

VESSEL				PROJECT & LEG				DSDB I.D.				STATION DESIGNATION							
NOAA Ship MILLER FREEMAN				MF-03-10								CCH1							
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD		TIME (GMT)		WET BULB (°C)	PRESSURE (mb)	SEA STATE (m)	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
0015734.13	N	15207.04	W	1954	03	2034	11.8												
SBE 911+				91220-A				JD/TIME				DATA LOCATION				REMARKS			
PRESS SN				DATA ON				Tape/Diskette ID				File Name/Header							
PRI TEMP SN				710															
SEC TEMP SN				884															
PRI COND SN				40915															
SEC COND SN				530															
POS. TRIP DEPTH				4242				FLUOR S/N				WS3S868P							
				CTD CONVERTED MONITOR VALUES															
				PRESSURE				PRI. TEMP.				SEC. TEMP.				SALINITY			
1				61															
2				2.3															
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

☒ Cleaned air bleed valve
MAX. DEPTH = 62 m

[illegible]

VESSEL NOAA Ship MILLER FREEMAN				PROJECT & LEG MF-03-10				DSDB I.D.				STATION DESIGNATION CCH3															
CONSC CAST #		LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		WET BULB		PRESSURE		SEA STATE		WIND DIRN.		WIND SPD.		WIND TYPE		WEATHER		BOTTOM DEPTH		STA. NAME/ID	
DEG	MIN	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(m/s)	*	*	*	*	*	(m)				
035708	66	N	15147	95	W	20	01	03	04	03	11	10	51	1148	02	1	17	8	2	2	82						
SBE 911+				91220-A				TAPES/DISKETTE ID				FILE NAME/HEADER				REMARKS											
PRESS SN				DATA ON				Tape/Diskette ID				File Name/Header				CCH003											
PRI TEMP SN				START DOWN																							
SEC TEMP SN				AT DEPTH																							
PRI COND SN				AT SURFACE																							
SEC COND SN				530				FLUOR S/N				WS3S868P															
PAR S/N				4242				CTD CONVERTED MONITOR VALUES																			
TRIP DEPTH																											
POS.																											
1				74																							
2				3																							
3																											
4																											
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											

↑ added during processing by elimination Pdf

[illegible]

[illegible]

VESSEL				PROJECT & LEG				STATION DESIGNATION															
NOAA Ship MILLER FREEMAN				MF-03-10				CCH6															
CONSC CAST #		LATITUDE		LONGITUDE		DATE JD=		TIME (GMT)		WIND DIRN.		WIND SPO.		WIND WEATHER		BOTTOM DEPTH		STA. NAME/ID					
DEG	MIN	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(deg)	(m/s)	(amt)	(m)									
0065628	88	N	15103	93	W	21	5	103	00	50	13.4	11.9	0547	040	198	22200							
SBE 911+				91220-A												REMARKS							
PRESS SN				710												Depth off chart							
PRI TEMP SN				884																			
SEC TEMP SN				40915																			
PRI COND SN				530																			
SEC COND SN				530																			
POS. TRIP DEPTH				4242				FLUOR S/N WS35868P				MAX. DEPTH = 1503 m											
				CTD CONVERTED MONITOR VALUES																			
SAMPLE BOTTLE DATA				SAMPLE BOTTLE DATA				SAMPLE BOTTLE DATA				SAMPLE BOTTLE DATA				SAMPLE BOTTLE DATA							
PRESSURE				PRI. TEMP.				SEC. TEMP.				SALINITY				SAL.				WHIT'S NUTR.			
1 1503																22							
2 2																X				X			
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							

computer looked up - re-start + called the file C-007A
This cast has the bottle file for the sample int. and
chem. samples.

Idi. samples.

VESSEL				PROJECT & LEG				DSDB I.D.				STATION DESIGNATION																				
NOAA Ship MILLER FREEMAN				MF-03-10								CKAG-6																				
CONSC CAST #	DEG	MIN	LATITUDE	DEG	MIN	LONGITUDE	DATE	JD	TIME (GMT)	HR	MIN	SEC	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								
0085540.57	N	15	254.41	W	21	54.41	103	15	23	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12								
SBE 911+	91220-A				TIMES				JD/TIME				DATA LOCATION				Tape/Diskette ID				File Name/Header				REMARKS							
PRESS SN	710				DATA ON																											
SEC TEMP SN	884				AT DEPTH																											
PRI COND SN	40915				AT SURFACE																											
SEC COND SN	530				PAR S/N				4242				FLUOR S/N				WS3S868P															
POS.	TRIP DEPTH				CTD CONVERTED MONITOR VALUES				SAMPLE BOTTLE DATA				SAMPLE BOTTLE NUMBER				WHIT'S NUTR.															
1	1501				PRESSURE				PRI. TEMP.				SEC. TEMP.				SALINITY				SAL.				NUTR.				CHL.			
2	Bucket																															
3																																
4																																
5																																
6																																
7																																
8																																
9																																
10																																
11																																
12																																

computer froze - re started - CTD 8A was for the surface bottle but it did not pop. Surface samples taken from a bucket.

