

VESSEL				PROJECT & LEG				DSDB I.D.				STATION DESIGNATION						
RV Miller Freeman				MF99-172								CTDM1						
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		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										
155	9	01 N	163	54	22	09	15	54	7.0	7.3953	7	2	65	20	2	2	36	1
REMARKS CTDM1																		
DATA LOCATION																		
Tape/Diskette ID File Name/Header																		
<div> <input type="checkbox"/> PAR S/N 4 2 4 2 <input type="checkbox"/> FLUOR S/N 1 5 3 <input type="checkbox"/> CHIAM S/N </div>																		
CTD CONVERTED MONITOR VALUES																		
POS.	TRIP DEPTH	PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SAMPLE BOTTLE DATA												
1	30																	
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		

Surface Mooring

VESSEL		PROJECT & LEG		STATION DESIGNATION														
RV Miller Freeman		MF9912		CTDMA														
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=	TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD. (m/s)	WIND CLOUD (amt)	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID	
25514.96N	163.58.30W	20	20	20	1808	7.4	7.09	537	255	228	62	56	CTDMA					
SBE 9+09P89	1660	TIMES		JD/TIME		DATA LOCATION												
PRESS SN	29772	DATA ON		Tape/Diskette ID		File Name/Header												
PRI TEMP SN	884	START DOWN																
SEC TEMP SN	889	AT DEPTH																
PRI COND SN	530	AT SURFACE																
SEC COND SN	303	PAR S/N		4242	FLUOR S/N	153	Chiam S/N											
POS.	TRIP DEPTH	CTD CONVERTED MONITOR VALUES																
1	50	PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SAMPLE BOTTLE DATA												
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		

2048

Cleared air bleed valve

MAX. DEPTH = 50 m

TRANS. S/N

SAMPLE BOTTLE NUMBER

SAL. NUTR. CHL. WHIT'S NUTR.

23

VESSEL		PROJECT & LEG		DSDB I.D.		STATION DESIGNATION																	
RV Miller Freeman		MF9912				CTDM3																	
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		DRY BULB	(°C)	WET BULB	(°C)	PRESSURE	(mb)	SEA STATE	WIND DIRN.	(deg)	WIND SPD.	(m/s)	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID
35524.93 N	164.6	97 W	20	SEP 99	2206	8.5	7.6	964	7234	18	841	95	CTDM3										
SBE 9+09P89	1660	TIMES		JD/TIME		Tape/Diskette ID		File Name/Header		REMARKS													
PRESS SN	29772	DATA ON								w082													
PRI TEMP SN	884	START DOWN								Cleaned air bleed valve													
SEC TEMP SN	889	AT DEPTH								MAX. DEPTH = 90 m													
PRI COND SN	530	AT SURFACE																					
SEC COND SN	303	PAR S/N		4242	FLUOR S/N		153	CHAM S/N		TRANS. S/N													
POS.	TRIP DEPTH	CTD CONVERTED MONITOR VALUES																					
1	90	PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SAMPLE BOTTLE DATA																	
2						SAL. NUTR. CHL. WHIT's NUTR.																	
3						6																	
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							

[illegible]

(25)

After Deploying Mode 2

PG ____ OF ____

VESSEL		PROJECT & LEG		STATION DESIGNATION	
RV Miller Freeman		DSDB I.D. MF9912		CTDM6	
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=
	DEG	MIN	DEG	MIN	DAY
65652.68 N			16403.21 W		21 SEP 99
SBE 9+ 09P89	1	6	6	0	
PRESS SN	2 9 7 7 2		DATA ON		
PRI TEMP SN	884		START DOWN		
SEC TEMP SN	889		AT DEPTH		
PRI COND SN	530		AT SURFACE		
SEC COND SN	303				
POS.	TRIP DEPTH	CTD CONVERTED MONITOR VALUES			
		PAR S/N	4 2 4 2	FLUOR S/N	1 5 3
		Chiam S/N			
		SALINITY			
		SEC. TEMP			
		PRI. TEMP.			
		PRESSURE			
1	6				
2	50				
3	40				
4	30				
5	25 (Chl max)				
6	20				
7	12				
8	0				
9					
10					
11					
12					

