Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
001	NOAA SHIP MILLER FREEMAN	MF-92-09	14			PROTEUS MOORING

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude	E or W	Date JD = 254 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	54	47.67	N	168	32.82	W	10	SEP	92	02	09	09.5	07.1	24	3	8	340	06	4	6	1	2210	

CTD
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 254/ 0156
at Surface 0157
Start Down 0158
at Bottom 0209
Start Up 0210
at Surface
Data off

Data Location
Tape/Diskette I.D.
File Name/Header CAST001_10SEP0155

Remarks PRIOR TO RECOVERY OF PROTEUS MOORING- ~3/4 mi OFF STATION

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			400		0209					399.543	3.623	31.506	33.932			33.926	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 CD | BD

✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
002	NOAA SHIP MILLER FREEMAN	MF-92-09	153			LINE I, STA 2

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude Min.	E or W	Date Day	Date Mo.	Date Yr.	JD = 257	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	51	59.40	N	177	24.60	W	13	SEP	92		01	05	08.2	07.8	23	4	8	050	24	37	1	1625	I2

CTD

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

Monitor Checks

	on Deck	at Surface
Press.		1.841
Temp.		7.521
Cond.		
Other		32.990

Times JD/Time

Data on 257
at Surface 002645
Start Down 002705
at Bottom 0105
Start Up 0106
at Surface
Data off

Data Location

Tape/Diskette I.D.
File Name/Header CAST002_13SEP0025

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			SURF	013316	013825					12.897	7.503	33.902	32.981	14	7.53	32.985	14		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

BOTTOM 1499.971/2.295/34.489

Initials CD/BT

✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
003	NOAA SHIP MILLER FREEMAN	MF-92-09	159			LINE I, STA 3

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	Min.	E or W	Date JD = 257 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	52	21.67	N	177	24.37	W	13	SEP	92	04	30	10.2	08.8	23	4	8	05	02	21	01	1	3600	I3

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

Monitor Checks

	on Deck	at Surface
Press.		1.193
Temp.		8.192
Cond.		
Other		32.911

Times JD/Time
Data on 257 / 0350
at Surface 035045
Start Down 035125
at Bottom 0429
Start Up 043022
at Surface
Data off

Data Location
Tape/Diskette I.D.
File Name/Header CAST003-13SEP0349

Remarks
max 372°

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			DEPTH		042942					1504.183	2.262	31.263	34.499			34.496	06		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials CD/MC
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
004	NOAA SHIP MILLER FREEMAN	MF-92-09	164			LINE I, STA 4

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	Min.	E or W	Date JD = 257 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	52	38.16	N	177	25.12	W	13	SEP	92	07	15	09.1	08.3	25.48	0	5	0	18	1	0	1	3681	I4

CTD

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

Monitor Checks

	on Deck	at Surface
Press.		1.491
Temp.		8.202
Cond.		
Other		32.921

Times JD/Time

Data on 063830
at Surface 063855
Start Down 063919
at Bottom 071435
Start Up 071528
at Surface
Data off

Data Location

Tape/Diskette I.D.
File Name/Header CAST004_13SEP0639

Remarks
max 3.844°

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			SURF		074240					7.247	8.204	34.453	32.922			32.919	34		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

2.27
3-

1501.443/2.231/34.504

Initials CO/MC
✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
005	NOAA SHIP MILLER FREEMAN	MF-92-09	170			LINE I, STA 5

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude Min.	E or W	Date Day	Date Mo.	Date Yr.	JD = 257	Time GMT Hr.	Time GMT Min.	Dry Bulb	Wet Bulb	Bar. mb 1025.8	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
005	52	57.91	N	177	24.80	W	13	SEP	92		10	19	8.5	8.0	26	4	8	040	18	10	1	3733	I5

CTD	
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	0942
at Bottom	1019
Start Up	
at Surface	
Data off	

Data Location	
Tape/Diskette I.D.	File Name/Header
	CAST005_13SEP0941
(unrouted)	

Remarks Therm 65-4433 changed to 66-4447 (because glass was broken) before this cast. w/o 1532

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		✓	DEPTH	101924	102325					1498.003	2.262	31.260	34.498	1482	2.27	34.495	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 LL/BT

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
006	NOAA SHIP MILLER FREEMAN	MF-92-09	175			Line I, cast 6

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 257 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
006	52	58.02	N	175 50.12	W	13	SEP	92	12	54	9.8	9.0	25	4	7	070	20	37	1	3729	I6

CTD

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 ____
at Bottom 1254
Start Up ____
at Surface ____
Data off ____

Data Location

Tape/Diskette I.D.	File Name/Header
	cast006_13SEP1217

Remarks
w/o 1495

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			surf							11.087	8.232	34.508	32.951			32.949	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 LL/BT
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
007	NOAA SHIP MILLER FREEMAN	MF-92-09	180			Line I, stn. 7

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude	E or W	Date JD = 257 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
007	52	57.83	N	178	29.88	W	13	SEP	92	16	19	9.8	9.0	23	4	7	075	24	7	6	1	3724	I7

CTD
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 ____
at Bottom ____
Start Up ____
at Surface ____
Data off ____

Data Location
Tape/Diskette I.D. ____
File Name/Header cast007_13Sep1542.SCS

Remarks
w0/1515
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			Depth							1502.5092	2.2982		34.4970	*		34.493	22		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials LL
✓ WF

* These values taken from the data file at a depth approx
was not written to .log file).