[illegible]

VESSEL				PROJECT & LEG				DSD8 I.D.				STATION DESIGNATION																												
NOAA Ship MILLER FREEMAN				MF-03-10								ckAG-4																												
CONSC CAST #	DEG	MIN	LATITUDE	DEG	MIN	LONGITUDE	DATE	JD	TIME (GMT)	HR	MIN	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																	
0105606.78	N	15326.3	4W215	MO	10323	5913.4	12.1	1438635	087	1	975																													
SBE 911+	91220-A				TIMES				DATA LOCATION				REMARKS																											
PRESS SN					DATA ON				Tape/Diskette ID				File Name/Header																											
PRI TEMP SN	710				START DOWN																																			
SEC TEMP SN	884				AT DEPTH																																			
PRI COND SN	40915				AT SURFACE																																			
SEC COND SN	530				PAR S/N				4242				FLUOR S/N																											
POS.	TRIP DEPTH				CTD CONVERTED MONITOR VALUES				SAMPLE BOTTLE DATA				SAMPLE BOTTLE NUMBER																											
1	972				PRESSURE				PRI. TEMP.				SEC. TEMP.				SALINITY				SAL.				NUTR.				CHL.				WHIT'S NUTR.							
2																																								
3																																								
4																																								
5																																								
6																																								
7																																								
8																																								
9																																								
10																																								
11																																								
12																																								

Sal spikes at top CTD 011 is a slow cast (same location) to 40 m or so

[illegible]

[illegible]

Soaked card. cells in tutonx solution
card. measurements were not equal last, east,
Problem is when temp changes quickly

Soaked carb. cells in tartaric solution
carb. measurements were not equal last coast,
problem is when temp changes quickly

[illegible]

VESSEL										PROJECT & LEG				DSD8 I.D.				STATION DESIGNATION															
NOAA Ship MILLER FREEMAN										MF-03-10								Ck3															
COMSC 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	
0155	725	.99	N	158	45	.81	W	23	5	10	30	34	15	.6	14	.02	1	38	165	160	0	*	*	*	*	*	*	*	*	*	*	*	
SBE 911+										DATA LOCATION										REMARKS													
91220-A										Tape/Diskette ID										File Name/Header													
PRESS SN																																	
PRI TEMP SN																				CTD015													
SEC TEMP SN																																	
PRI COND SN																																	
SEC COND SN										530										Cleaned air bleed valve													
										4242										MAX. DEPTH = 74 m													
POS. TRIP DEPTH										FLUOR S/N										WS3S868P													
										PAR S/N										CTD CONVERTED MONITOR VALUES													
										PRESSURE										SALINITY													
										PRI. TEMP.										SALINITY													
										SEC. TEMP.										SALINITY													
1										74										SAL. 41													
2										2										X													
3																				X													
4																																	
5																																	
6																																	
7																																	
8																																	
9																																	
10																																	
11																																	
12																																	

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10		DSOB I.D.		STATION DESIGNATION Mooring 03-SSP-3A																								
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)	(°C)	(mb)	+	+	(deg)	(m/s)	+	+	+	+	+	+	+	+	(m)				
01	65	29	07	N	15	48	70	23	5	11	4	2	13	7	2	13	8	18	8	20	1	1	1	1	1	2	8	1		
SBE 911+		91220-A		TIMES		JD/TIME		DATA LOCATION		Tape/Diskette ID		File Name/Header		CTD 016																
PRESS SN		710		START DOWN																										
SEC TEMP SN		884		AT DEPTH																										
PRI COND SN		40915		AT SURFACE																										
SEC COND SN		530		PAR S/N		4242		FLUOR S/N		WS3S868P																				
POS. TRIP DEPTH		196		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.								
1																														
2																														
3																														
4																														
5																														
6																														
7																														
8																														
9																														
10																														
11																														
12																														

at mooring 03-SSP-3A

VESSEL		PROJECT & LEG		STATION DESIGNATION	
NOAA Ship MILLER FREEMAN		MF-03-10		CK2	
CONSC CAST #		LATITUDE		LONGITUDE	
0175735.18 N		155 02.77 W		23 J 41 03	
SBE 911+		DATE JD=		TIME (GMT)	
PRESS SN		91220-A		14 05 12.5	
PRI TEMP SN		DATA ON		DRY BULB (°C)	
SEC TEMP SN		START DOWN		WET BULB (°C)	
PRI COND SN		AT DEPTH		PRESSURE (mb)	
SEC COND SN		AT SURFACE		SEA STATE	
530		PAR S/N		VISIBILITY	
4242		FLUOR S/N		WIND DIRN. (deg)	
WS3S868P		CTD CONVERTED MONITOR VALUES		WIND SPD. (m/s)	
4242		PRI TEMP.		CLOUD (amt)	
4242		SEC TEMP.		TYPE	
4242		PRESSURE		WEATHER	
4242		TRIPOD		BOTTOM DEPTH (m)	
4242		SALINITY		STA. NAME/ID	
4242		TEMP.		236	
4242		COND.		1	
4242		SAL.		230	
4242		TEMP.		MAX. DEPTH =	
4242		COND.		m	
4242		SAL.		CLEANED AIR BLEED VALVE	
4242		TEMP.		REMARKS	
4242		COND.		CTD 017	
4242		SAL.		FILE NAME/HEADER	
4242		TEMP.		Tape/Diskette ID	
4242		COND.		MAX. DEPTH =	
4242		SAL.		m	
4242		TEMP.		CLEANED AIR BLEED VALVE	
4242		COND.		REMARKS	
4242		SAL.		CTD 017	
4242		TEMP.		FILE NAME/HEADER	
4242		COND.		Tape/Diskette ID	
4242		SAL.		MAX. DEPTH =	
4242		TEMP.		m	
4242		COND.		CLEANED AIR BLEED VALVE	
4242		SAL.		REMARKS	
4242		TEMP.		CTD 017	
4242		COND.		FILE NAME/HEADER	
4242		SAL.		Tape/Diskette ID	
4242		TEMP.		MAX. DEPTH =	
4242		COND.		m	
4242		SAL.		CLEANED AIR BLEED VALVE	
4242		TEMP.		REMARKS	
4242		COND.		CTD 017	
4242		SAL.		FILE NAME/HEADER	
4242		TEMP.		Tape/Diskette ID	
4242		COND.		MAX. DEPTH =	
4242		SAL.		m	
4242		TEMP.		CLEANED AIR BLEED VALVE	
4242		COND.		REMARKS	
4242		SAL.		CTD 017	
4242		TEMP.		FILE NAME/HEADER	
4242		COND.		Tape/Diskette ID	
4242		SAL.		MAX. DEPTH =	
4242		TEMP.		m	
4242		COND.		CLEANED AIR BLEED VALVE	
4242		SAL.		REMARKS	
4242		TEMP.		CTD 017	
4242		COND.		FILE NAME/HEADER	
4242		SAL.		Tape/Diskette ID	
4242		TEMP.		MAX. DEPTH =	
4242		COND.		m	
4242		SAL.		CLEANED AIR BLEED VALVE	
4242		TEMP.		REMARKS	
4242		COND.		CTD 017	
4242		SAL.		FILE NAME/HEADER	
4242		TEMP.		Tape/Diskette ID	
4242		COND.		MAX. DEPTH =	
4242		SAL.		m	
4242		TEMP.		CLEANED AIR BLEED VALVE	
4242		COND.		REMARKS	
4242		SAL.		CTD 017	
4242		TEMP.		FILE NAME/HEADER	
4242		COND.		Tape/Diskette ID	
4242		SAL.		MAX. DEPTH =	
4242		TEMP.		m	
4242		COND.		CLEANED AIR BLEED VALVE	
4242		SAL.		REMARKS	
4242		TEMP.		CTD 017	
4242		COND.		FILE NAME/HEADER	
4242		SAL.		Tape/Diskette ID	
4242		TEMP.		MAX. DEPTH =	
4242		COND.		m	
4242		SAL.		CLEANED AIR BLEED VALVE	
4242		TEMP.		REMARKS	
4242		COND.		CTD 017	
4242		SAL.		FILE NAME/HEADER	
4242		TEMP.		Tape/Diskette ID	
4242		COND.			

