

[illegible]

VESSEL						PROJECT & LEG								STATION DESIGNATION																					
NOAA RV MILLER FREEMAN						MF99-06								Station 2 Haul 1																					
CONSC CAST #	LATITUDE			LONGITUDE			DATE JD=			TIME (GMT)		DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD. (knots)	CLOUD (amt) TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID													
	DEG	MIN		DEG	MIN		DAY	MO	YR	HR	MIN																								
002	56	45	.9 N	16	41	.8 W	20	02	MAY	99	2	00	1.4	1.0	16.3	7	3	10	2	96	2	75.8		2-1											
CTD					TIMES			JD/TIME			DATA LOCATION												REMARKS												
TYPE & SN		9+ S/N 91660			DATA ON						Tape/Diskette ID			File Name/Header									1st of 2												
PRESS SN		29772			START DOWN									ctd002																					
TEMP SN		884/889			AT DEPTH																														
COND SN		530/303			AT SURFACE																		40 72												
						<input checked="" type="checkbox"/> PAR 4242						<input checked="" type="checkbox"/> FLUOR 153						<input type="checkbox"/> CHAM 109						<input checked="" type="checkbox"/> TRANSMISSOMETER						Cleaned air bleed valve					
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	bottom				71.2																	35				✓									
2	50				51.8																					✓									
3	40				40																					✓									
4	30				30																					✓									
5	20				20																					✓									
6	10				10.5																					✓									
7	0				2.1																					✓									
8																																			
9																																			
10																																			
11																																			
12																																			

[illegible]

VESSEL NOAA R/V MILLER FREEMAN		PROJECT & LEG MF99-06		STATION DESIGNATION 3-1																			
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	SEA STATE	VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amt)	WAVE TYPE	BOTTOM DEPTH	STA. NAME/ID				
004	56	2.5	N	164	3.3	W	02	M	A	Y	99	22	26	-11.0	-2.0	0163	7	30	020	531	73		
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												ctd 003							
TEMP SN		884/889		AT DEPTH																			
COND SN		530/303		AT SURFACE																			
MAX. DEPTH =		70		m																			
CTD CONVERTED MONITOR VALUES		<input checked="" type="checkbox"/> PAR 4242		<input checked="" type="checkbox"/> FLUOR 153		<input checked="" type="checkbox"/> CHAM 109		<input type="checkbox"/> TRANSMISSOMETER		<input checked="" type="checkbox"/> Cleaned air bleed valve													
POS.	TRIP DEPTH	PRESSURE		PRI. TEMP.		SEC. TEMP.		PRI. SALINITY		SEC. SALINITY		SALINITY		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER		SAL.		NUTR.	CHL.	WHIT'S NUTR.	
1	Bottom	70										17						27					S18
2	50	50																					S17
3	44	44																					
4	44	44																					
5	44	45																					
6	30	30				Sal																	S16
7	24	24																					
8	24	25																					
9	24	25																					
10	20	20																					S15
11																							
12																							

VESSEL NOAA RV MILLER FREEMAN										PROJECT & LEG MF99-06										STATION DESIGNATION 3-2											
CONSC CAST #		LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		DRY BULB		WET BULB		PRESSURE (mb)		SEA STATE		VISIBILITY		WIND DIRN.		WIND SPD.		CLOUD (amt)		WEATHER		BOTTOM DEPTH		STA. NAME/ID	
DEG	MIN	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(miles)	*	*	(m)											
00	55	65	26	N	164	36	W	02	M	A	Y	99	23	12																	
CTD										DATA LOCATION										REMARKS											
TYPE & SN										Tape/Diskette ID										File Name/Header											
PRESS SN										START DOWN										Ctd 004											
TEMP SN										AT DEPTH																					
COND SN										AT SURFACE																					
PAR 4242										FLUOR 153										CHIAM 109											
TRANSMISSOMETER										Cleared air bleed valve																					
CTD CONVERTED MONITOR VALUES										SAMPLE BOTTLE DATA										SAMPLE BOTTLE NUMBER											
POS.	TRIP DEPTH	PRESSURE	PRI. TEMP.	SEC. TEMP.	PRI. SALINITY	SEC. SALINITY	SALINITY											SAL.	NUTR.	CHL.	WHIT'S NUTR.										
1	13	13																		✓	514										
2	13	11																		✓											
3	13	12																		✓											
4	5	5																		✓											
5	5	5																		✓											
6	5	5																		✓											
7	0	1																		✓	813										
8																															
9																															
10																															
11																															
12																															

