

VESSEL				PROJECT & LEG				STATION DESIGNATION												
NOAA R/V MILLER FREEMAN				MF99-07																
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		WET BULB (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt)	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID		
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR											MIN	
001	53	22.15	N	168	42.27	W	13	M	A	Y	99	10	12	4.5	4.0	19	4	1	272	
CTD		TIMES		JD/TIME		DATA LOCATION		REMARKS												
TYPE & SN		9+ S/N 91660		DATA ON		Tape/Diskette ID		File Name/Header												
PRESS SN		29772		START DOWN				CTD001												
PRI TEMP SN		884		AT DEPTH																
SEC TEMP SN		889		AT SURFACE																
PRI COND SN		530		PAR 4242		FLUOR 153		TRANSMISSOMETER												
SEC COND SN		303		3 ug/l		10 ug/l		100 ug/l												
TRIP DEPTH				30 ug/l		300 ug/l		1000 ug/l												
POS.				CTD CONVERTED MONITOR VALUES		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER												
1		268.325		PRI. TEMP.		SEC. TEMP.		PRI. SALINITY												
2								SEC. SALINITY												
3								SALINITY												
4								33.6268												
5								33.6277												
6																				
7																				
8																				
9																				
10																				
11																				
12																				

SOUTHERNMOST CTD
OF "DOG LEG"
(13 STATIONS TOTAL)
MAX. DEPTH = 269 m

VESSEL				PROJECT & LEG				STATION DESIGNATION													
NOAA RV MILLER FREEMAN				MF99-07																	
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		WET BULB (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt)	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID			
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR											MIN		
002	53	25.47 N	168	45.19 W	13	MAY	99	11	04	4.5	19.4	*	115	34	*	*	759				
CTD		JD/TIME		DATA LOCATION		REMARKS															
TYPE & SN		DATA ON		Tape/Diskette ID		File Name/Header															
PRESS SN		START DOWN		CTD002																	
PRI TEMP SN		AT DEPTH																			
SEC TEMP SN		AT SURFACE																			
PRI COND SN		PAR 4242		FLUOR 153		CHIAM 109		TRANSMISSOMETER		Cleared air bleed valve											
SEC COND SN		3 ug/l		10 ug/l		30 ug/l		100 ug/l		300 ug/l		1000 ug/l									
TRIP DEPTH		CTD CONVERTED MONITOR VALUES																			
POS.	DEPTH	PRESSURE	PRI. TEMP.	SEC. TEMP.	PRI. SALINITY	SEC. SALINITY	SALINITY	SAMPLE BOTTLE DATA										SAMPLE BOTTLE NUMBER			
1		735.075			34.1616		34.1607											SAL.	NUTR.	CHL.	WHIT'S NUTR.
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

VESSEL		PROJECT & LEG		STATION DESIGNATION													
NOAA R/V MILLER FREEMAN		MF99-07															
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=	TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt)	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
00353311410N	DEG MIN	DEG MIN	DEG MIN	DEG MIN	DAY MO YR	HR MIN	4.5	4.5	01846	*	*	12835	*	*	*	11390	
CTD		JD/TIME		TIMES		DATA LOCATION											
TYPE & SN		9+ S/N 91660		DATA ON		File Name/Header											
PRESS SN		29772		START DOWN		CTD0003											
PRI TEMP SN		884		AT DEPTH													
SEC TEMP SN		889		AT SURFACE													
PRI COND SN		530		PAR 4242		FLUOR 153		CHIAM 109		TRANSMISSOMETER		Cleaned air bleed valve					
SEC COND SN		303		3 ug/l		10 ug/l		30 ug/l		100 ug/l		1000 ug/l					
POS.	TRIP DEPTH	CTD CONVERTED MONITOR VALUES										SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER			
1		PRESSURE	PRI. TEMP.	SEC. TEMP.	PRI. SALINITY	SEC. SALINITY	SALINITY	SAL.	NUTR.	CHL.	WHIT'S NUTR.						
2		1037.122			34.3298		34.3292	35									
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	