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10		DSD8 ID.		STATION DESIGNATION ck1												
CONSC CAST #	LATITUDE		LONGITUDE		DATE		TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE	WIND DIRN. (deg)	WIND SPD. (m/s)	CLOUD (amt)	TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
	DEG	MIN	DEG	MIN	DAY	MO												
0185742.14	N	15517.34	W	23	Jun	03	1731	12.7	11.5	2048	150258	5	227					
SBE 911+	91220-A		JD/TIME		Tape/Diskette ID		DATA LOCATION		File Name/Header		REMARKS							
PRESS SN	710		DATA ON		START DOWN		AT DEPTH		AT SURFACE		AT SURFACE							
PRI TEMP SN	884		DATA ON		START DOWN		AT DEPTH		AT SURFACE		AT SURFACE							
SEC TEMP SN	40915		DATA ON		START DOWN		AT DEPTH		AT SURFACE		AT SURFACE							
PRI COND SN	530		DATA ON		START DOWN		AT DEPTH		AT SURFACE		AT SURFACE							
SEC COND SN	530		DATA ON		START DOWN		AT DEPTH		AT SURFACE		AT SURFACE							
POS. TRIP DEPTH	220		DATA ON		START DOWN		AT DEPTH		AT SURFACE		AT SURFACE							
1	220		DATA ON		START DOWN		AT DEPTH		AT SURFACE		AT SURFACE							
2	50		DATA ON		START DOWN		AT DEPTH		AT SURFACE		AT SURFACE							
3	18		DATA ON		START DOWN		AT DEPTH		AT SURFACE		AT SURFACE							
4	2		DATA ON		START DOWN		AT DEPTH		AT SURFACE		AT SURFACE							
5			DATA ON		START DOWN		AT DEPTH		AT SURFACE		AT SURFACE							
6			DATA ON		START DOWN		AT DEPTH		AT SURFACE		AT SURFACE							
7			DATA ON		START DOWN		AT DEPTH		AT SURFACE		AT SURFACE							
8			DATA ON		START DOWN		AT DEPTH		AT SURFACE		AT SURFACE							
9			DATA ON		START DOWN		AT DEPTH		AT SURFACE		AT SURFACE							
10			DATA ON		START DOWN		AT DEPTH		AT SURFACE		AT SURFACE							
11			DATA ON		START DOWN		AT DEPTH		AT SURFACE		AT SURFACE							
12			DATA ON		START DOWN		AT DEPTH		AT SURFACE		AT SURFACE							

[illegible]

VESSEL		PROJECT & LEG		DSD8 I.D.		STATION DESIGNATION														
NOAA Ship MILLER FREEMAN		MF-03-10				CA2														
CONSC CAST #	LATITUDE		LONGITUDE		DATE		TIME (GMT)		WET BULB (°C)	PRESSURE (mb)	SEA STATE	WIND DIRN. (deg)	WIND SPD. (m/s)	CLOUD (amt)	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID			
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR										MIN		
02058	10.83	N	153	40.99	W	27	10	30	13.5	12.8	2	80	7	5	5	193				
SBE 911+	91220-A				JD/TIME				DATA LOCATION									REMARKS		
PRESS SN									File Name/Header											
PRI TEMP SN	710								Tape/Diskette ID											
SEC TEMP SN	884																			
PRI COND SN	40915																			
SEC COND SN	530								FLUOR S/N WS358682											
TRIP DEPTH			PAR S/N		4242		CTD CONVERTED MONITOR VALUES													
POS.			PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.	
1	187																			
2	40																			
3	22																			
4	2																			
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

chlor max

CTD020

Cleaned air bleed valve

MAX. DEPTH = 187 m

VESSEL		PROJECT & LEG				DSDB I.D.		STATION DESIGNATION												
NOAA Ship MILLER FREEMAN		MF-03-10						CNS												
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		
	DEG	MIN	DEG	MIN	DAY	MO													YR	
0215803.111N	153	27.20	W	24	J	U	10	3	14	4	2	13	7	10.9	1538	114	158	2	75	
SBE 911+	91220-A				JD/TIME		DATA LOCATION													
PRESS SN							File Name/Header													
PRI TEMP SN	710						Tape/Diskette ID													
SEC TEMP SN	884																			
PRI COND SN	40915																			
SEC COND SN	530																			
PAR S/N			4242			FLUOR S/N			WS3S868P											
CTD CONVERTED MONITOR VALUES																				
POS.	TRIP DEPTH	PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SALINITY	SAL.	NUTR.	CHL.	WHIT'S NUTR.										
1	69																			
2	30																			
3	12	chlor MAX																		
4	2																			
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

