VE	SSEL		C	RUISE ID	)		PROJ	ECT &	LEG	C	CTD Fil	leName:	<del></del>			STATION N	D.	
L	Aquila			AQ1801			FO	CI Fall	Mooring Crui	S-0					,	1897		
	10	LATITUDE DEG MIN 577/3.6	/ N /	LOP DEG	MIN	1	DAY MO	YR		DRY B	-	RH (%)	Pressure (mb)	WIND DIRN. (deg)	WIN D SPD. (kts)	BOTTOM DEPTH	STA. NAME/IC	2
	SBE 9+ PRESS PRI TEI SEC TE PRI CO SEC CO	MP SN MP SN ND SN		FLUOR 8 SBE43-0 SBE43-0 Transmis PAR S/N	xy (prim xy (sec) someter				REMARKS:		257	t o		mes die		Oup Tri	C. DEPTH =	
Nis	DEPTI	H Rosette Notes		Hydro T	eam-PMEL		Chi	oro					POC			Comments	N	lis
No.	DESIRI	ED	SALT	Nut.Btl	O2-BII.N	DIC/Alk	GF	F Vol >	10 Large Vol	GFF Du	ıp Vc>	10 dup v	ol 500 mi				N	lo.
2 3 4 5 6 7 8 9 10	55 50 44 40 30 20 11		*	16 11 13 14 15 16 17 18	XI61 468	) ) )	28 28 28 28 28 28 28 28	7 8 1 2 5 1 3						W	2		3 4 5 6	2 3 4 5 6 7
-	•••••	Inline		ļ		<del></del>	-							****	-			

VESS	SEL			CF	RUISE IC	)	· · · · · · · · · · · · · · · · · · ·		PROJECT &	LEG		CTD	FileName:					STATION NO	).	
	Aqulia		- <u> </u>		AQ180	1			FOCI Fall	Mooring Cru	ılse									
CON	ST#		ITUDE			NGITUDE				TIME (GMT)		BULB	RH	Pressure	WIND DIRN.	WIN D SPD.	вот	TOM DEPTH	STA. N/	AME/ID
1	1	DEG	MIN	100	DEG	MIN	1	DAY	MO YF	R HR MIN	1 (	*C)	(%)	(mb)	(deg)	(kts)	[68]	(m)	21.16	101
G	1	57/	3.7	1	633		dw	02	Gat 6	606					11			62		
_	BE 9+				FLUOR	_				WEATHER				SFC/E	Bottom Ter	mp.		MAX	C. DEPTH	58
	RESS					Oxy (prim				REMARKS:		4 5 4	0.	10	- V		12.			
		MP SN EMP SN		_		Oxy (sec) ssometer			—	180	CYL	3,9		04		A.	PP	197	MARG	
		ND SN			PAR S/N					13-4-4	3.15	-	دعت		4119	7.00	E No.		KII Į į į	حنبوج
	SEC CC	OND SI			O2 Tmp	Senson			_ 1											
H																				
_																		Recorr	der Initials:	:
Nis	DEPT	H Rosette	Notes	<u></u>	Hydro T	eam-PME	L		Chloro				*	POC				Comments		Nis
No.	ESIRI	ED	s	ALT	Nut.Btl	O2-Btl.N	DIC/A	lk	GFF Vol	>10 Large Vol	GFF	Dup Vo	>10 dup	vol 500 ml		1				No.
1	Bai	f	×	145	9				277		ar ar beneath.									1
	5.5	-			10				023											2
	50				11	1/1			287											3
_	44				10				288								******	***************************************	,	
	40				13	<del>                                     </del>	H		251					-		╫				4
	30				14				282		-						* <del>** ** ** **</del>			5
6					5		-		F 1			,		100000		-				6
	25				43		ļ		285						<b> </b>					7
8 ,	26				16	-	├		281		+					-				8
9	<u>//</u>				14				283											9
10	0				18	168	14		283							_				10
11																				11
12																				12
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VESSEL		C	RUISE ID			PROJEC	T&L	EG	CTD F	ileName:			STATION NO	).	
Aquili			AQ1801			FOCI	Fall N	fooring Crui	sa .						
CONSC CAST # SBE 9 PRESS PRI TE	LATITUDE DEG MIN 5652.4	7 n	LON DEG	MIN	DAY	MO	YR	TIME (GMT) HR MIN 1/ 0 8 WEATHER O REMARKS:	DRY BULB (°C)	28	men	al	-CTD #1	M2C STA. NAME/I	
Nis DEPT	TH Rosette Notes	SALT	Nut.Btl	eam-PMEL O2-Btl.N DIC	/Alk	Chlore GFF \	- 0	0 Large Vol	GFF Dup Vo	>10 dup v	POC		Record	-	Nis No.
1			×19 ×21 ×22			x 28	1								1 2 3 4 5 6 7 8 9 10 11
1	Inline														-

VESS	EL	CRU	ISE ID	<u> </u>		PROJEC	T&L	EG	CTD	FileName:	<del></del>	<del></del>		STATION NO	<b>D</b> .	_
A	quila	A	Q1801			FOCI	Fall N	flooring Crui	se	· , · · · · <del>· ,</del>	<del></del>		,			
CON:		1	LON	GITUDE				TIME (GMT)	DRY BULE	3 RH	Pressure	WIND DIRN.	WIN D SPD.	BOTTOM DEPTH	MAC STA. NAME	
	DEG MIN	DE	G	MIN	DAY	МО	YR	HR MIN	(°C)	(%)	(mb)	(deg)	(kts)	(m)		
U	5652.8	50 N 16	40	3.12w	62	CCT	18	1151						73		
SE	3E 9+	FL	UOR S					WEATHER O	)BS:		SFC/B	ottom Ter	mp.	MAX	C. DEPTH = 2	3
	RESS SN			xy (prim				REMARKS:								_
	RI TEMP SN			xy (sec)			1									
	EC TEMP SN		ansmiss NR S/N	someter		-										
	EC COND SI		2 Tmp S	enson ————			i									
	-															
														Param	fer Initials:	
																_
1 ⊩	EPTH Rosette Notes			am-PMEL		Chlor	_				POC	-	_	Comments		Ni
No.DI	SIRED	SALT N	ut.Btl	O2-Btl.N DIC/A	lk			0 Large Vol	GFF Dup V	/c >10 dup v	ol 500 ml			·		No
1 6	230.					287			<b></b>	ļ						1
2	234	and the	23			×288	3									2
3	230					×281										3
4	5		24	<b>\$37</b>		x28 6										4
5	100					χ28:	400								//////////////////////////////////////	Γ.
1	//			P		×28	7		<del> </del>				-			5
6 /	18	7	25			Bulletin war to	-		-				+			6
7 4	0		- 1			x08.	1000	********		<b>.</b>						7
8 (	0	16	26			228	3						_			8
9															10-3000 TA	9
10	SD - 1															10
															ALCOHOLD THE SERVE	
11												*********		***************************************		11
12	-						+									12
Щ												******		***************************************		
	Inline												1			

