

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10		DSD8 I.D.		STATION DESIGNATION CAK21																	
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)			
051	59	47	59	N	149	25	42	W	30	50	63	12	13	13	62	1	38	2	42	68	2	270	
SBE 911+		91220-A		JD/TIME		Tape/Diskette ID		DATA LOCATION		File Name/Header		REMARKS											
PRESS SN		710		DATA ON		START DOWN		CIP 051															
SEC TEMP SN		884		AT DEPTH																			
PRI COND SN		40915		AT SURFACE																			
SEC COND SN		530		PAR S/N		4242		FELDOR S/N		WS35868P													
POS.		TRIP DEPTH		PRESSURE		PRI TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL		NUTR.		CHL		WHIT'S NUTR.			
1	264													5									
2	31																						
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		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 = 23 m															
POS.		TRIP DEPTH		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL		NUTR.		CHL.		WHIT'S NUTR.		SAMPLE BOTTLE NUMBER					
1	233																										
2	30																										
3	20																										
4	2																										
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											

added during processing
by elimination pdf

note down 15 m/min for first 60m

VESSEL		PROJECT & LEG		DSDB ID.		STATION DESIGNATION	
NOAA Ship MILLER FREEMAN		MF-03-10				GA63	
CONSC CAST #	0535431.31	DEG	MIN	LONGITUDE	DEG	MIN	
	0535431.31	14	09	09.64	14	09	
SBE 911+	91220-A	DATE JD=		TIME (GMT)		WET BULB	
		DAY MO YR		HR MIN		(°C)	
		14 03 19		15 16 13		12.92223	
PRESS SN		JD/TIME		SEA STATE		WIND DIRN.	
				* * *		(deg)	
PRI TEMP SN	710			PRESSURE		WIND SPD.	
				(mb)		(m/s)	
SEC TEMP SN	884			WIND TYPE		WEATHER	
PRI COND SN	40915			DATA LOCATION		BOTTOM DEPTH	
				File Name/Header		(m)	
SEC COND SN	530			C50053		208	
POS. TRIP DEPTH				Tape/Diskette ID		REMARKS	
						Cleaned air bleed valve	
						MAX. DEPTH = 201 m	
CTD CONVERTED MONITOR VALUES				SAMPLE BOTTLE DATA			
PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY	
1 281						71	
2 32							
3 17	CHLOR MAX						
4 2							
5							
6							
7							
8							
9							
10							
11							
12							

note down 15 m/min for first 60 m of Cast

VESSEL		PROJECT & LEG				DSDB I.D.		STATION DESIGNATION												
NOAA Ship MILLER FREEMAN		MF-03-10						GAL3												
CONSC CAST #	DEG	MIN	LATITUDE		DEG	MIN	LONGITUDE		DATE	TIME	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID
	05	45	92	7	44	N	149	06	06	W	3	05	13	03	2	10	03	2	20	2
SBE 911+	91220-A																			
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		WS3868P		CTD CONVERTED MONITOR VALUES										
1	196	PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.		
2	30																			
3	20	OK for MAX																		
4	2																			
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