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
008	NOAA SHIP MILLER FREEMAN	MF-92-09	184			Line I, station 8

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude Min.	E or W	Date Day	Date Mo.	Date Yr. (JD = 257)	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	52	57.90	N	179	02.21	W	13	SEP	92	19	15	9.8	9.3	23	4	7	075	20	8	6	3349	I8

CTD
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 ____
at Bottom ____
Start Up ____
at Surface ____
Data off ____

Data Location
Tape/Diskette I.D. ____
File Name/Header cast008_ 8

Remarks
w/o 1504

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		✓	Surf.	19:44	19:49	11.001	7.867	34.195	32.963					7	7.86	32.961	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 LL
✓ WF

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
009	NOAA SHIP MILLER FREEMAN	MF-92-09	190			Line F, station 9

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude Min.	E or W	Date JD = 257 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	52	58.01	N	179	39.01	W	13	SEP	92	20	05	08.5	08.22	4	7	09	01	88	6	1	602	I9

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

Monitor Checks

	on Deck	at Surface
Press.		1.294
Temp.		6.760
Cond.		
Other		33.092

Times JD/Time
Data on 257 / 2149
at Surface 214925
Start Down 214945
at Bottom 200520
Start Up 200550
at Surface
Data off

Data Location
Tape/Diskette I.D.
File Name/Header: cast 009_13SEP2148

Remarks: There is no cast#10. Station 10 was dropped & that cast number was not used.

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			Depth		200540					590.501	3.486	31.617	34.108			34.103	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 CD/WF
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
011	NOAA SHIP MILLER FREEMAN	MF-92-09	206			Line 2, sta 11

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date JD = 258 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
011	51	31.65	N	179	09.63	W	14	SEP	92	06	04	09.1	09.0	1018.3	5	085	18	9	-	4	990	III 11

CTD

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

Monitor Checks

	on Deck	at Surface
Press.		0.255
Temp.		7.236
Cond.		
Other		32.782

Times JD/Time

Data on 0540
at Surface 054034
Start Down 054040
at Bottom 060425
Start Up
at Surface
Data off

Data Location

Tape/Diskette I.D.
File Name/Header: cast011_14SEP0539

Remarks See note on cast #9. surface log

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			SURF.							1.492	7.376	33.581	32.770			32.769	30		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials CD
✓ MC

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
012	NOAA SHIP MILLER FREEMAN	MF-92-09	210			Line 2, stn 12

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date JD = 258 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
012	51	29	61 N	179 23	36 W	14	SEP	92	08	09	09.01	09.01	18	4	3	08	02	09	4	1105	II 12

CTD
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 ____
at Bottom ____
Start Up ____
at Surface ____
Data off ____

Data Location
Tape/Diskette I.D. ____
File Name/Header: cast 012 - 14sep0739

Remarks: Therm was tripped on the edge of a small-scale thermocline. Also, due to drift caused by high wire angle, soak depth was not constant, varied by as much as 17 m. Max depth = w/o = 1159

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		✓	DEPTH	081309						826.574	3.159	31.555	34.253	817	3.18	34.244	01		1
2															see "remarks"				2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials LL / BT
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
013	NOAA SHIP MILLER FREEMAN	MF-92-09	213			Line 2, stn 13

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date JD = 258 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	51	30.05	N	179 35.87	W	14	SEP	92	1001		9.0	9.0	1017	4	5	080	20	9	4	0995	II 13

CTD
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 ____
at Bottom ____
Start Up ____
at Surface ____
Data off ____

Data Location
Tape/Diskette I.D. ____
File Name/Header cast013-14SEP0934

Remarks
w/o 1005

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			surf.							10.610	6.110	32.858	33.188			33.130	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 LL/BT
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
014	NOAA SHIP MILLER FREEMAN	MF-92-09	216			

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 258 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	51	29.99	N	179 48.61	W	14	SEP	92	11	29	10.2	9.5	16	5	5	095	20	9	-	4	1030 (499)	11 14

CTD 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 ____
at Bottom ____
Start Up ____
at Surface ____
Data off ____

Data Location * CTD hit bottom @ ~500 m

Tape/Diskette I.D. ____

File Name/Header: cast 014-14SEP 1110

Remarks NOTE: CTD hit bottom, + was apparently dragged along surface. Data appeared good.

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			DEPTH	— NO		SAMPLE		TAKEN											1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials LL/BT

✓ ____

Scribed record from damaged rosette + mounted to spare.