VE	SEL		С	RUISE ID			PROJEC	T&L	EG	CT	D FileNam	е.			STATION N	<b>D</b> .	
	Aquila			AQ1801			FOCI	Fall N	fooring Crui	50							
	ONSC AST#	LATITUDE DEG MIN S 6 39 . 6 sn up sn imp sn nd sn	1 1		MIN	DAY 05	мо	YR	TIME (GMT) HR MIN	DRY BU	LB RH (%)	Pressure (mb)	WIND DIRN. (deg)	WiN D SPD. (kts)		MZS STA. NAME  C DEPTH =	
			1					L									
ll I	DESIR	Rosette Notes	SALT	Hydro Te	O2-Btl.N DIC	VII.	Chlore	- 11	0 Large Vol	CEE Du	16 × 40 da	POC o vol 500 ml			Comments		Nis
140.			SALI	1	O2-BU,NIDICIA	uk .	GPF	01 > 1	o carge voi	GPP Dup	VC>10 du	5 VOI 500 IIII		-			No.
1	Вор			27								(5.5-6)	ļ				빔
2	60		1	22				-  -					<u> </u>				2
3	50			29			281						ļ <del></del>				3
4	40			30			282	L						4			4
5	30			31			285										5
6	20			32			281										6
7	10			3)	215		283										7
П	5			34			283		derlar dit alem nie de meio dernie m m n								8
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10	******																П
9 10 11 12														i_		T I	10
11				<del> </del>						<b></b>							11
12				$\vdash$			4				-		-				12
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VESSEL	CRUISE ID	PROJECT & LÉG	з ст	D FileName:	S	TATION NO.
Aquila	AQ1801	FOCI Fail Mod	oring Cruise			
CONSC CAST # LATITUDI  DEG MIN  SBE 9+ PRESS SN PRI TEMP SN SEC TEMP SN PRI COND SN SEC COND SI	DEG MIN	050CT/82	VEATHER OBS:	LB RH Pressure (%) (mb)	(deg) (kts)	OM DEPTH STA. NAME/ID (m)  MAZ W  MAX. DEPTH = G8
Nis DEPTH Rosette Notes	Hydro Team-PMEL	Chloro		POC		Recorder Initials: Comments Nis
No DESIRED	SALT Nut.Btl O2-Btl.N DiC/A		Large Vol GFF Dup	Vc >10 dup vol 500 ml		No.
1 BOT	146 35 150					1
2 60	36					2
3 50	37	281				3
4 40	38	282				4
5 30	34	285				5
6 20	40	281				6
7 10	41	283				7
в ()	42	283				8
9						9
10		9-2-32-23		- 1		10
11						11
12						12
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VESSEL	CRUISE ID		PROJECT &	LEG	CTD	FileName;		W. V. V. V.		STATION N
Aquila	AQ1801		FOCI Fall	Mooring Crui	50					
CONSC LATITUDE	E LONGI	ITUDE		TIME (GMT)	DRY BULB	Bu		WIND	WIN	BOTTOM DEPTH
CAST # LATITUDE DEG MIN		MIN DAY	MO YR		(°C)	RH (%)	Pressure (mb)	DIRN. (deg)	SPD. E	(m)
0065651.9	The Transfer	3.50w06	DOLL THE TOTAL	30210					\\	74
SBE 9+	FLUOR S/N		15. 11.11	WEATHER C	BS:		SFC/B	ottom Ter	np.	M
PRESS SN	SBE43-Oxy	(prim	_	REMARKS:						
PRI TEMP SN	SBE43-Oxy (	(sec)		MT	z Cen	vier				
SEC TEMP SN	Transmisson	neter	1							
PRI COND SN	PAR S/N O2 Tmp Sen									
			:							Reco
Nis DEPTH Rosette Notes	Hydro Tear	m-PMEL	Chloro				POC			Rec
		m-PMEL 12-Btl.N DIC/Alk	-	10 Large Vol	GFF Dup Vo	:>10 dup vo	27000			
			-	10 Large Vol	GFF Dup Vo	>10 dup vo	27000			
No DESIRED	SALT Nut.Btl O	2-Bti.N DIC/Alk	-	10 Large Vol	GFF Dup Vo	:>10 dup vo	27000			
No DESIRED	SALT Nut.Bit O	2-Bti.N DIC/Alk	-	10 Large Vol	GFF Dup Vo	>10 dup vo	27000			
1 0501 2 GO	SALT   Nut.Bil   O	2-Bti.N DIC/Alk	GFF Vo.	10 Large Vol	GFF Dup Vo	>10 dup vo	27000			
1 0501 2 GD 3 50	SALT   Nut.Bil   O	2-Bti.N DIC/Alk	GFF Vol.>	10 Large Vol	GFF Dup Vo	>10 dup vo	27000			
1 0501 2 GD 3 50	SALT   Nul.Bil   0	2-Bti.N DIC/Alk	Z81 282	10 Large Vol	GFF Dup Vo	>10 dup vo	27000			
No DESIRED  1 0507  2 G0  3 50  4 40  5 30	SALT Nut.Bil 0 43 44 45 46 47	2-Bti.N DIC/Alk	281 282 286	10 Large Vol	GFF Dup Vo	>10 dup vo	27000			
No DESIRED  1 0507  2 60  3 50  4 40  5 30  6 20	SALT Nut.Bil 0 43 44 45 46 47 48	2-Bti.N DIC/Alk	281 281	10 Large Vol	GFF Dup Vo	>10 dup vo	27000			
No DESIRED  1 0500  2 GD  3 50  4 40  5 30  6 20  7 [0	SALT NULBII 0 43 44 45 46 47 48	2-Bti.N DIC/Alk	281 283 283	10 Large Vol	GFF Dup Vo	>10 dup vo	27000			
No DESIRED  1 0501  2 G0  3 50  4 40  5 30  6 20  7 [0]  8 0	SALT NULBII 0 43 44 45 46 47 48	2-Bti.N DIC/Alk	281 283 283	10 Large Vol	GFF Dup Vo	>10 dup vo	27000			
No DESIRED  1 0500  2 G0  3 50  4 40  5 30  6 20  7 [0  8 0  9	SALT NULBII 0 43 44 45 46 47 48	2-Bti.N DIC/Alk	281 283 283	10 Large Vol	GFF Dup Vo	>10 dup vo	27000			