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

Added during process by elimination pdf

Added during process by elimination pdf

VESSEL NOAA Ship MILLER FREEMAN				PROJECT & LEG MF-03-10				DSDB I.D.				STATION DESIGNATION BS2											
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	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(mb)	(deg)	(m/s)	*	*	*	*	*	(m)			
057	58	51	39	N	148	14	07	15	02	19	14.3	15.5	21	38	200	07	5	1	100				
SBE 911+		91220-A		JD/TIME		DATE		TIME (GMT)		WET BULB		WIND DIRN.		WIND SPD.		CLOUD (amt)		WEATHER		BOTTOM DEPTH		STA. NAME/ID	
PRESS SN		710		DATA ON		DATE		TIME (GMT)		WET BULB		WIND DIRN.		WIND SPD.		CLOUD (amt)		WEATHER		BOTTOM DEPTH		STA. NAME/ID	
PRI TEMP SN		884		AT DEPTH		DATE		TIME (GMT)		WET BULB		WIND DIRN.		WIND SPD.		CLOUD (amt)		WEATHER		BOTTOM DEPTH		STA. NAME/ID	
PRI COND SN		40915		AT SURFACE		DATE		TIME (GMT)		WET BULB		WIND DIRN.		WIND SPD.		CLOUD (amt)		WEATHER		BOTTOM DEPTH		STA. NAME/ID	
SEC COND SN		530		PAR S/N		4242		FLUOR S/N		WS3S868P		CTD CONVERTED MONITOR VALUES		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER		SAL.		NUTR.		CHL.	
POS. TRIP DEPTH				PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		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		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)					
25	59	53	43	N	149	06	15	W	10	30	14	24		21		2	8	2	0	0	7	2		1	2	1	3		
SBE 911+		91220-A		JD/TIME																									
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		207																											
2		30																											
3		17		chlor MAX																									
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		DEG MIN		DAY MO YR		HR MIN		WET BULB (°C)		WIND DIRN. (deg)		WIND SPD. (m/s)		CLOUD (amt)		WEATHER		BOTTOM DEPTH (m)		STA. NAME/ID	
0605953.05N		14846.96W		315W		103		170112.1		18.1		000		042		1		159					
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		153																					
2		30																					
3		14																					
4		2																					
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							

DATA LOCATION				FILE NAME/HEADER			
Tape/Diskette ID		File Name/Header		Tape/Diskette ID		File Name/Header	
		CTD060					

CTD CONVERTED MONITOR VALUES			
FLUOR S/N	PAR S/N	4242	WS358682

SAMPLE BOTTLE DATA				SAMPLE BOTTLE NUMBER			
POS.	TRIP DEPTH	PRI. TEMP.	SEC. TEMP.	SALINITY	SAL.	NUTR.	CHL.
1	153				125		
2	30						
3	14						
4	2						
5							
6							
7							
8							
9							
10							
11							
12							

note down 15m per for just 60m

VESSEL NOAA Ship MILLER FREEMAN				PROJECT & LEG MF-03-10				DSDB I.D.				STATION DESIGNATION CF-12																
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)	1	2	3	(deg)	(m/s)	1	2	3	4	5	6	(m)				
0161	58	32.9	16	N	148	51.8	W	31	5	2010	13	9	13	9	13	9	13	9	13	9	13	9	13	9	13	9	13	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		WS3S888P		CTD CONVERTED MONITOR VALUES																
TRIP DEPTH																												
1	172			PRESSURE		PRI TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.								
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		DSDB I.D.		STATION DESIGNATION																		
NOAA Ship MILLER FREEMAN		MF-03-10				CF-12																		
CONSC CAST #	LATITUDE		LONGITUDE		DATE		TIME (GMT)		WET BULB		PRESSURE		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/s)	(amt)	*	*	*	*	(m)			
862	34.75	N	148	44	16	W	3	20	42	14.7	13.6	1728	260	07	2	1	9	4						
SBE 911+																								
PRESS SN	9120-A																							
PRI TEMP SN	710																							
SEC TEMP SN	884																							
PRI COND SN	40915																							
SEC COND SN	530																							
POS.																								
TRIP DEPTH																								
FLUOR S/N W53S868P																								
CTD CONVERTED MONITOR VALUES																								
4242																								
PAR S/N																								
4242																								
PRESSURE																								
PRI TEMP.																								
SEC. TEMP.																								
SALINITY																								
SAL.																								
NUTR.																								
CHL.																								
WHT's NUTR.																								
1	89																							
2	30																							
3	14																							
4	2																							
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10				DSDB I.D.		STATION DESIGNATION CF 8															
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	HR	MIN	SEC	MO	DAY	YR	DRY BULB (°C)	WET BULB (°C)	DIRN (deg)	SPD (m/s)	TYPE	AMT	WIND DIRN (deg)	WIND SPD (m/s)	WIND DIRN (deg)	WIND SPD (m/s)	WIND DIRN (deg)	WIND SPD (m/s)	WIND DIRN (deg)	WIND SPD (m/s)
06359	40.68	N	178	52.08	W	31	03	15	13	15	13	15	13	15	13	15	13	15	13	15	13	15	13
SBE 911+		91220-A		JD/TIME		DATE		TIME (GMT)		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		AT SURFACE		AT SURFACE		AT SURFACE		AT SURFACE		AT SURFACE		AT SURFACE	
PRI TEMP SN		884		DATA ON		START DOWN		AT DEPTH		AT SURFACE		AT SURFACE		AT SURFACE		AT SURFACE		AT SURFACE		AT SURFACE		AT SURFACE	
SEC TEMP SN		40915		DATA ON		START DOWN		AT DEPTH		AT SURFACE		AT SURFACE		AT SURFACE		AT SURFACE		AT SURFACE		AT SURFACE		AT SURFACE	
PRI COND SN		530		DATA ON		START DOWN		AT DEPTH		AT SURFACE		AT SURFACE		AT SURFACE		AT SURFACE		AT SURFACE		AT SURFACE		AT SURFACE	
SEC COND SN		530		DATA ON		START DOWN		AT DEPTH		AT SURFACE		AT SURFACE		AT SURFACE		AT SURFACE		AT SURFACE		AT SURFACE		AT SURFACE	
POS.		TRIP DEPTH		PAR S/N		4242		FLUOR S/N		WS3S868P		CTD CONVERTED MONITOR VALUES		FILE NAME/HEADER		Tape/Diskette ID		DATA LOCATION		REMARKS		MAX. DEPTH = 173 m	
1		173		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY	
2		20		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY	
3		11		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY	
4		2		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY	
5				PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY	
6				PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY	
7				PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY	
8				PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY	
9				PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY	
10				PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY	
11				PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY	
12				PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY	