[illegible]





[illegible]



VESSEL		PROJECT & LEG				STATION DESIGNATION														
NOAA R/V MILLER FREEMAN		MF99-06				7-1														
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)		
00957	6.8	N	165	0.00	W	03	M	A	Y	9	9	21	57	-1.8	-1.4	22.4	732	026	842	
CTD		TIMES		JD/TIME		DATA LOCATION														
TYPE & SN		DATA ON				Tape/Diskette ID 1021.9 File Name/Header														
PRESS SN		29772				ctd 009														
TEMP SN		884/889																		
COND SN		530/303																		
						MAX. DEPTH = 69 m														
POS.		TRIP DEPTH		CTD CONVERTED MONITOR VALUES		PAR 4242		FLUOR 153		CHIAM 109		TRANSMISSOMETER		Cleared air bleed valve		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER		
1	Bottom	66		PRI. TEMP.		1st cast		SEC. TEMP.				PRI. SALINITY				SEC. SALINITY		SALINITY		
2	Bottom	67		PRI. TEMP.		2nd cast		SEC. TEMP.				PRI. SALINITY				SEC. SALINITY		SALINITY		
3	11.50	51		PRI. TEMP.				SEC. TEMP.				PRI. SALINITY				SEC. SALINITY		SALINITY		
4	40	40		PRI. TEMP.				SEC. TEMP.				PRI. SALINITY				SEC. SALINITY		SALINITY		
5	30	30		PRI. TEMP.				SEC. TEMP.				PRI. SALINITY				SEC. SALINITY		SALINITY		
6	120	22		PRI. TEMP.				SEC. TEMP.				PRI. SALINITY				SEC. SALINITY		SALINITY		
7	10	10		PRI. TEMP.				SEC. TEMP.				PRI. SALINITY				SEC. SALINITY		SALINITY		
8	0	2		PRI. TEMP.				SEC. TEMP.				PRI. SALINITY				SEC. SALINITY		SALINITY		
9				PRI. TEMP.				SEC. TEMP.				PRI. SALINITY				SEC. SALINITY		SALINITY		
10				PRI. TEMP.				SEC. TEMP.				PRI. SALINITY				SEC. SALINITY		SALINITY		
11				PRI. TEMP.				SEC. TEMP.				PRI. SALINITY				SEC. SALINITY		SALINITY		
12				PRI. TEMP.				SEC. TEMP.				PRI. SALINITY				SEC. SALINITY		SALINITY		

VESSEL NOAA RV MILLER FREEMAN		PROJECT & LEG MF99-06		STATION DESIGNATION 8-1															
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)	
105725.1	N	16551.8	W	04	M	A	99	02	05	-2.6	-2.6	2247	320	30	842	69			
DATA LOCATION File Name/Header Tape/Diskette ID CTD CONVERTED MONITOR VALUES <input checked="" type="checkbox"/> PAR 4242 <input checked="" type="checkbox"/> FLUOR 153 <input checked="" type="checkbox"/> CHAM 109 <input type="checkbox"/> TRANSMISSOMETER <input checked="" type="checkbox"/> Cleaned air bleed valve																			
CTD	REMARKS																		
TYPE & SN	9+ S/N 91660																		
PRESS SN	29772																		
TEMP SN	884/889																		
COND SN	530/303																		
MAX. DEPTH = 65 m																			
POS.	TRIP DEPTH	PRESSURE	PRI. TEMP.	SEC. TEMP.	PRI. SALINITY	SEC. SALINITY	SALINITY	SAL.	NUTR.	CHL.	WHIT'S NUTR.								
1	Bottom	65						4											
2	Bottom	65																	
3	50	50																	
4	40	41																	
5	30	29																	
6	20	20																	
7	10	11																	
8	0	-																	
9																			
10																			
11																			
12																			