VESSEL		CRUISE ID		Р	ROJECT	& LE	G	CTD F	ileName				STATION NO	D. /	7
Aquil	a	AQ1801	1		FOCI F	all Mo	oring Cruis	10						6	
CONSC CAST#	LATITUDE DEG MIN 565666	LOP DEG FLUOR S SBE43-0 SBE43-0 Transmis	by (prim	1 1	мо	YR / 8 /	TIME (GMT) HR MIN 2533 WEATHER O	DRY BULB (°C)	RH (%)		WIND DIRN. (deg)	(kts)	BOTTOM DEPTH (m)  MAX	M2E STA. NAME/ID	The state of the s
	OND SN	PAR S/N						-					····	9	1
SEC C	COND SI	O2 Tmp	Senson												
															1
															ı
													Record	ler Initials:	I
Nis DEP	TH Rosette Notes	Hydro T	eam-PMEL		Chloro					POC			Comments	Nis	ŝ
No DESI	RED	SALT Nut.Btl	O2-Btl.N DIC/	/Alk	GFF Vo	>10	Large Vol	GFF Dup Vo	>10 dup	vol 500 ml		_		No	1
1 Bd	H	51												1	
2 57		52		0	281									2	
3 40		53		0	282					Security 1				3	
4 30	)	54		5	85									4	
5 20	0	55		=	787									5	
6 10		57		6	283									6	1
7 0		57	100	- 1	83									7	1
8 0						1						Z	add S		1
9						$\vdash$						Ì		9	1
10						1			L			-			
						╁						+		10	7
11						-	**********	*********						11	$\parallel$
12				100		$\vdash$						+		12	4
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VESSE	<del></del>	CRUISE II		PROJEC	T & LEG	CTD	FileName:				STATION NO	D/
Aqu	illa	AQ180	1	FOCI	Fall Mooring Cru	ise						+
CONSC CAST	DEG MIN	DEG 9 N 1641		DAY MO	TIME (GMT) YR HR MIN	DRY BULB	RH (%)	Pressure (mb)	WIND DIRN, (deg)	WiN D SPD (kts)	BOTTOM DEPTH (m)	M 24 STA. NAME/ID
SBE		FLUOR			WEATHER C	DBS:		SFC/B	lottom Tei	np.	MAX	С. DEPTH = 63
PRI SEC PRI	SS SN TEMP SN TEMP SN COND SN				REMARKS:						Recon	ier initiale;
Nis DE	PTH Rosette Notes	Hydro 1	Team-PMEL	Chloro	OOP/F	DOY		POC			Comments	Ni
No DES	RED	SALT Nut.Btl	O2-BILN DIC/	Alk GFF V		GFF Dup Vo	>10 dup vo	500 ml				No
10	7	147 58	162		01							1
	D	59	107	281								2
4	0	60		282	7					╁		
	20											3
		61		285						$\dashv$		4
5 0	(.1	62	·	281		ļ	 	-		-		5
6 )	0	63		283					<u> </u>	_		6
7 0		64		283	2				. <del></del>		<del></del>	7
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10		1										
12			<del></del>									11
12										-		12
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VE	SSEL		(	CRUISE ID			PROJE	CT & L	EG		CTD	ileName				STATION N	0.	
	Aquila			AQ1801			FOC	l Fall N	fooring Crui	sa							S	
Г		<del></del>			<del></del>									-				
			-												WIN		MHE	
	ONSC AST#	LATITU	,	1.01	JOHNS				TIME				:	WIND	D			
-	431#	DEG MI		DEG	NGITUDE MIN	DAY	МО	YR	(GMT)	DRY I	-	RH	Pressure	DIRN.	SPD.	BOTTOM DEPTH	STA. NAME	E/ID
	- ^	E 15 E E-7	1 1 1			17 - 11	151 12	1 1		(*(	~ <i>1</i>	(%)	(mb)	(deg)	(kts)	(m)		
0	09	5745.	64N	1680	7.3	1w 07	-001	1/8	0605							71		
_	SBE 9+	-		FLUOR S	5/N			H	WEATHER O	BS:			SFC/B	ottom Ter	np.	MA	X. DEPTH = 6	, ८
	PRESS			SBE43-O				į	REMARKS:			10		<u></u>	7			
<u> </u>	PRI TE			SBE43-0					901	0	ر ه	Wy	15 /	50+	0	the u	vay	
L	SEC TE			Transmis	-				<u> </u>	2, _	د	0-						
<b> </b>	PRI CO		——-	PAR S/N					-									
H	SEC C	OND SI		O2 Tmp :	Senson													
-	·																	
H	†																	
H	j																	
<b> -</b> -																		- 1
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Nis	DEPT	H Rosette Note	8	Hydro To	eam-PMEL		Chlor	0	-	-			POC			Comments		Nis
No.	DESIR	ED	SALT	Nut.Btl	O2-BIJ.N D	IC/Alk	GFF	Vo >1	0 Large Vol	GFF D	up Vc	>10 dup 1	vol 500 ml					No.
<b>[</b> 1	Bat		148	65										4	_	<u> </u>		
			1/0															1
2	50			14		9	-	10			$\dashv$		-		╁			2
3	40			67	<b> </b>					******		**********						3
4	30	-		68					( -	$\rightarrow$	$\dashv$				4			4
5	20			69	ļ													5
6	10			70			<b>L</b>		)									6
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VESSEL	CRUISE ID	PROJECT & LEG CTD F	FileName;	STATION NO.
Aquila	AQ1801	FOCI Fall Mooring Cruise		
CONSC CAST# LATITUDE DEG MIN	LONGITUDE DEG MIN DAY	TIME (GMT) DRY BULB MO YR HR MIN (°C)	WIN   WIN   D   D     BO   (%) (mb) (deg) (kts)	OTTOM DEPTH STA. NAME/ID
0105803.91	16844.04 W 07	007180910		70
SBE 9+ PRESS SN PRI TEMP SN SEC TEMP SN PRI COND SN SEC COND SI	SBE43-Oxy (prim SBE43-Oxy (sec) Transmissometer PAR S/N O2 Tmp Senson	WEATHER OBS: REMARKS:	SFC/Bottom Temp.	MAX. DEPTH = 65
Nis DEPTH Rosette Notes	Hydro Team-PMEL	Chloro	POC	Comments Nis
No. DESIRED SAL		GFF Vol >10 Large Vol GFF Dup Vo	>10 dup vol 500 ml	No.
1 Bat	72 197			1
250	73	281		2
3 40	74	282		3
4 30	75	225		4
5 20	76	281		5
6 10	77	283		6
70	78	283		7
8 0			La	dd 8
9				9
10				10
11				11
12				12
				16
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/ESSEL	CRUISE	ID		PROJEC	T & LEG		CTD	FileName:				STATION NO	).
Aquila	AQ1	801		FOCI	Fall Moorin	g Crui	80						10
CONSC LATITUDE  DEG MIN  0 / / S7 5 5 1 . L  SBE 9+	7 N 169	ONGITUDE MIN	DA	у мо Дост	(G YR HR 1 8 / 2	ME MT) MIN		RH (%)	Pressure (mb)	WIND DIRN. (deg)	WIN D SPD. (kts)	BOTTOM DEPTH	MY LA STA. NAM
PRESS SN		3-Oxy (prim			REMA	-	100:		SFUE	iottom 196	np.	Invo	DEPIN = C
PRI TEMP SN		3-Oxy (sec)										1,1 2,1110,111,111	
SEC TEMP SN	Trans	missometer_											
PRI COND SN	PAR	_											
SEC COND SI	O2 T	np Senson _								تسمت		_0 0	
1													
1													
												Record	ler initials:
DEPTH Rosette Notes	Hydr	o Team-PME	L	Chloro					POC			Comments	
DESIRED	SALT Nut.	3tl   O2-Btl.I	DIC/Alk	GFF V	ol >10 Larg	e Vol	GFF Dup Vo	>10 dup	vol 500 ml	,		<u></u>	
Batt	7	9			ļ								
50	8			281									· <del></del>
40	8			282								<del></del>	
30	8			285	-							*****************	****
20	8.										╢		
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SSEL	CRUISE II		PROJECT			ileName:				STATION NO	. //
Aquila	AQ180	1	FOCI Fa	il Mooring Crui	se				WiN		MH
ONSC LATITUDE	LO	NGITUDE		TIME (GMT)	DRY BULB	RH	Pressure	WIND DIRN.	SPD	BOTTOM DEPTH	STA. NAME
DEG MIN	DEG		AY MO Y	R HR MIN	(°C)	(%)	(mb)	(deg)	(kts)	(m)	C-78
100000	1 1/1		70CT1	1,51	-1 f k	1 18	111			70	
SBE 8+	N/6		27 O C 11 1	8 / 1/5/	ne.		CECID	attem Ten			. DEPTH = 6
PRESS SN		Oxy (prim		REMARKS:	100;		SFUB	ottom Ter	np.	MAX	. DEPTH = O
PRI TEMP SN		Oxy (sec)		11233741101	111111111111111111111111111111111111111						
SEC TEMP SN		ssometer			LEATERS!						
PRI COND SN	PAR S/I	N									
SEC COND SI	O2 Tmp	Senson									
										Record	ler initials:
DEPTH Rosette Notes	Hydro *	Team-PMEL	Chloro	Dolls	DAN		POC		_	Comments	
DESIRED	SALT Nut.Btl	1 1		>10 Large Vel-	GFF Dup Vc	>10 dup v			+		
Bott	x/49 86	×172		002					T		
50	87		281				-				
40	88		282								270.00
70	00						-			/ .	
0			0							mistri	P
30	89		285	Maria de Salveria de							
20	90		081	700 NO 1074				113050			
9	0/		AG 2			- 255					
40	7/		283								
0	190	2	283			-					
0				SHARRING AND AND AND		200201111111					
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A 54.07 A		- Control of 100 100 100 100 100 100 100 100 100 10		ALIENSE REPORTEDING							
		1									
Inline				1	1	1	H		1		