Down 15m/min

VESSEL NOAA Ship MILLER FREEMAN										PROJECT & LEG MF-03-10				DSD8 I.D.		STATION DESIGNATION CF-8											
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)						
064593	38.36	N	14901	17	03	15	03	23	27	17	14	0172	28	29	0	11	3										
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		530		PAR S/N		4242		FLUOR S/N		WS3S868P																	

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		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		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		WIND DIRN.		WIND SPD.		CLD (amt)		WEATHER		BOTTOM DEPTH		STA. NAME/ID	
DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(deg)	(m/s)	*	*	*	*	(m)						
066	59	38	22	14	09	2003	03	06	17	01	4	8	16	38	26	0	11	2	3	1	23	1	
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		MAX. DEPTH =		m									
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 15 m/min for just 70 m

VESSEL		PROJECT & LEG				DSD8 I.D.				STATION DESIGNATION													
NOAA Ship MILLER FREEMAN		MF-03-10								CC-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)	TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID					
	DEG	MIN	DEG	MIN	DAY	MO													YR				
2675944	44	43	177	49	17	W	01	AW	503	13	56	15	01	2.8	14	38	33	00	2	6	1	65	
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																						
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																						
3	12																						
4	2																						
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)	TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
	DEG	MIN	DEG	MIN	DAY	MO												
06859	40.20	N	147	44.13	W	01	AUG	15	11	14.01	43	3	00	04	7		111	
SBE 911+ 91220-A DATA ON START DOWN AT DEPTH AT SURFACE SEC COND SN 530 PAR S/N 4242 FLUOR S/N WS358682 CTD CONVERTED MONITOR VALUES																		
POS.	TRIP DEPTH	SAMPLE BOTTLE DATA																
		PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SALINITY	SAL.	NUTR.	CHL.	WHIT'S NUTR.								
1	106						40											
2	30								X									
3	24	chlor max							X									
4	2								X									
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	4	3	5	10	8	4	10	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)		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)			
0705928.64		N 14728.96		W 01 Aug 03		24 26 15		.0 14.1		1337		030		14		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		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																								
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	132																									
2	30																									
3	9	chlor max																								
4	2																									
5																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										