REMARKS

Notably thought

Bottom depth was ~1040 m

instead of ~1790 m

MAX. DEPTH = 1036 m

VESSEL		PROJECT & LEG				STATION DESIGNATION														
NOAA R/V MILLER FREEMAN		MF99-07																		
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	SEA STATE	VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID	
DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)		
004	5335.96	N	16904.68	W	13	MAY	99	1422	4.5	4.0	1757			125	35	* *	* *	11070		
CTD		TIMES		JD/TIME		DATA LOCATION														
TYPE & SN		DATA ON				Tape/Diskette ID File Name/Header														
PRESS SN		START DOWN				C.T. 0004														
PRI TEMP SN		AT DEPTH				1870 m														
SEC TEMP SN		AT SURFACE				MAX. DEPTH = 1128 m														
PRI COND SN	530	PAR 4242	FLUOR 153	CHIAM 109	Cleaned air bleed valve															
SEC COND SN	303	3 ug/l	10 ug/l	30 ug/l	100 ug/l	300 ug/l	1000 ug/l													
POS.	TRIP DEPTH	CTD CONVERTED MONITOR VALUES										SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER						
		PRESSURE	PRI. TEMP.	SEC. TEMP.	PRI. SALINITY	SEC. SALINITY	SALINITY	SAL.	NUTR.	CHL.	WHIT'S NUTR.									
1		1138.950			34.3746		34.3738	25												
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

Must have thought bottom
depth was ~1140m instead
of 1870m
MAX. DEPTH = 1128 m

VESSEL		PROJECT & LEG		STATION DESIGNATION												
NOAA R/V MILLER FREEMAN		MF99-07														
CONSC CAST #	LATITUDE	LONGITUDE		DATE JD=	TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt)	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
0055346-73N	16915.49W	13	MAY 99	1644	4.9	4.1	1757	110	22	771	1530					
CTD		TIMES		JD/TIME		DATA LOCATION		REMARKS								
TYPE & SN		DATA ON		Tape/Diskette ID		File Name/Header										
PRESS SN		START DOWN				CTD005										
PRI TEMP SN		AT DEPTH														
SEC TEMP SN		AT SURFACE														
PRI COND SN		PAR 4242		FLUOR 153		CHIAM 109		TRANSMISSOMETER								
SEC COND SN		3 ug/l		10 ug/l		30 ug/l		100 ug/l								
								Cleared air bleed valve								
TRIP DEPTH																
POS.		CTD CONVERTED MONITOR VALUES		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER										
1		PRESSURE	PRI. TEMP.	SEC. TEMP.	PRI. SALINITY	SEC. SALINITY	SALINITY	SAL	NUTR.	CHL.	WHIT'S NUTR.					
2		1522.500			34.5149		34.5149	10								
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																

prior to ocean bot off

@ ~1150 m

MAX. DEPTH = 1502 m

VESSEL		PROJECT & LEG		STATION DESIGNATION																					
NOAA R/V MILLER FREEMAN		MF99-07																							
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID							
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	(deg)	(kts)	*	(m)								
006	54	01.32N	169	33.98W	13	MAY	99	19	36	05.1	04.9	15	57	11	4	26	87	21790							
CTD		TIMES		JD/TIME		DATA LOCATION														REMARKS					
TYPE & SN		9+ S/N 91660		DATA ON		Tape/Diskette ID														File Name/Header					
PRESS SN		29772		START DOWN																CTD006					
PRI TEMP SN		884		AT DEPTH																					
SEC TEMP SN		889		AT SURFACE																MAX. DEPTH = 1500 m					
PRI COND SN		530		PAR 4242		FLUOR 153		CHIAM 109		TRANSMISSOMETER		Cleared air bleed valve													
SEC COND SN		303		3 ug/l		10 ug/l		30 ug/l		100 ug/l		300 ug/l		1000 ug/l											
TRIP DEPTH		CTD CONVERTED MONITOR VALUES																		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER			
POS	PRESSURE	PRI. TEMP.	SEC. TEMP.	PRI. SALINITY	SEC. SALINITY	SALINITY														SAL.	NUTR.	CHL.	WHIT'S NUTR.		
1	1518.652			34.5054		34.5053														34					
2																									
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									

VESSEL						PROJECT & LEG							STATION DESIGNATION													
NOAA RV MILLER FREEMAN						MF99-07																				
CONSC CAST #	LATITUDE		LONGITUDE			DATE JD=			TIME (GMT)		DRY BULB	WET BULB	PRESSURE	SEA STATE	VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID					
	DEG	MIN	DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	(deg)	(kts)	*	*	(m)							
0075419.911N	169	49.32W	13	MAY	99	22	49	05.1	04.3	14	57	08	120	872	1880											
CTD		TIMES		JD/TIME		DATA LOCATION															REMARKS					
TYPE & SN		9+ S/N 91660		DATA ON		Tape/Diskette ID File Name/Header																				
PRESS SN		29772		START DOWN																						
PRI TEMP SN		884		AT DEPTH																						
SEC TEMP SN		889		AT SURFACE																	1512 = W/b MAX. DEPTH = 1502 m					
PRI COND SN		530		PAR 4242		FLUOR 153		CHLAM 109		TRANSMISSOMETER		Cleaned air bleed valve														
SEC COND SN		303		3 ug/l		10 ug/l		30 ug/l		100 ug/l		300 ug/l		1000 ug/l												
TRIP DEPTH		CTD CONVERTED MONITOR VALUES																			SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER			
POS.	PRESSURE	PRI. TEMP.	SEC. TEMP.	PRI. SALINITY	SEC. SALINITY	SALINITY																SAL.	NUTR.	CHL.	WHIT'S NUTR.	
1	1521.45H			34.5061		34.5057																11				
2																										
3																										
4																										
5																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										