	CRUISE ID	,	PROJECT (	& LEG	Сто	FileName:				STATION NO	
Aquila	AQ1801		FOCI Fa	Il Mooring Cru	ise					12	2
ONSC AST# LATITUD	E LOI	NGITUDE		TIME (GMT)	DRY BULB	RH	Pressure	WIND DIRN.	WIN D SPD	ВОТТОМ ДЕРТН	M H
DEG MIN			DAY MO Y	R HR MIN		(%)	(mb)	(deg)	(kts)	(m)	OTF. TO AND
135751	7/N/685	5 07w0	7 00T /	3/8/8				24		70	
SBE 9+	FLUOR			WEATHER	OBS:		SFC/B	lottom Ter	np.	MAY	C. DEPTH = 6
PRESS SN		Oxy (prim		REMARKS:	MY			1		m Cas	
PRI TEMP SN		Dxy (sec)		He	- 16C0	very	_Cal	101	2/2	m cas	<i>i</i>
SEC TEMP SN PRI COND SN	PAR S/N	seometer									-
SEC COND SI		Senson		-							
1				-							
1											
											der initials:
DEPTH Rosette Note:	Hudeo T	eam-PMEL	Chloro				POC	_		Comments	aer muais.
DESIRED	SALT Nut.Bil	1		>10 Large Vol	GFF Dup Vo	>10 dup v			╁	Continents	
Q //									T		
Bal	93			1							
BA 50	93 94		287	1							
B <sub>A</sub> 50 40	93 94 95		287	1							
B/H 50 40 30	93 94 95 96		287 2887 281			******					
Bd   50   30   80	93 94 95		287 2887 281 282								
B# 50 40 30 80 13c	93 94 95 96 97		287 2887 281								
BA	93 94 95 96		287 2887 281 282								
B# 50 40 30 13c	93 94 95 96 97		287 2887 281 282 283 285								
BA 50 40 30 80 13c 13b	93 94 95 96 97	131	287 288 281 282 283 281 283								
BA 30 30 13c 13b 30 0	93 94 95 96 97 98		287 2887 281 282 283 285								
BA 50 40 30 80 13c 13b	93 94 95 96 97 98		287 288 281 282 283 281 283								
B# 50 40 30 80 13c	93 94 95 96 97 98		287 288 281 282 283 281 283								
Bd   50   40   30   13c   13b   13a   0	93 94 95 96 97 98		287 288 281 282 283 281 283								
B <sub>0</sub> + 50 40 30 80 13c 13b	93 94 95 96 97 98		287 288 281 282 283 281 283								

