or W Deg.			Date JD = 97 Day Mo. Yr.			Time GMT Hr. Min.		Dry Bulb		Wet Bulb		Bar. mb 1030.0		SS. Vis.		Wind Dir.		Wind Sp.		Cloud Type		Weath.		Bottom Depth, m		Sta. Name or I.D.	
008		573633 N			1542996 W			07 APR 90			1455		40		38		30		380		35		33		862		120		7			
CTD PMEL SBE Type & SN 91220-A				Monitor Checks on Deck at Surface								Times JD/Time Data on _____ at Surface 14:51 Start Down 14:52 at Bottom 14:55 Start Up _____ at Surface _____ Data off _____				Data Location Tape/Diskette I.D. _____ File Name/Header _____ DUB2: (Data Log, SCS; 9 _____ _____ Remarks wire out 98 m.																
Pos.		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				98		14:55 14:56		102.9 3.889 32.926												32.305		05		1								
2																								2								
3																								3								
4																								4								
5																								5								
6																								6								
7																								7								
8																								8								
9																								9								
10																								10								
11																								11								
12																								12								

Initials LM  
✓



Consec. Cast # 009		Vessel 021 MILLER FREEMAN		Proj. & Leg MF90-2 F O C I		Event # 87		Vessel Sta. I.D. LINE 8 CTD #9		Instructions										Sta. Designation																										
Consec. Cast #	Latitude		N or S	Longitude		E or W	Date JD = 97			Time GMT		Dry Bulb	Wet Bulb	Bar. mb	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.																																				
009	5	7	2	8	8	4	N	1	5	4	4	2	1	7	W	0	7	A	P	R	9	0	1	6	1	7	4	0	3	5	3	1	4	8	0	4	0	2	7	7	6	2	6	3	5	5
CTD PMEL SBE Type & SN 91220-A				Monitor Checks								Times JD/Time				Data Location																														
Press. SN 25084				on Deck				at Surface				Data on _____				Tape/Diskette I.D. _____																														
Temp. SN 701				Press. _____				_____				at Surface _____				File Name/Header _____																														
Cond. SN 303				Temp. _____				_____				Start Down _____				DUB2: (Data Log, SCS; 10																														
_____				Cond. _____				_____				at Bottom _____				_____																														
_____				Other _____				_____				Start Up _____				Remarks WIRE OUT RESET ON WAY																														
_____				_____				_____				at Surface _____				DOWN																														
_____				_____				_____				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				16:18		54.1	2.806	32.074								32.078	35	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 # <u>10</u>		Vessel <u>021 MILLER FREEMAN</u>		Proj. & Leg <u>MF90-2 F O C I</u>		Event # <u>90</u>		Vessel Sta. I.D. <u>Line 8 CTD #10</u>		Instructions		Sta. Designation																																					
Consec. Cast #	Latitude			N or S	Longitude			E or W	Date JD = <u>97</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.																																					
	<u>1</u>	<u>0</u>	<u>5</u>	<u>7</u>	<u>3</u>	<u>0</u>	<u>8</u>	<u>9</u>	N	<u>1</u>	<u>5</u>	<u>4</u>	<u>4</u>	<u>6</u>	<u>8</u>	<u>8</u>	W	<u>0</u>	<u>7</u>	A	<u>P</u>	<u>R</u>	<u>9</u>	<u>0</u>	<u>1</u>	<u>7</u>	<u>2</u>	<u>3</u>	<u>5</u>	<u>2</u>	<u>4</u>	<u>5</u>	<u>3</u>	<u>1</u>	<u>4</u>	<u>8</u>	<u>0</u>	<u>4</u>	<u>5</u>	<u>2</u>	<u>0</u>	<u>7</u>	<u>6</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>0</u>	<u>5</u>	<u>6</u>

  

CTD Type & SN <u>91220-A</u> Press. SN <u>25084</u> Temp. SN <u>701</u> Cond. SN <u>303</u>	Monitor Checks				Times JD/Time		Data Location		
	on Deck		at Surface		Data on		Tape/Diskette I.D.		
	Press. _____		_____		at Surface <u>17:12</u>		File Name/Header		
	Temp. _____		_____		Start Down <u>17:12</u>		DUB2: (Data Log, SCS; <u>11</u> )		
	Cond. _____		_____		at Bottom <u>17:24</u>		_____		
_____		_____		Start Up _____		_____		Remarks <u>wire out 197</u>	
Other _____		_____		at Surface _____		_____			
_____		_____		Data off _____		_____			

