

VESSEL Alpha Helix		PROJECT & LEG HX209				STATION DESIGNATION PMA5						
CON SC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN	DATE JD= DAY MO YR	TIME (GMT) HR MIN	DRY BULB (°C)	WET BULB (°C)	SEA STATE VISIBILITY	WIND DIRN (deg)	WIND SPEED (m/s)	WEATHER H	BOTTO M DEPT H	STA. NAME/ID
505124	13.97N	16003.22W	29 MAY 1988	2120	.	.	.	.	.	.	54	PMA5
CTD	TIMES		JD/TIME	DATA LOCATION				REMARKS				
TYPE & SN SE911+	DATA ON			Tape/Diskette ID				File Name/Header				
PRESS SN	p5040		START DOWN									
TEMP SN	11390		AT DEPTH									
COND SN	6501		AT SURFACE									
TEMP SN	11391		PAR	FLUOR	CHAM	TRANS.	LISSOMETER	Cleared air bleed valve				
POS	TRIP	CTD CONVERTED MONITOR VALUES				SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER				
	DEPTH	PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SALINITY	SAL.	NUTR.	CHL.	HPLO	Other	
1	50							224	✓			
2	40							222				
3	30							222				
4	20							226				
5	10							225				
6	0							224	✓			
7												
8												
9												
10												
11												
12												

MAX. DEPTH = m

VESSEL						PROJECT & LEG								STATION DESIGNATION						
Alpha Helix						HX209								PM46						
CON SC	LATITUDE	LONGITUDE	DATE JD=	TIME (GMT)	DY BULB	WET BULB	PRESSURE	SEA STATE	VISIBILITY	WIN DIRN.	WIN D SP	CLOUD TYPE	BOTTO M DEPT H	STA. NAME/ID						
#	DEG MIN	DEG MIN	DAY MO YR	HR MIN	(°C)	(°C)	(mb)			(deg)	(m/s)									
51	56 46.01 N	160 C 6.36 W	29 MAY 98	2 44	.	.							58 PM46							
CTD	TIMES	JDTIME	DATA LOCATION												REMARKS					
TYPE & SN SB911+	DATA ON		Tape/Diskette ID File Name/Header												Deck prod					
PRESS SN	p5040	START DOWN																		
TEMP SN	i1390	AT DEPTH																		
COND SN	c501	AT SURFACE																		
TEMP SN	i123 i1391	<input checked="" type="checkbox"/> PAR <input checked="" type="checkbox"/> FLUOR <input type="checkbox"/> CHLAM <input checked="" type="checkbox"/> TRANSMISSOMETER <input type="checkbox"/>	MAX. DEPTH = m																	
POS TRIP DEPTH	CTD CONVERTED MONITOR VALUES													SAMPLE BOTTLER DATA	SAMPLE BOTTLE NUMBER					
	PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SALINITY										SAL.	NUTR.	CHL.	HPLC Other		
1	121																			
2	121																			
3	121																			
4	121																			
5	121																			
6	✓																			
7	✓																			
8	✓																			
9	✓																			
10	✓																			
11																				
12																				

[illegible]

9 0

HPLC 0.20

VESSEL: Alpha Helix		PROJECT & LEG HX209		STATION DESIGNATION PNC11	
CON SC CAST #	LATITUDE	LONGITUDE	DATE JD=	TIME (GMT)	DRY BULB
	DEG MIN	DEG MIN	DAY MO YR	HR MIN	WET BULB
	55 58.36 N	160 21.1 W	20 MAY 1982	23 27	PRESSURE
					SEA STATE
					WIND DIRN
					WIND D. (m/s)
					CLOUD (amt)
					WEATHER
					BOTTO M DEPT H
					STA. NAME/ID
CTU	TIMES		JD/TIME		DATA LOCATION
TYPE & SN SB911+	DATA ON				Tape/Diskette ID
PRESS SN	START DOW:1				File Name/Header
TEMP SY	AT DEPTH				
COND SIF	AT SURFACE				
TEMP SN	PAR		FLUOR		CHAM
	TRANSMISSOMETER		Cleared air bleed valve		
POS	THIF	CTD CONVERTED MONITOR VALUES			SAMPLE BOTTLE DATA
DEPTH	PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SALINITY
1	16.1				SAL. NUTR. CHL. HPLC Others
2	16.1				
3	16.1				
4	16.1				
5	16.1				
6	16.1				
7	16.1				
8	16.1				
9	16.1				
10	16.1				
11	16.1				
12	16.1				

MAX. DEPTH = m

Redwood

[illegible]

VESSEL Alpha Helix		PROJECT & LEG HX209				STATION DESIGNATION PMCH							
CON SC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN	DATE JD= DAY MO YR	TIME (GMT) HR MIN	CRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE VISIBILITY (deg)	WIND DIRN, D, (m/s)	WIN D SP (amt)	WEATHER	BOTTO M DEPT H	STA. NAME/ID
575637.82N	16009.27W	31 MAY 1998	0815									47 PMCH	
CTD		TIMES		JD/TIME		DATA LOCATION		REMARKS					
TYPE & SN SB911+		DATA ON				Tape/Diskette ID		File Name/Header					
PRESS. SN	P5040	START DOWN											
TEMP SN	11390	AT DEPTH											
COND SN	6501	AT SURFACE											
TEMP SN	11391	AT SURFACE											
<input checked="" type="checkbox"/> PAR <input checked="" type="checkbox"/> FLUOR <input type="checkbox"/> CHAM <input checked="" type="checkbox"/> TRANSMISSOMETER <input type="checkbox"/> Cleaned air bleed valve													
CTD CONVERTED MONITOR VALUES													
POS	TRIP DEPTH	PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SALINITY	SAMPLE BOTTLE DATA	SAMPLE BOTTLE NUMBER					
1	25							SAL.	NUTR.	CHL.	HPLC	Other	
2	25												
3	25												
4	25												
5	25												
6	0												
7	0												
8	0												
9	0												
10	0												
11													
12													