15 m/min for just 45 m

VESSEL				PROJECT & LEG				DSDB I.D.				STATION DESIGNATION															
NOAA Ship MILLER FREEMAN				NF-03-10								cc-6															
CONSC CAST #		LATITUDE		LONGITUDE		DATE		TIME (GMT)		WET BULB		PRESSURE		SEA STATE		WIND DIRN.		WIND SPD.		CLOUD (amt)		WEATHER		BOTTOM DEPTH		STA. NAME/ID	
0725913.90N		14709.56W		14709.56W		02 AUG 03		140214.3		13.7		1638030		022		1		200									
SBE 911+		91220-A		TIMES		JD/TIME		DATA LOCATION		Tape/Diskette ID		File Name/Header		REMARKS													
PRESS SN		710		DATA ON																							
PRI TEMP SN		884		START DOWN																							
SEC TEMP SN		40915		AT DEPTH																							
PRI COND SN		530		AT SURFACE																							
SEC COND SN		4242		PAR S/N		4242		FLUOR S/N		WS3868P																	
POS. TRIP DEPTH				CTD CONVERTED MONITOR VALUES																							
1 195		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 60

Down at 15 m/min for first 75 m

cord cells removed with Triton X-100 prior to count
Down 15 m/min to 70 m

Don't mind to do

VESSEL		PROJECT & LEG		STATION DESIGNATION		DSD8 I.D.	
NOAA Ship MILLER FREEMAN		MF-03-10		CSE-5			
CONSC CAST #	LATITUDE	LONGITUDE	DATE	TIME (GMT)	WET BULB	SEA STATE	WIND DIRN.
0755909.11	11 N	1443.6 W	03 AUG 2003	13 21	113.6	2	606
SBE 911+	91220-A						
PRESS SN	DATA ON						
PRI TEMP SN	710						
SEC TEMP SN	884						
PRI COND SN	40915						
SEC COND SN	530						
FLUOR S/N	WS35868P						
PAR S/N	4242						
CTD CONVERTED MONITOR VALUES							
POS.	TRIP DEPTH	PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SALINITY	SAL.
1	1503						31
2	2						X
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							

Down at 15 m/min for first 75 m

REMARKS
Depth off chart

File Name/Header
CTD0075

Cleaned air bleed valve

MAX. DEPTH = 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		03164115.1114.2		1828205063	
SBE 911+		91220-A		TIMES		JD/TIME	
PRESS SN		710		DATA ON		DATA LOCATION	
PRI TEMP SN		884		START DOWN		File Name/Header CTD076	
SEC TEMP SN		40915		AT DEPTH		Tape/Diskette ID	
PRI COND SN		530		AT SURFACE		MAX. DEPTH = 1503 m	
SEC COND SN		4242		PAR S/N		FLUOR S/N WS35868P	
POS. TRIP DEPTH		4242		CTD CONVERTED MONITOR VALUES		REMARKS Depth of last	
1 1503		PRESSURE		PRI. TEMP.		SEC. TEMP.	
2 2		SALINITY		SALINITY		SALINITY	
3		SALINITY		SALINITY		SALINITY	
4		SALINITY		SALINITY		SALINITY	
5		SALINITY		SALINITY		SALINITY	
6		SALINITY		SALINITY		SALINITY	
7		SALINITY		SALINITY		SALINITY	
8		SALINITY		SALINITY		SALINITY	
9		SALINITY		SALINITY		SALINITY	
10		SALINITY		SALINITY		SALINITY	
11		SALINITY		SALINITY		SALINITY	
12		SALINITY		SALINITY		SALINITY	