DATA LOCATION					
Tape/Diskette ID			File Name/Header		

STATION DESIGNATION					
WIND DIRN.	WIND SPD.	WIND TYPE	WEATHER	BOTTOM DEPTH	STA. NAME/ID
(deg)	(m/s)	*	*	(m)	
9	17	030	1	72	CTDM6

REMARKS					
OK					
Cleaned air bleed valve					
MAX. DEPTH = 68 m					
TRANS. S/N					

IFD Mooring Recovery

VESSEL		PROJECT & LEG		STATION DESIGNATION	
RV Miller Freeman		MF9912		CTM7	
CONSC CAST #		LATITUDE		LONGITUDE	
75723.79 N		16323.97 W		97.21	
SBE 9+ 09P89 1 6 6 0		DATE JD=		TIME (GMT)	
		DAY MO YR		HR MIN	
		21 SEP 99		0524	
PRESS SN 2 9 7 7 2		DATA ON		Tape/Diskette ID	
PRI TEMP SN 884		START DOWN		File Name/Header	
SEC TEMP SN 889		AT DEPTH			
PRI COND SN 530		AT SURFACE			
SEC COND SN 303		PAR S/N 4 2 4 2		FLUOR S/N 1 5 3	
POS. TRIP DEPTH		CTD CONVERTED MONITOR VALUES		SAMPLE BOTTLE DATA	
		PRESSURE		SALINITY	
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

REMARKS

Cleaned air bleed valve

MAX. DEPTH = 48 m

TRANS. S/N

SAMPLE BOTTLE NUMBER

SAL. NUTR. CHL. WHIT'S NUTR.

[illegible]

Mooring 4 Recovery

VESSEL		PROJECT & LEG		STATION DESIGNATION													
RV Miller Freeman		MF9912		DSDB I.D.													
CONSC CAST #	LATITUDE	LONGITUDE		DATE JD=	TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD. (m/s)	CLOUD (amt)	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID	
95751-25	11 68 52 N	11 68 52 N	11 68 52 N	22 SEP 99	0305	7.6	7.2	7.2	4	6	33	2	87	2	72	CTDM9	
SBE 9+ 09P89 1 6 6 0		TIMES		JD/TIME		DATA LOCATION		Tape/Diskette ID		File Name/Header		REMARKS					
PRESS SN 2 9 7 7 2		DATA ON															
PRI TEMP SN 884		START DOWN															
SEC TEMP SN 889		AT DEPTH															
PRI COND SN 530		AT SURFACE															
SEC COND SN 303		PAR S/N 4 2 4 2		FLUOR S/N 1 5 3		CHIAM S/N											
POS.	TRIP DEPTH	CTD CONVERTED MONITOR VALUES		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER		TRANS. S/N									
1	67	PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY												
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	

Cleaned air bleed valve

MAX. DEPTH = 67 m

[illegible]

Deployment / Stacy's morning M3

VESSEL		PROJECT & LEG		DSDB I.D.		STATION DESIGNATION														
RV Miller Freeman		MF9912																		
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD. (m/s)	CLOUD (amt)	TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR												
1	25603.00	N	16620.43	W	24	S	E	P	99	22	38	12	47	25	5	22	38	1	120	12
SBE 9+ 09P89 1 6 6 0																				
PRESS SN 2 9 7 7 2																				
PRI TEMP SN 884																				
SEC TEMP SN 889																				
PRI COND SN 530																				
SEC COND SN 303																				
CTD CONVERTED MONITOR VALUES																				
POS.	TRIP DEPTH	PAR S/N	4 2 4 2	FLUOR S/N	1 5 3	CHLOR S/N	SAMPLE BOTTLE DATA													
1	✓ b 116	PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SAMPLE BOTTLE NUMBER														
2	✓ 100																			
3	✓ 75																			
4	✓ 50																			
5	✓ 25																			
6	✓ 10																			
7	0																			
8																				
9																				
10																				
11																				
12																				