VESSEL		PROJECT & LEG				STATION DESIGNATION																
NOAA R/V MILLER FREEMAN		MF99-07																				
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	SEA STATE	VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID			
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	(m)				
008	54	39	50	N	16	9	12	20	W	13	M	A	Y	9	0	3	1	7	0	5		
CTD		TIMES		JD/TIME		DATA LOCATION																
TYPE & SN		DATA ON				Tape/Diskette ID File Name/Header																
PRESS SN		START DOWN																				
PRI TEMP SN		AT DEPTH																				
SEC TEMP SN		AT SURFACE																				
PRI COND SN	530	PAR 4242	FLUOR 153	CHIAM 109	TRANSMISSOMETER	Cleaned air bleed valve																
SEC COND SN	303	3 ug/l	10 ug/l	30 ug/l	100 ug/l	300 ug/l	1000 ug/l															
POS.	TRIP DEPTH	CTD CONVERTED MONITOR VALUES																				
		PRESSURE	PRI. TEMP.	SEC. TEMP.	PRI. SALINITY	SEC. SALINITY	SALINITY	SAMPLE BOTTLE DATA											SAMPLE BOTTLE NUMBER			
1		1521.862			34.5176		34.5181												SAL.	NUTR.	CHL.	WHIT'S NUTR.
2																						
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						

w/o 1535
MAX. DEPTH = 1502 m

VESSEL				PROJECT & LEG				STATION DESIGNATION													
NOAA R/V MILLER FREEMAN				MF99-07																	
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		WET BULB (°C)	PRESSURE (mb)	SEA STATE	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt)	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID				
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR										MIN			
009	54	58.16	N	168	42.97	W	14	MAY	99	08	00	05	5	4.9	11	67	08	630	872	2000	
CTD		TIMES		JD/TIME		DATA LOCATION															
TYPE & SN		9+ S/N 91660		DATA ON		Tape/Diskette ID															
PRESS SN		29772		START DOWN		File Name/Header															
PRI TEMP SN		884		AT DEPTH		CTD009															
SEC TEMP SN		889		AT SURFACE																	
PRI COND SN		530		PAR 4242		FLUOR 153		CHIAM 109		TRANSMISSOMETER		Cleaned air bleed valve									
SEC COND SN		303		3 ug/l		10 ug/l		30 ug/l		100 ug/l		300 ug/l		1000 ug/l							
POS.	TRIP DEPTH	CTD CONVERTED MONITOR VALUES												SAMPLE BOTTLE DATA				SAMPLE BOTTLE NUMBER			
		PRESSURE	PRI. TEMP.	SEC. TEMP.	PRI. SALINITY	SEC. SALINITY	SALINITY	SAL.	NUTR.	CHL.	WHIT'S NUTR.										
1		1519.339			34.4993		34.4998	14													
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					
MAX. DEPTH = 1500 m																					

VESSEL		PROJECT & LEG				STATION DESIGNATION															
NOAA RV MILLER FREEMAN		MF99-07																			
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	SEA STATE	VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID		
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)		
010	55	06	11	28	30	14	MAY	99	12	14	5.0	3.5	1167	1083	38	*	2	1670			
CTD		TIMES		JD/TIME		DATA LOCATION															
TYPE & SN		DATA ON				Tape/Diskette ID				File Name/Header											
PRESS SN		START DOWN								CTD010											
PRI TEMP SN		AT DEPTH																			
SEC TEMP SN		AT SURFACE																			
PRI COND SN		PAR 4242		FLUOR 153		CHIAM 109		TRANSMISSOMETER		Cleaned air bleed valve											
SEC COND SN		3 ug/l		10 ug/l		30 ug/l		100 ug/l		300 ug/l		1000 ug/l									
POS.	TRIP DEPTH	CTD CONVERTED MONITOR VALUES																			
		PRESSURE	PRI. TEMP.	SEC. TEMP.	PRI. SALINITY	SEC. SALINITY	SALINITY		SAMPLE BOTTLE DATA										SAMPLE BOTTLE NUMBER		
1	700	309.874			34.1997		34.1984		29										WHIT'S NUTR.		
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

