

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # 2  
 Station # 1  
 Cast# 1  
 Operators KD, ST

Date: 2010-11-19 GMT  
 Time: 1242 GMT  
 Lat: 20 04.999S  
 Lon: 70 48.001W

Rosette Position	Desired Depth	Gas Letelier	DIC Hawaii	Nuts Hawaii	DOC/DON Repeta	CDOM Repeta	Chl $\alpha$ Repeta
1	376	X		X	X	X	X
2	376		X				
3	100	X		X	X	X	X
4	100		X				
5	48	X		X	X	X	X
6	48		X				
7	36	X		X	X	X	X
8	36		X				
9	22	X		X	X	X	X
10	22		X				
11	20	X		X	X	X	X
12	20		X				
13	13	X		X	X	X	X
14	13		X				
15	9	X		X	X	X	X
16	9		X				
17	5	X		X	X	X	X
18	5		X				
19							
20							
21							
22							
23							
24							

Notes:

# C-MORE SoPac

11/18 – 12/14/10

## Cast Data Sheet

Event # 2  
 Station # 1  
 Cast # 1  
 Operators KD, ST

Date: 2010-11-19 GMT  
 Time: 1242 GMT  
 Lat: 20 04.999S  
 Lon: 70 48.001W

Rosette Position	Desired Depth	DOP Repeta	FCM Hawaii	FRRF UCSC	PC/PN Hawaii	Psi Hawaii	PPO4 Hawaii
1	376	X	X	X			
2	376				2L	2L	2L
3	100	X	X	X			
4	100				2L	2L	2L
5	48	X	X	X			
6	48				2L	2L	2L
7	36	X	X	X			
8	36				2L	2L	2L
9	22	X	X	X			
10	22				2L	2L	2L
11	20	X	X	X			
12	20				2L	2L	2L
13	13	X	X	X			
14	13				2L	2L	2L
15	9	X	X	X			
16	9				2L	2L	2L
17	5	X	X	X			
18	5				2L	2L	2L
19							
20							
21							
22							
23							
24							

Notes:

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## Cast Data Sheet

Event #	_____	Date:	19 Nov 2010	GMT
Station #	1	Time:	1710	GMT
Cast#	2	Lat:	20 05.004S	
Operators	SR, GG, AW	Lon:	70 47.982W	
DCM:	30m	SST:	19.48	

Rosette Position	Desired Depth	Solange	Shimi	Paul	Sonya	Gadiel	Ricardo
1	200					10L	
2	100			4.5L	0.5L		2L
3	55		3L	4.5L	0.5L		
4	55						2L
5	55					10L	
6	48			4.5L	0.5L		
7	48		3L				2L
8	36	6L	3L				
9	36			4.5L	0.5L		2L
10	22	6L	3L				
11	22			4.5L	0.5L		2L
12	20	6L	3L				
13	20			4.5L	0.5L		2L
14	20					10L	
15	13	6L	3L				
16	13			4.5L	0.5L		2L
17	9	6L	3L				
18	9			4.5L	0.5L		2L
19	5	6L	3L				
20	5			4.5L			2L
21	5				10L		
22	5				10L		
23	5				10L		
24	5					10L	

Notes:

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## Cast Data Sheet

Event #	_____	Date:	19 Nov 2010	GMT
Station #	1	Time:	22:59	GMT
Cast#	3	Lat:	20 05:00 S	
Operators	NAP, ST	Lon:	070 47.982 W	
DCM:	20 (secondary at 53)	SST:	19	

Rosette Position	Desired Depth	Nicole (nifH)	Lydia (euk. dna)	Gadiel (fractionated dna; cell sorting)	Adrian (OMZ depth profile; dna/rna)	Elisha (viral dna, abundance)	Christine (N2O gas, nut's, POC, N2 fix rate)
1	500		X				
2	500					X	
3	500			X			
4	400			X			
5	400					X	
6	400	X					
7	300					X	
8	300		X				
9	No Fire						X
10	148						X
11	148	X					
12	103	X					
13	53		X				
14	53	6L		500ml		X	
15	35	X					
16	20	X					
17	20		X				
18	20					X	
19	5		X				
20	5					X	
21	5						
22	5				X		
23	5				X		
24	5				x		

Notes: 5 min soak @ sfc; 2 min soak @ each different depth, 1 min between bottles

# C-MORE BiGRAPA

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## Cast Data Sheet

Event # \_\_\_\_\_  
Station # 1  
Cast# 4  
Operators ST, RL

Date: 20 Nov 2010 GMT  
Time: 14:18:30 GMT  
Lat: 20 05.768 S  
Lon: 70 48.000 W  
SST: 19.91