Over at 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			
PRESS SN		710		884		40915		530		PAR S/N		4242		FLUOR S/N		WS35868P		CTD CONVERTED MONITOR VALUES		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER		SAL.		NUTR.		CHL.		WHIT'S NUTR.	
PRI TEMP SN		710		884		40915		530		PAR S/N		4242		FLUOR S/N		WS35868P		CTD CONVERTED MONITOR VALUES		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER		SAL.		NUTR.		CHL.		WHIT'S NUTR.	
SEC TEMP SN		710		884		40915		530		PAR S/N		4242		FLUOR S/N		WS35868P		CTD CONVERTED MONITOR VALUES		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER		SAL.		NUTR.		CHL.		WHIT'S NUTR.	
PRI COND SN		710		884		40915		530		PAR S/N		4242		FLUOR S/N		WS35868P		CTD CONVERTED MONITOR VALUES		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER		SAL.		NUTR.		CHL.		WHIT'S NUTR.	
SEC COND SN		710		884		40915		530		PAR S/N		4242		FLUOR S/N		WS35868P		CTD CONVERTED MONITOR VALUES		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER		SAL.		NUTR.		CHL.		WHIT'S NUTR.	
POS.		TRIP DEPTH		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.		SAL.		NUTR.		CHL.		WHIT'S NUTR.			
1		942																				38		X		X					
2		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 JD		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 AUG 03		23 03 16.2		14.2		1828		160		078		2		146							
SBE 911+		91220-A		JD/TIME		DATA ON		START DOWN		AT DEPTH		AT SURFACE		Tape/Diskette ID		File Name/Header		REMARKS									
PRESS SN		710																									
SEC TEMP SN		884																									
PRI COND SN		40915																									
SEC COND SN		530																									
POS. TRIP DEPTH		140																									
1		140																									
2		40																									
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

cost 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	0	17	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																							
PRI TEMP SN		884																							
SEC TEMP SN		40915																							
PRI COND SN		530																							
SEC COND SN		4242																							
POS.		TRIP DEPTH		FLUOR S/N		WS358682		CTD CONVERTED MONITOR VALUES		SALINITY		SALINITY		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.			
1	101	PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.					
2	30	near chiller max																							
3	18																								
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		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)		WET BULB		WIND DIRN.		WIND SPD.		CLOUD (amt)		WEATHER		BOTTOM DEPTH		STA. NAME/ID	
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(deg)	(m/s)	(amt)		(m)						
083	59	34.20	N	142	33.86	W	04	A	23	17	14	0	11	9	173	808	0108	6	155			
<div> <div> SBE 911+ PRESS SN PRI TEMP SN SEC TEMP SN PRI COND SN SEC COND SN </div> <div> 91220-A 710 884 40915 530 </div> <div> TIMES DATA ON START DOWN AT DEPTH AT SURFACE </div> <div> JD/TIME </div> <div> DATE LOCATION </div> <div> Tape/Diskette ID </div> <div> File Name/Header CT0083 </div> <div> REMARKS </div> <div> MAX. DEPTH = 150 m </div> </div>																						
<div> <div> PAR S/N FLUOR S/N CTD CONVERTED MONITOR VALUES </div> <div> 4242 WS3S8682 </div> </div>																						
POS.		TRIP DEPTH		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.		
1	149														41							
2	2																					
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						

Down 515 m/min

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
DEG MIN	DEG MIN	DEG MIN	DAY MO YR	HR MIN	(°C)	(deg)	(m/s)	TYPE	(m)	
084519	27.80 N	17234.9	05 AUG 03	0204	15.1	173	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 4242		FLUOR S/N W535868P		MAX. DEPTH = 1275 m		
POS. TRIP DEPTH		4242		CTD CONVERTED MONITOR VALUES		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER		
		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		WHIT'S NUTR.
1 1274								49		
2 2								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
0855	18	27	142	38	15	Aug	03	13	08	14	8	12	19	17	3	8	22	010
<div> <div> SBE 911+ PRESS SN PRI TEMP SN SEC TEMP SN PRI COND SN SEC COND SN </div> <div> 91220-A 710 884 40915 530 </div> <div> TIMES DATA ON START DOWN AT DEPTH AT SURFACE </div> <div> DATE JD= </div> <div> JD/TIME </div> <div> TIME (GMT) </div> <div> DRY BULB (°C) </div> <div> WET BULB (°C) </div> <div> PRESSURE (mb) </div> <div> SEA STATE </div> <div> WIND DIRN. (deg) </div> <div> WIND SPD. (m/s) </div> <div> CLOUD (amt) </div> <div> WEATHER </div> <div> BOTTOM DEPTH (m) </div> <div> STA. NAME/ID </div> </div>																		
<div> <div> REMARKS Depth by chart Cleaned air bleed valve MAX. DEPTH = 1502 m </div> <div> DATA LOCATION File Name/Header CTD 085 </div> <div> Tape/Diskette ID </div> </div>																		
<div> <div> POS. TRIP DEPTH </div> <div> FLUOR S/N WS35868P </div> <div> CTD CONVERTED MONITOR VALUES </div> </div>																		
<div> <div> SAMPLE BOTTLE DATA </div> <div> SAMPLE BOTTLE NUMBER </div> </div>																		
<div> <div> PRESSURE </div> <div> SALINITY </div> <div> SAL. </div> <div> NUTR. </div> <div> CHL. </div> <div> WHIT'S NUTR. </div> </div>																		
1	1501																	
2	2																	
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		163915.2		163915.2		1838390		1838390		54		12860															
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																															

