SALINITY CORR = +0.007

Pg. 1 of ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
001	MILLER FREEMAN	FOCI MF-89-03 Leg II	25	M14	1008.1	M14

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date JD = 110 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb 1008.1	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m 660 fm	Sta. Name or I.D
001	55	20.84	N	155 11.27	W	20	APR	89	18	36	10.0	08.2	68	3	8	29	15	1	8	1	1297	M14

CTD 55 47 74

Type & SN 91220-B

Press. SN 26072

Temp. SN 710

Cond. SN 304

156 86 26

Monitor Checks

	on Deck	at Surface
Press.		2.713
Temp.		4.450
Cond.		30.822
Other		

Times JD/Time

Data on <S> 175824

at Surface 18:02:15

Start Down <L>

at Bottom <^P> 18:35:40

Start Up 18:36:30

at Surface

Data off 18:35:40

Data Location 1 2 3 4 5

Tape/Diskette I.D.	File Name/Header
	20 APR 1744

Remarks Salinity calculated using "Salty" program

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Temp.	Cond.	~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Temp.	Cond.	Sal.	Sample Bot.Data Therm-P	Avg Tw	Sal.	Sal. Bot. #	Other Samp.	Pos.
1	252	A	1159	18:38	18:44	1172.365	2.732	31.448	1172.365				34.394	1155	2.74	34.406	13		1
2													Laboratory Salinity			Autosal Salinity			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials ____

✓ ~~JS~~

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
002	MILLER FREEMAN	FOCI MF-89-03 Leg II	38	M8	CTD at M8 MF 89-03 Leg2	M8

Consec. Cast #	Latitude Deg. Min.	N or S	Longitude Deg.	E or W	Date JD = 111 Day Mo. Yr.	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb 1009.0	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
002	5557 32	N	156 22 74	W	21 APR 89	0421	0406	0206	69	3	8	360	16	1	6	1	216	M8

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		3.100
Temp.		3.123
Cond.		29.184
Other		DEPTH 3.072

Times JD/Time
Data on B 0408
at Surface L 0412
Start Down 0412
at Bottom CP 04:20
Start Up 04:21
at Surface
Data off CP 0420

Data Location
Tape/Diskette I.D.
File Name/Header 21Apr0401

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Temp.	Monitor Cond.	Monitor ~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Conv. Temp.	Conv. Cond.	Conv. Sal.	Sample Bot. Data Therm-P	Avg Tw	Sal.	Sal. Bot. #	Other Samp.	Pos.
1	504	/	52.5m	4:26	4:27	53.156	2.323	28.495	52.666				31.791			31.802	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 WF
✓ JG

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
03	MILLER FREEMAN	FOCI MF-89-03 Leg II	41	152	Line 17	152

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 111 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb 1009.5	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
003	55	54	Ø Ø	155 59	91 W	21	APR	89	07	29	04	40	10	2	8	265	08	1	0	0	86	152

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		2.163.
Temp.		3.258.
Cond.		29.319.
Other		DEPTH 2.144

Times JD/Time
Data on <B> 7:18:34
at Surface <L> 7:21:49
Start Down 7:22:21
at Bottom <AP> 7:25:27
Start Up 7:25:40
at Surface
Data off <EO> 7:29

Data Location
Tape/Diskette I.D.
File Name/Header 21 APR0714.DAT

Remarks UGR not working (paper stuck) so cast was done shallower than normal to avoid hitting bottom

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Temp.	Cond.	~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Temp.	Cond.	Sal.	Sample Bot. Data Therm-P	Avg Tw	Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503	✓	28.2 m	07:27	07:28	28.514.	2.853.	29.129.	28.253				32.050			32.061	33		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

21 APR0706

Initials ✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
004	MILLER FREEMAN	FOCI MF-89-03 Leg II	44	Line 17 153	Line 17 CTD 153	153

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date JD = 111 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud ✓	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
004	55	55.10	N	156	11.25	W	21	APR	89	08	38	05.6	04.0	10.2	8	268	12	06	8		210	153

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	-0.001	2.766.
Temp.	3.473	3.054.
Cond.	0.004	29.064.
Other DEPTH	-0.001	2.741

Times JD/Time
Data on <B> 08:17
at Surface <L> 08:31
Start Down
at Bottom 08:37:35
Start Up 08:37:40
at Surface
Data off 083735

Data Location 210
Tape/Diskette I.D.
File Name/Header 21APR0816.DAT

Remarks Logged one point while CTD still on deck
Thermometers not read

210

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Temp.	Cond.	~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Temp.	Cond.	Sal.	Sample Bot. Data Therm-P	Avg Tw	Sal.	Sal. Bot. #	Other Samp.	Pos.
1	502	6	99	08:40	08:46	99.866.	2.491.	28.763.	98.934				31.928			31.937	14		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 #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
5	MILLER FREEMAN	MF-89-03 FOCI Leg II	45	154	CTD line #17	154

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 111 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb 1010.0	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud ✓	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
005	55.55	69	N	156 15.33	W	21	Apr	89	09	31	05.0	04.0	10	2	8	270	12	00		0	0236	00154

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		2.927.
Temp.		3.046.
Cond.		28.971.
Other		D 2.900

Times JD/Time
Data on 09 20
at Surface 09 23
Start Down 09 24
at Bottom 09 34 / 212
Start Up 09 34 10
at Surface
Data off 09 30 24

Data Location 236
Tape/Diskette I.D.
File Name/Header 21APR0916

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values Other	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot.Data Therm-P	Sample Bot.Data Avg Tw	Sample Bot.Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503		151	932	932	153.027.	3.046.	29.577.	151.579				32.320			32.327	19		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 #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
006	MILLER FREEMAN	FOCI MF-89-03 Leg II	46	CTD STA # 155	LINE #17	155

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 111 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb (1009.9)	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud ✓	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
006	55	56.11	N	156	21.10	21	APR	89	10	12	04.8	04.0	10	2	8	275	12	000			0243	06155

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks 10

	on Deck	at Surface
Press.		3.819.
Temp.		2.944.
Cond.		28.969.
Other		2.992.

Times 11 JD/Time
Data on 10:02:31
at Surface 10:04
Start Down
at Bottom 10:11 / 222-
Start Up 10:11
at Surface 11:19
Data off 101121

Data Location 24?
Tape/Diskette I.D.
File Name/Header 21APR0949.Dat

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values Other	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot. Data Therm-P	Sample Bot. Data Avg Tw	Sample Bot. Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503		164	10:13	10:13	166.085.	3.434.	29.522.	164.509.				32.277			32.288	18		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 #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
007	MILLER FREEMAN	FOCI MF-89-03 Leg II	47	CTD Sta #156	LINE #17	156

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 111 Day	Mo.	Yr.	Time GMT Hr.	Time GMT Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud ✓	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
007	55	56.63	N	156 25.83	W	21	APR	89	1053	05	040		1010	2	8	310	10	0	0	0	0221	156

CTD

Type & SN 91220-B

Press. SN 26072

Temp. SN 710

Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		3.734.
Temp.		2.838.
Cond.		28.814.
Other		D 3.700

Times JD/Time

Data on 111/1042

at Surface 1045

Start Down 1046

at Bottom 1052/205

Start Up 1052

at Surface

Data off 105241

Data Location

Tape/Diskette I.D.

File Name/Header 21APR1040.dat

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values ~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot. Data Therm-P	Sample Bot. Data Avg Tw	Sample Bot. Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	502	6	127	1055	1103	128.873.	2.756.	29.129.	127.661				32.094	64.7	2.74	32.099	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 ✓ [illegible]

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
008	MILLER FREEMAN	FOCI MF-89-03 Leg II	48	CTD STA. # 157	LINE # 17	157

Consec. Cast #	Latitude Deg. Min.	N or S	Longitude Deg.	E or W	Date JD = 111 Day Mo. Yr.	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb 1010.0	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
008	5557 34	N	156 31 05	W	21 APR 89	1143	05.0	04.0	10	2	8	275	09	1	0	0	210	157

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		2.943.
Temp.		2.916.
Cond.		28.861.
Other		D 2.916

Times JD/Time
Data on 111 / 1133
at Surface 1135
Start Down 1135
at Bottom 1142/0194
Start Up 1143
at Surface
Data off 114233.

Data Location 210
Tape/Diskette I.D.
File Name/Header 21APR1125

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Temp.	Cond.	~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Temp.	Cond.	Sal.	Sample Bot. Data Therm-P	Avg Tw	Sal.	Sal. Bot. #	Other Samp.	Pos.
1	563		78	1146	1146	78.513.	2.506.	28.973.	77.784				31.936			31.942	25		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 #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
009	MILLER FREEMAN	FOCI MF-89-03 Leg II	50	CTD# 158	LINE # 17	158

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 111 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb 1010.0	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
009	55	58.03	N	156	37.07	W	21	APR	89	12	30	04.5	04.0	16	2	8	280	08	6	01	202	158

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		2.648.
Temp.		2.885.
Cond.		28.871.
Other		D 2.624.

Times JD/Time
Data on 111 / 1220
at Surface 1223
Start Down 1224
at Bottom 1230 / 191
Start Up 1231
at Surface
Data off 1232

Data Location 202
Tape/Diskette I.D.
File Name/Header 21APR1219.dat

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values ~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot.Data Therm-P	Sample Bot.Data Avg Tw	Sample Bot.Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503		27	12:34	12:35	27.929	2.609	28.691	27.673				31.760			31.770	28		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 #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
010	MILLER FREEMAN	FOCI MF-89-03 Leg II	56			M5

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 111 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
010	56	21.55	N	156 54.76	W	21	APR	89	15	44	040	035	11	08	36	510	1	4	1	134	M5

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		2.568
Temp.		2.826
Cond.		28.849
Other		D 2.545

Times JD/Time

Data on	111 / 15:33:45
at Surface	15:39:32
Start Down	15:40
at Bottom	15:43 / 117
Start Up	15:44
at Surface	
Data off	1543

Data Location 131

Tape/Diskette I.D.	File Name/Header
	21APR1522.dat

Remarks rosette didn't fire, data logged by Seabird though

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values ~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot. Data Therm-P	Sample Bot. Data Avg Tw	Sample Bot. Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	502	6		15:45		107.422	2.299	28.557	106.418				31.862			—			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 #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
11	MILLER FREEMAN	FOCI MF-89-03 Leg II	58			147

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 111 Day	Mo.	Yr.	Time GMT Hr.	Time GMT Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
011	56	17.96	N	156 47.75	W	21	APR	89	17	45	04.5	04.0	12	3	8	31	18	1	6	1	93	147

CTD

Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		2.662
Temp.		2.934
Cond.		28.920
Other		D 2.638

Times JD/Time

Data on 111 / 1739
at Surface 1741
Start Down 1742
at Bottom 1745/94
Start Up 1746
at Surface
Data off 1745

Data Location

Tape/Diskette I.D.
File Name/Header 21APR1737.dat

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values ~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot.Data Therm-P	Sample Bot.Data Avg Tw	Sample Bot.Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	502	6	88	17:46	17:48	89.917	2.478	28.712	89.080				31.883	105.42	2.26	31.895	26		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 #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
12	MILLER FREEMAN	FOCI MF-89-03 Leg II	60	CTD #Sta 148	Line #16	148

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 111 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
012	56	21.64	N	156	52.42	W	21	APR	89	18	33	04.5	04.0	22.8	28	280	16	36	1	126	148

CTD

Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		2.961
Temp.		2.861
Cond.		28.880
Other		D 2.934

Times JD/Time

Data on 111 / 18:20
at Surface 111 1827
Start Down 11:28:00
at Bottom 18:33
Start Up 18:33
at Surface
Data off 1833

Data Location

Tape/Diskette I.D.
File Name/Header 21APR1819.DAT

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values ~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot.Data Therm-P	Sample Bot.Data Avg Tw	Sample Bot.Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503	6	106	18:34	18:39	107.206	2.286	28.536	106.204				31.850			31.861	36		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 #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
13	MILLER FREEMAN	FOCI MF-89-03 Leg II	62	#149	line 16	149

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 111 Day	Mo.	Yr.	Time GMT Hr.	Time GMT Min.	Dry Bulb	Wet Bulb	Bar. mb 1012.5	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
013	56	24.04	N	156 54.92	W	21	APR	89	19	21	04.0	03.5	12	3	8	345	10	3	6	128	149

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		2.433
Temp.		2.880
Cond.		28.890
Other		2.411

Times JD/Time
Data on 111 / 1910
at Surface 19:15
Start Down 19:17
at Bottom 19:21 / 115
Start Up 1921
at Surface
Data off 1921

Data Location
Tape/Diskette I.D.
File Name/Header 21APR1907

Remarks 20 "mark" on data for water sample

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values Other	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot.Data Therm-P	Sample Bot.Data Avg Tw	Sample Bot.Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	53	6	28	19:24	19:24	—	—	—	—							31.762	32		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials ✓ B

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
14	MILLER FREEMAN	FOCI MF-89-03 Leg II	103	150	CTD #150 Line 16	150

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 111 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb 1002.2	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
014	56	26.64	N	156	57.11	W	21	Apr	89	1957	05.0	04.0	0.2	3	8	285	15	7	6	105	150

CTD

Type & SN 91220-B

Press. SN 26072

Temp. SN 710

Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		2.757
Temp.		2.572
Cond.		28.733
Other		2.732

Times JD/Time

Data on <B> 19:51:55

at Surface <L> 19:53

Start Down 19:53

at Bottom <P> 19:57

Start Up 20:00

at Surface

Data off 19:57

Data Location

Tape/Diskette I.D.