Rosette Position	Desired Depth					
1	<b>100</b>					
2	<b>42</b>					
3	<b>32</b>					
4	<b>24</b>					
5	<b>17</b>					
6	<b>13</b>					
7	<b>6</b>					
8	<b>6</b>					
9	<b>6</b>					
10	<b>6</b>					
11	<b>6</b>					
12	<b>6</b>					
13	<b>6</b>					
14	<b>6</b>					
15	<b>6</b>					
16	<b>6</b>					
17	<b>6</b>					
18	<b>6</b>					
19	<b>6</b>					
20	<b>6</b>					
21	<b>6</b>					
22	<b>6</b>					
23	<b>6</b>					
24	<b>6</b>					

Notes:

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## Cast Data Sheet

Event #	<u>14</u>	Date:	<u>20 Nov 2010</u> GMT
Station #	<u>1</u>	Time:	<u>1821</u> GMT
Cast#	<u>5</u>	Lat:	<u>20 05.768 S</u>
Operators	<u>JWB, NAP ST</u>	Lon:	<u>70 48.001 W</u>
		SST:	<u>19.91</u>

Rosette Position	Desired Depth	Oxygen Hawaii	Nuts Hawaii	DOC/DON Repeta	CDOM Repeta	N2 Letelier
1	400	1	X	X	X	
2	400					
3	100		X	X	X	
4	100					
5	65	2	X	X	X	
6	65					
7	65					
8	65					X
9	50		X	X	X	
10	50					
11	50					X
12	42	3	X	X	X	
13	42					
14	32		X	X	X	
15	32					
16	24		X	X	X	
17	24					
18	17	4,5	X	X	X	
19	17					
20	13		X	X	X	
21	13					
22	6		X	X	X	
23	6					
24	6	QC				

Notes:

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## Cast Data Sheet

Event # 14  
 Station # 1  
 Cast # 5  
 Operators JWB, NAP ST

Date: 20 Nov 2010 GMT  
 Time: 1821 GMT  
 Lat: 20 05.768 S  
 Lon: 70 48.001 W  
19.91

Rosette Position	Desired Depth	Chl $\alpha$ Repeta	FCM Hawaii	FRRF UCSC	Pigments Fong	Biomarkers Fong	Transcriptomics EXP Paul
1	400	X	X	X			
2	400				X	X	
3	100	X	X	X			
4	100				X	X	
5	65	X	X	X			
6	65				X	X	
7	65						X
8	65						
9	50	X	X	X			
10	50				X	X	
11	50						
12	42	X	X	X			
13	42				X	X	
14	32	X	X	X			
15	32				X	X	
16	24	X	X	X			
17	24				X	X	
18	17	X	X	X			
19	17				X	X	
20	13	X	X	X			
21	13				X	X	
22	6	X	X	X			
23	6				X	X	
24	6						

Notes:

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## Cast Data Sheet

Event #	<u>14</u>	Date:	<u>20 Nov 2010</u>	GM
Station #	<u>1</u>	Time:	<u>18:21</u>	GM
Cast#	<u>5</u>	Lat:	<u>20 05.7685 S</u>	
Operators	<u>JWB, NAP, ST</u>	Lon:	<u>070 48.001 W</u>	
		SST:	<u>19.91</u>	

Rosette Position	Desired Depth	GMT					
1	<b>400</b>	19:08					
2	<b>400</b>	19:09					
3	<b>100</b>	19:17					
4	<b>100</b>	19:18					
5	<b>65</b>	19:22					
6	<b>65</b>	19:23					
7	<b>65</b>	19:24					
8	<b>65</b>	19:25					
9	<b>50</b>	19:29					
10	<b>50</b>	19:30					
11	<b>50</b>	19:31					
12	<b>42</b>	19:34					
13	<b>42</b>	19:35					
14	<b>32</b>	19:38					
15	<b>32</b>	19:39					
16	<b>24</b>	19:42					
17	<b>24</b>	19:43					
18	<b>17</b>	19:46					
19	<b>17</b>	19:47					
20	<b>13</b>	19:50					
21	<b>13</b>	19:51					
22	<b>6</b>	19:54					
23	<b>6</b>	19:55					
24	<b>6</b>	19:56					

