C	onsec	.Cast	#001	Vesse			oj. & Leg F MF 91 - 03			sel Sta. I.D.		uctions				Sta	. Designati	on 61	
1	nsec. st #	De	Latit g.	ude Min.	N or S De	Longitud	le E D a	ate JD =	92 T	ime MT	Dry Bulb	Wet Bulb	Bar. mb	Wind Dir.	Wind Pno	Type Weath.	ottom epth, m	Sta. Nam or I.D	
0	0 1	5	742	269	N / 3	55164	9 W O	2 A P R	911-	1300	30	020	836	7045	156		277	6	6
	oe & 9		71220	- A	-	OI	Monit n Deck	or Checks	Surface		nes a on	JD/Time 1720	Tan	e/Diskette	Data Loc		Name/Hea	der	
i		N			- ू						face 092	171800	2	,			1-02AP		
ı	mp. S		701		-	ress		_		- Start D		1721	_						
C	ond. S	N	<u>30</u>	.3		emp		···			tom : Up								
_			<u>.</u>		- C	ond				,	face			arks Nutrie		ple 5 : 1	Line 8 3	Sta 61	
						ther					a off			meters u					
S.	Bot	T Rack	Trip	Tim Depth	e @	Ducce		r Values	Other			Values-CT			nple Bot.D		Sal.	Other	10
		Tack	Берип			Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	BOL, #	Samp.	 -
1	29		20	17:48	17:48	6460.885	8004.089	33977		19.886	1.890	28.251	31.941					194	Ľ
2	30		10	17:49	17:49	6460.201	8002.993	33955		10.533	1.885	28.242	31.940					193	2
3	P	┥																	3
4	20		KAM		17:34														4
5	21		XAM		17:34												220	206	5
6	22		MAX		17:34	6573.787	8113.77)	34448.135		222.247	2.674	29.152	32.15 5				· v, =	261	6
7	23		200	17:36	17:36	6532.731	8076.252	34396		200.095	2.390	28.842	32.073				198	200	
8	24		150	17:40	17:40	6525.358	2066.985	34280		149.901	2.339	28.766	32.057				,	199	
9	25		100	17:43	17:43	6484.47B	8028.657	34161		98.456	2.055	28.451	31.982					198	
	26		75	17:45	17:45	6463.011	8008.804	34106		75.090	1.905	28.289	31.944				. 3	197	_
11	27		50	17:46	17:46	6462.956	8007.459	34048		50.136	1.904	28.278	31.945				9.	196	
12	28		30	17:47	17:47	6459.136	8003.192	3 4001		30.099	1.878	28.243	31-939				Initials	195	

Deck unit for bottle sampler did not index for samples taken

1 29 10 1933 10.341 1.731 28.090 31.906 MZ 2 30 10 1933 10.650 1.732 28.091 31.906 Chl 3 P — — — — — — — — — — — — — — — — — —																									rg.		of	
Case # C	Co	nsec.	Cast :		Vessel	1 50 5	PEFMAN	Proj. & Le	g Foc						Instr	uctions				•				!	Sta. De	esignat	ion /_l	
Constraint Con	-													n 61	<u> </u>		T			1			r	1.				
O O O O O O O O O O	1							or	1	JD = 7,	4				,						nd	Wind	밀	딅				
O O O O O O O O O O	Ca	st #	Deg.	. 1	Min.	S	eg.	W		Mo. Y	۲r.	_		Bul	b	Bulb	r	mb	S. S.	Di	r.	Sp.	응	: Š	Depti	h, m	or I.D	'
Type & N SEE 7120-A Press N 701 Cond. N 303 Temp. Nontro Values Temp. Start Up. 1925 Start Up.	0	0 2	57	4 2	9 9	NI	5515	58 W	02	APR9	1	19	28	02	9	020	8	2	67	05	T			1,	2 -	13		6
Press. SN 25084 Press. Sample Soc. Press. Press. Press. Press. Press. Press. Press. Press. Press. Press. P	T.,,	CT	D N SR	F 912	2D-A			M	onitor	Checks			ד	imes								Data	Loca	ition				
Temp. SN 303						1		on Deck		at Su	ırface	:	1					T	ape/[Disket	te l.	D.		File	e Nam	ie/Hea	der	
Temp. Cond. Cond	l					` ı	Press																	CAST	φ φ2.	- Φ2 A	PR1921	
Cond. Cond						์ า	Гетр						1										•				·····	
Sample	10																			011	,		1.		- 1-	محطما	Saund	
Bot Rack Depth Trip Press Temp. Cond. Other Press Temp. Cond. Other Press Temp. Cond. Sal. Therm-P Avg Tw Sal. Bot. # Samp.	-				-								E			10.25		1	(ı,	nyll c	י ויין ע	CIOZ	oopiai	VE ION	aumpl	W
& Bot. Rack Depth Trip Press. Temp. Cond. Other Press. Temp. Cond. Sai. Therm-P Avg Tw Sail. Bot. # Samp. 1 29 10 1933 Cond. 10 650 1.732 28.090 31.906 Cond. MZ 2 30 10 1933 Cond. 10 650 1.732 28.091 31.906 Cond. MZ 3 P Cond. 1933 Cond. 10 650 1.732 28.091 31.906 Cond. Cond. 4 20 GO. 1925 1926 Cond. 60.131 1.776 28.155 31.915 Cond. MZ 5 21 GO. 1927 So. 59.537 1.765 28.144 31.913 Cond. MZ 6 22 50 1928 So. 349 1.771 28.145 31.914 MZ 8 24 40 1929 39.353 1.756 28.121 31.912 NOT		······································	τl	Trip	Time			Moi	nitor V	alues								64	W (ple Bo	ot Da	ıta		Sal	Other	Τ.,
1 29 10 1933 10 10 341 1.731 28.090 31.906 1 MZ 2 30 10 1933 10.650 1.732 28.091 31.906 1 Chl 3 P -	Pos	Bot.	≀ack [Depth	Depth	Trip	Press				Othe	er						Sal.	T						 al.	3		
3 P	ı	29		10=		1933	3						10.341	1.	731	28.090	31.	.906				-					MZ	ı
4 20 60 1925 1926 60.131 1.776 28.155 31.915 616 622 50 1928 50.349 1.771 28.145 31.914 62.355 1.778 28.149 31.917 62.6 28.149	2	30		10		1933	,						10.650) }.	732	28.091											Chl	2
5 21 60 1927	3	P	4	22	· · -		-			98																		3
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	4	20		60	1925	1926					_	4	60.131	j. 7	176	28.155	31,	.915							·		MZ	4
6 22 50 1928 50 1928 50 349 1.771 28.145 31.914 50 MZ 7 23 40 1929 50 40.355 1.778 28.149 31.917 50 MZ 8 24 40 1929 50 30.674 1.738 28.107 31.909 — DID NOT CLOSE MZ 10 26 30 1930 51.745 28.113 31.910 51.745 28.113 31.910 51.745 28.113 31.910 51.745 28.113 31.910 51.775 51	5	21		60		1927							59.53	7 1.7	165	28.144	31.	913									Chl	5
8 24 40 1929 39.353 1.756 28.121 31.912 Ch(9 25 30 1930 30.674 1.738 28.107 31.909 — DID NOT CLOSE — MZ 10 26 30 1930 31.650 1.745 28.113 31.910 Ch(11 27 20 1931 20.084 1.737 28.099 31.907 MZ 12 28 20 1932 20.062 1.736 28.098 31.907 Ch(6	22		<i>5</i> 0		1928			254			9	50.349)]:	771												MZ	6
9 25 30 1930 30.674 1.738 28.107 31.909 — DID NOT CLOSE — MZ 10 26 30 1930 31.650 1.745 28.113 31.910 Ch(11 27 20 1931 20 1932 20.084 1.737 28.099 31.907 Ch(12 28 20 1932 20.062 1.736 28.098 31.907 Ch(40		1929						2	10.355	15	778	28.149	3).	917									MZ	7
10 26 30 1930 31.650 1.745 28.113 31.910 Ch(11 27 20 1931 20.084 1.737 28.099 31.907 MZ 12 28 20 1932 20.062 1.736 28.098 31.907 Ch(8	24		40		1929						;	39. <i>353</i>	1	156	28.127	31.	912									Ch(8
10 26 30 1930 31.650 1.745 28.113 31.910 Ch(11 27 20 1931 20.084 1.737 28.099 31.907 MZ 12 28 20 1932 20.062 1.736 28.098 31.907 Ch(9	25		30		1930						3	30.674	E	738	28.107	31-	909		- DI	D	TOM	- <	_LOS	sE		- MZ	9
12 28 20 1932 20.062 1.736 28.098 31.907 Chi	10	26	- 1	30		1930						3	31.650	1.	745	28.113	3).	910									Ch(10
	Ш	27		20		1931						2	20.084	1-	737	28.099	31.	907	1		\perp						MZ	11
	12	28		20		1932							20.062	- 1:	136	28.098	31	907									ch(12

Bottle sampler deck unit did not index -

Initials DMD

Pg. <u>3</u> of ____ Consec.Cast # Vesse essel Proj. & Leg Foci Event# Vessel Sta. I.D.