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
015	NOAA SHIP MILLER FREEMAN	MF-92-09	219			

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Mo.	Yr.	JD = 258	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	51	29.12	N	179 58.05	E	14	SEP	92		14	15	8.7	8.5	15	54	09	09	05	9	4	1274	115

CTD

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 ____

at Bottom ____

Start Up ____

at Surface ____

Data off ____

Data Location

Tape/Diskette I.D. ____

File Name/Header cast015_14sep1347

Remarks

w/o=1050 ; maxdepth=1001 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		✓	surf.	143422						11.248	6.040	32.698	33.076	15.6	6.03	33.073	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 LL/BT

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
017	NOAA SHIP MILLER FREEMAN	MF-92-09	223			

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Mo.	Yr.	JD = 258	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
017	51	28.08	N	179 39.78	E	14	SEP	92		16	17	8.6	8.5	14	4	5	070	08	9	6	177	III 17

CTD
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 ____
at Bottom 1618
Start Up ____
at Surface ____
Data off ____

Data Location
Tape/Diskette I.D. ____
File Name/Header cast 017 - 14 sep 1550

Remarks
w/o 1012

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			Depth							1004.708	2.930	31.478	34.308			34.305	24		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials LL / WF
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
018	NOAA SHIP MILLER FREEMAN	MF-92-09	228			

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Mo.	Yr.	JD = 258	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
018	51	28.17	N	179 24.78	E	14	SEP	92		1803		7.9	7.9	14	4	3	050	10	9	74	1353	III 18

CTD

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 ____

at Bottom ____

Start Up ____

at Surface ____

Data off ____

Data Location

Tape/Diskette I.D. ____

File Name/Header cast 018 - 14 SEP 1738

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			Surf							10.799	6.368	33.024	33.122			33.119	26		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials LL/WF

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
019	NOAA SHIP MILLER FREEMAN	MF-92-09	238			LINE III, STA 19

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Mo.	Yr.	JD = 259	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D
019	51	10.65	N	179 10.88	E ✓ W	15	SEP	92		00	04	09.3	09.2	1010.7	4	2	060	12	9	7	4	1053	III, 19

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

Monitor Checks

	on Deck	at Surface
Press.		0.989
Temp.		8.512
Cond.		
Other		32.400

Times JD/Time
Data on 233805
at Surface 233820
Start Down 233840
at Bottom 000430
Start Up 000440
at Surface
Data off

Data Location
Tape/Diskette I.D.
File Name/Header: CAST019 — 14SEP23 37

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		✓	Depth	000720	001213					896.439	3.019	31.499	34.295	891	3.02	34.295	23		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

1030, 101 2.926 34.317

Initials cd/mc
✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
20	NOAA SHIP MILLER FREEMAN	MF-92-09	240			LINE III, STA. 20

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Mo.	Yr.	JD = 259	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
020	51	06.73	N	179 10.80	E ~~W~~	15	SEP	92		01	33	09.8	09.7	09.4 1009.8	6	0	065	16	9	74	1525	III, 20

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

Monitor Checks	on Deck	at Surface
Press.		1.394
Temp.		8.442
Cond.		
Other		32.472

Times	JD/Time
Data on	005731
at Surface	005804
Start Down	005815
at Bottom	013345
Start Up	013420
at Surface	
Data off	

Data Location	
Tape/Diskette I.D.	File Name/Header
	CAST020_155EP0056

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			Surf							2.157	8.573		32.454			32.455	21		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials cd/mc

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
021	NOAA SHIP MILLER FREEMAN	MF-92-09	242			LINE III, STA 21

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 259 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
021	51	05.31	N	179 11.02	E	15	SEP	92	02	56	09.7	09.6	09.56			060	10.9	7	4	1834	III 21

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

Monitor Checks

	on Deck	at Surface
Press.		1.041
Temp.		8.670
Cond.		
Other		32.427

Times JD/Time
Data on 022050
at Surface 022055
Start Down 022120
at Bottom 025701
Start Up 025725
at Surface
Data off

Data Location
Tape/Diskette I.D.
File Name/Header: CAST021_15SEP0220

Remarks 1496 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			DEPTH		025720					1501.543	2.164	31.200	34.527			34.528	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 SS/mc
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
022	NOAA SHIP MILLER FREEMAN	MF-92-09	245			LINE III, STA 22

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date JD = 259 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	50	59.88	N	179 10.78	E	15	SEP	92	04	43	09.8	09.7	08	4	2	060	18	9	4	3284	III, 22

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

Monitor Checks

	on Deck	at Surface
Press.		0.661
Temp.		8.593
Cond.		
Other		32.461

Times JD/Time
Data on 259 / 040715
at Surface 040730
Start Down 040740
at Bottom 044301
Start Up 044340
at Surface
Data off

Data Location
Tape/Diskette I.D.
File Name/Header: CAST022_155SEP0406

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		✓	SURF	051000	051452					8.482	8.368		32.482	8.54	8.58	32.454	04		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

1501.291 / 2.209 / 34.520

Initials colme
✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
023	NOAA SHIP MILLER FREEMAN	MF-92-09	250			LINE III, STA 23

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date JD = 259 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	50	49.84	N	179 11.72	E	15	SEP	92	06	51	09.9	09.8	06	4	4	055	14.9	-	4	4378	III, 23

CTD

Type & SN 91220-A

Press. SN 25084

Temp. SN 701

Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		0.365
Temp.		9.295
Cond.		
Other		32.399

Times JD/Time

Data on 259 / 061428

at Surface 061438

Start Down 061510

at Bottom 065055

Start Up 065155

at Surface

Data off

Data Location

Tape/Diskette I.D.