Notes: 1000m cast; DCM @ 24m, MLD @ 6m



# C-MORE BiGRAPA

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## Cast Data Sheet

Event #	<u>17</u>	Date:	<u>20 Nov 2010</u>	GMT
Station #	<u>1</u>	Time:	<u>23:25</u>	GMT
Cast#	<u>6</u>	Lat:	<u>20 04.931 S</u>	
Operators	<u>SR, AS, PB</u>	Lon:	<u>70 48.031 W</u>	
DCM:	<u>22</u>	SST:	<u>20.14</u>	

Rosette Position	Desired Depth	Phagemeta. MIT/Paul	DNA/RNA Shimi	Metagen. Adrian	Incubation Lydia	Experiment Elisha	Gas/NO2 Chile
1	65	X					
2	65	X					
3	65	X					
4	65	X					
5	65	X					
6	65		X				
7	65				X		
8	50		X				
9	42		X		X		
10	32		X				
11	32			X			
12	32			X			
13	32			X			
14	32			X			
15	32					X	
16	32					X	
17	22		X				
18	17		X				X
19	13		X				
20	10						X
21	6		X				
22							
23							
24							

Notes:

# C-MORE BiGRAPA

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## Cast Data Sheet

Event # 17  
Station # 1  
Cast# 7  
Operators Gadiel, NAP  
DCM: \_\_\_\_\_

Date: 21 Nov 2010 GMT  
Time: 0237 GMT  
Lat: 20 05.027 S  
Lon: 70 48.027 W  
SST: 19.75

Rosette Position	Desired Depth	Gadiel	Cristina CH4/N2O				
1	1000		X				
2	1000	X					
3	900		X				
4	800		X				
5	700		X				
6	600		X				
7	500	X					
8	400		X				
9	400	X					
10	300	X					
11	200		X				
12	200	X					
13	80	X					
14	70		X				
15	70	X					
16	60		X				
17	60	X					
18	50	X					
19	40		X				
20	40	X					
21	30		X				
22	30	X					
23	5		X				
24	5	X					

Notes:

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## Cast Data Sheet

Event # 21  
Station # 1  
Cast# 8  
Operators NAP  
DCM: \_\_\_\_\_

Date: 21 Nov 2010 GMT  
Time: 14:22:00 GMT  
Lat: 20 04.999 S  
Lon: 70 47.998 W  
SST: \_\_\_\_\_

Rosette Position	Desired Depth	nifH Nicole	Euk dna Lydia	ATP T.O. Solange			
1	400	X					
2	400	X					
3	148	X					
4	148	X					
5	60		X				
6	60		X				
7	53	X					
8	53	X					
9	35	X					
10	35	X					
11	30		X				
12	27	X					
13	27	X					
14	5	X					
15	5	X					
16	5			X			
17							
18							
19							
20							
21							
22							
23							
24							

Notes:

# C-MORE BiGRAPA

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## Cast Data Sheet

Event # 23  
 Station # 1  
 Cast# 9  
 Operators KD, ST, TC  
 DCM: 30m

Date: 21 Nov 2010 GMT  
 Time: 1712 GMT  
 Lat: 20 04.999 S  
 Lon: 70 47.999 W  
 SST: 19.22

Rosette Position	Desired Depth	O2 Hawaii	DIC Hawaii	Gases Letelier	Nuts Hawaii	DIC/DON Repeta	CDOM Repeta	Culturing Repeta
1	360		X		X	X	X	
2	360	6		X				
3	239			X	X	X		
4	180			X	X	X	X	
5	100		X		X	X	X	
6	100	7		X				
7	70		X		X	X	X	
8	70			X				
9	50		X		X		X	X
10	50			X				
11	43		X		X		X	
12	43			X				
13	33		X		X		X	
14	33			X				
15	30		X		X		X	
16	30	8,9		X				
17	25		X		X		X	
18	25			X				
19	18		X		X		X	
20	18			X				
21	13		X		X		X	
22	13			X				
23	7	10	x		X		X	
24	7			X				

Notes: Bottle 21 spigot leaking

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # 23  
 Station # 1  
 Cast# 9  
 Operators KD, ST, TC  
 DCM: 30m

Date: 21 Nov 2010 GMT  
 Time: 1712 GMT  
 Lat: 20 04.999 S  
 Lon: 70 47.999 W  
 SST: 19.22