& may have warmed up

VESSEL.	CRUISE ID	PROJECT & L	EG	CTD FileName:		STATION NO.
Aquila	AQ1801	FOCI Fall N	Acoring Cruise			/3
CONSC LATITUDE DEG MIN	DEG MIN	DAY MO YR			WIND D DIRN. SPD. B	BOTTOM DEPTH STA. NAME/
A Comment of the Comm	14N17007.5	4 w % o c T 1 8				72
SBE 9+ PRESS SN PRI TEMP SN SEC TEMP SN PRI COND SN SEC COND SI	FLUOR S/N SBE43-Oxy (prim SBE43-Oxy (sec) Transmissometer PAR S/N O2 Tmp Senson		WEATHER OBS: REMARKS:	SFCA	Bottom Temp.	MAX. DEPTH = GG
Nis DEPTH Rosette Notes	Hydro Team-PME	. Chloro		POC		Comments
No DESIRED	SALT Nut.Btl O2-Btl N	DIC/Alk GFF Vol >1	0 Large Vol GFF 0	Oup Vc >10 dup vol 500 ml		
1 BOT	100 -220					
2 50	101	281		=		
3 40	102	282				.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
4 30	103	Z85				
5 20	104	281				
s 10	105	24,3				
7 0	(06	183				
8						
9						1
10			**********			
11			***********			
12			1.0		97:	
I Inline						***************************************

/ESSEL Aquila	C	RUISE ID			JECT &	LEG Mooring Crui		ileName:				STATION NO	14/
CONSC CAST # LATIT	JDE		IGITUDE			TIME (GMT)	DRY BULB	RH	Pressure	WIND DIRN.	WIN D SPD.	воттом рертн	POM 3
		DEG	MIN	DAY MO			(°C)	(%)	(mb)	(deg)	(kts)	(m)	
	.41NI	11		0800	T 1	8 0 6 5 7						7	. DEPTH = 6
SBE 9+ PRESS SN		FLUOR S SBE43-0				WEATHER O	185:		SFC/B	ottom Tei	mp.	MAX	. DEPTH = 6
PRI TEMP SN		SBE43-0				recinitatio.							
SEC TEMP SN		Transmis							100				
PRI COND SN		PAR S/N				-					115	7	
SEC COND SI		O2 Tmp S	Senson		. 1								
1													
1													
j													
						Jot	to/co					Record	ler Initials:
DEPTH Rosetta No	los	Hydro To	sam-PMEL	CI	nloro	DOP/L	MG		POC			Comments	
DESIRED	SALT	Nut.Btl	O2-Btl.N DIC/A	Alk GI	F Vol	10 Large Vol	GFF Dup Vo	>10 dup v	ol 500 ml				
Bot	150	107				03							
50		108		20	51								
40		109			32								
30		110		28		*************							
20		111		28						M4000			
10		112		28	*****		500000000000000000000000000000000000000						
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Infine								-					

VESS	SEL	CRUISE IC		F	ROJECT	& LEG	СТД	FileName				STATION NO	
LA	Aquila	AQ1801			FOCI F	all Mooring C	ruise						/3
	DEG MIN	DEG DEG FLUOR: SBE43-C SBE43-C Transmis PAR S/N O2 Tmp	Dxy (prim Dxy (sec)	DAY O	MO 1	TIME (GMT YR HR M 8 22 /	(°C)	(%)	Pressure (mb)	WIND DIRN. (deg)	WIN D SPD. (kts)	BOTTOM DEPTH (m)  MAX	STA. NAME/ID  DEPTH = 4
Nis [	DEPTH Rosette Notes	Hydro T	eam-PMEL		Chloro	ai parasal			POC	1		Record	er initials:
∦ <u>"</u>  -	ESIRED	SALT Nut.Btl	O2-Bti.N DIC/A	Alk		>10-Large V	of GFF Dup V	c >10 dup			╫		No.
1	3 <i>a</i> F	114	284			3.3							
H H	5D	115	<u>~ 0 /</u>		188			<del> </del>					1
	40				287								2
	30	116					-	<del> </del>				•••••••	3
	To the second	117			281	<b> </b>	-						4
5	180	118	<b> </b>		242	<u> </u>		<b></b>		ļ			5
6	180	119			285				17				6
7	16a	130	ļ		8		4	ļ		ļ			7
В	10	21			183			_					
9	0	122		2	83					<b></b>			9
10													10
11													11
12								<b>†</b>			-		12
H										П	1		14
H	Inline							Sept. 20.40					

VES	SSEL	···		CRUISE ID			PF	OJECT	& LEG		CTD	FileName				STATIO	N NO.	
	Aquila			AQ1801				FOCI Fa	ali Mod	oring Crui	50							16
1	SBE 9+ PRESS	S SN MP SN EMP SN OND SN	MIN	DEG	xy (prim_ xy (sec)_ someter		21 11 11	1.1.1.1	8 Ĉ	TIME (GMT)  HR MIN  EATHER O  EMARKS:	DRY BULB (°C) BS:	RH (%)	Pressure (mb)	WIND DIRN. (deg)	WIN D SPD (kts)	BOTTOM DEI		STA. NAME/ID  MS =   DEPTH = 6 4
Nis	DEPT	H Rosette N	otes	Hydro T	eam-PME	L.		Chloro	D	P/D	M		POC			Comme	<u></u>	r Initiale:
No.	DESIR	ED	SALT	Nut.Btl	O2-Bil.N	DIC/Alk		GFF Vo	>10 L	arge Vol	GFF Dup V	: >10 dup	vol 500 ml			a a name		No.
1	39		,/3	7/23					0	23								1
2	50	>		124					1									2
3	40	Į B		25		П												3
4	30			726					(	(	5			***************************************				4
_	20			127						7	(					1.00		5
6	10			128					<		a							6
7	0	:		129	1759					)								7
П	<u></u>				52.2.1				/	<i></i>				ļ				
8												<b></b>		<b> </b>	$\dashv$			8
9						<b></b>							1					9
10				-											-			10
11		-									************							11
12	1				1	1	II II		H									12
									-						-			12
12	*****							Ē							- 6		****	12