Cleaned air bleed valve

MAX. DEPTH = 69 m

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10				DSDB I.D.				STATION DESIGNATION 691																
CONSC CAST #	LATITUDE		LONGITUDE		DATE		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)			
02259	09	78	N	156	56	35	W	25	5	4	103	0206	12	8	11	8	11	73	6	128	118	5	72			
SBE 911+		91220-A		JD/TIME		DATA LOCATION		Tape/Diskette ID		File Name/Header		REMARKS														
PRESS SN																										
PRI TEMP SN		710																								
SEC TEMP SN		884																								
PRI COND SN		40915																								
SEC COND SN		530																								
		<input checked="" type="checkbox"/> PAR S/N		4242		<input checked="" type="checkbox"/> FLUOR S/N		WS358682																		
POS. TRIP DEPTH																										
1		66																								
2		40																								
3		15																								
4		2																								
5																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										

no strong chlor max 2m is highest chlor

VESSEL		PROJECT & LEG				DSDB I.D.				STATION DESIGNATION													
NOAA Ship MILLER FREEMAN		MF-03-10								GP2													
CONSC CAST #	DEG	MIN	LATITUDE		DEG	MIN	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 TYPE	BOTTOM DEPTH (m)	STA. NAME/ID	
023	59	01	194	N	15	05	1	52	W	25	J	07	08	13	12	2	16	36	12	5	6	164	
SBE 911+																							
PRESS SN	91220-A																						
PRI TEMP SN	710																						
SEC TEMP SN	884																						
PRI COND SN	40915																						
SEC COND SN	530																						
POS.	TRIP DEPTH	PAR S/N		4242		FLUOR S/N		WS3586P															
		CTD CONVERTED MONITOR VALUES																					
		PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY		SALINITY		SALINITY		SAL.		NUTR.	CHL.	WHIT'S NUTR.								
1	158										40												
2	39																						
3	20																						
4	2																						
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							

DATA LOCATION
File Name/Header
CT0023

Tape/Diskette ID

Cleaned air bleed valve

MAX. DEPTH = m

FLUOR S/N WS3586P

PAR S/N 4242

SEC COND SN 530

PRI COND SN 40915

SEC TEMP SN 884

PRI TEMP SN 710

PRESS SN 91220-A

SBE 911+

CONSC CAST # 023

VESSEL NOAA Ship MILLER FREEMAN

PROJECT & LEG MF-03-10

STATION DESIGNATION GP2

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10				DSDB I.D.		STATION DESIGNATION GP3											
CONSC CAST #	LATITUDE		LONGITUDE		DATE		TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE	WIND DIRN. (deg)	WIND SPD. (m/s)	CLOUD (amt)	WEATHER TYPE	BOTTOM DEPTH (m)	STA. NAME/ID		
	DEG	MIN	DEG	MIN	DAY	MO												YR	
012458	53	26	15	43	9	6	13	58	12	8	12	4	3	6	1	2	5		
SBE 911+		91220-A		JD/TIME		Tape/Diskette ID		DATA LOCATION		REMARKS									
PRESS SN																			
PRI TEMP SN	710																		
SEC TEMP SN	884																		
PRI COND SN	40915																		
SEC COND SN	530																		
POS. TRIP DEPTH		PAR S/N		4242		FLUOR S/N		WSSS868P		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER							
		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.	
1	50																		
2	30																		
3	18																		
4	2																		
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

chlor max

MAX. DEPTH = 120 m

Cleared air bleed valve

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10		DSD8 I.D.		STATION DESIGNATION 694																							
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		DEG MIN		DAY MO YR		HR MIN		°C		°C		(mb)		*		(deg)		(m/s)		*		* *		(m)			
0255843.73 N		15037.89 W		255103		163813		012.2		13.0		12.2		13.3		6		120		11		8		5		190			
SBE 911+		91220-A		JD/TIME		Tape/Diskette ID		DATA LOCATION		File Name/Header		REMARKS																	
PRESS SN		DATA ON																											
PRI TEMP SN		710																											
SEC TEMP SN		884																											
PRI COND SN		40915																											
SEC COND SN		530																											
POS. TRIP DEPTH		185																											
1		185																											
2		40																											
3		12																											
4		2																											
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

FLUOR S/N WS35868P

4242

PAR S/N

CTD CONVERTED MONITOR VALUES

SAMPLE BOTTLE DATA

SAMPLE BOTTLE NUMBER

SALINITY

SALINITY

SEC. TEMP

PRI. TEMP.

PRESSURE

WHIT'S NUTR.

CHL

SAL

SALINITY

SALINITY

SEC. TEMP

PRI. TEMP.

PRESSURE

WHIT'S NUTR.