Mistfire



[illegible]

VESSEL		PROJECT & LEG				STATION DESIGNATION																			
NOAA RV MILLER FREEMAN		MF99-06				11-1																			
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		WET BULB		WIND DIRN.		WIND SPD.		CLOUD (amt)		WEATHER		BOTTOM DEPTH		STA. NAME/ID				
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(deg)	(deg)	(kts)	(m)										
0135746.0	N	16827.1	W	04	M	A	Y	99	19	50	-3.6	-3.2	26473	39208	42				721	11-1					
CTD		TIMES		JD/TIME		DATA LOCATION																			
TYPE & SN		9+ S/N 91660		DATA ON		1947		Tape/Diskette ID										File Name/Header							
PRESS SN		29772		START DOWN												ctd013									
TEMP SN		884/889		AT DEPTH		1950																			
COND SN		530/303		AT SURFACE																					
						MAX. DEPTH = 68 m																			
TRIP DEPTH		PRESSURE		PRI. TEMP.		SEC. TEMP.		PRI. SALINITY		SEC. SALINITY		SALINITY		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER		SAL.		NUTR.		CHL.		WHIT'S NUTR.	
1	68	67																23						(S62)	
2	50	51																						S62	
3	40	41																						S61	
4	30	30																						S60	
5	20	19																						959	
6	10	10																						558	
7	0	3																						557	
8																									
9																									
10																									
11																									
12																									

taken on ctd014  
(Rho's cast)

VESSEL NOAA RV MILLER FREEMAN		PROJECT & LEG MF99-06		STATION DESIGNATION 11-2																			
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		WET BULB		SEA STATE		WIND DIRN.		WIND SPD.		WEATHER		BOTTOM DEPTH		STA. NAME/ID		
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	(deg)	(kts)	*	*	(m)					
1457	45.7	N	168	28.0	W	04	M	A	Y	99	20	20							73	11	-2		
CTD		TIMES		JD/TIME		DATA LOCATION										REMARKS							
TYPE & SN		DATA ON				Tape/Diskette ID		File Name/Header												Rh's prim prod cast			
PRESS SN		START DOWN						ctd014												cast 2 of 2			
TEMP SN		AT DEPTH																					
COND SN		AT SURFACE																		MAX. DEPTH = 67 m			
TRIP DEPTH		PAR 4242		FLUOR 153		CHIAM 109		TRANSMISSOMETER		Cleaned air bleed valve		SAMPLE BOTTLE DATA										SAMPLE BOTTLE NUMBER	
POS.		CTD CONVERTED MONITOR VALUES		PRESSURE		PRI. TEMP.		SEC. TEMP.		PRI. SALINITY		SEC. SALINITY		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.	
1	22	82																					
2	22	22																					
3	14	14																					
4	14	15																					
5	10	11																					
6	6	6																					
7	3	3																					
8	3	3																					
9	0	2																					
10	0	Blank meter																					
11	.	Blank meter																					
12	.	67																				S63	

\* CTD yoyo'd between top + bottom a couple of times. So will have to process manually





[illegible]





[illegible]

