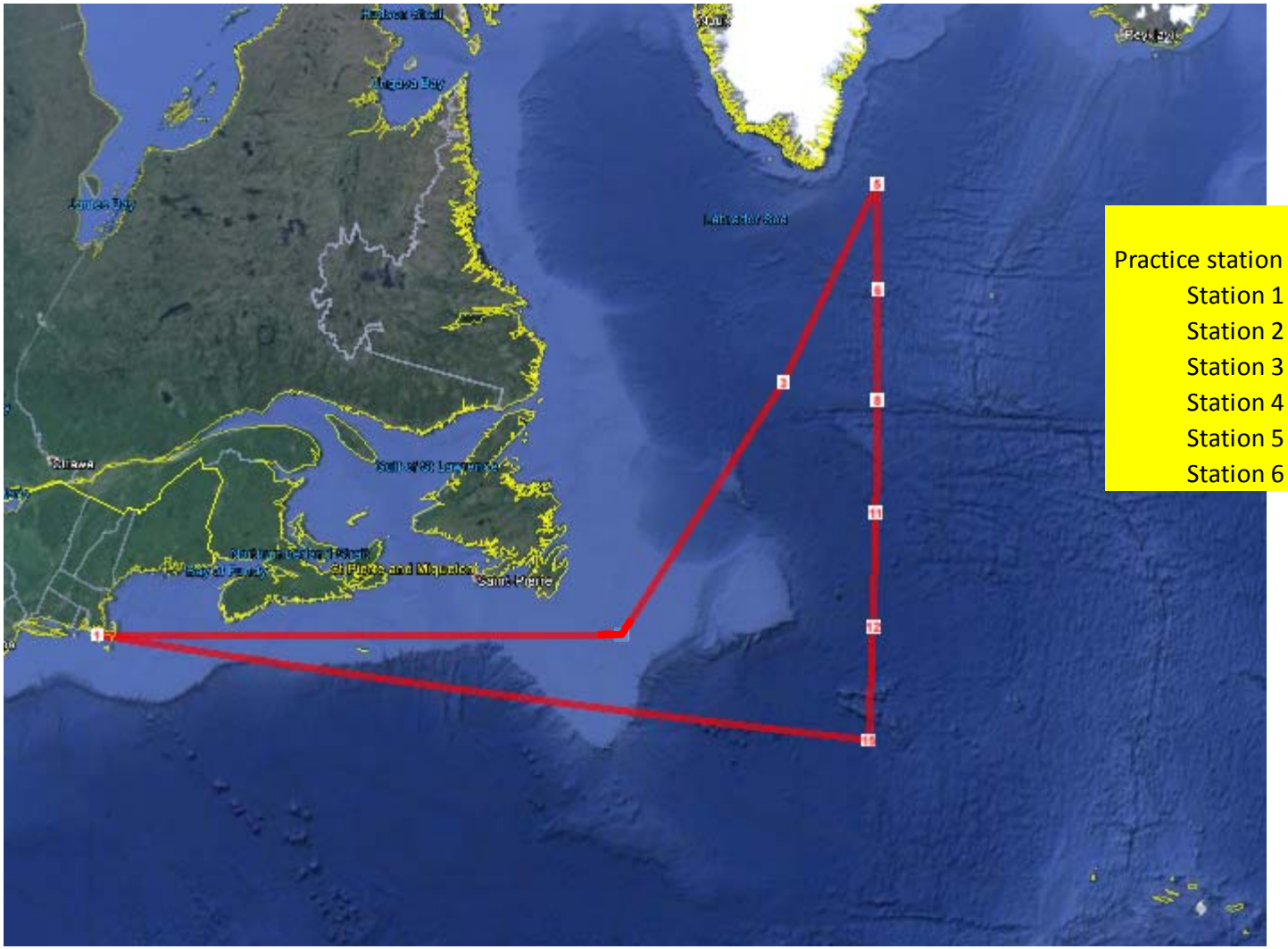

	Latitude	Longitude
Practice station	53.5	-44.4
Station 1	59.5	-40.0
Station 2	56.3	-40.0
Station 3	53.2	-40.0
Station 4	50.0	-40.0
Station 5	46.9	-40.0
Station 6	43.7	-40.0