File Name/Header CAST023_15SEP063

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			DEPTH		0651					1502.586	2.201		34.522			34.521	7		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials CO/MC

✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
024	NOAA SHIP MILLER FREEMAN	MF-92-09	255			LINE III, STA 24

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	Min.	E or W	Date JD = 259 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	50	31.22	N	179	05.1	E	15	SEP	92	09	34	10.0	10.0	06	4	8	060	18	2	-2	6123	III, 24

CTD
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 ____
at Bottom ____
Start Up ____
at Surface ____
Data off ____

Data Location
Tape/Diskette I.D. ____
File Name/Header Cast 024-15 Sep 0856

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			surf							11.871	9.435	35.253	32.617			32.617	29		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials LL/BJ
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
025	NOAA SHIP MILLER FREEMAN	MF-92-09	260			LINE III, STA 25

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	Min.	E or W	Date JD = 259 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
025	50	09.30	N	179	12.27	E	15	SEP	92	12	38	99.9	99.9	04	4	5	050	10	97	4	5900	III, 25

CTD

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 ____

at Bottom ____

Start Up ____

at Surface ____

Data off ____

Data Location

Tape/Diskette I.D. ____

File Name/Header castO25_15 Sep 1200

Remarks

w/o 1498

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		✓	depth	123740	4241					1501.829	2.078	31.140	34.546	1484	2.07	34.548	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 LL/BT

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
026	NOAA SHIP MILLER FREEMAN	MF-92-09	321			LINE IV, STA 26

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 260 Day	Mo.	Yr.	Time GMT Hr.	Time GMT Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
026	52	27.33	N	176 14.69	E W	16	SEP	92	23	48	08.4	07.8	03	5	7	020	25	98	2	1755	IV 26

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

Monitor Checks	on Deck	at Surface
Press.		2.157
Temp.		8.284
Cond.		
Other		32.870

Times	JD/Time
Data on	230850
at Surface	230855
Start Down	231045
at Bottom	234735
Start Up	2348
at Surface	
Data off	

Data Location

Tape/Diskette I.D.	File Name/Header
	CAST026_16SEP2309

Remarks 3.87

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			500		000640	500.179	3.744		34.001							34.000	6		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

1499.051/2.221/34.508

Initials CD/MC

✓

33932

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
027	NOAA SHIP MILLER FREEMAN	MF-92-09				LINE IV, STA 27

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	Min.	E or W	Date JD = 261 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
027	52	58	N	176	7	E W	16	SEP	92													IV, 27

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

Monitor Checks

	on Deck	at Surface
Press.		0.137
Temp.		8.177
Cond.		
Other		32.871

Times JD/Time
Data on 035352
at Surface 035324
Start Down 035405
at Bottom
Start Up
at Surface
Data off

Data Location
Tape/Diskette I.D.
File Name/Header: CAST027_16SEP0353

Remarks At ~470 m salinity jumped to a lower salinity (~0.2‰) - stopped cast at ~550 m - cast aborted, has drawn up earlier

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			DEPTH							100	3.817	33.08							1
2										80		33.05							2
3										70		33.02							3
4										60		32.98							4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

ABORTED (JELLYFISH?)

Initials CD/MC

✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
027	NOAA SHIP MILLER FREEMAN	MF-92-09	329			LINE IV STA 27

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date JD = 261 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
027	52	57.93	N	176 18.16	E W	17	SEP	92	05	35	08.6	07.2	1005.0	5	6	025	22	8	8	2	3940	IV/27

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

Monitor Checks	on Deck	at Surface
Press.		0.263
Temp.		8.176
Cond.		
Other		32.874

Times	JD/Time
Data on	045815
at Surface	045845
Start Down	045857
at Bottom	0535
Start Up	053540
at Surface	
Data off	

Data Location	
Tape/Diskette I.D.	File Name/Header
	CAST027_16SEP0457

Remarks 1504 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			DEPTH		0535					1502.702	2.377		34.476			34.476	22		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials CD/MC

✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
028	NOAA SHIP MILLER FREEMAN	MF-92-09	330			LINE IV STA 28

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date JD = 261 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	53	31.16	N	176	18.31	E	17	SEP	92	1034	08.7	07.3	06	7	6	030	030	8	8	2	3943	IV,28

CTD

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 ____

at Bottom ____

Start Up ____

at Surface ____

Data off ____

Data Location

Tape/Diskette I.D. ____

File Name/Header: cast029_17SEP09

Remarks: Illegal input caused screen to freeze up. ∴ Recorded upcast (C28UP_) to use if necessary. Log file for sal sample = C28UP

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		✓	SURF.	110950						11.801	8.340	34.481	32.822	13.4	8.33	32.823	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 LL/BT

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
029	NOAA SHIP MILLER FREEMAN	MF-92-09	347			LINE IV, STA 29

Consec. Cast #	Latitude Deg. Min.	N or S	Longitude Deg.	E or W	Date JD = Day Mo. Yr.	Time GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
029	54 01.11	N	176 17.10	E ~~W~~	17 SEP 92	1610	8.0	6.0	12	6	7	025	28	8	72	3936	IV 29

CTD
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 ____
at Bottom ____
Start Up ____
at Surface ____
Data off ____

Data Location
Tape/Diskette I.D. ____
File Name/Header cast029_17SEP1531

Remarks w/01515 clip board hit the keyboard at 1436 depth. Screen froze C29L09-17Sept1610 water ppm Fe log file

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values Other (cal)	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			DEPTH			1508.759	2.288	31.265	34.471							34.495	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
030	NOAA SHIP MILLER FREEMAN	MF-92-09	357			LINE IV, STA 30

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 261 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
030	54	27.39	N	176 16.11	W	17	SEP	92	21	18	09.06	07.17	6804.5	2	0	8	7	1	3	3312	IV 30

CTD

Type & SN 91220-A

Press. SN 25084

Temp. SN 701

Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		2.166
Temp.		8.144
Cond.		
Other		32.906

Times JD/Time

Data on 204105

at Surface 204110

Start Down 2042

at Bottom 2118

Start Up 2118

at Surface

Data off

Data Location

Tape/Diskette I.D.