7 bottles 1

VESSEL		PROJECT & LEG		DSDB I.D.		STATION DESIGNATION															
RV Miller Freeman		MF9912				CTDM13															
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD. (m/s)	CLOUD (amt)	TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID	
13	525.86	N	168.04	57	W	25	SEP	99	09	207.0	1737	320	14	441	205					13	
SBE 9+09P89		1 6 6 0		JD/TIME		TIMES		DATA LOCATION													
PRESS SN		2 9 7 7 2		DATA ON		START DOWN		Tape/Diskette ID File Name/Header													
PRI TEMP SN		884																			
SEC TEMP SN		889																			
PRI COND SN		530																			
SEC COND SN		303																			
PAR S/N		4 2 4 2		FLUOR S/N		1 5 3		Chiam S/N													
CTD CONVERTED MONITOR VALUES																					
POS.	TRIP DEPTH	PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SAMPLE BOTTLE DATA															
1	6																				
2	150																				
3	100																				
4	50																				
5	250																				
6	10																				
7	0																				
8																					
9																					
10																					
11																					
12																					

just above the pmo line

Cleaned air bleed valve

MAX. DEPTH = m

TRANS. S/N

SAMPLE BOTTLE NUMBER

WHIT'S NUTR.

CHL.

NUTR.

SAL.

SALINITY

SALINITY

SALINITY

SALINITY

SALINITY

SALINITY

SALINITY

SALINITY

SALINITY

SALINITY

SALINITY

SALINITY

SALINITY

SALINITY

SALINITY

SALINITY

SALINITY

SALINITY

SALINITY

VESSEL RV Miller Freeman		PROJECT & LEG MF9912		DSDB I.D.		STATION DESIGNATION CTD M14																					
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD. (m/s)	CLOUD (amt) TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID								
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR												MIN							
14	55	22.60	N	168	10.80	W	25	S	E	P	99	06	24	09	6	06	7	18	37	310	12	4	41	493	14		
SBE 9+ 09P89 1 6 6 0		TIMES		JD/TIME		DATA LOCATION														REMARKS							
PRESS SN 2 9 7 7 2		DATA ON				Tape/Diskette ID File Name/Header																					
PRI TEMP SN 884		START DOWN																									
SEC TEMP SN 889		AT DEPTH																									
PRI COND SN 530		AT SURFACE																		Cleaned air bleed valve							
SEC COND SN 303						PAR S/N 4 2 4 2														FLUOR S/N 1 5 3		CHAM S/N		TRANS. S/N		MAX. DEPTH = m	
POS.	TRIP DEPTH	CTD CONVERTED MONITOR VALUES														SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER									
1		PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY															SALINITY		SAL.	NUTR.	CHL.	WHIT'S NUTR.		
2																						15					
3																											
4																											
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											

clatals¹¹ ex at ~ 1130 local for per

[illegible]

Current?

1000 m

VESSEL RV Miller Freeman						PROJECT & LEG MF9912								DSDB I.D.							STATION DESIGNATION <i>C70M16</i>							
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		DRY BULB °C	WET BULB °C	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD. (m/s)	CLOUD (amt)	TYPE *	WEATHER *	BOTTOM DEPTH (m)	STA. NAME/ID								
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR													MIN							
16	55	21 . 64 N	168	13 . 90 W	25	S E P	99	08	31	08 . 8	06 . 5	20	3	7	3	40	12	44	1	1048								
TIMES																												
SBE 9+ 09P89	1	6	6	0					JDTIME					DATA LOCATION														
PRESS SN	2	9	7	2					DATA ON					Tape/Diskette ID File Name/Header														
PRI TEMP SN	884									START DOWN																		
SEC TEMP SN	889									AT DEPTH																		
PRI COND SN	530									AT SURFACE																		
SEC COND SN	303									PAR S/N _ 4 2 4 2	<input type="checkbox"/>	FLUOR S/N _ 1 5 3	<input type="checkbox"/>	ChlAM S/N														
POS. TRIP DEPTH	CTD CONVERTED MONITOR VALUES																											
	PRESSURE	PRI. TEMP.	SEC. TEMP		SALINITY		SAMPLE BOTTLE DATA		SAL. NUTR. CHL. WHIT'S NUTR.																			
1																												
2																												
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

Dep from prev. yr PG 11.12 OF

[illegible]