MAX. DEPTH = 11391

VESSEL Alpha Helix		PROJECT & LEG HX209				STATION DESIGNATION CNC 4									
CON SC CAST #	LATITUDE	LONGITUDE	DATE JD=	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND D. SP.	CLOUD (amt)	WEATHER	BOTTO M DEPT	STA. NAME/ID	
585637	16 09.02	16 09.02	31 MAY 98	0200	.	.	.	.	.	.	.	.	47		
CTD	TIMES		JD/TIME	DATA LOCATION											
TYPE & SN SB911+	DATA ON			Tape/Discette ID File Name/Header											
PRESS SN	P5040		START DOWN												
TEMP SN	11390		AT DEPTH												
COND SN	C501		AT SURFACE												
TEMP SN	11391														
<input checked="" type="checkbox"/> PAR <input checked="" type="checkbox"/> FLUOR <input type="checkbox"/> CHAM <input checked="" type="checkbox"/> TRANSMISSOMETER <input type="checkbox"/> Cleaned air bleed valve				MAX. DEPTH =											
CTD CONVERTED MONITOR VALUES:				SAMPLE BOTTLE DATA											
POS	DEPTH	PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SALINITY	SAL.	NUTR.	CHL.	HPIC	Other	SAMPLE BOTTLE NUMBER			
1	23														
2	23														
3	23														
4	23														
5	23														
6	23														
7	23														
8	23														
9	23														
10	23														
11	23														
12	23														

REMARKS:
check
4.513 volts
0.000 volts
TRANS
CUT
after

VESSEL		PROJECT & LEG						STATION DESIGNATION																	
Alpha Helix		HX209						D1A5																	
CON SC CAST	LATITUDE	LONGITUDE	DATE JD=	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIN D SP. D.	CLOUD TYPE	WEATHER	BOTTO M DEPT H	STA. NAME/ID											
#	DEG MIN	DEG MIN	DAY MO YR	HR MIN	(°C)	(°C)	(mb)		(deg)	(m/s)	*	*	(m)												
59	57.24.6	N 158.23.9	aw 02 JUN 98	03 24	.	.								D1A5											
CTD		TIMES	JD/TIME	DATA LOCATION																					
TYPE & SN SB911+		DATA ON		Tape/Diskette ID File Name/Header																					
PRESS SN		START DOWN																							
TEMP SN		AT DEPTH																							
COND SN		AT SURFACE																							
TEMP SN		PAR		FLUOR		CHAM		TRANSMISSOMETER		MAX. DEPTH = m															
POS		CTD CONVERTED MONITOR VALUES																							
TRIP DEPTH		PRESSURE				PRI. TEMP.				SEC. TEMP.				SALINITY				SAMPLE BOTTLE DATA				SAMPLE BOTTLE NUMBER			
1	20																								
2	18.20																								
3	18.15																								
4	18.10																								
5	18.05																								
6	18.00																								
7																									
8																									
9																									
10																									
11																									
12																									



VESSEL Alpha Helix		PROJECT & LEG HX209				STATION DESIGNATION D1A2										
CON SC CAST #	LATITUDE	LONGITUDE	DATE JD=	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND D. SP. (m/s)	CLOUD (amt)	WEATHER	BOTTO M DEPT	STA. NAME/ID		
61581	0.60 N	5836.25 W	02 JUN 98	0539	.	.	.	.	(deg)	(m/s)	.	.	(m)	D1A2		
CTD		TIMES		JD/TIME		DATA LOCATION		REMARKS								
TYPE & SN SB911+		DATA ON				Tape/Diskette ID		File Name/Header								
PRESS SN		START DOWN														
TEMP SN		AT DEPTH														
COND SN		AT SURFACE														
TEMP SN		PAR		FLUOR		CHAM		TRANSMISSOMETER		MAX. DEPTH = m						
POS		TRIP		DEPTH		CTD CONVERTED MONITOR VALUES		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER						
		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY						
1	27											SAL.	NUTR.	CHL.	HPLO	Other
2	20												262			
3	10												259			
4	0												258	✓		
5																
6																
7																
8																
9																
10																
11																
12																

Blank

VESSEL		PROJECT & LEG				STATION DESIGNATION									
Alpha Helix		HX209				D1A3									
CON SC CAST #	LATITUDE	LONGITUDE	DATE JD=	TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE	WIND DIRN. (deg)	WIND D. (m/s)	CLOUD (amt)	WEATHER	BOTTO M DEPT H	STA. NAME/ID	
625808.14	11° 58' 38.6" N	162° 02' 21.9" W	21 JUN 98	0603	.	.	.	.	.	.	.	.	32	D1A3
CTD	TIMES		JD/TIME	DATA LOCATION				REMARKS							
TYPE & SN SB911+	DATA ON			Tape/Diskette ID				File Name/Header							
PRESS SN 50403	START DOWN														
TEMP SN 11390	AT DEPTH														
COND SN 6501	AT SURFACE														
TEMP SN 11391	AT SURFACE														
MAX. DEPTH = m															
TEMP SN 11391	<input checked="" type="checkbox"/> PAR		<input checked="" type="checkbox"/> FLUOR	<input type="checkbox"/> CHLOR	<input checked="" type="checkbox"/> TRANSMISSOMETER		<input type="checkbox"/> Cleaned air bleed valve								
POS	TRIP	CTD CONVERTED MONITOR VALUES										SAMPLE BOTTLE DATA	SAMPLE BOTTLE NUMBER		
	DEPTH	PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SALINITY	SAL.	NUTR.	CHL.	HPLO	Other				
1	30						26.3								
2	20						26.5								
3	10						26.4								
4	0						26.3								
5															
6															
7															
8															
9															
10															
11															
12															

plankton

[illegible]

