FOC 1

Pg. 1 of ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
1	MILLER FREEMAN	MF90-03 OCSEAP	041			001

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Date Mo.	Date Yr. (JD = 107)	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
01	56	46.38	N	155	29.16	W	17	APR 90	20	18	05.4	05.2	9.4	4	8	020	12	8	6	245	001

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		6.4
Temp.		
Cond.		
Other		

Times JD/Time
Data on ____
at Surface ____
Start Down 20:10
at Bottom 20:18
Start Up ____
at Surface ____
Data off ____

Data Location DUB2:(data_log)
Tape/Diskette I.D. ____
File Name/Header SBE_CTD.SCS;2

Remarks FOC1 CTD after deployment of M9027 & M9026

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		B		20:20	20:26	204.3	4.614	32.885							4.58	32.885	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 WF

✓ ____

FOC I

Pg. 2 of ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
02	MILLER FREEMAN	MF90-03 OCSEAP	53			

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 108 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
02	56	21.36	N	156 54.16	W	18	APR	90	02	23	04.8	04.8	92.46	00	15	209	/	6			126	

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		6.0
Temp.		0.779
Cond.		
Other		31.839

Times JD/Time

Data on ____
at Surface ____
Start Down 0220
at Bottom 0224
Start Up ____
at Surface ____
Data off ____

Data Location DUB2:(data_log)

Tape/Diskette I.D. ____

File Name/Header SBE_CTD.SCS;3

Remarks Startup failed, erroneous data CTD after deployment of M9005

FOC I

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			100		0225 24	10				102.7	2.207		31.899				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
001	MILLER FREEMAN	MF90-03 OCSEAP	148			IA

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 109 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
001	55	03.82	N	168	07.77	W 19	APR	90	20	45	26	25	91	4	8	310	18	8	6	2	1590 IA

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time
Data on ____
at Surface ____
Start Down 109/2007
at Bottom 2046
Start Up ____
at Surface ____
Data off ____

Data Location DUB2:(data_log)
Tape/Diskette I.D. ____
File Name/Header SBE_CTD.SCS;5

Remarks Entire cast was logged on SCS system / Malfunction in Rosette, no Sal. sample - no nutrients NUTS

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	T	B	1454	2046	2051	1453.5	2.328	205201	34.465								X	X	1
2			300		211925	303.3	3.735		33.617									X	2
3			200		212426	204.6	3.310		33.377									X	3
4			150		212656	152.4	2.900		33.262									X	4
5			100		212908	102.1	2.993		33.198									X	5
6			75		213039	75.8	3.143		33.138									X	6
7			50		213241	49.9	3.737		33.050									X	7
8			25		213423	25.6	4.007		32.586									X	8
9			10		213547	10.0	3.867		32.340									X	9
10			3		213716	4.5	3.863		32.339									X	10
11																			11
12																			12

Initials ____
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
02	MILLER FREEMAN	MF90-03 OCSEAP	151			IB

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude Min.	E or W	Date Day	Date Mo.	Date Yr. (JD = 109)	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
002	55	08.88	N	168	02.43	W	19	APR	90	23	06	30.3	30.3	91	4	3	2	0	14	6	2	1428	IB

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time

Data on	
at Surface	2229
Start Down	2233
at Bottom	230631
Start Up	2307
at Surface	234847
Data off	

Data Location DUB2:(data_log)

Tape/Diskette I.D.	File Name/Header
	SBE_CTD.SCS;6

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	T	B	1306	230840	231353	1305.8	2.464		34.428					1377	2.44	34.434	7	138	1
2			300		233558	299.8	3.605		33.650									137	2
3			200		233854	200.1	3.417		33.431									136	3
4			150		234059	149.8	3.113		33.307									135	4
5			100		234302	100.3	2.996		33.237									134	5
6			75		234417	75.6	3.034		33.214									133	6
7			50		234533	49.9	3.346		33.150									132	7
8			25		234651	24.8	3.919		32.902									131	8
9			10		234753	9.8	3.954		32.884									130	9
10			3		234847	5.5	3.953		32.882									129	10
11																			11
12																			12

Initials ____

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
003	MILLER FREEMAN	MF90-03 OCSEAP	156			IC

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	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
003	55	12.43	N	167 55.69	W	20	APR	90	01	21	3.2	3.2	91	4	8	325	17	8	6	2	527	IC

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time

Data on	
at Surface	
Start Down	010733
at Bottom	0121
Start Up	012130
at Surface	013300
Data off	

Data Location DUB2:(data_log)

Tape/Diskette I.D.	File Name/Header
	SBE_CTD.SCS;7

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	0		404		012421	403.6	3.648		33.742							33.742	13		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
004	MILLER FREEMAN	MF90-03 OCSEAP	157			ID

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	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
004	55	15.40	N	167	W	20	APR	90	02	18	32.3	32.3	91	4	8	310	16	8	6	2	336	ID

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time

Data on ____
at Surface 0205
Start Down 020737
at Bottom 021756
Start Up 0218
at Surface 023209
Data off ____

Data Location DUB2:(data_log)

Tape/Diskette I.D. ____

File Name/Header SBE_CTD.SCS;8

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	1		323	323	021836	323.4	3.593		33.594							33.596	18	148	1
2	2		300	300	022015	300.7	3.577		33.577									147	2
3	3		200	200	022308	200.6	3.143		33.334									146	3
4	4		150		022454	150.9	3.383		33.248									145	4
5	5		100		022636	99.7	3.509		32.984									144	5
6	6		75		022737	75.2	3.381		32.770									143	6
7	7		50		022844	50.4	3.439		32.609									142	7
8	8		25		022959	25.0	3.691		32.211									141	8
9	9		10		023116	9.6	3.518		32.059									140	9
10	10		3		023209	7.6	3.512		32.055									139	10
11																			11
12																			12

Initials ____

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
005	MILLER FREEMAN	MF90-03 OCSEAP	164			

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	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
005	55	17.27	N	167 46.44	W	20	APR	90	07	27	4.8	4.8	92	37	33	012	8	6	2	220	IE

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time
Data on
at Surface
Start Down 072052
at Bottom 0727
Start Up 0734
at Surface
Data off

Data Location DUB2:(data_log)
Tape/Diskette I.D.
File Name/Header SBE_CTD.SCS;9

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				181	073416	181.1	3.510		33.430					127	3.51	33.435	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
006	MILLER FREEMAN	MF90-03 OCSEAP	166			IF

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude Min.	E or W	Date Day	Date Mo.	Date Yr.	JD = 110	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
006	55	19.91	N	167	39.67	W	20	APR	90		08	26	3.8	3.9	993	3	8	330	12	8	6	2	155	IF

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		4.6
Temp.		3.602
Cond.		—
~~Other~~ S.W.		32.174

Times JD/Time

Data on	0820
at Surface	0821
Start Down	0822
at Bottom	0827
Start Up	0828
at Surface	0840
Data off	0841

Data Location DUB2:(data_log)

Tape/Diskette I.D. _____

File Name/Header SBE_CTD.SCS;10

Remarks 146 m w/o NuT.

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	1		149.	0827	0827:39					149.3	3.362		33.272			33.266	24	149	1
2	2		100	0830	0830:30					100.8	3.559		32.995					150	2
3	3		75	0832	0832:42					73.3	3.560		32.814					151	3
4	4		50	0834	0835:23					51.4	3.383		32.685					152	4
5	5		25	0837	0837:16					24.8	3.912		32.356					153	5
6	6		10	0838	0838:47					10.6	3.630		32.182					154	6
7	7		3	0840	0840:37					5.1	3.628		32.177					155	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	MF90-03 OCSEAP	168			IG

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude Min.	E or W	Date Day	Date Mo.	Date Yr.	JD = 110	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	23.96	N	167	30.70	W	20	APR	90		09	34	4.5	4.0	93	3	8	320	10	8	6	144	IG

CTD
Type & SN: PMEL SeaBird 91220-A
Press. SN: 25084
Temp. SN: 701
Cond. SN: 303

Monitor Checks

	on Deck	at Surface
Press.		13.7
Temp.		3.593
Cond.		
Other		32.116

Times JD/Time

Data on	090P
at Surface	093D
Start Down	0931
at Bottom	0935
Start Up	0936
at Surface	0940
Data off	0936

Data Location DUB2:(data_log)

Tape/Diskette I.D.: ____

File Name/Header: SBE_CTD.SCS;11

Remarks: 130 m/w/o, used hold button to 100/115 freeze screen to record monitor val.

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			134	0935	0935					134.0	3.701		33.140				20		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10			134	0935	0935 09					134.0	3.701		33.140			33.143	20		10
11																			11
12																			12

Initials ____

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
008	MILLER FREEMAN	MF90-03 OCSEAP	170			IH

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude Min.	E or W	Date Day	Mo.	Yr. (JD = 110)	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
008	55	29.12	N	167	21.70	W	20	APR	90	10	35	3.8	3.2	993	3	8	310	8	8	6	5	141	IH

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		3.2
Temp.		3.429
Cond.		
Other		31.964

Times JD/Time

Data on	1028
at Surface	1030
Start Down	1030
at Bottom	1035
Start Up	1040
at Surface	1050
Data off	1051

Data Location DUB2:(data_log)

Tape/Diskette I.D. _____

File Name/Header SBE_CTD.SCS;12

Remarks 129 m w/o

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	T		132	1035	1039:40					132.7	3.844		33.149	137	3.84	32.505	03	164	1
2	1		100	1042	1042:36					100.2	3.436		32.869		DIDNT use	sal.		163	2
3	2		75	1044	1044:19					74.8	3.299		32.703		sample			162	3
4	3		50	1046	1046:07					49.7	3.016		32.516					161	4
5	4		25	1048	1047:50					25.2	3.429		31.969					159	5
6	5		10	1049	1049:12					9.7	3.447		31.963					160	6
7	6		3	1050	1050:16					4.7	3.445		31.965					156	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	MF90-03 OCSEAP	173			II

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude Min.	E or W	Date JD = 110 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
009	55	35.06	N	167	59.59	W	20	APR	90	11	59	3.8	3.6	94	3	8	330	99	86	5	141	II

CTD Type & SN: PMEL SeaBird 91220-A
Press. SN: 25084
Temp. SN: 701
Cond. SN: 303

Monitor Checks	on Deck	at Surface
Press.		5.0
Temp.		3.368
Cond.		
Other		31.838

Times	JD/Time
Data on	1153
at Surface	1154
Start Down	1155
at Bottom	1159
Start Up	1201
at Surface	
Data off	1201

Data Location: DUB2:(data_log)
Tape/Diskette I.D.:
File Name/Header: SBE_CTD.SCS;13

Remarks: 124m w/o

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																	21		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8	7		128	1159	1159 59					127.7	4.004		33.096			33.099	21		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	MF90-03 OCSEAP	188			BP2

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 110 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
010	56	09.71	N	168 52.61	W	20	APR	90	22	01	20	20	00	4	8	320	14	8	6	2	278	BP2

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time
Data on ____
at Surface 2149
Start Down 215338
at Bottom 220204
Start Up 220247
at Surface ____
Data off ____

Data Location DUB2:(data_log)
Tape/Diskette I.D. ____
File Name/Header SBE_CTD.SCS;14

Remarks CTD after deployment of mooring BP2A'

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				220233		270.4	3.642		33.507										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
011	MILLER FREEMAN	MF90-03 OCSEAP	193			Va

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	55	54	05 N	169	21 25 W	21	APR	90	01	36	18	10	00	48	3	10	14	8	6 2	*	VA

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time

Data on	
at Surface	0055
Start Down	005636
at Bottom	013625
Start Up	014130
at Surface	
Data off	

Data Location DUB2:(data_log)

Tape/Diskette I.D.	File Name/Header
	SBE_CTD.SCS;15

Remarks* bottom depth beyond sounder; wire out 1640m

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		B	1489		014146	1488.9	2.286		34.478					1466	2.30	34.484	5	172	1
2			300		020732	301.2	3.440		33.451									171	2
3			200		021057	202.3	3.242		33.290									170	3
4			150		021309	151.2	3.471		33.224									169	4
5			100		021458	101.3	3.538		33.192									168	5
6			75		021608	75.6	3.293		33.027									167	6
7			50		021723	50.4	3.141		32.794									166	7
8			25		021841	26.0	3.064		32.678									165	8
9			10		021950	10.1	3.173		32.433									158	9
10			3		022040	6.0	3.177		32.433									157	10
11																			11
12																			12

Initials ____

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
012	MILLER FREEMAN	MF90-03 OCSEAP	197			VB

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
012	55	58.82	N	169	33 W	21	APR	90	03	45	20.1	10.0	01	4	8	290	16	8	6	999	VB

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time

Data on ____
at Surface 0314
Start Down 031852
at Bottom 034550
Start Up 034630
at Surface ____
Data off ____

Data Location DUB2:(data_log)

Tape/Diskette I.D. ____

File Name/Header SBE_CTD.SCS;16

Remarks held off @ 715 m for a few minutes; lost bottom depth.

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				950	034616	950.1	2.861		34.289							34.296	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
013	MILLER FREEMAN	MF90-03 OCSEAP	199			IC

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
013	56	05.22	N	169 14.67	W	21	APR	90	05	24	10.0	0.0	01	4	8	300	18	7	6	1	823	IC

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time

Data on ____
at Surface 0500
Start Down 050452
at Bottom 052523
Start Up 052600
at Surface 054710
Data off ____

Data Location DUB2:(data_log)

Tape/Diskette I.D. ____

File Name/Header SBE_CTD.SCS;20

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			809		052540	808.8	3.123		34.178							34.181	33	182	1
2			300		053629	299.7	3.609		33.491									181	2
3			200		053858	201.1	3.542		33.286									180	3
4			150		054041	149.8	3.568		33.196									179	4
5			100		054208	101.8	3.352		32.985									178	5
6			75		054314	74.7	3.219		32.862									177	6
7			50		054415	50.4	3.125		32.777									176	7
8			25		054519	25.5	3.232		32.559									175	8
9			10		054640	9.9	3.045		32.454									174	9
10			3		054712	5.2	3.048		32.453									173	10
11																			11
12																			12

Initials ____

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
014	MILLER FREEMAN	MF90-03 OCSEAP	201			BP3

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude	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
014	56	07.20	N	169	15.97	W	21	APR	90	06	46	01	00	02	4	8	303	18	7	6	1	1006	BP3

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time

Data on	
at Surface	0619
Start Down	062250
at Bottom	064611
Start Up	065320
at Surface	071640
Data off	

Data Location DUB2:(data_log)

Tape/Diskette I.D.	File Name/Header
	SBE_CTD.SCS;21

Remarks CTD after deployment of mooring BP3

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		B	926		065309	926.1	3.007		34.240					915	3.01	34.245	16	192	1
2			300		070613	300.3	3.604		33.436									191	2
3			200		070858	200.0	3.509		33.255									190	3
4			150		071030	150.6	3.442		33.146									189	4
5			100		071155	101.0	3.229		32.995									188	5
6			75		071300	74.9	3.165		32.864									187	6
7			50		071405	49.8	3.052		32.763									186	7
8			25		071514	24.7	3.128		32.550									185	8
9			10		071615	10.4	3.140		32.528									184	9
10			3		071657	6.2	3.138		32.527									183	10
11																			11
12																			12

Initials ____

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
015	MILLER FREEMAN	MF90-03 OCSEAP	203			VD

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude Min.	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
015	56	11.76	N	169	13.84	W	21	APR	90	08	21	0.0	-1.0	04	4	8	330	22	86	2	597	VD

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		4.5
Temp.		2.853
Cond.		
Other		32.234

Times	JD/Time
Data on	0803
at Surface	0804
Start Down	0804
at Bottom	0821
Start Up	0822
at Surface	
Data off	0823

Data Location DUB2:(data_log)

Tape/Diskette I.D.	File Name/Header
	SBE_CTD.SCS;22

Remarks 593m w/o

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																			1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11	10		582	0821	0821:44					582.2	3.463		33.952				35		11
12																			12

Initials ____

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
016	MILLER FREEMAN	MF90-03 OCSEAP	205			Ve

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 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
016	56	16.83	N	169 10.66	W	21	APR	90	09	27	-10.1	-15.0	4	4	8	310	18	8	6	148	Ve

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks	on Deck	at Surface
Press.		2.5
Temp.		2.769
Cond.		
Other		32.192

Times	JD/Time
Data on	0921
at Surface	0922
Start Down	0922
at Bottom	0927
Start Up	0929
at Surface	
Data off	

Data Location DUB2:(data_log)

Tape/Diskette I.D.	File Name/Header
	SBE_CTD.SCS;23

Remarks Temp. very erratic ~80-100 meters
Same on upcast
141 m w/o

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																	06		1
2	1		BOT	0927	0928:12					138.2	3.517		33.100			33.104	06	705	2
3	2		100	0930	0930:41					101.0	3.559		33.089					706	3
4	3		75	0932	0932:48					75.8	3.140		32.864					707	4
5	4		50	0934	0934:39					50.4	2.951		32.672					708	5
6	5		25	0936	0936:30					25.3	2.893		32.210					709	6
7	6		10	0937	0937:57					10.4	2.894		32.205					710	7
8	7		3	0939	0939:37					4.8	2.888		32.203					711	8
9																			9
10																			10
11																			11
12																			12

Initials ____
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
017	MILLER FREEMAN	MF90-03 OCSEAP	207			V f

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude Min.	E or W	Date JD = 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
017	56	23.89	N	169	08.84	W	21	APR	90	10	39	-1.3	-1.9	03	4	8	320	20	8	6	2	117	V f

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		3.0
Temp.		2.776
Cond.		
Other		32.069

Times JD/Time

Data on	1033
at Surface	1035
Start Down	1035
at Bottom	1039
Start Up	1045
at Surface	1048
Data off	1045

Data Location DUB2:(data_log)

Tape/Diskette I.D.