File Name/Header 21APR 1948

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Temp.	Cond.	~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Temp.	Cond.	Sal.	Sample Bot. Data Therm-P	Avg Tw	Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503		77.2	19:58	20:00	78.032	2.300	28.508	77.308				31.817			31.829	34		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials MS

✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
015	MILLER FREEMAN	FOCI MF-89-03 Leg II	64		CTD 151 LINE 16	151

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 111 Day	Mo.	Yr.	Time GMT Hr.	Time GMT Min.	Dry Bulb	Wet Bulb	Bar. mb 1012.0	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
015	56	30.17	N	156 59.90	W	21	APR	89	20	56	06.0	05.0	12	3	8	325	10	7	6	1	51	151

CTD

Type & SN 91220-B

Press. SN 26072

Temp. SN 710

Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		2.960
Temp.		2.573
Cond.		28.712
Other		D 2.933

Times JD/Time

Data on B 20:51

at Surface L 20:53

Start Down 20:54

at Bottom AP 20:55

Start Up 20:55

at Surface

Data off AP 20:55

Data Location

Tape/Diskette I.D.

File Name/Header 21APR2050

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values ~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot.Data Therm-P	Sample Bot.Data Avg Tw	Sample Bot.Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	502	6	23.5	20:56	21:02	23.701	2.465	28.560	23.483				31.745	25.65	2.44	31.756	3		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials ms

✓ [illegible]

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
016	MILLER FREEMAN	FOCI MF-89-03 Leg II	67		CTD at M4	M4

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 111 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb 1012.2	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
016	56	27.80	N	156 58.00	W	21	APR	89	22	36	04.0	03.5	12	3	8	285	10	7	6	1	68	M4

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		2.858
Temp.		2.642
Cond.		28.969
Other		D 2.832

Times JD/Time
Data on B 22:29
at Surface L 22:33
Start Down 22:37
at Bottom AP 22:35
Start Up 22:35
at Surface
Data off AP 22:35

Data Location
Tape/Diskette I.D.
File Name/Header 21 APR 2225

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values Other	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot. Data Therm-P	Sample Bot. Data Avg Tw	Sample Bot. Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503	/	434	22:36	22:37	44.030	2.405	28.529	43.623				31.756			31.769	31		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials MS
✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
017	MILLER FREEMAN	FOCI MF-89-03 Leg II	75		CTD at M20	M20

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude Min.	E or W	Date JD = 112 Day	Mo.	Yr.	Time GMT Hr.	Time GMT Min.	Dry Bulb	Wet Bulb	Bar. mb 1014.0	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
017	56	15.66	N	155	29.65	W	21	APR	89	03	28	08.0	07.0	14	2	8	253	12	76	1	59	M20

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		2.316
Temp.		3.522
Cond.		29.745
Other		D 2.295

Times JD/Time
Data on B 3:23
at Surface L 3:26
Start Down 3:26
at Bottom ^P 3:28
Start Up 3:28
at Surface
Data off 0328

Data Location
Tape/Diskette I.D.
File Name/Header 22 APR 0323

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values ~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot.Data Therm-P	Sample Bot.Data Avg Tw	Sample Bot.Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503	/	22.3	0329	0330	22.440	3.290	29.550	22.234				32.127			32.139	2		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 #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
18	MILLER FREEMAN	FOCI MF-89-03 Leg II	78		Station 99 Line 12	99

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date JD = 112 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
018	56	43.44	N	155	20.54	W	21	APR	89	07	10	03.5	03.0	1014.0	2	0	260	08	Ø	Ø	4	166	99

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks	on Deck	at Surface
Press.		2.713
Temp.		3.363
Cond.		29.264
Other		D 2.688

Times	JD/Time
Data on B	7:02
at Surface L	7:04
Start Down	7:04
at Bottom AP	7:10
Start Up	7:10
at Surface	
Data off AP	7:10

Data Location

Tape/Diskette I.D.	File Name/Header
	22APR0659

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Temp.	Cond.	~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Temp.	Cond.	Sal.	Sample Bot. Data Therm-P	Avg Tw	Sal.	Sal. Bot. #	Other Samp.	Pos.
1	502	6	149.5	7:11	7:16	141.816	3.222	29.589	140.468				32.179	126.8	3.29	32.182	7		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials MS

✓

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
19	MILLER FREEMAN	FOCI MF-89-03 Leg II	80		line 12 #100	100

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 112 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb ✓	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type ✓	Weath.	Bottom Depth, m	Sta. Name or I.D
019	56	48.94	N	155	29.27	22	APR	89	08	34	02.0	01.0	14	2	0	250	20	9	4	265	100

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		2.938
Temp.		2.966
Cond.		28.840
Other		D 2.911

Times JD/Time
Data on 08:20:31
at Surface 08:25:00
Start Down 08:26:00
at Bottom 08:33:38 /246
Start Up 0837
at Surface
Data off 083348

Data Location 265 145 fm
Tape/Diskette I.D.
File Name/Header 22APR08R4

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values ~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot.Data Therm-P	Sample Bot.Data Avg Tw	Sample Bot.Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503	—	189	08:36	08:37	190.645	3.086	29.593	188.811				32.294			32.304	1		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials DGK

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
20	MILLER FREEMAN	FOCI MF-89-03 Leg II	83	CTD STA #101	LINE 16	101

Consec. Cast #	Latitude Deg. Min. N or S	Longitude Deg. E or W	Date JD = 112 Day Mo. Yr.	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb 1013.0	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud ✓	Type ✓	Weath.	Bottom Depth, m	Sta. Name or I.D
020	56 51.45 N	155 38.15 W	22 APR 89	1018	03.0	02.0	13	2	0	165	12	/	/	4	293	101

CTD

Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304
~2
150

Monitor Checks

	on Deck	at Surface
Press.		2.759
Temp.		3.246
Cond.		29.162
Other		D 2.734

Times JD/Time

Data on 10:07
at Surface 10:09
Start Down 10:09
at Bottom 10:18:25 / 276
Start Up 10:19
at Surface
Data off 1018

Data Location 292

Tape/Diskette I.D.
File Name/Header 22APR1005

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values ~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot. Data Therm-P	Sample Bot. Data Avg Tw	Sample Bot. Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503		249	10:19	10:20	251.859	5.368	32.425	249.400				33.310			33.314	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 DSK
✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
21	MILLER FREEMAN	FOCI MF-89-03 Leg II	85	CTD STA #102	LINE #16	102

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 112 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
021	56	55.93	N	155 48.01	W	22	APR	89	11	29	02.0	02.0	1012.5	2	4	198	18	/	/	4 308	102

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		3.066
Temp.		3.099
Cond.		0.020
Other		D 3.038

Times JD/Time
Data on 11:13:16
at Surface 11:20:00
Start Down 11:21:00
at Bottom 11:29:35 / 294
Start Up 1139
at Surface
Data off 11:39:35

Data Location 312

Tape/Diskette I.D.	File Name/Header
	22APR111.Dat

Remarks X Salinity no good, tube left on all use for Temp. calibration only

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ 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	502	6	290	11:30	11:38	293.109	5.181	0.022	290.218					289.7	5.18	—			1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

NOT INCLUDED IN R2D2
(COND. CELL TUBE WAS ON)

Initials DGK
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
022	MILLER FREEMAN	MF-89-03 FOCI Leg II	86	CTD Sta # 102	LINE #16	102

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 112 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb 1012.0	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
022	56	55.92	N	155 47.76	W	22	APR	89	11	56	02.0	02.0	12	2	Φ	235	12	/	/	4	308	102

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		1948
Temp.		3.104
Cond.		28.943
Other		D 1.930

Times JD/Time
Data on 11:45
at Surface 11:45:41
Start Down 11:46
at Bottom 11:56/292
Start Up 1156
at Surface
Data off 115559

Data Location
Tape/Diskette I.D.
File Name/Header 22APR1143.dat

Remarks Temperature sample taken on cast 21

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ 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																			10
11																			11
12																			12

Initials DGK
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
023	MILLER FREEMAN	FOCI MF-89-03 Leg II	87	CTD STA # 103	LINE # 16	103

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date JD = 112 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
023	56	59.71	N	155	56.98	W	22	APR	89	12	57	03.0	03.0	1012.0	2	0	190	14	/	/	4	254	103

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	8.906/9.026	2.056
Temp.		2.933
Cond.		28.705
Other		D 2.037

Times JD/Time
Data on 12:47
at Surface 12:49
Start Down 1250
at Bottom 12:57:12 /241
Start Up 1259
at Surface
Data off 125312

Data Location 254
Tape/Diskette I.D.
File Name/Header 22APR1245

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Temp.	Cond.	DEPTH ~~Other~~	Conv. Mon. Values-CTD Press.	Temp.	Cond.	Sal.	Sample Bot. Data Therm-P	Avg Tw	Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503		237	12:58	12:59	238.909	4.999	31.959	236.583				33.149			33.138	5		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials ✓ JG

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
024	MILLER FREEMAN	FOCI MF-89-03 Leg II	88	CTD STA #104	LINE 16	104

Consec. Cast #	Latitude Deg. Min.	N or S	Longitude Deg.	E or W	Date JD = 112 Day Mo. Yr.	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
024	5703 91	N	156 05 01	W	22 APR 88	1354	03 5	03 0	1011.0	1	1	6	20	14	/	/	4	123	104

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	9.026/8.949	1.880
Temp.		3.259
Cond.		29.091
Other		D 1.863

Times JD/Time
Data on 13:43
at Surface 13:50
Start Down 1350
at Bottom 13:54 / 117m.
Start Up 13:54
at Surface
Data off 135425

Data Location 14L
Tape/Diskette I.D.
File Name/Header 22APR1340

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values Other	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot.Data Therm-P	Sample Bot.Data Avg Tw	Sample Bot.Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	502	6		13:58	14:03	102.462	3.180	29.425	101.498				32.044	96.5	3.11	32.037	6		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials DGK

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
025	MILLER FREEMAN	FOCI MF-89-03 Leg II	95	M21	Mooring site #21	M21

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 112 Day	Mo.	Yr.	Time GMT Hr.	Time GMT Min.	Dry Bulb	Wet Bulb	Bar. mb 1009.0	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
025	57	03.80	N	156 05.30	W	22	APR	89	18	45	04.0	04.0	09	3	7	240	18	/	/	6	127	M21

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		2.851
Temp.		3.316
Cond.		29.154
Other		2.825

Times JD/Time
Data on 18:32:05
at Surface 18:32
Start Down 18:36 / 114
at Bottom 1838
Start Up 1843
at Surface
Data off 183857

Data Location
Tape/Diskette I.D.
File Name/Header 22APR1828

Remarks

127 (106) from M03

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values Other	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot. Data Therm-P	Sample Bot. Data Avg Tw	Sample Bot. Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503		75	18:40	18:42	76.097	2.813	28.850	75.386				31.726			31.732	10		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 #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
026	MILLER FREEMAN	FOCI MF-89-03 Leg II	101		CTD at M22	M22

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude Min.	E or W	Date JD = 112 Day	Mo.	Yr.	Time GMT Hr.	Time GMT Min.	Dry Bulb	Wet Bulb	Bar. mb (✓)	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type (✓)	Weath.	Bottom Depth, m	Sta. Name or I.D
026	57	02	N	156	53	W	22	APR	89	22	25	04.0	03.0	1006.5 06.4	6	13	018	8	/	6		210	M22

CTD

Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		3.357
Temp.		2.907
Cond.		28.721
Other		3.327

Times JD/Time

Data on 13 22:11
at Surface 22:18
Start Down 22:25
at Bottom 22:25
Start Up 22:27
at Surface
Data off 22:25

Data Location

Tape/Diskette I.D.
File Name/Header 22APR2208

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values Other	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot. Data Therm-P	Sample Bot. Data Avg Tw	Sample Bot. Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503	/	168.5	2226	2227	170.733	3.036	29.533	169.094				32.282			32.288	22		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials MS

✓

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
027	MILLER FREEMAN	FOCI MF-89-03 Leg II	110		m21 -2	m21

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude Min.	E or W	Date JD = 113 Day	Mo.	Yr.	Time GMT Hr.	Time GMT Min.	Dry Bulb	Wet Bulb	Bar. mb 1000.0	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
027	57	03.85	N	156	05.49	W	23	Apr	89	05	38	04.0	04.0	00	43	1	75	32	-	-	6	107	m21

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		2.830
Temp.		3.059
Cond.		28.955
Other		D 2.804

Times JD/Time
Data on 5:30
at Surface 5:35
Start Down 5:35
at Bottom 5:38
Start Up 5:39
at Surface
Data off 5:38

Data Location
Tape/Diskette I.D.
File Name/Header 23Apr0527

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values ~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot.Data Therm-P	Sample Bot.Data Avg Tw	Sample Bot.Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	502	6	52	5:40	5:46	51.957	2.715	28.737	51.473				31.698	53.9	2.70	31.706	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 WF
✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
28	MILLER FREEMAN	FOCI MF-89-03 Leg II	112		CTD M22	M22