VESSEL		PROJECT & LEG						STATION DESIGNATION							
Alpha Helix		HX209						01A6							
COM SC CAST #	LATITUDE	LONGITUDE	DATE JD=	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIN D SP D.	CLOUD TYPE	BOTTO M DEPT H	STA. NAME/ID		
	DEG MIN	DEG MIN	DAY MO YR	HR MIN	(°C)	(°C)	(mb)		(deg)	(m/s)		(m)			
	65 58 00.9	5 N 15 54 5.4	9 W 02 JUN 98	07 12	.	.						35	01A6		
CTD	TIMES	JT/TIME	DATA LOCATION												
TYPE & SN SB911+			DATA ON		Tape/Diskette ID File Name/Header										
PRESS SN P5040			START DOWN												
TEMP SN T1390			AT DEPTH												
COND SN C501			AT SURFACE												
TEMP SN T1391			X PAR X FLUOR		ChAM		X TRANSMISSOMETER	MAX. DEPTH = m							
POS	TRIP DEPTH	CTD CONVERTED MONITOR VALUES											SAMPLE BOTTLE DATA	SAMPLE BOTTLE NUMBER	
1	324	PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY		SALINITY		SAL.	NUTR.	CHL	HPLC	Other		
2	902								065	277					
3	102									275					
4	D									274					
5															
6															
7															
8															
9															
10															
11															
12															

VESSEL		PROJECT & LEG		STATION DESIGNATION													
Alpha Helix		HX209		D1A7													
CON SC CAST #	LATITUDE	LONGITUDE	DATE JD=	TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE	WIND DIRN.	WIND D. SP.	CLOUD (amt)	WEATHER	BOTTO M DEPT	STA. NAME/ID			
	DEG MIN	DEG MIN	DAY MO YR	HR MIN	(°C)	(°C)	(mb)		(deg)	(m/s)	(%)		(m)				
665758.58N		5847.82W	02 JUN 98	0739									35	D1A7			
CTD		TIMES		JD/TIME		DATA LOCATION		REMARKS									
TYPE & SN SB911+		DATA ON				Tape/Diskette ID File Name/Header											
PRESS SN 53405		START DOWN															
TEMP SN 11390		AT DEPTH															
COND SN 6501		AT SURFACE															
TEMP SN 41133																	
TEMP SN 11391		<input checked="" type="checkbox"/> PAR		<input checked="" type="checkbox"/> FLUOR		<input type="checkbox"/> CHIAM		<input checked="" type="checkbox"/> TRANSMISSOMETER		<input type="checkbox"/> Cleaned air bleed valve							
POS TRIP DEPTH		CTD CONVERTED MONITOR VALUES										SAMPLE BOTTLE DATA			SAMPLE BOTTLE NUMBER		
		PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SALINITY	SAL.	NUTR.	CHL.	HPLO	Other						
1	31							281	✓			Doc					
2	20							280									
3	10							279									
4	0							278	✓								
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	

MAX. DEPTH = m

VESSEL Alpha Helix		PROJECT & LEG HX209		STATION DESIGNATION D1A8	
CON SC CAST #	LATITUDE	LONGITUDE	DATE JD=	TIME (GMT)	DRY BULB (°C)
DEG MIN	DEG MIN	DAY MO YR	HR MIN	WET BULB (°C)	WIND DIRN.
6 75 756.22N	15 85 0.11W	2 JUN 98	0804	SEA STATE	WIND D. (m/s)
CTD	TIMES		JD/TIME	DATA LOCATION	
TYPE & SN SB911+	DATA ON			Tape/Diskette ID File Name/Header	
PRESS SN 5040	START DOWN				
TEMP SN 11390	AT DEPTH				
COND SN 501	AT SURFACE			MAX. DEPTH = m	
TEMP SN 11391	<input checked="" type="checkbox"/> PAR <input checked="" type="checkbox"/> FLUOR <input type="checkbox"/> CHAM <input checked="" type="checkbox"/> TRANSMISSOMETER			<input type="checkbox"/> Cleaned air bleed valve	
POS TRIP DEPTH	CTD CONVERTED MONITOR VALUES				SAMPLE BOTTLE DATA
	PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SALINITY
1 31.4					SAL. NUTR. CHL. HPLC Other
2 31.4					067 215 ✓
3 20.4					284 284
4 10.4					283 282
5 0.4					✓
6 0.4					✓
7					
8					
9					
10					
11					
12					