File Name/Header: SBE_CTD.SCS;24

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	T	B	107	1039	1044:28					107.0	3.924		33.017	90	3.93	33.070	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 ____

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
018	MILLER FREEMAN	MF90-03 OCSEAP	211			VI h

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	JD = 111 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
018	56	26.74	N	169 28.76	W	21	APR	90	12	15	-1.6	-0.4	04	4	8	310	15	8	6	2	104	VI h

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		2.8
Temp.		2.319
Cond.		
Other		32.164

Times JD/Time

Data on	1210
at Surface	1211
Start Down	1212
at Bottom	1215
Start Up	1216
at Surface	1224
Data off	1224

Data Location DUB2:(data_log)

Tape/Diskette I.D.

File Name/Header: SBE_CTD.SCS;25

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																	02		1
2	1		BOT 87	1215	1216:02					87.6	3.031		32.671			32.673	02	712	2
3	2		75	1217	1217:58					75.5	3.028		32.668					713	3
4	3		50	1219	1219:33					51.1	2.722		32.531					714	4
5	4		25	1221	1221:16					25.1	2.307		32.158					715	5
6	5		10	1222	1222:30					10.1	2.305		32.156					716	6
7	6		3	1223	1223:44					3.2	2.300		32.156					717	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
019	MILLER FREEMAN	MF90-03 OCSEAP	213			VI 9

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	JD = 111 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
019	56	22.13	N	169 31.97	W	21	APR	90	13	10	00.0	-10.0	04	4	8	320	21	8	6	2	135	VI 9

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		3.5
Temp.		2.408
Cond.		
Other		32.153

Times JD/Time
Data on 1307
at Surface 1305
Start Down 1306
at Bottom 1310
Start Up 1311
at Surface
Data off 1312

Data Location DUB2:(data_log)
Tape/Diskette I.D.
File Name/Header SBE_CTD.SCS;26

Remarks 120m W/O

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																	10		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8	7		123	1310	1310:56					122.7	3.749		32.945			32.945	10		8
9																			9
10																			10
11																			11
12																			12

Initials ____
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
020	MILLER FREEMAN	MF90-03 OCSEAP	216			BP2

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude Min.	E or W	Date Day	JD = 111 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
020	56	13.67	N	169	41.64	W	21	APR	90	14	39	000	-10	05	4	8	305	17	8	6	7	291 (280)	BP2

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		4.2
Temp.		2.668
Cond.		
Other		32.209

Times	JD/Time
Data on	1427
at Surface	1429
Start Down	1430
at Bottom	1439
Start Up	1445
at Surface	1501
Data off	1503

Data Location DUB2:(data_log)

Tape/Diskette I.D. ____

File Name/Header SBE_CTD.SCS;27

Remarks CTD on Mooring BP2

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	T		BOT	1439	1444:15					263.5	3.599		33.487	255	3.58	33.472	14	718	1
2	1		200	1447	1447:36					201.9	3.474		33.091					719	2
3	2		150	1450	1450:59					151.0	3.551		33.057					720	3
4	3		100	1453	1453:46					101.3	3.740		32.906					721	4
5	4		75	1455	1455:40					75.1	3.078		32.705					722	5
6	5		50	1457	1457:22					50.0	2.665		32.487					723	6
7	6		25	1459	1459:10					25.1	2.600		32.218					724	7
8	7		10	1500	1500:32					9.5	2.599		32.219					725	8
9	8		3	1501	1501:51					4.7	2.600		32.218					726	9
10	9		3																10
11																			11
12																			12

Initials ____

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
001	MILLER FREEMAN	MF90-03 OCSEAP	241			BP1

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
21	56	15.92	N	169	47.95	W	21	APR 90	19	57	-06	-15	1006.5	4	3	10	16	8	6	139	BP1

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time
Data on
at Surface
Start Down 19:53:40
at Bottom 19:58:07
Start Up
at Surface
Data off

Data Location DUB2:(data_log)
Tape/Diskette I.D.
File Name/Header SBE_CTD.SCS;28

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					1958:28	127.4	3.521		33.061							33.064	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 WF
✓

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
022	MILLER FREEMAN	MF90-03 OCSEAP	243			VIF

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
022	56	14.68	N	169	33.06	W	21	APR	90	21	30	-1.5	-1.7	07	4	6	3	10	20	8	-7	324	VIF

CTD PMEL SeaBird

Type & SN 91220-A

Press. SN 25084

Temp. SN 701

Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time

Data on ____

at Surface 2111

Start Down 212157

at Bottom 213111

Start Up 213130

at Surface 213845

Data off ____

Data Location DUB2:(data_log)

Tape/Diskette I.D. ____

File Name/Header SBE_CTD.SCS;29

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			312		213125					312.2	3.638		33.697			33.700	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
023	MILLER FREEMAN	MF90-03 OCSEAP	245			VI E

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
023	56	11.89	N	169 34.64	W	21	APR	90	22	19	-1.2	-1.3	07	4	6	305	18	8	-	7	413	VI E

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time
Data on ____
at Surface 2204
Start Down 220720
at Bottom 221942
Start Up 221955
at Surface 224255
Data off ____

Data Location DUB2:(data_log)
Tape/Diskette I.D. ____
File Name/Header SBE_CTD.SCS;30

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			389		222553					388.5	3.586		33.798	384	3.56	33.800	32	737	1
2			300		222911					299.1	3.677		33.561					736	2
3			200		223246					200.4	3.576		33.288					735	3
4			150		223455					149.3	3.422		33.145					734	4
5			100		223650					99.8	3.063		32.888					733	5
6			75		223810					75.5	2.928		32.704					732	6
7			50		223928					51.1	2.802		32.563					731	7
8			25		224051					24.8	2.678		32.165					730	8
9			10		224200					10.4	2.677		32.166					729	9
10			3		224301					7.1	2.679		32.165					728	10
11																			11
12																			12

Initials ____
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
024	MILLER FREEMAN	MF90-03 OCSEAP	247			VI D

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
024	56	07.01	N	169 36.66	W	21	APR	90	23	30	-10	-10	07	4	6	315	22	8	-7	192	VI D

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time

Data on ____
at Surface 2321
Start Down 232408
at Bottom 233036
Start Up 2331
at Surface ____
Data off ____

Data Location DUB2:(data_log)

Tape/Diskette I.D. ____

File Name/Header SBE_CTD.SCS;31

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				179	233135					178.5	3.514		33.235			33.237	35		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials ____

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
025	MILLER FREEMAN	MF90-03 OCSEAP	249			VI C

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Mo.	Yr. (JD = 112)	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
025	56	00.80	N	169 38.57	W	22	APR	90	00	29	-05.0	-05.0	1007	4	5	315	21	8	7	261	VI C

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time
Data on
at Surface 0019
Start Down 002145
at Bottom 003008
Start Up 003034
at Surface 004409
Data off

Data Location DUB2:(data_log)
Tape/Diskette I.D.
File Name/Header SBE_CTD.SCS;32

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					003136	227.0				227.0	3.591		33.454			33.456 •	30	947	1
2			200		003329					200.9	3.561		33.326					946	2
3			150		003553					149.2	3.491		33.212					945	3
4			100		003756					100.8	3.388		33.027					944	4
5			75		003919					76.4	3.369		32.932					943	5
6			50		004045					47.5	3.031		32.688					942	6
7			25		004201					22.8	2.700		32.396					941	7
8			10		004310					10.0	2.639		32.351					940	8
9			3		004422					6.7	2.638		32.352					938	9
10																			10
11																			11
12																			12

Initials ____
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
026	MILLER FREEMAN	MF90-03 OCSEAP	253			VI B

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
026	55	55.50	N	169	41.58	W	22	APR	90	02	05	01.1	00.9	07	44	31	25	9	–	7	1346	VI B

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time
Data on
at Surface 0130
Start Down 013157
at Bottom 020510
Start Up 020530
at Surface 0236
Data off

Data Location DUB2:(data_log)
Tape/Diskette I.D.
File Name/Header SBE_CTD.SCS;33

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		B		1293	021209					1292.9	2.420		34.441	1271	2.43	34.447	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 ____
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
027	MILLER FREEMAN	MF90-03 OCSEAP	255			VI A

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude Min.	E or W	Date Day	Date Mo.	Date Yr. (JD = 112)	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
027	55	47.22	N	169	46.39	W	22	APR	90	04	13	01	-02	08	4	4	315	309	-	4	2121	VI A

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time

Data on	
at Surface	0336
Start Down	033833
at Bottom	041336
Start Up	0414
at Surface	044730
Data off	

Data Location DUB2:(data_log)

Tape/Diskette I.D.	File Name/Header
	SBE_CTD.SCS;34

Remarks SCS stopped logging to tape; new logger, tape loaded during cast.

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			1504		041405					1504.1	2.297		34.479			34.483	23	757	1
2			300		043742					300.7	3.700		33.516					756	2
3			200		044010					199.9	3.376		33.292					755	3
4			150		044133					148.7	3.482		33.165					754	4
5			100		044259					101.6	3.547		33.042					753	5
6			75		044351					75.6	3.522		32.911					752	6
7			50		044511					48.6	3.318		32.680					751	7
8			25		044608					26.3	2.929		32.465					750	8
9			10		044701					12.0	2.931		32.463					749	9
10			3		044744					6.6	2.934		32.463					748	10
11																			11
12																			12

Initials ____

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
028	MILLER FREEMAN	MF90-03 OCSEAP	288			BS2

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
028	56	41.11	N	173 15.17	W	22	APR	90	2003		4.4	2.8	1949	4	8	310	16	6	7	1	271	BS2

CTD PMEL SeaBird	
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times	JD/Time
Data on	
at Surface	1952
Start Down	195554
at Bottom	200413
Start Up	200430
at Surface	20
Data off	

Data Location DUB2:[26,8](data_log)

Tape/Diskette I.D.	File Name/Header
	SBE_CTD.SCS;36

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			262		200436					261.6	3.621		33.504			33.508	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 ____

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
D29	MILLER FREEMAN	MF90-03 OCSEAP	289			BS3

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
029	56	40.03	N	173 17.34	W	22	APR	90	21	00	4.0	2.3	1019	4	8	310	14	6	7	1	930	BS3

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time
Data on
at Surface 2033
Start Down 203639
at Bottom 210048
Start Up 210110
at Surface 2131
Data off

Data Location DUB2:(data_log)
Tape/Diskette I.D.
File Name/Header SBE_CTD.SCS;37

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values Other	(966) Conv. Mon. Values-CTD Press.	Temp.	Cond.	Sal.	Sample Bot. Data Therm-P	Avg Tw	Sal.	Sal. Bot. #	Other Samp.	Pos.
1			944		210725					943.5	2.977		34.285	926	2.98	34.289	25	767	1
2			300		212033					299.8	3.640		33.592					766	2
3			200		212303					198.1	3.405		33.403					765	3
4			150		212438					149.8	2.587		33.244					764	4
5			100		212611					100.6	3.020		33.228					763	5
6			75		212717					74.9	3.300		33.132					762	6
7			50		212823					50.4	3.137		32.937					761	7
8			25		212925					24.7	2.871		32.793					760	8
9			10		213013					9.8	2.893		32.793					759	9
10			3		213054					5.6	2.900		32.794					758	10
11																			11
12																			12

Initials ____
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
30	MILLER FREEMAN	MF90-03 OCSEAP	326			XIV a

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	JD = 113 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
030	58	08	18 N	175	11 39 W	23	APR	90	11	11	25	19	23	4	8	320	16	8	-	2	2280 (2190)	XIVa

CTD PMEL SeaBird

Type & SN 91220-A

Press. SN 25084

Temp. SN 701

Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		5.0
Temp.		2.626
Cond.		
Other		32.971

Times JD/Time

Data on 1033

at Surface 1035

Start Down 1035

at Bottom 1111

Start Up 1112

at Surface –

Data off –

Data Location DUB2:(data_log)

Tape/Diskette I.D.

File Name/Header SBE_CTD.SCS;38

Remarks Bottom 2200 m, Im bored. w/o 1524

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			Bot	1111 1502	1111 47					1502.1	2.316		34.478						1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11	10		1502	1111	1111 47					1502.1	2.316		34.478			34.483	21		11
12																			12

Initials ____

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
031	MILLER FREEMAN	MF90-03 OCSEAP	330			XIV b

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	JD = 113 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
031	58	14.11	N	175 11.33	W	23	APR	90	12	56	23	20	23	3	8	285	13	9	-	2	1125	XIV b

CTD
Type & SN: PMEL SeaBird 91220-A
Press. SN: 25084
Temp. SN: 701
Cond. SN: 303

Monitor Checks

	on Deck	at Surface
Press.		5.2
Temp.		2.483
Cond.		
Other		33.087

Times JD/Time
Data on: 1226
at Surface: 1227
Start Down: 1228
at Bottom: 1256
Start Up: 1258
at Surface: 1332
Data off: 1333

Data Location DUB2:(data_log)
Tape/Diskette I.D.:
File Name/Header: SBE_CTD.SCS;39

Remarks: new Niskin Bottles leaked around bottom cap when air vent opened

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																			1
2	1		Bot. 1149	1256	1257:28					1148.7	2.696		34.372			34.379	13		2
3	2		300	1316	1316:12					300.5	3.730		33.555					768	3
4	3		200	1319	1319:40					200.0	2.339		33.187					727	4
5	4		150	1322	1322:04					149.7	2.399		33.140					641	5
6	5		100	1324	1324:27					99.6	2.297		33.095					642	6
7	6		75	1326	1326:03					76.1	2.280		33.044					643	7
8	7		50	1327	1327:39					50.1	2.254		33.013					644	8
9	8		25	1329	1329:18					23.9	2.277		33.006					645	9
10	9		10	1330	1330:34					10.9	2.275		33.008					646	10
11	10		3	1332	1331:49					6.0	2.275		33.007					647	11
12																			12

Initials ____
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
032	MILLER FREEMAN	MF90-03 OCSEAP	334			XIV C

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	JD = 113 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
032	58	20.20	N	175 12.97	W	23	Apr	90	14	33	20.1	19.23	38	3	30	139	-	2	388	XIVC	

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		5.0
Temp.		2.684
Cond.		
Other		32.948

Times JD/Time

Data on	~~1416~~ 1419
at Surface	1420
Start Down	1420
at Bottom	1433
Start Up	1439
at Surface	-
Data off	-

Data Location DUB2:(data_log)

Tape/Diskette I.D. ____

File Name/Header SBE_CTD.SCS; 40

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	T	P	375	1433	1438 15					3755	3.671		33.650	366	3.68	33.648	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
033	MILLER FREEMAN	MF90-03 OCSEAP	338			XIV d

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Mo.	Yr.	JD = 113	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
033	58	26.29	N	175 12.76	W	23	Apr	90		16	24	22.2	20.2	1018.5	1	29	5	12	9	7	2	230	XIVd

CTD PMEL SeaBird

Type & SN 91220-A

Press. SN 25084

Temp. SN 701

Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		5.0
Temp.		2.596
Cond.		
Other		32.974

Times JD/Time

Data on 1615

at Surface 1617

Start Down 1617

at Bottom 1624

Start Up 1625

at Surface =

Data off

Data Location DUB2:(data_log)

Tape/Diskette I.D.

