Cruise: GF280a / AE1210				Leg:		Cast: CTD #1 : GF280aC1.HEX				Type: 0-1000m Munson - Methyl-Mercury							
Date: 25 April 2012			Time: 2340	Lat: 3140.018 N			Long: 06410.150 W			Samplers:							
Date: 26 April 2012			Time: 0045	Lat: 3139.341 N			Long: 06410.778 W										
Niskin #	Depth	Niskin temp	Oxygens	~~Hg T bio Bates~~	~~Hg T bio Keeling~~	TOC/N Inc.	Sugars	Salts	Nuts	TDP / SRP / APA	Bact.	Virus/ Probes	POC/N vol =	Psi vol =	POP vol =	HPLC/FCM vol =	ChlA
	Surf		200														
1	800		140														
2	200		* base of chl sub max	✓	✓												
3	120(hi)		* base of chl max														
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

Cruise: BATS BLOOM				Leg: 280a		Cast: CTD # 2 : GF280aC2.HEX				Type: 0 - 1000m PRODUCTION							
Date: 20120426			Time: 0632	Lat: 31° 39.828 N			Long: 64° 10.062 W			Samplers:							
Date: 20120426			Time: 0741	Lat: 31° 38.804 N			Long: 64° 10.698 W										
Niskin #	Depth	Niskin temp	~~Oxygens~~ ^{14}C PRODUCTION	~~DIC Bates~~	DIC Keeling	TOC/N	Sugars	Salts	Nuts	TDP / SRP / APA	Bact.	Virus/ Probes	POC/N vol =	Psi vol =	POP vol =	HPLC/FCM vol =	ChlA BBOP
				^{3}H BP													
1	1	19.9	3LT, 1DK, 1TØ	*													B280a-1
2	1																
3	20		"	*													-2
4	20																
5	40		"	*													-3
6	40																
7	60		"	*													-4
8	60																
9	80		"	*													-5
10	80																
11	100		"	*													-6
12	100																
13	120		"	*													-7
14	120																
15	140		"	*													-8
16	140																
17	200	~~18.3~~		*													
18	300	18.3		*													
19	400			*													
20	500	17.4		*													
21	600	16.1		*													
22	1000	11.4		*													
23																	
24																	

Cruise: BATS BLOOM				Leg: 280a		Cast: CTD # 3 : GF280aC3.HEX				Type: 0 - 500 m SHALLOW CORE							
Date: 20120426			Time: 1507	Lat: 31° 37.1597 N			Long: 64° 11.7509 W			Samplers: Gwyn, Rod, Sam							
Date: 20120426			Time: 1550	Lat: 31° 37.2129 N			Long: 64° 12.0671 W										
Niskin #	Depth	Niskin temp	Oxygens	DIC Bates	DIC Keeling	TOC/N	Sugars	Salts	Nuts	TDP / SRP / ~~APA~~	Bact.	~~Vieus~~/ Probes	POC/N vol = 2L	Psi vol = 2L	POP vol = 4L	HPLC/FCM vol = 4L	ChlA
				L = LARGE													
1	1	20.9	301, 313, 314	B280a-1, 1L, R		B280a-1	B280a-1	201	B280a-1	B280a-1						B280a-1	
2	1										B280a-1	P1	B280a-1	B280a-1	B280a-1		
3	10	20.8	302	-2		-2		202	-2	-2						-2	
4	10										-2		-2	-2	-2		
5	20	20.7	303	-3		-3		203	-3	-3						-3	
6	20										-3		-3	-3	-3		
7	40	20.6	304	-4, R, 4L		-4	-2	204	-4	-4						-4	
8	40										-4	P2	-4	-4	-4		
9	60	20.4	305, 315, 316	-5		-5	-3	205	-5	-5						-5	
10	60										-5		$\times 2 \cdot 10^5$	$\times 1.92^5$	-5		
11	80	20.3	306	-6		-6	-4	206	-6	-6						-6	
12	80										-6	P3	-6	-6	-6		
13	100	20.3	307	-7		-7	-5	207	-7	-7						-7	
14	100										-7		-7	-7	-7		
15	120	20.2	308	-8		-8		208	-8	-8						-8	
16	120										-8	P4	-8	-8	-8		
17	140	20.1	309, 317, 318	-9		-9	-6	209	-9	-9						-9	
18	140										-9		-9	-9	-9		
19	160	19.8	310	-10		-10	-7	210	-10	-10						-10	
20	160										-10	P5	-10	-10	-10		
21	200	19.4	311	-11		-11	-8	211	-11	-11						-11	
22	200										-11	P6	-11	-11	-11		
23	250	19.1	312, 319, 320	-12, R, 1L		-12	-9	212	-12	-12						-12	
24	250										-12	P7	-12	-12	-12		