CHL

57

VESSEL		PROJECT & LEG				DSD8 I.D.				STATION DESIGNATION									
NOAA Ship MILLER FREEMAN		MF-03-10								GP-5									
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)
026	58	35.16	N	150	29	26	W	19	18	12.9	12.5	1336	095	118	5	183			
SBE 911+	91220-A				JD/TIME				DATA LOCATION				REMARKS						
PRESS SN									Tape/Diskette ID		File Name/Header								
PRI TEMP SN	710										CTD026								
SEC TEMP SN	884																		
PRI COND SN	40915																		
SEC COND SN	530																		
POS.	TRIP DEPTH	PAR S/N		4242		FLUOR S/N		WS35858P		CTD CONVERTED MONITOR VALUES		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER					
1	174											PRESSURE		SEC. TEMP.		SALINITY		SAL.	
2	5																		
3	23	chlor max																	
4	2																		
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

netto set up wrong only Top two bottles popped.

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10		DSDB I.D.		STATION DESIGNATION 617															
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 TYPE	BOTTOM DEPTH (m)	STA. NAME/ID		
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN												
02858	16	12	N	156	16	01	W	26	12	01	11	18	123	7	07	08	5		61		
SBE 911+		91220-A		JD/TIME																	
PRESS SN																					
PRI TEMP SN	710																				
SEC TEMP SN	884																				
PRI COND SN	40915																				
SEC COND SN	530																				
PAR S/N		4242		FLUOR S/N		WS3S868P															
CTD CONVERTED MONITOR VALUES																					
POS.	TRIP DEPTH																				
1	40																				
2	20																				
3	11																				
4	2																				
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

File Name/Header
CTD028

Cleaned air bleed valve

MAX. DEPTH = 55 m

Fluoro. substituted for Tap 17 meters and down cast

VESSEL NOAA Ship MILLER FREEMAN				PROJECT & LEG MF-03-10				DSDB I.D.				STATION DESIGNATION 6P-8																	
CONSC. CAST #		LATITUDE		LONGITUDE		DATE		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	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	(deg)	(m/s)	(amt)													
029	58	06	87	N	15	08	81	W	2	6	5	13	3	12	5	11	4	6	1	0	5	1	1	8	6	2	6	3	
SBE 911+		91220-A		JD/TIME		DATE		TIME (GMT)		DRY BULB		WET BULB		PRESSURE		SEA STATE		WIND DIRN.		WIND SPD.		CLOUD (amt)		WEATHER		BOTTOM DEPTH		STA. NAME/ID	
PRESS SN		710		DATA ON		Tape/Diskette ID		File Name/Header		CTD029																			
SEC TEMP SN		884		AT DEPTH																									
PRI COND SN		40915		AT SURFACE																									
SEC COND SN		530		UPPAR S/N		4242		FLUOR S/N		WS35868P																			
POS. TRIP DEPTH				CTD CONVERTED MONITOR VALUES																									
PRESSURE				PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY	
1		256																											
2		40																											
3		18																											
4		2																											
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

Rate down: 15 m/min for first 42 m

VESSEL NOAA Ship MILLER FREEMAN				PROJECT & LEG MF-03-10				DSDB I.D.				STATION DESIGNATION 68-9															
CONSC CAST #		LATITUDE		LONGITUDE		DATE		TIME (GMT)		WET BULB		PRESSURE		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)	(mb)	*	*	*	(deg)	(m/s)	*	*	*	*	(m)					
0305	57.86	N	1506	2.53	W	26	5	10	3	17	09	13.3	11.3	7	0	8	0	1	1	8	5	2	50				
SBE 911+		91220-A				JD/TIME				DATA LOCATION		Tape/Diskette ID		File Name/Header								REMARKS					
PRESS SN		710																									
PRI TEMP SN		884																									
SEC TEMP SN		40915																									
PRI COND SN		530																									
SEC COND SN		4242																									
POS. TRIP DEPTH		4242																									
1		244																									
2		29																									
3		9																									
4		2																									
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											

Stop temp. Drop. See next cast for
repeat of Top section of cast at
15m/min drop notes.

VESSEL		PROJECT & LEG				DSDB ID.		STATION DESIGNATION												
NOAA Ship MILLER FREEMAN		MF-03-10						SP-9												
CONC CAST #	LATITUDE		LONGITUDE		DATE		TIME (GMT)		WET BULB		WIND		CLOUD (amt)		WEATHER		BOTTOM DEPTH		STA. NAME/ID	
0315757	DEG	MIN	SEC	DEG	MIN	SEC	DAY	MO	YR	HR	MIN	SEC	DIRN.	SPD.	TYPE		(m)			
	157	57		02	52	W	26	5	03	14	22	13	08	01	8	5	250			
SBE 911 +	91220-A				JD/TIME		DATA LOCATION		Tape/Diskette ID		File Name/Header		REMARKS							
PRESS SN																				
PRI TEMP SN	710																			
SEC TEMP SN	884																			
PRI COND SN	40915																			
SEC COND SN	530																			
POS. TRIP DEPTH	4242		FLUOR S/N		WS35868P															
	4242		CTD CONVERTED MONITOR VALUES																	
			PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL		NUTR.		CHL.		WHIT'S NUTR.	
1																				
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

repeat of top section of CTD 030
at a drop rate of 15 m/min. to remove salinity spikes.