File Name/Header SBE_CTD.SCS;41

Remarks ERROR LIGHT WHEN SEA-BIRD AT 10 m - BROUGHT CTD ABOARD; STILL HAD ERROR LIGHT - 1545. Fault due to ground on leads w/o zoom to deck unit - fixed - 1605

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																			1
2	1		200	1624	1624:14					201.1	2.274		33.187			33.186	24	648	2
3	2		150	1626	1626:54					150.2	2.183		33.125					649	3
4	3		100	1629	1629:17					100.8	2.442		33.124					650	4
5	4		75	1630	1630:53					76.0	2.619		33.091					651	5
6	5		50	1632	1632:25					50.5	2.513		32.999					652	6
7	6		25	1634	1633:58					25.5	2.575		32.975					653	7
8	7		10	1635	1635:24					11.1	2.580		32.971					654	8
9	8		3	1636	1636:22					5.7	2.573		32.976					655	9
10																			10
11																			11
12																			12

Initials ____

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
034	MILLER FREEMAN	MF90-03 OCSEAP	340			XIV e

Consec. Cast #	Latitude Deg. Min.	N or S	Longitude Deg.	E or W	Date Day Mo. Yr. (JD = 113)	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
034	58 33 46	N	125 14 42	W	23 APR 90	1742	15	15	25	1	8	350	09	9	7	2	472	XIVe

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		4.5
Temp.		0.071
Cond.		
Other		33.027

Times JD/Time
Data on 1729
at Surface 1730
Start Down 1730
at Bottom 1742
Start Up 1744
at Surface 1753
Data off 1745

Data Location DUB2:(data_log)
Tape/Diskette I.D.
File Name/Header SBE_CTD.SCS;42

Remarks 449m w.o.

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	9		DOT 452	1742	1743 29					451.5	3.637		33.817			33.820	11		10
11																			11
12																			12

Initials

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
035	MILLER FREEMAN	MF90-03 OCSEAP	343			B23

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	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
035	58	33.01	N	175	02.17	W	23	APR	90	19	08	01.2	01.2	25	1	8	300	10	9	7	994	B23

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time
Data on 1835
at Surface 1838
Start Down 1838
at Bottom 1909
Start Up 1915
at Surface
Data off

Data Location DUB2:(data_log)
Tape/Diskette I.D.
File Name/Header SBE_CTD.SCS;43

Remarks Pause @ 240 m due to false bottom reading

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	T		Bot 976	1909	1914:12					975.9	2.833		34.329	955	2.84	34.334	03	656	1
2	1		300	1929	1929:14					301.3	3.619		33.502					657	2
3	2		200	1932	1932:22					201.2	2.463		33.199					658	3
4	3		150	1934	1934:36					151.1	2.029		33.111					659	4
5	4		100	1936	1936:31					99.4	2.025		33.100					660	5
6	5		75	1938	1937:55					75.8	2.142		33.096					661	6
7	6		50	1939	1939:13					50.4	2.392		33.098					662	7
8	7		25	1940	1940:38					25.8	2.185		33.025					663	8
9	8		10	1941	1941:44					10.9	2.184		33.028					664	9
10	9		3	1942	1942:35					6.2	2.191		33.024					665	10
11																			11
12																			12

Initials ____
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
036	MILLER FREEMAN	MF90-03 OCSEAP	346			B71

✓ 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
036	58	40.52	N	175 09.14	W	23	APR	90	20	49	18.1	18.1	27	3	6	300	048	7	2	150	B71

CTD Type & SN: PMEL SeaBird 91220-A
Press. SN: 25084
Temp. SN: 701
Cond. SN: 303

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time

Data on: ____
at Surface: 2043
Start Down: 204530
at Bottom: 205012
Start Up: 205030
at Surface: 2054
Data off: ____

Data Location DUB2:(data_log)

Tape/Diskette I.D.: ____
File Name/Header: SBE_CTD.SCS;44

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			142		205023					141.6	2.031		33.115			33.117	05		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials ____
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
037	MILLER FREEMAN	MF90-03 OCSEAP	319			BZ2

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
037	58	38	N	175	W	23	APR	90	22	45	35	29	27	3	6	280	04	8	7	2	268	BZ2

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time

Data on ____
at Surface 2235
Start Down 223745
at Bottom 224604
Start Up 2246
at Surface 2250
Data off ____

Data Location DUB2:(data_log)

Tape/Diskette I.D. ____
File Name/Header SBE_CTD.SCS;45

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			259		224616					259.2	3.195		33.408			33.399	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 ____
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
038	MILLER FREEMAN	MF90-03 OCSEAP	350			XIV F

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	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
038	58	42.31	N	175 15.19	W	23	APR	90	23	38	20.1	19.2	736.2	6	0	0	4	8	7	212	XIVF

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time

Data on
at Surface 2330
Start Down 233244
at Bottom 233910
Start Up 2340
at Surface
Data off

Data Location DUB2:(data_log)

Tape/Diskette I.D.

File Name/Header SBE_CTD.SCS;46

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				195	233934					194.9	2.249		33.181			33.184 •	14	765	1
2				150	234132					149.6	2.045		33.130					764	2
3				100	234323					99.4	1.896		33.075					763	3
4				75	234436					75.0	1.872		33.055					762	4
5				50	234549					49.5	1.845		33.049					761	5
6				25	234710					25.0	1.756		33.030					760	6
7				10	234819					9.5	1.166		32.846					759	7
8				3	234928					4.0	0.991		32.774					758	8
9																			9
10																			10
11																			11
12																			12

Initials

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
039	MILLER FREEMAN	MF90-03 OCSEAP	352			XIVG

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude Min.	E or W	Date Day	Mo.	Yr. (JD = 114)	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
039	58	46.52	N	175 15.73		W	24	APR	90	00	29	15	15	271	3	2	65	06	8	7	4	144	XIVG

CTD PMEL SeaBird

Type & SN 91220-A

Press. SN 25084

Temp. SN 701

Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time

Data on ____

at Surface 0023

Start Down 002524

at Bottom 002940

Start Up 0030

at Surface 0033

Data off ____

Data Location DUB2:(data_log)

Tape/Diskette I.D. ____

File Name/Header SBE_CTD.SCS;47

Remarks original location aborted due to ice

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			135		002952					135.2	1.716		33.075			33.081	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
040	MILLER FREEMAN	MF90-03 OCSEAP	358			XVE

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude Min.	E or W	Date Day	Date Mo.	Date Yr. (JD = 114)	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
040	58	38.34	N	175	33.56	W	24	APR	90	02	34	28	27	27	3	8	265	8	87	3/4	141	XVE

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time
Data on
at Surface 0228
Start Down 022952
at Bottom 023432
Start Up 024050
at Surface 024708
Data off

Data Location DUB2:(data_log)
Tape/Diskette I.D.
File Name/Header SBE_CTD.SCS;48

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		B	125	023520	024032					124.6	1.984		33.115	120	1.97	33.118	30	682	1
2			100		024159					100.1	1.910		33.086					681	2
3			75		024314					75.2	1.882		33.078					680	3
4			50		024427					50.2	1.861		33.070					679	4
5			25		024538					24.3	1.615		32.953					678	5
6			10		024629					10.4	1.635		32.951					677	6
7			3		024718					3.8	1.634		32.951					676	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	MF90-03 OCSEAP	361			XV D

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
041	58	27	N	175	W	24	APR	90	04	12	42	38	27	1	8	273	14	9	7	2	207	XV D

CTD Type & SN: PMEL SeaBird 91220-A
Press. SN: 25084
Temp. SN: 701
Cond. SN: 303

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time

Data on ____
at Surface 0404
Start Down 040603
at Bottom 041228
Start Up 0413
at Surface 0416
Data off ____

Data Location DUB2:(data_log)

Tape/Diskette I.D. ____
File Name/Header SBE_CTD.SCS-49

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			198		041241					197.6	2.361		33.187			33.192	35		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials ____
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
042	MILLER FREEMAN	MF90-03 OCSEAP	364			XVC

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	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
042	58	20.99	N	175	39.53	W	24	APR	90	0543		30.29		27.18		27	014	9	7	2	1501	XVC

CTD Type & SN: PMEL SeaBird 91220-A
Press. SN: 25084
Temp. SN: 701
Cond. SN: 303

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time

Data on: ____
at Surface: 0506
Start Down: 050802
at Bottom: 054311
Start Up: 054408
at Surface: 061944
Data off: ____

Data Location DUB2:(data_log)

Tape/Diskette I.D.: ____
File Name/Header: SBE_CTD.SCS;50

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			1491		054346					1491.3	2.358		34.466			34.471	09	692	1
2			300		060911					299.7	3.781		33.590					691	2
3			200		061153					201.7	2.944		33.297					690	3
4			150		061330					150.8	3.101		33.218					689	4
5			100		061507					99.2	2.647		33.062					688	5
6			75		061605					75.1	2.535		33.014					687	6
7			50		061703					49.4	2.472		32.954					686	7
8			25		061802					22.5	2.475		32.955					685	8
9			10		061919					10.4	2.501		32.951					684	9
10			3		061956					6.2	2.497		32.956					683	10
11																			11
12																			12

Initials ____
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
043	MILLER FREEMAN	MF90-03 OCSEAP	367			XV B

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	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
043	58	13.35	N	175 39.40	W	24	APR	90	0752		23	25	29	3	6	310	12	8	5	1175	XV B

CTD Type & SN: PMEL SeaBird 91220-A
Press. SN: 25084
Temp. SN: 701
Cond. SN: 303

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time

Data on: ____
at Surface: 0718
Start Down: 072508
at Bottom: 0752
Start Up: 0758
at Surface: —
Data off: 0758

Data Location DUB2:(data_log)

Tape/Diskette I.D.: ____
File Name/Header: SBE_CTD.SCS;51

Remarks: Nisken Bottle Bottom not reset, Salinity Sample questionable

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	T	B	BOT 1144	0752	7:57 23					1143.7	2.647	34.389	34.389	1124	2.65	34.389	02		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
044	MILLER FREEMAN	MF90-03 OCSEAP	370			XVA

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude Min.	E or W	Date Day	Date Mo.	Date Yr.	JD = 114	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
044	58	07.29	N	175	43.67	W	24	APR	90		09	54	19.20		30	3	6	300	12	8	-	2	1740	XVA

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		4.4
Temp.		2.755
Cond.		
Other		32.799

Times JD/Time

Data on	0914
at Surface	0917
Start Down	0918
at Bottom	0954
Start Up	0956
at Surface	1035
Data off	1036

Data Location DUB2:(data_log)

Tape/Diskette I.D.	File Name/Header
	SBE_CTD.SCS;52

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																	33		1
2	1		Bot	0954	0954:56					1502	2.307		34.476			34.485	33	701	2
3	2		300	10:20	1019 58					300.7	3.725		33.705					695	3
4	3		200	1024	1023:54					200.6	3.699		33.526					702	4
5	4		150	1026	1026:06					149.8	2.718		33.288					698	5
6	5		100	1028	1028:28					100.2	2.313		33.203					696	6
7	6		75	1030	1029:56					75.4	2.376		33.198					700	7
8	7		50	1031	1031:28					50.9	2.680		33.198					699	8
9	8		25	1033	1033:04					24.5	2.648		33.142					697	9
10	9		10	1034	1034:18					9.4	2.714		33.023					694	10
11	10		3	1035	1035:28					5.7	2.715		33.021					693	11
12																			12

Initials ____

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
045	MILLER FREEMAN	MF90-03 OCSEAP	377			XIIIa

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	JD = 114 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
045	58	05.23	N	175 05.00	W	24	APR	90	13	22	2.5	2.5	29	3	5	280	12	9	-	5	1931	XIIIa

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		3.9
Temp.		2.717
Cond.		
Other		32.963

Times JD/Time

Data on	1244
at Surface	1245
Start Down	1246
at Bottom	1322
Start Up	1323
at Surface	1355
Data off	1323

Data Location DUB2:(data_log)

Tape/Diskette I.D.	File Name/Header
	SBE_CTD.SCS;53

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																	28		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11	10		BOT/ 1500	1322	1322:14					1500.6	2.318		34.473			34.478	28		11
12																			12

Initials ____
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
046	MILLER FREEMAN	MF90-03 OCSEAP	380			XUL b

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude Min.	E or W	Date Day	Mo.	Yr.	JD = 114	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
046	58	08.10	N	174	57.68	W	24	APR	90		15	05	1.9	1.9	30	3	6	315	15	9	-	2	1536	X111b

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		4.0
Temp.		2.388
Cond.		
Other		32.998

Times JD/Time

Data on	1425
at Surface	1428
Start Down	1429
at Bottom	1505
Start Up	1511
at Surface	1551
Data off	1552

Data Location DUB2:(data_log)

Tape/Diskette I.D.	File Name/Header
	SBE_CTD.SCS;54

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	T	B	B-T	1505	1510:24					1499.4	2.316		34.472	1478	2.29	34.481	19	703	1
2	1		300	1536	1536:42					301.4	3.624		33.511					704	2
3	2		200	1540	1540:16					200.2	2.937		33.269					667	3
4	3		150	1542	1542:18					149.1	2.305		33.123					666	4
5	4		100	1544	1544:27					99.7	2.242		33.057					898	5
6	5		75	1545	1545:48					75.6	2.033		33.025					897	6
7	6		50	1547	1547:10					50.7	2.114		33.028					900	7
8	7		25	1548	1548:37					24.9	2.160		33.020					899	8
9	8		10	1549	1549:17					11.3	2.170		33.019					903	9
10	9		3	1551	1551:14					6.1	2.176		33.016					901	10
11	10																		11
12																			12

Initials ____

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
047	MILLER FREEMAN	MF90-03 OCSEAP	384			XIII C

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Mo.	Yr.	JD = 114	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
047	58	11.67	N	174 51.46	W	24	APR	90		17	06	10.1	10.1	30	3	6	325	8	9		2	1730	XIIIC

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		5.5
Temp.		2.363
Cond.		
Other		33.034

Times	JD/Time
Data on	1624
at Surface	1628
Start Down	1630
at Bottom	1706
Start Up	1707
at Surface	
Data off	1707

Data Location DUB2:(data_log)

Tape/Diskette I.D.	File Name/Header
	SBE_CTD.SCS;55

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																			1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11	10		BOT 1500	1706	1706: 36					1501.4	0.286		34.480			34.487.	10		11
12																			12

Initials ____

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
48	MILLER FREEMAN	MF90-03 OCSEAP	3877			X112 d

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
048	58	18.49	N	174	42.06	W	24	APR	90	19	14	01.0	00.5	30	37	300	03	8	–	2	2377	X111d

CTD	
Type & SN	PMEL SeaBird 91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks	on Deck	at Surface
Press.		4.7
Temp.		2.248
Cond.		
Other		33.020

Times	JD/Time
Data on	1835
at Surface	1836
Start Down	1837
at Bottom	1915
Start Up	1916
at Surface	
Data off	

Data Location	DUB2:(data_log)
Tape/Diskette I.D.	File Name/Header
	SBE_CTD.SCS;56

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																			1
2	1		Bot 1500	1915	1915 10					1502.3	2.280	–	34.481			34.489.	27	912	2
3	2		300	1941	1941 30					297.6	3.874		33.520					911	3
4	3		200	1944	1944 27					198.3	2.562		33.197					910	4
5	4		150	1946	1946 05					149.1	2.355		33.131					909	5
6	5		100	194759						100.9	2.454		33.113					908	6
7	6		75	194904						75.9	2.210		33.067					907	7
8	7		50	195016						49.6	2.208		33.030					906	8
9	8		25	195124						24.1	2.244		33.026					905	9
10	9		10	195215						9.5	2.252		33.018					904	10
11	10		3	195252						5.4	2.254		33.019					902	11
12																			12

Initials ____

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
049	MILLER FREEMAN	MF90-03 OCSEAP	389			XIII E

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude	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
049	58	22.80	N	174	37.53	W	24	APR	90	21	07	1.0	1.0	30	3	7	275	6	8	7	2137	0 XIIIE

CTD
Type & SN PMEL SeaBird 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time
Data on ____
at Surface 2031
Start Down 203417
at Bottom 210743
Start Up 2108
at Surface ____
Data off ____

Data Location DUB2:(data_log)
Tape/Diskette I.D. ____
File Name/Header SBE_CTD.SCS;57

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values Other	1371 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		B	1330		21426					1329.8	2.419		34.446	1308	2.42	34.454	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 ____
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
050	MILLER FREEMAN	MF90-03 OCSEAP	391			XIII F

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude Min.	E or W	Date Day	Date Mo.	Date Yr. (JD = 114)	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
050	58	28.53	N	174	31.35	W	24	APR	90	22	32	12.1	11.1	31	3	7	290	6	87	2	183	XIIIF

CTD	
Type & SN	PMEL SeaBird 91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times	JD/Time
Data on	
at Surface	2224
Start Down	222636
at Bottom	223210
Start Up	223250
at Surface	224010
Data off	