VESSEL		PROJECT & LEG		DSDB I.D.		STATION DESIGNATION																					
RV Miller Freeman		MF9912				CTDM18																					
CONSC CAST #	DEG	MIN	LATITUDE	DEG	MIN	LONGITUDE	DATE JD=	TIME (GMT)	HR	MIN	YR	MO	DAY	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD. (m/s)	CLOUD (amt)	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID			
185458	62	N	16844	75	W	25	S	E	P	9	9	13	5	108	006	5	23	3	7	3	4	0	44	12050	18		
SBE 9+09P89		1 6 6 0		TIMES		JD/TIME		Tape/Diskette ID		DATA LOCATION		File Name/Header		REMARKS													
PRESS SN		2 9 7 7 2		DATA ON																							
PRI TEMP SN		884		START DOWN																							
SEC TEMP SN		889		AT DEPTH																							
PRI COND SN		530		AT SURFACE																							
SEC COND SN		303		PAR S/N		4 2 4 2		FLUOR S/N		1 5 3		CHIAM S/N		TRANS. S/N													
POS.		TRIP DEPTH		CTD CONVERTED MONITOR VALUES		SAMPLE BOTTLE DATA		SAMPLE BOTTLE DATA		SAL.		NUTR.		CHL.		WHIT'S NUTR.											
1																											
2																											
3																											
4																											
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											

2022 2235

VESSEL		PROJECT & LEG		DSDB I.D.		STATION DESIGNATION														
RV Miller Freeman		MF9912				CTOM19														
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)	(m/s)	*	*	(m)		
19	54	39	96	N	16	25	17	14	08	26	7	25	27	02	5	04	33	11	730	19
SBE 9+ 09P89 1 6 6 0 PRESS SN 2 9 7 7 2 PRI TEMP SN 884 SEC TEMP SN 889 PRI COND SN 530 SEC COND SN 303																				
TIMES										DATA LOCATION										
JD/TIME										File Name/Header										
DATA ON										Tape/Diskette ID										
START DOWN																				
AT DEPTH																				
AT SURFACE																				
<input type="checkbox"/> PAR S/N 4 2 4 2 <input type="checkbox"/> FLUOR S/N 1 5 3 <input type="checkbox"/> CHAM S/N										<input type="checkbox"/> MAX. DEPTH = 1502 m <input type="checkbox"/> TRANS. S/N										
POS.	TRIP DEPTH	SAMPLE BOTTLE DATA																		
1	1500	PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SAMPLE BOTTLE NUMBER														
2						SAL.	NUTR.	CHL.	WHIT'S NUTR.											
3						29														
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

1750 1704

VESSEL RV Miller Freeman		PROJECT & LEG MF9912				DSDB I.D.				STATION DESIGNATION CTDM 20										
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD. (m/s)	CLOUD (amt)	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID	
20	54	19.79	N	169	50.18	W	25	S	20	59	14.9	10.1	28	37			30	1900	20	
SBE 9+ 09P89		1 6 6 0		TIMES		JD/TIME		DATA LOCATION		Tape/Diskette ID		File Name/Header		REMARKS						
PRESS SN		2 9 7 7 2		DATA ON																
PRI TEMP SN		884		START DOWN																
SEC TEMP SN		889		AT DEPTH																
PRI COND SN		530		AT SURFACE																
SEC COND SN		303		PAR S/N		4 2 4 2		FLUOR S/N		1 5 3		CHAM S/N		TRANS. S/N		SAMPLE BOTTLE NUMBER				
POS.		TRIP DEPTH		CTD CONVERTED MONITOR VALUES																
1	1502		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.	
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

VESSEL			PROJECT & LEG			DSDB I.D.			STATION DESIGNATION											
RV Miller Freeman			MF9912						CTD 421											
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		
21	54	02.32N	169	32.70W	26	SEP 99	0002	09.08	08.12	2837							11820	21		
SBE 9+ 09P89 1 6 6 0			TIMES		JD/TIME		DATA LOCATION													
PRESS SN 2 9 7 7 2			DATA ON				Tape/Diskette ID		File Name/Header											
PRI TEMP SN 884			START DOWN																	
SEC TEMP SN 889			AT DEPTH																	
PRI COND SN 530			AT SURFACE																	
SEC COND SN 303			PAR S/N 4 2 4 2		FLUOR S/N 1 5 3		Chiam S/N		TRANS. S/N											
POS.	TRIP DEPTH	CTD CONVERTED MONITOR VALUES																		
		PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SALINITY	SAMPLE BOTTLE DATA											SAMPLE BOTTLE NUMBER		
1	1501																	18		
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