VE:	SSEL		C	RUISE ID			PROJE	CT&L	EG	CTD	FileName:				STATION NO	).
	Aquila			AQ1801			FOC	l Fall N	Acoring Crui	\$e						1+
CA	DNSC AST#	LATITUDE DEG MIN		LON DEG	IGITUDE MIN	DA	у мо	YR	TIME (GMT) HR MIN	DRY BULÐ (°C)	RH (%)	Pressure (mb)	WIND DIRN. (deg)	WIN D SPD. (kts)	BOTTOM DEPTH	MBS sta. name/id
	18	5942.4	CN	1716	9.59	w/4	ОСТ	1 8	0416						76	
	SBE 9+			FLUOR S					WEATHER O	es:		SFC/B	ottom Ten	np.	MAX	. DEPTH=/_9
-	PRESS			SBE43-0			<del></del>		REMARKS:	0 /1	1 10			<u></u>	2	
	PRI TE	MP SN		SBE43-O					-/	Sal ap	+_12	1910	y	2_(	3m g	ing_
	PRI CO			PAR S/N					1/0	02 S	en o	0 to	kar	_		
	SEC C	OND SI		O2 Tmp \$	Senson				Y-250	d	0					
L																
																i
															Record	ler initials:
Nis	DEPT	H Rosette Notes		Hydro To	eam-PMEL		Chło	ro [	DOP/D	a1 V		POC		T	Comments	Nis
	DESIR		SALT	Nut.BIJ	O2-BII.N D	IC/Alk	GFF	- 4	0 Large Vol		>10 dup v	/ol 500 ml	-			No.
1				130	15 /4				004							1
2				131							-				• • • • • • • • • • • • • • • • • • •	2
	.,			132										$\exists \vdash$		3
3 4 5	30			133			1									
٦	20			134									-			4
2	10			135			1								•••••••	5
				136			1-	╅						- -		6
7			<u> </u>	128			-									7
8							1	+						$-\parallel$		8
9			<b> </b>				-					-				9
10 11 12				-				-						- -		10
11	ļ		ļ		ļ							-		-		11
12																12
															,	
		Inline						23								,

VESS	EL	ROJECT	& LEG	CTD	FileName:				STATION NO	18				
A	quila		AQ1801	<u> </u>		FOCI Fa	ill Mooring Crui	\$0						10
CON CAS	T# LATITUDE DEG MIN	UN/	EG		DAY W / Oc	1 1 1	TIME (GMT) /R HR MIN		RH (%)	Pressure (mb)	WIND DIRN. (deg)	(kts)	BOTTOM DEPTH	M 5W STA. NAME/ID  DEPTH = 58
	RESS SN		BE43-0				WEATHER C	/D3;		SPUID	ottom Ter			. DEFIN SO
Si	RI TEMP SN EC TEMP SN RI COND SN EC COND SI	S T	BE43-O Fransmiss PAR S/N D2 Tmp 5	xy (sec)			<i>Pogad</i>	20 250	file		2	Cecy	Calcula	ler tribiale.
													Record	ler Initials:
	EPTH Rosette Notes	<del>                                     </del>		eam-PMEL		Chloro	DOP/D			POC		_	Comments	Nis
	ESIRED			O2-Btl.N DIC	C/Alk	GFF Vol	>10 Large Vol	GFF Dup Vo	: >10 dup vo	500 ml		_		No.
1	3of	152		3/2			005			ļ				1
2	50		138			08)								2
3	40		139		1	282	' '				:			3
4	30	,	140			285	:							4
	$\infty$		141			281								5
6 7	10 ·		142			283	***********		waaaaaaa		********			6
			142			283	! ·	<u> </u>						
7-		<del> </del>				<u> </u>	· :							7
B												╫		8
9														9
10										2		-  -		10
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12												_ _		12
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	Inline				1									

VES	SEL			C	RUISE ID		16	PROJEC1	8 L	EG	CTD	FileName:	,			STATION NO		
L	Aquila	1			AQ1801			FOCIF	all N	looring Crui	10						19	
CO	NSC ST#		LATITUDE		LON	GITUDE				TIME (GMT)	DRY BULB	RH	Pressure	WIND DIRN.	WIN D SPD.	ВОТТОМ DEPTH	MSTA. NAM	
L		DEG	MIN		DEG	MIN	DAY	МО	YR	HR MIN	(°C)	(%)	(mb)	(deg)	(kts)	(m)		
0	20	59	53.0	SUNI	721	0.14	w/0	ост	1 8	1007	-     .					72		
	SBE 9+				FLUOR S	/N			ì	WEATHER O	BS:		SFC/B	ottom Ter	np.		. DEPTH = /	g.
	PRESS	•			SBE43-0	xy (prim			i	REMARKS:								
	PRI TEI				SBE43-0:				:									
		EMP SN			Transmis	someter												
		ND SN OND SI			PAR S/N O2 Tmp S										-			
H	0000	0110 31			Tor map a	MINISON												
									i									
H																Record	ler Initials:	
Nis	DEPT	H Ros	ette Notes		Hydro Te	am-PMEL		Chloro	1	20P/DOI	4		POC			Comments		Ni
No.	DESIR	ED	N/F	SALT	Nut.Btl	O2-BUN DI	C/Alk	GFF Vo	o >1	0 Large Vol	GFF Dup Vo	>10 dup \	ol 500 ml					No
1	Bot	2			144				1	206								1
2	50				145		Ш	281										2
3	40				146			282										3
4	30				147			285	- 31									4
5	20				148			281										5
6	10				149			283										6
7	0				150	351		283										7
8																***************************************		8
9															:	<u> </u>		9
10										*****						••••••••••	*************	10
11																		11
12			******	-					1							***		
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П			Inline						1							*****		١,