Data Location DUB2:(data_log)

Tape/Diskette I.D.	File Name/Header
	SBE_CTD.SCS;58

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					223225					171.9	2.428		33.149			33.156	06	920	1
2			150		223332					150.6	2.481		33.148					919	2
3			100		223526					100.5	2.263		33.091					918	3
4			75		223641					74.8	2.237		33.068					917	4
5			50		223748					50.0	2.203		33.043					916	5
6			25		223859					23.6	2.172		33.033					915	6
7			10		223948					9.3	2.209		33.033					914	7
8			3		224022					4.9	2.210		33.032					913	8
9																			9
10																			10
11																			11
12																			12

Initials ____

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
051	MILLER FREEMAN	MF90-03 OCSEAP	393			XIII G

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
051	58	35	N	174	W	24	APR	90	23	41	28	21	31	3	7	295	7	87	3/4	150	XIIIG

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time

Data on	
at Surface	2335
Start Down	233645
at Bottom	234140
Start Up	2342
at Surface	2345
Data off	

Data Location DUB2:(data_log)

Tape/Diskette I.D.	File Name/Header
	SBE_CTD.SCS;59

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					234151					147.2	2.111		33.096			33.101	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
052	MILLER FREEMAN	MF90-03 OCSEAP	396			XIII H

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Mo.	Yr. (JD = 115)	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	58	42.93	N	174	09.56	W	25	APR 90	00	51	09	08	31	3	6	270	7	9	-	4	144	XIIIH

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time

Data on	
at Surface	0046
Start Down	004740
at Bottom	005200
Start Up	005215
at Surface	010346
132 Data off	

Data Location DUB2:(data_log)

Tape/Diskette I.D.	File Name/Header
	SBE_CTD.SCS;60

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		B	126		005740					125.8	1.435		32.971	120	1.42	32.978	20	927	1
2			100		005844					101.0	1.409		32.969					926	2
3			75		005950					74.9	1.348		32.954					925	3
4			50		010100					51.1	1.300		32.944					924	4
5			25		010220					25.3	0.791		32.824					923	5
6			10		010310					10.2	0.138		32.544					922	6
7			3		010356					3.7	-0.063		32.290					921	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
053	MILLER FREEMAN	MF90-03 OCSEAP	401			XI G

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date Day	Mo.	Yr. (JD = 115)	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
053	58	24.87	N	173 50.31	W	25	APR	90	03	17	3.4	3.3	30	3	7	260	6.8	7	2	4	124	XIIG

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time

Data on ____
at Surface 0312
Start Down 031420
at Bottom 031812
Start Up 0318
at Surface 032420
Data off ____

Data Location DUB2:(data_log)

Tape/Diskette I.D. ____
File Name/Header SBE_CTD.SCS;61

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					031828					112.0	1.584		32.967			32.973	35	934	1
2			100		031930					100.8	1.583		32.966					933	2
3			75		032039					75.5	1.477		32.944					932	3
4			50		032145					49.7	1.342		32.913					931	4
5			25		032257					24.5	1.327		32.907					—	5
6			10		032351					12.0	1.401		32.908					—	6
7			3		032433					3.2	1.409		32.909					930	7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials ____
✓ ____

58° 20'
174° 1'
0415 GMT
25APR90

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
054	MILLER FREEMAN	MF90-03 OCSEAP	405			XII F

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude Min.	E or W	Date Day	Date Mo.	Date Yr. (JD = 115)	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	58	18.09	N	174	04.71	W	25	APR	90	04	43	4.0	3.1	30	3	7	280	13	8	7	2	134	XIIF

CTD PMEL SeaBird

Type & SN 91220-A

Press. SN 25084

Temp. SN 701

Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time

Data on ____

at Surface 0438

Start Down 044014

at Bottom 044416

Start Up 044445

at Surface 0447

Data off ____

Data Location DUB2:(data_log)

Tape/Diskette I.D. ____

File Name/Header SBE_CTD.SCS;62

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				121	044432					120.8	2.213		33.064			33.068	02		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
055	MILLER FREEMAN	MF90-03 OCSEAP	406			XII E

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude	E or W	Date Day	Mo.	Yr. (JD = 115)	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
055	58	15	N	174	12	W	25	APR	90	05	33	21	20	30	3	7	290	11	87	2	146	XIIE

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time

Data on	
at Surface	0528
Start Down	052936
at Bottom	053410
Start Up	053430
at Surface	054616
Data off	

Data Location DUB2:(data_log)

Tape/Diskette I.D.	File Name/Header
	SBE_CTD.SCS;63

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values Other	137.7 Conv. Mon. Values-CTD Press.	Temp.	Cond.	Sal.	Sample Bot.Data Therm-P	Avg Tw	Sal.	Sal. Bot. #	Other Samp.	Pos.
1		B	124		054036					124.1	2.355		33.099	121	2.33	33.105	10	939	1
2			100		054149					100.3	2.306		33.077					938	2
3			75		054255					73.8	2.263		33.043					937	3
4			50		054401					51.0	2.109		33.013					936	4
5			25		054507					26.4	2.013		32.996					935	5
6			10		054554					10.9	2.223		33.002					929	6
7			3		054627					5.6	2.268		33.002					928	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
056	MILLER FREEMAN	MF90-03 OCSEAP	408			XII D

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	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
056	58	11.47	N	174 20.84	W	25	APR	90	07	04	31	30	30	3	7	270	12	8	–	2	1116	XIID

CTD PMEL SeaBird

Type & SN 91220-A

Press. SN 25084

Temp. SN 701

Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time

Data on ____

at Surface 0633

Start Down 063507

at Bottom 070445

Start Up 070510

at Surface 0730

Data off ____

Data Location DUB2:(data_log)

Tape/Diskette I.D. ____

File Name/Header SBE_CTD.SCS;64

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			1227		070500					1227.1	2.581		34.405			34.412	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
057	MILLER FREEMAN	MF90-03 OCSEAP	411			XIIC

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Mo.	Yr. (JD = 115)	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
057	58	06.55	N	174	33.58	W	25	APR 90	09	08	3.20	2.5	32	3	8	265	10	9	-	-	2010	XIIC

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		4.3
Temp.		2.612
Cond.		
Other		32.971

Times JD/Time
Data on 0830
at Surface 0831
Start Down 0832
at Bottom 0908
Start Up 0909
at Surface
Data off

Data Location DUB2:(data_log)
Tape/Diskette I.D.
File Name/Header SBE_CTD.SCS;65

Remarks 1497 m

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																			1
2	1		1500 BOT	0908	0908:43					1501.6	2.311		34.475			34.481	27	940	2
3	2		300	0933	0933:40					299.1	3.726		33.546					941	3
4	3		200	0937	0937:10					199.0	3.921		33.076					942	4
5	4		150	0939	0939:16					148.7	3.133		33.255					943	5
6	5		100	0941	0941:31					100.5	2.827		33.116					944	6
7	6		75	0943	0943:08					74.5	2.494		33.027					945	7
8	7		50	0944	0944:31					49.5	2.475		32.978					946	8
9	8		25	0946	0946:09					23.7	2.589		32.970					947	9
10	9		10	0947	0947:17					10.1	2.636		32.963					949	10
11	10		3	0948	0948:15					6.8	2.631		32.964					948	11
12																			12

Initials ____
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
058	MILLER FREEMAN	MF90-03 OCSEAP	414			XIIb

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Mo.	Yr.	JD = 115	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	58	02.12	N	174 42.70	W	25	Apr	90		11	17	30.2	27.3	3Z	3	8	270	08	9	-	-	2995	X11b

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		3.5
Temp.		2.391
Cond.		
Other		33.006

Times JD/Time

Data on	1038
at Surface	1039
Start Down	1040
at Bottom	1117
Start Up	1123
at Surface	1153
Data off	1124

Data Location DUB2:(data_log)

Tape/Diskette I.D.	File Name/Header
	SBE_CTD.SCS;66

Remarks 1494 w/o, Silent trip on thermometer Bottle, tripped again. 2 bottles Tripped, monitor values from second trip sal + T sample from first trip

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	T	B	1500	1117	1123:09					1501.6	2258		34.485	1483	2.26	34.494	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
059	MILLER FREEMAN	MF90-03 OCSEAP	420			XII a

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	JD = 115 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
059	57	55.74	N	174 57.30	W	25	APR	90	13	49	23	20	32.38	2	7	5	11	9	-	5	3063	XIIa

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		4.5
Temp.		2.548
Cond.		
Other		32.979

Times	JD/Time
Data on	1366 1310
at Surface	1307 1310
Start Down	1311
at Bottom	1349
Start Up	1358
at Surface	1433
Data off	1431

Data Location DUB2:(data_log)

Tape/Diskette I.D.

File Name/Header: SBE_CTD.SCS;67

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																			1
2	1		Bot 1500	1349	1349: 52					1501.4	2.344		34.468			34.476	32	950	2
3	2		300	1415	1415: 11					301.2	3.425		33.549					951	3
4	3		200	1419	1418: 59					200.0	2.907		33.274					960	4
5	4		150	1421	1421: 21					150.0	2.202		33.136					952	5
6	5		100	1423	1423: 32					99.5	2.327		33.123					958	6
7	6		75	1425	1425: 00					75.0	2.487		33.129					959	7
8	7		50	1426	1426: 38					50.0	2.462		33.078					956	8
9	8		25	1428	1428: 04					24.7	2.472		33.010					957	9
10	9		10	1429	1429: 25					10.3	2.482		32.993					954	10
11	10		3	1430	1430: 32					6.2	2.481		32.993					955	11
12																			12

Initials ____

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
060	MILLER FREEMAN	MF90-03 OCSEAP	426			XIa

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date Day	JD = 115 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
060	57	35.72	N	174 32.18	W	25	APR	90	17	30	4.0	3.0	32	3	8	245	10	8	8	2	2163	XIa

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		5.3
Temp.		2.308
Cond.		
Other		33.010

Times	JD/Time
Data on	1651
at Surface	1652
Start Down	1653
at Bottom	1730
Start Up	1731
at Surface	
Data off	

Data Location DUB2:(data_log)

Tape/Diskette I.D.	File Name/Header
	SBE_CTD.SCS;68

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																34.497	09		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11	10		1500	1730	1730:51					1499.5	2.249		34.491			34.497	09		11
12																			12

Initials ____

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
061	MILLER FREEMAN	MF90-03 OCSEAP	428			XI b

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Mo.	Yr.	JD = 115	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
061	57	40	53 N	174	24 64 W	25	APR	90		19	30	25	20	32	3	8	218	12	8 -	2	2140	XI b

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		5.7
Temp.		2.373
Cond.		
Other		33.204

Times JD/Time
Data on 185
at Surface 1852
Start Down 1852
at Bottom 1930
Start Up 1936
at Surface 201150
Data off

Data Location DUB2:(data_log)
Tape/Diskette I.D.
File Name/Header SBE_CTD.SCS;69

Remarks nutrient bottle numbers questionable entered several days after cast

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	T	B	BOT 1500	1930	1935:15					1497.1	2.338	-	34.470	1467	2.34	34.474	18	778	1
2			300		200031					299.6	3.715		33.551					777	2
3			200		200332					199.4	2.966		33.265					776	3
4			150		200513					150.2	2.309		33.148					775	4
5			100		200659					100.2	2.298		33.105					774	5
6			75		200811					75.5	2.670		33.100					773	6
7			50		200920					49.6	2.375		33.003					772	7
8			25		201024					25.4	2.386		32.999					771	8
9			10		201119					9.3	2.395		32.998					770	9
10			3		201205					5.6	2.390		32.999					769	10
11																			11
12																			12

Initials ____

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
062	MILLER FREEMAN	MF90-03 OCSEAP	43			XIC

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Mo.	Yr. (JD = 115)	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	57	42.36	N	174 20.01	W	25	APR	90	21	11	25	21	32	3	8	220	12	7	6	1	1575	XIC

CTD Type & SN: PMEL SeaBird 91220-A
Press. SN: 25084
Temp. SN: 701
Cond. SN: 303

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time

Data on: ____
at Surface: 2034
Start Down: 203550
at Bottom: 211145
Start Up: 211205
at Surface: 2141
Data off: ____

Data Location DUB2:(data_log)

Tape/Diskette I.D.: ____

File Name/Header: SBE_CTD.SCS;70

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			1503		211157					1503.1	2.305		34.474			34.483	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
063	MILLER FREEMAN	MF90-03 OCSEAP	433			XID

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Date Mo.	Date Yr. (JD = 115)	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
063	57	46.15	N	174	W	25	APR	90	22	28	30.2	28.2	32	3	2	225	10	8	6	2	151	XID

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		4.5
Temp.		2.500
Cond.		
Other		32.977

Times JD/Time

Data on	
at Surface	2222
Start Down	222440
at Bottom	222916
Start Up	222940
at Surface	223602
Data off	

Data Location DUB2:(data_log)

Tape/Diskette I.D.	File Name/Header
	SBE_CTD.SCS;71

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			141		222928					141.0	2.429		33.122			33.128	08	785	1
2			100		223104					100.4	2.471		33.041					784	2
3			75		223218					75.5	2.484		33.010					783	3
4			50		223331					50.0	2.500		32.992					782	4
5			25		223443					24.5	2.482		32.981					781	5
6			10		223532					9.2	2.504		32.971					780	6
7			3		223614					5.7	2.504		32.970					779	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
064	MILLER FREEMAN	MF90-03 OCSEAP	435			XIE

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Date Mo.	Date Yr.	JD = 115	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
064	57	47.79	N	174	W	25	APR	90		23	34	29	27	32	4	8	260	12	8	6	988	XIE

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time

Data on	
at Surface	2309
Start Down	231100
at Bottom	233456
Start Up	234030
at Surface	0001
Data off	

Data Location DUB2:(data_log)

Tape/Diskette I.D.	File Name/Header
	SBE_CTD.SCS;72

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		B	960		234018					960.3	3.037		34.255	946	3.00	34.260	07		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	MF90-03 OCSEAP	438			XIf

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
065	57	54.29	N	173 51.87	W	26	APR	90	00	53	33.3	33.0	32.3	3	8	230	13	8	6	2	141	XIf

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		4.4
Temp.		2.122
Cond.		
Other		32.952

Times JD/Time
Data on
at Surface 0047
Start Down 004910
at Bottom 005316
Start Up 005340
at Surface 0100
Data off

Data Location DUB2:(data_log)
Tape/Diskette I.D.
File Name/Header SBE_CTD.SCS;73

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			129		005331					128.9	2.235		33.065			33.069	22	792	1
2			100		005454					101.2	2.209		33.048					791	2
3			75		005609					74.9	2.191		33.040					790	3
4			50		005719					50.8	2.097		33.014					789	4
5			25		005825					24.9	2.085		32.951					788	5
6			10		005918					11.3	2.085		32.953					787	6
7			3		010009					4.9	2.093		32.955					786	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
066	MILLER FREEMAN	MF90-03 OCSEAP	442			XI 9

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	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
066	57	59.96	N	173	31.76	26	APR	90		02	17	63	51	31	4	8	270	12	8	6	2	121	XI9

CTD PMEL SeaBird	
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		6.0
Temp.		1.802
Cond.		
Other		32.912

Times	JD/Time
Data on	
at Surface	0211
Start Down	021325
at Bottom	021738
Start Up	0218
at Surface	0220
Data off	

Data Location DUB2:(data_log)

Tape/Diskette I.D.	File Name/Header
	SBE_CTD.SCS;74

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			106		021755					105.7	1.773		32.959			32.966	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
067	MILLER FREEMAN	MF90-03 OCSEAP	449			Xe

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	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
067	57	32.04	N	173 32.78	W	26	APR	90	05	26	4.5	4.1	31	4	8	245	17	8	6	132	Xe

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		4.9
Temp.		2.475
Cond.		
Other		32.960

Times JD/Time
Data on ____
at Surface 0522
Start Down 052320
at Bottom 052728
Start Up 0534
at Surface 0536
Data off ____

Data Location DUB2:(data_log)
Tape/Diskette I.D. ____
File Name/Header SBE_CTD.SCS;75

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			104		053351					103.9	2.188		33.038	101	2.13	33.046	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 ____
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
068	MILLER FREEMAN	MF90-03 OCSEAP	451			Xd

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	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
068	57	28	14 N	173	50 08 W	26	APR	90	06	59	4.2	3.8	31	4	8	22	5	18	6	142	Xd

CTD
Type & SN: PMEL SeaBird 91220-A
Press. SN: 25084
Temp. SN: 701
Cond. SN: 303

Monitor Checks

	on Deck	at Surface
Press.		5.4
Temp.		2.510
Cond.		
Other		32.957

Times JD/Time
Data on: ____
at Surface: 0654
Start Down: 065550
at Bottom: 070010
Start Up: 070040
at Surface: 070640
Data off: ____