Cruise: BATS BLOOM				Leg: 280a		Cast: CTD# 4: GF280a C4 HEX				Type: 0-1200m (MO / BBOP / BATS)								
Date: 20120426			Time: 2010	Lat: 31° 34.9551 N			Long: 64° 11.1423 W			Samplers: Gwyn, Rod, Sam, Natasha								
Date: 20120426			Time: 2135	Lat: 31° 34.0508 N			Long: 64° 11.6414 W											
Niskin #	Depth	Niskin temp	Oxygens	DIC Bates	~~DIC Keeling~~	TOC/N	Sugars	Salts	Nuts	TDP / ~~SRP / APA~~	Bact.	~~Virus~~/ Probes	POC/N vol = 3L	Psi vol = 2L	POP vol = 4L	~~HPLC/FCM vol=~~	~~CHTA~~ Chl BBOP	Ap
					BACT DNA											CDOM		
1	1				B280a-1											1	B280a-1	-1
2	10															2	-2	
3	20															3	-3	-2
4	40				-2											4	-4	-3
5	60															5	-5	-4
6	80				-3											6	-6	-5
7	100															7	-7	-6
8	120				-4											8	-8	-7
9	140															9	-9	
10	160				-5											10	-10	
11*	200				-6											11	-11	-8
12	250				-7											12	-12	
13	300	18.8	321, 403, 404	B280a-13	-8	B280a-13	B280a-10	213	B280a-13 A/B	B280a-13		P8						
14	300												B280a-13	B280a-13	B280a-13	13		
15	400	18.2	322	-14		-14		214	-14 A/B	-14								
16	400												-14	-14	-14	14		
17	500	17.5	323	-15		-15		215	-15 A/B	-15								
18	500												-15	-15	-15	15		
19	700							216										
20	800	17.4	324					217										
21	900							218										
22	1000	11.0	401					219										
23	1200	10.6	402, 405, 406					220										
24	1200							221										

Cruise: B280A				Leg: 1		Cast: #5				Type: CTD - Post Production							
Date: 26 April 2012			Time: 2359	Lat: 31°33.1433 N			Long: 064°11.0042 W			Samplers:							
Date: 20120427			Time: 0028	Lat: 31° 32.7426 N			Long: 64° 11.0809 W										
Niskin #	Depth	Niskin temp	~~Oxygens~~ HANS CHRISTIAN $\delta^{18}O$	~~DIC Bates~~	DIC Keeling	TOC/N	Sugars	Salts	Nuts	TDP / SRP / APA	Bact.	Virus/ Probes	POC/N vol =	Psi vol =	POP vol =	HPLC/FCM vol =	ChlA
				UNSW													
1	1		*	*													
2	1			*													
3	1			*													
4	1			*													
5	1			*													
6	1			*													
7	1			*													
8	1			*													
9	1			*													
10	1			*													
11	1			*													
12	1			*													
13	1			*													
14	1			*													
15	1			*													
16	1			*													
17	1			*													
18	1			*													
19	1			*													
20	1			*													
21	1			*													
22	1			*													
23	1			*													
24	1			*													

Cruise: BATS 280a / AE1210		Leg:	Cast: C7D6 ~~8~~ 6 GP280 ~~58~~ C6 HEX		Type: 0-1200M SS #8
Date: 20120427	Time: 0707	Lat: 31° 50.958'N	Long: ~~64~~ 63° 48.252'N		Samplers: NONE / UPPER 200M REL. WARM 20C @ 100M 19C @ 180M
Date: 20120427	Time: 0805	Lat: 31° 51.210'W	Long: 63° 48.399'.		~~OEM~~ OMZ ~ 750m.

Niskin #	Depth	Niskin temp	Oxygens	DIC Bates	DIC Keeling	TOC/N	Sugars	Salts	Nuts	TDP / SRP / APA	Bact.	Virus/ Probes	POC/N vol =	Psi vol =	POP vol =	HPLC/FCM vol =	ChlA
1																	
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

NONE

Cruise: BATS BLOOM				Leg: 280a		Cast: CTD #7: GF280aC7.HEX				Type: (0-1200m) SPATIAL STATION #3							
Date: 20120427		Time: 1019		Lat: 32° 09.580N			Long: 64° ~~00~~ 01.130W			Samplers: No Samples							
Date: 20120427		Time: 1112		Lat: 32° 10.011N			Long: 64° 00.886 W										
Niskin #	Depth	Niskin temp	Oxygens	DIC Bates	DIC Keeling	TOC/N	Sugars	Salts	Nuts	TDP / SRP / APA	Bact.	Virus/ Probes	POC/N vol =	Psi vol =	POP vol =	HPLC/FCM vol =	ChlA
1																	
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

No Samples