VESSEL		PROJECT & LEG				IDSB I.D.		STATION DESIGNATION									
NOAA Ship MILLER FREEMAN		MF-03-10						GP10									
CONSC	CST #	LATITUDE		LONGITUDE		DATE		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)	
0325	749.97	N	14955.63	W	265	W	103	17	03	13.012	5114	608	71	28	5	255	
SBE 911+		91220-A															
PRESS SN																	
PRI TEMP SN		710															
SEC TEMP SN		884															
PRI COND SN		40915															
SEC COND SN		530															
		<input checked="" type="checkbox"/> PAR S/N		4242		<input checked="" type="checkbox"/> FLUOR S/N		W53S8682									
POS.		TRIP DEPTH		CTD CONVERTED MONITOR VALUES													
				PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL.		NUTR.	
1		249												11			
2		30														X	
3		10														X	
4		2														X	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	

REMARKS

DATA LOCATION
File Name/Header
CTD032

Tape/Diskette ID

JD/TIME

TIMES

DATA ON
START DOWN
AT DEPTH
AT SURFACE

☒ Cleaned air bleed valve
MAX. DEPTH - 249 m

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10		DSDB I.D.		STATION DESIGNATION GP-11									
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD		TIME (GMT)		WET BULB (°C)	WIND DIRN. (deg)	WIND SPD. (m/s)	CLOUD (amt)	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(deg)	(m/s)	*	*	(m)	
033	57	38	N	149	49	18	19	55	13.7	13.3	124	8	2	52	7
<p>SBE 911+ 91220-A</p> <p>PRESS SN DATA ON</p> <p>PRI TEMP SN 710</p> <p>SEC TEMP SN 884</p> <p>PRI COND SN 40915</p> <p>SEC COND SN 530</p> <p>PAR S/N 4242</p> <p>FLUOR S/N W53S86BP</p> <p>CTD CONVERTED MONITOR VALUES</p>															
<p>File Name/Header CTD 033</p> <p>Tape/Diskette ID</p> <p>DATA LOCATION</p> <p>REMARKS</p> <p>Cleaned air bleed valve</p> <p>MAX. DEPTH = 517 m</p>															
POS.	TRIP DEPTH	PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SALINITY	SAL.	NUTR.	CHL.	WHIT'S NUTR.					
1	517						35								
2	40								X						
3	10								X						
4	2							X	X						
5															
6															
7															
8															
9															
10															
11															
12															

15 m/min down rate for first 60m

near the limits on the border
So went conservative on depth
20 m off bottom.

Drop rate 15 ml/min for first 65 m
Strong temp gradient.

VESSEL				PROJECT & LEG				DSDB I.D.				STATION DESIGNATION															
NOAA Ship MILLER FREEMAN				MF-03-10								6013															
CONSC CAST #		LATITUDE		LONGITUDE		DATE		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)			
0355720.33		N 149 33.36		W 27 56.10		03 13		15.24		15.01		5382		5009		6		12000									
SBE 911+				91220-A				TIMES				DATA ON				REMARKS											
PRESS SN				710				START DOWN				CTD 035				Depth of Bottom											
PRI TEMP SN				884				AT DEPTH								off chart											
SEC TEMP SN				40915				AT SURFACE								Cleaned air bleed valve											
PRI COND SN				530				PAR S/N 4242				FLUOR S/N WS3S8582				MAX. DEPTH = 1502 m											
SEC COND SN				530				CTD CONVERTED MONITOR VALUES																			
POS. 1 TRIP DEPTH																											
1 1502																											
2 2																											
3																											
4																											
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											

VESSEL NOAA Ship MILLER FREEMAN				PROJECT & LEG MF-03-10				DSDB I.D.				STATION DESIGNATION GP 14																	
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	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(m/s)	*	*	*	*	*	*	(m)					
036	57	11	34	142	27	23	W	03	08	31	13	12	8	1	7	4	8	2	6	0	1	1	7	23	00	0			
SBE 911+				91220-A				JD/TIME				DATA LOCATION				REMARKS													
PRESS SN								Tape/Diskette ID				File Name/Header				Depth est. from													
PRI TEMP SN												CT-0036				Chart													
SEC TEMP SN																													
PRI COND SN				40915				AT SURFACE																					
SEC COND SN				530				PAR S/N				4242				FLUOR S/N				WS3S8682									
POS. TRIP DEPTH								CTD CONVERTED MONITOR VALUES																					
				PRESSURE				PRI. TEMP.				SEC. TEMP.				SALINITY				SALINITY									
1				1501																									
2				2																									
3																													
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

MAX. DEPTH = 1501 m

☒ Cleaned air bleed valve

VESSEL		PROJECT & LEG		DSD8 I.D.		STATION DESIGNATION							
NOAA Ship MILLER FREEMAN		MF-03-10				GAK 13							
CONSC CAST #	LATITUDE	LONGITUDE	DATE	TIME (GMT)	DRY BULB	WET BULB	SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID
0275807.40	91220-A	14746.91	2750403	163114	13	13	71938	233097	21926				
SBE 911+	91220-A	14746.91	2750403	163114	13	13	71938	233097	21926				
PRESS SN	710												
PRI TEMP SN	884												
SEC TEMP SN	40915												
PRI COND SN	530												
SEC COND SN	530												
POS.	TRIP DEPTH	PAR S/N	4242	FLUOR S/N	WS35868P								
1	1503												
2	2												
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													

1053 for home

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10		DSDB I.D.		STATION DESIGNATION GAK-12																									
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)	(m/s)	*	*	*	*	(m)					
038	58	17	56	N	17	56	67	W	27	W	10	32	21	24	14	2-13	22	13	82	10	15	7	2	2	0	6	7				
SBE 911+		91220-A		TIMES		JD/TIME		Tape/Diskette ID		DATA LOCATION		File Name/Header		REMARKS																	
PRESS SN				DATA ON																											
PRI TEMP SN		710		START DOWN																											
SEC TEMP SN		884		AT DEPTH																											
PRI COND SN		40915		AT SURFACE																											
SEC COND SN		530		PAR S/N		4242		FLUOR S/N		WS358682																					
POS.		TRIP DEPTH		CTD CONVERTED MONITOR VALUES																											
1	150	4		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL	47	NUTR.		CHL.		WHIT'S											
2	2																														
3																															
4																															
5																															
6																															
7																															
8																															
9																															
10																															
11																															
12																															

cond. cells rinsed with T-100 solution prior to this cast.