File Name/Header CAST030_17SEP2040

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			SURF							11.523	8.134		32.905			32.925	20		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

1501.026/2.261/34.479

Initials CD/WF

✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
031	NOAA SHIP MILLER FREEMAN	MF-92-09	385			

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 262 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
031	52	20.60	N	172 49.90	E	18	SEP	92	12	59	8.5	6.2	19	6	8	055	25	57	1	1540	IV31

CTD
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
at Bottom
Start Up
at Surface
Data off

Data Location
Tape/Diskette I.D.
File Name/Header: cast031_18SEP1992.1

Remarks
w/o 1535

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		✓	Depth -200	0340						1299.815	2.508	31.340	34.435	1287	2.51	34.452	26		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials LL/BT
✓

Pg. ____ of ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
032	NOAA SHIP MILLER FREEMAN	MF-92-09	387			

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Mo.	Yr.	JD = 262	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
032	52	18.11	N	172 45.20	W	18	SEP	92		1447		8.2	6.2	14	6	8	060	26	5	7	2300	V32

CTD 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 ____
at Bottom ____
Start Up ____
at Surface ____
Data off ____

Data Location

Tape/Diskette I.D. ____

File Name/Header: Cast 032 - 18SEP 1409

Remarks

w/o: 1507 max depth = 1503

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			surf.							11.635	8.126	34.332	32.865			32.862	30		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials LL/BT

✓ ____

Pg. ____ of ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
033	NOAA SHIP MILLER FREEMAN	MF-92-09	390			

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 262 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
033	52	09.99	N	172341	E	18	SEP	92	17	00	7.4	6.1	14	5	8	055	31	5	7	1	3756	IV33

CTD

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 ____

at Bottom ____

Start Up ____

at Surface ____

Data off ____

Data Location

Tape/Diskette I.D. ____

File Name/Header cast033_SEP18/622

Remarks

w/o 1528 maxdepth 1508

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			Depth							1500.840	2.268	31.274	34.507			34.506	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
034	NOAA SHIP MILLER FREEMAN	MF-92-09	395			LINE V, STA 34

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude	E or W	Date JD = 262 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
034	52	01.16	N	172	12.13	W	18	SEP	92	19	26	07.0	05.8	14	6	8	060	30	7	7	1	5530	V34

CTD

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 ____

at Bottom ____

Start Up ____

at Surface ____

Data off ____

Data Location

Tape/Diskette I.D. ____

File Name/Header CAST034_18SEP1849

Remarks

w/o 1508

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		✓	Surf.	195425						11.318	7.513		32.885	10.6	7.52	32.884	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 LL/WF

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
035	NOAA SHIP MILLER FREEMAN	MF-92-09	400			LINE V STA 35

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude	E or W	Date JD = 262 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
035	51	52.76	N	172	08.63	E/W	18	SEP	92	22	03	08.0	06.0	14	6	8	050	22	7	1	6000	V35

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

Monitor Checks

	on Deck	at Surface
Press.		53
Temp.		~7.6
Cond.		
Other		32.909

Times JD/Time
Data on 212540
at Surface 212455
Start Down 212645
at Bottom 2202
Start Up 220322
at Surface 222
Data off

Data Location
Tape/Diskette I.D.
File Name/Header: CAST035_18SEP2625

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			DEPTH		2203					1502.424	2.211	31.234	34.518			34.518	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 CD/WP
✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
036	NOAA SHIP MILLER FREEMAN	MF-92-09	407			LINE V, STA 36

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date JD = 263 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	51	28.12	N	174	E	19	SEP	92	01	54	08.8	06.8	1267	0	5	5	28	8	7	2	4700	V 36

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

Monitor Checks

	on Deck	at Surface
Press.		1.127
Temp.		7.887
Cond.		
Other		32.825

Times JD/Time
Data on 011830
at Surface 011825
Start Down 011840
at Bottom 015430
Start Up 015435
at Surface
Data off

Data Location
Tape/Diskette I.D.
File Name/Header CAST036_19SEP0117

Remarks CTD hit side of ship on recovery
1513 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			SURF							9.737	7.907		32.797			32.796	19		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

1501.712 | 2.134 | 34.535

Initials SD/MC
✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
037	NOAA SHIP MILLER FREEMAN	MF-92-09	432			LINE VI

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude	E or W	Date JD = 263 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
037	53	00.01	N	172	06.81	E/W	19	SEP	92	13	55	6.8	5.8	15	5	8	060	20	5	7	1	496	VI

CTD

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 ____

at Bottom ____

Start Up ____

at Surface ____

Data off ____

Data Location

Tape/Diskette I.D. ____

File Name/Header CAST037_19SEP1331

Remarks

w/o 481 max depth 479

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		✓	DEPTH	56:26	01:26					450.873	3.664	31.679	34.069		3.66	34.066	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 ____