Date	Sunrise (40°)	Sunset (40°)	Sunrise (60°)	Sunset (60°)
May 11	4:30	6:45	3:10	8:00
June 5	4:10	7:00	2:20	9:00

Station #X PLAN OF DAY

(Station #X initial coordinates: XX° XX.X' N, YY° YY'W)

(enter date here)	
22:30	secure overboard dumping
23:00	Approach station & deploy 3 surface drifters as ship slows into position (*+ possible 1 float deployment*)
23:10	Maintain ship following drifter at safe distance until morning operations complete
23:10 - 23:35	Deploy ecosounder & seasweep (if conditions allow)
23:35 - 00:30	Biology #1 CTD/rosette cast (300 m)
01:20 - 02:10	Biology #2 CTD/rosette cast (300 m)
03:30 - 06:00	Deep CTD/rosette cast (1500 m)
06:20 - 06:30	Radiosonde launch
(*06:30 - 11:00*	*Open time window for operations of interest*)
11:00 - 12:30	Optics - IOP/ Hyperpro/COPS - ***block change-out required***
(12:30 - 12:40)	Radiosonde launch - if flight day)
13:00 - 15:30	Deep CTD/rosette cast (1500 m) - ***block change-out required***
15:30 - 16:00	Recover seasweep
16:00 - 18:00	Midwater trawl @ 4 knots, maintaining wind from forward to allow aerosol sampling
16:20 - 16:30	Radiosonde launch
18:00 - 19:00	Overboard dumping; Recover Ecosounder
18:30 - 19:30	Return to station at full speed. Secure overboard dumping within 2 miles of station. Notify aerosol teams that wind will be from the stern for ~1 hr
19:30	Maintain ship following drifter at safe distance until morning operations complete
19:30 - 20:00	Deploy seasweep (if conditions allow) & Ecosounder
22:00 - 23:30	Optics - IOP cast - ***block change-out required***
23:00 - 23:30	Zooplankton net cast
23:35 - 00:30	Biology #1 CTD/rosette cast (300 m) - ***block change-out required***

Station #X PLAN OF DAY (continued)

(enter date here)	
01:20 - 02:10	Biology #2 CTD/rosette cast (300 m)
02:10 - 02:40	Recover ecosounder & seasweep
02:40	**Depart for next station**
03:00	When 2+ miles from station, overboard dumping resumes

Biology Day 1

Cast #1

Bottlle #	**Depth**	PI
1	200 m	Krintina
2	Deep / 1%	Susanne
3	Deep / 1%	Susanne
4	Deep / 1%	Kay
5	Deep / 1%	Kay
6	Deep / 1%	Kay
7	Deep / 1%	Kristina
8	Middle / 20%	Susanne
9	Middle / 20%	Susanne
10	Middle / 20%	Kay
11	Middle / 20%	Kay
12	Middle / 20%	Kay
13	Middle / 20%	Jason
14	Surface / 5 m	Susanne
15	Surface / 5 m	Susanne
16	Surface / 5 m	Susanne
17	Surface / 5 m	Susanne
18	Surface / 5 m	Liz
19	Surface / 5 m	Liz
20	Surface / 5 m	Kay
21	Surface / 5 m	Kay
22	Surface / 5 m	Kay
23	Surface / 5 m	Jason
24	Surface / 5 m	Kristina

Cast #2

Bottlle #	**Depth**	PI
1	200 m	Krintina
2	Deep / 1%	Susanne
3	Deep / 1%	Susanne
4	Deep / 1%	Kay
5	Deep / 1%	Kay
6	Deep / 1%	Kim/Kristen
7	Deep / 1%	**OPEN**
8	Deep / 1%	**OPEN**
9	Middle / 20%	Susanne
10	Middle / 20%	Susanne
11	Middle / 20%	Kay
12	Middle / 20%	Kay
13	Middle / 20%	Kim
14	Surface / 5 m	Susanne
15	Surface / 5 m	Susanne
16	Surface / 5 m	Susanne
17	Surface / 5 m	Susanne
18	Surface / 5 m	Liz
19	Surface / 5 m	Liz
20	Surface / 5 m	**OPEN**
21	Surface / 5 m	**OPEN**
22	Surface / 5 m	Kay
23	Surface / 5 m	Kay
24	Surface / 5 m	Kim/Kristina