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10		DSDB I.D.		STATION DESIGNATION GAK 11																									
CONSC CAST #		LATITUDE		LONGITUDE		DATE		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	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	VISIBILITY	(deg)	(m/s)	TYPE	AMT	(deg)	(m/s)	CLD	WEATHER	DEPTH	NAME/ID							
039	58	23	36	N	148	04	80	W	28	5	10	3	11	4	0	11	7	2	1	4	8	5	1	5	8	2	1	3	9	8	
SBE 911+		91220-A		TIMES		JD/TIME		DATE		TIME		DRY BULB		WET BULB		PRESSURE		SEA STATE		WIND DIRN.		WIND SPD.		CLOUD (amt)		WEATHER		BOTTOM DEPTH		STA. NAME/ID	
PRESS SN				DATA ON																											
PRI TEMP SN		710		START DOWN																											
SEC TEMP SN		884		AT DEPTH																											
PRI COND SN		40915		AT SURFACE																											
SEC COND SN		530		PAR S/N		4242		FLUOR S/N		WS358682																					
POS.		TRIP DEPTH		CTD CONVERTED MONITOR VALUES		FILE NAME/HEADER		Tape/Diskette ID		Ctd 039																					
1		1380		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.											
2		2																													
3																															
4																															
5																															
6																															
7																															
8																															
9																															
10																															
11																															
12																															

note down 15 m/min. for first 60 m of the cast.

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10		DSD8 I.D.		STATION DESIGNATION GAK 10																									
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	
0405832.110N		17812.38W		28054103		075813.3		12.219481110218		219481110218		219481110218		219481110218		219481110218		219481110218		219481110218		219481110218		219481110218		219481110218		219481110218		219481110218	
SBE 911+		91220-A		TIMES		JD/TIME		DATA LOCATION		Tape/Diskette ID		File Name/Header		REMARKS																	
PRESS SN		710		START DOWN																											
SEC TEMP SN		884		AT DEPTH																											
PRI COND SN		40915		AT SURFACE																											
SEC COND SN		530		PAR S/N		4242		FLUOR S/N		WS3S86BP																					
POS. TRIP DEPTH																															
1		1464																													
2		2																													
3																															
4																															
5																															
6																															
7																															
8																															
9																															
10																															
11																															
12																															

note down 15 m/min for first 80 m
conservative near bottom - at the edge of depth range for Soudern

VESSEL NOAA Ship MILLER FREEMAN				PROJECT & LEG MF-03-10				DSD8 I.D.				STATION DESIGNATION GAX 9															
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	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(mb)	*	*	*	(deg)	(m/s)	*	*	*	*	(m)					
041	58	40	48	N	148	20	47	W	28	5	10	3	11	5	17	4	7	1	5	0	1	3	8	5	2	7	8
SBE 911+		91220-A				JD/TIME				DATA LOCATION		Tape/Diskette ID		File Name/Header		REMARKS											
PRESS SN		710																									
PRI TEMP SN		884																									
SEC TEMP SN		40915																									
PRI COND SN		530																									
SEC COND SN		4242																									
POS. TRIP DEPTH		FLUOR S/N		WS3868P		CTD CONVERTED MONITOR VALUES																					
		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.									
1	27-1																										
2	40																										
3	10	chlor max																									
4	2																										
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											

down at 15 m/min for first 50 m of cast.

VESSEL				PROJECT & LEG				DSDB I.D.				STATION DESIGNATION										
NOAA Ship MILLER FREEMAN				MF-03-10								GAKE 8										
CONSC CAST #	LATITUDE		LONGITUDE		DATE		TIME (GMT)		WET BULB		WIND DIRN.		WIND SPD.		CLOUD (amt)		WEATHER		BOTTOM DEPTH		STA. NAME/ID	
62425847.03 N	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(deg)	(m/s)	*	*	*	*		(m)			
	48	30	14	W	28	5	103	17	51	13.4	13.0	138	150	10	2	2	2	280				
SBE 911+	91220-A		JD/TIME		DATA LOCATION		Tape/Diskette ID		File Name/Header		REMARKS											
PRESS SN	710		DATA ON		START DOWN				CT0042													
PRI TEMP SN	884		AT DEPTH																			
SEC TEMP SN	40915		AT SURFACE																			
PRI COND SN	530		PAR S/N		4242		FLUOR S/N		WS3S868P													
SEC COND SN	4242		CTD CONVERTED MONITOR VALUES																			
POS.	TRIP DEPTH		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL.		NUTR.		CHL		WHIT'S NUTR.			
1	272																					
2	30																					
3	15		chlor max																			
4	2																					
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						

note Down 15 m/min for just 80 meters

VESSEL				PROJECT & LEG				DSDB I.D.				STATION DESIGNATION																
NOAA Ship MILLER FREEMAN				MF-03-10								GAK-7																
CONSC CAST #		LATITUDE		LONGITUDE		DATE		TIME (GMT)		WET BULB		PRESSURE		SEA STATE		WIND DIRN.		WIND SPD.		CLOUD (amt)		WEATHER		BOTTOM DEPTH		STA. NAME/ID		
DEG	MIN	DEG	MIN	DEG	MIN	DAY	MO	HR	MIN	(°C)	(mb)	* * *	* * *	(deg)	(m/s)	* * *	* * *	(m)										
04	35	8	37	N	14	8	38	W	28	12	22	13	7	12	8	1	7	3	8	2	0	1	8	2	2	4	2	
SBE 911+				91220-A				JD/TIME				DATA LOCATION				REMARKS												
PRESS SN				DATA ON				Tape/Diskette ID				File Name/Header																
PRI TEMP SN				START DOWN								50043																
SEC TEMP SN				AT DEPTH																								
PRI COND SN				AT SURFACE																								
SEC COND SN				530				FLUOR S/N W535868P																				
POS.				TRIP DEPTH				PAR S/N 4242				CTD CONVERTED MONITOR VALUES				SAMPLE BOTTLE DATA				SAMPLE BOTTLE NUMBER								
1				40																								
2				30																								
3				16																								
4				2																								
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