Rosette Position	Desired Depth	Chl Repeta	DOP Repeta	FCM Hawaii	FRRF UCSC	PCPN UH	PSi Hawaii	PPO4 Hawaii
1	360	X	X	X	X			
2	360					2	2	2
3	239	X	X	X				
4	180	X	X	X				
5	100	X	X	X	X			
6	100					2	2	2
7	70	X	X	X	X			
8	70					2	2	2
9	50	X	X	X	X			
10	50					2	2	2
11	43	X	X	X	X			
12	43					2	2	2
13	33	X	X	X	X			
14	33					2	2	2
15	30	X	X	X	X			
16	30					2	2	2
17	25	X	X	X	X			
18	25					2	2	2
19	18	X	X	X	X			
20	18					2	2	2
21	13	X	X	X	X			
22	13					2	2	2
23	7	X	X	X	X			
24	7					2	2	2

Notes: Bottle 21 spigot leaking

# C-MORE BiGRAPA

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## Cast Data Sheet

Event #	_____	Date:	21 Nov 2010	GMT
Station #	1	Time:	22:10:00	GMT
Cast#	10	Lat:	20 04.999 S	
Operators	NAP, SR	Lon:	70 47.998 W	
DCM:	_____	SST:	19.5	

Rosette Position	Desired Depth	Incubation Nicole	DNA Alli	Archaea Shimi	OMZ Adrian		
1	1000		X				
2	Misfire						
3	500		X	X			
4	320			X			
5	320				X		
6	320				X		
7	200				X		
8	200				X		
9	148		X	X			
10	110				X		
11	110				X		
12	96	X					
13	96	X					
14	96	X					
15	96	X					
16	96	X					
17	96	X					
18	96	X					
19	96	X					
20	96			X			
21	80		X	X			
22	70			X			
23	70				X		
24	70				X		

Notes:

# C-MORE BiGRAPA

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## Cast Data Sheet

Event # \_\_\_\_\_  
Station # 1  
Cast# 11  
Operators Gadiel  
DCM: \_\_\_\_\_

Date: 22 Nov 2010 GMT  
Time: 00:25:00 GMT  
Lat: 20 04.999 S  
Lon: 70 40.006 W  
SST: \_\_\_\_\_

Rosette Position	Desired Depth	RNA/DNA Gadiel	Biomarkers Jeanette				
1	200		X				
2	200		X				
3	200		X				
4	200		X				
5	200		X				
6	200		X				
7	200		X				
8	200		X				
9	200		X				
10	200		X				
11	200		X				
12	200		X				
13	200		X				
14	200		X				
15	200		X				
16	200		X				
17	200		X				
18	200		X				
19	200		X				
20	200		X				
21	60	X					
22	50	X					
23	40	X					
24	25	X					

Notes:

# C-MORE BiGRAPA

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## Cast Data Sheet

Event # 28  
Station # 1  
Cast# 12  
Operators JWB  
DCM: 25m

Date: 22 Nov 2010 GMT  
Time: 01:41:49 GMT  
Lat: 20 04.999 S  
Lon: 70 47.997 W  
SST: 19.34

Rosette Position	Desired Depth	DOM exp. Becker					
1	35	X					
2	35	X					
3	35	X					
4	35	X					
5	35	X					
6	35	X					
7	35	X					
8	35	X					
9	35	X					
10	35	X					
11	35	X					
12	35	X					
13	15	X					
14	15	X					
15	15	X					
16	15	X					
17	15	X					
18	15	X					
19	15	X					
20	15	X					
21	15	X					
22	15	X					
23	15	X					
24	15	X					

Notes: 500m Cast



# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # \_\_\_\_\_  
 Station # 1  
 Cast# 13  
 Operators Cristina  
 DCM: \_\_\_\_\_

Date: 22 Nov 2010 GMT  
 Time: 04:26:21 GMT  
 Lat: 20 04.970 S  
 Lon: 70 97.996 W  
 SST: 19.51

Rosette Position	Desired Depth	Gadiel	Nicole nifH				
1	<b>148</b>		X				
2	<b>65</b>	X					
3	<b>55</b>	X					
4	<b>55</b>	X					
5	<b>53</b>		X				
6	<b>40</b>	X					
7	<b>35</b>		X				
8	<b>27</b>		X				
9	<b>5</b>	X					
10	<b>5</b>		X				
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							

Notes: 150m Cast

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # 31  
Station # 1  
Cast# 14  
Operators GT  
DCM: \_\_\_\_\_

Date: 22 Nov 2010 GMT  
Time: 10:05 GMT  
Lat: 20 04.996 S  
Lon: 70 47.988 W  
SST: \_\_\_\_\_

Rosette Position	Desired Depth	Ricardo	Angel	Gadiel			
1	<b>240</b>	X					
2	<b>180</b>	X					
3	<b>60</b>			X			
4	<b>52</b>			X			
5	<b>52</b>			X			
6	<b>52</b>	X					
7	<b>40</b>			X			
8	<b>5</b>			X			
9	<b>5</b>			X			
10	<b>5</b>		X				
11	<b>5</b>		X				
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							