Biology Day 2

Cast #1

Bottlle #	**Depth**	PI
1	Deep / 1%	**Open**
2	Deep / 1%	Susanne
3	Deep / 1%	Susanne
4	Deep / 1%	Liz
5	Deep / 1%	Kay
6	Deep / 1%	Kay
7	Deep / 1%	Kay
8	Deep / 1%	**Open**
9	Middle / 20%	**Open**
10	Middle / 20%	Susanne
11	Middle / 20%	Susanne
12	Middle / 20%	Liz
13	Middle / 20%	Kay
14	Middle / 20%	Kay
15	Middle / 20%	Kay
16	Surface / 5 m	Kim
17	Surface / 5 m	Susanne
18	Surface / 5 m	Susanne
19	Surface / 5 m	Liz
20	Surface / 5 m	Kay
21	Surface / 5 m	Kay
22	Surface / 5 m	Kay
23	Surface / 5 m	Jason
24	Surface / 5 m	Jason

Cast #2

Bottlle #	**Depth**	PI
1	Deep / 1%	**Open**
2	Deep / 1%	Susanne
3	Deep / 1%	Susanne
4	Deep / 1%	Liz
5	Deep / 1%	Kay
6	Deep / 1%	Kay
7	Deep / 1%	Kay
8	Deep / 1%	Kim
9	Middle / 20%	**Open**
10	Middle / 20%	Susanne
11	Middle / 20%	Susanne
12	Middle / 20%	Liz
13	Middle / 20%	Kay
14	Middle / 20%	Kay
15	Middle / 20%	Kay
16	Surface / 5 m	**Open**
17	Surface / 5 m	Kim
18	Surface / 5 m	Susanne
19	Surface / 5 m	Susanne
20	Surface / 5 m	Liz
21	Surface / 5 m	Kay
22	Surface / 5 m	Kay
23	Surface / 5 m	Kay
24	Surface / 5 m	**Open**

Morning Deep Cast (03:30 - 06:00)

Bottle #	1	2	3	4	5	6	7	8	9	10	11	12
Depth (m) >	1500	1250	1000	750	500	400	300	200	200	150	150	100
Order												
1	D.O	D.O	D.O	D.O	D.O	D.O	D.O	Chl	D.O	Chl	D.O	HPLC
2	DOM / DCNS	DOM / DCNS	DOM / DCNS	DOM / DCNS	DOM / DCNS	DOM / DCNS	DOM / DCNS	EER / TEP / VA	DOM / DCNS	EER / TEP / VA	DOM / DCNS	Chl
3	NUTS	NUTS	NUTS	NUTS	NUTS	NUTS	NUTS	FC	NUTS	FC	NUTS	EER / TEP / VA
4	cDOM	cDOM	cDOM	cDOM	cDOM	cDOM	cDOM	POC	cDOM	POC / POC-3	cDOM	FC
5	BB	BB	BB	BB	BB / BP	BB	DNA		DNA		DNA	POC
6	POC		POC		POC		BB / BP		BB / BP		BB / BP	
7									IFCB		IFCB	
Bottle #	13	14	15	16	17	18	19	20	21	22	23	24
Depth (m) >	100	75	75	50	50	25	25	10	10	5	5	**OPEN**
Order												
1	D.O	HPLC	D.O	HPLC	D.O	HPLC	D.O	Chl	D.O	HPLC	D.O	
2	DOM / DCNS	Chl	DOM / DCNS	Chl	DOM / DCNS	Chl	DOM / DCNS	EER / TEP / VA	DOM / DCNS	Chl	DOM / DCNS	
3	NUTS	EER / TEP / VA	NUTS	EER / TEP / VA	NUTS	EER / TEP / VA	NUTS	FC	NUTS	EER / TEP / VA	NUTS	
4	cDOM / AP	FC	cDOM / AP	FC	cDOM / AP	FC	cDOM / AP		cDOM / AP	FC	cDOM / AP	
5	DNA	POC	DNA	POC	DNA	POC	DNA		BB / BP	IFCB	DNA	
6	BB / BP		BB / BP		BB / BP		BB / BP		IFCB		BB / BP	
7	IFCB		IFCB		IFCB		IFCB				VOCC	