Data Location DUB2:(data_log)
Tape/Diskette I.D.: ____
File Name/Header: SBE_CTD.SCS;76

Remarks: nutrient bottle numbers questionable - entered several days after cast

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					070026					128.8	2.396		33.030			33.036	04	799	1
2			100		070143					101.7	2.456		33.007					798	2
3			75		070249					75.2	2.405		32.974					797	3
4			50		070357					56.4	2.418		32.968					796	4
5			25		070522					25.8	2.492		32.956					795	5
6			10		070617					10.3	2.510		32.958					794	6
7			3		070654					4.2	2.517		32.955					793	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	MF90-03 OCSEAP	453			XC

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	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
069	57	26.08	N	173 57.96	W	26	APR	90		08	05	28	28	32	4	8	240	10	86	2	562	XC

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		4.1
Temp.		2.489
Cond.		
Other		32.952

Times	JD/Time
Data on	0749
at Surface	0750
Start Down	0750
at Bottom	0805
Start Up	0806
at Surface	
Data off	0807

Data Location DUB2:(data_log)

Tape/Diskette I.D.	File Name/Header
	SBE_CTD.SCS;77

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																			1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11	10		5	0805	0806 02					551.3	3.474		34.019			34.022	26		11
12																			12

Initials ____

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
070	MILLER FREEMAN	MF90-03 OCSEAP	457			Xb

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	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
070	57	21.94	N	174 12.61	W	26	APR	90		10	07	29	29	32	4	8	230	8	9	-	-	1525	Xb

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		4.7
Temp.		2.391
Cond.		
Other		33.006

Times JD/Time
Data on 0928
at Surface 0930
Start Down 0930
at Bottom 1007
Start Up 1007
at Surface
Data off

Data Location DUB2:(data_log)
Tape/Diskette I.D.
File Name/Header SBE_CTD.SCS;78

Remarks w.o 1463, Wire indicator fubar. Rate + w/o are screwy

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	T	B	1410	1011	1016:16					1410.1	2.373		34.458	1391	2.38	34.464	11	800	1
2	1		300	1038	1039 08					300.2	3.712		33.562					801	2
3	2		200	1042	1042 16					201.1	2.914		33.273					802	3
4	3		150	1044	1044:27					150.7	2.096		33.121					803	4
5	4		100	1046	1046:31					97.5	2.394		33.099					804	5
6	5		75	1048	1047:55					74.2	2.385		33.053					805	6
7	6		50	1049	1049:27					54.4	2.468		33.024					806	7
8	7		25	1051	1051:13					23.5	2.606		32.976					807	8
9	8		10	1052	1052:31					11.3	2.605		32.977					808	9
10	9		3	1053	1053:54					7.2	2.605		32.977					809	10
11																			11
12																			12

Initials ✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
071	MILLER FREEMAN	MF90-03 OCSEAP	463			Xa

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	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
071	57	17.03	N	174 31.32	W	26	APR	90		13	03	29	29	31	4	8	250	15	9	-	5	3237	XXa

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		4.9
Temp.		2.535
Cond.		
Other		32.982

Times	JD/Time
Data on	1223
at Surface	1225
Start Down	1225
at Bottom	1303
Start Up	1304
at Surface	1332
Data off	1307

Data Location DUB2:(data_log)

Tape/Diskette I.D. ____

File Name/Header SBE_CTD.SCS;79

Remarks W.O. 1363

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																			1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																	21		10
11			1500	1303	1303:12					1501.2	2.278		34.480			34.493*	21		11
12																			12

Initials ____

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
072	MILLER FREEMAN	MF90-03 OCSEAP	467			Ia'

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
072	57	13.97	N	174 43.94	W	26	APR	90	15	17	21	21	30.48	25	0	13	9	-	-		3347	Ia'

CTD PMEL SeaBird

Type & SN 91220-A

Press. SN 25084

Temp. SN 701

Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		7.9
Temp.		2.510
Cond.		
Other		32.984

Times	JD/Time
Data on	1431
at Surface	1433
Start Down	1433
at Bottom	1517
Start Up	1518
at Surface	1556
Data off	1557

Data Location DUB2:(data_log)

Tape/Diskette I.D.

File Name/Header: SBE_CTD.SCS;80

Remarks: Screen display froze. Aborted out, required two tries to get it to work again. Did not open & close files, all in SBE_CTD.SCS;80 maybe gap in data

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																			1
2	1		1500	1517	1517:21					1505.8	2.302		34.477	Two bottles			25		2
3	2		300	1543	1543:19					301.7	3.715		33.522	DIDNT TRIP so No samples					3
4	3		200	1546	1546:33					203.3	2.539		33.198	saved, including salinity					4
5	4		150	1548	1548:30					150.0	2.154		33.114						5
6	5		100	1550	1550:17					99.8	2.457		33.093						6
7	6		75	1551	1551:32					74.8	2.340		33.021						7
8	7		50	1552	1552:42					50.5	2.376		33.005						8
9	8		25	1554	1554:19					24.7	2.467		32.995						9
10	9		10	15:55	1555:23					10.5	2.471		32.991						10
11	10		3	1556	1556:11					4.9	2.474		32.992						11
12																			12

Initials ✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
073	MILLER FREEMAN	MF90-03 OCSEAP	482			IXa

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude	E or W	Date Day	Date Mo.	Date Yr. (JD = 116)	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
073	56	22.59	N	173	04.89	W	26	APR	90	23	24	3.4	2.8	31	4	8	200	14	8	6	2	1900	IXa

CTD

Type & SN: PMEL SeaBird 91220-A

Press. SN: 25084

Temp. SN: 701

Cond. SN: 303

Monitor Checks

	on Deck	at Surface
Press.		3.4
Temp.		3.438
Cond.		
Other		32.789

Times JD/Time

Data on: ____

at Surface: 2243

Start Down: 224530

at Bottom: 232520

Start Up: 233948

at Surface: 0013

Data off: ____

Data Location DUB2:(data_log)

Tape/Diskette I.D.: ____

File Name/Header: SBE_CTD.SCS;90

Remarks: changing wire-counter sensor while at bottom to correct discrepancy; no nutrient collection this cast

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			1475		233519					1474.7	2.327		34.470	1463	2.33	34.480	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
074	MILLER FREEMAN	MF90-03 OCSEAP	485			IX b

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Date Mo.	Date Yr. (JD = 117)	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
074	56	26.52	N	172 59.12	W	27	APR	90	01	27	29.2	24.3	30.38	1	9	013	8	6	2	1800	IXb

CTD

Type & SN PMEL SeaBird 91220-A

Press. SN 25084

Temp. SN 701

Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		
Other		

Times JD/Time

Data on ____

at Surface ____

Start Down ____

at Bottom 012810

Start Up 0129

at Surface 020220

Data off ____

Data Location DUB2:(data_log)

Tape/Diskette I.D. ____

File Name/Header SBE_CTD.SCS;91

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			1505		012819					1505.3	2.337		34.467			34.474	33	819	1
2			300		015113					301.0	3.612		33.712					818	2
3			200		015356					199.7	2.592		33.312					817	3
4			150		015533					151.0	2.176		33.220					816	4
5			100		015719					101.2	2.191		33.206					815	5
6			75		015836					74.5	2.216		33.203					814	6
7			50		015946					48.9	2.437		33.190					813	7
8			25		020056					24.9	2.916		33.082					812	8
9			10		020141					10.4	3.106		32.995					811	9
10			3		020232					5.5	3.179		32.965					810	10
11																			11
12																			12

Initials ____

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
075	MILLER FREEMAN	MF90-03 OCSEAP	486			TXC

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Mo.	Yr.	JD = 117	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
075	56	30.44	N	172 55.50	W	27	APR	90		03	07	3.30	2.83	30.38	2	0	5	12	8	6	2148.5	TXC

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		6.7
Temp.		3.270
Cond.		
Other		32.962

Times JD/Time
Data on ____
at Surface 0228
Start Down 023002
at Bottom 030730
Start Up 030755
at Surface 0341
Data off ____

Data Location DUB2:(data_log)
Tape/Diskette I.D. ____
File Name/Header SBE_CTD.SCS;92

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			1505		030741					1505.4	2.341		34.466			34.474	29	829	1
2			300		033210					299.6	3.609		33.690					828	2
3			200		033443					201.7	2.943		33.420					827	3
4			150		033610					148.6	2.124		33.213					826	4
5			100		033732					99.3	2.158		33.207					825	5
6			75		033832					76.0	2.162		33.203					824	6
7			50		033932					50.4	2.479		33.189					823	7
8			25		034027					23.7	3.140		33.039					822	8
9			10		034103					7.7	3.224		33.010					821	9
10			3		034144					5.7	3.223		33.010					820	10
11																			11
12																			12

Initials ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
076	MILLER FREEMAN	MF90-03 OCSEAP	490			IXd

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date Day	Mo.	Yr. (JD = 117)	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	56	35.00	N	172 48.04	W	27	APR	90	06	33	4.0	3.5	29	4	8	195	10	8	6	154	IXd

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		5.1
Temp.		3.391
Cond.		
Other		32.840

Times JD/Time
Data on ____
at Surface 0625
Start Down 062935
at Bottom 063415
Start Up 064100
at Surface 0643
Data off ____

Data Location DUB2:(data_log)
Tape/Diskette I.D. ____
File Name/Header SBE_CTD.SCS;93

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Temp.	Cond.	Other	143 Conv. Mon. Values-CTD Press.	Temp.	Cond.	Sal.	Sample Bot. Data Therm-P	Avg Tw	Sal.	Sal. Bot. #	Other Samp.	Pos.
1	T	B			064093					125.5	3.078		33.347	123	3.06	33.353	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
077	MILLER FREEMAN	MF90-03 OCSEAP	492			IXe

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 117 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
077	56	42.12	N	172359	W	27	APR	90	07	55	3.7	3.1	29	4	8	210	10	8	6	2	134	IXe

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		4.5
Temp.		2.588
Cond.		
Other		32.497

Times JD/Time

Data on ____
at Surface 0748
Start Down 075055
at Bottom 075510
Start Up 0756
at Surface 0806
Data off ____

Data Location DUB2:(data_log)

Tape/Diskette I.D. ____

File Name/Header SBE_CTD.SCS;94

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Temp.	Cond.	Other	125 Conv. Mon. Values-CTD Press.	Temp.	Cond.	Sal.	Sample Bot. Data Therm-P	Avg Tw	Sal.	Sal. Bot. #	Other Samp.	Pos.
1	1		124		075548					123.6	3.311		33.184			33.178	21	635	1
2	3		100		075927					99.2	3.247		33.108	→ (on 3rd try)				636	2
3	4		75		080103					75.7	3.091		33.016					637	3
4	5		50		080231					49.6	3.101		32.870					638	4
5	6		25		080404					24.6	2.579		32.493					639	5
6	7		10		080519					10.3	2.578		32.492					640	6
7	8		3		080627					5.6	2.578		32.491					850	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	MF90-03 OCSEAP	501			XVIk

Consec. Cast #	Latitude Deg. Min. N or S	Longitude Deg. E or W	Date JD = 117 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	5647 97 N	173 34 17 W	27 APR 90	1145	40	37	29	4	8	20	020	9	-	121	XVIk

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		5.7
Temp.		2.562
Cond.		
Other		32.532

Times	JD/Time
Data on	1140
at Surface	1141
Start Down	1141
at Bottom	1145
Start Up	1146
at Surface	1151
Data off	1146

Data Location DUB2:(data_log)

Tape/Diskette I.D. ____

File Name/Header SBE_CTD.SCS;95

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																			1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10	9			1145	1145:42					107.9	2.455		32.829			32.838	03		10
11																			11
12																			12

Initials ____

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
079	MILLER FREEMAN	MF90-03 OCSEAP	504			XVI 9

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Mo.	Yr. (JD = 117)	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
079	56	42.16	N	173 39.80	W	27	APR	90	12	45	3.8	3.4	29	4	8	200	17	9	-	-	122	XVI9

CTD

Type & SN: PMEL SeaBird 91220-A

Press. SN: 25084

Temp. SN: 701

Cond. SN: 303

Monitor Checks

	on Deck	at Surface
Press.		6.4
Temp.		2.670
Cond.		
Other		32.617

Times JD/Time

Data on: 1239

at Surface: 1241

Start Down: 1241

at Bottom: 1245

Start Up: 1252

at Surface: 1300

Data off: 1301

Data Location DUB2:(data_log)

Tape/Diskette I.D.:

File Name/Header: SBE_CTD.SCS;96

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	T	B	100	1247	1252:21					106.3	2.609		32.853	103	2.59	32.861	24	831	1
2	1		75	1254	1254:14					75.7	2.616		32.847					832	2
3	2		50	1256	1256:08					51.9	2.606		32.834					953	3
4	3		25	1258	1258:04					24.4	2.671		32.630					633	4
5	4		10	1259	1259:26					10.6	2.661		32.630					634	5
6	5		3	1300	1300:57					6.0	2.669		32.628					632	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
080	MILLER FREEMAN	MF90-03 OCSEAP	507			XVI f

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Date Mo.	Date Yr.	JD = 117	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
080	56	36.08	N	171 44.87	W	27	APR	90		14	02	39	35	28.4	8	2	05	12	9	-	-	132	XVI f

CTD PMEL SeaBird

Type & SN 91220-A

Press. SN 25084

Temp. SN 701

Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		5.4
Temp.		2.595
Cond.		
Other		32.599

Times JD/Time

Data on 1356

at Surface 1357

Start Down 1358

at Bottom 1402

Start Up 1403

at Surface 1400

Data off 1404

Data Location DUB2:(data_log)

Tape/Diskette I.D.

File Name/Header SBE_CTD.SCS;97

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																			1
2																			2
3																			3
4																			4
5																			5
6																			6
7	6		P.T 115	1402	1402: 36					115.7	2.625		32.561			32.867	12		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	MF90-03 OCSEAP	509			XVI e

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	JD = 117 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
081	56	30.10	N	171 51.16	W	27	APR	90	15	09	4.0	3.5	28	38	22	5	12	8	6	198	XVIe

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		4.1
Temp.		2.549
Cond.		
Other		32.470

Times JD/Time

Data on	1501
at Surface	1502
Start Down	1502
at Bottom	1509
Start Up	1510
at Surface	1520
Data off	1522

Data Location DUB2:(data_log)

Tape/Diskette I.D.

File Name/Header: SBE_CTD.SCS;98

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																			1
2	1		Bot 200	1509	1509: 46					181.7	3.231		33.276			33.282	13	631	2
3	2		150	1511	1511: 34					151.8	3.319		33.208					630	3
4	3		100	1514	1513: 57					99.5	3.911		32.942					629	4
5	4		75	1515	1515: 31					75.8	2.918		32.850					628	5
6	5		50	1517	1516: 50					49.6	3.110		32.780					627	6
7	6		25	1518	1518: 34					26.6	2.547		32.471					626	7
8	7		10	1519	1519 40					9.9	2.532		32.469					625	8
9	8		3	1520	1520 44					7.3	2.557		32.468					624	9
10																			10
11																			11
12																			12

Initials ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
A82	MILLER FREEMAN	MF90-03 OCSEAP	512			XVI d

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	JD = 117 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
A82	56	26.44	N	157 38.1	W	27	APR	90	1647		4.0	3.5	28	3	8	190	20	8	6	885	XVI d

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks	on Deck	at Surface
Press.		5.7
Temp.		2.783
Cond.		
Other		32.484

Times	JD/Time
Data on	1622
at Surface	1623
Start Down	1623
at Bottom	1647
Start Up	1647
at Surface	–
Data off	

Data Location DUB2:(data_log)

Tape/Diskette I.D.	File Name/Header
	SBE_CTD.SCS;99

Remarks Cast aborted During change of Logger tape, ended up with cast in 3 different files. Downcast though will all be in ;99

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	T		825	1650	165532					796.7	3.180		34.209	784	3.17	34.216	15		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

ABORTED

Initials ____

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
082	MILLER FREEMAN	MF90-03 OCSEAP	513			XVI d

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	JD = 117 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
082	56	27.09	N	171 53.31	W	27	APR	90	17	34	4.0	3.5	28	3	7	195	18	8	6	2	682	XVI d

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		8.4
Temp.		2.747
Cond.		
Other		32.477

Times JD/Time
Data on 1715
at Surface 1716
Start Down 1716
at Bottom 1734
Start Up 1735
at Surface
Data off 1735

Data Location DUB2:(data_log)
Tape/Diskette I.D.
File Name/Header SBE_CTD.SCS;102

Remarks Re do of cast at XVI d

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																			1
2	1			1734	1735:02					703.6	3.327		34.125			34.126	30		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
083	MILLER FREEMAN	MF90-03 OCSEAP	516			XVI C

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Mo.	Yr.	JD = 117	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	56	21.99	N	171 57.60	W	27	APR	90		19	24	4.0	4.0	28	28	22	25	20	8	6	2	24	25	XVIC

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		7.0
Temp.		3.452
Cond.		
Other		32.728

Times JD/Time
Data on 1845
at Surface 1847
Start Down 1847
at Bottom 1924
Start Up 1925
at Surface 2004
Data off

Data Location DUB2:(data_log)
Tape/Diskette I.D.
File Name/Header SBE_CTD.SCS;103

Remarks nutrient bottle numbers questionable - entered several days after cast.