MAX. DEPTH = 1503 m

VESSEL		PROJECT & LEG				STATION DESIGNATION														
NOAA RV MILLER FREEMAN		MF99-07																		
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=			TIME (GMT)		DRY BULB	WET BULB	PRESSURE	SEA STATE	VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID
DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)		
012	55	22.69	N	168	10.65	W	14	MAY	99	20	22	05.1	04.0	1377	115	35	8	72	487	
CTD		TIMES		JD/TIME		DATA LOCATION										REMARKS				
TYPE & SN		DATA ON				Tape/Diskette ID										File Name/Header				
PRESS SN		START DOWN														CTD012				
PRI TEMP SN		AT DEPTH																		
SEC TEMP SN		AT SURFACE														MAX. DEPTH = m				
PRI COND SN	530	PAR 4242	FLUOR 153	CHLOR 109	TRANSMISSOMETER	Cleaned air bleed valve														
SEC COND SN	303	3 ug/l	10 ug/l	30 ug/l	100 ug/l	300 ug/l	1000 ug/l													
TRIP DEPTH	CTD CONVERTED MONITOR VALUES										SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER							
POS.	PRESSURE	PRI. TEMP.	SEC. TEMP.	PRI. SALINITY	SEC. SALINITY	SALINITY		SAL.	NUTR.	CHL.	WHIT'S NUTR.									
1	438.253			33.9072		33.9052		5												
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

VESSEL				PROJECT & LEG				STATION DESIGNATION											
NOAA RV MILLER FREEMAN				MF99-07															
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		DRY BULB	WET BULB	SEA STATE	VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID	
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)		*	(deg)	(kts)	*	(m)		
014	54	31	167	27	15	MAY	99	09	51	4.9	4.8	67	140	26	44	1	620		
CTD				JD/TIME				DATA LOCATION				REMARKS							
TIMES				Tape/Diskette ID				File Name/Header											
TYPE & SN				DATA ON															
PRESS SN				START DOWN															
PRI TEMP SN				AT DEPTH															
SEC TEMP SN				AT SURFACE															
PRI COND SN				PAR 4242				FLUOR 153				TRANSMISSOMETER							
SEC COND SN				3 ug/l				10 ug/l				100 ug/l							
				30 ug/l				300 ug/l				1000 ug/l							
TRIP DEPTH				CTD CONVERTED MONITOR VALUES															
POS.	PRESSURE	PRI. TEMP.	SEC. TEMP.	PRI. SALINITY	SEC. SALINITY	SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY	
1																			
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Private fish
fishing tow @
Dogshead
MAX. DEPTH = 501 m

[illegible]

[illegible]

VESSEL				PROJECT & LEG				STATION DESIGNATION																
NOAA RV MILLER FREEMAN				MF99-07																				
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		WET BULB		WIND DIRN.		WIND SPD.		WIND TYPE		WIND CLD (amt)		WIND WEATHER		BOTTOM DEPTH		STA. NAME/ID	
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(deg)	(kts)	(m)										
0175428.16N	163	19.73W	16	MAY	99	03	45	5.5	5.0	20	48	115	13	46	1	792								
CTD				TIMES				JD/TIME				DATA LOCATION				REMARKS								
TYPE & SN				9+ S/N 91660				DATA ON				Tape/Diskette ID				File Name/Header								
PRESS SN				29772				START DOWN																
PRI TEMP SN				884				AT DEPTH																
SEC TEMP SN				889				AT SURFACE								w/o = 657								
PRI COND SN				530				FLUOR 153				ChlAM 109				TRANSMISSOMETER								
SEC COND SN				303				10 ug/l				30 ug/l				100 ug/l								
				3 ug/l								100 ug/l				1000 ug/l								
POS.				TRIP DEPTH				CTD CONVERTED MONITOR VALUES				SAMPLE BOTTLE DATA				SAMPLE BOTTLE NUMBER								
PRESSURE				PRI. TEMP.				SEC. TEMP.				PRI. SALINITY				SEC. SALINITY				SALINITY				
1				654																33				
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

MAX. DEPTH = 654 m

[illegible]

VESSEL		PROJECT & LEG				STATION DESIGNATION																			
NOAA RV MILLER FREEMAN		MF99-07																							
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID							
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	(deg)	(kts)	*	(m)								
021	54	05.90	N	167	55.00	W	17	M	A	Y	99	09	10	05.1	05.0	1538	067	108	722000						
CTD		TIMES		JD/TIME		DATA LOCATION																			
		DATA ON				File Name/Header																			
TYPE & SN		9+ S/N 91660				Tape/Diskette ID																			
PRESS SN		29772				C1D021																			
PRI TEMP SN		884																							
SEC TEMP SN		889																							
PRI COND SN		530				Cleaned air bleed valve																			
SEC COND SN		303				1000 ug/l																			
TRIP DEPTH						1000 ug/l																			
POS.						SAMPLE BOTTLE DATA																			
						SAMPLE BOTTLE NUMBER																			
1		1108				PRESSURE		PRI. TEMP.		SEC. TEMP.		PRI. SALINITY		SEC. SALINITY		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.	
2																		13							
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									