MILLER FREEMAN MF91-03 69 Line 8 Sta 60 Instructions Sta. Designation 03 Sta 60 Line 8 Longitude E Date JD = 92 Latitude Time Weath. Bottom Sta. Name Consec. Dry Wet Wind Bar. **GMT** Si Si Dir. Cast # Deg. or S Deg. or I.D Depth, m Bulb Bulb mb Min. W Day Mo. Yr. Hr. Min. 0035740195N1550999W02APR91 2109030 2 5 8 3 6 7 0 5 0 5 0 6 6 288 **Monitor Checks Data Location** Times ID/Time Type & SN _ SBE 9/220-A 2058 on Deck at Surface Data on__ Tape/Diskette I.D. File Name/Header 25084 Press. SN____ at Surface 92 2057 CAST 093-0ZAPR2058 2100 Start Down____ Cond. SN 303 at Bottom______2109 Temp. _____ Start Up 2114 Cond.______ Remarks Notrient samples and CTD to at Surface_____ max depth Other_____ Data off w/0 287 m Sample Bot.Data Sal. Other 6 Bot. # Samp. Sal. Other Trip **Monitor Values** Conv. Mon. Values-CTD Time @ Bot. Rack Depth Depth Trip Therm-P Avg Tw Temp. Press. Temp. Cond. Other Press. Cond. Sal. 1 29 2129 202 10 10.682 29.023 32.145 2.639 2 30 2 3 P MAX 210930 2114 4 4 20 282.308 4.986 32057 4.99 33.2*53* 210 5 5 21 282.504 58 MAX 33.253 211430 4.986 32.058 6 22 209 200 199.100 3.443 29.958 32.371 2117 7 23 208 150 2.894 29.364 32.230 2119 152.110 8 24 207 100.010 2.686 29.115 32.162 100 2122 9 25 206 32.149 2123 75.850 2-641 29.057 10 26 50 205 2125 48.948 2.640 29.041 32.146 11 27 204 11 *3*0 2.639 29.033 32.146 2126 31.907

20.212 2.637

29.027 32.147

12 28

20

2128

Initials DMO

203 12

Pg. 4 of ____

Co	onsec	.Cast	: #	Vesse	el	Pro	oj. & Leg	FOC EV	ent# Vesse	el Sta. I.D.	Instr	uctions Sec	and cast	for sam	ole profi		esignatio	on	_
-		1	04			REEMAN	MF 91 - (13	72 li	res Sta	60			T-1	<u>, , , , , , , , , , , , , , , , , , , </u>	- līn	LB	60	<u> </u>
i	nsec. st #	De	Latit _o	ude Min.	N or C	Longitud Deg.	or	ate JD =	´ GI	me MT Min.	Dry Bulb	Wet Bulb	Bar. mb	Wind S Dir.	Wind Boo	Both Both	tom	Sta. Nan or I.D	
0	n 4	5	5. 7 4 1	04		55099		2 1 0 0	9123		2 5	025	816	70-			90		50
1	<u> </u>	TD.	<u>, 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1</u>	N L	14 1		 	tor Checks				JD/Time	016	7/10/01	Data Lo		70	1 16	احرو
				220 -A	-	0	n Deck		Surface	I	on	233	3 <u>5</u> Tap	e/Diskette		File Nan	ne/Head	ler	
1			250		-	oress				I		2 233				CAST OO4.	- Φ2 ΑΡ	R2335	-
1	•	N	<u>70</u> 30		-	emp				1	own tom		9				<u> </u>	 	
						Cond				Start	Up	234	<u>0</u>	irks Microz		L & C	11/200	262611	
_					_	Other					face a off			Cast	1	60 m	MIOIO	64 m 1	
is is	_	Т	Trip	Tim	ie @		Monito	r Values				Values-CT			nple Bot.		Sal.	Other	Š
Pos.	Bot.	Rack	Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #	Samp.	18
	29		10		2348					10.265	2.644	29.023	32.140			2		MZ	
2	<i>3</i> 0		10		2348	3				10.141	2.644	29.022	32.139		<u>-</u>			Chl	2
3	P	_	92		_											57			3
4	<i>2</i> 0		60	2339	2340					62.664	2.646	29.049	32.142					MZ	4
5	21		50		2341	2				51.3 5 5	2.646	29.043	32.140					MZ	5
6	22		50	-	2342	2	<u> </u>			51.757	2.646	29.043	32.141	s				Chl	6
7	23		40		2343	,				41.920	2.645	29.038	32.141					ΜZ	7
8	24	_	40	·	2343	3				42-067	2.645	29.038	32.140					chl	8
	25	_	30		2345	5				31.113	2.646	29.034	32.140					MZ	9
	26		<i>3</i> 0		2345	1				32-040	2.645	29.034	32.141					chl	10
	27		20		2346					20.818	2.644	29-028	32.141					MZ	11
12	23	ł	20		2347			-	1	21.149	2/14	29.027	22 140	1				Chl	12

5/0/t- F2

@ 71000 2500 Becch

Initials DND

C	onsec	.Cast	# 06	Vessel	LER	FREEMIN	j. & Leg	FOCI EX	/ent#	Vessel S			uctions Sec	and cast	at statio	of chlorou	n Sta.	Designation		9
1	nsec. st #	De	Latit	ude 1	7 or	Longitud	le E or	Date JD =	93	Time GMT Hr.		Dry Bulb	Wet Bulb	Bar.	1' 1	Wind PnoO	1 1	- 1	Sta. Nam or I.D	
0	06	5	738	50	N	55048	6W0	3 A P R	91	02.	300	21	0 2 0	806		506		156	5	59
				220-A				nitor Check	s		Tir		JD/Time	T	- /Distant	Data Lo		256		
Pr	ess. S	N	250	984			n Deck		Surfac	e		on <u>93</u> face	0390	Tap	e/Diskette	ו.ט.		ame/Heac <u>6 - Φ3ΑΡ</u>		<u> </u>
	•		7(3		- 1	Press emp				 !			0350	-			<u> </u>	0-02111		~
_	Jila. 5			<u> </u>		Cond					Start	Up	0230	 Rema	rks					\dashv
_						Other						face a off		CT	DPOPT C	HO CES	DECK A	LARD		
S.	Bot	T Rack	Trip	Time Depth	@ T-:-	Press.	Monit Temp.	Cond.	Otl		Coress.	onv. Mon. Temp.	Values-CT Cond.	D Sal.	Sar Therm-P	n ple Bot .E Avg Tw	Data Sal.		Other Samp.	1 0 1
-	29	, were			32F35		remp.	Cond.	Oti			a.664				VAR IM	Sai.	BOL. #	MZ.	
2			10						 		.404			32.162					Ch1	2
3	30		10	0	2362	0				9	.580	2.666	29.059	33.163				<u> </u>	CNI	3
 	1						· · · · · · · · · · · · · · · · · · ·					-			<u> </u>					
	20	_	60	0	3300	5				<u>(</u>	5.385	2.665	180.PG	32.162					MZ	╀┪
5	31		9	0	2302	5				6	JF3.6	2.663	PF0.P5	33.161	ļ				ch	5
6	22		50	0	23147	7		-		Me	ESE.1	2.664	4F0.PE	33.162		_	_		MZ	6
7	23	_	40		1286	ا				35	1.954	820.6	29.075	32.163					MZ	7
8	24		40	C	23304	4				H	0.342	053.6	FF0.PG	32.164					Ch	8
9	25		30	C	2340	8				3	F. 70.0	2.671	HF0.PG	32.164		<u> </u>			MZ	9
10	26		30	C	a342k	o				3	F84.0	2.669	1F0.PS	ટ્યા. <i>દ</i> દ					chl	10
	27		<i>30</i>	0	ಎಕಿಕ್	2				2	3.588	2.660	29.058	32.161					MZ	11
12	28		30	0	3353 7	4				1			29.056						chl	12
				<u> </u>				<u> </u>	•	_		-						Initials _	<u>a</u>	