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	1		Bot	1924	1924:15					1498.8	2.255		34.485			34.492	01	623	2
3	2			300	195134					301.3	3.709		33.610					622	3
4	3			200	195439					197.8	2.640		33.294					621	4
5	4			150	195648					151.0	3.084		33.311					620	5
6	5			100	195841					99.5	3.322		33.277					619	6
7	6			75	195950					75.9	3.310		33.203					618	7
8	7			50	200103					49.3	3.440		32.936					617	8
9	8			25	200219					24.4	3.443		32.845					616	9
10	9			10	200308					11.7	3.450		32.823					615	10
11	10			3	200351					5.1	3.452		32.824					614	11
12																			12

Initials ____
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
084	MILLER FREEMAN	MF90-03 OCSEAP	520			XVI b

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date JD = 117 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
084	56	16	N	172	W	27	APR	90	21	42	43	42	29	3	7	230	10	8	7	2	2614	XVIb

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		5.1
Temp.		3.318
Cond.		
Other		32.727

Times JD/Time

Data on
at Surface 2103
Start Down 2105
at Bottom 214325
Start Up 2149
at Surface 2220
Data off

Data Location DUB2:(data_log)

Tape/Diskette I.D.

File Name/Header SBE_CTD.SCS;104

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		B	1476		214907					1475.6	2.412		34.452	1449	2.43	34.458	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
085	MILLER FREEMAN	MF90-03 OCSEAP	523			XVIa

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Date Mo.	Date Yr. (JD = 117)	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
085	56	10.46	N	172 09.31	W	27	APR	90	23	52	6.1	6.0	30	3	8	300	20	8	7	2	2706	XVIa

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		6.5
Temp.		3.238
Cond.		
Other		32.750

Times JD/Time

Data on	
at Surface	2315
Start Down	231630
at Bottom	235300
Start Up	235320
at Surface	0025
Data off	

Data Location DUB2:(data_log)

Tape/Diskette I.D.	File Name/Header
	SBE_CTD.SCS;105

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			1504		235309					1504.3	2.383		34.462			34.470	05	613	1
2			300		001553					297.9	3.528		33.454					612	2
3			200		001827					198.7	3.452		33.401					611	3
4			150		001953					148.8	3.594		33.228					610	4
5			100		002114					98.9	3.255		33.046					609	5
6			75		002210					74.8	3.119		32.978					608	6
7			50		002259					51.8	2.943		32.900					607	7
8			25		002353					22.7	3.100		32.795					606	8
9			10		002434					11.3	3.241		32.749					605	9
10			3		002523					5.8	3.265		32.746					604	10
11																			11
12																			12

Initials ✓

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
086	MILLER FREEMAN	MF90-03 OCSEAP	530			VIIIa

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude	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
086	56	05.29	N	171	26.17	W	28	APR	90	03	28	3.7	3.0	3.1	3	8	320	19	8	7	2486	VIIIa

CTD PMEL SeaBird

Type & SN 91220-A

Press. SN 25084

Temp. SN 701

Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		6.8
Temp.		3.510
Cond.		
Other		32.712

Times JD/Time

Data on ____

at Surface 0249

Start Down 024930

at Bottom 032910

Start Up 032940

at Surface 0401

Data off ____

Data Location DUB2:(data_log)

Tape/Diskette I.D. ____

File Name/Header SBE_CTD.SCS;106

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			1505		032923					1504.9	2.266		34.484			34.491	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 ____

A82 B02 84

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
087	MILLER FREEMAN	MF90-03 OCSEAP	532			VIII b

Consec. Cast #	Latitude Deg. Min. N or S	Longitude Deg. E or W	Date JD = 118 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	56 08.09 N	171 20.17 W	28 APR 90	0506	35	30	31	3	8	310	20	8	7	2195	VIIIb

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		5.8
Temp.		3.107
Cond.		
Other		32.701

Times JD/Time

Data on	
at Surface	0428
Start Down	042944
at Bottom	050720
Start Up	051225
at Surface	0547
Data off	

Data Location DUB2:(data_log)

Tape/Diskette I.D.	File Name/Header
	SBE_CTD.SCS;107

Remarks $n = 82$ $\bar{x} = -.005$
nutrient bottle numbers questionable - [illegible]

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		B		050779	05219					1505.2	2.307		34.475	1483	2.32	34.482	2	603	1
2			300		053142					300.3	3.522		33.411					602	2
3			200		054005					202.7	3.319		33.305					601	3
4			150		054134					152.6	3.307		33.208					600	4
5			100		054301					100.8	3.281		33.122					599	5
6			75		054356					75.6	3.262		32.996					598	6
7			50		054451					51.2	3.150		32.811					597	7
8			25		054549					24.4	3.102		32.678					596	8
9			10		054634					10.1	3.105		32.674					595	9
10			3		054703					5.4	3.108		32.675					594	10
11																			11
12																			12

Initials ✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
088	MILLER FREEMAN	MF90-03 OCSEAP	535			VIII C

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude	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
088	56	12.92	N	171	14.54	W	28	APR	90		07	01	3.5	3.0	32	38	33	02	08	7	2		1430	VIIIC

CTD Type & SN	PMEL SeaBird 91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		5.9
Temp.		3.178
Cond.		
Other		32.712

Times JD/Time

Data on	
at Surface	0625
Start Down	062648
at Bottom	070154
Start Up	0702
at Surface	0731
Data off	

Data Location DUB2:(data_log)

Tape/Diskette I.D.	File Name/Header
	SBE_CTD.SCS;108

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					070224					1391.5	2.340		34.462			34.470	08		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	MF90-03 OCSEAP	537			VIII d

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude	E or W	Date JD = 118 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	56	16.89	N	171	10.21	W	28	APR	90	08	10	3.1	2.9	32	3	8	350	12	9	-	-	148	VIIId

CTD	
Type & SN	PMEL SeaBird 91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		5.9
Temp.		3.017
Cond.		
Other		32.530

Times	JD/Time
Data on	0805
at Surface	0806
Start Down	0806
at Bottom	0810
Start Up	
at Surface	
Data off	

Data Location DUB2:(data_log)

Tape/Diskette I.D. ____

File Name/Header SBE_CTD.SCS;109

Remarks w.o 12p Two bottles fired for Third 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																			1
2	1		BOT 132	0810	0811:15					132.8	3.333		33.209			33.215	35	584	2
3	2		100	0813	0813:04					102.3	3.327		33.122					585	3
~~4~~ 5	4		75	0814	0815:15	didn't fire first time?				74.6	3.038		32.919					586	4
~~5~~ 6	5		50	0816	0816:43					49.6	3.139		32.772					587	5
~~6~~ 7	6		25	0817	0818:13					25.4	2.929		32.635					588	6
~~7~~ 8	7		10	0819	0819:35					9.7	3.028		32.525					589	7
~~8~~ 9	8		3	0821	0820:48					5.9	3.030		32.524					590	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	MF90-03 OCSEAP	540			Ville

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Mo.	Yr. (JD = 118)	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
090	56	22.95	N	171	01.76	28	APR	90	09	39	32	28	33	3	8	320	16	9		133	Ville

CTD

Type & SN	PMEL SeaBird 91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		4.9
Temp.		2.813
Cond.		
Other		32.322

Times

	JD/Time
Data on	0934
at Surface	0935
Start Down	0935
at Bottom	0939
Start Up	0944
at Surface	—
Data off	0944

Data Location DUB2:(data_log)

Tape/Diskette I.D.	File Name/Header
	SBE_CTD.SCS;113

Remarks wo 114

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	T	B		0939	0944:23					118.2	3.268		33.086	118	3.24	33.092	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
091	MILLER FREEMAN	MF90-03 OCSEAP	549			VII-9

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude Min.	E or W	Date Day	JD = 118 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
091	56	24.91	N	169	54.47	W	28	APR	90	13	46	11.1	11.1	32	3	8	35	14	9-7		102	~~VII-9~~

CTD

Type & SN	PMEL SeaBird 91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		3.4
Temp.		2.411
Cond.		
Other		32.177

Times

	JD/Time
Data on	1341
at Surface	1342
Start Down	1342
at Bottom	1346
Start Up	1347
at Surface	1352
Data off	

Data Location DUB2:(data_log)

Tape/Diskette I.D.	File Name/Header
	SBE_CTD.SCS; 114

Remarks W.O. 85

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				/															1
2			BOT	1346	1346:22					85.9	2.404		32.467			34.473	10	577	2
3			75	1347	1347:23					75.6	2.396		32.460					578	3
4			50	1349	1349:02					50.6	2.256		32.368					579	4
5			25	1350	1350:24					25.4	2.381		32.265					580	5
6			10	1351	1351:35					10.2	2.402		32.206					581	6
7			3	1352	1352:40					3.9	2.399		32.206					582	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	MF90-03 OCSEAP	552			VIIf

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	JD = 118 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
092	56	15.92	N	169 59.02	W	28	APR	90	15	00	15	14	33	3	3	350	198	7	2	117	VIIf

CTD Type & SN	PMEL SeaBird 91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks	on Deck	at Surface
Press.		3.9
Temp.		2.563
Cond.		
Other		32.237

Times	JD/Time
Data on	1455
at Surface	1456
Start Down	1457
at Bottom	1500
Start Up	1501
at Surface	1505
Data off	1501

Data Location DUB2:(data_log)

Tape/Diskette I.D. _____

File Name/Header SBE_CTD.SCS; 115

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																			1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8	7		Bot 100	1500	1500 53					99.5	3.385		32.875			32.878	27		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	MF90-03 OCSEAP	555			VIIe

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude Min.	E or W	Date Day	Mo.	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
93	56	08.10	N	170	03.52	W	28	Apr	90		16	04	2.2	2.1	33	3	8	006	188	72		126	VIIe

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		4.9
Temp.		2.460
Cond.		
Other		32.235

Times	JD/Time
Data on	1559
at Surface	16:00
Start Down	1601
at Bottom	1604
Start Up	1610
at Surface	1616
Data off	1617

Data Location DUB2:(data_log)

Tape/Diskette I.D.

File Name/Header: SBE_CTD.SCS;116

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.
1	1	B	Bot	1604	1609:25					110.1	3.411		32.983	108	3.39	32.987	22	1153	1
2	1		100	1610	1610:30					99.4	3.440		32.969					1154	2
3	2		75	1612	1611:54					74.4	3.086		32.694					1155	3
4	3		50	1613	1613:12					49.5	2.397		32.274					1156	4
5	4		25	1614	1614:30					25.0	2.455		32.232					1157	5
6	5		10	1615	1615:31					10.4	2.448		32.233					1158	6
7	6		3	1616	1616:20					5.5	2.452		32.229					1159	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
094	MILLER FREEMAN	MF90-03 OCSEAP	557			VIId

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date Day	JD = 118 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
094	56	11.0	N	170 06.18	W	28	APR	90	17	15	1.8	1.5	33	3	8	030	18	8	72	148	VIId

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		4.1
Temp.		2.699
Cond.		
Other		32.198

Times	JD/Time
Data on	1709
at Surface	1710
Start Down	1711
at Bottom	1715
Start Up	1716
at Surface	1721
Data off	1716

Data Location DUB2:(data_log)

Tape/Diskette I.D. _____

File Name/Header SBE_CTD.SCS;117

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																			1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8	7		Bot 1335	1715	1715 39					132.9	3.421		33.088			33.093	32		8
9																			9
10																			10
11																			11
12																			12

Initials _____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
095	MILLER FREEMAN	MF90-03 OCSEAP	559			VII C

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date Day	Mo.	Yr.	JD = 118	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
095	55	56.17	N	170 09.24	W	28	APR	90		18	25	12	12	33	3	8	022	15	8	7	2104.1	VIIC

CTD Type & SN	PMEL SeaBird 91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		5.0
Temp.		3.570
Cond.		
Other		32.233

Times	JD/Time
Data on	1758
at Surface	1800
Start Down	1800
at Bottom	1825
Start Up	1826
at Surface	1851
Data off	1855

Data Location DUB2:(data_log)

Tape/Diskette I.D.

File Name/Header: SBE_CTD.SCS ; 118

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.	Pcs.
1																			1
2	1		Bot 1024	1825	1825:21					1024.1	2.860		34.306			34.313	34	1160	2
3	2		300	1841	1841:11					299.8	3.621		33.569					1161	3
4	3		200	1844	1844:16					200.0	3.245		33.359					1162	4
5	4		150	1846	1846:14					151.0	3.026		33.220					1163	5
6	5		100	1848	1848:15					98.4	3.153		33.119					1164	6
7	6		75	1849	1849:33					74.8	3.495		33.012					1165	7
8	7		50	1851	1850:54					50.0	3.556		32.740					1166	8
9	8		25	1852	1852:24					24.6	3.491		32.409					1167	9
10	9		10	1853	1853:36					10.2	3.508		32.200					1168	10
11	10		3	1854	1854:15					6.3	3.504		32.197					1169	11
12																			12

Initials ✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
096	MILLER FREEMAN	MF90-03 OCSEAP	562			VII b

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date JD = 118 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
096	55	51.55	N	170	10.03	28	APR	90	20	13	16	15	33	3	8	005	20	8	6	2	1495	VIIb

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		5.5
Temp.		3.567
Cond.		
Other		32.431

Times JD/Time

Data on	1931
at Surface	1936
Start Down	
at Bottom	201330
Start Up	201400
at Surface	20
Data off	

Data Location DUB2:(data_log) 1426 on MOA

Tape/Diskette I.D.	File Name/Header
	SBE_CTD.SCS;119

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	T	B	1431		202042					1430.5	2.295		34.471	1411	2.30	34.479	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
097	MILLER FREEMAN	MF90-03 OCSEAP	565			VII a

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date JD = 118 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
097	55	46.25	N	170	10.93	W 28	APR	90	22	07	15	11	32	3	8	015	22	7	6	1	2102	VIIa

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		4.3
Temp.		3.367
Cond.		
Other		32.502

Times JD/Time

Data on	
at Surface	2118
Start Down	212110
at Bottom	220830
Start Up	220910
at Surface	224612
Data off	

Data Location DUB2:(data_log)

Tape/Diskette I.D. ____

File Name/Header: SBE_CTD.SCS; 120/121 (up)

File 121 has 1320 to 1500 and upcast data

Remarks screen froze; stopped at ~1280 m depth; got out, and started program again for upcast. Instrument bottle, no water on bottom. Data ~ several days after cast

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			1500		220844					1500.3	2.258		34.483					1175	1
2			300		223524					304.2	3.728		33.622					1174	2
3			200		223829					201.5	3.482		33.383					1173	3
4			150		224017					150.3	3.114		33.226			33.236	07	1172	4
5			100		224155					101.6	3.004		33.100					1171	5
6			75		224301					75.2	2.909		33.029					1170	6
7			50		224358					49.3	3.038		32.919					593	7
8			25		224457					25.1	3.230		32.712					592	8
9			10		224543					10.4	3.395		32.605					591	9
10			3		224631					6.5	3.397		32.604					583	10
11																			11
12																			12

Initials ✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
098	MILLER FREEMAN	MF90-03 OCSEAP	597			IVa

Consec. Cast #	Latitude Deg. Min. N or S	Longitude Deg. E or W	Date JD = 119 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
098	55 50.86 N	169 23.59 W	29 APR 90	0517	05	00	27	3	8	003	30	7	6	2067	IVa

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		3.9
Temp.		3.603
Cond.		
Other		32.227

Times JD/Time

Data on	
at Surface	0438
Start Down	044025
at Bottom	051742
Start Up	0518
at Surface	0550
Data off	

Data Location DUB2:(data_log)

Tape/Diskette I.D.