1845 1827

VESSEL		PROJECT & LEG				DSDB I.D.				STATION DESIGNATION											
RV Miller Freeman		MF-9912								CTO M 22											
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD. (m/s)	CLOUD (amt)	TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID	
225347.23 N	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	10.2	9.128	37		4600	4	681			1540	22	
SBE 9+ 09P89 1 6 6 0		TIMES		JD/TIME		DATA LOCATION		Tape/Diskette ID		File Name/Header		REMARKS									
PRESS SN	2 9 7 7 2		DATA ON																		
PRI TEMP SN	884		START DOWN																		
SEC TEMP SN	889		AT DEPTH																		
PRI COND SN	530		AT SURFACE																		
SEC COND SN	303		PAR S/N		4 2 4 2		FLUOR S/N		1 5 3		CHIAM S/N										
POS.	TRIP DEPTH	CTD CONVERTED MONITOR VALUES		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER		TRANS. S/N													
1		PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY																
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

☒ Cleaned air bleed valve
 MAX. DEPTH = 1501 m

VESSEL		PROJECT & LEG				DSDB I.D.				STATION DESIGNATION																
RV Miller Freeman		MF9912								CTDM23																
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		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)	(mb)	*	*	*	*	(deg)	(m/s)	*	*	*	*	(m)				
235336.32	N	16	9	03	26	9	9	05	16	8.5	7.5	28	3	2	4	0	5	6	7	1	18	60		23		
SBE 9+09P89		1 6 6 0		TIMES		JD/TIME		DATA LOCATION		Tape/Diskette ID		File Name/Header		REMARKS												
PRESS SN	2 9 7 7 2		DATA ON																							
PRI TEMP SN	884		START DOWN																							
SEC TEMP SN	889		AT DEPTH																							
PRI COND SN	530		AT SURFACE																							
SEC COND SN	303		PAR SN		4 2 4 2		FLUOR SN		1 5 3		CHAM S/N															
POS.	TRIP DEPTH		CTD CONVERTED MONITOR VALUES																							
1	1504		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.							
2																										
3																										
4																										
5																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										

☒ Cleaned air bleed valve
 MAX. DEPTH = 1504 m

[illegible]

VESSEL RV Miller Freeman				PROJECT & LEG MF9912				DSDB I.D.				STATION DESIGNATION CTDM25																					
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)		°C		(m/s)		* * *		(m)			
25		5326.26		N		16845.30		W		26		SEP		99		0908		8.0		7.23028		4		131		878		25					
SBE 9+ 09P89 1 6 6 0				TIMES				JD/TIME				DATA LOCATION				REMARKS																	
PRESS SN 2 9 7 7 2				DATA ON				Tape/Diskette ID				File Name/Header																					
PRI TEMP SN 884				START DOWN																													
SEC TEMP SN 889				AT DEPTH																													
PRI COND SN 530				AT SURFACE																													
SEC COND SN 303				PAR S/N 4 2 4 2				FLUOR S/N 1 5 3				ChlAM S/N																					
POS. TRIP DEPTH				CTD CONVERTED MONITOR VALUES				SAMPLE BOTTLE DATA				SAMPLE BOTTLE NUMBER																					
1				PRESSURE				PRI. TEMP.				SEC. TEMP				SALINITY				SAL. NUTR. CHL. NUTR.													
2																																	
3																																	
4																																	
5																																	
6																																	
7																																	
8																																	
9																																	
10																																	
11																																	
12																																	