VESSEL Alpha Helix		PROJECT & LEG HX209				STATION DESIGNATION D1A9								
CON SC CAST #	LATITUDE	LONGITUDE	DATE JD=	TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE	WIND DIRN. (deg)	WIND D. (m/s)	CLOUD (amt)	WEATHER	BOTTO M DEPT H	STA. NAME/ID
685353.78N	15852.4	0202JUN98	0829										39	D1A9
CTD		TIMES		JD/TIME		DATA LOCATION		REMARKS						
TYPE & SN SB911+		DATA ON				Tape/Diskette ID		File Name/Header						
PRESS SN p5040		START DOWN												
TEMP SN 11390		AT DEPTH												
COND SN c501		AT SURFACE												
TEMP SN 11391		<input checked="" type="checkbox"/> PAR		<input checked="" type="checkbox"/> FLUOR		<input type="checkbox"/> CHIAM		<input checked="" type="checkbox"/> TRANSMISSOMETER		<input type="checkbox"/> Cleaned air bleed valve				
MAX. DEPTH =												m		
POS	TRIP DEPTH	CTD CONVERTED MONITOR VALUES								SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER		
		PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SALINITY	SAL.	NUTR.	CHL.	HPLO	Other			
1	35						289							
2	20						288							
3	10						287							
4	0						286							
5														
6														
7														
8														
9														
10														
11														
12														

Doc+

VESSEL Alpha Helix		PROJECT & LEG HX209		STATION DESIGNATION DFA	
CON SC CAST #	LATITUDE	LONGITUDE	DATE JD=	TIME (GMT)	DRY BULB (°C)
DEG MIN	DEG MIN	DAY	MO	YR	HR MIN
70 57 49.0	11 58 56.8	20	02	09	19
WET BULB (°C)	SEA STATE	WIND DIRN.	WIND D. SP. (m/s)	CLOUD (amt)	WEATHER
19.0	1	110	11	100	11
CTD	TIMES	JD/TIME	DATA LOCATION		
TYPE & SN SB911+	DATA ON		Tape/Diskette ID File Name/Header		
PRESS SN 50406	START DOWN				
TEMP SN 11390	AT DEPTH				
COND SN 6501	AT SURFACE				
TEMP SN 41133					
	<input checked="" type="checkbox"/> PAR	<input checked="" type="checkbox"/> FLUOR	<input type="checkbox"/> CHAM	<input checked="" type="checkbox"/> TRANSMISSOMETER	<input type="checkbox"/> Cleaned air bleed valve
MAX. DEPTH =	m				
POS TRIP DEPTH	CTD CONVERTED MONITOR VALUES				SAMPLE BOTTLE DATA
	PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SALINITY
1 37					
2 20					
3 10					
4 0					
5					
6					
7					
8					
9					
10					
11					
12					
					SAMPLE BOTTLE NUMBER
					SAL. NUTR. CHL. HPLC Other
					Doc
					292
					296
					295
					294

VESSEL		PROJECT & LEG		STATION DESIGNATION										
Alpha Helix		HX209		D1A1a										
CON SC CAST #	LATITUDE	LONGITUDE	DATE	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND D. (m/s)	CLOUD (amt)	WEATHER	BOTTO M DEPT	STA. NAME/ID
115746.69N	15859.29W	080919	0947											
CTD	TIMES		JD/TIME		DATA LOCATION				REMARKS					
TYPE & SN SB911+	DATA ON				Tape/Diskette ID				File Name/Header					
PRESS SN	START DOWN													
TEMP SN	AT DEPTH													
COND SN	AT SURFACE													
TEMP SN	PAR		FLUOR		CHAM		TRANSMISSOMETER		Cleared air bleed valve		MAX. DEPTH = m			
POS TRIP DEPTH	CTD CONVERTED MONITOR VALUES				SAMPLE BOTTLE DATA				SAMPLE BOTTLE NUMBER					
1	38	PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY		SALINITY		SAL.	NUTR.	CHL.	HPLO	Other	
2	30								301					
3	20								300					
4	10								299					
5	0								298					
6														
7														
8														
9														
10														
11														
12														

VESSEL		PROJECT & LEG		STATION DESIGNATION											
Alpha Helix		HX209		D1A13											
CON SC CAST #	LATITUDE	LONGITUDE	DATE JD=	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND D. SP.	CLOUD (amt)	WEATHER	BOTTO M DEPT	STA. NAME/ID	
725744.27N	15901.43W	08JUN98	1016										442113		
CTD	TIMES		JD/TIME	DATA LOCATION		REMARKS									
TYPE & SN	SB911+	DATA ON		Tape/Diskette ID		File Name/Header									
PRESS SN	50406	START DOWN													
TEMP SN	11390	AT DEPTH													
COND SN	5501	AT SURFACE													
TEMP SN	11391	PAR	FLUOR	CHLAM	TRANSMISSOMETER	Cleaned air biased valve	MAX. DEPTH = m								
POS TRIP DEPTH	CTD CONVERTED MONITOR VALUES				SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER								
	PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SALINITY	SAL.	NUTR.	CHL.	HPLO	Other					
1	40														
2	30														
3	0														
4															
5															
6															
7															
8															
9															
10															
11															
12															