File Name/Header: SBE_CTD.SCS;122

Remarks

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values Other	1505.7 Conv. Mon. Values-CTD Press.	Temp.	Cond.	Sal.	Sample Bot. Data Therm-P	Avg Tw	Sal.	Sal. Bot. #	Other Samp.	Pos.
1																			1
2					054636					206.6	3.500		33.447			33.454	9		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
099	MILLER FREEMAN	MF90-03 OCSEAP	601			IVb

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date JD = 119 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
099	55	57.63	N	169	11.64	29	APR	90	07	54	02	00	26	56	02	030	9	-	7		150	IV6

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		5.1
Temp.		3.313
Cond.		
Other		32.374

Times JD/Time

Data on	
at Surface	0715
Start Down	071735
at Bottom	0754
Start Up	0800
at Surface	0838
Data off	0839

Data Location DUB2:(data_log)

Tape/Diskette I.D.	File Name/Header
	SBE_CTD.SCS;123

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	T	B	Bot	0754	0759:26					1504.8	1.994		34.538	1489	2.02	34.546	19	1185	1
2	1		300	0823	0823:53					299.3	3.717		33.625					1184	2
3	2		200	0827	0827:01					199.1	3.464		33.375					1183	3
4	3		150	0829	0828:58					150.3	3.504		33.114					1182	4
5	4		100	0831	0831:39					99.5	3.422		32.794					1178	5
6	5		75	0833	0833:12					74.2	3.132		30.581					1181	6
7	6		50	0834	0834:47					51.8	3.331		32.409					1176	7
8	7		25	0836	0836:11					25.4	3.368		32.400					1186	8
9	8		10	0837	0837:14					10.6	3.364		32.399					1179	9
10	9		3	0838	0838:21					2.3	3.368		32.400					1177	10
11																			11
12																			12

Initials ✓

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
100	MILLER FREEMAN	MF90-03 OCSEAP	604			IVC

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	Min.	E or W	Date Day	Mo.	Yr.	JD = 119	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
100	56	03.56	N	169	03.17	W	29	APR	90		10	32	07.0	00.2	5	5	6	085	28	9	-	7	1430	IVC

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		4.5
Temp.		2.916
Cond.		
Other		32.267

Times JD/Time

Data on	0953
at Surface	0955
Start Down	0955
at Bottom	1032
Start Up	1033
at Surface	—
Data off	1033

Data Location 1438 DUB2:(data_log)

Tape/Diskette I.D.

File Name/Header: SBE_CTD.SCS; ~~123~~ 124

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																			1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11			DOT 1500	1032	1032: 37					1428.1	2.109		34.508			34.518	13		11
12																			12

Initials ✓

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
101	MILLER FREEMAN	MF90-03 OCSEAP	610			IV d

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	JD = 119 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
101	56	09.54	N	168 56.27	W	29	APR	90	12	38	07	02	24	5	7	015	30	9	-	-	311	IVd

CTD Type & SN	PMEL SeaBird 91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		3 3
Temp.		3.033
Cond.		
Other		32.317

Times	JD/Time
Data on	1225
at Surface	1227
Start Down	1227
at Bottom	1238
Start Up	1239
at Surface	1254
Data off	1255

Data Location DUB2:(data_log)

Tape/Diskette I.D.

File Name/Header: SBE_CTD.SCS ; 125

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																			1
2	1		288	1238	1238: 20					288.6	3.526		33.478			33.440	01	1186	2
3	2		200	1242	1242: 48					201.2	3.480		33.214					1187	3
4	3		150	1245	1245: 15					150.7	3.437		33.125					1188	4
5	4		100	1247	1247: 29					100.9	3.453		33.065					1189	5
6	5		75	1249	1249: 07					75.1	3.341		32.941					1190	6
7	6		50	1250	1250: 33					50.5	3.109		32.725					1191	7
8	7		25	1252	1252: 05					24.2	3.001		32.291					1192	8
9	8		10	1253	1253 06					9.6	3.004		32.290					1193	9
10	9		3	1254	1253 54					6.2	3.002		32.292					1194	10
11																			11
12																			12

Initials ✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
102	MILLER FREEMAN	MF90-03 OCSEAP	613			IVe

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date Day	JD = 119 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
102	56	15.08	N	168 50.00	W	29	Apr	90	1429		12.09		22.48			020	32	8	6	155	IVe

CTD PMEL SeaBird

Type & SN 91220-A

Press. SN 25084

Temp. SN 701

Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		3.8
Temp.		3.001
Cond.		
Other		32.143

Times JD/Time

Data on 1423

at Surface 1424

Start Down 1424

at Bottom 1429

Start Up 1430

at Surface

Data off 1430

Data Location DUB2:(data_log)

Tape/Diskette I.D.

File Name/Header SBE_CTD.SCS;126

Remarks Rosette didnt trip.

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	T	B	Bot	1429	1434:23					138.2	3.476		33.135	Bottle didn't			15		1
2			During backup on TR-50 tape - total procedure error											TRIP, No sample					2
3			occured																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
103	MILLER FREEMAN	MF90-03 OCSEAP	617			IV C

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 119 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
103	56	20	N	168	40	29	APR	90	16	12	10	09	21	4	8	01	32	8	6	2	132	IVF

CTD PMEL SeaBird

Type & SN 91220-A

Press. SN 25084

Temp. SN 701

Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		4.6
Temp.		3.044
Cond.		
Other		32.189

Times JD/Time

Data on 1607

at Surface 1608

Start Down 1608

at Bottom 1612

Start Up 1618

at Surface 1626

Data off

Data Location DUB2:(data_log)

Tape/Diskette I.D.

File Name/Header SBE_CTD.SCS; 127

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	T	B	Bot	1612	1617:48					110.2	3.590	-	33.040	107	3.57	33.041	15	1195	1
2	1		100	1619	1619:04					100.0	3.436		32.962					1196	2
~~3~~	~~3~~		75	1620	1621:09	MAY not have tripped				71.6	3.081		32.550					1197	3
~~5~~ 4	4		50	1622	1622:47					50.0	3.057		32.678					1198	4
~~6~~ 5	5		25	1624	1624:19					24.0	3.057		32.175					1199	5
~~7~~ 6	6		10	1625	1625:28					11.7	3.057		32.170					1200	6
~~8~~ 7	17		3	1626	1626:25					6.2	3.055		32.169					1201	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
104	MILLER FREEMAN	MF90-03 OCSEAP	619			IV 9

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date Day	JD = 119 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
104	56	27.12	N	168 37.39	W	29	APR	90	1755		11.1	10.21	1048	0	10	31	8	6	2		126	IV 9

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		5.7
Temp.		2.765
Cond.		
Other		31.998

Times	JD/Time
Data on	1750
at Surface	1751
Start Down	1751
at Bottom	1755
Start Up	1756
at Surface	1758
Data off	1756

Data Location DUB2:(data_log) 175

Tape/Diskette I.D.

File Name/Header: SBE_CTD.SCS;128

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																			1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9	8		Bot 100	1755	1755 33					104.1	4.092	~~4.092~~	32.987			32.994	24		9
10																			10
11																			11
12																			12

Initials ✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
105	MILLER FREEMAN	MF90-03 OCSEAP	624			

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date JD = 119 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
105	56	16.85	N	167 49.99	W	29	APR	90	20	58	1.7	1.6	1018.2	5	7	010	28	8	72	141	II

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		3.8
Temp.		2.789
Cond.		32.057 Sal.
Other		

Times JD/Time
Data on
at Surface
Start Down 2055
at Bottom
Start Up
at Surface
Data off

Data Location DUB2:(data_log)
Tape/Diskette I.D.
File Name/Header SBE_CTD.SCS;129

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			140			128.7	3.800	33.068								33.072	26	1202	1
2			100			101.21	3.770	33.045										1203	2
3			75			75.0	3.391	32.791										1204	3
4			50		2103	50.1	2.975	32.539										1205	4
5			25		21:05:58	24.8	2.788	32.055										1206	5
6			10		21:05:55	9.2	2.788	32.054										1207	6
7			3		21:06:14	4.8	2.786	32.055										1208	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
106	MILLER FREEMAN	MF90-03 OCSEAP	627			

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Mo.	Yr.	JD = 119	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
106	56	09.76	N	168 02.11	W	29	APR	90		22	20	2.1	2.0	1017.9	5	7	015	27	8	7	2	148	II H

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		5.3
Temp.		3.186
Cond.		32.062
Other		

Times JD/Time
Data on ____
at Surface ____
Start Down 22:16:43
at Bottom 22:21:15
Start Up ____
at Surface ____
Data off ____

Data Location DUB2:(data_log)
Tape/Diskette I.D. ____
File Name/Header ; 130
SBE_CTD.SCS ; 130

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	T	B	125	22:22:15	22:27:4[illegible]	125.2	3.502	33.075								33.040	12	1209	1
2			100		22:2[illegible]:55	99.5	3.517	33.052										1210	2
3			75		22:30:19	75.4	3.512	32.876										1211	3
4			50		22:31:24	51.0	3.360	32.635										1212	4
5			25		22:32:36	25.6	3.264	32.231										1213	5
6			10		22:33:37	10.2	3.172	32.050										1214	6
7			3		22:34:[illegible]	5.5	3.174	32.050										1215	7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials LL

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
107	MILLER FREEMAN	MF90-03 OCSEAP	630			II g

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Mo.	Yr.	JD = 119	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
107	56	02.84	N	168 13.29	W	29	APR	90		23	48	2.4	2.2	1017.2	4	7	015	32	8	7	159	II g

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		6.0
Temp.		3.406
~~Cond.~~ Sal		32.330
Other		

Times JD/Time
Data on
at Surface
Start Down 23:38:43
at Bottom 23:43:51
Start Up
at Surface
Data off

Data Location DUB2:(data_log)
Tape/Diskette I.D.
File Name/Header; 131
SBE_CTD.SCS

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	T	B		23:44:45	49:55	122.8	3.536	33.141						118	3.52	33.147	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 LAL

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
108	MILLER FREEMAN	MF90-03 OCSEAP	633			IF

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date 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
108	55	58.09	N	168 22.80	W	30	APR	90	00	48	22.1	21.1	1017	5	7	025	28	8	7	2	163	IF

CTD Type & SN	PMEL SeaBird 91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		5.3
Temp.		3.414
~~Cond.~~ Sal		32.365
Other		

Times JD/Time

Data on	
at Surface	
Start Down	00:43
at Bottom	06:48:49
Start Up	
at Surface	
Data off	

Data Location DUB2:(data_log)

Tape/Diskette I.D.	File Name/Header
	SBE_CTD.SCS ; 132

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			150		00:49:05	152.0	3.510	33.369								33.376	18	1216	1
2			100		51:16	100.7	3.499	32.995										385	2
3			75		52:21	75.9	3.517	32.752										386	3
4			50		53:33	51.4	3.410	32.364										387	4
5			25		54:35	23.1	3.410	32.347										388	5
6			10		55:23	9.3	3.410	32.350										389	6
7			3		56:11	6.7	3.408	32.343										390	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
109	MILLER FREEMAN	MF90-03 OCSEAP	236			II E

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude Min.	E or W	Date Day	Date Mo.	Date Yr.	JD = 120	Time GMT Hr.	Time GMT Min.	Dry Bulb	Wet Bulb	Bar. mb (1017.1)	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
109	55	52.19	N	168	34.40	W	30	APR	90		02	03	4.4	3.9	17	4	7	020	28	8	7	2	150	II E

CTD

Type & SN	PMEL SeaBird 91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		6.2
Temp.		3.337
Cond.		32.148
Other		

Times JD/Time

Data on	
at Surface	
Start Down	1:58:34
at Bottom	2:03:22
Start Up	
at Surface	
Data off	

Data Location DUB2:(data_log)

Tape/Diskette I.D.	File Name/Header
	SBE_CTD.SCS ; 133

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																	17		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9					2:03:22	140.3	3.646	33.112								33.118	17		9
10																			10
11																			11
12																			12

Initials LAL

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
110	MILLER FREEMAN	MF90-03 OCSEAP	638			II D

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude Min.	E or W	Date Day	Date Mo.	Date Yr.	JD = 120	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
110	55	46.16	N	168 43.16		W	30	APR	90		03	07	3.2	3.0	1016.4	5	7	030	28	8	7	2	148	II D

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		4.6
Temp.		3.292
Cond.		32.049
Other		

Times JD/Time
Data on ____
at Surface ____
Start Down 03:03:35
at Bottom 03:07:55
Start Up ____
at Surface ____
Data off ____

Data Location DUB2:(data_log)
Tape/Diskette I.D. ____
File Name/Header SBE_CTD.SCS ; 134

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	T	B		03:04:57	14:07	114.9	3.518	33.140						111	3.49	33.144	23	391	1
2			100		15:14	101.4	3.537	33.069										392	2
3			75		16:36	75.1	3.547	32.845										393	3
4			50		17:58	48.8	3.516	32.680										394	4
5			25		19:17	25.6	3.297	32.054										395	5
6			10		20:18	10.4	3.296	32.049										396	6
7			3		21:17	4.9	3.296	32.049										397	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
111	MILLER FREEMAN	MF90-03 OCSEAP	640			II C

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude E or W	Date Day	Date Mo.	Date Yr. (JD = 120)	Time GMT Hr.	Time GMT Min.	Dry Bulb	Wet Bulb	Bar. mb (016.2)	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
111	55	43.23	N	168 50.30	W	30	APR	90	04	10	44	39	1016.57			032	28	87	2	271	II C

CTD PMEL SeaBird

Type & SN 91220-A

Press. SN 25084

Temp. SN 701

Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		5.6
Temp.		3.503
Cond.		32.292
Other		

Times JD/Time

Data on ____

at Surface ____

Start Down 04:02:20

at Bottom 04:11:10

Start Up ____

at Surface ____

Data off ____

Data Location DUB2:(data_log)

Tape/Diskette I.D. ____

File Name/Header SBE_CTD.SCS; 135

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					04:11:29	259.8	3.520	33.500								33.505	03		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials ____

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
112	MILLER FREEMAN	MF90-03 OCSEAP	642			II B

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date Day	Mo.	Yr. (JD = 120)	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
112	55	38.92	N	168 56.70	W	30	APR	90	05	36	4.1	3.5	1016.1	5	7	019	27	8	7	115	IIB

CTD

Type & SN: PMEL SeaBird 91220-A

Press. SN: 25084

Temp. SN: 701

Cond. SN: 303

Monitor Checks

	on Deck	at Surface
Press.		5.5
Temp.		3.610
~~Cond.~~ Sal.		32.564
Other		

Times JD/Time

Data on: ____

at Surface: ____

Start Down: 05:06:36

at Bottom: 05:36

Start Up: ____

at Surface: ____

Data off: ____

Data Location DUB2:(data_log)

Tape/Diskette I.D.: ____

File Name/Header: SBE_CTD.SCS; 136

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			1140		05:36:33	1144.0	2.605	34.388								34.393	16	398	1
2			300		:55:03	301.5	3.648	33.729										399	2
3			200		57:49	201.2	3.551	33.543										400	3
4			150		59:22	150.5	3.264	33.385										401	4
5			100		06:00 :50	101.0	3.041	33.285										402	5
6			75		01:46	77.6	2.993	33.245										403	6
7			50		02:45	50.2	3.325	33.203										404	7
8			25		03:45	24.6	3.607	32.588										406	8
9			10		04:36	10.0	3.594	32.560										407	9
10			3		05:09	6.0	3.593	32.562										408	10
11																			11
12																			12

Initials: LAV

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
113	MILLER FREEMAN	MF90-03 OCSEAP	646			II A

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude Min.	E or W	Date Day	Date Mo.	Date Yr.	Time GMT Hr.	Time GMT Min.	Dry Bulb	Wet Bulb	Bar. mb (1016.2)	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
113	55	35.40	N	169	03.09	W	30	APR	90	07	30	20	20	1657	000	28	87	2				1646	II A

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		6.3
Temp.		3.669
Cond.		32.781
Other		

Times JD/Time

Data on ____
at Surface ____
Start Down 06:53:35
at Bottom 7:30:45
Start Up ____
at Surface ____
Data off ____

Data Location DUB2:(data_log)

Tape/Diskette I.D. ____

File Name/Header SBE_CTD.SCS; 137

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	T	8		07:30:45	36:01	1517.7	2.246	34.489						1497	2.27	34.496	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 LAL

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
114	MILLER FREEMAN	MF90-03 OCSEAP	649			IIa'

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date JD = 120 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
114	55	32.85	N	169°07.11	W	30	APR	90	09	22	2.4	2.3	1657	7	10	289	-5			1875	IIa'

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		5.5
Temp.		3.689
Cond.		
Other		32.815

Times JD/Time

Data on	0843
at Surface	0844
Start Down	0845
at Bottom	0922
Start Up	0922
at Surface	1001
Data off	1002

Data Location DUB2:(data_log)
Tape/Diskette I.D.
File Name/Header SBE_CTD.SCS;138

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																			1
2	1		1500	0922	0921:55					1499.2	2.214		34.496				29	408	2
3	2		300	0947	0947:04					300.3	3.679		33.737					409	3
4	3		200	0950	0953:23	May not have tripped?				200.3	3.516		33.500					410	4
5	4		150	0953	0956:56	DID TRIP				148.1	3.291		33.367					411	5
6	5		100	0955	0959:03					99.2	2.909		33.246					412	6
7	6		75	0956	0956:26					74.3	2.982		33.235					413	7
8	7		50	0957	0957:43					50.7	3.293		33.216					414	8
9	8		25	0959	0959:17					25.1	3.709		32.803					415	9
10	9		10	1000	1000:27					10.4	3.703		32.780					416	10
11	10		3	1001	1001:40					6.4	3.700		32.783			32.789	29	417	11
12																			12

Initials ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
115	MILLER FREEMAN	MF90-03 OCSEAP	658			XVII a

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude	E or W	Date Day	JD = 120 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
115	55	17.46	N	168 35.28		W	30	APR	90	1333		30	30	1014	4	7	010	249	-	-		1819	XVII a

CTD	
Type & SN	PMEL SeaBird 91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks	on Deck	at Surface
Press.		4.9
Temp.		3.598
Cond.		
Other		32.478

Times	JD/Time
Data on	1251
at Surface	1253
Start Down	1253
at Bottom	1323
Start Up	1334
at Surface	1415
Data off	1334

Data Location DUB2:(data_log)

Tape/Diskette I.D.