	SEL	<del></del>		C	RUISE ID				PROJEC				FileName				STATION N	10.
-	Aquila				AQ1801			Ι	FOCI	Fall N	Acoring Cru	se	т		1	Т	20	
	NSC ST#	LATIT	TUDE		LON	NGITUDE					TIME (GMT)	DRY BUL	B RH	Pressure	WIND	WiN D SPD,	ВОТТОМ ДЕРТН	FOM42
_		EG	MIN		DEG	MIN		DAY	МО	YR	HR MIN	(°C)	(%)	(mb)	(deg)	(kts)	(m)	
2	1/1	002		5 N	730	00.4	3 w		ОСТ	1 8	1343						68	
	SBE 9+				FLUOR S						WEATHER C	BS:		SFC/E	Bottom Te	mp.	MA	X. DEPTH = 62
4	PRESS S	N			SBE43-0	-					REMARKS:							
=	PRI TEM			_	SBE43-0													
=	SEC TEN PRI CON				Transmis	_												
=	SEC CON				O2 Tmp	_												
						_												2.77 - 3
4																		
ᅰ																	_	
4																	Reco	rder initials:
Nis	DEPTH	Rosette N	lotes		Hydro T	eam-PME			Chlor	ro I	20 P/D	Ma		POC			Comments	Ni
No	DESIRE	D		SALT	Nut.Btl	O2-Btl.N	DIC/	Alk	GFF		I0 Large Vol	GFF Dup	Vc > 10 dup	vol 500 ml				No
1	RA			153	151	344					007			1				1
٦	<u> </u>	8		12-12-					100	7	- Indoor-k		<del> </del>		1			
2	50	0			152			,	28					15		-		2
3	40	ļ			153		X		286	<u> </u>			<del> </del>					3
4	30				154				285									4
5	20				155				281									5
6	10				156				283									6
	0				157		>		283									7
7					1/22				KO 3				+					
8	<u>.</u>	1				-			-	+			-		-			8
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10																		10
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VE	SSEL.	С	RUISE ID			PROJECT & L	.EG	CTC	FileName:			· · · · · · · · · · · · · · · · · · ·	STATION NO	).
L	Aquita		AQ1801		-578	FOCI Fall !	Mooring Crui	58						21
C/	DNSC AST# LATITUDE DEG MIN 22 60 1 3 . 4 SBE 9+ PRESS SN PRI TEMP SN SEC TEMP SN PRI COND SN SEC COND SI	Z <sub>N</sub> ]	DEG	oxy (prim )xy (sec)	DAY	MO YR	10 000		(%)		WIND DIRN. (deg)	(kts)	(m)	STA. NAME/ID  DEPTH = 4/ >
Nis	DEPTH Rosette Notes		Hydro T	eam-PMEL		Chloro				POC			Record Comments	er Initiale:
No.	DESIRED	SALT	Nut.Btl	O2-Btl.N DIC//	Alk	GFF Vol >1	0 Large Vol	GFF Dup \	Vc >10 dup v	/of 500 ml	<u> </u>			No
1	BOT	154	158	290		282			-					1
3	30	1/32/	159	0,0		285							_	2
4	20		/60			281							****	3
5	10		161			283	Á							5
6	D		11,2		_	283	138							6
7									<u> </u>					
8								195.						8
9				<u> </u>							*********			9
10 11												1		10
12														11
				-										
1	Inline										11		**	

VE	SSEL			PROJEC	T & L	EG	CTD	FileName:				ST	ATION N	).				
L	Aquila			AQ1801			FOCI	Fall N	dooring Crui	80							22	
00	13	LATITUDE DEG MIN	3 N L	DEG 3	IGITUDE MIN	DAY w 10	MO OCT	YR 1 8	2332	DRY BULB	RH (%)	Pressure (mb)	WIND DIRN. (deg)	WIN D SPD. (kts)	(	м <u>рертн</u> m)	70M 45	./
	SBE 9+ PRESS PRI TEI SEC TE PRI CO SEC CO	S SN MP SN EMP SN		FLUOR S SBE43-O SBE43-O Transmis PAR S/N O2 Tmp S	xy (primxy (sec)someter				WEATHER O	BS:		SFC/B	ottom Teh	np.			Ior Initials:	
Ш	II	H Rosette Notes			eam-PMEL		Chloro	-				POC			Co	omments	N	is
	DESIR	1	SALT		O2-BII.N DI	IC/Alk	GFF V	0 >1	0 Large Vol	GFF Dup Vo	: >10 dup	vol 500 ml		4			N.	0.
1	130		ļ	163	ļ			_									1	1
2	50			164			281										2	2
3	40			165			282	2										3
4	30			166			289	11		######################################	İ			_				4
5	ZD			117			281							_				
	10			168			283				******							5
6	0			169	250									╁			,	5
-				119	357		285										7	7
8	}							-						+			8	3
9	ļ				ļ												9	9
10	41							4						_			1	0
11																	1	1
12							576.70										12	٦
#	41	- II	1	1	1									محمالا ممد			K	_

ESSEL		CI	RUISE ID			PR	OJECT	& LEG	CTD	FileName:		-		STATION NO	D.
Aquila			AQ1801				FOCI Fa	II Mooring Cru	se						
SBE 9+ PRESS PRI TE SEC TE PRI CO		6 N 1	DEG	i/N exy (prim exy (sec) someter	Zw	DAY A		TIME (GMT) /R HR MIN	DRY BULB	RH (%)	Pressure (mb) SFC/B	WIND DIRN. (deg)	WIN D SPD (kts)	BOTTOM DEPTH (m) 68	STA. NAME/I
DESIR	4	SALT	Nut.Btl	eam-PMEL O2-BIJ.N		_	Chloro GFF Vo	>10 Large Vol	GFF Dup Vo	: >10 dup v	POC vol 500 ml			Recom	der Initials:
1367		155	170	108			00-1		ļ	ļ					
50			171		X	ė	28/					-	+		
40			172			1	181	<b></b>			-				
30			173		_	0	285					-	╫		
10			174				181				-				
0			175		L/	el.	83						-		
			176		<u>×</u>	é	283			-	-				
0						-						-			
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	Inline												+		

VESSEL.		CR	UISE ID		11 / 18	PROJECT	T&L	EG	CTD F	ileName;				STATION NO	211
Aqui	la .		AQ1801			FOCIF	fall N	looring Crui	88	· · · · · · · · · · · · · · · · · · ·					0.7
CONSC CAST#	LATITUDE DEG MIN		LON	GITUDE MIN	DAY	мо	YR	TIME (GMT) HR MIN	DRY BULB	RH (%)	Pressure (mb)	WIND DIRN. (deg)	WIN D SPD.	BOTTOM DEPTH	70M 48
25	60 54 .3	F. 1 1	734	E L. I. J. E.	111	CH PH	-111		111	1-0.1	[1]			82	4 61
SBE			FLUOR S		112	0 0 1	T	WEATHER O	BS:		SFC/B	ottom Tei	mp.		DEPTH= 7,5
PRES	S SN		SBE43-O	ry (prim				REMARKS:				-0211			
	EMP SN		SBE43-01												
	TEMP SN		Transmiss PAR S/N	someter			-	-							
	COND SI		O2 Tmp S	ienson		<u> </u>									
				10	•		!								
							L								
														Record	ler initials:
Nis DEP	TH Rosette Notes		Hydro Te	am-PMEL		Chloro	1	OPPA	V		POC			Comments	N
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# Bering Sea sampling wish list 2018:

Desired sample types: I assume most locations will be non-bloom so it would be great to get at least 5-7 non-bloom samples from the surface and as many bloom or transition (bloom edges) samples as possible also from the surface.

difficult or impossible to take with available effort and time, I will be happy with any of the important to least important. After priority 1 and 2 samples, if one of the listed samples is This list describes my wish list for samples to take, with them listed in order of most other samples (order gets less important after 1 and 2).