  

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		<u>B</u>	<u>167</u>	<u>17:26</u>	<u>17:31</u>	<u>179.7</u>	<u>4.139</u>	<u>32.617</u>							<u>4.16</u>	<u>32.623</u>	<u>06</u>		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials *Jim*  
 ✓

Consec. Cast # 11		Vessel 021 MILLER FREEMAN		Proj. & Leg MF90-2 F O C I		Event# 092		Vessel Sta. I.D. Line 8 CTD #10		Instructions										Sta. Designation									
Consec. Cast #		Latitude N or S Deg. Min.			Longitude E or W Deg.			Date JD = 97 Day Mo. Yr.			Time GMT Hr. Min.		Dry Bulb		Wet Bulb		Bar. mb 1072.0		S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m		Sta. Name or I.D.	
11		573283 N			1545254 W			07 APR 90			1857		52		46		32		48	035	18	66	1	235T	57				
CTD Type & SN PMEL SBE 91220-A					Monitor Checks on Deck at Surface					Times JD/Time Data on _____ at Surface _____ Start Down 18:50 at Bottom 18:58 Start Up _____ at Surface _____ Data off _____					Data Location Tape/Diskette I.D. _____ File Name/Header DUB2:(Data Log.SCS; 12 _____ _____ Remarks wire out 217														
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.	Pos.										
1			217	1856 1858		217.9 4587 32.711											32.718	21	1										
2																			2										
3																			3										
4																			4										
5																			5										
6																			6										
7																			7										
8																			8										
9																			9										
10																			10										
11																			11										
12																			12										

Initials DM  
✓

Consec. Cast # <div style="text-align: center;">12</div>		Vessel 021 MILLER FREEMAN		Proj. & Leg MF90-2 F O C I		Event# 095		Vessel Sta. I.D.		Instructions										Sta. Designation				
Consec. Cast #	Latitude N or S			Longitude E or W			Date JD = 97			Time GMT		Dry Bulb	Wet Bulb	Bar. mb	SS	Vis	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D	
	Deg.	Min.	S	Deg.		W	Day	Mo.	Yr.	Hr.	Min.													
012	57	36	15 N	155	00	10 W	07	A	P	R	90	21	09		70		60	32	48	075	18	461	239	58
CTD PMEL SBE 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 _____				DUB2: (Data Log.SCS; 13				_____			
Cond. SN 303			Temp. _____					_____					at Bottom 2108				_____				_____			
_____			Cond. _____					_____					Start Up _____				Remarks				_____			
_____			Other _____					_____					at Surface _____				_____				_____			
_____			_____					_____					Data off _____				_____				_____			

  

Pos. 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	0		227	21:08	21:09	227	4.194	32.375									32.378	17		1
2																				2
3																				3
4																				4
5																				5
6																				6
7																				7
8																				8
9																				9
10																				10
11																				11
12																				12

Initials WJF

✓

Consec. Cast # <u>13</u>		Vessel <u>021 MILLER FREEMAN</u>		Proj. & Leg <u>MF90-2 F O C I</u>		Event# <u>098</u>		Vessel Sta. I.D.		Instructions										Sta. Designation												
Consec. Cast #		Latitude <u>N</u> Deg. Min.			Longitude <u>E</u> Deg.			Date <u>JD = 97</u> Day Mo. Yr.			Time GMT Hr. Min.		Dry Bulb		Wet Bulb		Bar. mb <u>1033.2</u>		S.S.	Vis.	Wind Dir.		Wind Sp.		Cloud Type		Weath.		Bottom Depth, m		Sta. Name or I.D.	
013		573814 N			1550380 W			07 APR 90			2233		55		45		33		38	075	18		361		258		59					
CTD Type & SN <u>PMEL SBE 91220-A</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 _____				DUB2: (Data Log. SCS; <u>16</u> )						_____										
Cond. SN <u>303</u>				Temp. _____				_____				at Bottom <u>22:24:50</u>				_____						_____										
_____				Cond. _____				_____				Start Up _____				Remarks						_____										
_____				Other _____				_____				at Surface _____				_____						_____										
_____				_____				_____				Data off _____				_____						_____										

  

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		B	216	22:35	22:40	216.5	4.284	32.348								4.26	32.352	16		1
2																				2
3																				3
4																				4
5																				5
6																				6
7																				7
8																				8
9																				9
10																				10
11																				11
12																				12