Notes:

# C-MORE BiGRAPA

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## Cast Data Sheet

Event #	<u>33</u>	Date:	<u>22 Nov 2010</u> GMT
Station #	<u>1</u>	Time:	<u>14:10</u> GMT
Cast#	<u>15</u>	Lat:	<u>20 05.001 S</u>
Operators	<u>SR</u>	Lon:	<u>70 47.999 W</u>
DCM:	<u>24</u>	SST:	<u>19.40</u>

Rosette Position	Desired Depth	S.F. Bact Lydia	P.P. Solange	S.F. HPLC Shimi	Gadiel	Transcript-omics Paul
1	500	X				
2	300	X				
3	83		X	X		
4	83					
5	73		X	X		
6	73					
7	70				X	
8	66		X			
9	59		X			
10	59			X		
11	53	X				
12	53		X			
13	53			X		
14	53				X	
15	53					X
16	53					X
17	40				X	
18	24		X			
19	24		X			
20	24	X				
21	24			X		
22	5				X	
23	5			x		
24	5	X				

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event #	<u>35</u>	Date:	<u>22 Nov 2010</u>	GMT
Station #	<u>1</u>	Time:	<u>16:21:28</u>	GMT
Cast#	<u>16</u>	Lat:	<u>20 05.000 S</u>	
Operators	<u>KD</u>	Lon:	<u>70 47.999 W</u>	
DCM:	<u>24</u>	SST:	<u>19.56</u>	

Rosette Position	Desired Depth	Gases Repeta	DIC Hawaii	Nuts Hawaii	DOC/DON Rapeta	DOP Rapeta
1	<b>1992</b>		X	X	X	
2	<b>1750</b>		X	X	X	
3	<b>1500</b>		X	X	X	
4	<b>1250</b>		X	X	X	
5	<b>1000</b>		X	X	X	
6	<b>750</b>		X	X	X	
7	<b>500</b>	X	X	X	X	
8	<b>450</b>		X	X	X	
9	<b>400</b>		X	X	X	
10	<b>350</b>	X	X	X	X	
11	<b>300</b>		X	X	X	
12	<b>240</b>	X	X	X	X	
13	<b>180</b>	X	X	X	X	X
14	<b>120</b>	X	X	X	X	X
15	<b>100</b>	X	X	X	X	X
16	<b>83</b>		X	X	X	X
17	<b>73</b>		X	X	X	X
18	<b>66</b>		X	X	X	X
19	<b>60</b>		X	X	X	X
20	<b>54</b>	X	X	X	X	X
21	<b>48</b>		X	X	X	X
22	<b>24</b>	X	X	X	X	X
23	<b>12</b>		X	X	X	X
24	<b>5</b>	x	X	X	X	x

**Notes: Bottle #21 Spigot Leaking  
12m is particle max – not min.**

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event #	<u>35</u>	Date:	<u>22 Nov 2010</u>	GMT
Station #	<u>1</u>	Time:	<u>16:21:28</u>	GMT
Cast#	<u>16</u>	Lat:	<u>20 05.000 S</u>	
Operators	<u>KD</u>	Lon:	<u>70 47.999 W</u>	
DCM:	<u>24</u>	SST:	<u>19.56</u>	

Rosette Position	Desired Depth	Chl Rapeta	Culture MIT	DOP Comp Rapeta	Abs. Spec. OSU	FRRF UCSC	FCM Hawaii
1	<b>1992</b>						X
2	<b>1750</b>						X
3	<b>1500</b>						X
4	<b>1250</b>						X
5	<b>1000</b>						X
6	<b>750</b>						X
7	<b>500</b>						X
8	<b>450</b>						X
9	<b>400</b>						X
10	<b>350</b>						X
11	<b>300</b>						X
12	<b>240</b>						X
13	<b>180</b>			X			X
14	<b>120</b>						X
15	<b>100</b>	X		X	X	X	X
16	<b>83</b>	X			X	X	X
17	<b>73</b>	X			X	X	X
18	<b>66</b>	X			X	X	X
19	<b>60</b>	X		X	X	X	X
20	<b>54</b>	X	X	X	X	x	X
21	<b>48</b>	X			X	X	X
22	<b>24</b>	X		X	X	X	X
23	<b>12</b>	X			X	X	X
24	<b>5</b>	X		X	X	X	X

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event #	<u>35</u>	Date:	<u>22 Nov 2010</u>	GMT
Station #	<u>1</u>	Time:	<u>16:21:28</u>	GMT
Cast#	<u>16</u>	Lat:	<u>20 05.000 S</u>	
Operators	<u>KD</u>	Lon:	<u>70 47.999 W</u>	
DCM:	<u>24</u>	SST:	<u>19.56</u>	

Rosette Position	Desired Depth	Pigments Bidigare	LMW Org. Rapeta				
1	<b>1992</b>						
2	<b>1750</b>						
3	<b>1500</b>						
4	<b>1250</b>						
5	<b>1000</b>						
6	<b>750</b>						
7	<b>500</b>						
8	<b>450</b>						
9	<b>400</b>						
10	<b>350</b>						
11	<b>300</b>						
12	<b>240</b>						
13	<b>180</b>						
14	<b>120</b>		X				
15	<b>100</b>	X	X				
16	<b>83</b>	X	X				
17	<b>73</b>	X	X				
18	<b>66</b>	X	X				
19	<b>60</b>	X	X				
20	<b>54</b>	X	X				
21	<b>48</b>	X	X				
22	<b>24</b>	X	X				
23	<b>12</b>	X					
24	<b>5</b>	X	X				

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # 36  
Station # 1  
Cast# 17  
Operators Cristina  
DCM: \_\_\_\_\_

Date: 22 Nov 2010 GMT  
Time: 20:34:17 GMT  
Lat: 20 04.998 S  
Lon: 70 47.999 W  
SST: \_\_\_\_\_

Rosette Position	Desired Depth	Gadiel	Jeanett Biomarkers				
1	60	X					
2	48	X					
3	36	X					
4	30		X				
5	30		X				
6	30		X				
7	30		X				
8	30		X				
9	30		X				
10	30		X				
11	30		X				
12	30		X				
13	30		X				
14	30		X				
15	30		X				
16	30		X				
17	30		X				
18	30		X				
19	30		X				
20	30		X				
21	30		X				
22	30		X				
23	30		X				
24	5	X					

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event #	_____	Date:	<u>23 Nov 2010</u>	GMT
Station #	<u>1</u>	Time:	<u>02:52:30</u>	GMT
Cast#	<u>18</u>	Lat:	<u>20 05.001 S</u>	
Operators	<u>Cristina</u>	Lon:	<u>70 48.000 W</u>	
DCM:	_____	SST:	<u>20.17</u>	

Rosette Position	Desired Depth	Gadiel	Biomarkers Jeanett				
1	1900		X				
2	1900		X				
3	1900		X				
4	1900		X				
5	1900		X				
6	1900		X				
7	1900		X				
8	1900		X				
9	1900		X				
10	1900		X				
11	1900		X				
12	1900		X				
13	1900		X				
14	1900		X				
15	1900		X				
16	1900		X				
17	1900		X				
18	1900		X				
19	1900		X				
20	1900		X				
21	60	X					
22	50	X					
23	36	X					
24	5	X					

Notes:



# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event #	_____	Date:	<u>23 Nov 2010</u>	GMT
Station #	<u>1</u>	Time:	<u>09:13:40</u>	GMT
Cast#	<u>19</u>	Lat:	<u>20 04.999 S</u>	
Operators	<u>Cristina</u>	Lon:	<u>70 47.998 W</u>	
DCM:	_____	SST:	<u>19.6</u>	

Rosette Position	Desired Depth	Gadiel	Biomarkers Jeanett				
1	70		X				
2	65		X				
3	65		X				
4	65		X				
5	65		X				
6	65		X				
7	65		X				
8	65		X				
9	65		X				
10	65		X				
11	65		X				
12	65		X				
13	65		X				
14	65		X				
15	65		X				
16	65		X				
17	65		X				
18	65		X				
19	65		X				
20	65		X				
21	65		X				
22	58	X					
23	40	X					
24	5	X					

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event #	<u>046</u>	Date:	<u>24 Nov 2010</u> GMT
Station #	<u>01</u>	Time:	<u>00:13:00</u> GMT
Cast#	<u>20 (also 19a)</u>	Lat:	<u>20 04.972 S</u>
Operators	<u>JWB</u>	Lon:	<u>070 48.073 W</u>
DCM:	<u>22m, 2° at 48m</u>	SST:	<u>20.34</u>

Rosette Position	Desired Depth	Sharma nucleic acids/DOM	Rii slides	Wood viruses	Duhamel DOP	Berube culturing	
1	1,000	X					
2	1,000	X					
3	1,000	X					
4	1,000			X			
5	750			X			
6	300	X					
7	300	X					
8	300	X					
9	65		X				
10	48					X	
11	48		X				
12	48	X					
13	48	X					
14	48	X					
15	35		X				
16	22		X				
17	22				X		
18	13		X				
19	5		X				
20							
21							
22							
23							
24							

**Notes: 1000m cast in 2042.7m of water. Jamie panicked and called this cast 19a originally. All data files were changed to cast 20, but some samples may be labeled 19a.**

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # 48  
 Station # 2  
 Cast# 21  
 Operators KD  
 DCM: \_\_\_\_\_

Date: 25 Nov 2010 GMT  
 Time: 12:07:58 GMT  
 Lat: 21 10.648 S  
 Lon: 76 34.356 W  
 SST: 17.85

Rosette Position	Desired Depth	Jeanett	Cristina	Angel	Solange	Sonya	Dan Gases	Paul
1	800	X	X					
2	600	X	X					
3	300					X	X	
4	200					X	X	
5	160					X	X	
6	100					X		
7	100						X	X
8	75					X		X
9	65							X
10	65							X
11	65							X
12	65							X
13	65							X
14	65				X	X		X
15	50				X	X	X	X
16	37				X	X		X
17	27				X	X		X
18	24					X	X	X
19	20				X	X		X
20	10				X	X	X	X
21	10			X				
22	10			X				
23	10			X				
24	10			X				

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event #	<u>50</u>	Date:	<u>25 Nov 2010</u>	GMT
Station #	<u>2</u>	Time:	<u>15:02:10</u>	GMT
Cast#	<u>22</u>	Lat:	<u>21 10.649 S</u>	
Operators	<u>KD, ST</u>	Lon:	<u>76 34.355 W</u>	
DCM:	<u></u>	SST:	<u>17.87</u>	

Rosette Position	Desired Depth	Gases OSU	Oxygen UH	DIC UH	Nuts UH	DOC/DON Repeta	CDOM Repeta
1	1000	X					
2	1000		1	X	X	X	X
3	600	X					
4	600			X	X	X	X
5	325	X					
6	325			X	X	X	X
7	300	X	2,3				
8	300			X	X	X	X
9	100	X					
10	100		4	X	X	X	X
11	65	X					
12	65			X	X	X	X
13	50	X					
14	50			X	X	X	X
15	37	X					
16	37			X	X	X	X
17	27	X					
18	27			X	X	X	X
19	24	X					
20	24			X	X	X	X
21	20	X					
22	20		5	X	X	X	X
23	10	X					
24	10			X	X	X	X

Notes: 1500m cast, 325m = F.W. Intrusion

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event #	<u>50</u>	Date:	<u>25 Nov 2010</u>	GMT
Station #	<u>2</u>	Time:	<u>15:02:10</u>	GMT
Cast#	<u>22</u>	Lat:	<u>21 10.649 S</u>	
Operators	<u>KD, ST</u>	Lon:	<u>76 34.355 W</u>	
DCM:	<u></u>	SST:	<u>17.87</u>	

Rosette Position	Desired Depth	Chl a Repeta	DOP Repeta	FCM UH/UC	FRRF UCSC	PC/PN UH	PSi UH
1	<b>1000</b>					<b>2L</b>	<b>2L</b>
2	<b>1000</b>		X	X			
3	<b>600</b>					<b>2L</b>	<b>2L</b>
4	<b>600</b>		X	X			
5	<b>325</b>					<b>2L</b>	<b>2L</b>
6	<b>325</b>		X	X			
7	<b>300</b>					<b>2L</b>	<b>2L</b>
8	<b>300</b>		X	X			
9	<b>100</b>					<b>2L</b>	<b>2L</b>
10	<b>100</b>	X	X	X	X		
11	<b>65</b>					<b>2L</b>	<b>2L</b>
12	<b>65</b>	X	X	X	X		
13	<b>50</b>					<b>2L</b>	<b>2L</b>
14	<b>50</b>	X	X	X	X		
15	<b>37</b>					<b>2L</b>	<b>2L</b>
16	<b>37</b>	X	X	X	X		
17	<b>27</b>					<b>2L</b>	<b>2L</b>
18	<b>27</b>	X	X	X	X		
19	<b>24</b>					<b>2L</b>	<b>2L</b>
20	<b>24</b>	X	X	X	X		
21	<b>20</b>					<b>2L</b>	<b>2L</b>
22	<b>20</b>	X	X	X	X		
23	<b>10</b>					<b>2L</b>	<b>2L</b>
24	<b>10</b>	X	X	X	X		