Doc 4

VESSEL Alpha Helix		PROJECT & LEG HX209		STATION DESIGNATION D1A14	
CON SC CAST #	LATITUDE	LONGITUDE	DATE: JD=	TIME (GMT)	DRY BULB (°C)
735741.86N	15903.76W	02 JUN 98	1038		
DEG MIN	DEG MIN	DAY MO YR	HR MIN		
CTD	TIMES	JD/TIME	DATA LOCATION		
TYPE & SA SB911+	DATA ON		Tape/Diskette ID File Name/Header		
PRESS SN 50405	START DOWN				
TEMP SN 11390	AT DEPTH				
COND SN 0501	AT SURFACE				
TEMP SN 11391	AT SURFACE				
<input checked="" type="checkbox"/> PAR <input checked="" type="checkbox"/> FLUOR <input type="checkbox"/> CHAM <input checked="" type="checkbox"/> TRANSMISSOMETER <input type="checkbox"/> Cleaned air bleed valve			MAX. DEPTH = m		
POS TRIP DEPTH	CTD CONVERTED MONITOR VALUES				SAMPLE BOTTLE DATA
	PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SALINITY
1 43					SAL. 30.8
2 30					NUTR. 30.9
3 0					CHL. 30.6
4					HPLO Other
5					
6					
7					
8					
9					
10					
11					
12					
REMARKS 441014					

VESSEL		PROJECT & LEG				STATION DESIGNATION								
Alpha Helix		HX209												
CON SC CAST	LATITUDE	LONGITUDE	DATE JD=	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND D. SP. D.	CLOUD (amt)	WEATHER	BOTTO M DEPT	STA. NAME/ID
#	DEG MIN	DEG MIN	DAY MO YR	HR MIN	(°C)	(°C)	(mb)	(deg)	(m/s)	(m)				
24	. N	. W	JUN 9 8											
CTD	TIMES		JD/TIME		DATA LOCATION				REMARKS					
TYPE & SN	3B911+	DATA ON		Tape/Discrete ID				File Name/Header						
PRESS SN	50403 P5040	START DOWN												
TEMP SN	11390	AT DEPTH												
COND SN	C501 41123	AT SURFACE												
TEMP SN	11391	<input checked="" type="checkbox"/> PAR	<input checked="" type="checkbox"/> FLUOR	<input type="checkbox"/> CHAM	<input checked="" type="checkbox"/> TRANSMISSOMETER	<input type="checkbox"/> Cleaned air bleed valve				MAX. DEPTH = m				
POS	TRIP	CTD CONVERTED MONITOR VALUES				SAMPLE BOTTLE DATA				SAMPLE BOTTLE NUMBER				
DEPTH		PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SALINITY	SAL. NUTR.	CHL.	HPLC	Other				
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														

1 pens
25 June 2010 GMT
4.574 40.000

[illegible]

VESSEL Alpha Helix		PROJECT & LEG HX209				STATION DESIGNATION 0144													
CON SC CAST #	LATITUDE	LONGITUDE	DATE JD=	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND D. SP. (m/s)	CLOUD (amt)	WEATHER	BOTTO M DEPT H	STA. NAME/ID					
725738.80N	1585093	W 030	UN 98	0850	.	.	.	.	.	.	.	.	4401	0144					
DEG MIN	DEG MIN	DAY MO YR	HR MIN	(°C)	(°C)	(mb)	(deg)	(m/s)	(m)										
CTD		TIMES		JD/TIME		DATA LOCATION				REMARKS									
TYPE & S\ SB911+		DATA ON		Tape/Diskette ID				File Name/Header											
PRESS SN 50405		START DOWN																	
TEMP SN 11390		AT DEPTH																	
COND SN 6501		AT SURFACE																	
TEMP SN 41133																			
TEMP SN 11391		<input checked="" type="checkbox"/> PAR		<input checked="" type="checkbox"/> FLUOR		<input type="checkbox"/> CHAM		<input checked="" type="checkbox"/> TRANSMISSOMETER		<input type="checkbox"/> Cleaned air bleed valve									
CTD CONVERTED MONITOR VALUES																			
POS	TRIP	PRESSURE								PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL. NUTR. CHL. HPLC Other	
1																			
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

No Samples

VESSEL		PROJECT & LEG		STATION DESIGNATION													
Alpha Helix		HX209		D1C13													
CON SC CAST #	LATITUDE	LONGITUDE	DATE JD=	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND D SP	CLOUD (amt)	WEATHER	BOTTO M DEPT	STA. NAME/ID			
	DEG MIN	DEG MIN	DAY MO YR	HR MIN	(°C)	(°C)	(mb)		(deg)	(m/s)			(m)				
	78 54 11.13 N	15 84 8.6 W	23 JUN 98	09 15										D1C13			
CTD	TIMES		JD/TIME	DATA LOCATION		REMARKS											
TYPE & SN SB911+		DATA ON		Tape/Diskette ID		File Name/Header											
PRESS SN 50405		START DOWN															
TEMP SN 11390		AT DEPTH															
COND SN 6501		AT SURFACE															
TEMP SN 41123																	
TEMP SN 11391		<input checked="" type="checkbox"/> PAR		<input checked="" type="checkbox"/> FLUOR		<input type="checkbox"/> CHAM		<input checked="" type="checkbox"/> TRANSMISSOMETER		<input type="checkbox"/> Cleaned air bleed valve							
POS TRIP DEPTH		CTD CONVERTED MONITOR VALUES										SAMPLE BOTTLE DATA			SAMPLE BOTTLE NUMBER		
		PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SALINITY	SAL. NUTR.	CHL.	HPLC	Other							
1	32						0.78										
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	

MAX. DEPTH = m

[illegible]