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude	E or W	Date JD = 113 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb 1001.0	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
028	57	02.91	N	156	02.41	W	23	Apr	89	06	25	03.0	03.0	01	55	10	020	8	/	6		212	M22

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		1.959
Temp.		3.099
Cond.		28.932
Other		D 1.941

Times JD/Time
Data on 0614
at Surface 06:18
Start Down 06:19
at Bottom 06:25
Start Up 06:26
at Surface
Data off AP 06:25

Data Location
Tape/Diskette I.D.
File Name/Header 23 Apr 0608

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values Other	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot.Data Therm-P	Sample Bot.Data Avg Tw	Sample Bot.Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503	/	175	6:27	6:28	178.132	3.304	29.785	176.419				32.314			32.325	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 ✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
29	MILLER FREEMAN	FOCI MF-89-03 Leg II	110			102

Consec. Cast #	Latitude Deg. Min.	N or S	Longitude Deg.	E or W	Date JD = 113 Day Mo. Yr.	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb 1000.0	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
029	5655 86	N	15548 08	W	23 APR 89	1111	04.0	03.8	00	3	6	090	14	8	1	6	310	102

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		2.967
Temp.		2.943
Cond.		28.775
Other		2.939

Times JD/Time
Data on B 10:56
at Surface 11:01
Start Down 11:01
at Bottom AP 11:11 / 295M
Start Up 11:11
at Surface
Data off 11:11

Data Location 310
Tape/Diskette I.D.
File Name/Header 23 APR 1055

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values Other	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot.Data Therm-P	Sample Bot.Data Avg Tw	Sample Bot.Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503		250	11:12	11:13	252.490	5.249	32.277	250.018				33.259			33.257	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 ✓ JB

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
030	MILLER FREEMAN	MF-89-03 FOCI Leg II	120			101

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Date Mo.	Date Yr. (JD = 113)	Time GMT Hr.	Time GMT Min.	Dry Bulb	Wet Bulb	Bar. mb (Wet I.D)	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
030	56	51.33	N	155	37.73	23	APR	89	12	38	04.0	04.0	01	4	6	035	12	8	-6	286	101

CTD

Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		1.878
Temp.		3.065
Cond.		28.945
Other		1.860

Times JD/Time

Data on 12:23
at Surface 12:28
Start Down 12:28
at Bottom 12:38 / 274
Start Up 12:47
at Surface
Data off 12:38

Data Location 290

Tape/Diskette I.D.	File Name/Header
	23APR1221.dat

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values Other	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot.Data Therm-P	Sample Bot.Data Avg Tw	Sample Bot.Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	502	6	200	12:41	12:46	202.374	4.389	31.200	200.417				32.895	194.99	4.34	32.876	29		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 #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
31	MILLER FREEMAN	FOCI MF-89-03 Leg II	123	CTD Sta. #100		100

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 113 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb 1001.0	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
031	56	48.07	N	155	29.91	W	23	APR	89	1430	04.0	04.0	61	4	6	035	12	8	/	6	261	100

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		1.554
Temp.		2.991
Cond.		28.931
Other		1.540

Times JD/Time
Data on 14:20
at Surface 14:21
Start Down 14:22
at Bottom 14:36 /247
Start Up 14:30
at Surface
Data off 14:30

Data Location 261
Tape/Diskette I.D.
File Name/Header 23APR1419

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values Other	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot.Data Therm-P	Sample Bot.Data Avg Tw	Sample Bot.Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503		225	14:31	14:32	225.295	5.275	32.293	223.104				33.265			33.267	23		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 #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
32	MILLER FREEMAN	FOCI MF-89-03 Leg II	125			099

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date JD = 113 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	✓ S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
032	56	43.33	N	155	21.2	23	APR	89	15	28	05.0	04.5	03	4	8	100	04	7	6	1	179	099

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		2.117
Temp.		2.869
Cond.		28.878
Other		2.097

Times JD/Time
Data on 15:19
at Surface 15:22
Start Down 15:22
at Bottom 15:28 / 167
Start Up 15:28
at Surface
Data off 152807

Data Location 181
Tape/Diskette I.D.
File Name/Header 23APR1515

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ 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	503		150	15:29	15:30	151.320	3.495	30.115	149.876				32.532			32.538	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 ✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
33	MILLER FREEMAN	FOCI MF-89-03 Leg II	133		CTD between M26/M27	M26/M27

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 113 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb 1005.0	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
033	56	47.15	N	155	28.49	W	23	APR	89	20	28	09.0	07.0	05	48	340	04	76	1	251	M26/27

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		2.834
Temp.		3.058
Cond.		29.142
Other		2.808

Times JD/Time
Data on B 20:19
at Surface L 20:20
Start Down 20:21
at Bottom P 20:28
Start Up 20:28
at Surface
Data off P 20:28

Data Location
Tape/Diskette I.D.
File Name/Header 23APR2014

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values Other	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot.Data Therm-P	Sample Bot.Data Avg Tw	Sample Bot.Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	502	6	209	20:30	20:35	212.182	5.215	32.205	210.130				33.230	210.89	5.20	33.238	11		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 #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
034	MILLER FREEMAN	FOCI MF-89-03 Leg II	140		CTD at M23	M23

Consec. Cast #	Latitude Deg. Min.	N or S	Longitude Deg.	E or W	Date JD = 114 Day Mo. Yr.	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb 1006.0	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
034	56 58.52	N	155 52.72	W	24 APR 89	00 43	05.0	05.0	06	3	8	120	20	76	1	317	M23

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		4.031
Temp.		3.202
Cond.		29.066
~~Other~~ Depth		3.994

Times JD/Time
Data on B 00:30
at Surface 00:33
Start Down 00:33
at Bottom P 00:43
Start Up 00:43
at Surface
Data off P 00:43

Data Location
Tape/Diskette I.D.
File Name/Header 24APR0029

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values ~~Other~~ Depth	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot.Data Therm-P	Sample Bot.Data Avg Tw	Sample Bot.Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503	/	285	00:44	00:45	288.572	5.378	32.450	285.723				33.310			33.319	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 MS
✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
35	MILLER FREEMAN	FOCI MF-89-03 Leg II	145		CTD at M24	M24

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 114 Day	Mo.	Yr.	Time GMT Hr.	Time GMT Min.	Dry Bulb	Wet Bulb	Bar. mb 1007.0	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
035	56	34.77	N	155	46.04	W	24	APR	89	04	15	08.0	07.5	07	3	8	040	10	7	6	1	302	M24

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		3.512
Temp.		3.070
Cond.		28.8887
~~Other~~ Depth		3.480

Times JD/Time
Data on B 04:03
at Surface L 04:04
Start Down 04:05
at Bottom AP 04:15
Start Up 04:15
at Surface
Data off AP 04:15

Data Location
Tape/Diskette I.D.
File Name/Header 24APR0402

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values ~~Other~~ Depth	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot.Data Therm-P	Sample Bot.Data Avg Tw	Sample Bot.Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503	/	244	4:17	4:19	246.046	4.956	31.940	243.643				33.166			33.157	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 LAF
✓ MS

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
36	MILLER FREEMAN	FOCI MF-89-03 Leg II	147		CTD at M25	M25

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 114 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb 1006.0	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
036	56	52.50	N	155 40.60	W	24	APR	89	06	36	06.0	05.0	06	3	8	100	10	7	8	1	291	M25

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		3.214
Temp.		3.143
Cond.		28.942
~~Other~~ Depth		3.185

Times JD/Time
Data on B 06:19
at Surface L 06:23
Start Down 06:27
at Bottom AP 6:36
Start Up 0645
at Surface
Data off AP 6:36

Data Location
Tape/Diskette I.D.
File Name/Header 24APR0615

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values ~~Other~~ Depth	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot.Data Therm-P	Sample Bot.Data Avg Tw	Sample Bot.Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	502	6	225	6:39	6:44	226.991	4.926	31.899	224.785				33.158	224.95	4.90	33.162	9		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials MC

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
37	MILLER FREEMAN	FOCI MF-89-03 Leg II	149			M21

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 114 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
037	57	03.80	N	156	49.8	W	24	APR	89	08	49	07.0	06.0	06.0	4	6	090	12	96	6	146 M21

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		2.929
Temp.		3.142
Cond.		29.059
~~Other~~ Depth		2.902

Times JD/Time
Data on 114/ 0843
at Surface 8:43
Start Down 844
at Bottom 8:48 /139
Start Up 8:48
at Surface
Data off 8:48

Data Location
Tape/Diskette I.D.
File Name/Header 24APR0833

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values ~~Other~~ Depth	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot.Data Therm-P	Sample Bot.Data Avg Tw	Sample Bot.Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	502	/	102	8:50	8:51	103.485	2.944	29.187	102.510				31.991			31.999	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 ✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
038	MILLER FREEMAN	MF-89-03 FOCI Leg II	151	Mooring Sta # M22		M22

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 114 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
038	57	02.89	N	156	02.63	W	24	APR	89	09	22	05.0	05.0	1005.0	4	6	125	13	9	7	6	208	M22

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		3.190
Temp.		3.109
Cond.		29.070
~~Other~~ Depth		3.161

Times JD/Time

Data on	114 / 9:11
at Surface	9:15
Start Down	9:15
at Bottom	9:22 / 117
Start Up	9:22
at Surface	
Data off	9:22

Data Location

Tape/Diskette I.D.	File Name/Header
	24APR89 09

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values ~~Other~~ Depth	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot.Data Therm-P	Sample Bot.Data Avg Tw	Sample Bot.Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503	/	175	9:23	9:25	175.670	3.330	29.799	173.984				32.306			32.315	12		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials ✓

M1 257 291
M21 146
M22 208
M23 318

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
039	MILLER FREEMAN	MF-89-03 FOCI Leg II	153	Mooring Sta # M23		M23

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude Min.	E or W	Date JD = 114 Day	Mo.	Yr.	Time GMT Hr.	Time GMT Min.	Dry Bulb	Wet Bulb	Bar. mb 1004.0	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
039	56	58.84	N	155	29.7	W	24	APR	89	1033		04.0	04.0	04.0	4	3	164	20	9	7	6	318	M23

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		3.071
Temp.		3.198
Cond.		29.046
~~Other~~ Depth		3.043

Times JD/Time
Data on 114/16:21:40
at Surface 10:24
Start Down 10:24
at Bottom 10:33:14 / 305m
Start Up 10:34
at Surface
Data off 10:33

Data Location 317

Tape/Diskette I.D.	File Name/Header
	24 APR 1625

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values ~~Other~~ Depth	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot. Data Therm-P	Sample Bot. Data Avg Tw	Sample Bot. Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	502	6	296	10:34	10:39	299.248	5.381	32.459	296.288				33.312	293.29	5.37	33.322	Mangr 36		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 #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
040	MILLER FREEMAN	MF-89-03 FOCI Leg II	155			M24

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 114 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
040	56	55.48	N	155 46.14	W	24	APR	89	11	35	04.0	04.0	1003.0	4	6	115	15	9	7	6	30 B	M24

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		3.137
Temp.		3.130
Cond.		28.964
~~Other~~ Depth		3.108

Times JD/Time
Data on 114/11:24:20
at Surface 11:25
Start Down 11:26
at Bottom 11:34 / 292 m
Start Up 11:34
at Surface
Data off 11:34

Data Location
Tape/Diskette I.D.
File Name/Header 24APR1123

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values ~~Other~~ Depth	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot. Data Therm-P	Sample Bot. Data Avg Tw	Sample Bot. Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503	/	274	11:36	11:37	276.747	5.383	32.452	274.025				33.313			33.323	orange 37		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 #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
041	MILLER FREEMAN	FOCI MF-89-03 Leg II	157	mooring Sta # M25		M25

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 114 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb 1002.0	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
041	56.52	94	N	155 40.92	W	24	APR	89	12	42	04.0	04.0	02	4	6	093	24	8	/	2	294	M25

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		2.870
Temp.		2.910
Cond.		28.684
Depth ~~Other~~		2.844

Times JD/Time
Data on 114 / 12:27
at Surface 12:32
Start Down 1232
at Bottom 12:42 / 284
Start Up 12:42
at Surface
Data off 12:42

Data Location 297
Tape/Diskette I.D.
File Name/Header 24APR1227

Remarks program had output errors near bottom (may have hit)

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values Depth ~~Other~~	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot.Data Therm-P	Sample Bot.Data Avg Tw	Sample Bot.Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503	/	245	12:43	12:44	247.030	5.281	32.306	244.618				33.263			33.273	or-ngo 38		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials ✓ JB

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
042	MILLER FREEMAN	MF-89-03 FOCI Leg II	160			M26/M27

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 114 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb 1002.0	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
042	56	46.99	N	155	28.60	24	APR	89	14	01	04.0	04.0	02	4	7	130	20	8	7	2	253	M26/M27

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		2.536
Temp.		3.239
Cond.		29.066
~~Other~~ Depth		2.513

Times JD/Time
Data on 114 / 13:56
at Surface 13:56
Start Down 1357
at Bottom 14:05 / 241
Start Up 14:05
at Surface
Data off 14:05

Data Location 25 | M26/M27
Tape/Diskette I.D.
File Name/Header 24APR1346

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values ~~Other~~ Depth	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot. Data Therm-P	Sample Bot. Data Avg Tw	Sample Bot. Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	502	6	228	14:06	14:11	218.461	4.960	31.897	216.342				33.127	213.97	4.95	33.128	39		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 #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
43	MILLER FREEMAN	FOCI MF-89-03 Leg II	166			M29

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 114 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb 1001.4	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
043	56	43.96	N	155	23.10	24	APR	89	18	03	4.7	4.5	01	4	9	070	17	9	7	2	206	M29

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	8.924	2.801
Temp.		3.056
Cond.		28.971
Other		D 2.775

Times JD/Time
Data on 114/17:50
at Surface 17:54
Start Down 17:54
at Bottom 18:02 /196
Start Up 18:02
at Surface
Data off 18:02

Data Location 206
Tape/Diskette I.D.
File Name/Header 24 APR 1746

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values Other	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot. Data Therm-P	Sample Bot. Data Avg Tw	Sample Bot. Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503		149	18:03	18:04	150.845	3.149	29.646					32.316			32.309	orange 40		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 #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
44	MILLER FREEMAN	MF-89-03 FOCI Leg II	171		CTD at M28	M28

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date JD = 114 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb 1001.5	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
044	56	51	23	N 155	37 57	W 24	APR	89	21	11	04.0	04.0	82	4	7	130	14	8	7	2	285	M28

CTD

Type & SN 91220-B

Press. SN 26072

Temp. SN 710

Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	8.826/8.828	3.206
Temp.		3.028
Cond.		28.801
Other		D 3.117

Times JD/Time

Data on 13 21:59

at Surface L 21:02

Start Down 21:02

at Bottom AP 21:11

Start Up 21:11

at Surface

Data off AP 21:11

Data Location

Tape/Diskette I.D.