Abbreviations	**Lead**
D-Grazing = diluent for standard grazing experiment	**Menden-Deuer**
D-Virus = diluent for viral loss rate experiment	**Bidle/Harvey**
D-Virus = diluent for viral loss rate experiment #2	**Mojica**
Grazing = dilution experiment with standard diluent	**Menden-Deuer**
Grazing + light = standard dilution experiment different light treatments	**Menden-Deuer**
Virus = dilution experiment with viral filtered diluent	**Bidle/Harvey**
Virus 2 = dilution experiment #2 with viral filtered diluent	**Mojica**
VOCC = volatile organic carbon cycling	**Halsey**
PP = 14C-based primary production	**Halsey**
mu-C = phytoplankton division rate and biomass	**Behrenfeld**
D.O. = dissolved oxygen	**Boss**
DOM = dissolved organic material	**Carlson**
cDOM = colored dissolved organic material	**Nelson**
NUTS = nutrients	**Menden Deuer/Carlson/Behrenfeld**
DCNS = dissolved carbohydrates & neutral sugars	**Carlson**

BB = bacterial biomass	**Carlson**
BA = bacterial abundance	**Bidle**
BP = bacterial production	**Carlson**
DNA = genomic assessment of microbial diversity	**Giovannoni**
VP = Viral production	**Mojica**
Chl = chlorophyll concentration	**Neson/Menden Deuer**
POC = particulate organic carbon	**Behrenfeld**
IFCB = imaging flow cytobot	**Boss**
VA = viral abundance	**Bidle**
TEP = transparent exopolymer	**Bidle**
ectohydrolytic enzyme rates	**Bidle**
phytoplankton composition (via flow cytometery)	**Bidle**
ABM - Additional Bidle measurements (lipids, flow cyt, biomass)	**Bidle**
AP - particulate (phytoplankton?) absorption spectrum	**Nelson**
HPLC - high performance liquid chromatography	**Nelson**
DOM Remin - DOM remineralization	**Nelson / Carlson**

Afternoon Deep Cast (15:30 - 18:00)

Bottle #	1	2	3	4	5	6	7	8	9	10	11	12
Depth (m) >	1500	1000	750	500	500	400	300	~300	~300	~300	200	150
Order												
1	DOM / DCNS	DOM / DCNS	DOM / DCNS	DOM-remin	DOM / DCNS	DOM / DCNS	DOM / DCNS	remin exp	remin exp	remin exp	DOM / DCNS	DOM / DCNS
2	cDOM	cDOM	cDOM	experiment	cDOM	cDOM	cDOM	Carlson	Carlson	Carlson	cDOM	cDOM
3											Chl	Chl
4											VOCC	FC
5											FC	IFCB
6											IFCB	
7												
Bottle #	13	14	15	16	17	18	19	20	21	22	23	24
Depth (m) >	100	75	50	25	10	10	10	10	5	**OPEN**	**OPEN**	**OPEN**
Order												
1	DOM / DCNS	DOM / DCNS	DOM / DCNS	DOM / DCNS	DOM / DCNS	remin exp	remin exp	remin exp	DOM / DCNS			
2	cDOM / AP	cDOM / AP	cDOM / AP	cDOM / AP	cDOM / AP	Carlson	Carlson	Carlson	cDOM / AP			
3	HPLC	HPLC	HPLC	HPLC	Chl				HPLC			
4	Chl	Chl	Chl	Chl	FC				Chl			
5	FC	FC	FC	FC	IFCB				VOCC			
6	IFCB	IFCB	IFCB	IFCB					FC			
7									IFCB			

Property	vol (ml)		
DOM / DCNS	400		
cDOM / AP	150		
HPLC	2000		
IFCB	50		
Chl	500		
FC	50		
VOCC	1000		
	4150	<<Total Volume	
Remin	10 L		