

[illegible]

[illegible]

↑ added during Processing by elimination Pdf

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VESSEL				PROJECT & LEG				DSDB I.D.				STATION DESIGNATION																					
NOAA Ship MILLER FREEMAN				MF-03-10								CCH4																					
CONSC CAST #		LATITUDE		LONGITUDE				DATE JD=				TIME (GMT)		WET BULB		PRESSURE		SEA STATE		WIND DIRN.		WIND SPD.		CLOUD (amt)		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)							
004565		5	47	N	15	30	43	W	20	5	W	13	42	13	3	11.8	044	6	0	4	6	0	2	6	1	9	8	6	3	7	3		
SBE 911+		91220-A		TIMES				JD/TIME				DATA LOCATION				REMARKS																	
PRESS SN				DATA ON								Tape/Diskette ID				File Name/Header																	
PRI TEMP SN		710		START DOWN												CTD004																	
SEC TEMP SN		884		AT DEPTH																													
PRI COND SN		40915		AT SURFACE																													
SEC COND SN		530																															
POS.		TRIP DEPTH		PAR S/N				4242				FLUOR S/N				WS3S868P																	
				CTD CONVERTED MONITOR VALUES												SAMPLE BOTTLE DATA				SAMPLE BOTTLE NUMBER													
				PRESSURE				PRI. TEMP.				SEC. TEMP				SALINITY				SALINITY				SAL.		NUTR.		CHL.		WHIT'S NUTR.			
1		365																						50		X		X					
2		205																															
3																																	
4																																	
5																																	
6																																	
7																																	
8																																	
9																																	
10																																	
11																																	
12																																	

[illegible]

VESSEL NOAA Ship MILLER FREEMAN	PROJECT & LEG MF-03-10	DSDB I.D.	STATION DESIGNATION <u>CCH6</u>																
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	N	E	DAY	MO	YR	HR	MIN										
00656	28	.88	N	15103	-93	W	21	JUN	103	0050	13.7	11.9	0547	040	19	8	* * *	22200	
SBE 911+																			
PRESS SN	DATA ON _____																		
PRI TEMP SN	START DOWN _____																		
SEC TEMP SN	AT DEPTH _____																		
PRI COND SN	AT SURFACE _____																		
SEC COND SN	_____																		
POS. TRIP DEPTH	☐ PAR S/N 4242 ☒ FLUOR S/N WS3S86BP CTD CONVERTED MONITOR VALUES																		
1	1503																		
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 CC47	
CONSC. CAST #		LATITUDE		LONGITUDE		DATE JD=	
01075616.83 N		15050.92 W		2154163072812.8		10.50648048138	
SBE 911+		91220-A		TIMES		DATA LOCATION	
PRESS SN		710		DATA ON		File Name/Header CTD007	
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		FLUOR S/N WS3S868P	
POS. TRIP DEPTH		1502		CTD CONVERTED MONITOR VALUES			
2.5							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							

REMARKS
Depth on chart

☒ Cleaned air bleed valve
MAX. DEPTH = 1502 m

computer locked up - re-start + called the file CTD007A
The cast has the bottle file for the surface int. and
chlon. 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	11.8	11.8	1035	030	138	4	4500																									
SBE 911+	91220-A				TIMES				JD/TIME				DATA LOCATION				Tape/Diskette ID				File Name/Header				CTD 008				REMARKS				Depth on chart											
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				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.

VESSEL				PROJECT & LEG				STATION DESIGNATION											
NOAA Ship MILLER FREEMAN				MF-03-10				CKAG-5											
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	BOTTOM DEPTH (m)	STA. NAME/ID		
	DEG	MIN	DEG	MIN	DAY	MO												YR	
0095553	87	N	153	08	06	W	21	5	13	01	3	7	0	2	3	1	1		
SBE 911+ 91220-A PRESS SN PRI TEMP SN 710 SEC TEMP SN 884 PRI COND SN 40915 SEC COND SN 530																			
DATA ON START DOWN AT DEPTH AT SURFACE																			
CTD CONVERTED MONITOR VALUES FLUOR S/N 4242 WS3S888P PAR S/N																			
POS. TRIP DEPTH		SAMPLE BOTTLE DATA																	
		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.	
1	1502													49		X			
2	2																		
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

REMARKS
Depth off shore

Cleaned air bleed valve
MAX. DEPTH = 1502 m

DATA LOCATION
File Name/Header
CTD009

Tape/Diskette ID

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	215	4	10323	59	13.4	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]

VESSEL				PROJECT & LEG				DSDB I.D.				STATION DESIGNATION									
NOAA Ship MILLER FREEMAN				MF-03-10								ckAG-3									
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	N	DEG	MIN	W	DAY	MO	YR	HR	MIN	(°C)									
0125615.911N	15	32	9	75	22	51	23	03	12	51	15	17	350	06	8	2					
SBE 911+ 91220-A JD/TIME 4242 FLUOR S/N WS3S868P																					
PRESS SN																					
PRI TEMP 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																			
1	82																				
2	2																				
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

VESSEL		PROJECT & LEG		DSDB I.D.		STATION DESIGNATION																								
NOAA Ship MILLER FREEMAN		MF-03-10				CKAG-2																								
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD		TIME (GMT)		DRY BULB		WET BULB		PRESSURE		SEA STATE		WIND DIRN.		WIND SPD.		CLOUD (amt)		WEATHER		BOTTOM DEPTH		STA. NAME/ID			
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(m/s)	*	*	*	*	*	*	*	*	(m)					
013	56	28.77	N	153	42.41	W	22	J	41	03	13	47	12	7	12	5	2	1	3	7	2	1	4	2	5	8	2	9	8	
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		WS3S868P																				
POS. TRIP DEPTH																														
1		91																												
2		2																												
3																														
4																														
5																														
6																														
7																														
8																														
9																														
10																														
11																														
12																														

Soaked cond. cells in Lintox solution
 cond. measurements were not equal last cast,
 problem is when temp changes quickly

[illegible]

VESSEL NOAA Ship MILLER FREEMAN	PROJECT & LEG MF-03-10	DSD8 I.D.	STATION DESIGNATION <i>Ck3</i>											
CONSC CAST #	LATITUDE	LONGITUDE	DATE JD-- DAY MIN DEG	TIME (GMT) HR MIN YR MO	WET BULB ('C)	DRY BULB ('C)	PRESSURE (mb)	SEA STATE	SALINITY	WIND DIRN. (deg)	SPD. (m/s)	WEATHER TYPE	BOTTOM DEPTH (m)	STA. NAME/ID
0155725.99 N	15°45' .81 W	81°45' .81 E	23 JAN 2003	034415	614.02	15.61	02.1	38	165	/65	0	*	* * *	
SBE 911+	91220-A	TIMES	JT/TIME	DATA LOCATION	REMARKS									
PRESS SN		START DOWN		Tape/Diskette ID	File Name/Header	<i>CTDOIS</i>								
PRI TEMP SN	710	AT DEPTH												
SEC TEMP SN	884	AT SURFACE												
PRI COND SN	40915													
SEC COND SN	530	PAR S/N	4242	FUOR S/N	WS3S86BP									
POS., TRIP DEPTH	MAX. DEPTH = <i>74</i> m													
1	SAMPLE BOTTLE NUMBER													
2	SAMPLE BOTTLE DATA													
3	PRESSURE PRI. TEMP. SEC. TEMP. SALINITY													
4	WHIT'S NUTR.													
5	CHL.													
6	NUTR.													
7	SAL.													
8	CLEANED AIR BLEED VALVE													
9	SAFETY													
10	TEMP.													
11	COND.													
12	SPECIFIC GRAVITY													

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10		DSOB I.D.		STATION DESIGNATION Mearns 03-SSP-3A																									
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)	(mb)	+	+	(deg)	(m/s)	+	+	+	+	+	+	+	+	+	+	(m)			
01	65	29	07	N	15	48	W	23	51	02	65	11	41	21	38	18	8	20	1	1	1	1	1	1	1	1	1	1	1	1	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		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY	
1																															
2																															
3																															
4																															
5																															
6																															
7																															
8																															
9																															
10																															
11																															
12																															

at morning 03-SSP-3A

[illegible]

VESSEL		PROJECT & LEG		DSD8 ID.		STATION DESIGNATION												
NOAA Ship MILLER FREEMAN		MF-03-10				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	2331	10	03	1731	11.2	11.5	2048	150258	5	2227					
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							

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10		DSD8 I.D.		STATION DESIGNATION CNI												
CONSC CAST #	LATITUDE		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
	DEG	MIN	DEG	MIN	DAY	MO												
01958	22.07	N	15355	.73	W	24	JUL	03	0120	14.4	11.9	18.3	8	2	2	2	81	
SBE 911+ 91220-A PRESS SN PRI TEMP SN 710 SEC TEMP SN 884 PRI COND SN 40915 SEC COND SN 530																		
DATA ON START DOWN AT DEPTH AT SURFACE																		
TAPES/DISKETTE ID File Name/Header CT0019																		
REMARKS ☒ Cleaned air bleed valve MAX. DEPTH -75 m																		
POS. TRIP DEPTH 1 75 2 50 3 27 4 2 5 6 7 8 9 10 11 12																		
CTD CONVERTED MONITOR VALUES FLUOR S/N WS3S868P PAR S/N 4242																		
SAMPLE BOTTLE DATA SALINITY SAL. 32 CHL. X NUTR. X WHIT'S NUTR.																		

[illegible]

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		PROJECT & LEG		DSDB I.D.		STATION DESIGNATION													
NOAA Ship MILLER FREEMAN		MF-03-10				691													
CONSC CAST #	DEG	MIN	LATITUDE	DEG	MIN	LONGITUDE	DATE	TIME	DRY BULB	WET BULB	PRESSURE	SEA STATE	VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID
02259	09	49	78	N	15	56	25	06	12.8	11.8	1173	6	128	128	118	5		72	
SBE 911+		91220-A		JD/TIME		DATE		TIME		DRY BULB		WET BULB		PRESSURE		SEA STATE		VISIBILITY	
PRESS SN		710		START DOWN		Tape/Diskette ID		File Name/Header		CSD 022									
SEC TEMP SN		884		AT DEPTH															
PRI COND SN		40915		AT SURFACE															
SEC COND SN		530																	
POS. TRIP DEPTH		66																	
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										STATION DESIGNATION									
NOAA Ship MILLER FREEMAN										MF-03-10										GP2									
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)												
023	59	01	94	N	15	05	1	03	07	08	13	7	2	16	3	6	1	2	5	1	2	8	6	1	6	9			
SBE 911+		91220-A		TIMES		JD/TIME		Tape/Diskette ID		DATA LOCATION		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		X		FLUOR S/N		WS3S868P		MAX. DEPTH =		m																	
POS. TRIP DEPTH		158		4242		X		CTD CONVERTED MONITOR VALUES		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER																	
1		158		4242		X		CTD CONVERTED MONITOR VALUES		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.					
2		39		4242		X		CTD CONVERTED MONITOR VALUES		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.					
3		20		4242		X		CTD CONVERTED MONITOR VALUES		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.					
4		2		4242		X		CTD CONVERTED MONITOR VALUES		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.					
5				4242		X		CTD CONVERTED MONITOR VALUES		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.					
6				4242		X		CTD CONVERTED MONITOR VALUES		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.					
7				4242		X		CTD CONVERTED MONITOR VALUES		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.					
8				4242		X		CTD CONVERTED MONITOR VALUES		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.					
9				4242		X		CTD CONVERTED MONITOR VALUES		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.					
10				4242		X		CTD CONVERTED MONITOR VALUES		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.					
11				4242		X		CTD CONVERTED MONITOR VALUES		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.					
12				4242		X		CTD CONVERTED MONITOR VALUES		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.					

[illegible]

[illegible]

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)		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)											
02858	16.12	N	15016	01	W	26	01	32	12.0	11.8	1237	077	088	5		61											
SBE 911+		91220-A																									
PRESS SN																											
PRI TEMP SN		710																									
SEC TEMP SN		884																									
PRI COND SN		40915																									
SEC COND SN		530																									
POS. TRIP DEPTH																											
1		40																									
2		20																									
3		11																									
4		2																									
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											

Fluoro. Submitted for Tap 17 meters and down cast

Cleaned air bleed valve
MAX. DEPTH = 55 m

DATA LOCATION
File Name/Header
CTD028
Tape/Diskette ID

FLUOR S/N WS3S868P
CTD CONVERTED MONITOR VALUES

SAMPLE BOTTLE DATA

SAMPLE BOTTLE NUMBER

WHIT'S
NUTR.

CHL.

NUTR.

SAL.

SALINITY

SALINITY

SEC. TEMP

PRI. TEMP.

PRESSURE

FLUOR MAX

FLUOR MAX

FLUOR MAX

FLUOR MAX

FLUOR MAX

FLUOR MAX

FLUOR MAX

FLUOR MAX

FLUOR MAX

FLUOR MAX

FLUOR MAX

FLUOR MAX

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				DATA LOCATION				REMARKS																							
PRESS SN								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				WS35868P																											
				UPPER S/N				CTD CONVERTED MONITOR VALUES								SAMPLE BOTTLE DATA				SAMPLE BOTTLE NUMBER																			
				PRESSURE				PRI. TEMP.				SEC. TEMP.				SALINITY				SAL				NUTR.				CHL.				WHIT'S NUTR.							
1				256																44																			
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)					
03057	57.86	N	15062	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	HR	MIN	SEC	(°C)	(°C)	DIRN.	SPD.	+	+	+	(m)			
	157	57	00	02	52	W	14	22	13	13	3	08	01	8	5	250				
SBE 911+	91220-A		JD/TIME		DATE		TIME (GMT)		WET BULB		WIND		CLOUD (amt)		WEATHER		STA. NAME/ID			
PRESS SN	710		DATA ON		DATE		TIME (GMT)		WET BULB		WIND		CLOUD (amt)		WEATHER		STA. NAME/ID			
PRI TEMP SN	884		START DOWN		DATE		TIME (GMT)		WET BULB		WIND		CLOUD (amt)		WEATHER		STA. NAME/ID			
SEC TEMP SN	40915		AT DEPTH		DATE		TIME (GMT)		WET BULB		WIND		CLOUD (amt)		WEATHER		STA. NAME/ID			
PRI COND SN	530		AT SURFACE		DATE		TIME (GMT)		WET BULB		WIND		CLOUD (amt)		WEATHER		STA. NAME/ID			
SEC COND SN	4242		FLUOR S/N		WD35858P		TIME (GMT)		WET BULB		WIND		CLOUD (amt)		WEATHER		STA. NAME/ID			
POS. TRIP DEPTH	4242		PAR S/N		4242		TIME (GMT)		WET BULB		WIND		CLOUD (amt)		WEATHER		STA. NAME/ID			
1			PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL		NUTR.		CHL.		WHIT'S NUTR.	
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)	(m/s)	(deg)	(m/s)	(amt)													
0325	749.97	N	14955.63	W	26	5	17	03	13.01	2.5	11.4	6	08	7	1	2	5	255									
SBE 911+		91220-A																									
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		W53S8682																	
1		249																									
2		30																									
3		10																									
4		2																									
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											

REMARKS

DATA LOCATION

File Name/Header

CTD0032

Tape/Diskette ID

Cleaned air bleed valve

MAX. DEPTH - 249 m

SAMPLE BOTTLE DATA

SAMPLE BOTTLE NUMBER

SAL.

CHL.

NUTR.

WHIT'S

NUTR.

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		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)							
033	5738	90	N	149	49	18	W	26	54	103	19	55	13	7	13	3	12	4	8	0	7	3	0	9	8	2	5	2	7
SBE 911+		91220-A		JD/TIME		DATA ON		Tape/Diskette ID		DATA LOCATION		File Name/Header		CTD CONVERTED MONITOR VALUES		FLUOR S/N		W53S86BP		MAX. DEPTH		517		m					
PRESS SN		710		START DOWN		AT DEPTH		AT SURFACE		PAR S/N		4242		CTD		S/N		W53S86BP		CLEANED AIR BLEED VALVE		3							
SEC TEMP SN		884																											
PRI COND SN		40915																											
SEC COND SN		530																											
POS.		TRIP DEPTH		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL.		NUTR.		CHL.		WHIT'S		NUTR.							
1	517																												
2	40																												
3	10																												
4	2																												
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

15 m/min down rate for first 60m

VESSEL		PROJECT & LEG		DSD8 I.D.		STATION DESIGNATION																			
NOAA Ship MILLER FREEMAN		MF-03-10				GP 12																			
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						
0345729	108	N	149	41	19	07	23	33	15	15	6	1	3	7	0	5	0	1	1	1	4	9	2		
SBE 911+	91220-A																								
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		WS358582																	
1	1473																								
2	2																								
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									

Drop rate 15 m/min for first 65 m
Strong temp gradient.
near the limits on the bottom
So went conservative on depth
20 m off bottom.

[illegible]

[illegible]

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	DATA ON												
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	WS35868P	DATA LOCATION							
						File Name/Header							
						CTD037							
						Tape/Diskette ID							
						Cleared air bleed valve							
						MAX. DEPTH = 1503 m							
SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY	
1 1503		2		3		4		5		6		7	
2		3		4		5		6		7		8	
3		4		5		6		7		8		9	
4		5		6		7		8		9		10	
5		6		7		8		9		10		11	
6		7		8		9		10		11		12	
7		8		9		10		11		12		13	
8		9		10		11		12		13		14	
9		10		11		12		13		14		15	
10		11		12		13		14		15		16	
11		12		13		14		15		16		17	
12		13		14		15		16		17		18	

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)		WET BULB		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)			
038	58	17	56	W	27	4	21	24	13	22	13	82	10	15	7					27067			
SBE 911+		91220-A		JD/TIME		Tape/Diskette ID		DATA LOCATION		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		PAR S/N		4242		FLUOR S/N		WS358682		CTD CONVERTED MONITOR VALUES		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER							
1	1504			PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SALINITY		SAL		NUTR.		CHL.		WHIT'S NUTR.	
2	2																	47		x		x	
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							

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

VESSEL		PROJECT & LEG		DSDB I.D.		STATION DESIGNATION																					
NOAA Ship MILLER FREEMAN		MF-03-10				GAK 11																					
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)								
039	23	36	N	148	04	28	5	10	3	11	4	0	11	72	1	4	8	5	1	5	8	2	1	3	9	8	
SBE 911+	91220-A		JD/TIME		TAPES		Tape/Diskette ID		DATA LOCATION		File Name/Header																
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	WS358682																										
CTD CONVERTED MONITOR VALUES																											
POS.	TRIP DEPTH																										
1	1380																										
2	2																										
3																											
4																											
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											

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

rate down 15 m/min. ~~just~~ 80 m conservative near bottom - at the edge of depth map for sounder

VESSEL NOAA Ship MILLER FREEMAN				PROJECT & LEG MF-03-10				DSD8 I.D.				STATION DESIGNATION GAX-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)					
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																									
4		2																									
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											

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

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10		DSDB I.D.		STATION DESIGNATION GARE 8	
LATITUDE DEG MIN 47.03 N		LONGITUDE DEG MIN 148.30.14 W		DATE DAY MO YR 28 5 103		TIME (GMT) HR MIN 17 51	
CONSC CAST # 62425847		WET BULB (°C) 13.4		WIND DIRN. (deg) 150		WIND SPD. (m/s) 10	
SBE 911+		PRESSURE (mb) 1017.3		SEA STATE * * 3 8		CLOUD (amt) * * 2 8	
PRESS SN 710		WET BULB (°C) 13.4		WIND DIRN. (deg) 150		WIND SPD. (m/s) 10	
PRI TEMP SN 884		WET BULB (°C) 13.4		SEA STATE * * 3 8		CLOUD (amt) * * 2 8	
SEC TEMP SN 40915		WET BULB (°C) 13.4		SEA STATE * * 3 8		CLOUD (amt) * * 2 8	
PRI COND SN 530		WET BULB (°C) 13.4		SEA STATE * * 3 8		CLOUD (amt) * * 2 8	
SEC COND SN		WET BULB (°C) 13.4		SEA STATE * * 3 8		CLOUD (amt) * * 2 8	
PAR S/N		WET BULB (°C) 13.4		SEA STATE * * 3 8		CLOUD (amt) * * 2 8	
FLUOR S/N		WET BULB (°C) 13.4		SEA STATE * * 3 8		CLOUD (amt) * * 2 8	
CTD CONVERTED MONITOR VALUES		WET BULB (°C) 13.4		SEA STATE * * 3 8		CLOUD (amt) * * 2 8	
TRIP DEPTH		WET BULB (°C) 13.4		SEA STATE * * 3 8		CLOUD (amt) * * 2 8	
1 272		WET BULB (°C) 13.4		SEA STATE * * 3 8		CLOUD (amt) * * 2 8	
2 30		WET BULB (°C) 13.4		SEA STATE * * 3 8		CLOUD (amt) * * 2 8	
3 15		WET BULB (°C) 13.4		SEA STATE * * 3 8		CLOUD (amt) * * 2 8	
4 2		WET BULB (°C) 13.4		SEA STATE * * 3 8		CLOUD (amt) * * 2 8	
5		WET BULB (°C) 13.4		SEA STATE * * 3 8		CLOUD (amt) * * 2 8	
6		WET BULB (°C) 13.4		SEA STATE * * 3 8		CLOUD (amt) * * 2 8	
7		WET BULB (°C) 13.4		SEA STATE * * 3 8		CLOUD (amt) * * 2 8	
8		WET BULB (°C) 13.4		SEA STATE * * 3 8		CLOUD (amt) * * 2 8	
9		WET BULB (°C) 13.4		SEA STATE * * 3 8		CLOUD (amt) * * 2 8	
10		WET BULB (°C) 13.4		SEA STATE * * 3 8		CLOUD (amt) * * 2 8	
11		WET BULB (°C) 13.4		SEA STATE * * 3 8		CLOUD (amt) * * 2 8	
12		WET BULB (°C) 13.4		SEA STATE * * 3 8		CLOUD (amt) * * 2 8	

note Down 15 m/min for just 80 meters

VESSEL NOAA Ship MILLER FREEMAN				PROJECT & LEG MF-03-10				DSDB I.D.				STATION DESIGNATION 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	YR	HR	MIN	(°C)	(mb)	(mb)	*	*	(deg)	(m/s)	*	*	*	*	(m)					
0435858	37	N	14838	76	W	28	JUN	03	21	22	13.7	12.8	1738	3	8	200	11	8	2	2	2	2	2	2	2	2	
SBE 911+		91220-A																									
PRESS SN		710																									
PRI TEMP SN		884																									
SEC TEMP SN		40915																									
PRI COND SN		530																									
SEC COND SN		4242																									
POS. TRIP DEPTH		4242																									
PRESSURE		CHLOR M AK																									
PRI TEMP.																											
SEC. TEMP																											
SALINITY																											
SAL.		32																									
CHL.																											
NUTR.																											
WHIT'S NUTR.																											

DATA LOCATION
File Name/Header
CT0043

REMARKS
☒ Cleaned air bleed valve
MAX. DEPTH = 235 m

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)	*	*	*	*	*	*	*	*	(m)				
04	59	06	99	N	148	46	34	W	29	J	03	00	22	14	01	19	01	73	82	25	08	6	1	150					
SBE 911+		91220-A		JD/TIME		Tape/Diskette ID		DATA LOCATION		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		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

VESSEL		PROJECT & LEG		DSDB I.D.		STATION DESIGNATION													
NOAA Ship MILLER FREEMAN		MF-03-10				GAK-5													
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	BOTTOM DEPTH (m)	STA. NAME/ID	
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR											MIN
59559	15.69	N	14855	5.13	W	27	JUN	10	30	31	6	13	5	12	11	73	8	2	168
SBE 911+		91220-A		JD/TIME		Tape/Diskette ID		DATA LOCATION		REMARKS									
PRESS SN		710				File Name/Header		CT0045											
PRI TEMP SN		884																	
SEC TEMP SN		40915																	
PRI COND SN		530																	
SEC COND SN		530																	
POS. TRIP DEPTH		162																	
1		39																	
2		24																	
3		2																	
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

note 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 #				TIME				DATA ON				Tape/Diskette ID				File Name/Header				REMARKS					
SBE 911+				91220-A								C7D046													
PRESS SN				710																					
PRI TEMP SN				884																					
SEC TEMP SN				40915																					
PRI COND SN				530																					
SEC COND SN				4242																					
TRIP DEPTH				4242																					
POS.				CTD CONVERTED MONITOR VALUES																					
PRESSURE				PRI. TEMP.				SEC. TEMP.				SALINITY				SAL.				CHL.					
1				194												58									
2				40																X					
3				19																X					
4				2																X					
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 NOAA Ship MILLER FREEMAN				PROJECT & LEG MF-03-10				DSD8 I.D.				STATION DESIGNATION GAC-3															
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	
0475933.12 N		149 11.0 W		11 03 1031		13 38 13		13 38 13		13.4		2047		47		180		06		8		2		210			
SBE 911+		91220-A		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		WS3S868P																	
POS.		TRIP DEPTH		CTD CONVERTED MONITOR VALUES		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.					
1		204														18											
2		70																									
3		17				CHL. MAX																					
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)		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)	SEA STATE	WIND DIRN.	(m/s)	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID											
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																											
FLUOR S/N		WS35868P																											
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									
0495950.711 N		14928.14 W		295.14 W		183712.9		14.5		22.3		8330038		2		2		265																	
SBE 911+				91220-A				TIMES				DATA ON				START DOWN				AT DEPTH				AT SURFACE				SEC COND SN				530			
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				WS3S868P				CTD CONVERTED MONITOR VALUES				SAMPLE BOTTLE DATA				SAMPLE BOTTLE NUMBER			
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]

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10		DSD8 I.D.		STATION DESIGNATION CAK21																			
CONSC CAST #		LATITUDE		LONGITUDE		DATE		TIME (GMT)		WET BULB		SEA STATE		WIND DIRN.		WIND SPD.		CLOUD (amt)		WEATHER		BOTTOM DEPTH		STA. NAME/ID	
0515947.59N		14925.42W		30506.03		12.9		13.6		21.3		38242		68		2		2770							
SBE 911+		91220-A		JD/TIME		TIME		DATA ON		START DOWN		AT DEPTH		AT SURFACE		SEC COND SN		MAX. DEPTH - 264 m		REMARKS					
PRESS SN		710		DATA ON		START DOWN		AT DEPTH		AT SURFACE		SEC COND SN		MAX. DEPTH - 264 m		REMARKS									
PRI TEMP SN		884		DATA ON		START DOWN		AT DEPTH		AT SURFACE		SEC COND SN		MAX. DEPTH - 264 m		REMARKS									
PRI COND SN		40915		DATA ON		START DOWN		AT DEPTH		AT SURFACE		SEC COND SN		MAX. DEPTH - 264 m		REMARKS									
SEC COND SN		530		DATA ON		START DOWN		AT DEPTH		AT SURFACE		SEC COND SN		MAX. DEPTH - 264 m		REMARKS									
POS.		TRIP DEPTH		PAR S/N		4242		FELDOR S/N		WS35868P		CTD CONVERTED MONITOR VALUES		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER									
1		264		PRESSURE		PRI TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL		NUTR.		CHL		WHIT'S NUTR.					
2		38																							
3		12																							
4		2																							
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									

started At 15 Meters/min to 50 Meters
Then 30 meter/min

VESSEL NOAA Ship MILLER FREEMAN				PROJECT & LEG MF-03-10				DSDB I.D.				STATION DESIGNATION GAK-11															
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)					
052	59	42	17	N	149	21	30	5	17	36	13	22	23	7	2	20	06	7	8	2	24	1					
SBE 911+		91220-A		JD/TIME		TAPES/DISKETTE ID		DATA LOCATION		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		WS3S868P																	
POS.		TRIP DEPTH		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL		NUTR.		CHL.		WHIT'S NUTR.							
1	233																										
2	30																										
3	20																										
4	2																										
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											

note down 15 m/min for first 60m

added during processing
by elimination pdf

rate down 15 mph - for first 60 m of coast

VESSEL		PROJECT & LEG				DSDB I.D.		STATION DESIGNATION									
NOAA Ship MILLER FREEMAN		MF-03-10						GAL3									
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											
0545927.44	N	14906.06	W	30	JUN	10	13:00	13.9	11.3	22.3	8	2	202				
SBE 911+ 91220-A DATA ON START DOWN AT DEPTH AT SURFACE SEC COND SN 530 PAR S/N 4242 FLUOR S/N WS3868P CTD CONVERTED MONITOR VALUES																	
POS. TRIP DEPTH 1 196 2 30 3 20 4 2 5 6 7 8 9 10 11 12																	
SAMPLE BOTTLE DATA SALINITY SAL. 8 CHL. X NUTR. X WHIT'S NUTR.																	

cond. cells rinsed with Triton X-100 before this cast
 pump rate 15 m/min for first 60m

VESSEL NOAA Ship MILLER FREEMAN				PROJECT & LEG MF-03-10				DSDB ID.				STATION DESIGNATION B53																			
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)	*	*	*	*	(deg)	(m/s)	*	*	*	*	(m)				
055	59	35	33	N	149	00	56	W	30	J	4	03	22	22	13	8	11	4	22	3	8	2	3	0	0	3	7	2	1	8	0
SBE 911+		91220-A		JD/TIME		Tape/Diskette ID		DATA LOCATION		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		WS3S868P		MAX. DEPTH =		m																	
POS.		TRIP DEPTH		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.											
1	174																														
2	40																														
3	19																														
4	2																														
5																															
6																															
7																															
8																															
9																															
10																															
11																															
12																															

Drop rate 15 m/min for first 60m

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10		DSOB I.D.		STATION DESIGNATION B53							
CONSC CAST #	LATITUDE		LONGITUDE		DATE JD		WIND DIRN. (deg)	WIND SPD. (m/s)	CLOUD (amt)	TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
	DEG	MIN	DEG	MIN	DAY	MO							
05659	31	14	N	148	58	31	5	2005	4	22	23	23	057
SBE 911+	91220-A		TIMES		JD/TIME		DATA LOCATION		REMARKS				
PRESS SN			DATA ON		Tape/Diskette ID		File Name/Header						
PRI TEMP SN	710		START DOWN				CTD056						
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	CTD CONVERTED MONITOR VALUES											
		PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SALINITY	SALINITY	SAL	NUTR.	CHL.	WHIT'S NUTR.		
1	177												
2	30												
3	16	chlor MAX											
4	2												
5													
6													
7													
8													
9													
10													
11													
12													

Added during process
by eliminator pdf

VESSEL NOAA Ship MILLER FREEMAN				PROJECT & LEG MF-03-10				DSDB I.D.				STATION DESIGNATION BS2																							
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)	*	*	(deg)	(m/s)	*	*	*	*	(m)										
057	58	51	39	N	148	14	07	15	02	19	14.3	15.5	1021	38	200	075	1		200	075	1			100											
SBE 911+				91220-A				JD/TIME				DATA LOCATION				REMARKS																			
PRESS SN				710				Tape/Diskette ID				File Name/Header																							
PRI TEMP SN				884																															
SEC TEMP SN				40915																															
PRI COND SN				530																															
SEC COND SN				4242																															
POS. TRIP DEPTH				FLUOR S/N				W53S868P																											
				CTD CONVERTED MONITOR VALUES																															
				PRESSURE				PRI. TEMP.				SEC. TEMP.				SALINITY				SAL.				NUTR.				CHL				WHIT'S NUTR.			
1	94																																		
2	30																																		
3	12																																		
4	2																																		
5																																			
6																																			
7																																			
8																																			
9																																			
10																																			
11																																			
12																																			

drop rate 15 m/min for just 50m

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10				DSD8 I.D.		STATION DESIGNATION BS.2									
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
	DEG	MIN	DEG	MIN	DAY	MO											
25859	53	43	N	149	06	15	W	103	04	11	14	2	2	1	1	2	13
SBE 911+ 91220-A TIMES DATA ON START DOWN AT DEPTH AT SURFACE SEC COND SN 530 PAR S/N 4242 FLUOR S/N WS3S868P CTD CONVERTED MONITOR VALUES																	
DATA LOCATION File Name/Header C-0058 Tape/Diskette ID Cleaned air bleed valve MAX. DEPTH = 207 m																	
REMARKS																	
SAMPLE BOTTLE DATA																	
SAMPLE BOTTLE NUMBER																	
SALINITY SAL. 9 CHL. X NUTR. X WHIT'S NUTR.																	
PRESSURE PRI. TEMP. SEC. TEMP. SALINITY CTD COND SN 530 PAR S/N 4242 FLUOR S/N WS3S868P CTD CONVERTED MONITOR VALUES																	
1 207 2 30 3 17 4 2 5 6 7 8 9 10 11 12																	

drop rate 15 m/min for first 80m

[illegible]

VESSEL		PROJECT & LEG		DSDB I.D.		STATION DESIGNATION																	
NOAA Ship MILLER FREEMAN		MF-03-10				CF-2																	
CONSC CAST #	LATITUDE		LONGITUDE		DATE		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)	(mb)	(deg)	(m/s)	*	*	*	*	(m)					
060	59	53.05	N	148	46.96	W	31	JUN	10	17	01	12	11	18	28	00	04	2	1	15	9		
SBE 911+		91220-A		TIMES		JD/TIME		DATA LOCATION		Tape/Diskette ID		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				SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER													
1	153			PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.			
2	30																						
3	14			chlor MAX																			
4	2																						
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							

note down 15 m per for just 60 m

VESSEL		PROJECT & LEG		STATION DESIGNATION													
NOAA Ship MILLER FREEMAN		MF-03-10		CF-12													
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 TYPE	BOTTOM DEPTH (m)	STA. NAME/ID	
	DEG	MIN	DEG	MIN													
0161	58	32.916	N	148	51.84	W	31	56	13	9	183	82	90	62	1	177	
SBE 911+	91220-A		TIMES		JD/TIME		DATA LOCATION		REMARKS								
PRESS SN			DATA ON				Tape/Diskette ID		File Name/Header								
PRI TEMP SN	710		START DOWN						CTD061								
SEC TEMP SN	884		AT DEPTH														
PRI COND SN	40915		AT SURFACE														
SEC COND SN	530																
PAR S/N		4242		FLUOR S/N		W33S888P		MAX. DEPTH = 172 m									
POS.	TRIP DEPTH	CTD CONVERTED MONITOR VALUES		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER											
		PRESSURE	PRI TEMP.	SEC. TEMP.	SALINITY	SALINITY	SAL.	NUTR.	CHL.	WHIT'S NUTR.							
1	172						6										
2	40																
3	15																
4	2																
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	

rate down 15 m/min for first 60 m

VESSEL		PROJECT & LEG		DSD8 I.D.		STATION DESIGNATION																							
NOAA Ship MILLER FREEMAN		MF-03-10				CF-12																							
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	
8625934.75N		14894.16W		31JUN10		204214.7		13.6		13.6		13.6		13.6		13.6		13.6		13.6		13.6		13.6		13.6		13.6	
SBE 911+		91220-A		JD/TIME		TIMES		DATA ON		START DOWN		AT DEPTH		AT SURFACE															
PRESS SN																													
PRI TEMP SN		710																											
SEC TEMP SN		884																											
PRI COND SN		40915																											
SEC COND SN		530																											
POS.		TRIP DEPTH		CTD CONVERTED MONITOR VALUES		FLUOR S/N		WS3S8682																					
1		89		PRESSURE		PRI TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.									
2		30																											
3		14		chlor max																									
4		2																											
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

Drop rate 15 m/min for entire cast

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10				DSDB I.D.		STATION DESIGNATION CF 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)	*	*	(deg)	(m/s)	*	*	(m)	*	*				
06359	40.68	N	178	52.08	W	31	03	15	13	15	13	13	17	28	40	02	2	1	179										
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																											
1		173																											
2		20																											
3		11																											
4		2																											
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

Down 15m/min

VESSEL NOAA Ship MILLER FREEMAN										PROJECT & LEG MF-03-10				DSD8 I.D.		STATION DESIGNATION CF-2													
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)								
064	59	38	36	N	149	01	78	W	3	2	17	14	01	72	8	2	9	0	1	1	3	1	7	7					
SBE 911+		91220-A		JD/TIME		DATE		TIME (GMT)		WET BULB		PRESSURE		SEA STATE		WIND DIRN.		WIND SPD.		CLOUD (amt)		WEATHER		BOTTOM DEPTH		STA. NAME/ID			
PRESS SN																													
PRI TEMP SN		710																											
SEC TEMP SN		884																											
PRI COND SN		40915																											
SEC COND SN		530																											
POS. TRIP DEPTH		530		4242		FLUOR S/N		WS3S8682		CTD CONVERTED MONITOR VALUES		PAR S/N		4242		FLUOR S/N		WS3S8682		CTD CONVERTED MONITOR VALUES		PAR S/N		4242		FLUOR S/N		WS3S8682	
1		171																											
2		30																											
3		17																											
4		2																											
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

down at 15 m/min for just 70m

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10		DSDB I.D.		STATION DESIGNATION <i>ACI</i>																							
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	
2655943		43.43 N		11923.85 W		01A		1919.4		14.1		14.1		11628300		2		1		252									
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		WS3S8682																			
POS.		TRIP DEPTH		CTD CONVERTED MONITOR VALUES																									
1		247		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.									
2		50																											
3		26		chlv max																									
4		2																											
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

15 m/min down for first 85

VESSEL NOAA Ship MILLER FREEMAN										PROJECT & LEG MF-03-10				DSD8 I.D.				STATION DESIGNATION A-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	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	* * *	(deg)	(m/s)	* * *	* * *	(m)										
066	5938	26	N	14	9	22	9	0	17	0	14	8	16	3	8	2	6	0	1	1	2	3	1				
SBE 911+		91220-A		JD/TIME		DATE		TIME (GMT)		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		Cleared air bleed valve		MAX. DEPTH =		m													
PRI 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																							
1	226			PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.							
2	40																										
3	24			chlor MAX																							
4	2																										
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											

down at 15m/min for first 70m

VESSEL		PROJECT & LEG				DSD8 I.D.				STATION DESIGNATION												
NOAA Ship MILLER FREEMAN		MF-03-10								CC-1												
CONSC CAST #	LATITUDE		LONGITUDE		DATE		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)	(mb)	(deg)	(m/s)	(m/s)	(amt)		(m)					
2675944	43	N	177	49	17	W	01	AUG	13	56	15.0	12.8	143	383	002	61	1	65				
SBE 911+	91220-A																					
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		WS3S868P														
		CTD CONVERTED MONITOR VALUES																				
		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SALINITY		SAL		NUTR.		CHL.		WHIT'S NUTR.		
1	59													45								
2	30																	x				
3	12																	x				
4	2																	x				
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						

Down at 15 m/min

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10				DSDB I.D.		STATION DESIGNATION CC-2													
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	BOTTOM DEPTH (m)	STA. NAME/ID				
	DEG	MIN	DEG	MIN	DAY	MO												YR			
06859	40.20	N	147	44.13	W	01	AUG	15	11	14.01	43	3	00	04	7	1	111				
SBE 911+ 91220-A PRESS SN DATA ON PRI TEMP SN START DOWN SEC TEMP SN AT DEPTH PRI COND SN AT SURFACE SEC COND SN 530 PAR S/N 4242 FLUOR S/N WS358682 ☒ PAR S/N 4242 CTD CONVERTED MONITOR VALUES																					
POS.	TRIP DEPTH	SAMPLE BOTTLE DATA																SAMPLE BOTTLE NUMBER			
		PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SALINITY	SAL.	NUTR.	CHL.	WHIT'S NUTR.											
1	106						40														
2	30																				
3	24	chlor max																			
4	2																				
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

15 m/min for first 55 m

VESSEL		PROJECT & LEG		DSD8 I.D.		STATION DESIGNATION																			
NOAA Ship MILLER FREEMAN		MF-03-10				CC-3																			
CONSC CAST #	LATITUDE		LONGITUDE		DATE		TIME (GMT)		WET BULB		SEA STATE		WIND DIRN.		WIND SPD.		CLOUD (amt)		WEATHER		BOTTOM DEPTH		STA. NAME/ID		
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(mb)	* * *	(deg)	(m/s)	* * *	* * *	* * *	* * *	(m)						
66R	59	34.111	N	147	36.98	11	Aug	18	48	14.4	14.2	14	3	4	0	3	5	1	0	8	4	1	0	9	
SBE 911+	91220-A				JD/TIME				DATA LOCATION		File Name/Header														
PRESS SN																									
PRI TEMP SN	710																								
SEC TEMP SN	884																								
PRI COND SN	40915																								
SEC COND SN	530																								
POS. TRIP DEPTH																									
1	40																								
2	30																								
3	13																								
4	2																								
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									

down 15m/min for 40 m

☒ Cleaned air bleed valve
MAX. DEPTH = 104 m

☒ FLUOR S/N WS35868P
CTD CONVERTED MONITOR VALUES

☒ PAR S/N 4242

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10		DSDB I.D.		STATION DESIGNATION CC4																							
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		DAY MO YR		HR MIN		°C		°C		(mb)		*		(deg)		(m/s)		* * *		* * *		(m)					
0705928.64 N		14728.96 W		01 AUG 03		24 26 15		14.1		14.1		1337		03		03		01		4		8		2		117			
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		FLUOR S/N		WS35868P																					
POS.		TRIP DEPTH		CTD CONVERTED MONITOR VALUES																									
1		50		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.							
2		28																											
3		18																											
4		2																											
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

15 m/min just 50 m

VESSEL		PROJECT & LEG		DSD8 I.D.		STATION DESIGNATION																				
NOAA Ship MILLER FREEMAN		MF-03-10				CC-5																				
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)	(mb)	(deg)	(m/s)	(amt)	(amt)	(deg)	(m/s)	(amt)	(amt)	(m)					
071592	11.37	N	147	21.18	W	02	AUG	03	00	41	15.11	4.1	133	3	8	02	00	9	1	1	1	137				
SBE 911+		91220-A		JD/TIME		Tape/Diskette ID		DATA LOCATION		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				PAR S/N		4242		CTD CONVERTED MONITOR VALUES		FLUOR S/N		WS3S868P														
				PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.						
1	132																									
2	30																									
3	9																									
4	2																									
5																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										

15 m/min for just 45 m

VESSEL NOAA Ship MILLER FREEMAN				PROJECT & LEG NF-03-10				DSDB I.D.				STATION DESIGNATION cc-6															
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)					
07259	13.90	N	14709	56	W	02	AUG	03	14	02	14.3	13.7	16	3	8	0	3	0	0	2	2	1	2	0			
SBE 911+		91220-A		JD/TIME		TIMES		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		WS3S868P																									
CTD CONVERTED MONITOR VALUES																											
POS. TRIP DEPTH																											
1		195																									
2		2																									
3																											
4																											
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											

down 15 m/min for first 60

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10		OSDB I.D.		STATION DESIGNATION ce-7													
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		
073	59	03	58	43	W	02	Aug	03	17	1738	290	013	12	160					
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																	
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	1501																		
2	2																		
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Down at 15 m/min for first 75 m