Pg. ____ of ____ Consec.Cast # Vessel Proj. & Leg FOCI Event# Vessel Sta. I.D. Instructions CTD to max depth. Sta. Designation MILLER FREEMAN (Line 8) 58 MF91-03 76 Line 8 Sta 58 nutrient samples Latitude Longitude E Date D = 93Wind Wind Phologram Again Sp. Cloud Phologram Again Sp. Cloud Phologram Sp. Cloud Phol Time Dry Bottom Sta. Name Wet Consec. Bar. GMT Cast # Deg. Si si Dir. Depth, m or I.D Bulb Bulb mb Min. S Deg. W Day Mo. Yr. Hr. Min. 97W03APR910339028025 CTD 240 **Data Location Monitor Checks** Times **JD/Time** Type & SN_ SBE 9/220-A Data on 93/0330 Tape/Diskette I.D. on Deck at Surface File Name/Header 25084 Press. SN_____ 0330 at Surface... CASTOO7-03APRO329 Temp. SN _______ 701 1550 Start Down_ Cond. SN______303 at Bottom____ 033858 Start Up 033945 Cond._____ Remarks Cossette tape was recorded at Surface 0 35円 n 041 mor? Other_____ 0357 Data off ____ Sal. Other Sample Bot.Data **Monitor Values** Conv. Mon. Values-CTD Time @ Bot. Rack Depth Depth Trip Bot. # Samp. Temp. Temp. Therm-P Avg Tw Press. Cond. Cond. Other Press. 29 2 30 3 P 30 EFILEE 15P.15 46P.4 SIF.0EG 330 033929 239 0 B 200 034045 0346 4.63 200.439 4.661 31.480 32.951 228 6 21 227 6 150 034824 150.662 3.032 29.529 32.291 7 23 161.235 2.671 035036 100 111.96 32172 986 8 24 74.935 2.650 635307 29.075 32.163 225 50 0353 466 49.091 3.651 39.065 32.164 26 035459 121.56 F40.PS S42.6 10F.PS oΕ 323 11 27 20 035550 393 JELLEE 250.PS FED.E 32.156 <u>331</u> 12 12 28 10.533 2.629 29.024 32.156 035644 Initials CD __

0353 1550120

Pg. <u>8</u> of ____ Proj. & Leg FOC1 Event# Vessel Sta. I.D. Consec.Cast # Vessel Instructions CTD to 60 m, Sta. Designation 08 MILLER FREEMAN MF91-03 78 Line 8 Sta 58 chlorophyll and migrozooplaykton sangle (Line &) 58 Latitude N Longitude E Date JD = 93 Time Bottom Sta. Name Dry Wet Consec. S Deg. or GMT or I.D Bulb Cast # Bulb Deg. Min. W Day Mo. Yr. Hr. Min. 02W03APR910435028 236 **Data Location Monitor Checks** JD/Time **Times** Type & SN SBE 9/220-A on Deck at Surface Data on 93 0519 Tape/Diskette I.D. File Name/Header Press. SN 25084 at Surface 0520 CASTOOR_03A7R0519 Press. ______ Start Down 0521 Cond. SN______303 at Bottom____ Start Up_____ Cond._____ Remarks at Surface_____ Other_____ Data off____ Sal. Other 6 Bot. # Samp. Sample Bot.Data Trip **Monitor Values** Conv. Mon. Values-CTD Time @ Bot. Rack Depth Depth Trip Temp. Therm-P | Avg Tw Press. Cond. Cond. Temp. Press. Sal. Other Sal. 1 29 0530 10.161 2.454 28.831 32.096 WI 10 290.55 F68.86 024.6 *3*0 0530 CHL PIF.P 10 P 4 20 60.184 2.548 28.951 32.122 MI 0523 60 5 21 60 0524 CHL 861.66 EFP.86 OFT.6 286.PT MZ 6 22 50 0525 38.898 32.108 51,218 2.501 m2 7 23 40 0526 40.224 2.565 28.960 32.126 CHL 8 8 24 40 40.299 2.568 0526 851.68 429.86 9 25 WF 8 30 FECO 29.483 2.557 28.949 32.12b 10 26 30 FS1.56 F39.86 438.6 P35.95 FEED CHL 11 27 20 0529 21.102 2.520 28.905 32.115 MZ 12 28 0529 FO1.5E 4F8.86 OPH,5 842.05

Initials _____

C	onsec	.Cast	# 09	Vesse	I ER FR	Pro REEMAN Pro	oj. & Leg	FOCI EV	ent# Ves	sel Sta. I.D.	Instru	uctions CT	n of C	nax dept	· Fre		Designation		
1	onsec. ast #	De	Latit	ude Min.	or or	Longitud	le E D	Pate JD =	73 T	Fime GMT Min.	Dry Bulb	Wet	Bar.	Wind Dir.	Wind B		1	Sta. Nan or I.D	- 1
0	09	5	733	184	NI	54520	9 W O	3 A P R	910	0510	28	022	806	,6040	[4]	1 1 1	28	2.	57
Ту	De & S	ΓD N_i	SBE 9	1122D-H	4	• •		tor Checks		1		JD/Time		/ D: 1	Data Loc		230	-	
				25084	-		n Deck		Surface			0643		e/Diskette			ame/Head		ا ، ،
	•			701	-	ress				- Start D	own	0643				CRITOR	<u> </u>	MAOR.	``
C	ond. S	N		<u> 303</u>	ı	emp						0651 0651			 				_
-						Cond Other				at Sur	face	10F0		ırks					
- -		T	Trip	Tim									l D	San	nple Bot.D)ata	Sal.	Other	N/S
9	Trip Time @ Monitor Values Conv. Mon. Values-CTD Sample Bot. Data Sample Bot.															Bot. #	Samp.	18	
1	Trip Time @ Monitor Values Conv. Mon. Values-CTD Sample Bot. Data Sal. Rack Depth Depth Trip Press. Temp. Cond. Other Press. Temp. Cond. Sal. Therm-P Avg Tw Sal. Bot. and Sal. and Sal																		
2	Bot. Rack Depth Depth Trip Press. Temp. Cond. Other Press. Temp. Cond. Sal. Therm-P Avg Tw Sal. Bot. #																2		
3	Bot. Rack Depth Depth Trip Press. Temp. Cond. Other Press. Temp. Cond. Sal. Therm-P Avg Tw Sal. Bot. # Sal 29 30 <th< td=""><td></td><td>3</td></th<>																3		
4	20			224	0651					233.862	FP8.H.	31.854	751.55					238	4
5	31			300	০৬৯৪	5	*					31.832						237	5
6	22			150	0655	>	į.			149.545	3.826	30,375	32.511	87				936	6
7	23			100	065°	ન				99.827	2.763	F05.PS	32.198					235	7
8	24			75	0650	١	Ş			10F.7F	2.739	29.168	F81.5E					234	8
9	25			100	0700) :				49.468	8HF.6	29.167	32.191					533	9
	26			30	COFO					30.795	817.6	29,125	32.180					735	10
11	27			90	COFO	λ				20.630	10 F.	29.104	32.175					231	1
12	28			10	50F0					9.581	805.6	29.106	32.177				36	330	, 12
																	Initials	95	