File Name/Header: SBE_CTD.SCS;139

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																			1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																	30		10
11	10		1500	1333	1333:15					1499.2	2.267		34.484			34.494	30		11
12																			12

Initials ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
116	MILLER FREEMAN	MF90-03 OCSEAP	664			XVII b

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date Day	Mo.	Yr.	JD = 120	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
116	55	26.12	N	162	W	30	APR	90		1549		31	31	1014.7	4	7	018	20	8	7	640	XVIIb

CTD Type & SN: PMEL SeaBird 91220-A
Press. SN: 25084
Temp. SN: 701
Cond. SN: 303

Monitor Checks

	on Deck	at Surface
Press.		6.5
Temp.		3.590
Cond.		
Other		32.427

Times JD/Time

Data on	1530
at Surface	1531
Start Down	1532
at Bottom	1549
Start Up	1550
at Surface	1617
Data off	1618

Data Location DUB2:(data_log)

Tape/Diskette I.D.: _____

File Name/Header: SBE_CTD.SCS, 140

Remarks: Bottom shoaling,

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	T	B	BT 575	1550	1555:56					573.3	3.508		33.957	563	3.51	33.963	25	418	1
2	1		300	1603	1603:22					302.3	3.559		33.538					419	2
3	2		200	1607	1607:07					200.7	2.905		33.258					420	3
4	3		150	1609	1609:07					150.9	3.077		33.235					421	4
5	4		100	1611	1611:04					100.5	3.518		33.111					422	5
6	5		75	1612	1612:27					75.8	3.601		32.947					423	6
7	6		50	1614	1613:53					50.5	3.625		32.452					424	7
8	7		25	1615	1615:15					25.9	3.600		32.428					425	8
9	8		10	1616	1616:26					8.4	3.598		32.428					426	9
10	9		3	1617	1617:21					6.7	3.599		32.428					427	10
11																			11
12																			12

Initials: ✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
117	MILLER FREEMAN	MF90-03 OCSEAP	668			XVII C

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	JD = 120 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
117	55	31.25	N	168 07.23	W	30	APR	90	17	56	29	29	1447	7	0	000	24	8	72	145	XVIIC

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		5.5
Temp.		3.413
Cond.		
Other		32.138

Times JD/Time

Data on	1750
at Surface	1751
Start Down	1752
at Bottom	1756
Start Up	1758
at Surface	1801
Data off	1800

Data Location DUB2:(data_log)
Tape/Diskette I.D.
File Name/Header SBE_CTD.SCS ; 141

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																			1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11	10			1757	1757:01					123.0	3.621		33.095			33.100	04		11
12																			12

Initials ✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
118	MILLER FREEMAN	MF90-03 OCSEAP	670			XVII d

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Date Mo.	Date Yr. (JD = 120)	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
118	5543	06	N	167539	W	30	APR	90	1947		20	20	1447		0	000	24	8	7	2	133	XVIId

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks	on Deck	at Surface
Press.		3.5
Temp.		3.215
Cond.		
Other		31.946

Times	JD/Time
Data on	
at Surface	1943
Start Down	194425
at Bottom	194810
Start Up	1948
at Surface	1955
Data off	

Data Location DUB2:(data_log)

Tape/Diskette I.D. ____

File Name/Header SBE_CTD.SCS; 142

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			118		194824					117.8	4.011		33.061			33.066	21	437	1
2			100		194957					101.5	4.014		33.059	(2 trys)				436	2
3			75		195108					74.7	3.495		32.807					435	3
4			50		195221					49.5	3.254		32.026					434	4
5			25		195327					25.3	3.209		31.933					433	5
6			10		195417					10.3	3.210		31.931					432	6
7			3		195505					5.0	3.210		31.932					431	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
119	MILLER FREEMAN	MF90-03 OCSEAP	675			XVIIe

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date JD = 119 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
119	55	51.08	N	167	37.57	30	APR	90	21	36	20	20	1447	4	0	05	20	8	7	137	XVIIe

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		4.8
Temp.		3.115
Cond.		
Other		31.952

Times JD/Time

Data on ____
at Surface 2131
Start Down 213220
at Bottom 213640
Start Up 213720
at Surface 2139
Data off ____

Data Location DUB2:(data_log)

Tape/Diskette I.D. ____
File Name/Header SBE_CTD.SCS;143

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			125		213706					124.7	4.119		33.024			33.028	05		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
120	MILLER FREEMAN	MF90-03 OCSEAP	678			XVII f

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude Min.	E or W	Date JD = 120 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
120	55	58.93	N	167	24.18	W	30	APR	90	23	06	25	23	13	4	7	355	22	8	7	2	137	XVIIf

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		4.5
Temp.		3.137
Cond.		
Other		31.875

Times JD/Time

Data on ____
at Surface 2302
Start Down 230310
at Bottom 230720
Start Up 230740
at Surface 2319
Data off ____

Data Location DUB2:(data_log)

Tape/Diskette I.D. ____
File Name/Header SBE_CTD.SCS;144

Remarks pressure reading for rosette during soak time was 106–108; up to 115 by time of trigger.

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	T	B	113		231336					113.4	3.967		32.973	114	3.95	32.979	06	441	1
2			100		231432					100.8	3.957		32.971					440	2
3			75		231548					75.1	3.196		32.652					439	3
4			50		231659					50.3	2.890		32.134					438	4
5			25		231813					24.7	3.133		31.878					430	5
6			10		231900					10.3	3.120		31.864					429	6
7			3		231948					6.1	3.123		31.864					428	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
121	MILLER FREEMAN	MF90-03 OCSEAP	682			XVII 9

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
121	56	06.96	N	167	10.14	01	MAY	90	00	51	18	18	13	4	7	345	20	8	7	2	135	XVII 9

CTD PMEL SeaBird

Type & SN 91220-A

Press. SN 25084

Temp. SN 701

Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		3.8
Temp.		3.288
Cond.		
Other		31.903

Times JD/Time

Data on ____

at Surface 0046

Start Down 004756

at Bottom 005152

Start Up 0052

at Surface 0054

Data off ____

Data Location DUB2:(data_log)

Tape/Diskette I.D. ____

File Name/Header SBE_CTD.SCS;145

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			126		005210					125.5	3.853		33.001			33.006	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 ____

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
122	MILLER FREEMAN	MF90-03 OCSEAP	688			Ii

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
122	55	35.12	N	167 09.46	W	01	MAY	90	04	16	49	45	1024	4	7	350	20	8	7	139	Ii

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		6.3
Temp.		3.371
~~Cond.~~ Sal.		32.068
Other		

Times JD/Time

Data on ____
at Surface ____
Start Down 04:08:17
at Bottom 12:36
Start Up ____
at Surface ____
Data off ____

Data Location DUB2:(data_log)

Tape/Diskette I.D. ____
File Name/Header SBE_CTD.SCS;146

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			125		04:12:50	127.1	3.643	33.059								33.066	13	442	1
2			100		14:46	101.1	3.546	32.897										443	2
3			75		16:03	75.8	3.265	32.609										444	3
4			50		17:30	50.4	3.364	32.069										445	4
5			25		18:49	25.8	3.370	32.065										446	5
6			10		19:58	11.0	3.370	32.066										447	6
7			3		20:33	7.4	3.370	32.066										448	7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials LAC

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
123	MILLER FREEMAN	MF90-03 OCSEAP	690			I H

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude Min.	E or W	Date Day	Date Mo.	Date Yr.	JD = 121	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
123	55	29.20	N	167	21.65	W	01	MAY	90		05	31	3.1	3.0	1012.2	4	7	331	20	8	7	2	143	I H

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		5.1
Temp.		3.3995
Cond.		32.123
Other		

Times JD/Time

Data on ____
at Surface ____
Start Down 05:27:30
at Bottom 05:31:48
Start Up ____
at Surface ____
Data off ____

Data Location DUB2:(data_log)

Tape/Diskette I.D. ____

File Name/Header SBE_CTD.SCS ; 147

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	T	B		05:32:53	05:38:07	113.3	3.641	33.117						109	3.63	33.122	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
124	MILLER FREEMAN	MF90-03 OCSEAP	691			IG

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
124	55	24.05	N	167 31.02	W	01	May	90	0642		20.2	20.2	1012.0	4	3	337	25	8	7	7	146	IG

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		5.1
Temp.		3.435
Cond.	5.1	32.089
Other		

Times JD/Time

Data on	
at Surface	
Start Down	06:38:30
at Bottom	42:55
Start Up	
at Surface	
Data off	

Data Location DUB2:(data_log)

Tape/Diskette I.D.	File Name/Header
	SBE_CTD.SCS;148

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			135		06:43:13	136.9	3.722	33.111								33.117	3	1217	1
2			100		:44:43	102.4	3.643	32.987										1218	2
3			75		:45:51	76.5	3.374	32.757										1219	3
4			50		47:03	49.8	3.372	32.268										1220	4
5			25		48:16	26.4	3.453	32.109										21	5
6			10		49:05	11.0	3.440	32.096										22	6
7			3		49:41	6.0	3.438	32.095										23	7
8																		24	8
9																			9
10																			10
11																			11
12																			12

Initials ____

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
125	MILLER FREEMAN	MF90-03 OCSEAP	694			If

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude Min.	E or W	Date Day	Mo.	Yr. (JD = 121)	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
125	55	20	N	167	39	W	01	MAY	90	07	52	20	19	13	4	5	340	26	9	-	7	161	If

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		4.8
Temp.		3.422
Cond.		
Other		32.097

Times	JD/Time
Data on	0745
at Surface	0747
Start Down	0747
at Bottom	0752
Start Up	0753
at Surface	0758
Data off	0753

Data Location DUB2:(data_log)

Tape/Diskette I.D. _____

File Name/Header SBE_CTD.SCS ; 150

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																			1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8	7		B.T 143	0752	0752 32					143.1	3.643		33.145			33.151	09		8
9																			9
10																			10
11																			11
12																			12

Initials _____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
126	MILLER FREEMAN	MF90-03 OCSEAP	695			Ie

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date Day	JD = 121 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
126	55	17.23	N	167 46.60	W	01	MAY	90	08	47	27	24	13	4	5	340	26	9	7	223	Ie

CTD Type & SN	PMEL SeaBird 91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		4.6
Temp.		3.397
Cond.		
Other		32.071

Times	JD/Time
Data on	0838
at Surface	0839
Start Down	0839
at Bottom	0847
Start Up	0853
at Surface	0904
Data off	0905

Data Location DUB2:(data_log)

Tape/Diskette I.D.

File Name/Header: SBE_CTD.SCS;151

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	T	B	Bot 200	0847	0852:28					209.7	3.460	?	33.403	205	3.45	33.409	19	1224	1
2	1		150	0855	0855 19					150.1	3.415		33.217					1225	2
3	2		100	0857	0857 51					101.3	3.611		32.969					1226	3
4	3		75	0859	0859:29					73.1	3.461		32.624					1227	4
5	4		50	0901	0901:03					50.1	3.516		32.454					1228	5
6	5		25	0902	0902:30					26.0	3.358		32.266					1229	6
7	6		10	0903	0903 54					9.4	3.398		32.069					1230	7
8	7		3	0904	0904 59					6.4	3.396		32.070					1231	8
9																			9
10																			10
11																			11
12																			12

Initials ✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
127	MILLER FREEMAN	MF90-03 OCSEAP	697			Id

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude Min.	E or W	Date Day	Date Mo.	Date Yr.	JD = 121	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
127	55	15.53	N	167	51.25	W	01	May	90		09	52	21	19	13	4	5	335	22	9 -	7	327	Id

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		5.1
Temp.		3.454
Cond.		
Other		32.146

Times	JD/Time
Data on	0939
at Surface	0940
Start Down	0940
at Bottom	0952
Start Up	0953
at Surface	0957
Data off	0952

Data Location DUB2:(data_log)

Tape/Diskette I.D. _____

File Name/Header SBE_CTD.SCS;152

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																			1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9	8		Bot 310	0952	0952:00					311.2	3.546		33.517			33.516	30		9
10																			10
11																			11
12																			12

Initials ✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
128	MILLER FREEMAN	MF90-03 OCSEAP	699			IC

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude Min.	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
128	55	12.54	N	167	55.40	W	01	MAY	90	1049		18.1	15.1	1014.5	3	2	5	22	9	7	514	IC

CTD	PMEL SeaBird
Type & SN	91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		4.3
Temp.		3.525
Cond.		
Other		32.186

Times	JD/Time
Data on	1035
at Surface	1035
Start Down	1036
at Bottom	1049
Start Up	1050
at Surface	1108
Data off	1109

Data Location DUB2:(data_log)

Tape/Diskette I.D. ____

File Name/Header SBE_CTD.SCS;153

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																			1
2	1		500 Bot	1049	1049:57					500.0	3.564		33.882			33.887	15	1232	2
3	2		300	1055	1054:59					302.6	3.470		33.463					1233	3
4	3		200	1058	1058:09					200.4	3.036		33.240					1234	4
5	4		150	1100	1100:00					150.2	3.452		33.204					1235	5
6	5		100	1102	1102:08					99.8	3.699		33.090					1236	6
7	6		75	1103	1103:23					75.4	3.718		32.898					1237	7
8	7		50	1105	1104:53					51.7	3.702		32.676					1238	8
9	8		25	1106	1102:27					25.8	3.528		32.200					1239	9
10	9		10	1107	1107:35					10.6	3.512		32.188					1240	10
11	10		3	1108	1108:29					5.7	3.515		32.186					1241	11
12																			12

Initials ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
129	MILLER FREEMAN	MF90-03 OCSEAP	703			Ib

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date Day	JD = 121 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
129	55	08.61	N	168	50	01	MAY	90	1227		21	20	14	4	5	330	269	-	-	7	1554	Ib

CTD

Type & SN	PMEL SeaBird 91220-A
Press. SN	25084
Temp. SN	701
Cond. SN	303

Monitor Checks

	on Deck	at Surface
Press.		4.7
Temp.		3.555
Cond.		
Other		32.291

Times

	JD/Time
Data on	1151
at Surface	1151
Start Down	1152
at Bottom	1227
Start Up	1234
at Surface	1306
Data off	1234

Data Location DUB2:(data_log)

Tape/Diskette I.D.	File Name/Header
	SBE_CTD.SCS ; 154

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	T	B	B+T 1500	1233	1333 22					1515.5	2.258		34.482	1494	2.28	34.491	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
130	MILLER FREEMAN	MF90-03 OCSEAP	706			Ia

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	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
130	55	04.06	N	168 09.72	W	01	MAY	90	14	26	15	13	1015	4	5	335	269	-	7		1618	Ia

CTD PMEL SeaBird
Type & SN 91220-A
Press. SN 25084
Temp. SN 701
Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		7.0
Temp.		3.597
Cond.		
Other		32.366

Times JD/Time

Data on	1348
at Surface	1349
Start Down	1349
at Bottom	1426
Start Up	1427
at Surface	1500
Data off	1427

Data Location DUB2:(data_log)
Tape/Diskette I.D.
File Name/Header SBE_CTD.SCS; 155

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																			1
2	1		1500	1426	1426 16					1504.1	22.39		34.488			34.495	16		2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials ____