

f

Cast #	1		
Date & Time	6/25/15	start 6:45 am	end 7:20
Hydrolab Info			
Depth		0.5	
Temp		24.06	
Spc		6.140	
Sal		3.40	
LDO 1		9.30	
LDO %		112.37	
pH		7.47	
PAR		350	
Chl		5.08	
Samples Collected			
	Vol (ml)	Complete	Notes - ie # of bottle
1. Cell Counts	n/a		
2. DNA/RNA	600/600	600/600 ✓	TWO samples
3. POM	350	✓	
4. ChlA	400	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	699	
11. DIC	n/a	682	
12. H ₂ S	n/a	✓	
13. Fe/Mn Particulate	450	✓	
13. Fe/Mn Dissolved		✓	

0

P

Cast #	7		
Date & Time	6/25	7:22	
Hydrolab Info			
Depth	2.00		
Temp	24.07		
Spc	6.153		
Sal	3.40		
LDO 1	9.36		
LDO %	113.0		
pH	7.47		
PAR	317		
Chl	3.98		
Samples Collected			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600/600	✓	Two samples
3. POM	325	✓	
4. ChlA	300	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	605	
11. DIC	n/a	#600	✓
12. H ₂ S	n/a	605	✓
13. Fe/Mn Particulate	360		
13. Fe/Mn Dissolved		✓	

P

Cast #	1		
Date & Time	6/25	7:50	
<i>Hydrolab Info</i>			
Depth	3.03		
Temp	22.13		
Spc	2.713		
Sal	5.00		
LDO 1	16.05		
LDO %	189.09		
pH	7.72		
PAR	228		
Chl	35.17		
<i>Samples Collected</i>			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a		
2. DNA/RNA	600/600		Two samples
3. POM	220		
4. ChlA	220		
5. DOM	n/a		
6. NO ₃ +NO ₂	n/a		
7. NO ₂	n/a		
8. NH ₄	n/a		
9. PO ₄	n/a		
10. SO ₄	n/a	683	
11. DIC	n/a	690	
12. H ₂ S	n/a		
13. Fe/Mn Particulate	200		
13. Fe/Mn Dissolved	—		

f

Cast #	1		
Date & Time	6/25	8:10	
<i>Hydrolab Info</i>			
Depth	4.0		
Temp	18.73		
Spc	11.95		
Sal	6.85		
LDO 1	14.58		
LDO %	162.1		
pH	6.99		
PAR	102		
Chl	38.9		
<i>Samples Collected</i>			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600/600	✓	Two samples
3. POM	150	✓	
4. ChlA	200	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	688	
11. DIC	n/a	689	
12. H ₂ S	n/a	✓	
13. Fe/Mn Particulate	120	✓	
13. Fe/Mn Dissolved	-	✓	

P

Cast #	1		
Date & Time	6/25	8:30	
Hydrolab Info			
Depth	6.00		
Temp	15.24		
Spc	14.90		
Sal	8.65		
LDO 1	1.74		
LDO %	17.8		
pH	6.48		
PAR	15		
Chl	40.77		
Samples Collected			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a		
2. DNA/RNA	600/600	✓	Two Samples
3. POM	250	✓	
4. ChlA	300		
5. DOM	n/a		
6. NO ₃ +NO ₂	n/a		
7. NO ₂	n/a		
8. NH ₄	n/a		
9. PO ₄	n/a		
10. SO ₄	n/a	695	
11. DIC	n/a	671	
12. H ₂ S	n/a		
13. Fe/Mn Particulate	250		
13. Fe/Mn Dissolved	—		

P

Cast #	1		
Date & Time	6/25	8:55	
Hydrolab Info			
Depth	8.0		
Temp	12.67		
Spc	15.97		
Sal	9.31		
LDO 1	0		
LDO %	0		
pH	6.49	0	
PAR		0	
Chl		11.40	
Samples Collected			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600/600	✓	Two samples
3. POM	300	✓	
4. ChlA	300	✓	
5. DOM	n/a		
6. NO ₃ +NO ₂	n/a		
7. NO ₂	n/a		
8. NH ₄	n/a		
9. PO ₄	n/a		
10. SO ₄	n/a	628	
11. DIC	n/a	686	
12. H ₂ S	n/a		
13. Fe/Mn Particulate	350		
13. Fe/Mn Dissolved	—		

D

Cast #	1		
Date & Time	6/25	9:15	
Hydrolab Info			
Depth	10.0		
Temp	12.06		
Spc	28.83		
Sal	17.71		
LDO 1	0		
LDO %	0		
pH	6.88	0	
PAR	0		
Chl	4.98		
Samples Collected			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600/600	✓	Two samples
3. POM	200	✓	
4. ChlA	275	✓	
5. DOM	n/a		
6. NO ₃ +NO ₂	n/a		
7. NO ₂	n/a		
8. NH ₄	n/a		
9. PO ₄	n/a		
10. SO ₄	n/a	684	
11. DIC	n/a	697	
12. H ₂ S	n/a		
13. Fe/Mn Particulate	240		
13. Fe/Mn Dissolved	—		

P

Cast #	1		
Date & Time	6/25	9:40	10:00
Hydrolab Info			
Depth	12.0		
Temp	12.45		
Spc	29.40		
Sal	18.15		
LDO 1	0		
LDO %	0		
pH	6.90		
PAR	0		
Chl	5.2A		
Samples Collected			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600/600	✓	Two Samples
3. POM	215	✓	
4. ChlA	250	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	627	
11. DIC	n/a	698	
12. H ₂ S	n/a	✓	
13. Fe/Mn Particulate	200	✓	
13. Fe/Mn Dissolved	—	✓	

P

Cast #	2		
Date & Time	6/25/15	10:12	
<i>Hydrolab Info</i>			
Depth	0.5		
Temp	24.54		
Spc	6.150		
Sal	3.40		
LDO 1	9.36		
LDO %	114.0		
pH	7.56		
PAR	2000		
Chl	1.69		
<i>Samples Collected</i>			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600	✓	
3. POM	350	✓	
4. ChlA	440	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	632	✓
11. DIC	n/a	665	✓
12. H ₂ S	n/a	✓	
13. Fe/Mn Particulate	400	✓	
13. Fe/Mn Dissolved	—	✓	

P

Cast #	2		
Date & Time	6/25	9:10:31	
<i>Hydrolab Info</i>			
Depth	2.0		
Temp	24.14		
Spc	6.141		
Sal	3.40		
LDO 1	9.32		
LDO %	112.6		
pH	7.51		
PAR	892		
Chl	2.50		
<i>Samples Collected</i>			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600	✓	
3. POM	380	✓	
4. ChlA	435	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	618	-
11. DIC	n/a	6097	-
12. H ₂ S	n/a	-	
13. Fe/Mn Particulate	500	✓	
13. Fe/Mn Dissolved	-	✓	

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Cast #	2		
Date & Time	6/25	11:26	Need to Replace C batteries 17
Hydrolab Info			
Depth	3.0		Hydrolab
Temp	22.25		
Spc	9.0		
Sal	5.30		
LDO 1	16.64		
LDO %	195.2		
pH	8.25		
PAR	580		
Chl	18.37		
Samples Collected			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600	✓	
3. POM	225	✓	
4. ChlA	250	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	633	
11. DIC	n/a	635	
12. H ₂ S	n/a	✓	
13. Fe/Mn Particulate	✓	220 ml	
13. Fe/Mn Dissolved		✓	

Cast #	2		
Date & Time	6/25/15	1150	
Hydrolab Info			
Depth	4.0		
Temp	18.48		
Spc	6.96	12.15	
Sal	6.92		
LDO 1	14.42		
LDO %	158.6		
pH	6.98		
PAR	274		
Chl	38.75		
Samples Collected			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600	✓	
3. POM	175	✓	
4. ChlA	175	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	639	
11. DIC	n/a	613	
12. H ₂ S	n/a	✓	
13. Fe/Mn Particulate	165	✓	
13. Fe/Mn Dissolved	—	✓	

Cast #	2		
Date & Time	6/25	12:06	
<i>Hydrolab Info</i>			
Depth	6.0		
Temp	15.11		
Spc	15.00		
Sal	8.71		
LDO 1	1.65		
LDO %	17.2		
pH	6.49		
PAR	33		
Chl	35.7		
<i>Samples Collected</i>			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600	✓	
3. POM	340	✓	
4. ChlA	290	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	621	✓
11. DIC	n/a	619	✓
12. H ₂ S	n/a	✓	
13. Fe/Mn Particulate	250	✓	
13. Fe/Mn Dissolved	—	✓	

Cast #	2		
Date & Time	6/25	12:20	
Hydrolab Info			
Depth	8.0		
Temp	12.57		
Spc	16.43		
Sal	9.59		
LDO 1	0		
LDO %	0		
pH	6.52		
PAR	0		
Chl	6.90		
Samples Collected			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600	✓	
3. POM	340	—	
4. ChlA	500	—	
5. DOM	n/a	—	
6. NO ₃ +NO ₂	n/a	—	
7. NO ₂	n/a	—	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	634	637 ✓
11. DIC	n/a	624	✓
12. H ₂ S	n/a	✓	
13. Fe/Mn Particulate	450	✓	
13. Fe/Mn Dissolved	—	✓	

7.4 V

- Survey of on
Hydrolabs died P

Cast #	2	14:05	
Date & Time	6/25	12:41	
Hydrolab Info			
Depth	10.0		
Temp	12.12		
Spc	28.90		
Sal	17.88		
LDO 1	0		
LDO %	0		
pH	6.82		
PAR	0		
Chl	5.2		
Samples Collected			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600	✓	
3. POM	230	✓	
4. ChlA	260		
5. DOM	n/a		
6. NO ₃ +NO ₂	n/a		
7. NO ₂	n/a		
8. NH ₄	n/a		
9. PO ₄	n/a		
10. SO ₄	n/a	626	
11. DIC	n/a	640	
12. H ₂ S	n/a		
13. Fe/Mn Particulate			
13. Fe/Mn Dissolved			

7.4V

P

Cast #	2		
Date & Time	6/25	14:22	
<i>Hydrolab Info</i>			
Depth	12.0		
Temp	12.44		
Spc	29.46		
Sal	18.17		
LDO 1	0		
LDO %	0		
pH	6.87		
PAR	0		
Chl	5.42		
<i>Samples Collected</i>			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600	✓	
3. POM	240	✓	
4. ChlA	210	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	C-096	
11. DIC	n/a	C-093	
12. H ₂ S	n/a		
13. Fe/Mn Particulate	200	✓	
13. Fe/Mn Dissolved	—	✓	

Cast #	3		
Date & Time	6/25	2:14:44	
Hydrolab Info			
Depth	0.50		
Temp	24.82		
Spc	6.141		
Sal	3.39		
LDO 1	9.60		
LDO %	117.9		
pH	7.58		
PAR	378	(X) boat shading problem (X)	
Chl	1.42		
Samples Collected			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a		
2. DNA/RNA	700	✓	High Volume (X)
3. POM	500	✓	
4. ChlA	500	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	C-100	
11. DIC	n/a	C-098	
12. H ₂ S	n/a	✓	
13. Fe/Mn Particulate	440	✓	
13. Fe/Mn Dissolved	-	✓	

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(X)

(X)

7.3V

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Cast #	3		
Date & Time	6/25	15:01	
Hydrolab Info			
Depth	2.0		
Temp	24.42		
Spc	6.283		
Sal	3.49		
LDO 1	10.11		
LDO %	123.9		
pH	7.75		
PAR	211	-cloudy and boat shadow	
Chl	2.60		
Samples Collected			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a		
2. DNA/RNA	400	700	(x) High Volume
3. POM	500		
4. ChlA	400		
5. DOM	n/a		
6. NO ₃ +NO ₂	n/a		
7. NO ₂	n/a		
8. NH ₄	n/a		
9. PO ₄	n/a		
10. SO ₄	n/a	C-090	
11. DIC	n/a	C-099	
12. H ₂ S	n/a		
13. Fe/Mn Particulate	700 440	✓	
13. Fe/Mn Dissolved	—	✓	

(x)

Cast #	3		
Date & Time	6/25	15:24	
<i>Hydrolab Info</i>			
Depth	3.0		
Temp	22.87		
Spc	8.630		
Sal	4.73		
LDO 1	13.51		
LDO %	185.3		
pH	8.23		
PAR	266		
Chl	23.40		
<i>Samples Collected</i>			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a		
2. DNA/RNA	600	✓	
3. POM	400	✓	
4. ChlA	400	✓	
5. DOM	n/a		
6. NO ₃ +NO ₂	n/a		
7. NO ₂	n/a		
8. NH ₄	n/a		
9. PO ₄	n/a		
10. SO ₄	n/a	C-094	
11. DIC	n/a	C-095	
12. H ₂ S	n/a		
13. Fe/Mn Particulate		400 ml	
13. Fe/Mn Dissolved			

Cast #	3		
Date & Time	6/25	15:52	
Hydrolab Info			
Depth	4.0		
Temp	18.70		
Spc	12.00		
Sal	6.91		
LDO 1	14.85		
LDO %	165.7		
pH	7.07		
PAR	130		
Chl	34.64		
Samples Collected			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600	✓	
3. POM	190	✓	
4. ChlA	190	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	DID NOT DO
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	C-091	
11. DIC	n/a	C-092	
12. H ₂ S	n/a	✓	
13. Fe/Mn Particulate	200ml	✓	
13. Fe/Mn Dissolved	200ml	✓	

P

Cast #	3		
Date & Time	6/25	1620	
Hydrolab Info			
Depth		6m	
Temp		15.14	
Spc		14.95	
Sal		8.71	
LDO 1		1.52	
LDO %		15.7	
pH		6.52	
PAR		14	
Chl		32.61	
Samples Collected			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600	✓	
3. POM	175	✓	
4. ChlA	200	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	C-058	
11. DIC	n/a	C-054	
12. H ₂ S	n/a	✓	
13. Fe/Mn Particulate	250ml	✓	
13. Fe/Mn Dissolved		✓	

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Cast #	3		
Date & Time	6/25/15	1653	
Hydrolab Info			
Depth	7.97		
Temp	12.70		
Spc	16.17		
Sal	9.43		
LDO 1	0		
LDO %	0		
pH	6.55		
PAR	0		
Chl	8.37		
Samples Collected			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600ml	✓	pinkish?
3. POM	400ml	✓	
4. ChlA	400ml	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	C-021	
11. DIC	n/a	C-103	
12. H ₂ S	n/a	✓	
13. Fe/Mn Particulate		400 ml	
13. Fe/Mn Dissolved		✓	

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Cast #	3		
Date & Time	6/25/15	1715	
Hydrolab Info			
Depth	10 m		
Temp	12.07		
Spc	28.79		
Sal	17.75		
LDO 1	0		
LDO %	0		
pH	6.91		
PAR	0		
Chl	4.88		
Samples Collected			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600 ml	✓	
3. POM	225 ml	✓	
4. ChlA	250 ml	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	C-067	
11. DIC	n/a	C-059	
12. H ₂ S	n/a	C-067	
13. Fe/Mn Particulate	275 ml	✓	
13. Fe/Mn Dissolved		✓	

F

Cast #	3		
Date & Time	1740	6/25/15	
Hydrolab Info			
Depth	11.95		
Temp	12.48		
Spc	29.44		
Sal	18.17		
LDO 1	0		
LDO %	0		
pH	6.93		
PAR	0		
Chl	5.42		
Samples Collected			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	000	✓	
3. POM	225	✓	
4. ChlA	210	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	C-013	
11. DIC	n/a	C-053	
12. H ₂ S	n/a	C-5	
13. Fe/Mn Particulate		180ml	
13. Fe/Mn Dissolved		✓	

P

Cast #	4		
Date & Time	6/25/15	1815	
<i>Hydrolab Info</i>			
Depth	0.52M		
Temp	24.88		
Spc	6.173		
Sal	3.42		
LDO 1	9.58		
LDO %	117.3		
pH	7.60		
PAR	202		
Chl	3.32		
<i>Samples Collected</i>			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600ml	✓	
3. POM	520ml	✓	
4. ChlA	500ml	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	C-065	
11. DIC	n/a	C-088	
12. H ₂ S	n/a	✓	
13. Fe/Mn Particulate		450ml	
13. Fe/Mn Dissolved		✓	

P

Cast #	4		
Date & Time	6/25/19	1840	
Hydrolab Info			
Depth	1.97		
Temp	24.81		
Spc	6.178		
Sal	3.42		
LDO 1	9.57		
LDO %	117		
pH	7.57		
PAR	80		
Chl	3.69		
Samples Collected			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600	✓	
3. POM	450	✓	
4. ChlA	500	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	C-014	
11. DIC	n/a	C-052	
12. H ₂ S	n/a	✓	
13. Fe/Mn Particulate		500 ml	
13. Fe/Mn Dissolved		✓	

P

Cast #	4		
Date & Time	6/25	19:02	
<i>Hydrolab Info</i>			
Depth	3.0		
Temp	22.75		
Spc	8.192		
Sal	4.60		
LDO 1	15.52		
LDO %	183.3		
pH	8.34		
PAR	31		
Chl	33.72		
<i>Samples Collected</i>			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600	✓	
3. POM	425	✓	
4. ChlA	400	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	C-102	
11. DIC	n/a	C-101	
12. H ₂ S	n/a	✓	
13. Fe/Mn Particulate	400	✓	
13. Fe/Mn Dissolved		✓	

7.2V

P

Cast #	4		
Date & Time	6/25	19:20	
Hydrolab Info			
Depth	4.0		
Temp	18.70		
Spc	12.00		
Sal	6.88		
LDO 1	15.17		
LDO %	169.1		
pH	7.11		
PAR	9		
Chl	34.30		
Samples Collected			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600	✓	
3. POM	225	✓	
4. ChlA	220	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	C-019	
11. DIC	n/a	C-051	
12. H ₂ S	n/a	✓	
13. Fe/Mn Particulate	225 ml	✓	
13. Fe/Mn Dissolved		✓	

Cast #	4		
Date & Time	6/25/15	1940	
<i>Hydrolab Info</i>			
Depth	6.0		
Temp	15.10		
Spc	15.00		
Sal	8.74		
LDO 1	1.43		
LDO %	14.9		
pH	6.53		
PAR	0		
Chl	44.47		
<i>Samples Collected</i>			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600	✓	
3. POM	250	✓	
4. ChlA	250		
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	C-050	
11. DIC	n/a	C-064	
12. H ₂ S	n/a	✓	
13. Fe/Mn Particulate	200 ml	✓	
13. Fe/Mn Dissolved		✓	

Cast #	4		
Date & Time	6/25/15	1958	
<i>Hydrolab Info</i>			
Depth	8.0		
Temp	12.57		
Spc	16.69		
Sal	9.64		
LDO 1	0		
LDO %	0		
pH	6.56		
PAR	0		
Chl	7.96		
<i>Samples Collected</i>			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600	✓	
3. POM	400	✓	
4. ChlA	480	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	C-106	
11. DIC	n/a	C-015	
12. H ₂ S	n/a		
13. Fe/Mn Particulate	450 ml	✓	
13. Fe/Mn Dissolved		✓	

F. V V

J

Cast #	4		
Date & Time	6/25	20:15	
Hydrolab Info			
Depth	10.0		
Temp	12.20		
Spc	29.20		
Sal	18.0		
LDO 1	0		
LDO %	0		
pH	6.92		
PAR	0		
Chl	4.99		
Samples Collected			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600	✓	
3. POM	500	✓	
4. ChlA	600	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	C-049	
11. DIC	n/a	C-063	
12. H ₂ S	n/a	✓	
13. Fe/Mn Particulate	650	✓	
13. Fe/Mn Dissolved	✓	✓	

7.1 V

P

Cast #	4	4	
Date & Time	6/25	20:36	
Hydrolab Info			
Depth	12.0		
Temp	12.44		
Spc	29.41		
Sal	18.17		
LDO 1	0		
LDO %	0		
pH	6.94		
PAR	0		
Chl	5.17		
Samples Collected			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600	✓	
3. POM	250	✓	
4. ChlA	240	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	C-018	
11. DIC	n/a	C089	
12. H ₂ S	n/a	✓	
13. Fe/Mn Particulate	180	✓	
13. Fe/Mn Dissolved	—	✓	

P

Cast #	5		
Date & Time	6/25/15	02102	
<i>Hydrolab Info</i>			
Depth	0.50		
Temp	24.73		
Spc	6.174		
Sal	3.41		
LDO 1	9.45		
LDO %	115.8		
pH	7.65		
PAR	0		
Chl	4.47		
<i>Samples Collected</i>			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a		
2. DNA/RNA	600	✓	
3. POM	400	✓	
4. ChlA	600	✓	
5. DOM	n/a		
6. NO ₃ +NO ₂	n/a		
7. NO ₂	n/a		
8. NH ₄	n/a		
9. PO ₄	n/a		
10. SO ₄	n/a	C-087	
11. DIC	n/a	C-084	
12. H ₂ S	n/a		
13. Fe/Mn Particulate	500	✓	
13. Fe/Mn Dissolved	—	✓	

7.1 V

P

Cast #	4		
Date & Time	6/25	21:20	
Hydrolab Info			
Depth	2.0		
Temp	24.64		
Spc	6.207		
Sal	3.43		
LDO 1	9.65		
LDO %	117.7		
pH	7.68		
PAR	0		
Chl	4.35		
Samples Collected			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600	✓	
3. POM	350 ml	✓	
4. ChlA	630 ml	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	C-025	
11. DIC	n/a	C-010	
12. H ₂ S	n/a	✓	
13. Fe/Mn Particulate	500 ml	✓	
13. Fe/Mn Dissolved	✓	✓	

71V

P

Cast #	5	6/25/15	
Date & Time		21:40	
Hydrolab Info			
Depth	3.0		
Temp	23.02		
Spc	7.25		
Sal	4.03		
LDO 1	14.58		
LDO %	172.0		
pH	8.12		
PAR	0		
Chl	24.6		
Samples Collected			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600	✓	
3. POM	250	✓	
4. ChlA	250	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	C-085	
11. DIC	n/a	C-083	
12. H ₂ S	n/a	✓	
13. Fe/Mn Particulate	250ml	✓	
13. Fe/Mn Dissolved		✓	

7.1 V

P

Cast #	5		
Date & Time	6/25	22:00	
<i>Hydrolab Info</i>			
Depth	4.0		
Temp	18.49		
Spc	12.06		
Sal	6.90		
LDO 1	14.96		
LDO %	165.2		
pH	7.06		
PAR	0		
Chl	39.33		
<i>Samples Collected</i>			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600	✓	
3. POM	175	✓	
4. ChlA	175	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	C-034	
11. DIC	n/a	C-048	
12. H ₂ S	n/a	✓	
13. Fe/Mn Particulate	500	✓	
13. Fe/Mn Dissolved		✓	

7.1 V

P

Cast #	5		
Date & Time	6/25	22:18	
<i>Hydrolab Info</i>			
Depth	6.0		
Temp	14.98		
Spc	14.95		
Sal	8.68		
LDO 1	1.51		
LDO %	15.6		
pH	6.53		
PAR	0		
Chl	41.53		
<i>Samples Collected</i>			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600	✓	
3. POM	250	✓	
4. ChlA	250	✓	
5. DOM	n/a	/	
6. NO ₃ +NO ₂	n/a	0	
7. NO ₂	n/a	↓	
8. NH ₄	n/a	↓	
9. PO ₄	n/a	↓	
10. SO ₄	n/a	C-055	
11. DIC	n/a	C-022	
12. H ₂ S	n/a	↓	
13. Fe/Mn Particulate	250ml	↓	
13. Fe/Mn Dissolved		↓	

P

Cast #	5		
Date & Time	6/25	22:35	
<i>Hydrolab Info</i>			
Depth	8.0		
Temp	12.68		
Spc	16.34		
Sal	9.53		
LDO 1	0		
LDO %	0		
pH	6.57		
PAR	0		
Chl	9.82		
<i>Samples Collected</i>			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600	✓	
3. POM	500	✓	
4. ChlA	500	✓ ✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	C-012	
11. DIC	n/a	C-017	
12. H ₂ S	n/a	✓	
13. Fe/Mn Particulate	500ml	✓	
13. Fe/Mn Dissolved	✓	✓	

Cast #	5		
Date & Time	6/25	22:52	
Hydrolab Info			
Depth	10.0		
Temp	12.12		
Spc	28.95		
Sal	17.88		
LDO 1	0		
LDO %	0		
pH	6.92		
PAR	0		
Chl	4.70		
Samples Collected			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600	✓	
3. POM	250	✓	
4. ChlA	250	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	C-056	
11. DIC	n/a	C-057	
12. H ₂ S	n/a	✓	
13. Fe/Mn Particulate	250	✓	
13. Fe/Mn Dissolved		✓	

Cast #	5		
Date & Time	6/25	23:10	
Hydrolab Info			
Depth	12.0		
Temp	12.43		
Spc	29.41		
Sal	18.15		
LDO 1	0		
LDO %	0		
pH	6.94		
PAR	0		
Chl	5.24		
Samples Collected			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600	✓	
3. POM	300	✓	
4. ChlA	250	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	C-066	
11. DIC	n/a	C-009	
12. H ₂ S	n/a	✓	
13. Fe/Mn Particulate	250ml	✓	
13. Fe/Mn Dissolved		✓	

7.2V

P

Cast #	6		
Date & Time	6/26	00:14	
<i>Hydrolab Info</i>			
Depth	0.50		
Temp	24.58		
Spc	6.163		
Sal	3.41		
LDO 1	9.43		
LDO %	114.9		
pH	7.61		
PAR	0		
Chl	4.63		
<i>Samples Collected</i>			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	650ml	✓	
3. POM	500ml	✓	
4. ChlA	500	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	C-060	
11. DIC	n/a	C-011	
12. H ₂ S	n/a	✓	
13. Fe/Mn Particulate	400ml	✓	
13. Fe/Mn Dissolved		✓	

P

Cast #	6		
Date & Time	6/26/15	00:41	
Hydrolab Info			
Depth	1.95		
Temp	24.39		
Spc	6.217		
Sal	3.44		
LDO 1	9.34		
LDO %	113.7		
pH	7.58		
PAR	0		
Chl	4.08		
Samples Collected			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600	✓	
3. POM	550	✓	
4. ChlA	500	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	J	
8. NH ₄	n/a	J	
9. PO ₄	n/a	J	
10. SO ₄	n/a	C-046	
11. DIC	n/a	C-045	
12. H ₂ S	n/a	✓	
13. Fe/Mn Particulate	450ml	J	
13. Fe/Mn Dissolved		✓	

Cast #	6		
Date & Time	6/26/15	001:02	
Hydrolab Info			
Depth		3.02m	
Temp		22.56	
Spc		8.642	
Sal		4.88	
LDO 1		15.96	
LDO %		187.4	
pH		8.12	
PAR		0	
Chl		31.71	
Samples Collected			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600	✓	
3. POM	250	✓	
4. ChlA	300	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	C-016	
11. DIC	n/a	C-078	
12. H ₂ S	n/a	✓	
13. Fe/Mn Particulate	200	✓	
13. Fe/Mn Dissolved		✓	

P

Cast #	6		
Date & Time	6/26/15	01:29	
Hydrolab Info			
Depth	4.03		
Temp	18.78		
Spc	12.02		
Sal	6.89		
LDO 1	15.09		
LDO %	167.7		
pH	7.11		
PAR	0		
Chl	36.60		
Samples Collected			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600	✓	
3. POM	175	✓	
4. ChlA	175	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	C-061	
11. DIC	n/a	C-062	
12. H ₂ S	n/a	✓	
13. Fe/Mn Particulate	200ml	✓	
13. Fe/Mn Dissolved	✓	✓	

Cast #	6		
Date & Time	6/26/15	0153	
Hydrolab Info		6.02	
Depth		6.02	
Temp		15.13	
Spc		15.00	
Sal		8.73	
LDO 1		1.51	
LDO %		15.6	
pH		6.54	
PAR		0	
Chl		57.95	
Samples Collected			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600	✓	
3. POM	275	✓	
4. ChlA	250	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	C-036	
11. DIC	n/a	C-069	
12. H ₂ S	n/a	✓	
13. Fe/Mn Particulate	250 ml	✓	
13. Fe/Mn Dissolved		✓	

Cast #	6		
Date & Time	6/26	6/26/15	02:18
Hydrolab Info			
Depth		8.04	
Temp		12.59	
Spc		16.29	
Sal		9.56	
LDO 1		0	
LDO %		0	
pH		6.56	
PAR		0	
Chl		9.14	
Samples Collected			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600	✓	
3. POM	300	2.50 ✓	
4. ChlA	310	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	C-029	
11. DIC	n/a	C-081	
12. H ₂ S	n/a	C ✓	
13. Fe/Mn Particulate	500 ml	✓	
13. Fe/Mn Dissolved		✓	

1

Cast #	6		
Date & Time	6/26/15	08:24	
Hydrolab Info			
Depth	9.945		
Temp	12.03		
Spc	28.68		
Sal	17.69		
LDO 1	0		
LDO %	0		
pH	6.92		
PAR	0		
Chl	4.45		

Samples Collected

	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600	✓	
3. POM	250	✓	
4. ChlA	250	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	C-039	
11. DIC	n/a	C-006	
12. H ₂ S	n/a	✓	
13. Fe/Mn Particulate	250ml	✓	
13. Fe/Mn Dissolved		✓	

Cast #	6		
Date & Time	6/26/15	3:07	
Hydrolab Info			
Depth	12.02		
Temp	12.46		
Spc	29.44		
Sal	18.19		
LDO 1	0		
LDO %	0		
pH	6.94		
PAR	0		
Chl	5.37		
Samples Collected			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a		
2. DNA/RNA	600		
3. POM	550	↗ ↖	one of these was not set right
4. ChlA	250		
5. DOM	n/a		
6. NO ₃ +NO ₂	n/a		
7. NO ₂	n/a		
8. NH ₄	n/a		
9. PO ₄	n/a		
10. SO ₄	n/a	C-129	
11. DIC	n/a	C-124	
12. H ₂ S	n/a	C.	
13. Fe/Mn Particulate	200	C-1	
13. Fe/Mn Dissolved			

P

Cast #	7		
Date & Time	6/26/15	4:44	
Hydrolab Info			
Depth	0.52m		
Temp	24.33		
Spc	6.161		
Sal	3.41		
LDO 1	9.29		
LDO %	113		
pH	7.56		
PAR	0		
Chl	4.43		
Samples Collected			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	650	✓	
3. POM	500	✓	
4. ChlA	500	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	C-026	
11. DIC	n/a	C-033	
12. H ₂ S	n/a	✓	
13. Fe/Mn Particulate	550	✓	
13. Fe/Mn Dissolved		✓	

Cast #	7		
Date & Time	6/26/15	0510	
Hydrolab Info			
Depth	1.99		
Temp	24.28		
Spc	6.176		
Sal	3.42		
LDO 1	9.23		
LDO %	111.8		
pH	7.56		
PAR	1		
Chl	4.82		
Samples Collected			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a		
2. DNA/RNA	600	✓	
3. POM	400	✓	
4. ChlA	500	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	C-042	
11. DIC	n/a	C-080	
12. H ₂ S	n/a	✓	
13. Fe/Mn Particulate	500	✓	
13. Fe/Mn Dissolved		✓	

P

Cast #	7		
Date & Time	6/26/15	530	
Hydrolab Info			
Depth	3.02		
Temp	22.47		
Spc	8.928		
Sal	5.12		
LDO 1	15.77		
LDO %	185.2		
pH	8.2		
PAR	2		
Chl	32.11		
Samples Collected			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600	✓	
3. POM	250	✓	
4. ChlA	300	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	✓	
11. DIC	n/a	✓	C-044
12. H ₂ S	n/a		C-076
13. Fe/Mn Particulate			
13. Fe/Mn Dissolved			

P

Cast #	7		
Date & Time	6/26/15	0553	
Hydrolab Info			
Depth	4.00		
Temp	18.67		
Spc	11.99		
Sal	6.88		
LDO 1	14.75		
LDO %	163.9		
pH	7.07		
PAR	5		
Chl	35.60		
Samples Collected			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600	✓	
3. POM	175	✓	
4. ChlA	200	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	C-131'	
11. DIC	n/a	C-001'	
12. H ₂ S	n/a	✓	
13. Fe/Mn Particulate	300	✓	
13. Fe/Mn Dissolved		✓	

Cast # 7			
Date & Time	6/26/15	0617	
Hydrolab Info			
Depth	6.01		
Temp	15.18		
Spc	14.93		
Sal	8.67		
LDO 1	1.72		
LDO %	18.0		
pH	6.53		
PAR	0		
Chl	55.94		
Samples Collected			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600	✓	
3. POM	300	✓	
4. ChlA	300	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	C-073	
11. DIC	n/a	C-130	
12. H ₂ S	n/a		
13. Fe/Mn Particulate	300	✓	
13. Fe/Mn Dissolved	—	✓	

Cast #	7		
Date & Time	6/26/15	646 am	
Hydrolab Info			
Depth	8.01		
Temp	12.65		
Spc	16.34		
Sal	9.53		
LDO 1	0		
LDO %	0		
pH	6.58		
PAR	0		
Chl	9.46		
Samples Collected			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600	✓	
3. POM	500	✓	
4. ChlA	600	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	C-125	
11. DIC	n/a	C-047	
12. H ₂ S	n/a	✓	
13. Fe/Mn Particulate	600ml	500ml	
13. Fe/Mn Dissolved		✓	

Cast #	7		
Date & Time	6/24/15	0713	
<i>Hydrolab Info</i>			
Depth	10.00		
Temp	12.06		
Spc	28.76		
Sal	17.72		
LDO 1	0		
LDO %	0		
pH	6.92		
PAR	0		
Chl	4.66		
<i>Samples Collected</i>			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	60 ⁰	✓	
3. POM	275	✓	
4. ChlA	325	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	C-077	
11. DIC	n/a	C-126	
12. H ₂ S	n/a	✓	
13. Fe/Mn Particulate		500	
13. Fe/Mn Dissolved		✓	

Cast #	7		
Date & Time	6/26/15	737	
<i>Hydrolab Info</i>			
Depth	12.05		
Temp	12.45		
Spc	29.43		
Sal	18.17		
LDO 1	0		
LDO %	0		
pH	6.93		
PAR	0		
Chl	5.19		
<i>Samples Collected</i>			
	Vol (ml)	Complete	Notes
1. Cell Counts	n/a	✓	
2. DNA/RNA	600	✓	
3. POM	200	✓	
4. ChlA	240	✓	
5. DOM	n/a	✓	
6. NO ₃ +NO ₂	n/a	✓	
7. NO ₂	n/a	✓	
8. NH ₄	n/a	✓	
9. PO ₄	n/a	✓	
10. SO ₄	n/a	C-127	
11. DIC	n/a	C-005	
12. H ₂ S	n/a	✓	
13. Fe/Mn Particulate		275 ml	
13. Fe/Mn Dissolved		✓	