Initials WR

Consec. Cast # <b>14</b>		Vessel <b>021 MILLER FREEMAN</b>		Proj. & Leg <b>MF90-2 F O C I</b>		Event# <b>101</b>		Vessel Sta. I.D.		Instructions										Sta. Designation			
Consec. Cast #	Latitude Deg. Min.		N or S	Longitude Deg.		E or W	Date JD = <b>98</b> Day Mo. Yr.			Time GMT Hr. Min.		Dry Bulb	Wet Bulb	Bar. mb <b>1033.5</b>	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
<b>014</b>	<b>57</b>	<b>40</b>	<b>75 N</b>	<b>155</b>	<b>10</b>	<b>37 W</b>	<b>08</b>	<b>APR</b>	<b>90</b>	<b>00</b>	<b>08</b>	<b>58</b>	<b>51</b>	<b>34</b>	<b>38</b>	<b>065</b>	<b>22</b>	<b>36</b>	<b>1</b>	<b>294</b>	<b>60</b>		
CTD PMEL SBE Type & SN <b>91220-A</b> Press. SN <b>25084</b> Temp. SN <b>701</b> Cond. SN <b>303</b>				Monitor Checks on Deck at Surface Press. _____ Temp. _____ Cond. _____ Other _____				Times JD/Time Data on _____ at Surface _____ Start Down <b>00:00</b> at Bottom <b>08:45</b> Start Up <b>08:30</b> at Surface _____ Data off _____				Data Location Tape/Diskette I.D. _____ File Name/Header _____ DUB2: (Data Log. SCS): <b>17</b> Remarks <b>Sal = 32.45 - 32.465</b>											
St. 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.							
<b>1</b>	<b>0</b>		<b>274</b>	<b>0608</b>	<b>00:09</b>	<b>274</b>	<b>3.70</b>	<b>32.460</b>									<b>32.448</b>	<b>02</b>		<b>1</b>			
<b>2</b>																				<b>2</b>			
<b>3</b>																				<b>3</b>			
<b>4</b>																				<b>4</b>			
<b>5</b>																				<b>5</b>			
<b>6</b>																				<b>6</b>			
<b>7</b>																				<b>7</b>			
<b>8</b>																				<b>8</b>			
<b>9</b>																				<b>9</b>			
<b>10</b>																				<b>10</b>			
<b>11</b>																				<b>11</b>			
<b>12</b>																				<b>12</b>			

Initials WJ  
✓

Consec. Cast # 015		Vessel 021 MILLER FREEMAN		Proj. & Leg MF90-2 F O C I		Event# 106		Vessel Sta. I.D.		Instructions										Sta. Designation												
Consec. Cast #		Latitude N or S Deg. Min.			Longitude E or W Deg.			Date JD = 98 Day Mo. Yr.			Time GMT Hr. Min.		Dry Bulb		Wet Bulb		Bar. mb 1037.8		S.S. Vis.		Wind Dir.		Wind Sp.		Cloud Type		Weath.		Bottom Depth, m		Sta. Name or I.D.	
015		574303 N			1551609 W			08 APR 90			0146		60		57		34		38		065		223		61		152		61			
CTD Type & SN PMEL SBE 91220-A				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 _____ DUB2: (Data Log, SCS: 18 _____ _____ _____ Remarks _____																
Press. SN 25084		Temp. SN 701		Cond. SN 303		Press. _____		Temp. _____		Cond. _____		Other _____																				
S. No.		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		0				123.9		01:47 01:48		123.9 25.91 31.640												31.643 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 WTF

Consec. Cast # <u>16</u>		Vessel <u>021</u> <u>MILLER FREEMAN</u>		Proj. & Leg <u>MF90-2</u> <u>F O C I</u>		Event# <u>323</u>		Vessel Sta. I.D.		Instructions										Sta. Designation																													
Consec. Cast #	Latitude			N or S	Longitude			E or W	Date JD = <u>102</u>			Time GMT		Dry Bulb	Wet Bulb	Bar. mb <u>1013.9</u>	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.																																					
	<u>16</u>	<u>5</u>	<u>6</u>	<u>2</u>	<u>7</u>	<u>5</u>	<u>3</u>	<u>N</u>	<u>1</u>	<u>5</u>	<u>6</u>	<u>5</u>	<u>8</u>	<u>6</u>	<u>3</u>	<u>W</u>	<u>1</u>	<u>2</u>	<u>A</u>	<u>P</u>	<u>R</u>	<u>9</u>	<u>0</u>	<u>1</u>	<u>5</u>	<u>2</u>	<u>6</u>	<u>4</u>	<u>8</u>	<u>4</u>	<u>5</u>	<u>1</u>	<u>4</u>	<u>3</u>	<u>6</u>	<u>0</u>	<u>5</u>	<u>1</u>	<u>2</u>	<u>5</u>	<u>8</u>	<u>9</u>	<u>1</u>	<u>7</u>	<u>9</u>				