W/O = 1123

MAX. DEPTH = 1108 m

VESSEL		PROJECT & LEG				STATION DESIGNATION																		
NOAA R/V MILLER FREEMAN		MF99-07																						
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt)	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID					
022	54	03.28	N	167	47.09	W	17	MAY	99	06	50	5.0	4.8	11	46	220	168	55						
CTD		TIMES		JD/TIME		DATA LOCATION																		
TYPE & SN		9+ S/N 91660		DATA ON		Tape/Diskette ID File Name/Header																		
PRESS SN		29772		START DOWN																				
PRI TEMP SN		884		AT DEPTH																				
SEC TEMP SN		889		AT SURFACE																				
PRI COND SN		530		FLUOR 153		CHIAM 109		TRANSMISSOMETER		Cleared air bleed valve														
SEC COND SN		303		10 ug/l		30 ug/l		100 ug/l		300 ug/l		1000 ug/l												
TRIP DEPTH		CTD CONVERTED MONITOR VALUES																						
POS.	PRESSURE	PRI. TEMP.	SEC. TEMP.	PRI. SALINITY	SEC. SALINITY	SAMPLE BOTTLE DATA													SAMPLE BOTTLE NUMBER					
1	952																		SAL.	29	CHL.		WHIT's NUTR.	
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

MAX. DEPTH = 952 m

VESSEL		PROJECT & LEG				STATION DESIGNATION										
NOAA RV MILLER FREEMAN		MF99-07														
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)	WET BULB	SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID	
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	(deg)	(kts)	(m)
023	54	17.2	166	22.3	01	7	99	12	17	5.1	4.5	15.4	7	26	5	1042
CTD	TIMES		JD/TIME		DATA LOCATION											
TYPE & SN	DATA ON				Tape/Diskette ID											
PRESS SN	START DOWN				File Name/Header											
PRI TEMP SN	AT DEPTH				CTD023											
SEC TEMP SN	AT SURFACE				UNIMAX PASS											
PRI COND SN	530		PAR 4242		FLUOR 153		CHIAM 109		TRANSMISSOMETER		Cleaned air bleed valve					
SEC COND SN	303		3 ug/l		10 ug/l		30 ug/l		100 ug/l		300 ug/l		1000 ug/l			
TRIP DEPTH	CTD CONVERTED MONITOR VALUES															
POS.	PRESSURE	PRI. TEMP.	SEC. TEMP.	PRI. SALINITY	SEC. SALINITY	SAMPLE BOTTLE DATA				SAMPLE BOTTLE NUMBER			WHIT'S NUTR.			
1										71						
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																

VESSEL		PROJECT & LEG		STATION DESIGNATION																	
NOAA RV MILLER FREEMAN		MF99-07																			
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	SEA STATE	VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID		
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	(deg)	(kts)	*	*	(m)			
024	54	16.72	N	166	27.64	W	17	MAY	99	16	58	3.8	2.0	1547	270	19	882	1151			
CTD		TIMES		JD/TIME		DATA LOCATION										REMARKS					
TYPE & SN		DATA ON				Tape/Diskette ID		File Name/Header													
PRESS SN		START DOWN						CTD024													
PRI TEMP SN		AT DEPTH																			
SEC TEMP SN		AT SURFACE																		MAX. DEPTH = m	
PRI COND SN	530	PAR 4242	FLUOR 153	CHIAM 109	TRANSMISSOMETER	Cleaned air bleed valve															
SEC COND SN	303	3 ug/l	10 ug/l	30 ug/l	100 ug/l	300 ug/l	1000 ug/l														
TRIP DEPTH	CTD CONVERTED MONITOR VALUES																				
POS.	PRESSURE	PRI. TEMP.	SEC. TEMP.	PRI. SALINITY	SEC. SALINITY	SAMPLE BOTTLE DATA														SAMPLE BOTTLE NUMBER	
1																				SAL.	CHL.
2																				5	
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

CTD after Unimod
Lighthouse (250m)