Pg. <u>10</u> of ____ Sta. Designation Sta. Name

Consec. Cast #	De	Latite	ude Min.	N or	Longitud Deg.	de E or W		JD = '		G٢	1T	Dry Bulb	Wet Bulb		ar. nb	ا. ا	Wind Dir.	Win Sp.	d pro	ype Veath.	Botto Depti		Sta. Nam or I.D	1
010	1	_	1		154524		03	A PR	91	00		28	0 2 2			_	040			1. 1. 1		28	N.	5 7
C7 Type & S	ΓD					M		Checks					JD/Time							ocation				
Press. S				_	0	n Deck		at :	Surfac	e	1	a on <u>931</u> face	0/80		Ta	pe/[Diskette	I.D.				e/Head		
Temp. S				-	Press						Start D	own	0812						•	CAS	-010T	-0347	ROSK	2
Cond. S	N		30.3	-	Temp						,		0815											
				-	Cond						,	•	0835		Rem	narks								
	-	Trip		<u></u>	Other	Mo	nitor V	alues				a off	. Values-CT	<u> </u>	L		San	anla l	Bot	Data		Sal.	Other	
So Bot.	Rack	Depth	Depth	e @ Trij	Press.	Tem		Cond.	Ot	her	Press.	Temp.	Cond.		Sal.	17	herm-P	<u> </u>			Sal.		Samp.	101
1 29		3	70	083	71					,	10.385	2.612	29.002	32	dHI.								W.F	1
2 30		Te	9	1						,	10.512	2.611	000.96	33	.145								CHL	2
3 P																								3
4 20			9	081	5					(60.013	2.615	8€0.9€	32	.148								MZ	4
5 ₂₁			0	081	S					ļ	60.010	2.615	39.028	32	,149								CHL	5
6 22			50	081	16		034				49.090	2.609	29.016	39	146	0	三						FM	6
7 23			40	081	7					١	40.112	3.608	39.011	32	146	>							W.F	7
8 24			40	081	8						39.885	2.609	29.012	32	١٧١	>							CHL	8
9 25			30	081	9						19.524	2.612	39.011	32	.14=	ŧ			_				FM	9
10 26	_	~	30	081	,9						30.132	2.607	39.006	32	145	5							CHL	10
11 27			90	08:	70								30.005	•									WF	11
12 28			20	083	O						21.892	800.6	29.002	33	145	5							CHL	lia l
																					١	nitials _	00	

Instructions CTD to 60 m,

chlorophyll and migrozoplankton samples

Proj. & Leg FOC | Event# Vessel Sta. I.D. MF91-03 81 Line 8 Sta. 57

Longitude E Date JD = 93

Consec.Cast #

Latitude

Vessel MILLER FREEMAN

N

Pg. ____ of ____ Consec.Cast # Vessel Proj. & Leg FOCI Event# Vessel Sta. I.D. Instructions CTD to may depth, nutrient OII MILLER FREEMAN MF91-03 82 line & Sta 56 Profile samples Sta. Designation Line 8: 56 Latitude N Longitude E Date JD = 93 Time Wind Wind Sp. Cond Bottom Sta. Name Dry Wet Consec. Bar. S Deg. or GMT W Day Mo. Yr. Hr. Min. Cast # Deg. Depth, m or I.D Bulb Bulb mb Min. 011573095N1544668W03APR910923 0 2 7 026 8 62 03250 CTD Type&\$N_<u>SBE_91220-A</u> ID/Time **Data Location Monitor Checks** Times 0913 on Deck at Surface Data on_ Tape/Diskette I.D. File Name/Header Press, SN ______25084 93 / 0911 at Surface___ CASTOIL- 63APR 6913 Press. __________ 0916 Start Down____ at Bottom_______092.3 Cond. SN______ 303 Temp. _____ fluorometer Cond. Remarks at Surface _____ Other fluorometer Data off____ 201 m wo Sal. Other T Trip **Monitor Values** Conv. Mon. Values-CTD Sample Bot.Data Time @ T Trip Time @ Bot. Rack Depth Depth Trip Bot. # Samp. Press. Therm-P Avg Tw Temp. Cond. Other Press. Temp. Cond. Sal. 1 29 2 30 3 3 P 4 20 38 0924 200 0923 201.773 4.900 31.859 33.151 246 5 5 21 200 202.214 4.899 31.859 0924 33.152 6 22 245 6 4.687 150.589 150 0927 0927 31.506 32.981 244 7 23 100 0929 0929 102.057 3.977 30.574 32.621 243 8 24 30.045 0931 0931 75.416 3.552 32.431 9 25 242 50 0932 29.536 0932 50.815 3.096 32-289 241 10 10 26 0934 30.124 0934 30 32.288 3.087 29.519 11 27 240 11 0935 0935 3.087 29.516 32-289 20.976 239 12 12 28 0936 0936 29.516 32.290 11.051 3.091

Initials DMD

Pg. <u>12</u> of ____ Event # Vessel Sta. I.D. Instructions Second cast on Station for 84 Line & Sta 56 microzoophukton & chlorophyll samples Sta. Designation
Line 8: Sta 56 Bar. Wind Wind By Bottom Sta. Name

					-CIMMINI				' 	FINE D		20 MIC	10 TOO NOTHE.	ION H	COLIN	PICANAIL	_\$0	my h	-				JIC JU	2-4
Consec. Cast #	La Deg.	titude Min.	N or S	Deg.	Longitud	or	Date Day	JD = 9	73 Yr.	Time GMT Hr. M	lin.	Dry Bulb	Wet Bulb	Bar. mb	S. S.	Wind	ı v	Vind Sp.	Cloud	ype Weath.	Botto Depth		Sta. Nan or I.D	
012		0 9	8 N	15	4466	2		APR		103	 	30	0 2 8	78	6	- 03		60	- -		2 1	0		56
				-			onitor	Checks					JD/Time	,					Loc	ation				
Press. S		5084			on	Deck		at S	urfac	e		on face93	1037	_ `	Гаре	'Diskette	l.D	٠.			le Name	-		
Temp. S	N	701		Pres	ss						Start Do	own	/034							CAST	P12-	DSAPK	21432	-
Cond. S	N	303		Tem	P							tom												
			_		ıd							Up face		Re	mark	s Microz	'معام عمام	bulk	ndo	don	y colqu	nay b	e win coll	ړه
Bot.	T Ir Rack Dei	p T	ime @	rip	Press.				Oth	er Pr					-						al		•	1 0 1
1 29			- 1		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,							3.106	29 529									•	MZ	1.1
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3 p	_	_		-																				3
4 20	60	1037	7 103	37						62	548	3.432	29.906	32.39	2								MZ	4
5 21	50) 1039	9 10	39				O.		51	.607	3.138	29.581	32-30	0							····	MZ	5
6 22	5		10	39			50			51	.840	3.147	29.590	32.30	2								Chl	6
7 23	40	104	0 10	40		····				42	.322	3.108	29.545	32.29	2								MZ	7
8 24	40		10	41						43	.028	3.110	29.546	32-29	12		$oldsymbol{ol}}}}}}}}}}}}}}}}}}$				_		Chc	8
9 25	30	1042	2 10	42	uí,				,	31.	793	3.099	29.531	32-2	39								MZ	9
10 26	30		٥١	42						32	. 127	3.104	29.535	32-29	2								VII	10
11 27	20	1043	3 104	3						20	-731	3.115	29.543	32-29	4			<u> </u>					MZ	11
12 28	20		10	44						20	.932	3.120	29.547	32.29	4								Chl	
																					li	nitials _. _	DMD	

Consec.Cast #

Vessel Proj. & Leg FOCI
MILLER FREEMAN MF91-03

Vessel

012

Pg. <u>13</u> of ____ Consec.Cast # Vessel Proj. & Leg FOCI Event# Vessel Sta. I.D.