✓ ____

Pg. ____ of ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
038	NOAA SHIP MILLER FREEMAN	MF-92-09	434			

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 263 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
038	53	00.91	N	171 52.04	E ~~W~~	19	SEP	92	15	19	78	68	15	5	8	060	20	6	85	523	VI 38

CTD	
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	
at Bottom	
Start Up	
at Surface	
Data off	

Data Location	
Tape/Diskette I.D.	File Name/Header
	cast038, 19SEP

Remarks
w/o 506

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			surf.			10,353	7.262	33.603	32.899							32.898	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 LL/BS

✓ ____

Pg. ____ of ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
039	NOAA SHIP MILLER FREEMAN	MF-92-09	436			

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Mo.	Yr.	JD =	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
039	53	60	N	137	E	19	SEP	92		16	44	82	69	1558		8	060	22	67	1	663	VC39

CTD
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
at Bottom
Start Up
at Surface
Data off

Data Location
Tape/Diskette I.D.
File Name/Header: Cast039_19SEP1629

Remarks
w/o 705

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			DEPTH			658.833	3.583	31.734	34.110							34.107	24		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials LL / WF

✓

Pg. ____ of ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
040	NOAA SHIP MILLER FREEMAN	MF-92-09	465			LINE VI STA 40

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Mo.	Yr.	JD = 264	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
040	53	02.93	N	171 23.85	E	20	SEP	92		08	50	6.9	5.9	15	29	05	023	2	9	2	575	VI 40

CTD

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 ____

at Bottom ____

Start Up ____

at Surface ____

Data off ____

Data Location

Tape/Diskette I.D. ____

File Name/Header: cast040_20SEP0834

Remarks: w/o 562

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Temp.	Cond.	SAL ~~Other~~	Conv. Mon. Values-CTD Press.	Temp.	Cond.	Sal.	Sample Bot. Data Therm-P	Avg Tw	Sal.	Sal. Bot. #	Other Samp.	Pos.
1		✓	surf	0900:16	090516	10.898	7.513	33.811	32.885		7.5		32		7.51	32.885	01		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials LL/BT

✓ ____

Pg. ____ of ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
041	NOAA SHIP MILLER FREEMAN	MF-92-09	465			

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date JD = 264 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	53	46	N	171	35 E W	20	SEP	92	10	21	07	06	16	39	05	12	9	2	2	1468	VI 41

CTD	
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	
at Bottom	
Start Up	
at Surface	
Data off	

Data Location

Tape/Diskette I.D.	File Name/Header
	CAST 041 - 20SEP0946

Remarks stopped ~50m short of bottom (as per instructions) w/O 1441

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			DEPTH							1431.215	2.210	31.201	34.516			34.516	09		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials LL/BS

✓

Pg. ____ of ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
042	NOAA SHIP MILLER FREEMAN	MF-92-09	477			

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Mo.	Yr.	JD = 264	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
042	53	19.33	N	170 30.24	E	20	SEP	92		14	07	76	66	1016	37	065	17	7	2	2	1054	VI42

CTD

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 ____

at Bottom ____

Start Up ____

at Surface ____

Data off ____

Data Location

Tape/Diskette I.D. ____

File Name/Header cast042_20SEP1340

Remarks w/o 1019

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			Surface							11.416	8.277	34.454	32.852			32.850	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 LL/BT

✓ ____

Pg. ____ of ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
43	NOAA SHIP MILLER FREEMAN	MF-92-09	479			

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Mo.	Yr.	JD = 264	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	53	22.99	N	170 14.83	E ~~W~~	20	SEP	92		16	01	6.8	5.8	1016.4	7	2	060	16.9	7	2	1696	VI43

CTD

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 ____

at Bottom ____

Start Up ____

at Surface ____

Data off ____

Data Location

Tape/Diskette I.D. ____

File Name/Header CAST043_20SEP1524

Remarks

w/o 1499

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values Other (Sal)	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		✓	depth	160m	160m	1503.061	2.134	31.179	34.532						2.13	34.531	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 LJBF

✓ ____

Pg. ____ of ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
044	NOAA SHIP MILLER FREEMAN	MF-92-09	481			

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Mo.	Yr.	JD =	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
044	53	27.22	N	170 03.93	E/W	20	SEP	92		1759		73	60	1046	4	8	075	15	97	2	1829*	44

CTD
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
at Bottom
Start Up
at Surface
Data off

Data Location
Tape/Diskette I.D.
File Name/Header: Cast044_20SEP

Remarks *(Got ambiguous trace from pinger, decided to play it safe + stop a little early.)
W/b 1452

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			surface							16.802	8.163	34.343	32.839			32.837	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 LL/BF
✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
045	NOAA SHIP MILLER FREEMAN	MF-92-09				LINE VII, STA 45

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Mo.	Yr.	JD = 265	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
045	55	25.78	N	172549.6	E/W	21	SEP	92		07	56	7.0	5.2	1016	2	8	050	18	9	7	3785	VII 45

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

Monitor Checks

	on Deck	at Surface
Press.		0.626
Temp.		7.616
Cond.		
Other		32.883

Times JD/Time
Data on 072942
at Surface 072940
Start Down 073100
at Bottom
Start Up
at Surface
Data off