VESSEL			PROJECT & LEG			STATION DESIGNATION												
NOAA R/V MILLER FREEMAN			MF99-07															
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)	WET BULB	SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID			
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	(deg)	(kts)	(m)		
02654	16	90N	166	27	18	MAY	99	03	22	08.1	06.5	1937	270	10	78	11092		
CTD	TIMES		JD/TIME		DATA LOCATION													
TYPE & SN	DATA ON				Tape/Diskette ID		File Name/Header											
PRESS SN	29772		START DOWN															
PRI TEMP SN	884		AT DEPTH															
SEC TEMP SN	889		AT SURFACE															
PRI COND SN	530		PAR 4242		FLUOR 153		CHIAM 109		TRANSMISSOMETER		Cleaned air bleed valve							
SEC COND SN	303		3 ug/l		10 ug/l		30 ug/l		100 ug/l		300 ug/l		1000 ug/l					
POS.	TRIP DEPTH	CTD CONVERTED MONITOR VALUES																
		PRESSURE	PRI. TEMP.	SEC. TEMP.	PRI. SALINITY	SEC. SALINITY	SALINITY		SAMPLE BOTTLE DATA								SAMPLE BOTTLE NUMBER	
1	1002																	
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		

MAX. DEPTH = 1002 m

VESSEL		PROJECT & LEG				STATION DESIGNATION															
NOAA RV MILLER FREEMAN		MF99-07																			
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	SEA STATE	VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID		
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	(m)			
0275416.43N	16	43	166	27.42W	18	MAY	99	11	18	5.9	4.8	1937	265	06	48	11171					
CTD		TIMES		JD/TIME		DATA LOCATION															
TYPE & SN		9+ S/N 91660		DATA ON		Tape/Diskette ID															
PRESS SN		29772		START DOWN		CTD0027															
PRI TEMP SN		884		AT DEPTH																	
SEC TEMP SN		889		AT SURFACE																	
PRI COND SN		530		PAR 4242		FLUOR 153		CHIAM 109		TRANSMISSOMETER		Cleaned air bleed valve									
SEC COND SN		303		3 ug/l		10 ug/l		30 ug/l		100 ug/l		300 ug/l		1000 ug/l							
POS.	TRIP DEPTH	CTD CONVERTED MONITOR VALUES																			
		PRESSURE	PRI. TEMP.	SEC. TEMP.	PRI. SALINITY	SEC. SALINITY	SAMPLE BOTTLE DATA												SAMPLE BOTTLE NUMBER		
1																					
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

MAX. DEPTH = m

VESSEL		PROJECT & LEG				STATION DESIGNATION															
NOAA RV MILLER FREEMAN		MF99-07																			
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	SEA STATE	VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID		
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	(m)			
028	54	16	11	N	16	28	30	W	18	M	A	Y	99	16	14	5	0	3	92028	165	
CTD		TIMES		JD/TIME		DATA LOCATION															
TYPE & SN		9+ S/N 91660		DATA ON		Tape/Diskette ID															
PRESS SN		29772		START DOWN		CTD028															
PRI TEMP SN		884		AT DEPTH																	
SEC TEMP SN		889		AT SURFACE																	
PRI COND SN		530		PAR 4242		FLUOR 153		CHIAM 109		TRANSMISSOMETER		Cleaned air bleed valve									
SEC COND SN		303		3 ug/l		10 ug/l		30 ug/l		100 ug/l		300 ug/l		1000 ug/l							
POS.	TRIP DEPTH	CTD CONVERTED MONITOR VALUES																			
		PRESSURE	PRI. TEMP.	SEC. TEMP.	PRI. SALINITY	SEC. SALINITY	SALINITY	SAMPLE BOTTLE DATA											SAMPLE BOTTLE NUMBER		
1																					
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

MAX. DEPTH = 601 m

[illegible]

VESSEL		PROJECT & LEG		STATION DESIGNATION																				
NOAA RV MILLER FREEMAN		MF99-07																						
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	SEA STATE	VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID					
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	(m)						
305424.57N	16	50	7	99	18	M	A	Y	9	22	53	06	9	05	2	18	1	02	27	1				
CTD		TIMES		JD/TIME		DATA LOCATION																		
		DATA ON				Tape/Diskette ID																		
TYPE & SN		9+ S/N 91660				File Name/Header																		
PRESS SN		29772																						
PRI TEMP SN		884																						
SEC TEMP SN		889																						
PRI COND SN		530				Cleaned air bleed valve																		
SEC COND SN		303				1000 ug/l																		
TRIP DEPTH		141																						
POS.	PRESSURE		PRI. TEMP.		SEC. TEMP.		PRI. SALINITY		SEC. SALINITY		SALINITY		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER		SAL.		NUTR.		CHL.		WHIT'S NUTR.	
1															11									
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

MAX. DEPTH = 141 m

[illegible]