VESSEL		PROJECT & LEG		STATION DESIGNATION												
Alpha Helix		HX209		D1C11												
CON SC CAST #	LATITUDE	LONGITUDE	DATE JD=	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND D. (m/s)	CLOUD (amt)	WEATHER	BOTTO M DEPT	STA. NAME/ID		
	DEG MIN	DEG MIN	DAY MO YR	HR MIN	(°C)	(°C)	(mb)		(deg)	(m/s)			(m)			
205745.99	N	15844.06	20	30	9	8	1008							4201C11		
CTD	TIMES		JD/TIME		DATA LOCATION				REMARKS							
TYPE & SN	SB911+		DATA O'Y		Tape/Diskette ID				File Name/Header							
PRESS SN	50405		START TOWN													
TEMP SN	11390		AT DEPTH													
COND SN	C501		AT SURFACE													
TEMP SN	41133															
TEMP SN	11391															
			<input checked="" type="checkbox"/> PAIR		<input checked="" type="checkbox"/> FLUOR		<input type="checkbox"/> CHAM		<input checked="" type="checkbox"/> TRANSMISSOMETER		<input type="checkbox"/> Cite air bleed valve					
POS TRIP DEPTH			(CTD) CONVERTED MONITOR VALUES													
			PRESSURE				PRI. TEMP.		SEC. TEMP.		SALINITY		SAL. NITY		SAL. NUTR. CHL. HPLO Other	
1	37												080			
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																

MAX. DEPTH = m

[illegible]

VESSEL		PROJECT & LEG		STATION DESIGNATION															
Alpha Helix		HX209		D1C9															
CON SC CAST #	LATITUDE	LONGITUDE	DATE JD=	TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE	WIND DIRN.	WIND D. (m/s)	WIND (amt)	CLOUD TYPE	WEATHER	BOTTO M DEPT H	STA. NAME/ID				
825750.80N	15839.49W	03/11/98	1105	1105	.	.								38	D1C9				
DEG MIN	DEG MIN	DAY MO YR	HR MIN																
CTD		TIMES		JD/TIME		DATA LOCATION		REMARKS											
TYPE & SN SB911+		DATA ON				Tape/Diskette ID		File Name/Header											
PRESS SN		START DOWN																	
TEMP SN		AT DEPTH																	
COND SN		AT SURFACE																	
TEMP SN		PAR		FLUOR		CHAM		TRANSMISSOMETER		Cleared air bleed valve									
11391		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input type="checkbox"/>		<input checked="" type="checkbox"/>											
POS TRIP DEPTH		CTD CONVERTED MONITOR VALUES		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER													
PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL.		NUTR.		CHL.		HPLC		Other	
1																			
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

MAX. DEPTH = m

CON SC CAST	LATITUDE	LONGITUDE	DATE JD=	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	VISIBILITY	WIN D DIR & D.	WIN SPEED TYPE	CLOUD (amt)	WEATHER	BOTTO M DEPT H	STA. NAME/ID
#	DEG MIN	DEG MIN	DAY MO YR	HR MIN	(°C)	(°C)	(mb)		(deg)	(ms)				(m)	
835753-23N	15637.21	03849.8	28 May 98	1129	.	.								350165	
CTD	TIMES	JDTIME	DATA LOCATION												REMARKS
TYPE & SN SB911+	DATA ON _____		Tape/Diskette ID File Name/Header _____												
PRESS SN p5040	START DC/VN: _____														
TEMP SN t1390	AT DEPTH: _____														
COND SN c501	AT SURF ZN: _____														
TEMP SN t1391	<input checked="" type="checkbox"/> PAR <input checked="" type="checkbox"/> FLUOR <input type="checkbox"/> CHAM <input checked="" type="checkbox"/> TRANSMISSOMETER <input checked="" type="checkbox"/> Clear air bleed valve														MAX. DEPTH = _____ m
TRIP DEPTH	CTD CONVERTED MONITOR VALUES														SAMPLE BOTTLE NUMBER
									SAMPLING BOTTLE DATA						
	PRESSURE	FRI. TEMP.	SEC. TEMP.	SALINITY	SATURITY				SAL.	NUTR.	CHL.	HPLO	Other		
1 32															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															

[illegible]

VESSEL		PROJECT & LEG		STATION DESIGNATION	
Alpha Helix		HX209		D1C5	
CON SC CAST #	LATITUDE	LONGITUDE	DATE JD=	TIME (GMT)	DRY BULB
	DEG MIN	DEG MIN	DAY MO YR	HR MIN	WET BULB
	86 58 00.39 N	158 40.20 W	03 MAR 98	23 8	PRESSURE
					SEA STATE
					WIND DIRN.
					WIND D. (m/s)
					CLOUD (amt)
					WEATHER
					BOTTO M DEPT
					STA. NAME/ID
					35 D1C5
CTD	TIMES		JD/TIME		DATA LOCATION
TYPE & SN SB911+	DATA CN				Tape/Diskette ID
PRESS SN	START DOWN				File Name/Header
TEMP SN	AT DEPTH				
COND SN	AT SURFACE				
TEMP SN	11391				MAX. DEPTH = m
		<input checked="" type="checkbox"/> PAR	<input checked="" type="checkbox"/> FLUOR	<input type="checkbox"/> CHAM	<input checked="" type="checkbox"/> TRANSMISSOMETER
		<input type="checkbox"/> CTD CONVERTED MONITOR VALUES			
POS	TRIP	CTD MONITOR VALUES			SAI/PLE
DEPTH					BOTTLE DATA
	PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SAL. NUTR. CHL. HPLC Other
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

[illegible]