REMARKS
Depth from chart

DATA LOCATION
File Name/Header
CTD086

Tape/Diskette ID
Cleaned air bleed valve
MAX. DEPTH - 1501 m

SAMPLE BOTTLE DATA				SAMPLE BOTTLE NUMBER			
POS.	TRIP DEPTH	PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SAL.	WHIT'S NUTR.
1	1501					18	
2	2						
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							

15m/min to 100m

Down at 15 m/min for just 70 m

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 (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD. (m/s)	CLOUD (amt)	WEATHER TYPE	BOTTOM DEPTH (m)	STA. NAME/ID										
	DEG	MIN	DEG	MIN	DAY	MO													YR	HR	MIN							
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		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	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

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10				DSDB I.D.		STATION DESIGNATION Ocean Cape-10												
CONSC CAST #	LATITUDE		LONGITUDE		DATE		TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRL. (deg)	WIND SPD. (m/s)	CLOUD (amt)	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID		
	DEG	MIN	DEG	MIN	DAY	MO													YR	
089580	1	28	N	14	02	5	13	13	15	5	20	3	8	3	10	1	5	13	4	00
SBE 911+ 91220-A PRESS SN 710 PRI TEMP SN 884 SEC TEMP SN 40915 PRI COND SN 530 SEC COND SN 530																				
DATA ON START DOWN AT DEPTH AT SURFACE																				
PAR S/N 4242 FLUOR S/N WS3S8582 CTD CONVERTED MONITOR VALUES																				
POS. TRIP DEPTH		SAMPLE BOTTLE DATA																		
		SAMPLE BOTTLE NUMBER																		
1 1501		PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SAL.	NUTR.	CHL.	WHIT'S NUTR.											
2 2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

Down 15m/min for just 80m

REMARKS

DATA LOCATION

File Name/Header

Tape/Diskette ID

☐ Cleaned air bleed valve

MAX. DEPTH = 1501 m

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.		SEA STATE		PRESSURE		VISIBILITY		CLOUD (amt)		WEATHER		BOTTOM DEPTH		STA. NAME/ID	
DEG	MIN	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(deg)	(m/s)	*	*	*	*	(mb)	*	*	*	*	(m)					
091	58	20	47	N	14	01	8	6	20	58	16.1	17.5	203	83	00	148	23	209											
SBE 911+		91220-A		JD/TIME		DATE		TIME		WET BULB		WIND DIRN.		WIND SPD.		SEA STATE		PRESSURE		VISIBILITY		CLOUD (amt)		WEATHER		BOTTOM DEPTH		STA. NAME/ID	
PRESS SN		710		START DOWN		Tape/Diskette ID		File Name/Header		CJD091		Cleared air bleed valve		MAX. DEPTH = 1503 m		REMARKS		Depth from chart											
PRI TEMP SN		884		AT DEPTH																									
SEC TEMP SN		40915		AT SURFACE																									
PRI COND SN		530		PAR S/N		4242		FLUOR S/N		WS3S8682		CTD CONVERTED MONITOR VALUES																	
SEC COND SN		530		PAR S/N		4242		FLUOR S/N		WS3S8682		CTD CONVERTED MONITOR VALUES																	
POS.		TRIP DEPTH		PRESSURE		PRI TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL.		NUTR.		CHL.		WHIT'S NUTR.									
1	1502																												
2	2																												
3																													
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