# Priority 1: Flow Cytometry

# Supplies needed:

- Sampling bottle
- Frozen gluataraldehyde/formaldehyde fixative (10x)
  - 50-100mL graduated cylinder

#### Protocol:

- Thaw fixative aliquot (5 mL/sample in 50 mL falcon tube)  $\sim$  .5 hr before sampling
- Label 50mL falcon tube containing thawed fixative with sample ID (make sure it can correlate with CTD cast and that bloom/non-bloom is recorded for each sample)
  - Sample surface seawater from CTD rosette
- Measure 45 mL of surface seawater in graduated cylinder
- Pour seawater into 50mL falcon tube containing thawed fixative
- Invert gently until well mixed
- Let sit in the dark at  $\sim$  room temperature (or slightly colder) for  $\sim$ 20 min then put into -20C freezer for long term storage

### Priority 2: DNA

## Supplies needed:

- Sampling bottle
- Filter rig
- 47mm filter set up
- 500-1000mL graduated cylinder
- 1.2um polycarbonate filters (RTTP)
  - 2 ml cryovials
- 200 um mesh (black pvc holder w/mesh)
- forceps

#### Protocol:

- Label empty 2 mL cryovial with sample ID and bloom state
- Prepare 47mm filter set up w/ 1.2 um filter installed (wear gloves)
  - Sample surface seawater from CTD rosette
- Pre-filter seawater with 200 um mesh into graduated cylinder and measure 1L for non-bloom samples and 500 mL for bloom samples (if really dense and slowly filtering) - record volume filtered

Cru			Salt Case ID		Analyst:		,	Analysis Date	/Time(GMT	):
	dard Baeral Co	atch # mments:		K15 std:		2Rt std(a):		2Rt std(b):		Bath Temp: Sample Temp:
	Cast	Niskin	Sample Btl. ID	2Rt (a)	2Rt (b)	2Rt (c)	2Rt (d)	2Rt (Aver.)	Salinity	Comment
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Notes

ECOPUCI Salinity Analysis Data Sheet

Salinometer ID

			Salt Case ID:		Analyst:			Analysis Date/Time(GMT):		
Standard Batch # General Comments:					. 2Rt std(a):			2Rt std(b):		Bath Temp: Sample Temp:
	Cast	Niskin	Sample Btl. ID	2Rt (a)	2Rt (b)	2Rt (c)	2Rt (d)	2Rt (Aver.)	Salinity	Comment
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Notes

#### Protocol:

- Label two petri dishes with sample ID and "20um filt" or "unfilt"
- Prepare 25mm filter set up w/ combusted GF/F filter installed (wear gloves)
  - Sample surface seawater from CTD rosette
- For 20um filt sample, prefilter seawater with 20um mesh into a graduated cylinder and measure out 500 mL or for unfilt sample, do not prefilter and measure 500 mL of whole seawater in graduated cylinder (in a bloom 300 mL will likely be enough)
  - Filter water at between 10 15 inHg until all water has gone through
    - Use forceps to remove filter and place upright in the petri dish
- Tape the edges of the petri dish so the top and bottom stay together
- Store at -20C for long term storage

# Priority 5: Fixed phytoplankton samples

## Supplies needed:

- Sampling bottle
- Formalin (20 mL/sample) (on board, used for zooplankton fixation)
- 250mL PP bottle (Naigene)
- 500 mL graduated cylinder
- Serological pipettes (25 mL)

#### rotocol:

- Label bottle with sample ID (using tape may be the easiest way to label the bottle?)
  - Collect surface seawater from CTD rosette
- Measure out 230 mL of seawater in graduated cylinder, pour into 250mL PP bottle
  - mL measurement) or dispense formalin into an empty 50 mL falcon tube and use a Use syringe to dispense 20 mL of formalin directly into sample (if confident of 20 serological pipette to measure out exactly 20 mL and add to sample (can re-use falcon tube for all samples)
- Invert sample gently
- Wrap parafilm around the lid to add extra protection from spillage and evaporation
  - Store in a cool, dark place (inside a box should be fine)

#### Other notes:

- Rinsing all filtering equipment and graduated cylinders with milli-Q between stations is ideal
- Samples do not need to be filtered/sampled immediately after sampling from niskin, they are all OK to sit while other samples are taken
  - measuring out exact volumes in the lab works well but be sure to mix sample bottle Sampling for all samples into the 1L sampling bottles from the niskin and then gently before measuring out volumes especially if sample has been sitting
    - The 25mm and 47mm filter holders do not hold the total amount of water that is required to be filtered for most of these samples, so water will need to be added multiple times while filtering (plastic beakers can also be used for short term storage before/during filtering)
      - For all samples, total water budget is  $\sim$ 2.4L but in a bloom less will be needed.

- Filter water at ~10-15 inHg
- Once sample has been completely filtered, fold sample/roll sample carefully with forceps and place in 2 mL cryovial
  - Freeze at -80C (or as cold as possible) for long term storage (in freezer box or ziplock bag is fine)
    - Rinse filter set up and forceps with Milli-Q between samples

# Priority 3: SEM (not necessary for every station but for just a couple of bloom

#### stations

# Supplies needed:

- Sampling bottle
- Filter rig
- 13mm filter set up
- 50-100mL graduated cylinder
- 0.4um polycarbonate filters (HTTP)
- Petri slides
- Razor blade
- Forceps

#### Protocol:

- Label petri slide with sample ID and bloom state
- filter holder, before adding water make sure the filter is centered on the holder so Prepare filter set up (these filters are a bit finicky and can easily get offset on the water does not leak around the filter)
  - Sample surface seawater from CTD rosette
- Measure 50 (bloom) or 100 mL (non-bloom) into graduated cylinder
  - Filter seawater gently (keep pressure around **~5 inHg** on pump)
- Once sample has filtered completely, carefully remove filter with forceps and razor blade and place face up in petri slide
  - Place lid on top without closing petri slide completely, let filter air dry overnight then close lid completely and store at room temperature for long term storage
- Stacking and taping all petri slides together at the end of the cruise is a good way to transport these samples

# Priority 4: size fractionated POC

## Supplies needed:

- Sampling bottle
- Filter rig
- 25mm filter set up
- 500 mL graduated cylinder
- 25mm combusted GF/F filters
- Forceps
- 20 um mesh (black pvc holder w/ mesh)
- Petri dishes