VESSEL		PROJECT & LEG		STATION DESIGNATION										
NOAA RV MILLER FREEMAN		MF99-06		19-1										
CONSC	LATITUDE	DATE JD=		TIME (GMT)	WET BULB	WIND DIRN.	WIND SPD.	WIND TYPE	WEATHER	BOTTOM DEPTH	STA. NAME/ID			
CAST #	DEG MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(deg)	(kts)	(m)	
205705.9	N 16919.2	W 05	MAY	99	22	44	-0.7	-0.7	313	18863	75	19-1		
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				c+d020								
TEMP SN	884/889	AT DEPTH												
COND SN	530/303	AT SURFACE												
MAX. DEPTH =	72 m													
POS.	TRIP DEPTH	CTD CONVERTED MONITOR VALUES		TRANSMISSOMETER		Cleaned air bleed valve		SAMPLE BOTTLE NUMBER						
1	Bottom	PAR 4242	FLUOR 153	CHAM 109	SAMPLE BOTTLE DATA		SAL.		NUTR.	CHL.	WHIT's NUTR.			
2	50				SALINITY		32				998			
3	40				SEC. SALINITY						597			
4	30				PRI. SALINITY						596			
5	20				SEC. TEMP.						595			
6	10				PRI. TEMP.						594			
7	0				SEC. TEMP.						593			
8					PRI. TEMP.						592			
9					SEC. TEMP.									
10					PRI. TEMP.									
11					SEC. TEMP.									
12					PRI. TEMP.									







VESSEL NOAA RV MILLER FREEMAN				PROJECT & LEG MF99-06				STATION DESIGNATION 22-1																	
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	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	(deg)	(kts)	*	*	*	*	(m)				
235641.2		N 16947.5		W 0647.5		MAY 99		0514-02		-1.0		2447		3132		481				81		22-1			
CTD				TIMES				JD/TIME				DATA LOCATION				REMARKS									
TYPE & SN				DATA ON				Tape/Diskette ID				File Name/Header				6/074									
PRESS SN				29772				START DOWN																	
TEMP SN				884/889				AT DEPTH				0514													
COND SN				530/303				AT SURFACE																	
				<input checked="" type="checkbox"/> PAR 4242 <input checked="" type="checkbox"/> FLUOR 153 <input checked="" type="checkbox"/> CHIAM 109 <input type="checkbox"/> TRANSMISSOMETER <input checked="" type="checkbox"/> Cleaned air bleed valve				SAMPLE BOTTLE DATA				SAMPLE BOTTLE NUMBER													
POS.	TRIP DEPTH	PRESSURE	PRI. TEMP.	SEC. TEMP.	PRI. SALINITY	SEC. SALINITY	SALINITY																		
1	Bottom	75										33													
2	56	50										✓ 518													
3	40	39										✓ 514													
4	30	30										✓ 516													
5	20	20										✓ 515													
6	10	10										✓ 514													
7	0	2										✓ 513													
8																									
9																									
10																									
11																									
12																									



VESSEL		PROJECT & LEG		STATION DESIGNATION							
NOAA RV MILLER FREEMAN		MF99-06		24-1							
CONSC CAST #	LATITUDE	LONGITUDE	DATE JD=	TIME (GMT)	WET BULB	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID
0255626.2	N 17 013.1	W 06 013.1	0924	0930	0.9	224	7322	561	114	24-1	
CTD		TIMES		DATA LOCATION		REMARKS					
TYPE & SN		DATA ON		Tape/Diskette ID		File Name/Header					
PRESS SN		START DOWN				ctd 025					
TEMP SN		AT DEPTH		0930							
COND SN		AT SURFACE						MAX. DEPTH = 109 m			
POS.		TRIP DEPTH		CTD CONVERTED MONITOR VALUES		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER			
1	Bottom	PRESSURE	PRI. TEMP.	SEC. TEMP.	PRI. SALINITY	SEC. SALINITY	SALINITY	SAL.	NUTR.	CHL.	WHIT'S NUTR.
2	100							30			✓ S135
3	75										✓ S134
4	50									✓	✓ 133
5	40									✓	✓ 132
6	30									✓	✓ 131
7	20									✓	✓ 130
8	10									✓	✓ 129
9	0									✓	✓ 128
10											
11											
12											