MILLER FREEMAN MF91-03 121 Mooring 9101 Vessel Instructions Current Meter Mooring 9101 Deployment Site Sta. Designation CM 9101 Mooring 9101 N Longitude E Date JD = 94 Latitude Time ' Wind Wind Pind High Si Si Dir. Bottom Sta. Name Consec. Dry Bar. Wet or S Deg. or GMT W Day Mo. Yr. Hr. Min. Depth, m or I.D Cast # Bulb Bulb mb Deg. Min. 013574086N1551403W04APR912006050 0 3 5 8 81703008 CTD JD/Time 1953 **Data Location Monitor Checks** Times Type & SN SBE 91220- A on Deck Data on__ Tape/Diskette I.D. at Surface File Name/Header Press. SN_____25084 at Surface 094 1952 CAST \$13 - \$4APR 1953 Press. ______<u>33933.763</u> 1305 Temp. SN ______ 701 1955 Start Down Cond. SN ______303 at Bottom 2006 Temp. 6466,627 1.930 2008 Start Up_____ Cond. 8002, 012 28.234 Remarks at Surface_____ Other_____ Data off 2006 293 M WO **Monitor Values** Sal. Trip Conv. Mon. Values-CTD Sample Bot. Data Other Time @ Bot. Rack Depth Depth Trip Bot. # Samp. Press. Therm-P Avg Tw Temp. Cond. Other Press. Temp. Cond. Sal. MAX 2006 4.883 289.208 CAST 33.186 31.913 DEPTH 2 2 3 3 4 4 5 5 6 6 7 7 8 8 9 9 10 10 H H 12 12

Initials DMD

Pg. ____ of ____ Vessel Proj. & Leg FOCI Event# Vessel Sta. I.D.

MILLER FREEMAN MF 91- Ø3 124 Current Mooring 9102 Instructions Current Meter Mooring 9102

Deployment Site Sta. Designation Consec.Cast # CM 9102 Longitude E Date JD = 94 Latitude N Wind Wind Dir. Sp. Cloud Sp. Cloud Time Sta. Name Dry Bottom Bar. Wet Consec. or GMT W Day Mo. Yr. Hr. Min. Si si Dir. or or I.D Depth, m Bulb Cast # Bulb Deg. Min. S Deg. 048 JD/Time **Data Location Monitor Checks Times** Type & SN SBE 9/220 - A 2254 Tape/Diskette I.D. File Name/Header on Deck at Surface Data on... Press. SN_____25084 2253 at Surface__ CAST 014 - 04APR2254 Press. <u>8121-407</u> 0.749 2255 Start Down___ 2303 Cond. SN_______303 Temp. <u>6597.293</u> 2.835 at Bottom..... 2304 Start Up_____ fluorometer Cond. 33932.522 29.215 Remarks at Surface ____ 32.187 2304 Other_____ Data off____ Sample Bot.Data Other **Monitor Values** Conv. Mon. Values-CTD Trip Time @ Bot. Rack Depth Depth Trip Bot. # Samp. Therm-P Avg Tw Press. Temp. Cond. Sal. Temp. Cond. Other Press. Sal. ı 2 2 3 3 4 4 5 5 6 6 7 7 500 B 33.144 4.07 235.814 4.891 31.860 2303 2304 8 8 9 9 10 10 11 12

12

Initials DMD

Pg. 15 of ____

Consec. Latitude N Longitude E Date JD = 95 Time GMT Bulb Bulb Bulb Bulb Wind Wind Wind Wind Sta. Nat GMT Bulb Bulb Bulb Bulb Bulb Bulb Bulb Bulb	Co	onsec	.Cast	# Ø15	Vesse		FREEMA)	j. & Leg MF 91-	FOC	\ Ev	ent# 28	Vessel CM	1 Sta. 1.D. 9103	Insti	ructions Co			er Moori		3	Sta. Des		910.	3_
Cond. Start Star			1	Latit	ude	N or	Longitud	le E or	Date	ID =	95	Tin GM	ne 1T			Ba	r.	Wind		Type Weath.		n s	Sta. Nam or I.D	ne
Note	0	15	5	728	85	NI	54477	OW	054	PR	91	02	000	60	046	8	9 3	7030	1 1 1	· 1 I	17	5	910	3
Press. SN 25084	l		רח			- 1		Moi		Checks	;		Tic		JD/Time			4-						
Temp. Solution S	Pr	ess. S	N_	25	084									a on face	95/015/	_	Тар	e/Diskette	I.D.				_	
Start Up		•				- 1							Start D	own	0153					CHST	φ15-φ	SAYK	Ψ13 Ζ	
Start Star	C						•									[
No. Total Trip Trip Trip Depth Trip Press. Temp. Cond. Other Press. Temp. Cond. Other Press. Temp. Cond. Sai. Therm-P Avg Tw Sai. Bot. # Sample Bot. Data Sai. Other Sample Bot. Pack Sai. Sai. Therm-P Avg Tw Sai. Bot. # Sample Bot. Pack Sai. Sai. Sai. Sai. Sai. Therm-P Avg Tw Sai. Bot. # Sample Bot. Pack Sai. Sai. Sai. Therm-P Avg Tw Sai. Bot. # Sai.	_		+101	ofomed	4					<u> 3122.</u>	183	29.22	at Sur	face			Rema	rks						
Bot. Rack Depth Depth Trip Press. Temp. Cond. Other Press. Temp. Cond. Sal. Therm-P Avg Tw Sal. Bot. # Samp.	-		Ŧ	Trin			Other		tor Va	luca										lata	<u> </u>	Sal .	Other	
1	Pos	Bot.	Rack	Depth	Depth	e @ Trip	Press.				Oth	ner					al.				al. E			
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9	7	<i>5</i> 00	B		030100	<i>90643</i>	2					,	147.43 9	4.061	307.05	32.1	<i>P</i> 80					40		7
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12	11																				23			11
	12																							12

Pg. <u>16</u> of ____ Consec. Cast # Vessel Proj. & Leg FOCI Event# 129 Sta. Designation
CM 910.3 Proj. & Leg FOCI Event# Vessel Sta. I.D. Instructions Current Meter Mooring 9103
Deployment Site - Second Cost CM 9103 Latitude N Longitude E Date JD = 95 Bar. Wind Wind Book Bottom Sta. Name or I.D Time Wet Consec. Dry or Min. S Deg. or GMT W Day Mo. Yr. Hr. Min. Cast # Deg. Bulb Bulb 016572900N1544938W05APR91023606 **Monitor Checks** JD/Time **Data Location** Times **Monitor C**l on Deck Type & SN SBE 91220 -A φ228 Tape/Diskette I.D. at Surface Data on_ File Name/Header Press. SN______25084 95/0227 at Surface___ Press. 33932.590 0.791 b229 Start Down____ 6236 Cond. SN _____303 Temp. 6610.431 2.926 at Bottom____ 0237 fluorometer Start Up_____ Cond. 8137.169 29.346 Remarks at Surface_____ Other_____ Data off $\phi = 2.37$ 203 m w/o Sal. Other **Monitor Values** Conv. Mon. Values-CTD Sample Bot.Data Pos. Time @ Bot. Rack Depth Depth Trip Bot. # Samp. Therm-P Avg Tw Sal. Press. Temp. Cond. Other Press. Temp. Cond. Sal. MAX ı 4.349 202.062 32.813 31.096 CAST DEPTH 2 2 3 3 4 4 5 5 6 6 8 8 9 9 10 10 H 11

Pg. <u>17</u> of ____ Consec.Cast # Vessel Proj. & Leg FOCI Event# 017 MILLER FREEMAN MF 91- 03 /30 Proj. & Leg FOCI Event# Vessel Sta. I.D. Instructions Line 8 Station 55 Sta. Designation Line 8 54 55 Sta 55 Latitude N Longitude E Date JD = 95 Time Wind Wind Bottom Sta. Nam Op 를 하는 Depth, m or I.D Bottom Sta. Name Dry Wet Consec. Bar. Consec.
Cast # Deg. Min. S Deg. or GMT W Day Mo. Yr. Hr. Min. Bulb Bulb mb 017572849N1544230W05APR910313059 **Data Location Monitor Checks** JD/Time **Monitor Cl** on Deck Times Type & SN 58E 91220-A Data on $\phi 3 \phi 9$ at Surface $95/\phi 3 \phi 9$ Start Down $\phi 3 1 \phi$ at Bottom $\phi 3 1 2$ at Surface File Name/Header 25084 Press. SN_____ CASTO17-05APR0309 Press. 33934 · 349 1 · 547 Temp. <u>6579.769</u> 2.715 Start Up_____ fluorometer Cond. 8112,375 29,140 Remarks at Surface Data off_____ 58 m w/o Sal. Other of Bot. # Samp. Sample Bot.Data Conv. Mon. Values-CTD **Monitor Values** Time @ Bot. Rack Depth Depth Trip Therm-P Avg Tw Temp. Press. Temp. Cond. Sal. Sal. Press. Cond. Other 29.575 32.333 45 58.630 3.094 MAX 0312 0312 2 3 3 4 4 5 5 6 6 7 7 8 8 9 9 10 10 Ш П