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10		OSDB I.D.		STATION DESIGNATION CC-8	
LATITUDE DEG MIN 52.75 N		LONGITUDE DEG MIN 146.43 W		DATE JD DAY MO YR 16 02 03		TIME (GMT) HR MIN 21 26	
CONSC CAST # 07958		WET BULB (°C) 15.2		SEA STATE * 2		WIND DIRN. (deg) 021	
SBE 911+		PRESSURE (mb) 1017.2		WIND SPD. (m/s) 10		WEATHER * 1	
PRESS SN		DATA ON		WIND TYPE * 1		CLOUD (amt) * 3	
PRI TEMP SN		START DOWN		WIND DIRN. (deg) 021		WIND SPD. (m/s) 10	
SEC TEMP SN		AT DEPTH		WIND TYPE * 1		CLOUD (amt) * 3	
PRI COND SN		AT SURFACE		WIND DIRN. (deg) 021		WIND SPD. (m/s) 10	
SEC COND SN		AT SURFACE		WIND TYPE * 1		CLOUD (amt) * 3	
POS. TRIP DEPTH		DATA LOCATION File Name/Header C50.074		WIND DIRN. (deg) 021		WIND SPD. (m/s) 10	
1 1501		Tape/Diskette ID		WIND TYPE * 1		CLOUD (amt) * 3	
2 2		FLUOR S/N W535868P		WIND DIRN. (deg) 021		WIND SPD. (m/s) 10	
3		CTD CONVERTED MONITOR VALUES		WIND TYPE * 1		CLOUD (amt) * 3	
4		PRESSURE		WIND DIRN. (deg) 021		WIND SPD. (m/s) 10	
5		PRI TEMP.		WIND TYPE * 1		CLOUD (amt) * 3	
6		SEC TEMP.		WIND DIRN. (deg) 021		WIND SPD. (m/s) 10	
7		SALINITY		WIND TYPE * 1		CLOUD (amt) * 3	
8		SALINITY		WIND DIRN. (deg) 021		WIND SPD. (m/s) 10	
9		SALINITY		WIND TYPE * 1		CLOUD (amt) * 3	
10		SALINITY		WIND DIRN. (deg) 021		WIND SPD. (m/s) 10	
11		SALINITY		WIND TYPE * 1		CLOUD (amt) * 3	
12		SALINITY		WIND DIRN. (deg) 021		WIND SPD. (m/s) 10	

REMARKS
Depth off chart

☒ Cleaned air bleed valve
MAX. DEPTH = 1501 m

cond cells removed with T-100 prior to cast
Down 15 m/min to 70 m

Down to 15" / in for just 75 m

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10		DSDB I.D.		STATION DESIGNATION CSE-4	
CONSC CAST #		LATITUDE		LONGITUDE		DATE JD=	
0765919.18 N		14436.63 W		03164/15.1114.2		1828205	
SBE 911+		91220-A		TIME (GMT)		WIND DIRN.	
PRESS SN		710		WET BULB (°C)		WIND SPD. (m/s)	
SEC TEMP SN		884		DRY BULB (°C)		WIND DIRN. (deg)	
PRI COND SN		40915		PRESSURE (mb)		SEA STATE	
SEC COND SN		530		VISIBILITY		CLOUD (amt)	
TRIP DEPTH		4242		FILE NAME/HEADER CTD076		WEATHER	
PAR S/N		4242		Tape/Diskette ID		TYPE	
FLUOR S/N		WS35868P		DATA LOCATION		MAX. DEPTH - 1503 m	
CTD CONVERTED MONITOR VALUES		CTD CONVERTED MONITOR VALUES		SALINITY		SALINITY	
PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY	
1 1503						SAL. 50	
2 2						NUTR. x	
3						CHL. x	
4						WHIT'S NUTR.	
5							
6							
7							
8							
9							
10							
11							
12							

Over 15 m/min for just 100 m

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10		DSDB I.D.		STATION DESIGNATION CSE-3																											
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					
077		28.91N		174.36W		03 AUG 03		20 10 15		15.2		15.2		1828.2		6005		57		2		960											
SBE 911+		91220-A		TIMES		DATA ON		START DOWN		AT DEPTH		AT SURFACE		530		PAR S/N		4242		FLUOR S/N		WS35868P		CTD CONVERTED MONITOR VALUES		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER					
POS. TRIP DEPTH		942		2		3		4		5		6		7		8		9		10		11		12		SAL.		NUTR.		CHL.		WHIT'S NUTR.	
1		942		2		3		4		5		6		7		8		9		10		11		12		38		X		X			
2																																	
3																																	
4																																	
5																																	
6																																	
7																																	
8																																	
9																																	
10																																	
11																																	
12																																	

0-100-15 M/M
100-300-30 M/M

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10		DSD8 I.D.		STATION DESIGNATION CSE-2																					
CONSC CAST #		LATITUDE		LONGITUDE		DATE		TIME (GMT)		WET BULB		PRESSURE		SEA STATE		WIND DIRN.		WIND SPD.		CLOUD (amt)		WEATHER		BOTTOM DEPTH		STA. NAME/ID	
0785937.96		N 149 36.29		W 03 46.03		03 23 03		14.2		14.2		1828		160		078		2		146							
SBE 911+		91220-A		JD/TIME		Tape/Diskette ID		File Name/Header		C00078																	
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		WS35868P																	
POS.		TRIP DEPTH		CTD CONVERTED MONITOR VALUES																							
1		140		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL		NUTR.		CHL.		WHIT'S NUTR.							
2		40		CHLOR MAX																							
3		19																									
4		2																									
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											

note down 15 m/min for first 60m

DRIFTER deployed at the station

15/11/51 for 1st term

VESSEL		PROJECT & LEG		DSDB I.D.		STATION DESIGNATION																											
NOAA Ship MILLER FREEMAN		MF-03-10				Cape YAK-1																											
CONSC CAST #		LATITUDE		LONGITUDE		DATE JD		TIME (GMT)		DRY BULB		WET BULB		PRESSURE		SEA STATE		VISIBILITY		WIND DIRN.		WIND SPD.		CLOUD (amt)		TYPE		WEATHER		BOTTOM DEPTH		STA. NAME/ID	
DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	(°C)	(mb)	*	*	(deg)	(m/s)	*	*	*	*	*	*	*	*	*	*	*	(m)				
02060	22.27	N	172	27.06	W	04	Aug	03	13	56	12.8	12.3	17	26	04	5	08	8	6									45					
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																															
PAR S/N		4242																															
FLUOR S/N		WS35B68P																															
CTD CONVERTED MONITOR VALUES																																	
POS.	TRIP DEPTH	PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER									
1	40																																
2	21	chlor MAX																															
3	2																																
4																																	
5																																	
6																																	
7																																	
8																																	
9																																	
10																																	
11																																	
12																																	

cont rate 15 m/min

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10				DSOB I.D.		STATION DESIGNATION Cape YAK-2																	
CONSEC CAST #		LATITUDE		LONGITUDE		DATE		TIME (GMT)		WET BULB		SEA STATE		WIND DIRN.		WIND SPD.		CLOUD (amt)		WEATHER		BOTTOM DEPTH (m)		STA. NAME/ID	
DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(mb)	+	+	(deg)	(m/s)	+	+	+	+	+	+	+	+	+	+	
081	5953.89	N	14229.69	W	04	08	03	17	09	13	12	01	7	23	1	05	1	18	2	1	07				
SBE 911+		91220-A		JD/TIME		Tape/Diskette ID		DATA LOCATION		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		WS358682															
POS.		TRIP DEPTH		CTD CONVERTED MONITOR VALUES																					
				PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.					
1	101																								
2	30																								
3	18	near chiller max																							
4	2																								
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									

15 m/sec to 50 m

VESSEL NOAA SHIP MILLER FREEMAN		PROJECT & LEG MF-03-10		DSOB I.D.		STATION DESIGNATION Cape Yak-3																							
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	
08259		44.26 N		142.32 W		04 AUG 03		1956		19.0		13.1		1173		8		2		205									
SBE 911+		91220-A																											
PRESS SN																													
PRI TEMP SN		710																											
SEC TEMP SN		884																											
PRI COND SN		40915																											
SEC COND SN		530																											
POS. TRIP DEPTH		4		PAR S/N		4242		FLUOR S/N		WS3S868P																			
1		199		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.									
2		30																											
3		16		chlor MAX																									
4		2																											
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

Down at 15 m/min for just 50m

VESSEL		PROJECT & LEG		DSDB I.D.		STATION DESIGNATION															
NOAA Ship MILLER FREEMAN		MF-03-10				Cape YAK-4															
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	BOTTOM DEPTH (m)	STA. NAME/ID				
	DEG	MIN	DEG	MIN	DAY	MO												YR	HR	MIN	
083	59	34.20	N	142	33.86	W	04	A	03	23	17	14	0	11	9	173	808	0108	6	155	
SBE 911+		91220-A		JID/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																			
PAR S/N		4242																			
FLUOR S/N		WS3S868P																			
CTD CONVERTED MONITOR VALUES																					
POS.	TRIP DEPTH																				
1	149																				
2	2																				
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

Down 515 m/m

VESSEL		PROJECT & LEG		STATION DESIGNATION						
NOAA Ship MILLER FREEMAN		NF-03-10		Cape YAK-5						
CONSC. CAST #	LATITUDE	LONGITUDE	DATE	TIME (GMT)	WET BULB	WIND DIRN.	WIND SPD.	WEATHER	BOTTOM DEPTH	STA. NAME/ID
084519	27.80 N	172.34 W	05 AUG 03	0204	15.1	113	090	073	11289	
SBE 911+		JD/TIME		DATA LOCATION		REMARKS				
PRESS SN		DATA ON		Tape/Diskette ID		File Name/Header				
PRI TEMP SN		START DOWN				CT0084				
SEC TEMP SN		AT DEPTH								
PRI COND SN		AT SURFACE								
SEC COND SN		530		PAR S/N		FLUOR S/N		MAX. DEPTH = 1275 m		
POS. TRIP DEPTH		4242		CTD CONVERTED MONITOR VALUES		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER		
1	1274	PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SALINITY	SAL.	NUTR.	CHL.	WHIT'S NUTR.
2	2						49	X	X	
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										