PG OF

VESSEL							PROJECT & LEG						STATION DESIGNATION																		
RV Miller Freeman							MF9912						<i>CITMALE</i>																		
		LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		DRY BULB °C		WET BULB °C		PRESSURE mb		SEA STATE		VISIBILITY		WIND DIRN.		WIND SPD. m/s		CLOUD amt		WEATHER		BOTTOM DEPTH m		STA NAME>ID	
CONSC CAST #		DEG MIN	DEG MIN		MIN		DAY MO YR	HR MIN	(°C)		(°C)		(°C)		(mb)		*	* * *	*	(deg)	(m/s)	*	*	*	*	*	*	(m)			
205322-10 N		16	42	-18 W	26 SEP 99	1027	7.8	6.53	128	Lt clear	131																304		266		
TIMES										DATA LOCATION										REMARKS											
SBE 9+ 09P89	1 6 6 0		J/TIME			Tape/Diskette ID	File Name/Header												297												
PRESS SN	2 9 7 7 2		START DOWN																												
PRI TEMP SN	884		AT DEPTH																												
SEC TEMP SN	889		AT SURFACE																Cleaned air bleed valve												
PRI COND SN	530																		MAX. DEPTH = 294 m												
SEC COND SN	303																		TRANS. S/N _____												
TRIP DEPTH			CTD CONVERTED MONITOR VALUES										SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER																
POS.	PAR S/N _ 4 2 4 2		FLUOR S/N _ 1 5 3		CHIAM S/N																										
PRESSURE			PRI. TEMP.		SEC. TEMP		SALINITY																								
1																															
2																															
3																															
4																															
5																															
6																															
7																															
8																															
9																															
10																															
11																															
12																															

1st Station N. Pacific

PG ____ OF ____

VESSEL RV Miller Freeman		PROJECT & LEG MF9912		DSDB I.D.		STATION DESIGNATION CTOM27														
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)	DRY BULB	WET BULB	SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID				
275288	13 N	17033	97 W	26 SEP 99	1917	07.9	32.2	8	1	3	8	4	320	27						
SBE 9+09P89 1660		TIMES		JD/TIME		DATA LOCATION														
PRESS SN 29772		DATA ON		Tape/Diskette ID		File Name/Header														
PRI TEMP SN 884		START DOWN																		
SEC TEMP SN 889		AT DEPTH																		
PRI COND SN 530		AT SURFACE				<input type="checkbox"/> Cleaned air bleed valve MAX. DEPTH = 313 m														
SEC COND SN 303		PAR SN 4242		FLUOR SN 153		CHIAM S/N		TRANS. S/N												
POS.	TRIP DEPTH	CTD CONVERTED MONITOR VALUES																		
		PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SAMPLE BOTTLE DATA										SAL.	NUTR.	CHL.	WHIT's NUTR.	
1	313															17				
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

VESSEL RV Miller Freeman		PROJECT & LEG MF9912				DSDB I.D.				STATION DESIGNATION CTDM30																			
CONSC CAST #		LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		WET BULB		WIND DIRN.		WIND SPD.		WEATHER		BOTTOM DEPTH		STA. NAME/ID.									
DEG		MIN		DEG		MIN		DAY		MO		YR		HR		MIN		°C		°C		(deg)		(m/s)		(m)			
30		52 05 . 92 N		17 02 26 . 50 W		27 SEP 99		00 08		10 . 1		08 . 4		32		27		87		22750		30							
SBE 9+09P89 1 6 6 0		TIMES		JD/TIME																									
PRESS SN 2 9 7 7 2		DATA ON																											
PRI TEMP SN 884		START DOWN																											
SEC TEMP SN 889		AT DEPTH																											
PRI COND SN 530		AT SURFACE																											
SEC COND SN 303		PAR S/N 4 2 4 2		FLUOR S/N 1 5 3		CHIAM S/N																							
POS. TRIP DEPTH																													
1 2718																													
2																													
3																													
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

☒ Cleaned air bleed valve

MAX. DEPTH = 2718 m

TRANS. S/N

SAMPLE BOTTLE NUMBER

SAMPLE BOTTLE DATA

SALINITY

SALINITY

SEC. TEMP

PRI. TEMP.

PRESSURE

 WHIT'S
NUTR.

CHL.

NUTR.

SAL.