Down 15 m/min for first 90 m

VESSEL NOAA Ship MILLER FREEMAN		PROJECT & LEG MF-03-10		DSDB I.D.		STATION DESIGNATION Ocean Cape - 7	
CONSC CAST #		LATITUDE		LONGITUDE		DATE, JD=	
0925829.97N		14014.62W		07 Aug 03		07	
SBE 911+		91220-A		TIMES		JD/TIME	
PRESS SN		710		DATA ON		DATA LOCATION	
PRI TEMP SN		884		START DOWN		File Name/Header	
SEC TEMP SN		40915		AT DEPTH		CTD092	
PRI COND SN		530		AT SURFACE		Tape/Diskette ID	
SEC COND SN		4242		PAR S/N		FLUOR S/N WS3S868P	
TRIP DEPTH		4242		CTD CONVERTED MONITOR VALUES		MAX. DEPTH = 1501 m	
POS.		PRESSURE		PRI. TEMP.		SEC. TEMP.	
1 1501							
2 2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							

Down at 15 m/min for first 100m
calibrated in with T-100 soap

[illegible]

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)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID
0545853.311 N	174006.51 W	06.51 W	07 AUG 2003	1310	15.1	15.1	1012.1	3	83	0	1	1	169	
SBE 911+	91220-A													
PRESS SN														
PRI TEMP SN	710													
SEC TEMP SN	884													
PRI COND SN	40915													
SEC COND SN	530													
TRIP DEPTH														
POS.														
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.	WEATHER	BOTTOM DEPTH	STA. NAME/ID	
0955903.110N	141002.92W	07A	160115.6	17.22	311107	1	128				
SBE 911+	91220-A	JD/TIME	FILE NAME/HEADER	CTD 095							
PRESS SN	710	START DOWN	AT DEPTH	AT SURFACE	Cleaned air bleed valve						
SEC TEMP SN	884	AT SURFACE	MAX. DEPTH = 122 m								
PRI COND SN	40915	AT SURFACE									
SEC COND SN	530	PAR S/N	4242	FLUOR S/N	WS38682						
POS.	TRIP DEPTH	CTD CONVERTED MONITOR VALUES		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER					
1	122	PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SAL.	NUTR.	CHL.	WHIT'S NUTR.		
2	40										
3	18	chlor max									
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		DSOB 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					DATA ON				Tape/Diskette ID											
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		WS35868P									
POS. TRIP DEPTH					CTD CONVERTED MONITOR VALUES															
1	121																			
2	40																			
3	22																			
4	2																			
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				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	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	(deg)	(m/s)	(m)	*	*	*	*	*	*	*	*	(m)				
0975	27.96	N	139	55.92	W	07	10	03	20	58	13.8	13.4	22.3	8	29	0	1	1	4						1182				
SBE 911+		91220-A		JD/TIME		DATA LOCATION		Tape/Diskette ID		File Name/Header		REMARKS																	
PRESS SN		710		START DOWN		AT DEPTH		AT SURFACE		PAR S/N		FLUOR S/N		CSD097															
SEC TEMP SN		884		AT DEPTH		AT SURFACE		PAR S/N		FLUOR S/N		CSD097																	
PRI COND SN		40915		AT SURFACE		PAR S/N		FLUOR S/N		CSD097																			
SEC COND SN		530		AT SURFACE		PAR S/N		FLUOR S/N		CSD097																			
TRIP DEPTH		177		4242		4242		4242		4242		MAX. DEPTH = 177 m																	
POS.		177		4242		4242		4242		4242		MAX. DEPTH = 177 m																	
SAMPLE BOTTLE DATA		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY		SALINITY	
SAMPLE BOTTLE NUMBER		11		11		11		11		11		11		11		11		11		11		11		11		11		11	
WHIT'S NUTR.																													
CHL.																													
NUTR.																													
SAL.																													
SALINITY																													
SEC. TEMP.																													
PRI. TEMP.																													
PRESSURE																													
CHLOR MAX																													
1		177																											
2		40																											
3		23																											
4		2																											
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

15 m/min down first 50 m

Down 5 15 m / per entire cord