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VESSEL		PROJECT & LEG		STATION DESIGNATION									
NOAA RV MILLER FREEMAN		MF99-06		Station 26 haul 1									
CONSCAST #	LATITUDE	LONGITUDE	DATE JD=	TIME (GMT)	WET BULB	SEA STATE	VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID
02715520.7	N 16 8 15.0	W 06 15.0	1999 MAY 9	1927	0.2	4	7	3	1	8	1	1476	26-1
CTD		TIMES		JD/TIME		DATA LOCATION		REMARKS					
TYPE & SN		DATA ON		1917		File Name/Header							
PRESS SN		START DOWN		1927		Tape/Diskette ID		c1027					
TEMP SN		AT DEPTH											
COND SN		AT SURFACE								MAX. DEPTH = 300 m			
POS.	TRIP DEPTH	CTD CONVERTED MONITOR VALUES		FLUOR 153		CHIAM 109		TRANSMISSOMETER		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER	
1	300	✓		✓		✓		✓		✓		✓	
2	250	✓		✓		✓		✓		✓		✓	
3	200	✓		✓		✓		✓		✓		✓	
4	150	✓		✓		✓		✓		✓		✓	
5	100	✓		✓		✓		✓		✓		✓	
6	75	✓		✓		✓		✓		✓		✓	
7	50	✓		✓		✓		✓		✓		✓	
8	40	✓		✓		✓		✓		✓		✓	
9	30	✓		✓		✓		✓		✓		✓	
10	20	✓		✓		✓		✓		✓		✓	
11	10	✓		✓		✓		✓		✓		✓	
12													

0 bucket

✓ S147



VESSEL		PROJECT & LEG		STATION DESIGNATION																							
NOAA R/V MILLER FREEMAN		MF99-06		27-1																							
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								
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR												MIN							
29	5	22.2	N	168	10.5	W	06	M	A	Y	9	9	21	55	1.0	-0.1	24	47	31	81	2	6	61	5	2	7	-1
CTD		TIMES		JD/TIME		DATA LOCATION														REMARKS							
TYPE & SN		DATA ON		2143		Tape/Diskette ID														File Name/Header							
PRESS SN		29772																									
TEMP SN		884/889		2155																							
COND SN		530/303																									
																				MAX. DEPTH = 300 m							
POS.	TRIP DEPTH	PAR 4242		FLUOR 153		CHIAM 109		TRANSMISSOMETER		Cleaned air bleed valve		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER													
		PRESSURE	PRI. TEMP.	SEC. TEMP.	PRI. SALINITY	SEC. SALINITY	SALINITY															SAL.	NUTR.	CHL.	NUTR.	WHIT'S	
1	300	300																				19				8/70	
2	250	250																								5/69	
3	200	201																								5/68	
4	150	150																								5/67	
5	100	101																								5/66	
6	75	75																								5/65	
7	50	50																								5/64	
8	40	41																								5/63	
9	30	31																								5/62	
10	20	21																								5/61	
11	10	10																								5/60	
12	0	bucket																								5/59	

surface  
in bucket



VESSEL				PROJECT & LEG				STATION DESIGNATION									
NOAA R/V MILLER FREEMAN				MF99-06				28-1									
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		WET BULB (°C)	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									
305525.7	N	16804.3	W	0601.3	23	41	1.1	-0.5	23	4	7	30	01	2	6	1	28-1
CTD		TIMES		JD/TIME		DATA LOCATION											
TYPE & SN		9+ SN 91660		DATA ON		2333											
PRESS SN		29772		START DOWN													
TEMP SN		884/889		AT DEPTH		2341											
COND SN		530/303		AT SURFACE													
<input checked="" type="checkbox"/> PAR 4242 <input checked="" type="checkbox"/> FLUOR 153 <input checked="" type="checkbox"/> CHIAM 109 <input type="checkbox"/> TRANSMISSOMETER <input checked="" type="checkbox"/> Cleaned air bleed valve				REMARKS w/o 220													
MAX. DEPTH = 219 m																	
POS.	TRIP DEPTH	CTD CONVERTED MONITOR VALUES												SAMPLE BOTTLE NUMBER			
		PRESSURE	PRI. TEMP.	SEC. TEMP.	PRI. SALINITY	SEC. SALINITY	SAMPLE BOTTLE DATA		SAL.	NUTR.	CHL.	WHIT'S NUTR.					
1	Bottom	219							17			S180 ✓					
2	200	199										S179 ✓					
3	150	150										S178 ✓					
4	100	100										S177 ✓					
5	75	75										S176 ✓					
6	50	51										S175 ✓					
7	40	40										S174 ✓					
8	30	31										S173 ✓					
9	20	21										S172 ✓					
10	10	19										S171 ✓					
11	0	3										S171 ✓					
12																	