VESSEL		PROJECT & LEG				STATION DESIGNATION									
Alpha Helix		HX209				D1C1									
CON SC CAST #	LATITUDE	LONGITUDE	DATE JD=	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND D. (m/s)	CLOUD (amt)	WEATHER	BOTTO DEPT	STA. NAME/ID	
90581012N	1582046W	03 JUN 98	1402										25 D1C1		
CTD	TIMES	JD/TIME	DATA LOCATION												
TYPE & SN SB911+	DATE/ON	Tape/Diskette ID File Name/Header													
PRESS SN 50605	STA/T DOWN														
TEMP SN 11390	AT DEPTH														
CONC SN 6501	AT SURFACE														
TEMP SN 41133	AT SURFACE														
<input checked="" type="checkbox"/> PAR <input checked="" type="checkbox"/> FLUOR <input type="checkbox"/> CHAM <input checked="" type="checkbox"/> TRANSMISSOMETER <input type="checkbox"/> Chained air bleed valve		MAX. DEPTH = m													
POS TRIP DEPTH	CTD CONVERTED MONITOR VALUES										SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER		
	PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SALINITY				SAL.	NUTR.	CHL.	HPLO	Other		
1 241															
2 241															
3 241															
4 241															
5 241															
6 241															
7 241															
8 241															
9 241															
10 241															
11															
12															

Deep Pond

[illegible]

VESSEL		PROJECT & LEG		STATION DESIGNATION										
Alpha Helix		HX209		Dics										
CON SC CAST #	LATITUDE	LONGITUDE	DATE JD=	TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE	WIND DIRN.	WIND D. (m/s)	CLOUD (amt)	WEATHER	BOTTO M DEPT H	STA. NAME/ID
525800.5	115830.13	115830.13	W04	1 JUN 98	0134	3a	Dics
CTD	TIMES		JD/TIME	DATA LOCATION				REMARKS						
TYPE & SN SB911+	DATA ON			Tape/Diskette ID				File Name/Header						
PRESS SN	50403	START DOWN												
TEMP SN	11390	AT DEPTH												
COND SN	6501	AT SURFACE												
TEMP SN	41133													
	11391													
		<input checked="" type="checkbox"/> PAR	<input checked="" type="checkbox"/> FLUOR	<input type="checkbox"/> CHAM	<input checked="" type="checkbox"/> TRANSMISSOMETER	<input type="checkbox"/> Cleaned air bleed valve								
POS	TRIP DEPTH	CTD CONVERTED MONITOR VALUES				SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER						
		PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SALINITY	SAL.	INUTR.	CHL.	HPLO	Other			
1	30						212							
2	3						311							
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														

MAX. DEPTH = m

VESSEL		PROJECT & LEG		STATION DESIGNATION										
Apt'a Helix		HX209		D1C4										
CON SC CAST #	LATITUDE	LONGITUDE	DATE JD=	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND D.S.P.	CLOUD (amt)	WEATHER	BOTTO M DEPT	STA. NAME/ID
	DEG MIN	DEG MIN	DAY MO YR	HR MIN	(°C)	(°C)	(mb)		(deg)	(m/s)			(m)	
9358002.82N		5827.94W	04 JUN 98	015Z	.	.							32	D1C4
CTD	TIMES		JD/TIME	DATA LOCATION				REMARKS						
TYPE & SN SB911+	DATA ON			Tape/Diskette ID				File Name/Header						
PRESS SN	START DOWN													
TEMP SN	AT DEPTH													
COND SN	AT SURFACE													
TEMP SN	AT SURFACE													
	PAR		FLUOR	CHAM	TRANSMISSOMETER		Cleared air bleed valve							
POS TRIP DEPTH	CTD CONVERTED MONITOR VALUES													
	PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SALINITY	SALINITY	SALT	NUTR.	CHL.	HPLC	Other	SAMPLE BOTTLE NUMBER		
1	30							314						
2	5							313						
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														

MAX. DEPTH = m

VESSEL		PROJECT & LEG		STATION DESIGNATION											
Alpha Helix		HX209		DIC3											
CON SC CAST	LATITUDE	LONGITUDE	DATE JD=	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	VISIBILITY	WIND DIRN.	WIND D.S.P.	WEATHER	BOTTO M DEPT	STA. NAME/ID	
#	DEG MIN	DEG MIN	DAY MO YR	HR MIN	(°C)	(°C)	(mb)			(deg)	(m/s)		(m)		
945805.26N	15825.61W	04 JUN 98	0700										32.01C4		
CTD	TIMES		JD/TIME	DATA LOCATION		REMARKS									
TYPE & SN	SB911+	DATA ON		Tape/Diskette ID		File Name/Header									
PRESS SN	50405	START DOWN													
TEMP SN	11390	AT DEPTH													
COND SN	6501	AT SURFACE													
TEMP SN	41133														
TEMP SN	11391														
PAR		FLUOR		CHAM		TRANSMISSOMETER		Cleared air bleed valve							
CTD CONVERTED MONITOR VALUES															
POS	TRIP	PRESSURE				PRI. TEMP.	SEC. TEMP.	SALINITY	SALINITY	SAMPLE	SAMPLE BOTTLE NUMBER				
DEPTH										BOTTLE DATA					
1	29										SAL. NUTR. CHL. HPLC Other				
2	3														
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															