VESSEL				PROJECT & LEG				STATION DESIGNATION																							
NOAA RV MILLER FREEMAN				MF99-07																											
CONSC CAST #		LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		DRY BULB		WET BULB		PRESSURE		SEA STATE		VISIBILITY		WIND DIRN.		WIND SPD.		CLOUD (amt)		WEATHER		BOTTOM DEPTH		STA. NAME	
DEG	MIN	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	(mb)	(deg)	(kts)	(amt)	(amt)	(deg)	(kts)	(amt)	(amt)	(amt)	(amt)	(amt)	(amt)	(amt)	(amt)	(amt)	(amt)	
32		54 20.40 N		16525.30 W		19 MAY 99		0138		04.0		03.0		1527		1561		561		17		561		151							
CTD		TIMES		JD/TIME		DATA LOCATION		REMARKS																							
TYPE & SN		DATA ON		Tape/Diskette ID		File Name/Header																									
PRESS SN		29772																													
PRI TEMP SN		884																													
SEC TEMP SN		889																													
PRI COND SN		530																													
SEC COND SN		303																													
TRIP DEPTH		143																													
POS		143																													
1		143																													
2																															
3																															
4																															
5																															
6																															
7																															
8																															
9																															
10																															
11																															
12																															

[illegible]

VESSEL		PROJECT & LEG		STATION DESIGNATION																	
NOAA RV MILLER FREEMAN		MF99-07																			
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	SEA STATE	VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME ID		
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	(m)			
34	54	28.40	N	166	02.00	W	19	MAY	99	06	26	03.7	02.209	47	150	22	882	626			
CTD		TIMES		JD/TIME		DATA LOCATION															
TYPE & SN		9+ S/N 91660		DATA ON		Tape/Diskette ID File Name/Header															
PRESS SN		29772		START DOWN																	
PRI TEMP SN		884		AT DEPTH																	
SEC TEMP SN		889		AT SURFACE																	
PRI COND SN		530		PAR 4242		FLUOR 153		CHIAM 109		TRANSMISSOMETER		Cleaned air bleed valve									
SEC COND SN		303		3 ug/l		10 ug/l		30 ug/l		100 ug/l		300 ug/l		1000 ug/l							
POS.	TRIP DEPTH	CTD CONVERTED MONITOR VALUES																			
		PRESSURE	PRI. TEMP.	SEC. TEMP.	PRI. SALINITY	SEC. SALINITY	SALINITY	SAMPLE BOTTLE DATA											SAMPLE BOTTLE NUMBER		
1	528																				
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

MAX. DEPTH = 528 m

VESSEL NOAA RV MILLER FREEMAN				PROJECT & LEG MF99-07				STATION DESIGNATION												
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	SEA STATE	VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA NAME/D	
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	(deg)	(kts)	*	*	(m)		
035	54	34	16	08	19	MAY	99	08	15	6.0	5.1	17.4	7	110	29	88	2	420		
CTD																				
TYPE & SN		9+ S/N 91660		DATA ON		Tape/Diskette ID		File Name/Header		REMARKS										
PRESS SN		29772		START DOWN																
PRI TEMP SN		884		AT DEPTH																
SEC TEMP SN		889		AT SURFACE																
PRI COND SN		530		PAR 4242		FLUOR 153		CHIAM 109		TRANSMISSOMETER		Cleaned air bleed valve								
SEC COND SN		303		3 ug/l		10 ug/l		30 ug/l		100 ug/l		300 ug/l								
TRIP DEPTH		CTD CONVERTED MONITOR VALUES																		
POS.	PRESSURE	PRI. TEMP.	SEC. TEMP.	PRI. SALINITY	SEC. SALINITY	SALINITY	SAMPLE BOTTLE DATA													
1							SAMPLE BOTTLE NUMBER													
2							SAL. NUTR. CHL. WHIT'S NUTR.													
3							40													
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

MAX. DEPTH = 406 m

VESSEL				PROJECT & LEG				STATION DESIGNATION												
NOAA RV MILLER FREEMAN				MF99-07																
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	SEA STATE	VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME (ID)	
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	(m)		
036	54	41.23	N	166	14.18	W	19	M	A	Y	9	9	10	09	3.9	2.9	1547	128	27	289
CTD				TIMES				JD/TIME				DATA LOCATION				REMARKS				
TYPE & SN				9+ S/N 91660				DATA ON				Tape/Diskette ID				File Name/Header				
PRESS SN				29772				START DOWN								CTD036				
PRI TEMP SN				884				AT DEPTH												
SEC TEMP SN				889				AT SURFACE								MAX. DEPTH = 236 m				
PRI COND SN	530			<input checked="" type="checkbox"/>	PAR 4242	<input checked="" type="checkbox"/>	FLUOR 153	<input type="checkbox"/>	CHAM 109	<input type="checkbox"/>	TRANSMISSOMETER	<input type="checkbox"/>	Cleared air bleed valve							
SEC COND SN	303			<input type="checkbox"/>	3 ug/l	<input checked="" type="checkbox"/>	10 ug/l	<input type="checkbox"/>	30 ug/l	<input type="checkbox"/>	100 ug/l	<input type="checkbox"/>	1000 ug/l							
POS	TRIP DEPTH			CTD CONVERTED MONITOR VALUES																
				PRESSURE	PRI. TEMP.	SEC. TEMP.	PRI. SALINITY	SEC. SALINITY	SAMPLE BOTTLE DATA				SAMPLE BOTTLE NUMBER							
1																				
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