  

CTD PMEL SBE Type & SN <u>91220-A</u> Press. SN <u>25084</u> Temp. SN <u>701</u> Cond. SN <u>303</u>		Monitor Checks		Times		JD/Time		Data Location	
		on Deck	at Surface	Data on		Tape/Diskette I.D.	File Name/Header		
		Press. _____	_____	Start Down	<u>15:24</u>			DUB2: (Data Log.SCS; <u>22</u> )	
		Temp. _____	_____	at Bottom	<u>15:26</u>				
		Cond. _____	_____	Start Up	_____				
		Other _____	_____	at Surface	_____			Remarks <u>Bottom 75</u>	
				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			<u>60</u>	<u>15:27</u>	<u>15:33</u>	<u>65.7</u>	<u>2.204</u>	<u>31.784</u>								<u>31.7900</u>	<u>26</u>		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials Gm/WF

✓



Consec. Cast # 17		Vessel 021 MILLER FREEMAN		Proj. & Leg MF90-2 F O C I		Event# 344		Vessel Sta. I.D.		Instructions										Sta. Designation											
Consec. Cast #		Latitude Deg. Min. N or S			Longitude Deg. E or W			Date JD = 103 Day Mo. Yr.			Time GMT Hr. Min.		Dry Bulb		Wet Bulb		Bar. mb 1017.5		S.S.	Vis.	Wind Dir.		Wind Sp.		Cloud	Type	Weath.	Bottom Depth, m		Sta. Name or I.D.	
17		5736 68 N			15506 24 W			13 APR 90			0119		59		58		18		38	055	17		761		260						
CTD Type & SN PMEL SBE 91220-A				Monitor Checks on Deck at Surface								Times JD/Time Data on _____ at Surface _____ Start Down 01:11 at Bottom 01:20 Start Up _____ at Surface _____ Data off _____				Data Location Tape/Diskette I.D. _____ File Name/Header _____ DUB2: (Data Log, SCS; 23 _____ _____ Remarks win out 251															
Stn. #	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		B	172	01:24:30 01:29:30		172. 4.127 32.240								4.11 32.243			4		1												
2																			2												
3																			3												
4																			4												
5																			5												
6																			6												
7																			7												
8																			8												
9																			9												
10																			10												
11																			11												
12																			12												

Initials LF

✓

Consec. Cast # <u>8</u>		Vessel <u>021 MILLER FREEMAN</u>		Proj. & Leg <u>MF90-2 F 0°C I</u>		Event#		Vessel Sta. I.D.		Instructions										Sta. Designation												
Consec. Cast #		Latitude <u>N</u> Deg. Min. S			Longitude <u>E</u> Deg. W			Date <u>JD = 103</u> Day Mo. Yr.			Time GMT Hr. Min.		Dry Bulb		Wet Bulb		Bar. mb <u>1017.0</u>		SS. Vis.		Wind Dir.		Wind Sp.		Cloud Type		Weath.		Bottom Depth, m		Sta. Name or I.D.	
		<u>18 57 47 74</u>			<u>N 154 57 69</u>			<u>W 13 APR 90</u>			<u>06 09</u>		<u>6 2</u>		<u>6 0</u>		<u>17</u>		<u>28</u>		<u>04</u>		<u>52</u>		<u>47</u>		<u>61</u>		<u>322</u>			
CTD PMEL SBE Type & SN <u>91220-A</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 _____				DUB2: (Data Log, SCS; <u>26</u> )						_____										
Cond. SN <u>303</u>				Temp. _____				_____				Start Down <u>05:58:30</u>				_____						_____										
_____				Cond. _____				_____				at Bottom <u>06:09</u>				_____						_____										
_____				Other _____				_____				Start Up _____				Remarks						_____										
_____				_____				_____				at Surface _____				_____						_____										
_____				_____				_____				Data off _____				_____						_____										

  

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	0			06:09	06:10	304	4.711	32.955									32.957	01	1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials WF