VESSEL NOAA Ship MILLER FREEMAN				PROJECT & LEG MF-03-10				DSDB I.D.				STATION DESIGNATION GAK-6																	
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	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	(deg)	(m/s)	(m)													
04	59	06	99	N	148	46	34	W	29	J	03	00	22	14	01	19	01	7	3	8	2	25	08	6	1	15	0		
SBE 911+		91220-A		TIMES		JD/TIME		DATA LOCATION		Tape/Diskette ID		File Name/Header		REMARKS															
PRESS SN		710		DATA ON																									
PRI TEMP SN		884		START DOWN																									
SEC TEMP SN		40915		AT DEPTH																									
PRI COND SN		530		AT SURFACE																									
SEC COND SN		4242		PAR S/N		4242		FLUOR S/N		WS35868P																			
POS. TRIP DEPTH				PRESSURE		PRI TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.									
1	145																												
2	40																												
3	19																												
4	2																												
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

noted down 15 m/min for first 60 m

Dr. FTER deployed at this station

rate down 15 m/min for first 65 m of cast.

VESSEL NOAA Ship MILLER FREEMAN				PROJECT & LEG MF-03-10				DSDB ID.				STATION DESIGNATION GAK-4																							
LATITUDE		LONGITUDE		DATE		TIME (GMT)		WET BULB		PRESSURE		SEA STATE		WIND DIRL.		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)															
24	59	24	57	14	03	29	07	34	13	11.8	18.3	8	2	0	0	8	2	0	0	8	2	0	0												
CONSC CAST #				JD/TIME				Tape/Diskette ID				File Name/Header				REMARKS																			
SBE 911+				91220-A								C10046																							
PRESS SN				DATA ON																															
PRI TEMP SN				START DOWN																															
SEC TEMP SN				AT DEPTH																															
PRI COND SN				AT SURFACE																															
SEC COND SN				PAR S/N				4242				FLUOR S/N				WS3S868P																			
POS. TRIP DEPTH				CTD CONVERTED MONITOR VALUES																															
				PRESSURE				PRI. TEMP.				SEC. TEMP.				SALINITY				SAL.				CHL.				WHIT'S NUTR.							
1				194																58															
2				40																															
3				19																															
4				2																															
5																																			
6																																			
7																																			
8																																			
9																																			
10																																			
11																																			
12																																			

note down 15 m/min just 75 m of the coast
Drifter released at this station

VESSEL		PROJECT & LEG				DSD8 I.D.				STATION DESIGNATION																
NOAA Ship MILLER FREEMAN		MF-03-10								GAC-3																
CONSC CAST #	LATITUDE		LONGITUDE		DATE		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)								
0475933	12	N	149	11	01	W	29	10	33	13	11.6	20.4	7	1	80	06	8	2	2	10						
SBE 911+	91220-A		JD/TIME		DATA ON		Tape/Diskette ID		DATA LOCATION		File Name/Header		REMARKS													
PRESS SN	710																									
PRI TEMP SN	884																									
SEC TEMP SN	40915																									
PRI COND SN	530																									
SEC COND SN	4242																									
POS.	TRIP DEPTH		PAR S/N		FLUOR S/N		CTD CONVERTED MONITOR VALUES		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER															
1	204																									
2	70																									
3	17																									
4	2																									
5																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										

note down 15 m/min for first 60 m of the cast

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10				DSD8 I.D.		STATION DESIGNATION GAK-2															
CONSC CAST #		LATITUDE		LONGITUDE		DATE		TIME (GMT)		WET BULB		WIND DIRN.		WIND SPD.		CLD (amt)		WEATHER		BOTTOM DEPTH		STA. NAME/ID	
DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(deg)	(m/s)	*	*	*	*	*	*	(m)				
048	59	41	18	4	29	03	16	22	13	4	14	32	1	48	0	49	0	4	7	2	266		
SBE 911+		91220-A		JD/TIME		Tape/Diskette ID		DATA LOCATION		File Name/Header		REMARKS											
PRESS SN		710																					
SEC TEMP SN		884																					
PRI COND SN		40915																					
SEC COND SN		530																					
POS. TRIP DEPTH		4242																					
		PAR S/N		4242		FLUOR S/N		WS3S868P															
		CTD CONVERTED MONITOR VALUES																					
		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.					
1		221																					
2		30																					
3		10																					
4		2																					
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							

Drop rate 15 m/min for first 50 m of cast

Dryter released at this station.

VESSEL NOAA Ship MILLER FREEMAN				PROJECT & LEG MF-03-10				DSDB ID.				STATION DESIGNATION GAK-1															
CONSC CAST #		LATITUDE		LONGITUDE		DATE		TIME (GMT)		WET BULB		PRESSURE		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)	(mb)	*	*	*	(deg)	(m/s)	*	*	*	*	(m)					
049	59	50	71	N	149	28	14	W	29	5	103	18	37	12	9	14	5	22	3	8	3	30	03	2	26	5	
SBE 911+		91220-A		TIMES		JD/TIME		Tape/Diskette ID		DATA LOCATION		File Name/Header		REMARKS													
PRESS SN		710		DATA ON																							
PRI TEMP SN		884		START DOWN																							
SEC TEMP SN		40915		AT DEPTH																							
PRI COND SN		530		AT SURFACE																							
SEC COND SN		4242		PAR S/N		4242		FLUOR S/N		WS3S86BP																	
POS.		TRIP DEPTH		PRESSURE		PRI TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.							
1	260																										
2	30																										
3	10																										
4	2																										
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											

note down 15 m/min for first 50 m of the coast

[illegible]