12

Pg. <u>18</u> of ____

Consec. Cast # De O 1 8 5 CTD Type & SN _ Press. SN _	B 4 5	Min. 5	or S De		le E D a	ite JD =	G	9139 ime	Dry	octions Cas	1 !	1 1			Designation CM		
CTD Type & SN <u>≤</u> Press. SN	SBE 91		N / 4	2 1 3 3			Yr. Hr.	MT Min.	Buib	Wet Bulb	Bar. mb	Wind ジシ Dir.	Wind Bo	Meath Dep	tom th, m	Sta. Nan or I.D	
Type & SN _= Press. SN		220-A		52137	5 W O	6 APR	9119	520	3 2	028	04	37320			16	913	39
1				or	Monit n Deck	or Checks at:	Surface	Data	a on	D/Time 1946	_ т	ape/Diskette	Data Loc al.D.		me/Head	ier	
i lemb. SiN			Pr	ress		_33934	1.745 1.79	at Sur	faceOS	6/ 1945 1948	_			CAST 018	- 66AP	R1946	
Cond. SN_		<i>3</i> 03	Te	emp	· · · · · · · · · · · · · · · · · · ·	6794	1916 4.18	≥ at Bot	tom	1952	_ _		_				
= fluo	rometer	<u> </u>	С	ond		8282	.9 8 4 30.5	Start at Sur	: Up face	1952	Ren	narks					
				ther				_ Data	a off							m wo	_
Bot. Rack	Trip	Time Depth I		Press.	Monitor Temp.	Values Cond.	Other	Press.	onv. Mon. Temp.	Values-CT Cond.	D Sal.	San Therm-P	nple Bot.D Avg Tw	ata Sal.		Other Samp.	
	7 - 0 - 0 - 0 - 0	Берит	тпр	11 033.		Cond.	<u> </u>	11.030.		Cond.	- Juli	111011111	7.00	Jai.			
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6 250 -	MAK	1952	1952		94			113.872	4.622	31.202	32.71]				53		6
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10																	10
11																	11
12																	12

Pg. <u>19</u> of __ Instructions Current Meter Mooring Recovery Site 9031 Sta. Designation 9031 CM Cloud Aveath. Sta. Name Wet Bottom Wind Bar. S. S. or I.D Depth, m Bulb mb Dir. 9031 28 05 305 3 0 **Data Location** JD/Time 2221 Tape/Diskette I.D. File Name/Header 2220 CAST 019 - 06 APR 2220 2222

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			_ Te	mp	. 	<u>6/82.</u>	322 4.096	at Bot	tom	2229							
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			<u> </u>	• la				at Sur	face			(3 000 000		Mari	10	
			-	tner				- Data	а оп			 _			May	אין סוע	<u> </u>
LT.	Irip	Tim	e @												Sal.	Other	ď
t. Kack	Depth	Depth	Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Iw	Sal.	Bot. #	Samp.	10
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	SN	T Trip	SN	T Trip Time @ t. Rack Depth Depth Trip	SN Temp	T Trip Time @ Monito t. Rack Depth Depth Trip Press. Temp.	T Trip Time @ Monitor Values t. Rack Depth Depth Trip Press. Temp. Cond.	SN 303	T Trip Time @ Monitor Values Cond. Cond. Cond. Data Cond. Cond.	T Trip Time @ Monitor Values Conv. Mon. Conv.	T Trip Time @ Monitor Values Conv. Mon. Values-CT Cond. Cond. Cond. Cond. Cond. Cond. Conv. Mon. Values-CT Cond. C	SN Temp.	T Trip Time @ Monitor Values Cond. Depth Trip Press. Temp. Cond. Other Cond. Cond.	T Trip Time @ Monitor Values Cond. Data off Conv. Mon. Values-CTD Sample Bot.Data Cond. Co	T Trip Time @ Monitor Values Cond. Other Cond. Cond.	T Trip Time @ Monitor Values Cond. Other Depth Trip Press. Temp. Cond. Other Cond. Other Cond. Other Cond. Other Other Cond. Other Other Cond. Other Other	T Trip Time @ Monitor Values Cond. Other Cond. Cond.

Proj. & Leg FOCI MF 91-03

or

W

on Deck

Longitude

Event#

193

at Surface

33933.544 1.234

Date JD = 96

Day Mo.

Monitor Checks

Vessel Sta. I.D.

Time

GMT

Hr. Min.

CM 9031

Dry

Bulb

3

0

Times

Data on_

Start Down_

at Surface 96

0

Consec.Cast #

CTD

Press. SN_

Temp. SN_

Deg.

Type & SN SBE 91220-A

Consec.

Cast #

Vessel

MILLER FREEMAN

Deg.

Press.

or

S

019

Latitude

Min.

0

25084

701

Initials UMD

Pg. <u>20</u> of ____

L	onsec	Cast	# _{\$\phi 2\phi\$\$}	Vessel Miller		loci eman	Proj. & Leg MF91	FOC1 -Ф3	Event#	Vessel	Sta. I.D. 9142	Instr	uctions AD	o v me	ooM ≥ fn	ring y	174		Sta. De	esignatio	on 914	2
Co	nsec. st #		Latit	ude 1	N or		itude E or	Date	JD = 97 Mo. Yr.	GM	IT	Dry Bulb	Wet Bulb	Bar mb	. []	Wind	Wind Sp.	Type Weath.	Botto Depth		Sta. Nam or I.D	ne
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Tvi	C .	TD SN 5	BE 91	220 -A		•		nitor C	Checks				JD/Time	_			Data Lo					
			25				on Deck		at Surfa			a on face	97 050	-	Tape	/Diskette	I.D.		ile Nam			,
Te	mp. S	N_		701	F	Press			33934 - 37		Start D		0500	<u> </u>				CAS	T920.	<u>- φ7ΑΥ</u>	R\$453	²
C						•			<u>6790. 036</u>			tom	_	[.								
-		fluo	rometer	-					3251.076	30.297		: Up face		[F	Remar	ks						
_	1		T-:-			Other	M			<u> </u>		a off		L		Co.	nple Bot.	Data		183 Sal	M WO	
Pos.	Bot.	Rack	Trip Depth	Time Depth	@ Trip	Press		tor Va		ther	Press.	Temp.	Values-CT Cond.	ال Sa	ıl.	Therm-P			Sal.	Bot. #	Other Samp.	S S
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9																						9
10												237						i				10
11																						11
12		,															·			nitials		12

Initials _____

Pg. 21 of _____

Co	nsec.	Cast	# ø 21	Vesse		enian	Proj	. & Leg / MF 91-	001 E	vent#	Vessel	Sta. I.D. 9141	Instr	uctions ADA	CP Mo	oring	914	1		Sta. Design	ation	9141	
Cor	nsec. st #	De	Latit		N or		ngitude	e E D or	ate JD =	97	Tim GM ⁻ Hr.	e T	Dry Bulb	Wet Bulb	Bar.			Wind Pro			Sta.	Name r I.D	- 1
0	21	5	901	1 1	NI	515	14	9 W O	7 A P R	91	06	000	34	0 3 2	04	27	090	208		178	9	14	
Тур	C7 e & S	ID N_S	BE 91	220 - 4	4				tor Check			Ti	mes	JD/Time	7 -	·/D	:-1 !	Data Loc		.			
Pre	ess. S	N		5084	_	_		Deck		Surface			a on rface	055 97 055)	•		.D.		e Name/Η : φ 21 – φ		553	
	•				- 1				33933.			Start D	own	055	4_				CHO	$\varphi z_1 - \varphi$	AT KY	<u></u>	
Co	nd. S		C1		- 1	•			6745.9				ttom t Up	060									
			Elvora	neter	·				<u>8198.4</u>	45 29	1 836	at Su	rface		Rer	narks						_	
H		т 1	Trip	Tim	_			Monito	r Values				ony Mon	. Values-CT	 D	· I	Sam	ple Bot.D	Data	Moy W	o <i>17</i> II. Oi		
Po	Bot.	Rack	Depth	Tim Depth	Trip	Pre	ess.	Temp.	Cond.	Oth	er	Press.	Temp.	Cond.	Sal.	Th		Avg Tw			. # Sa		Pos.
1	ММ	* c	ast D	EPTH							1.	14.628	4196	30.566	32 358	3							1
2			2																				2
3																				807			3
4	//		10	∞ 05	060	5					10	6.810	3.860	29.300	31,985	-				18	7		4
5												650											5
6								4.															6
7																							7
8										!			-										8
9																							9
10													ð							·			10
11																							II
12																							12