10

VESSEL		PROJECT & LEG		DSDB I.D.		STATION DESIGNATION											
RV Miller Freeman		MF9912				GDM31											
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE	WIND DIRN. (deg)	WIND SPD. (m/s)	CLOUD (amt)	WEATHER	BOTTOM DEPTH (m)	STA. NAME-ID
31	51	57.06 N	170	22.70 W	27	S.E.P. 99	0303	9.8	7.5	530	17	lt var	87	233	70	31	
SBE 9+ 09P89 1 6 6 0		TIMES		JD/TIME		DATA LOCATION		Tape/Diskette ID		File Name/Header		REMARKS					
PRESS SN 2 9 7 7 2		DATA ON															
PRI TEMP SN 884		START DOWN															
SEC TEMP SN 889		AT DEPTH															
PRI COND SN 530		AT SURFACE															
SEC COND SN 303		PAR S/N 4 2 4 2		FLUOR S/N 1 5 3		CHAM S/N											
POS.	TRIP DEPTH	PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER		WHIT'S NUTR.	
1	3001													25			
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	

Cleaned air bleed valve

MAX. DEPTH = 3001 m

1900fm.

PG ____ OF ____

VESSEL RV Miller Freeman		PROJECT & LEG MF9912		DSDB I.D.		STATION DESIGNATION CTDM32																	
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)	(m/s)	*	*	(m)				
32	51	46.43	N	170	18.10	W	27	S	E	P	9	9	06	26	7.3	6.2	30	17	1400	98	72	3480	32
SBE 9+09P89 1 6 6 0 PRESS SN 2 9 7 7 2 PRI TEMP SN 884 SEC TEMP SN 889 PRI COND SN 530 SEC COND SN 303																							
TIMES JD/TIME DATA ON START DOWN AT DEPTH AT SURFACE																							
DATA LOCATION Tape/Diskette ID File Name/Header																							
REMARKS <input checked="" type="checkbox"/> Cleaned air bleed valve MAX. DEPTH = 3003 m																							
TRANS. SN SAMPLE BOTTLE NUMBER																							
POS. TRIP DEPTH		CTD CONVERTED MONITOR VALUES PAR S/N 4 2 4 2 FLUOR S/N 1 5 3 CHL S/N																					
		PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY										SALINITY		SAL.		NUTR.	CHL.	WHIT'S NUTR.		
1																	7						
2																							
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							

2980 Am.

PG ____ OF ____

VESSEL RV Miller Freeman		PROJECT & LEG MF9912		DSDB I.D.		STATION DESIGNATION CTDM33										
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)	DRY BULB	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)	(°C)	(mb)	(deg)	(m/s)	(m)
335130-69 N	17011	62W	27	S E P	9	9	1019	5.1	5.1	5.1	130	11	140	10	44940	33
SBE 9+09P89 1 6 6 0		TIMES		JD/TIME		DATA LOCATION										
PRESS SN 2 9 7 7 2		DATA ON				Tape/Diskette ID		File Name/Header								
PRI TEMP SN 884		START DOWN														
SEC TEMP SN 889		AT DEPTH														
PRI COND SN 530		AT SURFACE														
SEC COND SN 303																
POS. TRIP DEPTH		PAR S/N 4 2 4 2		FLUOR S/N 1 5 3		ChlAM S/N		TRANS. S/N								
		CTD CONVERTED MONITOR VALUES														
		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER		
1														SAL. NUTR. CHL. WHIT'S NUTR.		
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																

W0 3006

Cleared air bleed valve

MAX. DEPTH = 3001 m

24

4040 fm.

PG ____ OF ____

VESSEL RV Miller Freeman		PROJECT & LEG MF9912		DSD8 I.D.		STATION DESIGNATION CTDM 34																									
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	
345114.82 N		DEG MIN		DEG MIN		DAY MO YR		14 13		8.0		7.128		170		6		7200		34											
SBE 9+09P89 1660		TIMES		JD/TIME		DATA LOCATION		Tape/Diskette ID		File Name/Header		REMARKS		3069		Cleaned air bleed valve		MAX. DEPTH = 3000m		TRANS. SIN		SAMPLE BOTTLE NUMBER									
PRESS SN 29772		DATA ON		START DOWN		AT DEPTH		AT SURFACE		PAR S/N 4242		FLUOR S/N 153		CHIAM S/N		CTD CONVERTED MONITOR VALUES		SAMPLE BOTTLE DATA		SALINITY		SAL.		NUTR.		CHL		WHIT'S NUTP			
PRI TEMP SN 884		SEC TEMP SN 889		PRI COND SN 530		SEC COND SN 303		TRIP DEPTH		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL.		NUTR.		CHL		WHIT'S NUTP					
1		2		3		4		5		6		7		8		9		10		11		12									

7390
7156