MAX. DEPTH = m



VESSEL		PROJECT & LEG		STATION DESIGNATION										
Alpha Helix		HX209		DICT										
CON SC CAST #	LATITUDE	LONGITUDE	DATE JD=	TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE	WIND DIRN.	WIND D SP D.	CLOUD (amt)	WEATHER	BOTTO M DEPT H	STA. NAME/ID
965810.06N	15821.06W	4 JUN 98	0303											25 DICT
DEG MIN	DEG MIN	DAY MO YR	HR MIN	(°C)	(°C)	(mb)	(deg)	(m/s)	(m)					
CTD		TIMES		DATA LOCATION		REMARKS								
TYPE & SN SB911+		DATA ON		Tape/Diskette ID		File Name/Header								
PRESS SN p5040		START DOWN												
TEMP SN t1390		AT DEPTH												
COND SN c501		AT SURFACE												
TEMP SN t1391		PAR		FLUOR		CHAM		TRANSMISSOMETER		Cleared air bleed valve				
POS TRIP DEPTH		CTD CONVERTED MONITOR VALUES												
		PRESSURE	PRI. TEMP.	SEC. TEMP.	SALINITY	SALINITY	SAMPLE BOTTLE DATA	SAMPLE BOTTLE NUMBER						
1								SAL.	NUTR.	CHL.	HPLO	Other		
2								096	220					
3								319						
4														
5														
6														
7														
8														
9														
10														
11														
12														

MAX. DEPTH = m

VESSEL Alpha Helix		PROJECT & LEG HX209		STATION DESIGNATION D1C0												
CON SC CAST	LATITUDE	LONGITUDE	DATE JD=	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	VISIBILITY	WIND DIRN.	WIND SPEED	CLOUD (amt)	WEATHER	BOTTO M DEPT	STA. NAME/ID	
#	DEG MIN	DEG MIN	DAY MO YR	HR MIN	(°C)	(°C)	(mb)			(deg)	(m/s)			H		
975810.43N	15818.67W	04 JUN 98	0323											24	D1C0	
CTD		TIMES		JD/TIME		DATA LOCATION										
TYPE & SN SB911+		DATA ON				Tape/Diskette ID File Name/Header										
PRESS SN 50405		START DOWN														
TEMP SN 11390		AT DEPTH														
COND SN 6501		AT SURFACE														
TEMP SN 41133																
TEMP SN 11391		<input checked="" type="checkbox"/> PAR		<input checked="" type="checkbox"/> FLUOR		<input type="checkbox"/> CHAM		<input checked="" type="checkbox"/> TRANSMISSOMETER		<input type="checkbox"/> Cleaned s/r bleed valve						
POS	TRIP	CTD CONVERTED MONITOR VALUES										SAMPLE	SAMPLE BOTTLE NUMBER			
DEPTH		PRESSURE	PRI TEMP.	SEC. TEMP	SALINITY	SALINITY	BOTTLE DATA				SAL.	NUTR.	CHL.	HPLO	Other	
1	22															
2	22												322			
3	5												321			
4																
5																
6																
7																
8																
9																
10																
11																
12																

MAX. DEPTH = m

REMARKS

VESSEL		PROJECT & LEG		STATION DESIGNATION																	
Alpha Helix		HX209		DLCY1																	
CON SC CAST #	LATITUDE	LONGITUDE	DATE JD=	TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE	WIND DIRN.	WIND D. SP. (m/s)	CLOUD (amt)	WEATHER	BOTTO M DEPT H	STA. NAME/ID							
985814.29N	15816.4W	2004JUN98	0345										220100Y1								
DEG MIN	DEG MIN	DAY MO YR	HR MIN	(°C)	(°C)	(mb)	(deg)	(m/s)	(m)												
CTD		TIMES		JD/TIME		DATA LOCATION		REMARKS													
TYPE & SN SB911+		DATA ON				Tape/Diskette ID		File Name/Header													
PRESS SN 50403		START DOWN																			
TEMP SN 11390		AT DEPTH																			
COND SN 6501		AT SURFACE																			
TEMP SN 41133		PAR		FLUOR		CHAM		TRANSMISSOMETER		Cleared air		bleed valve									
TEMP SN 11391																					
POS TRIP DEPTH		CTD CONVERTED MONITOR VALUES		SAMPLE BOTTLE DATA		SAMPLE BOTTLE NUMBER															
		PRESSURE		PR. TEMP.		SEC. TEMP		SALINITY		SALINITY		SAL.		NUTR.		CHL.		HPLC		Other	
1														324							
2														323							
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

plankton (10 min)

VESSEL		PROJECT & LEG		STATION DESIGNATION											
Alpha Heix		HX209		01CY2											
CON SC CAST #	LATITUDE	LONGITUDE	DATE JD=	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND D. SP.	CLOUD (amt)	WEATHER	BOTTO M DEPT	STA. NAME/ID	
995817.24N	1581402W	0404	0404	0404											
DEG MIN	DEG MIN	DAY MO	YR	HR MIN	(°C)	(°C)	(mb)	(deg)	(m/s)	(m)					
CTD		TIMES		JD/TIME		DATA LOCATION		REMARKS							
TYPE & SN SB911+		DATA CN		Tape/Diskette ID		File Name/Header									
PRESS SN		START DOWN													
TEMP SN		AT DEPTH													
COND SN		AT SURFACE													
TEMP SN		PAR		FLUOR		CHAM		TRANSMISSOMETER		Cleaned air bleed valve					
POS		TRIP		DEPTH		CTD CONVERTED MONITOR VALUES		SAMPLE		BOTTLE DATA		SAMPLE BOTTLE NUMBER			
		PRESSURE		PRI. TEMP.		SEC. TEMP.		SALINITY		SALINITY		SAL.		NUTR. CHL. HPLC Other	
1	19														
2	19														
3	19														
4															
5															
6															
7															
8															
9															
10															
11															
12															

MAX. DEPTH = m