Down at 15 m/min to just 100m

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10				DSDB I.D.		STATION DESIGNATION CAPE YAK-6											
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	BOTTOM DEPTH (m)	STA. NAME/ID		
	DEG	MIN	DEG	MIN	DAY	MO												YR	HR
0855	18	27	142	38	05	Aug	13	08	14	12	917	3	8	3	2	5	0	4	
REMARKS: Depth by chart DATA LOCATION: File Name/Header: CTD085 Tape/Diskette ID: _____ File Name/Header: _____ CTD CONVERTED MONITOR VALUES FLUOR S/N: WS35868P PAR S/N: 4242 MAX. DEPTH = 1502 m																			
SBE 911+		91220-A		JD/TIME		DATA LOCATION													
PRESS SN		710		START DOWN		File Name/Header													
SEC TEMP SN		884		AT DEPTH		CTD085													
PRI COND SN		40915		AT SURFACE		Cleaned air bleed valve													
SEC COND SN		530				MAX. DEPTH = 1502 m													
POS.	TRIP DEPTH	SAMPLE BOTTLE DATA																	
1	1501	PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.	
2	2											16		X		X			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

15 m/min down to 50 m

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10		DSD8 I.D.		STATION DESIGNATION Cape YAK-7																									
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)		TYPE		WEATHER		BOTTOM DEPTH (m)		STA. NAME/ID	
0865907.58		N 14241.06		W 05A09		03/16		3915.2		18.3		18.3		4		1		2860													
SBE 911+		91220-A																													
PRESS SN		710																													
PRI TEMP SN		884																													
SEC TEMP SN		40915																													
PRI COND SN		530																													
SEC COND SN																															
POS.		TRIP DEPTH																													
1		1501																													
2		2																													
3																															
4																															
5																															
6																															
7																															
8																															
9																															
10																															
11																															
12																															

DATA LOCATION

Tape/Diskette ID

File Name/Header

CTD086

REMARKS

Depth from chart

☒ Cleaned air bleed valve

MAX. DEPTH - 1501 m

FLUOR S/N WS3868P

4242

PAR S/N

CTD CONVERTED MONITOR VALUES

POS.

TRIP DEPTH

1501

2

3

4

5

6

7

8

9

10

11

12

15m/min to 100m

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10		DSDB ID.		STATION DESIGNATION <i>Cape YAK-8</i>																										
CONSC CAST #		LATITUDE		LONGITUDE		DATE		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)	(amt)	(deg)	(deg)	(m/s)	(amt)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)		
08	58	57	71	14	24	3	59	W	03	20	13	15	7	19	38	28	0	08	3	13	20	0	08	3	13	20	0	08	3	13	20	0
SBE 911+		91220-A		JD/TIME		DATE		TIME (GMT)		DRY BULB		WET BULB		PRESSURE		SEA STATE		VISIBILITY		WIND DIRN.		WIND SPD.		CLOUD (amt)		WEATHER		BOTTOM DEPTH		STA. NAME/ID		
PRESS SN		710		DATA ON		START DOWN		AT DEPTH		AT SURFACE		PAR S/N		FLUOR S/N		CTD CONVERTED MONITOR VALUES		CTD		Tape/Diskette ID		File Name/Header		REMARKS		MAX. DEPTH - 1502 m		Cleaned air bleed valve		Depth from chart		
PRI COND SN		40915		TIMES		DATA ON		START DOWN		AT DEPTH		AT SURFACE		PAR S/N		FLUOR S/N		CTD		Tape/Diskette ID		File Name/Header		REMARKS		MAX. DEPTH - 1502 m		Cleaned air bleed valve		Depth from chart		
SEC COND SN		530		TIMES		DATA ON		START DOWN		AT DEPTH		AT SURFACE		PAR S/N		FLUOR S/N		CTD		Tape/Diskette ID		File Name/Header		REMARKS		MAX. DEPTH - 1502 m		Cleaned air bleed valve		Depth from chart		
POS. TRIP DEPTH		1501		TIMES		DATA ON		START DOWN		AT DEPTH		AT SURFACE		PAR S/N		FLUOR S/N		CTD		Tape/Diskette ID		File Name/Header		REMARKS		MAX. DEPTH - 1502 m		Cleaned air bleed valve		Depth from chart		
PRESSURE		PRL TEMP.		SEC. TEMP.		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		
1		1501		2		2		2		2		2		2		2		2		2		2		2		2		2		2		
2		2		2		2		2		2		2		2		2		2		2		2		2		2		2		2		
3		2		2		2		2		2		2		2		2		2		2		2		2		2		2		2		
4		2		2		2		2		2		2		2		2		2		2		2		2		2		2		2		
5		2		2		2		2		2		2		2		2		2		2		2		2		2		2		2		
6		2		2		2		2		2		2		2		2		2		2		2		2		2		2		2		
7		2		2		2		2		2		2		2		2		2		2		2		2		2		2		2		
8		2		2		2		2		2		2		2		2		2		2		2		2		2		2		2		
9		2		2		2		2		2		2		2		2		2		2		2		2		2		2		2		
10		2		2		2		2		2		2		2		2		2		2		2		2		2		2		2		
11		2		2		2		2		2		2		2		2		2		2		2		2		2		2		2		
12		2		2		2		2		2		2		2		2		2		2		2		2		2		2		2		

Down at 15 m/min for first 70m

VESSEL		PROJECT & LEG				DSD8 I.D.		STATION DESIGNATION																								
NOAA Ship MILLER FREEMAN		MF-03-10						Cape YAK-9																								
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)													
088	58	48	1	42	44	76	W	05	Aug	03	23	54	16	11	14	02	03	8	28	0	9	5	1	3	1	6	0					
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		FLUOR S/N		WS35868P																								
POS.		TRIP DEPTH		CTD CONVERTED MONITOR VALUES																												
1	1498			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																																

Down 15 m/min for just 80 m

Down 15 in/min for first 80 in

Down 15 in/min for first 80 in

VESSEL		PROJECT & LEG		STATION DESIGNATION		DSOB I.D.	
NOAA Ship MILLER FREEMAN		MF-03-10		Ocean Cape-9			
CONSC	LATITUDE	LONGITUDE		DATE JD=		TIME (GMT)	
CAST #	MIN	DEG	MIN	DAY	MO	YR	HR
09058	10.39	N	170.21	14	06	03	17
SBE 911+		TIMES		JD/TIME		DATA LOCATION	
91220-A		DATA ON				File Name/Header	
PRESS SN	710	START DOWN				C5D09D	
PRI TEMP SN	884	AT DEPTH					
SEC TEMP SN	40915	AT SURFACE					
PRI COND SN	530	PAR S/N		4242		FLUOR S/N WS358682	
SEC COND SN		CTD CONVERTED MONITOR VALUES					
POS.	TRIP DEPTH	PRESSURE	PRI TEMP.	SEC. TEMP.	SALINITY	SALINITY	SAMPLE BOTTLE DATA
1	1500						SAMPLE BOTTLE NUMBER
2	2						
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							

REMARKS
Depth from chart

☒ Cleaned air bleed valve
MAX. DEPTH = 1501 m

Down at 15 m/min for first 100 m

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10				OSDB I.D.		STATION DESIGNATION Ocean Cape 8															
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	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(deg)	(m/s)	*	*	*	*	*	(m)			
091	58	20	47	N	14	01	8	6	20	58	16.1	17.5	263	83	00	148	23	20	09				
SBE 911+		91220-A		JD/TIME		DATE		TIME		WET BULB		WIND DIRN.		WIND SPD.		CLOUD (amt)		WEATHER		BOTTOM DEPTH		STA. NAME/ID	
PRESS SN		710		DATA ON		START DOWN		AT DEPTH		AT SURFACE		40915		530		PAR S/N		4242		FLUOR S/N		WS3S8682	
PRI TEMP SN		710		DATA ON		START DOWN		AT DEPTH		AT SURFACE		40915		530		PAR S/N		4242		FLUOR S/N		WS3S8682	
SEC TEMP SN		884		DATA ON		START DOWN		AT DEPTH		AT SURFACE		40915		530		PAR S/N		4242		FLUOR S/N		WS3S8682	
PRI COND SN		40915		DATA ON		START DOWN		AT DEPTH		AT SURFACE		40915		530		PAR S/N		4242		FLUOR S/N		WS3S8682	
SEC COND SN		530		DATA ON		START DOWN		AT DEPTH		AT SURFACE		40915		530		PAR S/N		4242		FLUOR S/N		WS3S8682	
POS.		TRIP DEPTH		DATA ON		START DOWN		AT DEPTH		AT SURFACE		40915		530		PAR S/N		4242		FLUOR S/N		WS3S8682	
1		1502		DATA ON		START DOWN		AT DEPTH		AT SURFACE		40915		530		PAR S/N		4242		FLUOR S/N		WS3S8682	
2		2		DATA ON		START DOWN		AT DEPTH		AT SURFACE		40915		530		PAR S/N		4242		FLUOR S/N		WS3S8682	
3				DATA ON		START DOWN		AT DEPTH		AT SURFACE		40915		530		PAR S/N		4242		FLUOR S/N		WS3S8682	
4				DATA ON		START DOWN		AT DEPTH		AT SURFACE		40915		530		PAR S/N		4242		FLUOR S/N		WS3S8682	
5				DATA ON		START DOWN		AT DEPTH		AT SURFACE		40915		530		PAR S/N		4242		FLUOR S/N		WS3S8682	
6				DATA ON		START DOWN		AT DEPTH		AT SURFACE		40915		530		PAR S/N		4242		FLUOR S/N		WS3S8682	
7				DATA ON		START DOWN		AT DEPTH		AT SURFACE		40915		530		PAR S/N		4242		FLUOR S/N		WS3S8682	
8				DATA ON		START DOWN		AT DEPTH		AT SURFACE		40915		530		PAR S/N		4242		FLUOR S/N		WS3S8682	
9				DATA ON		START DOWN		AT DEPTH		AT SURFACE		40915		530		PAR S/N		4242		FLUOR S/N		WS3S8682	
10				DATA ON		START DOWN		AT DEPTH		AT SURFACE		40915		530		PAR S/N		4242		FLUOR S/N		WS3S8682	
11				DATA ON		START DOWN		AT DEPTH		AT SURFACE		40915		530		PAR S/N		4242		FLUOR S/N		WS3S8682	
12				DATA ON		START DOWN		AT DEPTH		AT SURFACE		40915		530		PAR S/N		4242		FLUOR S/N		WS3S8682	