[illegible]



[illegible]





[illegible]



VESSEL	PROJECT & LEG		STATION DESIGNATION												
NOAA R/V MILLER FREEMAN	MF99-06		35-												
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	DEG MIN	DAY MO YR	HR MIN	(°C)	(°C)	(mb)	*	* (deg)	(kts)	*	*	*	(m)	
03756038 N	16619.6 W	07 MAY 99	107	-03	-04	213	7300	108	-2	123	35-1				
CTD	TIMES	JT/TIME	DATA LOCATION	REMARKS											
TYPE & SN 9+ S/N 91660	DATA ON 1103	Tape/Diskette ID	File Name/Header	2nd try											
PRESS SN 29772	START DOWN		cyl 037	((st try not all bottles tripped))											
TEMP SN 884/889	AT DEPTH														
COND SN 530/303	AT SURFACE														
				MAX. DEPTH = 110 m											
POS.	TRIP DEPTH	CTD CONVERTED MONITOR VALUES	SAMPLE BOTTLE DATA	SAMPLE BOTTLE NUMBER											
		PAR 4242 FLUOR 153 CHAM 109 TRANSMISSOMETER													
		PRI. TEMP. SEC. TEMP. PRI. SALINITY SEC. SALINITY	SALINITY	NUTR. CHL. WHIT'S NUTR.											
1 bottom	119				\$ 234										
2 75	✓	top of thermocline!			\$ 233										
3 50	✓				\$ 232										
4 40	✓				\$ 231										
5 30	back				\$ 230										
6 20	SSe				\$ 229										
7 10	✓				\$ 228										
8 0	✓														
9 0	✓														
10															
11															
12															

[illegible]

VESSEL						PROJECT & LEG							STATION DESIGNATION								
NOAA RV MILLER FREEMAN						MF99-06							37-1								
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)			
039	56	09.9	N	166	05.9	W	07	MAY	99	15	25	-0.8	-0.5	203	7	29	51	832	109	37-1	
CTD				TIMES		JD/TIME		DATA LOCATION												REMARKS	
TYPE & SN		9+ S/N 91660		DATA ON		1522		Tape/Diskette ID												Totally mixed to	
PRESS SN		29772		START DOWN				ctd 039												100 m?!	
TEMP SN		884/889		AT DEPTH		1525															
COND SN		530/303		AT SURFACE																MAX. DEPTH = 104 m	
				<input checked="" type="checkbox"/> PAR 4242		<input checked="" type="checkbox"/> FLUOR 153		<input checked="" type="checkbox"/> CHIAM 109		<input type="checkbox"/> TRANSMISSOMETER		<input checked="" type="checkbox"/>		Cleaned air bleed valve							
POS.	TRIP DEPTH	CTD CONVERTED MONITOR VALUES																			
		PRESSURE	PRI. TEMP.	SEC. TEMP.	PRI. SALINITY	SEC. SALINITY	SALINITY	SAMPLE BOTTLE DATA											SAMPLE BOTTLE NUMBER		
1	bottom	104																			
2	75	✓																			
3	50	✓																			
4	40	✓																			
5	30	✓																			
6	20	✓																			
7	10	✓																			
8	0	✓																			
9	0	✓																			
10																					
11																					
12																					