Pg. <u>22</u> of _____

C	nsec	.Cast	#022	Vesse	el La Fre	eman Longi	Proj. & Leg 1 MF 91-0	FOCI EV	rent# Ves	sel Sta. I.D. 9138	Instr	uctions ()	rrent Me	ter Moorin	g 9138		Designation CM		
Co	nsec. st #	De		ude Min.	or	Longi Deg.	tude E D	ate JD =	98	Fime GMT . Min.	Dry Bulb	Wet Bulb	Bar.	1 1	Wind Pno	Weath.		Sta. Nam or I.D	ne
0	2 2	5	834	69	N	5047	95W0	8 A P R	910	4210	4 2	036	021	8060		911	71	913	38
		N_S		220-A	7	•	Moni on Deck	tor Check	Surface	Dat	a on	JD/Time 6年	3 Tar	oe/Diskette	Data Loc		ame/Head	ler	
1			2	5084 701	-	Press.	on Dock			at Su	rface	98/041	2				2 _ φ8 A		2
	•			303	- 1		**************************************			92 at Bo	tom	042	0						
_			Fluor	ometer						770 Star at Su	t Up rface	042	Rema	arks					
<u> </u>		т 1	Trip	Tim	- ie @	Other	Monito	r Values				. Values-CT		San	nple Bot.[Max wii Data	e out:	168 m	1 00
Pos.	Bot.	Rack		Depth	Trip	Press		Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P			Bot. #	Samp.	Pos.
L			150		042	2				58.33 	5.064	31.856	33.007				34		
2																			2
3																			3
4	YAM	CA	ST D	EPTH					_	168.91)	5.064	31.876	33.018						4
5									:										5
6							ile.												6
7																			7
8					ı	1					74								8
9																			9
10											3365								10
П																_			11
12																			12
											-						Initials	$\mathcal{D}M\mathcal{D}$	

Pg. <u>23</u> of ____

Co	nsec.	Cast	023	Vesse	el ler F	-Lechav	Pro	oj. & Leg MF 9	FOC 1-か3	Eve Z	ent#	Vessel	Sta. I.D. 9137	Instr	uctions Cu			er Moori 5:te	ng 913	7	Sta. Design	natio	9137	
•	nsec. st #	De	Latit g.	ude Min.	N or				Date	JD = Mo.	98	Tim GM Hr.	ne T	Dry Bulb	Wet Bulb	Bar mb	.	Wind	Wind Bo	Type Weath.	Bottom Depth, m		a. Nam or I.D	ie
0	23	5	842	0 3	N	150	500	OOW	08	APR	91	05	190	4 5	040	0 2	2 1	7090	0 8 8		194		9 1 3	7
Tyr	CT	D <	RF Q	220 - A				Mo	nitor	Checks			Ti	mes	JD/Time				Data Lo	cation	-			
1			2:		•		0	n Deck		at :	Surfac	e		a on			Tape	/Diskette	I.D.		e Name/F			
						Press.				33934	012	<u> 1.383</u>		тасе7 own	18 /0511 0513	<u></u> -	···-			CAST	$\phi 23 - \phi 6$	APR	Ø511	
Co	nd. S				_	Temp.	_			6854.2	211	4.579		tom	05 1	9_							-	
-		<u>t</u>	notom	eter	-	Cond				8314.1	7 <u>8</u>	30.830	Start	: Up face	05 19	Z R	lemar	ks deploye	d wooring	at 18	3m depth	\		
_		127			_	Other		. <u>.</u>					Dat	a off				<u>, </u>			Wire ou	+ m	of	
Pos.	Bot I	T Rack	Trip	Tim Depth	e @	_	ress.	Mon Temp		'alues Cond.	Otl		Press.	onv. Mon. Temp.	Values-CT Cond.	D Sa		San Therm-P	nple Bot.			- 6	Other Samp.	Pos.
H				_	1113	7 1	1 633.	remp	·	Cond.	Ou							mem-r	Avg I w	3	11.		Janp.	
	МА	<u> </u>	AST I	eprit	<u> </u>					· · · · · · · · · · · · · · · · · · ·			187.099	5.179	32.044	33.0	94			-				-
2																								2
3									ŀ															3
4																								4
5		B	170	052020	0525	5							172.113	5.153	32.002	33.0	279		5.17		C	1		5
6									4,									ð:						6
7			W.			_					:													7
8																								8
9																								9
10														100					8					10
Ш																								11
12																								12

Initials _______

Pg. <u>24</u> of ____

C	onsec	. Cast	# 024	Vessel	r Fre	eman Pro	oj. & Leg 1 MF 91 - C	FOCI EV	rent# Vesse	el Sta. I.D. 9136	Instr	uctions Cu	rient Me	ter Moori	ng 9136		esignatio		
1	nsec. ist #	De	Latito		1 1	Longitud	de E D or	ate JD =	G	me MT Min.	Dry Bulb	Wet Bulb	Bar.			Meath Dept		Sta. Nam or I.D	
0	24	5	848	371	119	50528	3 Z W O	8 A P R	9106	180) 4 4	039	02	17083		921	79	913	6
Tv	C ne & S	TD SN 5	BE 91	220-A				tor Checks				JD/Time			Data Loc				
1 '			2				n Deck		Surface	24 5111	a on face	98 061		pe/Diskette	I.D.	File Nam			
	-								.413 1.121	Start D	own	0612				CAST \$24.	<u>- Ф8АЧ</u>	<u> </u>	
C	ond. S			303	- 1	•			069 4.36	C	tom	0618 0618	, [
-			Fluoron	neter_				<u>8276.</u>	072 30.50	at Sui	face	062.	3 Rem	arks Moring	doployed at				
-	ľ	 	Trip	Time	_	ther		r Values			a off	Values-CT	<u> </u>	San	nple Bot.D	May wire	Sal.	176 m Other	
Pos	Bot.	Rack	Depth	Depth	@ Trip	Press.	Temp.	Cond.	Other	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #		Pos.
ı	MA	X	LAST	DEPTH						175.953	4.844	31.431	32.726		-				ı
2											, , ,								2
3							1						<u>. </u>		<u> </u>				2
⊢						<u> </u>						 		-					
4															:				4
5	//_			062240	623					11.537	4.288	30.461	32.228				03		5
6											,					22			6
7			-												-				7
8												 							8
9					-			<u> </u>											9
├-								<u> </u>									<u> </u>		H
10											17								10
11																			11
12																			12
						<u> </u>	•				•		.				Initials	DMD	