Down 15 m/min for first 90 m

REMARKS

DATA LOCATION

Tape/Diskette ID

JD/TIME

TIMES

DATA ON

START DOWN

AT DEPTH

AT SURFACE

File Name/Header

CJD091

CJD091

CJD091

CJD091

CJD091

CJD091

CJD091

Cleared air bleed valve

MAX. DEPTH = 1503 m

MAX. DEPTH = 1503 m

MAX. DEPTH = 1503 m

MAX. DEPTH = 1503 m

MAX. DEPTH = 1503 m

MAX. DEPTH = 1503 m

MAX. DEPTH = 1503 m

MAX. DEPTH = 1503 m

Down at 15 m/min for first 1000 cells, rinsed in with T-100 soap

Down at 15 m/min for first 1000 cells, rinsed in with T-100 soap

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10				DSDB I.D.		STATION DESIGNATION Ocean Cape - 6													
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				
	DEG	MIN	DEG	MIN	DAY	MO												YR			
093	58	40.19	N	140	11	35	W	07	AWG	03	04	22	15	7	3.8	20	7	1	2	1	7
SBE 911+																					
TIMES																					
91220-A																					
DATA ON																					
START DOWN																					
710																					
AT DEPTH																					
884																					
AT SURFACE																					
40915																					
SEC COND SN 530																					
☒ PAR S/N 4242 ☒ FLUOR S/N WS35868P CTD CONVERTED MONITOR VALUES																					
POS.	TRIP DEPTH	SAMPLE BOTTLE DATA										SAMPLE BOTTLE NUMBER									
		PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SALINITY	SAL.	NUTR.	CHL.	WHIT'S NUTR.											
1	211																				
2	40																				
3	28	chlor MAX																			
4	2																				
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

Cleaned air bleed valve

MAX. DEPTH = 211 m

DATA LOCATION

Tape/Diskette ID

File Name/Header

CTD093

VESSEL		PROJECT & LEG				DSD8 I.D.				STATION DESIGNATION										
NOAA Ship MILLER FREEMAN		MF-03-10								Ocean Cape S										
CONC CAST #	LATITUDE		LONGITUDE		DATE		TIME (GMT)		WET BULB (°C)	WIND DIRN. (deg)	WIND SPD. (m/s)	SEA STATE	PRESSURE (mb)	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
0545853.311 N	17	40	06	51	W	07	A	03	13	15	15	12	13	83	0	11	7	1	169	
SBE 911+	91220-A				JD/TIME				DATA LOCATION		REMARKS									
PRESS SN									Tape/Diskette ID		File Name/Header									
PRI TEMP SN	710																			
SEC TEMP SN	884																			
PRI COND SN	40915																			
SEC COND SN	530																			
	☒ PAR S/N		4242		☒ FLUOR S/N		WS358682													
POS.	TRIP DEPTH																			
1	163																			
2	40																			
3	20																			
4	2																			
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

Down at 15 m/min for just 50m

VESSEL		PROJECT & LEG		DSD8 I.D.		STATION DESIGNATION	
NOAA Ship MILLER FREEMAN		MF-03-10				Ocean Cape - 4	
CONSC CAST #	LATITUDE	LONGITUDE	DATE	TIME (GMT)	WET BULB	WIND DIR.	WIND SPD.
0955903.110N	141002.92W	07A	160115.6	17.22	3111107	1	128
SBE 911+	91220-A	JD/TIME	TIME (GMT)	WET BULB	WIND DIR.	WIND SPD.	WIND DIR.
PRESS SN	710	START DOWN	AT DEPTH	AT SURFACE	AT SURFACE	AT SURFACE	AT SURFACE
SEC TEMP SN	884	AT SURFACE	AT SURFACE	AT SURFACE	AT SURFACE	AT SURFACE	AT SURFACE
PRI COND SN	40915	AT SURFACE	AT SURFACE	AT SURFACE	AT SURFACE	AT SURFACE	AT SURFACE
SEC COND SN	530	AT SURFACE	AT SURFACE	AT SURFACE	AT SURFACE	AT SURFACE	AT SURFACE
POS.	TRIP DEPTH	PAR S/N	4242	FLUOR S/N	WS38682	CTD CONVERTED MONITOR VALUES	FILE NAME/HEADER
1	122						CTD095
2	40						
3	18						
4	2						
5							
6							
7							
8							
9							
10							
11							
12							

15 m/min down to 70 m

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10		DSDB I.D.		STATION DESIGNATION Ocean Cape-3														
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 TYPE	BOTTOM DEPTH (m)	STA. NAME/ID		
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR											MIN	
0965913.22	13	22	139	59	18	06	15	18	30	15	11	19	13	05	10	7	1	12	6	
SBE 911+	91220-A				JD/TIME				DATA LOCATION										REMARKS	
PRESS SN									Tape/Diskette ID											
PRI TEMP SN	710								File Name/Header											
SEC TEMP SN	884																			
PRI COND SN	40915																			
SEC COND SN	530																			
POS. TRIP DEPTH									CTD CONVERTED MONITOR VALUES										MAX. DEPTH = 121.8 m	
									FLUOR S/N WS358682											
									PAR S/N 4242											
									CTD CONVERTED MONITOR VALUES											
									PRESSURE											
									PRI. TEMP.											
									SEC. TEMP.											
									SALINITY											
									SALINITY											
									SAL.											
									NUTR.											
									CHL.											
									WHIT'S NUTR.											

Down 15 m/min for first 60

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10				DSDB I.D.		STATION DESIGNATION 002																							
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	SEC	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	(deg)	(m/s)	(m)	(m/s)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)		
0975927.96N	13955.92W	07AUG	0320	58	13	8	13	4	2	23	8	2	9	0	1	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	
SBE 911+ 91220-A PRESS SN 710 PRI TEMP SN 884 SEC TEMP SN 40915 PRI COND SN 530 SEC COND SN 530 PAR S/N 4242 FLUOR S/N WS3S8682 CTD CONVERTED MONITOR VALUES																															
DATA LOCATION File Name/Header CTD097 Tape/Diskette ID Cleaned air bleed valve MAX. DEPTH = 177 m																															
REMARKS																															
SAMPLE BOTTLE DATA																															
SAMPLE BOTTLE NUMBER																															
POS. TRIP DEPTH																															
1	177		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.												
2	40																														
3	23		chlor max																												
4	2																														
5																															
6																															
7																															
8																															
9																															
10																															
11																															
12																															

15 m/min down first 50 m

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10				DSD8 I.D.		STATION DESIGNATION Ocean Cape 1									
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	BOTTOM DEPTH (m)	STA. NAME/ID
	DEG	MIN	DEG	MIN	DAY	MO											
098	59	29	13	53	12	W	07	13	13	13	22	38	28	5	1	77	
SBE 911+ PRESS SN PRI TEMP SN SEC TEMP SN PRI COND SN SEC COND SN																	
DATA ON START DOWN AT DEPTH AT SURFACE																	
DATA LOCATION File Name/Header CT0098																	
Tape/Diskette ID MAX. DEPTH = 72 m																	
REMARKS ☒ Cleaned air bleed valve																	
POS.		TRIP DEPTH		PAR S/N		FLUOR S/N		CTD CONVERTED MONITOR VALUES		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER		WHIT'S NUTR.			
1	72													06			
2	30																
3	10																
4	2																
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	

Down to 15 m/min entire cast