2793
2792
2791

VESSEL		PROJECT & LEG		STATION DESIGNATION																	
NOAA RV MILLER FREEMAN		MF99-07																			
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN (deg)	WIND SPD (kts)	CLOUD (amt)	WEATHER	BOTTOM DEPTH (m)	STA NAME		
0375447.93N	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	°C	°C	(mb)			(deg)	(kts)					
16620.82W	19	MAY	99	11	48	3.5	3.0	1447	121	25	882							186			
CTD		TIMES		JD/TIME		DATA LOCATION															
TYPE & SN		9+ S/N 91660		DATA ON		Tape/Diskette ID															
PRESS SN		29772		START DOWN		CYD033															
PRI TEMP SN		884		AT DEPTH																	
SEC TEMP SN		889		AT SURFACE																	
PRI COND SN	530	PAR 4242	FLUOR 153	CHAM 109	TRANSMISSOMETER	Cleaned air bleed valve															
SEC COND SN	303	3 ug/l	10 ug/l	30 ug/l	100 ug/l	300 ug/l	1000 ug/l														
POS.	TRIP DEPTH	CTD CONVERTED MONITOR VALUES																			
		PRESSURE	PRI. TEMP.	SEC. TEMP.	PRI. SALINITY	SEC. SALINITY	SALINITY	SAMPLE BOTTLE DATA											SAMPLE BOTTLE NUMBER		
1																					
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

MAX. DEPTH = 173

VESSEL		PROJECT & LEG				STATION DESIGNATION														
NOAA RV MILLER FREEMAN		MF99-07																		
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	SEA STATE	VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID	
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	(deg)	(kts)	*	*	(m)		
038	54	10	52	N	16	7	17	37	W	19	M	A	Y	9	9	16	51	7.0	5.59658	115203611010
CTD		TIMES		JD/TIME		DATA LOCATION														
TYPE & SN		9+ S/N 91660		DATA ON		Tape/Diskette ID														
PRESS SN		29772		START DOWN		File Name/Header														
PRI TEMP SN		884		AT DEPTH		CTD038														
SEC TEMP SN		889		AT SURFACE																
PRI COND SN		530		PAR 4242		FLUOR 153		CHAM 109		TRANSMISSOMETER		Cleared air bleed valve								
SEC COND SN		303		3 ug/l		10 ug/l		30 ug/l		100 ug/l		300 ug/l		1000 ug/l						
POS.	TRIP DEPTH	CTD CONVERTED MONITOR VALUES																		
		PRESSURE	PRI. TEMP.	SEC. TEMP.	PRI. SALINITY	SEC. SALINITY	SALINITY	SAMPLE BOTTLE DATA											SAMPLE BOTTLE NUMBER	
1																				
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

VESSEL				PROJECT & LEG				STATION DESIGNATION																
NOAA RV MILLER FREEMAN				MF99-07																				
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		WET BULB		WIND DIRN.		WIND SPD.		CLOUD (amt)		WEATHER		BOTTOM DEPTH		STA NAME			
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(deg)	(deg)	(kts)	(m)									
03954	10	32	N	167	12	00	W	20	M	A	Y	9	9	12	03	5	0	4	0	98	4	8		
CTD																								
TYPE & SN		9+ S/N 91660		DATA ON		Tape/Diskette ID		File Name/Header		REMARKS														
PRESS SN		29772		START DOWN		CTD039																		
PRI TEMP SN		884		AT DEPTH																				
SEC TEMP SN		889		AT SURFACE																				
PRI COND SN		530		PAR 4242		FLUOR 153		CHAM 109		TRANSMISSOMETER		Cleaned air bleed valve												
SEC COND SN		303		3 ug/l		10 ug/l		30 ug/l		100 ug/l		300 ug/l		1000 ug/l										
TRIP DEPTH		CTD CONVERTED MONITOR VALUES																						
POS.	PRESSURE		PRI. TEMP.		SEC. TEMP.		PRI. SALINITY		SEC. SALINITY		SALINITY		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER		SAL.		NUTR.		CHL.		WHIT'S NUTR.	
1																								
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

MAX. DEPTH = 1992 m