Pg. <u>25</u> of ____

C	onsec	.Cast		Vesse		F	Proj. & Leg MF91-6	FOCI EV	ent# 246		ta. I.D. 913 5		ructions Cur	rent	Med	er Moorin	g 9135	Si	ta. Designati		
1	nsec. st #	De	Latit	ude Min.	N or		ude E D	Date JD =	98	Time GMT Hr.	2	Dry Bulb	Wet Bulb	Ba	ır.	1 1	Wind 9	Type Weath.	Bottom Depth, m	Sta. Nai or I.D	me
0	25	5	852	31	NI	5053	62W0	8 A P R	910	065	5 9 C	145	035	1	1 1	705		_	163	91	35
Ту	ce & S	TD SN.≦	BE 9	1220-1	Δ		Mon on Deck	itor Check	Surface			mes a on	JD/Time 065	3	Tan	o/Diskotto	Data Lo		Name/Hea	d	
					-		On Deck			1152	at Sur	face	98/0652		•	e/ Diskette			194111е/ Пеа 125— ФВАР		_
	•			701 303	- I						Start D	own	065°	<u> </u>					70		
				meter		-				ı	Stan	: Up	065	9	Rema	rks M	٠ - ١٠٠٠	- Last	. o.∮ 147 m		
											at Sur		070	4	r Cilia	W2 MOOLZE	grobioden		lat wire ou		9 m
SS.	Rot	T	Trip	Tim Depth			Monito	or Values			C	onv. Mon	. Values-CT				nple Bot.I	Data	Sal.	Other	. 정
-	- 30				Ĭ	Press.	Temp.	Cond.	Othe	er I	Press.	Temp.	Cond.		al.	Therm-P	Avg Tw	Sal	, Bot. #	Samp.	+-
<u> </u>	М	} }\	AST	DEPTH	<u> </u>					15	8.737	4.776	31.319	32 .	672		!	<u> </u>		<u> </u>	+-
2						 												ļ			2
3			20	0702	0703					2,	2.301	4.243	30.421	32.2	221			ļ	09		3
4			1.								=										4
5																					5
6																					6
7			_									-									7
8												19									8
9																					9
10																					10
П																					П
12																					12
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Initials DMD

Pg. 26 of ____ Instructions Current Meter Mooring 9134
Deployment Site Sta. Designation Wind Wind Bottom Sta. Name

<u> </u>	-				CEEMAN	MEAL	<u>- ψ.s</u>		-7/		7154		<u> </u>	CHOY ME	nt site				713-	\mathbf{H}
Consec. Cast #		Latit g.		or	Longitud Deg.	or		JD = Mo.		G1	me MT Min.	Dry Bulb	Wet Bulb	Bar. mb	Wind	Wind Pnol	Neath.	ttom pth, m	Sta. Nan or I.D	
026	+		- 11		50560							45	038	+	7050	1 1 1		51	913	34
l c	TD		220-A			Mo	onitor	Checks			Tir	nes	JD/Time			Data Lo	cation			
1		25		•	10	n Deck		at	Surfac	e	Data	a on	0735	Tap	oe/Diskette	I.D.	File N	me/Head	ler	
1			701	_ F	Press 33934	1.91		33934	- 912	1.766	at Sur	face own	0735 78 0734 0736	<u> </u>			CASTØ26	- \$8APP	φ7 <u>3</u> 4	
1 *			<i>3</i> 03		emp	.		6808.	371	4.27	L at Bot	tom	0740	<u> </u>						:
- 30	flu	oromet	er		Cond			8264.	501	30.41	Start	Up	074	O Rema	arks Mooning	dealwed	at death	af 141 m		
			<u>_</u>	1	Other						at Sur	face a off	075	<u> </u>	9					
8	Т	Trip	Time	e @	T	Mon	itor V	/alues		1		_	Values-CT	D	San	nple Bot.[Mad wire	Sal. Bot. #	Other	Š
& Bot.	Rack	Depth	Depth	Trip	Press.	Temp	Э.	Cond.	Ot	her	Press.	Temp.	Cond.	Sal.	Therm-P	Avg Tw	Sal.	Bot. #	Samp.	٦
I MA	χс	AST D	EPTH	<u>.</u>							145.874	4.645	31.130	32.5B9						1
2 0	В	130	074155	0747							131-151	4.644	31.112	<i>32</i> .577		4.65		29		2
3																				3
4																				4
5											. <u>-</u>									5
6								•							÷					6
7																\ <u></u>				7
8											<u> </u>									8
9												-		<u> </u>		<u> </u>				9
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12							\top									<u></u>			1	12
<u></u>					<u> </u>								1				J	Initials _	DMD	<u> </u>

Vessel Sta. I.D. 9134

Event# 247

Consec. Cast # Vessel MILLER FREEMAN

Proj. & Leg FOC1 MF91-φ3

Pg. <u>27</u> of ____

C	onsec	Cast	02	Vesse M IL		FREEMAN	roj. & Leg MF °	FOC	I Ev	ent# 248	Vessel	Sta. I.D. 9133	Instr	ructions Cu	rren	+ M	eter	Moor	ing 9133	,	Sta. De	signatio CM	n 913	3
1	nsec.		Latit		N or		ude E or	Date				ne l	Dry	Wet	ј в	ar.			Wind Boo	eath.	Botto	m S	ita. Nan	ne
Ca	ast #	De	g.	Min.	S	Deg.	W		Mo.	Yr.			Bulb	Bulb	l n	nb (Sis	Dir.	Sp. 응	ř ×	Depth	, m	or I.D	_
0	2 7	5	900	22	N/	5057	97W	08	APR	91	0 8	240	145	038	0	2	17	020	131	81	16	8	9 13	33
Tv	C ne & S	TD SN 5	SBE 9	1220-A				onitor	Checks			i		JD/Time					Data Lo					
			2				on Deck			Surfac			a on face	<u>981 881</u>	<u></u>	Ta	pe/D	iskette	I.D.		le Name			1
Τe	mp. S	N_		701	.	Press.			33932	. 509	0.745	Start D	own	186 /	8_					CAST	r φ27_0	D8APR	<u>\$816</u>	
C	ond. S			<i>3</i> 03	- '	Temp		 .	6778.3	355	4.069			Ø82	<u> </u>									
_	ij.	£	votom	eter	-	Cond			8229.3	69	30.115		: Up face	φ82	급_	Rem	arks	Moorin	g deployed	lat o	depth o	F 158	M	
_	,		····		-	Other					<u></u>	Date	a off						•	N	lax wis	e out:	161 n	1
Pos.	Bot.	T Rack	Trip	Tim Depth	e @	Press.	Mor Temp	itor V	alues Cond.	Otl	hor	Press.	onv. Mon. Temp.	. Values-CT Cond.		Sal.	Th		nple Bot.[Avg Tw		Sal.		Other Samp.	Pos.
-		i l				7 11633.	i rem	" `	COIIG.	01							1 '''	eriii-r	VAR IAA		pai.	μου. π	Jamp.	H
<u>'</u>	MA	X	CASI	DEPTH			- 			<u> </u>	/	163.176	4.663	31.162	32.	600	-			ļ		<u></u>		\vdash
2																								2
3	11	1	MAX		082	4						162.493	4.664	31.161	32.	598						10		3
4																							·	4
5												-												5
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Initials __DMD__

Instructions Current Meter Magring 9132 Sta. Designation

Conse			Miller	Freev	man	MF 91		ent# Vo 250	essel Sta. I.D. 9132	111361	uctions Cu	e Dlov me	nt Site	4 / / /		esignatio	913	2
Cast 4	<u></u>	Latit	u de 1	or S De	Longitud	e E or	Date JD =	98	Time GMT r. Min.	Dry Bulb	Wet Bulb	Bar.		Wind PnolO	Meath Dept		ta. Nam or I.D	1
02	85	905	56	N / :	50597	440	OBAPR	910	914	040	040	02	7050	1 1 1 1		92	913	<u> </u>
-	CTD	91220				Mo n Deck	nitor Check	Surface		mes ta on	JD/Time 090	6 Tai	oe/Diskette	Data Loc	c ation File Nam	ne/Head	er	
Press	. SN_	250	84	D.			33932		at Su	rface9	18 0905		Je/ Diskette		CAST Ø28		_	
_							6701.5		Start L	own ttom	•							
94		luoron			•		8149.			t Up rface		Rem	arks Mooring	g daployed	at depth o	1 152	m	
					ther				Da	ta off	091	5	,	Max	wire out !	187 <u>m</u>		
S Bo	t. Racl	Trip Depth	Time Depth		Press.	Moni Temp.	tor Values Cond.	Other	Press.	Temp.	Values-CT Cond.	Sal.		nple Bot.E Avg Tw		Bot. #	ł .	1 0 1
1	3	į.																
2	4																	2
3		XAM	(914					186.743	4.492	30.908	32.460		· · · · · · · · · · · · · · · · · · ·		24		3
4																		4
5																72		5
6							**					L.	(9)			<u> </u>		6
7																ļ		7
8																		8
9					ū													9
10										1								10
11																_		11
12				_												Initials _	<u> </u>	12

Initials _______