VESSEL		PROJECT & LEG		STATION DESIGNATION							
NOAA R/V MILLER FREEMAN		MF99-06		38-3							
CONSC	LATITUDE	LONGITUDE	DATE	TIME	WET BULB	WIND DIRN.	WIND SPD.	WIND TYPE	WIND WEATHER	BOTTOM DEPTH	STA. NAME/ID
CAST #	DEG MIN	DEG MIN	DAY MO YR	HR MIN	(°C)	(deg)	(kts)	*	*	(m)	
040	5603.6	N 16619.8	W 07 MAY 99	1845	2.8	0.0	1927070	4	372	123	38-3
CTD		TIMES		JD/TIME		DATA LOCATION		REMARKS			
TYPE & SN		DATA ON		1840		Tape/Diskette ID		File Name/Header			
PRESS SN		START DOWN				CTD 040					
TEMP SN		AT DEPTH		1845							
COND SN		AT SURFACE								MAX. DEPTH = 118 m	
TRIP DEPTH		PAR 4242		FLUOR 153		CHIAM 109		TRANSMISSOMETER		Cleared air bleed valve	
POS.		CTD CONVERTED MONITOR VALUES		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER		SAL.		NUTR.	
1		118		back		500		24			
2		38									
3		38									
4		25									
5		25									
6		17									
7		10									
8		6									
9		6									
10		0									
11		0									
12											





VESSEL		PROJECT & LEG				STATION DESIGNATION													
NOAA RV MILLER FREEMAN		MF99-06				41 - 1													
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)		
043	56.16.2	N	165.45.7	W	08	MAY	99	09	37	0.3	0.0	15.2	7	12	07	8-7	96	41-1	
CTD		TIMES		JD/TIME		DATA LOCATION													
TYPE & SN		DATA ON		0934		File Name/Header													
PRESS SN		START DOWN				Tape/Diskette ID													
TEMP SN		AT DEPTH		0937															
COND SN		AT SURFACE																	
						<input checked="" type="checkbox"/> PAR 4242 <input checked="" type="checkbox"/> FLUOR 153 <input checked="" type="checkbox"/> CHIAM 109 <input type="checkbox"/> TRANSMISSOMETER		<input checked="" type="checkbox"/> Cleaned air bleed valve											
POS.	TRIP DEPTH	CTD CONVERTED MONITOR VALUES																	
		PRESSURE		PRI. TEMP.	SEC. TEMP.	PRI. SALINITY	SEC. SALINITY	SALINITY		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER		SAL.	NUTR.	CHL.	WHIT'S NUTR.		
1	bottom ✓	93												4			S 263		
2	75 ✓																S 262		
3	50 ✓															✓	S 261		
4	40 ✓															✓	S 260		
5	30 ✓															✓	S 259		
6	20 ✓															✓	S 258		
7	10 ✓															✓	S 257		
8	0 ✓																		
9																			
10																			
11																			
12																			





VESSEL		PROJECT & LEG		STATION DESIGNATION										
NOAA RV MILLER FREEMAN		MF99-06		43-1										
CONSC CAST #	LATITUDE	LONGITUDE	DATE JD=	TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt)	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
045	5630.5 N	16459.6 W	08 MAY 99	1248	1.0	-0.5	1427	0961	58-7	42	43-1			
CTD		TIMES		JD/TIME		DATA LOCATION		REMARKS						
TYPE & SN		DATA ON		1244		Tape/Diskette ID		File Name/Header						
PRESS SN		START DOWN		1248										
TEMP SN		AT DEPTH												
COND SN		AT SURFACE												
MAX. DEPTH = 77 m														
POS.		TRIP DEPTH		CTD CONVERTED MONITOR VALUES		TRANSMISSOMETER		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER		WHIT'S NUTR.		
1		100 m		✓ PAR 4242		✓ FLUOR 153		✓ Chlam 109		✓ Cleaned air bleed valve				
2		50 m												
3		40 m												
4		30 m												
5		20 m												
6		10 m												
7		0 m												
8														
9														
10														
11														
12														

see back

[illegible]

[illegible]





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