Data Location
Tape/Diskette I.D.
File Name/Header CAST045_21SEP0729

Remarks
w/o = 1001

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			DEPTH							1000.768	2.817	31.428	34.368			34.366	6		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials CD-MC/LL-B

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
046	NOAA SHIP MILLER FREEMAN	MF-92-09	515			LINE VII, STA 46

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Mo.	Yr.	JD = 265	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
046	55	15	N	173 29	15 E	21	SEP	92		10	44	7.0	5.7	15	2	8	070	20	97	2	3789	VII 46

CTD
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 ____
at Bottom ____
Start Up ____
at Surface ____
Data off ____

Data Location
Tape/Diskette I.D. ____
File Name/Header: cast 046 - 21 SEP 1019

Remarks - very strange, diffuse salinity trace on upcast, starting at about 250m, will check w/ 61000 maxdepth = 1000 conductivity

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		✓	SURF	11:03:00	11:06					12.121	8.320	34.481	32.840		8.33	32.840	11		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

cell for poss. contamination before to cast

Initials LL/BT
✓ ____

Pg. ____ of ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
047	NOAA SHIP MILLER FREEMAN	MF-92-09	520			

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Mo.	Yr.	JD = 265	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	55	05.31	N	174	E	21	SEP	92		13	52	69	55	14	4	8	055	24	9	7	2	3784	VII 47

CTD

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 ____

at Bottom 1352

Start Up ____

at Surface ____

Data off ____

Data Location

Tape/Diskette I.D.	File Name/Header
	cast047_21SEP1326

Remarks Last cast, jellyfish got in cond. cell on upcast. I was rinsed thoroughly until a zero reading was o w/o 1005

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			Depth							1001.595	2.890	31.475	34.349			34.347	24		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials LL/BT

✓ ____

Pg. ____ of ____

Consec. Cast #	Vessel	Proj. & Leg	Event #	Vessel Sta. I.D.	Instructions	Sta. Designation
048	NOAA SHIP MILLER FREEMAN	MF-92-09	525			

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Date Mo.	Date Yr.	JD = 265	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
048	54	54.98	N	174 40.05	E	21	SEP	92		17	13	75	65	1248			050	18	55		1	3781	1148

CTD	
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	
at Bottom	
Start Up	
at Surface	
Data off	

Data Location	
Tape/Diskette I.D.	File Name/Header
	CAST 048

Remarks

w/o 1023 max dep: 1001

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			surf							12.041	7.806	34.019	32.830			32.830	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 LL/BE

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
049	NOAA SHIP MILLER FREEMAN	MF-92-09	531			LINE VII, STA 49

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date Day	Mo.	Yr.	JD = 265	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	54	40.00	N	175	14.81	21	SEP	92		20	14	06.9	05.9	11	4	8	050	22	15	1	3763	VII 49

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

Monitor Checks

	on Deck	at Surface
Press.		1.348
Temp.		7.312
Cond.		
Other		32.977

Times JD/Time
Data on 194820
at Surface 194820
Start Down 194910
at Bottom 201337
Start Up 201845
at Surface
Data off

Data Location
Tape/Diskette I.D.
File Name/Header: CAST049_21SEP1947

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		✓	DEPTH	201337	201840					997.682	2.872		34.352		2.88	34.352	01		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials ____
✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
050	NOAA SHIP MILLER FREEMAN	MF-92-09	596			CM-E

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 267 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
050	59	14.72	N	178	35.88	23	SEP	92	04	50	06.9	05.9	11	4	8	050	22	15	1	949	CM-E

CTD
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 042911
at Surface 042930
Start Down 042945
at Bottom 044958
Start Up 0450
at Surface
Data off

Data Location
Tape/Diskette I.D.
File Name/Header CAST050_23SEP0428

Remarks
w/o 813

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			DEPTH							800.373	3.140		34.240			34.238	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
051	NOAA SHIP MILLER FREEMAN	MF-92-09	602			

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date JD = 267 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	59	37.06	N	178	10.38	W	23	SEP	07	52	35	21	1019	2	8	070	20	1	2	0	166	51

CTD
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 ____
at Bottom ____
Start Up ____
at Surface ____
Data off ____

Data Location
Tape/Diskette I.D. ____
File Name/Header CAST051_23SEP0428

Remarks
w/o 144

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			DEPTH							143.40	2.708	30.029	33.233			33.228			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	NOAA SHIP MILLER FREEMAN	MF-92-09	685			LINE VIII, STA 52

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude	E or W	Date JD = 268 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
052	53	34.45	N	179	39.96	E/W	24	SEP	92	23	00	07.10	06.0	1838.1	6	5	229	25	22	10	2210	VIII 52

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

Monitor Checks	on Deck	at Surface
Press.		1.303
Temp.		7.502
Cond.		
Other		32.906

Times	JD/Time
Data on	268 / 222316
at Surface	222304
Start Down	222335
at Bottom	225920
Start Up	225940
at Surface	
Data off	

Data Location	
Tape/Diskette I.D.	File Name/Header
	CAST052 24SEP2222

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		✓	SURF	232704						12.363	7.477		32.909		7.476	32.908	19		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

1501.776 | 2.227 | 34.505

Initials CD/WF

✓

x30 600 500 4.20

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
053	NOAA SHIP MILLER FREEMAN	MF-92-09	689			LINE VIII, STA 53