File Name/Header 24APR 2058

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ 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	503	✓	250	21:12	21:13	252.882	5.361	32.414					33.304			33.313	41		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials MS

✓ [illegible]

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
45	MILLER FREEMAN	MF-89-03 FOCI Leg II	178		CTD at M2 (before recovery)	M2

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 115 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb 1001.5	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
045	57	36.69	N	155 06.23	W	25	APR	89	02	38	04.0	04.0	02	4	7	130	14	8	7	2	261	M2

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	8.928/8.906	2.712
Temp.		3.626
Cond.		29.519
Other		D 2.687

Times JD/Time
Data on B 02:19
at Surface L 02:24
Start Down 02:24
at Bottom AP 2:33
Start Up 2:33
at Surface
Data off AP 2:33

Data Location
Tape/Diskette I.D.
File Name/Header 25APR0216

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values Other	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot.Data Therm-P	Sample Bot.Data Avg Tw	Sample Bot.Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	502	6	178	2:36	2:41	179.032	3.516	30.038					32.405	175.85	3.52	32.413	42		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials MS

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
46	MILLER FREEMAN	FOCI MF-89-03 Leg II	101		CTD at M2 (after deployment)	M2

Consec. Cast #	Latitude Deg. Min.	N or S	Longitude Deg.	E or W	Date JD = 115 Day Mo. Yr.	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb 1002.5	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
046	5736	68	N	155 06	05	W	25 APR 89	0537	0450	40	03	37	070	12	8	72	259	M2

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	8.906/8.830	2.998
Temp.		3.696
Cond.		29.550
Other		D 2.970

Times JD/Time
Data on B 05:26
at Surface L 05:28
Start Down 05:28
at Bottom AP 05:37
Start Up 05:37
at Surface
Data off AP 05:37

Data Location
Tape/Diskette I.D.
File Name/Header 25APR0516

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Temp.	Cond.	~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Temp.	Cond.	Sal.	Sample Bot. Data Therm-P	Avg Tw	Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503	/	170	05:40	05:42	172.386	3.565	30.079	170.723				32.408			32.408	43		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials MWS
✓

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
47	MILLER FREEMAN	FOCI MF-89-03 Leg II	18A			S002A

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 115 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb (1004.)	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
047	57	40.47	N	155	10.72	25	APR	89	08	01	04.9	04.0	04	2	5	105	10	87	2		294	S002A

FOCI Sta 60

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	8.830/	2.796
Temp.		3.619
Cond.		29.398
Other		D 2.770

Times JD/Time
Data on 0746
at Surface 0750
Start Down 0750
at Bottom 0800 /283
Start Up 0800
at Surface
Data off 0800

Data Location 294
Tape/Diskette I.D.
File Name/Header 25APR0743

Remarks tucker and sled station
not done - no BKGs for sled

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Temp.	Cond.	DEPTH ~~Other~~	Conv. Mon. Values-CTD Press.	Temp.	Cond.	Sal.	Sample Bot. Data Therm-P	Avg Tw	Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503	/	77	0806	0807	78.096	3.785	29.964	77.361				32.103			32.108	5		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials DCK
✓ 198

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
048	MILLER FREEMAN	MF-89-03 FOCI Leg II	199		LINE B Station 55	STA. 55

Consec. Cast #	Latitude Deg. Min.	N or S	Longitude Deg.	E or W	Date JD = 116 Day Mo. Yr.	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
048	5728	56 N	154430	2 W	26 APR 89	0527	035	025	1011.0	4	8	300	22	6	6	1	85	55

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	9.021/8.930	3.533
Temp.		3.433
Cond.		29.360
Other		D 3.501

Times JD/Time
Data on B 05:20
at Surface L 05:23
Start Down 05:23
at Bottom AP 05:26
Start Up 0527
at Surface 0541
Data off 0526

Data Location
Tape/Diskette I.D.
File Name/Header 26APR0515

Remarks
nuts

Pg.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Temp.	Cond.	~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Temp.	Cond.	Sal.	Sample Bot. Data Therm-P	Avg Tw	Sal.	Sal. Bot. #	Other Samp.	Pcs.	
1	1013		50	0528	0530	51.054	3.003	29.217	50.577				31.996			32.021	35	Bottle #	1	10l mz
2	1006		50	0528	0531	51.416	2.991	29.203	50.935									1	2	100ml chl
3	502	6	50	0528	0533	51.795	3.030	29.265	51.311					50.07	29.7				3	
4	1011		40	0534	0534	41.294	2.977	29.156	40.909										4	10l mz
5	1009		30	0535	0535	30.057	3.291	29.343	29.778									2	5	100ml chl.
6	1012		30	0535	0536	30.404	3.291	29.345	30.122										6	10l mz
7	1005		20	0537	0537	20.245	3.404	29.387	20.057									3	7	100ml chl.
8	1015		20	0537	0538	20.418	3.411	29.390	20.229										8	10l mz
9	1007		10	0539	0539	10.321	3.423	29.384	10.226										9	10l mz
10	1004		10	0539	0540	10.476	3.421	29.386	10.379									4	10	100ml chl.
11																			11	
12																			12	

Initials MS
✓ [illegible]

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
49A	MILLER FREEMAN	FOCI MF-89-03 Leg II	201		Line 8 CTD STA 56 - A	FOX56

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date JD = 116 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
049	57	30	86	N	154 46	34	W	26	APR	89	08	22	0.0	-1.0	1013.4	8	300	20	4	6	1 211	FOX56

(A) CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	8.983/8.901	2.985
Temp.		3.534
Cond.		29.438
Other		2.957

Times JD/Time

Data on B 08:11
at Surface L 08:13
Start Down 0814
at Bottom AP 8:21
Start Up 8:21
at Surface 0846
Data off 8:21

Data Location

Tape/Diskette I.D. ____
File Name/Header 26APR0756

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Temp.	Cond.	~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Temp.	Cond.	Sal.	Sample Bot. Data Therm-P	Avg Tw	Sal.	Sal. Bot. #	Other Samp.	Pos.	Chl.
1	1013		200	8:21	8:22	200.969	3.936	30.650	199.018				32.701			32.712	21	nuts #5	1	
2	1015		150	8:26	8:26	151.123	3.128	29.578	149.674									6	2	
3	1008		100	8:29	8:30	103.626	3.037	29.336	102.644									7	3	100mP
4	1011		75	8:35	8:35	76.693	3.707	29.892	75.972									8	4	
5	1007		50	8:37	8:37	51.985	3.291	29.453	51.499									9	5	
6	1012		30	8:40	8:41	30.645	3.319	29.347	30.360									10	6	
7	1005		20	8:42	8:43	21.173	3.428	29.337	20.977									11	7	
8	1006		10	8:44	8:45	11.226	3.416	29.319	11.122									12	8	
9																			9	
10																			10	
11																			11	
12																			12	

Initials MB
✓ JD

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
49B	MILLER FREEMAN	FOCI MF-89-03 Leg II	202		Line 8 CTD Sta 56-B "MZoo"	

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	Min.	E or W	Date JD = 116 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb 1012.5	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
049	57	30.91	N	154	46.73	W	26	Apr	89	09	02	0.0	-1.0	13	4	8	30	20	4	6	1	217	56B

(B) CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time
Data on no data
at Surface only LOG File
Start Down on this
at Bottom cast (B)
Start Up
at Surface
Data off

Data Location
Tape/Diskette I.D.
File Name/Header 26APR 0851

Remarks
M. ~~Zoo~~ only on this cast (B)

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Temp.	Cond.	~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Temp.	Cond.	Sal.	Sample Bot. Data Therm-P	Avg Tw	Sal.	Sal. Bot. #	Other Samp.	Pos.
1	1013		60	9:08	9:10	60.385	3.591	29.740	59.819									10l MZ	1
2	1015		50	9:11	9:12	52.010	2.643	28.842	51.524									10l MZ	2
3	1008		40	9:14	9:15	40.396	3.381	29.463	40.019									10l MZ	3
4	1011		30	9:16	9:17	31.196	3.343	29.328	30.906									10l MZ	4
5	1007		20	9:18	9:19	20.766	3.490	29.409	20.574									10l MZ	5
6	1012		10	9:21	9:22	10.989	3.495	29.411	10.888									10l. MZ	6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials MS
✓ [illegible]

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
50	MILLER FREEMAN	FOCI MF-89-03 Leg II	206		CTD at Station 57 — LINE B	FOX57

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 116 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb 1013.5	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
050	57	33.11	N	154 51.83	W	26	Apr	89	11	13	00	-1.0	14	4	8	295	20	4	6	1	236	FOX57

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time
Data on B 110137
at Surface 110319
Start Down 1104
at Bottom NP 11:12
Start Up 11:13
at Surface 11:30
Data off 11:12

Data Location
Tape/Diskette I.D.
File Name/Header 26APR1100

Remarks "MICRO-ZOOS only"

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Temp.	Cond.	DEPTH ~~Other~~	Conv. Mon. Values-CTD Press.	Temp.	Cond.	Sal.	Sample Bot. Data Therm-P	Avg Tw	Sal.	Sal. Bot. #	Other Samp.	Pos.
1	1015		200	11:14	11:15	200.760	4.194	30.959	198.811				32.808			32.779	4	MZ	1
2	1008		60	11:20	11:21	60.550	3.683	29.886	59.983									10l	2
3	1010		50	11:22	11:23	51.618	3.531	29.694	51.135									10l	3
4	1007		40	11:23	11:24	41.018	3.385	29.511	40.636									10l	4
5	1013		30	11:25	11:26	30.465	3.754	29.683	30.181									10l	5
6	1012		20	11:27	11:28	21.078	3.764	29.681	20.883									10l	6
7	1006		10	11:29	11:29	10.979	3.768	29.679	10.878									10l	7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials MS

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
51 A	MILLER FREEMAN	MF-89-03 FOCI Leg II	209		CTD at Sta 58-A	FOX58

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 116 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
051	57	36.48	N	155 05.87	W	26	APR	89	14	31	00.0	-16.1	1536	3	3	300	22	6	3	1	259	FOX58A

CTD	
Type & SN	91220-B
Press. SN	26072
Temp. SN	710
Cond. SN	304

Monitor Checks	on Deck	at Surface
Press.	8.999/9.048	2.071
Temp.		3.414
Cond.		29.295
Other		D 2.051

Times	JD/Time
Data on	1415
at Surface	1418
Start Down	1418
at Bottom	1428 /248
Start Up	1428
at Surface	1453
Data off	1428

Data Location 261	
Tape/Diskette I.D.	File Name/Header
	26APR1359

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ 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.	chl.
1	502	6	246	1429	1434	248.408	4.700	31.593	245.966				33.019	241 64	4.71	33.030	2	# Nuts	1	
2	1015		246	1434	1434	248.466	4.700	31.593	246.024									13	2	
3	1008		200	1437	1437	202.916	4.015	30.686	200.944									14	3	
4	1011		150	1440	1441	152.087	3.792	30.204	150.627									15	4	
5	1007		100	1443	1443	101.614	3.612	29.905	100.651									16	5	100 ml
6	1013		75	1446	1446	75.157	3.589	29.834	74.449									17	6	100 ml
7	1012		50	1448	1448	51.054	3.365	29.555	50.576									18	7	100 ml
8	1006		30	1449	1449	30.861	3.581	29.505	30.573									19	8	100 ml
9	1009		20	1451	1451	21.174	3.524	29.417	20.977									20	9	100 ml
10	1004		10	1452	1452	10.854	3.495	29.383	10.753									21	10	100 ml
11																			11	
12																			12	

Initials ✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
51B	MILLER FREEMAN	MF-89-03 FOCI Leg II	211		CTD at Sta 58-B-	

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date JD = 116 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
051	57	36	01	N	155	04	63	W	26	APR	89	15	21	06	0	-1	0	15	3	6	3	0 0	22	6	3	1	256	58B

(3) CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time
Data on
at Surface
Start Down
at Bottom
Start Up
at Surface
Data off

no data logged

Data Location
Tape/Diskette I.D.
File Name/Header: 26APR1514

Remarks: Micro: Zoos

Start #3

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ 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.	Pcs.
60 1	1008		60	1521	1521	60.723	3.516	29.708	60.154									mz 10l	1
50 2	1011		50	1522	1522	51.080	3.500	29.672	50.602									10l	2
40 3	1007		40	1523	1523	40.998	3.432	29.575	40.615									10l	3
30 4	1013		30	1524	1524	30.011	3.600	29.553	29.731									10l	4
20 5	1012		20	1525	1525	20.629	3.568	29.470	20.438									10l	5
10 6	1006		10	1527	1527	10.857	3.528	29.415	10.757									10l	6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials ✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
	MILLER FREEMAN	FOCI MF-89-03 Leg II	214			FOX59

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 116 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
052	57	38.37	N	155	04.23	W	26	APR	89	1647	01.0	00.0	16	3	8	260	20	3	6	1	26Φ	FOX59

(A) CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time

Data on	1637
at Surface	1637
Start Down	1637
at Bottom	1646 /249
Start Up	
at Surface	
Data off	

Data Location 263

Tape/Diskette I.D.	File Name/Header
	26APR1635

Remarks Rosette not firing, wiring pulled loose
Take another cast for microzoops (60m)

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ 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	1015		150	1649	1650														1
2	1008			1655															2
3	1011																		3
4	1007																		4
5	1013																		5
6	1012																		6
7	1006																		7
8																			8
9																			9
10																			10
11																			11
12																			12

111 60 50 40 30 20 10

Bongo 6005A

Initials RK ✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
	MILLER FREEMAN	FOCI MF-89-03 Leg II	215			

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date JD = 116 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
052	57	38.33	N	155 64.23	W	26	APR	89	17	23	01.0	00.0	16	3	8	260	20	3	6	1	259	59B

(B) CTD

Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks	on Deck	at Surface
Press.		3.299
Temp.		3.772
Cond.		29.652
Other		3.268

Times	JD/Time
Data on	1709
at Surface	1709
Start Down	1709
at Bottom	
Start Up	
at Surface	
Data off	

Data Location

Tape/Diskette I.D. ____

File Name/Header 26APR1703

Remarks Short cast for microzooplankton and salinity bottle calibration

	Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ 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.
60	1	1008		60	1714	1714	61.146	3.617	29.803	60.572									10l mz	1
50	2	1011		50	1715	1715	51.118	3.476	29.630	50.639									10l mz	2
40	3	1007		40	1716	1716	40.584	3.436	29.529	40.205									10l mz	3
30	4	1013		30	1717	1717	30.855	3.794	29.717	30.568									10l mz	4
20	5	1012		20	1718	1718	20.882	3.777	29.688	20.688									10l mz	5
10	6	1006		10	1719	1719	11.077	3.773	29.679	10.974									10l mz	6
10	7	1009		10	1720	1720	11.206	3.773	29.679	11.102				31.811			31.825	#7		7
	8																			8
	9																			9
	10																			10
	11																			11
	12																			12

Initials DGK

✓ MB

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
53A	Miller Freeman	MF-89-03 Leg II	218			FOX60

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 116 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
53A	57	40.65	N	155	10.26	W	26	APR	89	18	37	01.0	00.0	16	3	8	300	16	4	61	294 FOX60

CTD
Type & SN SBE 912203
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	8.928/8.926	3.127
Temp.		3.310
Cond.		28.989
Other		D 3.098

Times JD/Time
Data on 1825
at Surface 1826
Start Down 1826
at Bottom 18:37/281
Start Up
at Surface 18:01
Data off 18:37

Data Location 294
Tape/Diskette I.D.
File Name/Header 26APR1824

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values Other	Conv. Mon. Values-CTD Press.	Temp.	Cond.	Sal.	Sample Bot. Data Therm-P	Avg Tw	Sal.	Sal. Bot. #	Other Samp.	Pos.	
250	1	1005		250	18:40	18:40	253.040	4.774	31.677	250.549									~~Nuts~~ 22	1	chl.
200	2	1015		201	18:45	18:45	203.719	4.026	30.411	201.738									23	2	
150	3	1008		150	18:49	18:49	151.419	3.947	30.204	149.966									24	3	
S 100	4	1011		100	18:51	18:52	101.686	3.872	30.039	100.722									25	4	100ml
75	5	1007		75	18:54	18:54	76.430	3.881	29.999	75.710									26	5	
50	6	1013		50	18:55	18:55	51.032	3.798	29.894	50.555									27	6	
30	7	1012		30	18:57	18:57	31.231	3.612	29.653	30.940									28	7	
20	8	1006		20	18:58	18:58	20.937	3.541	29.498	20.743									29	8	
10	9	1009		10	18:58	18:59	10.223	3.357	29.063	10.178				31.484			31.504	13	30	9	
	10	1004																		10	
	11																			11	
	12																			12	

Initials ____
✓ ____

Consec. Cast #	Vessel	Proj. & Leg Foci	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
	Miller Freeman	MF-89-03 Leg II	220			60B

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 116 Day	Mo.	Yr.	Time GMT Hr.	Time GMT Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m (283)	Sta. Name or I.D
53B	57	40.61	N	155	10.13	26	Apr	89	19	20	01.0	00.0	16	3	8	300	16	4	6	1	293	60B

CTD
Type & SN ____
Press. SN ____
Temp. SN ____
Cond. SN ____

Monitor Checks

	on Deck	at Surface
Press.	8.926 / 8.893	
Temp.		
Cond.		
Other		

Times JD/Time
Data on ____
at Surface ____
Start Down ____
at Bottom ____
Start Up ____
at Surface ____
Data off ____

no data logged

Data Location
Tape/Diskette I.D. ____
File Name/Header 26 APR 1911

Remarks Microzooplankton

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values ~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot. Data Therm-P	Sample Bot. Data Avg Tw	Sample Bot. Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	1015																		1
2	1018																	MZ	2
60 3	1008		60	19:20	19:20	60.975	3.826	29.937	60.403									10l	3
50 4	1011		50	19:21	19:22	50.420	3.745	29.839	49.948										4
40 5	1007		40	19:23	19:24	41.172	3.611	29.663	40.788										5
30 6	1013		30	19:25	19:25	30.719	3.581	29.593	30.433										6
20 7	1012		20	19:26	19:26	20.813	3.476	29.324	20.620										7
10 8	1006		10	19:27	19:27														8
9																			9
10																			10
11																			11
12																			12

Initials ✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
054	MILLER FREEMAN	MF-89-03, LEG II	223			FOX 61

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude Min.	E or W	Date Day	Mo.	Yr.	JD = 116	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
054	57	42.93	N	155	15.32	W	26	APR	89		20	39	02.2	01.0	16	38	33	019	36	1			300	FOX61A

CTD
Type & SN SBE 9/22OB
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		3.272
Temp.		3.361
Cond.		29.063
Other		3.242

Times JD/Time

Data on	202713
at Surface	2028
Start Down	
at Bottom	203850
Start Up	2044
at Surface	
Data off	2038

Data Location 267 281

Tape/Diskette I.D.	File Name/Header
	26APR2023

Remarks
Nutrients & Chlorophylls

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values Other	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot. Data Therm-P	Sample Bot. Data Avg Tw	Sample Bot. Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	1005		280		204408	281.497	5.011	31.983	278.705				33.143			33.146	27	NUTS 31	1
2	1015		250		204605	253.393	4.768	31.637	250.897									32	2
3	1008		200		204833	203.411	3.657	29.987	201.432									33	3
4	1011		150		205052	151.891	3.866	30.049	150.432									34	4
5	1007		100		205307	101.990	3.758	29.877	101.022									35	5
6	1013		75		205419	76.190	3.620	29.601	75.472									36	6
7	1012		50		205540	51.409	3.505	29.412	50.927									37	7
8	1006		30		205650	31.003	3.262	29.084	30.714									38	8
9	8		20		205736	20.663	3.266	29.079	20.471									39	9
10	1004		10		205824	10.284	3.352	29.134	10.188									40	10
11	PINGER																		11
12	252	A	280	203850	204341 *	281.611	5.004	31.975	278.818										12

chlor

*THERMOMETER FRAME DIDN'T TRIP; PINGER INTERFERED

Initials ✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
054	MILLER FREEMAN	MF-89-03, LEG II	225			FOX 61

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude E or W	Date JD = 116 Day	Mo.	Yr.	Time GMT Hr.	Time GMT Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
054	57	42.91	N	155 15.47	W	26	APR	89	21	18	02.2	01.0	16	3	8	330	19	3	6	1 300	FOX61B

CTD
Type & SN SBE 9/22OB
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time
Data on 116 /
at Surface 2115
Start Down
at Bottom
Start Up
at Surface
Data off

no data logged

Data Location
Tape/Diskette I.D.
File Name/Header: 26APR2103.LOG

Remarks
Micro. Zoo

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values Other	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot. Data Therm-P	Sample Bot. Data Avg Tw	Sample Bot. Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	1005																		1
2	1015																		2
3	1008		60		211753	61.198	3.618	29.563	60.623									MZ 10ml	3
4	1011		50		211854	50.591	3.465	29.395	50.117										4
5	1007		40		211946	39.524	3.420	29.301	39.155										5
6	1013		30		212032	31.336	3.291	29.129	31.044										6
7	1012		20		212120	20.844	3.305	29.119	20.650										7
8	1006		10		212212	11.329	3.366	29.147	11.224										8
9	8																		9
10	1004																		10
11	PINGER																		11
12																			12

Initials ____
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
55	Miller Freeman	FOCI MF-89-03 Leg II	286			E33

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Date Mo.	Date Yr. (JD = 118)	Time GMT Hr.	Time GMT Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
055	57	36.86	N	154 39.74	W	28	APR	89	17	29	06.5	05.5	15	2	8	150	12	4	8	228	E33

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	9.054 / 9.063	2.747
Temp.		3.682
~~Cond.~~ SAL		31.909
~~Other~~ DEPTH		2.732

Times JD/Time
Data on 176
at Surface 1721
Start Down 1721
at Bottom 1729 / 208
Start Up 1729
at Surface 1740
Data off 1741

Data Location 238
Tape/Diskette I.D.
File Name/Header 28APR1712

Remarks Bongo Station 6030 / E33

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values ~~Cond.~~ SAL	Monitor Values ~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot. Data Therm-P	Sample Bot. Data Avg Tw	Sample Bot. Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	502	6	200	17:30	17:35	201.136	4.246	32.864	199.934					201.37	4.18	32.864	31		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials ____
✓ ____

S67A F23

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
56	MILLER FREEMAN	MF-89-03 FOCI Leg II	368			F23

Consec. Cast #	Latitude Deg. Min. N or S	Longitude Deg. E or W	Date JD = 121 Day Mo. Yr.	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
056	56 55.02 N	155 39.48 W	01 MAY 89	0233	051.0	050.3	2	1	1	000	00	9	/	4	292	F23

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		2.449
Temp.		3.854
Cond.		SAL 31.731
Other		D 2.426

Times JD/Time

Data on	121 / 023036
at Surface	0223
Start Down	0224
at Bottom	023332
Start Up	023415
at Surface	0252
Data off	023350

Data Location

Tape/Diskette I.D.	File Name/Header
	01MAY0217

Remarks F23/S067A 3316,
ERROR LIGHTS 022444, 022538, 2547, 2604, 2650, 2714, 2719, 2724, 2734, 2754, 2814, 2844, 2917, 2926, 2957, 3020, 3109, 3130, 3141, 3224, 3250

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values ~~Cond.~~ CTD	Monitor Values ~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot.Data Therm-P	Sample Bot.Data Avg Tw	Sample Bot.Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	1007		20		025004	20.644	3.276	31.748	20.454							33.189	6		1
2	1008		10		025058	9.830	3.500	31.724	9.739										2
3																			3
4	PINGER																		4
5																			5
6																			6
7																			7
8	502	6	258 260	023518	024027	262.431	5.032	33.179	259.863					255.0	5.03	33.189	6		8
9	1006		60		024623	60.896	3.200	31.956	60.329										9
10	1011		50		0247	50.189	3.031	31.890	49.723										10
11	1013		40		024824	39.724	3.144	31.794	39.356										11
12	1012		30		024914	29.973	3.250	31.753	29.697										12

*THERE MAY BE A METER OR TWO AT THE END OF THE CAST WHICH WAS TAKEN DURING THE ASCENT

Initials CD
✓

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
57	MILLER FREEMAN	MF-89-03 FOCI Leg II				G69 G21

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 121 Day	Mo.	Yr.	Time GMT Hr.	Time GMT Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
057	56	43.74	N	155	44.41	01	MAY	89	08	09	06.0	06.0	1032.5	1	2	05	10	9	–	2	280	G69 G21

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	-.002	2.945
Temp.	4.572	3.432
Cond.	.020	31.641
~~Other~~ Depth	—	2.918

Times JD/Time
Data on B 0756
at Surface L 0759
Start Down 0800
at Bottom 0808 / 269
Start Up 0809
at Surface
Data off 0808

Data Location

Tape/Diskette I.D.	File Name/Header
	01 MAY 0752

Remarks Error light flashing intermittently deck unit died in the way up at 30m; Micro Zoos collected on the next cast-57B

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values ~~Other~~ Depth	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot. Data Therm-P	Sample Bot. Data Avg Tw	Sample Bot. Data Sal.	Sal. Bot. #	Other Samp.	Pos.
60 1	1006		60	0814	0815	61.445	2.661	31.759	60.873							31.768	1		1
~~50~~ 2	1011		~~50~~	0816	~~0816~~														2
40 3	1013		~~40~~	~~0817~~	0818														3
~~30~~ 4	1012																		4
20 5	1007																		5
10 6	1008																		6
10 7	1005																		7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials ____
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
57B	MILLER FREEMAN	FOCI MF-89-03 Leg II				G69 G21

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Date Mo.	Date Yr.	JD = 121	Time GMT Hr.	Time GMT Min.	Dry Bulb	Wet Bulb	Bar. mb 1032.5	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
57B	56	43.74	N	155	44.41	01	MAY	89		08	09	06.0	06.0	32	19	20	5	10	9	2		280	G69 G21

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time

Data on
at Surface
Start Down
at Bottom
Start Up
at Surface
Data off

Data Location

Tape/Diskette I.D. | File Name/Header

Remarks Micro-Zoo's only - Second CTD cast at station G69 - DEC UNIT DEAD - no files logged on this cast - depths are based on wire out

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values Other	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot. Data Therm-P	Sample Bot. Data Avg Tw	Sample Bot. Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	1006		~60															10L MZ	1
2	1011		~50																2
3	1013		~40																3
4	1012		~30																4
5	1007		~20																5
6	1008		~10																6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials ____
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
58	MILLER FREEMAN	FOCI MF-89-03 Leg II			H17 / GΦ72A	H17

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date JD = 121 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
058	56	25	14	N 156	04	82	W 01	MAY	89	18	59	05	0	05	0	31	36	195	10 /	94	261 H17

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	19.156	
Temp.		
Cond.		
Other		

Times JD/Time
Data on 1845
at Surface 184936
Start Down 1850
at Bottom 1859 / 250m
Start Up 1900
at Surface
Data off 185907

Data Location 261
Tape/Diskette I.D.
File Name/Header 01MAY1844

Remarks Surface logged twice after start down
ERROR LIGHTS

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Temp.	~~Cond.~~ SAL	~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Temp.	Cond.	Sal.	Sample Bot. Data Therm-P	Avg Tw	Sal.	Sal. Bot. #	Other Samp.	Pos.
1	1005		250	1859	1859	251.947	4.724	33.072	249.487							33.081	22		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials DGK
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
059	MILLER FREEMAN	FOCI MF-89-03 Leg II	396			H21

Consec. Cast #	Latitude Deg. Min.	N or S	Longitude Deg.	E or W	Date JD = 121 Day Mo. Yr.	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S. S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
059	56 40.71	N	155 37.88	W	01 MAY 89	2303	06.0	06.0	30	36	22	0	14	8 /	4	246 (240)	H21

236.5
239 WO

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	0.000	3.220
Temp.	5.313	3.501
SAL ~~Cond.~~	0.000	31.616
DEPTH ~~Other~~	0.000	3.190

Times JD/Time
Data on 225402
at Surface 2255
Start Down 2256
at Bottom 2303
Start Up 2304
at Surface
Data off 230400

Data Location
Tape/Diskette I.D.
File Name/Header 01MAY2251

ERROR LIGHTS:

Remarks 225634, 225638, 225645, 225657, 5705, 5711, 5725, 5734, 5803, 5820, 5851, 5900, 5909, 5912, 5915, 5926, 5929, 5935, 5939, 5951, 5956, 0008, 0014, 0019, 0036, 0040, 0042, 0048, 0051, 0053, 0117, 0122, 0138, 0144, 0145, 0156, 0301, 0305, 0313, 0316, 0324, 0330, 0331, 0250, 0307, 0314, 0321, 0328, 0330, 0332, 0338, 0344, 0350

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values ~~Cond.~~ SAL	Monitor Values ~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Temp.	Cond.	Sal.	Sample Bot. Data Therm-P	Avg Tw	Sal.	Sal. Bot. #	Other Samp.	Pos.
1	1007		20		231934	19.970	3.642	31.710	19.786							32.665	30		1
2	1008		10		232020	9.819	3.518	31.614	9.729										2
3																			3
4	PINGER																		4
5																			5
6																			6
7																			7
8	502	6	188	230618	231158	190.813	3.800	32.659	188.978					186.1	3.785	32.665	30		8
9	1006		60		231539	61.696	2.849	31.864	61.122										9
10	1011		50		231657	51.327	3.270	31.748	50.851										10
11	1013		40		231754	41.334	3.286	31.748	40.952										11
12	1012		30		231848	30.678	3.574	31.741	30.395										12

Initials ____
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
060	MILLER FREEMAN	MF-89-03 FOCI Leg II	414		CTD at H25 w/ Microzooops	H25

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 122 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb 1028.5	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
060	56	56.28	N	155 10.88	W	02	MAY	89	10	01	05.5	05.0	28	3	6	220	11	8	-	2	226	H25

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		3.573
Temp.		3.537
Cond.		31.674
~~Other~~ Depth		3.540

Times JD/Time
Data on B 9:50
at Surface L 9:53
Start Down 9:53
at Bottom AP 10:00:59/214
Start Up 10:02
at Surface 10:12
Data off AP 10:00:59

Data Location 226
Tape/Diskette I.D.
File Name/Header 02MAY0948

Remarks H25 = G076A

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Temp.	Cond.	~~Other~~ Depth	Conv. Mon. Values-CTD Press.	Temp.	Cond.	Sal.	Sample Bot. Data Therm-P	Avg Tw	Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503	/	214	10:01	10:02	215.779	4.601	33.026	213.686							33.034	3	10l mz	1
2	1006		60	10:06	10:06	61.007	2.749	31.864	60.438										2
3	1011		50	10:07	10:07	51.171	2.741	31.797	50.695										3
4	1013		40	10:08	10:08	40.035	2.782	31.754	39.663										4
5	1012		30	10:09	10:09	30.415	2.987	31.683	30.134										5
6	1007		20	10:09	10:10	20.445	2.972	31.640	20.256										6
7	1008		10	10:10	10:10	10.896	3.495	31.665	10.796										7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials ms
✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
061	MILLER FREEMAN	FOCI MF-89-03 Leg II	431		Mooring 29 location	

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Date Mo.	Date Yr.	JD =	Time GMT Hr.	Time GMT Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
061	56	44.15	N	155 22.29	W	02	MAY	89		17	38	5.5	5.0	26	3	7	200	10	8	7	2	206	M29

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time
Data on 1722
at Surface 1730
Start Down 1731
at Bottom 1737/194
Start Up 1739
at Surface 1744
Data off 1737

Data Location 264

Tape/Diskette I.D.	File Name/Header
	02 MAY 1721

Remarks No error lights seen
-No water sample-

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values Other	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot. Data Therm-P	Sample Bot. Data Avg Tw	Sample Bot. Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1			193	1735	1737														1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials DGK
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
062	MILLER FREEMAN	FOCI MF-89-03 Leg II	433			M26/M27

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date JD = Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
062	56	47.18	N	155 28.20	W	02	MAY	89	18	25	6.0	5.5	26	3	7	200	06	7	7	1	251	M26/27

CTD

Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	0.002	2.993
Temp.	4.308	3.927
~~Cond.~~ SAL	0.166	31.748
~~Other~~ DEPTH	0.002	2.966

Times JD/Time

Data on 1814
at Surface 1817
Start Down 1818
at Bottom 1825/240
Start Up 1826
at Surface 1838
Data off ~P 1825

Data Location 254

Tape/Diskette I.D.
File Name/Header 02MAY1812

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values ~~Cond.~~	Monitor Values ~~Other~~	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot. Data Therm-P	Sample Bot. Data Avg Tw	Sample Bot. Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	502	6	200	1827	1833	201.921	3.883	32.678	199.970					197.5	3.80	32.663	14		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 #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
063	MILLER FREEMAN	FOCI MF-89-03 Leg II	435			M28

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date JD = 122 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
063	56	51.26	N	155	37.39	02	MAY	89	19	35	04.5	04.5	26	3	8	200	12	7/	1	287	M28

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	-0.066	3.109
Temp.	4.753	3.711
~~Cond.~~ SAL	0.023	31.752
~~Other~~ DEPTH	-0.065	3.080

Times JD/Time
Data on 1923
at Surface 1926
Start Down 1927
at Bottom 1935/274
Start Up 1936
at Surface 1942
Data off LP 1935

Data Location 287
Tape/Diskette I.D.
File Name/Header 02 MAY 1989

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values ~~Cond.~~ SAL	Monitor Values ~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot. Data Therm-P	Sample Bot. Data Avg Tw	Sample Bot. Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503		274	1935	1936	276.919	5.059	33.175	274.193							33.184	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 DKG
✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
064	MILLER FREEMAN	MF-89-03 FOCI Leg II	436			M25

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 122 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
064	56	52.58	N	155 40.53	W	02	MAY	89	20	14	04.0	04.0	25	38	20	11	8	/	1		292	M25

CTD

Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	-0.002	3.275
Temp.	4.853	3.854
~~Cond~~ SAL	0.000	31.703
~~Other~~ DEPTH	0.000	3.245

Times JD/Time

Data on	200354
at Surface	2005
Start Down	2006
at Bottom	2014
Start Up	2015
at Surface	
Data off	201456

Data Location

Tape/Diskette I.D.	File Name/Header
	02MAY1989

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Temp.	~~Cond.~~ SAL	~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Temp.	Cond.	Sal.	Sample Bot. Data Therm-P	Avg Tw	Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503		120		201950	121.444	2.977	32.052	120.294							32.061	29		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 #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
065	MILLER FREEMAN	MF-89-03 FOCI Leg II	437			M24

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Date Mo.	Date Yr. (JD = 122)	Time GMT Hr.	Time GMT Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
065	56	55.16	N	155 46.24	W	02	MAY	89	21	04	05.4	05.1	253.8	2	0	11	8	/	2	304	M24

CTD

Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	0.015	3.352
Temp.	4.803	3.880
~~Cond.~~ SAL	0.027	31.668
~~Other~~ DEPTH	0.015	3.322

Times JD/Time

Data on 205351
at Surface 2055
Start Down 2055
at Bottom 2104
Start Up 2105
at Surface
Data off 210456

Data Location

Tape/Diskette I.D.
File Name/Header 02MAY2049

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values ~~Cond.~~ SAL	Monitor Values ~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot.Data Therm-P	Sample Bot.Data Avg Tw	Sample Bot.Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503		81		211030	81.931	4.192	32.096	81.163								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 CD
✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
066	MILLER FREEMAN	MF-89-03 FOCI Leg II	438			M23

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 122 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
066	56	58	52	N 155	52 61	W 02	MAY	89	22	02	06	50	06	02	5	38	21	5	12	8 / 2	315 M23

CTD

Type & SN 91220-B

Press. SN 26072

Temp. SN 710

Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	0.004	3.330
Temp.	6.044	3.781
~~Cond.~~ SAL	0.000	31.630
~~Other~~ DEPTH	0.004	3.299

Times JD/Time

Data on	214922
at Surface	2151
Start Down	2151
at Bottom	2202
Start Up	2202
at Surface	
Data off	220206

Data Location

Tape/Diskette I.D.	File Name/Header
	02MAY2146

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Temp.	~~Cond.~~ SAL	~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Temp.	Cond.	Sal.	Sample Bot. Data Therm-P	Avg Tw	Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503		171		200731	172.013	3.282	32.259	170.363							32.265	23		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials CD

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
067	MILLER FREEMAN	MF-89-03 FOCI Leg II	441			M22

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date JD = 123 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
067	57	02.78	N	156	02.16	W	03 MAY	89	00	10	05.5	05.0	24	2	1	212	13	8 /	2	220	M22

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	0.009	2.622
Temp.	4.969	3.542
~~Cond.~~ SAL	0.039	31.649
~~Other~~ DEPTH	0.009	2.598

Times JD/Time

Data on	123 / 000059
at Surface	0002
Start Down	0002
at Bottom	0010
Start Up	0010
at Surface	0023
Data off	001002

Data Location

Tape/Diskette I.D.	File Name/Header
	02MA42353

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Temp.	~~Cond.~~ SAL	~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Temp.	Cond.	Sal.	Sample Bot. Data Therm-P	Avg Tw	Sal.	Sal. Bot. #	Other Samp.	Pos.
1																	18		1
2																			2
3																			3
4																			4
5																			5
6																			6
7	502	6	195	001100	001605	196.989	3.682	32.349	195.088					198.32	3.65	32.358	18		7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials CD
✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
068	MILLER FREEMAN	FOCI MF-89-03 Leg II	442			M21

Consec. Cast #	Latitude Deg. Min.	N or S	Longitude Deg.	E or W	Date JD = 123 Day Mo. Yr.	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
068	5703	N	15604	W	03MAY89	0127	04.0	04.0	23	2	12	220	18	8/2		173	M21

CTD

Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	-0.010	2.384
Temp.	4.243	3.450
~~Cond.~~ SAL	0.043	31.629
~~Other~~ DEPTH	-0.009	2.362

Times JD/Time

Data on	123 011620
at Surface	0121
Start Down	0121
at Bottom	0127
Start Up	0127
at Surface	0131
Data off	012739

Data Location

Tape/Diskette I.D.	File Name/Header
	03MAY0110

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values ~~Cond.~~ SAL	Monitor Values ~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot.Data Therm-P	Sample Bot.Data Avg Tw	Sample Bot.Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1			115		012928	116.385	3.301	31.982	115.284							31.993	12		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 #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
069	MILLER FREEMAN	FOCI MF-89-03 Leg II	449		LINE 8 - station 61	61

Consec. Cast #	Latitude Deg. Min.	N or S	Longitude Deg.	E or W	Date JD = 123 Day Mo. Yr.	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb 1021.5	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
069	5742 94	N	155 15 02	W	03 MAY 89	07 25	06 0	06 0	22	3	6	180	13	9	- 4/2	303	61

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	-.001	3.757
Temp.	3.624	4.118
Cond.	.080	31.550
~~Other~~ Depth	-.001	3.722

Times JD/Time
Data on B 7:13
at Surface L 7:15
Start Down 7:16
at Bottom NP 7:25 / 286
Start Up 7:25
at Surface 7:35
Data off 7:25

Data Location
Tape/Diskette I.D.
File Name/Header 03MAY0710

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values ~~Other~~ Depth	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot.Data Therm-P	Sample Bot.Data Avg Tw	Sample Bot.Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503	/	32	7:32	7:33	33.125	4.032	31.875	32.816							31.884	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 MS
✓

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
070	MILLER FREEMAN	MF-89-03 FOCI Leg II	453		Line 8 Station 60	

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 123 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb 1021.1	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
070	57	40.96	N	155 09.84	W	03	MAY	89	08	15	05.0	05.0	21	3	2	200	11	7	/	4	297	60

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	.009	3.384
Temp.	3.449	4.553
Cond.	0.00	31.629
Depth ~~Other~~	.009	3.352

Times JD/Time
Data on B 8:03
at Surface L 8:05
Start Down 8:05
at Bottom AP 8:14 / 298
Start Up 8:14
at Surface 8:28
Data off 8:14

Data Location
Tape/Diskette I.D.
File Name/Header 03 MAY 0800

Remarks MOA Event # 450 filter checked / no oil; trace oil Mousse at recovery point / no fouling of sensors observed

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values Depth ~~Other~~	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot. Data Therm-P	Sample Bot. Data Avg Tw	Sample Bot. Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	502	6	250	8:17	8:22	253.615	4.925	33.116	251.117					249.1	4.92	33.121	09		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials ms
✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
071	MILLER FREEMAN	FOCI MF-89-03 Leg II	454		Line 8 Station 59	59

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 123 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
071	57	38.59	N	155 04.11	W	03	MAY	89	09	18	05.0	05.0	1021.5 22	3	2	200	11	7	-	6	264	59

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	-.004	2.909
Temp.	3.000	4.602
Cond.	0.0	31.832
Depth ~~Other~~	-0.0	2.882

Times JD/Time
Data on 8 0907
at Surface 8 0909
Start Down 0909
at Bottom AP 0918 /246
Start Up 0919
at Surface 0925
Data off 0918

Data Location 262
Tape/Diskette I.D.
File Name/Header 03MAY0905

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values Depth ~~Other~~	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot.Data Therm-P	Sample Bot.Data Avg Tw	Sample Bot.Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503	/	246	0918	0918	249.219	5.326	33.290	246.768							33.299	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 MMS
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
072	MILLER FREEMAN	MF-89-03 FOCI Leg II	454		CTD at Line 8 Station 58	

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date JD = 123 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb 1021.0	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
072	57	36.38	N	155 00.38	W	03	MAY	89	10	00	04.0	04.0	21	3	2	200	10	7	-	6	244 245	58

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	-.001	3.436
Temp.	3.322	4.192
Cond.	0.0	31.785
Depth ~~Other~~	-.001	3.404

Times JD/Time
Data on B 9:50
at Surface L 9:52
Start Down 9:53
at Bottom AP 10:00 / 228
Start Up 10:01
at Surface 10:08
Data off 10:00

Data Location
Tape/Diskette I.D.
File Name/Header 03MAY0948

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values Depth ~~Other~~	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot. Data Therm-P	Sample Bot. Data Avg Tw	Sample Bot. Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503	/	228	10:00	10:01	230.793	5.039	33.175	228.534							33.183	11		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials ms
✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
073	MILLER FREEMAN	MF-89-03 FOCI Leg II	455		Line 8 Station 57	57

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date JD = 123 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
073	57	33.19	N	154 52.59	W	03	MAY	89	1056		04.0	04.0	1020.0	3	0	195	15	7	–	4	237	57

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	-.011	3.386
Temp.	3.291	4.231
Cond.	0.0	31.819
Depth ~~Other~~	0.0	3.354

Times JD/Time
Data on B 1045
at Surface L 1047
Start Down 1048
at Bottom 1055 /223
Start Up 1056
at Surface
Data off 1055

Data Location 237
Tape/Diskette I.D.
File Name/Header 03MAY1042

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Temp.	Cond.	Depth ~~Other~~	Conv. Mon. Values-CTD Press.	Temp.	Cond.	Sal.	Sample Bot.Data Therm-P	Avg Tw	Sal.	Sal. Bot. #	Other Samp.	Pos.
1	252	A	202	1056	1101	203.667	4.653	33.025	201.688					192.31	4.65	33.024	25		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials MS
✓

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
074	MILLER FREEMAN	MF-89-03 FOCI Leg II	456		Line 8 Station 56	

Consec. Cast #	Latitude Deg. Min. N or S	Longitude Deg. E or W	Date JD = 123 Day Mo. Yr.	Time GMT Hr. Min.	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
074	57 30.88 N	154 46.86 W	03 MAY 89	1145	04.0	04.0	20.0	3	0	195	15	7	-4	220	56

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	.007	3.501
Temp.	3.552	3.564
Cond.	0.0	31.709
Depth ~~Other~~	.007	3.469

Times JD/Time
Data on B 1136
at Surface L 1138
Start Down 1139
at Bottom AP 1145 / 206
Start Up 1146
at Surface 1151
Data off AP 1145

Data Location 221
Tape/Diskette I.D.
File Name/Header 03 MAY 1134

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values Depth ~~Other~~	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot.Data Therm-P	Sample Bot.Data Avg Tw	Sample Bot.Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503	✓	206	1145	1146	207.415	3.993	32.774	205.398							32.781	10		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials MS
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
075	MILLER FREEMAN	MF-89-03 FOCI Leg II	457		Line 8 Station 55	55

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 123 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb 1020.5	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
075	57	28.55	N	154 42.23	W	03	MAY	89	12	25	04.0	04.0	21	2	8	200	14	8	-	2	67	55

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	-.001	2.543
Temp.	3.644	3.900
Cond.	0.018	31.764
Depth ~~Other~~	-.001	2.519

Times JD/Time
Data on 3 1221
at Surface 1222
Start Down 1222
at Bottom ^P 12:24
Start Up 1225
at Surface 1226
Data off ^P 12:24

Data Location 67
Tape/Diskette I.D.
File Name/Header 03MAY121B

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values Depth ~~Other~~	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot. Data Therm-P	Sample Bot. Data Avg Tw	Sample Bot. Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503	/	54	1224	1225	55.251	3.635	31.964	54.734							31.974	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 ms
✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
076	MILLER FREEMAN	MF-89-03 FOCI Leg II	460		CTD at E33 w/ MicroZoop	E33

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 123 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
076	57	37.20	N	154	39.86	03	MAY	89	13	49	6.5	0.50	1020.0	2	8	200	16	7	7	1	229	E33

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	-.002	1.945
Temp.	3.505	3.668
Cond.	0.0	31.751
Depth ~~Other~~	-.002	1.927

Times JD/Time
Data on B 1340
at Surface L 1341
Start Down 1341
at Bottom P 1349/214
Start Up 1350
at Surface 1404
Data off P 1349

Data Location
Tape/Diskette I.D.
File Name/Header 03MAY133B

Remarks Also Station G030B
THERMOMETERS DID NOT REVERSE RIGHT - NOT READ

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Temp.	Cond.	Depth ~~Other~~	Conv. Mon. Values-CTD Press.	Temp.	Cond.	Sal.	Sample Bot. Data Therm-P	Avg Tw	Sal.	Sal. Bot. #	Other Samp.	Pos.
1	1006		60	1353	1358	61.352	3.364	31.991	60.777									MZS 10L	1
2	502	6	60	1353	1358	61.358	3.362	31.992	60.783							32.002	19		2
3	1011		50	1359	1400	49.878	3.410	31.976	49.412									MZ 10L	3
4	1013		40	1400	1400	40.163	3.483	31.957	39.789										4
5	1012		30	1401	1401	29.621	3.627	31.932	29.345										5
6	1007		20	1402	1402	19.122	3.650	31.752	18.945										6
* 7	1008		10	1402	1403	12.556	3.653	31.749	12.441										7
8																			8
9																			9
10																			10
11																			11
12																			12

*Last point is only a 7 second average instead of a 10 second average because I entered Q too soon after the L -ms

Initials ____
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
77	MILLER FREEMAN	MF-89-03 FOCI Leg II	466			39

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Date Mo.	Date Yr. (JD = 123)	Time GMT Hr.	Time GMT Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
077	58.12	83	N	154.06.00	W	03	MAY	89	18	35	6.0	5.5	1018.5	3	7	240	14	5	7	113	37

CTD

Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	9.114/9.140	3.101
Temp.	4.352	3.830
~~Cond.~~ Sal	0.000	31.721
~~Depth~~ Other	0.000	3.472

Times JD/Time

Data on 1829
at Surface 1832
Start Down 1832
at Bottom 1835/100
Start Up 1836
at Surface 1839
Data off ^P 1835

Data Location 113

Tape/Diskette I.D.
File Name/Header 03MAY 1827

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values ~~Cond.~~ Sal	Monitor Values ~~Other~~ Depth	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot.Data Therm-P	Sample Bot.Data Avg Tw	Sample Bot.Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	502	6	80	1836	1841	81.467	4.280	32.116	80.698					80.60	4.26	32.125	28		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 #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
078	MILLER FREEMAN	MF-89-03 FOCI Leg II	468			038

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 123 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
078	58	10.79	N	154 00.36	W	03	MAY	89	1923		06.5	06.0	18	37	21	52	22	5	/	1	263	038

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	-0.020	2.642
Temp.	4.279	3.997
SAL ~~Cond.~~	0.021	31.671
DEPTH ~~Other~~	-0.020	2.618

Times JD/Time
Data on 123 1111
at Surface 1915
Start Down 1915
at Bottom 1923/249
Start Up 1923
at Surface
Data off ~P 1923

Data Location 263
Tape/Diskette I.D.
File Name/Header 03 MAY 1989

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Temp.	~~Cond.~~ SAL	~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Temp.	Cond.	Sal.	Sample Bot. Data Therm-P	Avg Tw	Sal.	Sal. Bot. #	Other Samp.	Pos.
1	5 4 3		174	1925	1926	175.895	4.306	32.345	174.196							32.354	26		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials DK
✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
079	MILLER FREEMAN	FOCI MF-89-03 Leg II	472			037

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 123 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
079	58	08.08	N	153.54	W	03	MAY	89	20	52	06.0	06.0	1183	7	2	225	10	5	/	1	209	037

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	-0.021	3.444
Temp.	4.771	4.262
SAL ~~Cond.~~	0.000	31.776
DEPTH ~~Other~~	-0.004	3.412

Times JD/Time

Data on	123/204216
at Surface	2044
Start Down	2044
at Bottom	2052
Start Up	2052
at Surface	
Data off	205232

Data Location

Tape/Diskette I.D.	File Name/Header
	03MAY2039

209
203/204

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values ~~Cond.~~ SAL	Monitor Values ~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot.Data Therm-P	Sample Bot.Data Avg Tw	Sample Bot.Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503		61		205624	63.053	4.332	32.125	62.461							32.135	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 CD
✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
080	MILLER FREEMAN	FOCI MF-89-03 Leg II	474			036

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 123 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
080	58	05.39	N	153	49.12	03	MAY	89	22	02	06.7	05.9	17	3	7	22	5	10	5	4	203	036

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	0.005	3.127
Temp.	5.411	4.175
~~Cond.~~ SAL	0.000	31.627
~~Other~~ DEPTH	0.000	3.098

Times JD/Time

Data on	2153224
at Surface	2155
Start Down	2156
at Bottom	2202
Start Up	2202
at Surface	
Data off	220240

Data Location

Tape/Diskette I.D.	File Name/Header
	03MAY2150

203
198 DEC

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Temp.	~~Cond.~~ SAL	~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Temp.	Cond.	Sal.	Sample Bot. Data Therm-P	Avg Tw	Sal.	Sal. Bot. #	Other Samp.	Pos.
1	502	6	151	220416	220905	152.600	4.268	32.294	151.135					155.04	4.23	32.304	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 ____
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
081	MILLER FREEMAN	FOCI MF-89-03 Leg II	475			035

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Date Mo.	Date Yr. (JD = 123)	Time GMT Hr.	Time GMT Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
081	58	03.10	N	153 42.82	W	03	MAY	89	23	14	05.1	05.0	17	38	23	5	12	7		1	206 (206)	035

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	-0.027	3.173
Temp.	4.779	4.627
~~Cond.~~ SAL	0.000	31.827
~~Other~~ DEPTH	0.000	3.143

Times JD/Time

Data on	123 / 230516
at Surface	2306
Start Down	231
at Bottom	2314
Start Up	2314
at Surface	
Data off	231417

Data Location

Tape/Diskette I.D.	File Name/Header
	03MAY2301

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values ~~Cond.~~ SAL	Monitor Values ~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot. Data Therm-P	Sample Bot. Data Avg Tw	Sample Bot. Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	593		109		231859	110.366	4.098	32.220	109.310							32.229	34		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 #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
082	MILLER FREEMAN	MF-89-03 FOCI Leg II	477			034

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude Min.	E or W	Date Day	Date Mo.	Date Yr. (JD = 124)	Time GMT Hr.	Time GMT Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
082	58	00.50	N	153	37.37	W	04	MAY	89	00	21	04.9	04.7	18	3	8	250	18	7	4	1	183	034

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	-0.029	2.384
Temp.	4.735	4.758
SAL ~~Cond.~~	0.000	31.918
DEPTH ~~Other~~	0.000	2.362

Times

	JD/Time
Data on 124	0013
at Surface	0014
Start Down	0014
at Bottom	0021
Start Up	0021
at Surface	
Data off	002111

Data Location

Tape/Diskette I.D.	File Name/Header
	04MAY0007 (185 178)

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values ~~Cond.~~ SAL	Monitor Values ~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot. Data Therm-P	Sample Bot. Data Avg Tw	Sample Bot. Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503		31		002527	31.642	4.635	31.907	31.345							31.919	32		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials CD
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
083	MILLER FREEMAN	MF-89-03 FOCI Leg II	479			033

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 124 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
083	57	59.21	N	157	34.75	04	MAY	89	01	24	05.8	05.6	18	22	2	64	14	8	7	2	106 (105)	033

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	-0.050	2.777
Temp.	5.373	4.581
~~Cond.~~ SAL	0.000	31.885
~~Other~~ DEPTH	0.000	2.751

Times JD/Time
Data on 124/011931
at Surface 0120
Start Down 0121
at Bottom 0124
Start Up 0124
at Surface
Data off 012455

Data Location
Tape/Diskette I.D.
File Name/Header 04MAY0102

Remarks
UNSTABLE SALINITY ⇒

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ 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	502	6	16		013135	17.068	4.602	31.861	16.909					—	—	31.872	36		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials CD
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
084	MILLER FREEMAN	MF-89-03 FOCI Leg II	500	M31	CTD immediately after deploying M31	M31

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date JD = 124 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
684	59	02	11 N	152	03 92 W	04	MAY	89	17	35	45	40	17	3	7	30	12	8	7	2	193	M31

CTD

Type & SN 91220-B

Press. SN 26072

Temp. SN 710

Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	-0.036	2.937
Temp.	4.142	4.548
~~Cond.~~ Sal	0.017	31.895
~~Other~~ Depth	-0.036	2.910

Times JD/Time

Data on 1723

at Surface 1729

Start Down 1730

at Bottom 1735/178

Start Up 1736

at Surface 1744

Data off ~P

Data Location 191

Tape/Diskette I.D.

File Name/Header 04MAY1718

Remarks Some oil on surface seen at 1738 (few quarter size blobs)

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values ~~Other~~ Dep	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot. Data Therm-P	Sample Bot. Data Avg Tw	Sample Bot. Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	502	6		1736															1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8	502	6	149	1736	1741	149.163	4.471	31.999	149.163					145.89	4.465	31.992	46		8
9																			9
10																			10
11																			11
12																			12

Initials DGK

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
085	MILLER FREEMAN	MF-89-03 FOCI Leg II	503			009

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date JD = 124 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
085	59	03.78	N	151 43.98	W	04	MAY	89	19	13	55	50	1017	3	7	315	08	6	7	1	200	009

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks 9.062/9.084

	on Deck	at Surface
Press.	-0.061	2.730
Temp.	3.752	4.558
~~Cond.~~ Sal	0.000	31.766
~~Other~~ Depth	-0.060	2.705

Times JD/Time

Data on	1903
at Surface	1906
Start Down	1906
at Bottom	1912/178
Start Up	1913
at Surface	
Data off	~P 1912

Data Location

Tape/Diskette I.D.	File Name/Header
	04MAY1856

Remarks CTD #9 ← LOST 95-103 m
Hit bad bag ~ loosmeters, program output conversion errors at bottom

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Temp.	~~Cond.~~ Sal	~~Other~~ Depth	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	503		101	1915	1915	101.652	4.554	32.421	100.681							32.022	49		8
9																			9
10																			10
11																			11
12																			12

Initials JGK
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
086	MILLER FREEMAN	MF-89-03 FOCI Leg II	505			008

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 124 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
086	59	01.09	N	151 47.06	W	04	MAY	89	20	34	06.5	05.5	1737	2	9	5	17	7	6	153	008

CTD

Type & SN 91220-B

Press. SN 26072

Temp. SN 710

Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	-0.009	4.277
Temp.	5.097	4.654
SAL ~~Cond.~~	0.000	31.815
DEPTH ~~Other~~	-0.009	4.237

Times JD/Time

Data on 124/203630

at Surface 2028

Start Down 2029

at Bottom 2034

Start Up 2034

at Surface

Data off 203405

Data Location

Tape/Diskette I.D.

File Name/Header 04MAY2021

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values Other	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot. Data Therm-P	Sample Bot. Data Avg Tw	Sample Bot. Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1			71		203621	72.091	4.642	32.159	71.404							32.175	41		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials CD

✓

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
087	MILLER FREEMAN	FOCI MF-89-03 Leg II				007

Consec. Cast #	Latitude Deg. Min. N or S	Longitude Deg. E or W	Date JD = 124 Day Mo. Yr.	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
087	5857 02 N	15148 02 W	04 MAY 89	2149	070	060	1017	3	8	300	16	5	1	178 (175)	007

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	-0.034	2.912
Temp.	4.252	4.721
SAL ~~Cond.~~	0.000	32.224
DEPTH ~~Other~~	0.000	2.885

Times

	JD/Time
Data on	214202
at Surface	2143
Start Down	2143
at Bottom	2149
Start Up	2149
at Surface	
Data off	214939

Data Location

Tape/Diskette I.D.	File Name/Header
	04MAY2137

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values ~~Cond.~~ SAL	Monitor Values ~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot. Data Therm-P	Sample Bot. Data Avg Tw	Sample Bot. Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503	6	131	215110	215607	132.314	4.620	32.224	131.033					130.04	4.60	32.234	37		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials SD
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
088	MILLER FREEMAN	FOCI MF-89-03 Leg II	509			006

Consec. Cast #	Latitude Deg. Min.	N or S	Longitude Deg.	E or W	Date JD = 124 Day Mo. Yr.	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
088	5852 59	N	15149 93	W	04 MAY 89	2258	09 0	08 0	17	38	29	51	44	61			106	006

CTD

Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	-0.009	3.486
Temp.	5.022	4.761
~~Cond.~~ SAL	0.000	32.243
~~Other~~ DEPTH	0.000	3.453

Times JD/Time

Data on 225152
at Surface 2254
Start Down 2254
at Bottom 2258
Start Up 2259
at Surface
Data off 225846

Data Location

Tape/Diskette I.D.
File Name/Header 04MAY2249

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values ~~Cond.~~ SAL	Monitor Values ~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot. Data Therm-P	Sample Bot. Data Avg Tw	Sample Bot. Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1			67		230013	67.865	4.582	32.342	67.218								43		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 #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
089	MILLER FREEMAN	FOCI MF-89-03 Leg II				005

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 124 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
089	58	49.08	N	151 53.60	W	04	MAY	89	23	37	09.0	08.0	17	3	8	295	14	4	6	1	126	005

CTD

Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	0.005	3.164
Temp.	4.831	4.877
Cond.	0.000	32.216
Other	0.005	3.134

Times JD/Time

Data on	233130
at Surface	2332
Start Down	2333
at Bottom	2337
Start Up	2337
at Surface	
Data off	233721

Data Location

Tape/Diskette I.D.	File Name/Header
	04MAY2328

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values Other	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot. Data Therm-P	Sample Bot. Data Avg Tw	Sample Bot. Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503		109		233816	110.811	4.585	32.455	109.744							32.464	39		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 #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
090	MILLER FREEMAN	FOCI MF-89-03 Leg II				004

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Date Mo.	Date Yr. (JD = 125)	Time GMT Hr.	Time GMT Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
090	58	46.09	N	151	56.12	05	MAY	89	00	12	07.0	05.0	17	1	8	277	15	6	6	1	116	004

CTD

Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	-0.004	2.388
Temp.	4.534	5.112
SAL ~~Cond.~~	0.000	32.116
DEPTH ~~Other~~	-0.004	2.365

Times JD/Time

Data on	125/000652
at Surface	0007
Start Down	0008
at Bottom	0012
Start Up	0012
at Surface	
Data off	001234

Data Location

Tape/Diskette I.D.	File Name/Header
	05MAY0001

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values ~~Cond.~~ SAL	Monitor Values ~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot.Data Therm-P	Sample Bot.Data Avg Tw	Sample Bot.Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1	502	6	80	001332	001827	81.981	4.537	32.315	81.197					82.44	4.51	32.326	40		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 #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
091	MILLER FREEMAN	FOCI MF-89-03 Leg II				003

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 125 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
091	58	42.03	N	151 59.62	W	05	MAY	89	00	59	09.5	07.0	1017.8	2	7	155	7	1			148	003

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	0.001	2.210
Temp.	4.549	5.120
SAL ~~Cond.~~	0.000	32.151
DEPTH ~~Other~~	0.000	2.189

Times JD/Time

Data on	0049.09
at Surface	0053
Start Down	0053
at Bottom	0059
Start Up	0059
at Surface	
Data off	005905

Data Location

Tape/Diskette I.D.	File Name/Header
	05MAY0047

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Temp.	~~Cond.~~ SAL	~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Temp.	Cond.	Sal.	Sample Bot. Data Therm-P	Avg Tw	Sal.	Sal. Bot. #	Other Samp.	Pos.
1	503		120		010022	120.909	4.516	32.357	119.742							32.366	38		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 #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
092	MILLER FREEMAN	MF-89-03 FOCI Leg II	514			002

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date JD = 125 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
092	58	38.45	N	152	04.25	W	05	MAY	89	02	02	10.0	09.0	17	18	325	04	57	1		125	002

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	-0.008	2.080
Temp.	4.887	5.097
~~Cond.~~ SAL	0.000	32.184
~~Other~~ DEPTH	0.000	2.060

Times JD/Time
Data on 125/015535
at Surface 0157
Start Down 0157
at Bottom 0202
Start Up 0202
at Surface
Data off 020213

Data Location
Tape/Diskette I.D.
File Name/Header 05MAY0150

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ 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			75		020350	75.556	4.544	32.325	74.835							32.337	42		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 #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
093	MILLER FREEMAN	MF-89-03 FOCI Leg II	515			001

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 125 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
093	58	34.82	N	152	W	05	MAY	89	02	57	08.0	07.0	16	1	8	330	08	57	1	95	001

CTD
Type & SN 91220-B
Press. SN 26072
Temp. SN 710
Cond. SN 304

Monitor Checks

	on Deck	at Surface
Press.	0.000	2.529
Temp.	4.652	4.549
~~Cond.~~ SAL	0.020	32.241
~~Other~~ DEPTH	0.000	2.505

Times JD/Time
Data on 125/0252
at Surface 0253
Start Down 0254
at Bottom 0257
Start Up 0257
at Surface
Data off 0257+28

Data Location 103 98

Tape/Diskette I.D.	File Name/Header
	05MAY0247

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values ~~Cond.~~ SAL	Monitor Values ~~Other~~ DEPTH	Conv. Mon. Values-CTD Press.	Conv. Mon. Values-CTD Temp.	Conv. Mon. Values-CTD Cond.	Conv. Mon. Values-CTD Sal.	Sample Bot. Data Therm-P	Sample Bot. Data Avg Tw	Sample Bot. Data Sal.	Sal. Bot. #	Other Samp.	Pos.
1			26	030028	030518	26.263	4.539	32.157	26.016					25.65	4.52		47		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials ____
✓ ____