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude	E or W	Date JD = 269 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
053	53	14.52	N	179	46.00	E	25	SEP	92	02	11	06.8	05.5	14	4	7	160	30	9	5	6	2450	VIII 53

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

Monitor Checks

	on Deck	at Surface
Press.		0.899
Temp.		6.984
Cond.		
Other		32.959

Times JD/Time
Data on 013433
at Surface 013435
Start Down 013455
at Bottom 021145
Start Up 0212
at Surface
Data off

Data Location
Tape/Diskette I.D.
File Name/Header CAST053_25SEP0133

Remarks
2.912
3.890

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			DEP							1499.404	2.239		34.502			34.503	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
054	NOAA SHIP MILLER FREEMAN	MF-92-09	693			LINE VIII, STA 54

Consec. Cast #	Latitude Deg.	Min.	N or S	Longitude Deg.	E or W	Date JD = 269 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
054	53	18.28	N	179 49.86	W	25	SEP	92	04	36	06.205	08.5	1014.0	3	6	8	9	8		629	VIII 54

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

Monitor Checks	on Deck	at Surface
Press.		6.222
Temp.		6.609
Cond.		
Other		33.061

Times	JD/Time
Data on	041910
at Surface	041945
Start Down	041950
at Bottom	043650
Start Up	043658
at Surface	
Data off	

Data Location

Tape/Diskette I.D. ____

File Name/Header: CAST054_25SEP0418

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			SURF		044817					9.936	6.244		33.060			33.061	27		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

606.716/3.373/34.171

Initials ____

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
055	NOAA SHIP MILLER FREEMAN	MF-92-09	711			LINE VIII, STA 55

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 269 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
055	53	22.96	N	179 25.97	W	25	SEP	92	1505	07	20.68	19.58	2302	04	7	1	1160				VIII, 55

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

Monitor Checks

	on Deck	at Surface
Press.		
Temp.		
Cond.		33.038
Other		

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

Data Location

Tape/Diskette I.D.	File Name/Header
	CAST055_25SEP1433

Remarks

w/o 1151, CAST DEPTH 1149m

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values ~~Other~~ SAL	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		✓	900 w/o DEP	1509 30	1514 30	900.073	2.913	31.437	34.332						2.911	34.328	30		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials LL/BT/BF

✓ ____

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
056	NOAA SHIP MILLER FREEMAN	MF-92-09	713			LINE VIII, STA 56

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude	E or W	Date Day	Mo.	Yr.	JD = 269	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	53	24.04	N	179	11.72	W	25	SEP	92		17	08	7.2	6.3	989.1	5	8	195	20	8	3	3330	VIII 56

CTD	
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	16:30:45
at Bottom	17 09 00
Start Up	
at Surface	
Data off	

Data Location	
Tape/Diskette I.D.	File Name/Header
	CAST056_25SEP1629

Remarks: MAX DEPTH 1498 db w/n 1530

Pos.	Bot.	T Rack	Trip Depth	Time @ Depth	Time @ Trip	Monitor Values Press.	Monitor Values Temp.	Monitor Values Cond.	Monitor Values ~~Other~~ SAL	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			SURF		173535	13.717	5.923	32.590	33.069							33.067	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 BT/WF

✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
057	NOAA SHIP MILLER FREEMAN	MF-92-09	716			LINE VIII, STA 57

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	E or W	Date JD = 269 Day	Mo.	Yr.	Time GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb 987.5	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D
057	53	13.39	N	179 08.66	W	25	SEP	92	19	09	7.0	6.2	87	5	8	180	22	8	7	3420	VIII 57

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

Monitor Checks

	on Deck	at Surface
Press.		6.167
Temp.		2.206
Cond.		
Other		33.027

Times JD/Time
Data on 184500
at Surface 184430
Start Down 184505
at Bottom 190913
Start Up 1910
at Surface
Data off

Data Location
Tape/Diskette I.D.
File Name/Header CAST057_25SEP1844

Remarks 3.839 711-5 713-6

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			DCP							1002.285	2.822		34.351			34.349	16		1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

Initials CD / WF
✓

Consec. Cast #	Vessel	Proj. & Leg	Event#	Vessel Sta. I.D.	Instructions	Sta. Designation
058	NOAA SHIP MILLER FREEMAN	MF-92-09	722			LINE VIII, STA 58

Consec. Cast #	Latitude Deg.	Latitude Min.	N or S	Longitude Deg.	Longitude Min.	E or W	Date JD = 269 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
058	52	45.38	N	179	06.81	W	25	SEP	92	22	53	08.50	08.08	5	5	7	295	20	3	7	1	3130	VIII 58

CTD

Type & SN 91220-A

Press. SN 25084

Temp. SN 701

Cond. SN 303

Monitor Checks

	on Deck	at Surface
Press.		1.180
Temp.		6.159
Cond.		
Other		33.073

Times JD/Time

Data on 221457

at Surface 221457

Start Down 221520

at Bottom 2251

Start Up

at Surface

Data off

Data Location

Tape/Diskette I.D.

File Name/Header CAST058_255EP2214

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		✓	DEPTH	225125	225625					1457.967	2.363		34.471		2.35	34.470	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 ____

✓ ____