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event #	<u>50</u>	Date:	<u>25 Nov 2010</u> GMT
Station #	<u>2</u>	Time:	<u>15:02:10</u> GMT
Cast#	<u>22</u>	Lat:	<u>21 10.649 S</u>
Operators	<u>KD, ST</u>	Lon:	<u>76 34.355 W</u>
DCM:	<u></u>	SST:	<u>17.87</u>

Rosette Position	Desired Depth	PPO4 UH	Pigments Fong	ABS. OSU			
1	1000	2L					
2	1000						
3	600	2L					
4	600						
5	325	2L					
6	325						
7	300	2L					
8	300						
9	100	2L	2L				
10	100			2L			
11	65	2L	2L				
12	65			2L			
13	50	2L	2L				
14	50			2L			
15	37	2L	2L				
16	37			2L			
17	27	2L	2L				
18	27			2L			
19	24	2L	2L				
20	24			2L			
21	20	2L	2L				
22	20			2L			
23	10	2L	2L				
24	10			2L			

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event #	<u>54</u>	Date:	<u>25 Nov 2010</u>	GMT
Station #	<u>2</u>	Time:	<u>22:24</u>	GMT
Cast#	<u>23</u>	Lat:	<u>21 10.652 S</u>	
Operators	<u>SR</u>	Lon:	<u>76 34.356 W</u>	
DCM:	<u>32-50</u>	SST:	<u>18.12</u>	

Rosette Position	Desired Depth	Shimi	Gadiel DNA/RNA	Jeanette	Lydia Euk. DNA	DAN	Cristina Nuts/NO2
1	500				10L		
2	300				10L		
3	120	5L		2L			0.5L
4	120	7L					
5	120		10L				
6	120		10L				
7	100	5L		2L			0.5L
8	100	7L					
9	65	5L		2L			
10	65	7L					
11	50	5L		2L			0.5L
12	50	7L				1L	
13	50				10L		
14	50		10L				
15	37	5L		2L			
16	37	7L					
17	37				10L		
18	24	5L		2L			0.5L
19	24	7L				1L	
20	20	5L		2L			
21	20	7L					
22	10	5L		2L			0.5L
23	10	7L				1L	
24	5		10L				

Notes: Shimi – 5L for DNA, 7L for HPLC

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # 56  
 Station # 2  
 Cast# 24  
 Operators NAP  
 DCM: \_\_\_\_\_

Date: 26 Nov 2010 GMT  
 Time: 04:50:00 GMT  
 Lat: 21 10.652 S  
 Lon: 76 34.354 W  
 SST: 17.96

Rosette Position	Desired Depth	nifH Nicole	Biomarkers Ali	Viral DNA Elisha	N2O Cristina	Euk DNA Lydia	Biomarkers Jeanette	DNA/RNA Shimi
1	1515						X	
2	1000		x		X			
3	1000			X				X
4	900				X		X	
5	700				X		X	
6	500		X		X			
7	500			X				X
8	500					X		
9	300					X		
10	250		X	X				
11	250							X
12	150		X					
13	120	x						
14	80		X					
15	50		X	X				
16	50	X						
17	50					X		
18	37					X		
19	36	X						
20	24	X						
21	20	X						
22	10	X						
23	10		X	X				
24	10					X		

Notes: 1500m Cast, bottom depth 4690m



# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # \_\_\_\_\_  
 Station # 3  
 Cast# 25  
 Operators KD, ST  
 DCM: \_\_\_\_\_

Date: 27 Nov 2010 GMT  
 Time: 12:37:12 GMT  
 Lat: 22 15.657 S  
 Lon: 82 20.873 W  
 SST: 17.82

Rosette Position	Desired Depth	Oxygen UH	Gases OSU	DIC UH	Nuts UH	DOC/DON Repeta	CDOM Repeta
1	80			X	X	X	X
2	80						
3	80		X				
4	60			X	X	X	X
5	60	6					
6	60		X				
7	45			X	X	X	X
8	45						
9	45		X				
10	32			X	X	X	X
11	32						
12	32		X				
13	23			X	X	X	X
14	23						
15	23		X				
16	12			X	X	X	X
17	12	7,8					
18	12		X				
19	12						
20	10						
21	10						
22	10						
23	10						
24	10						

Notes: 200m cast, had to yoyo to get light levels.

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # \_\_\_\_\_  
 Station # 3  
 Cast# 25  
 Operators KD, ST  
 DCM: \_\_\_\_\_

Date: 27 Nov 2010 GMT  
 Time: 12:37:12 GMT  
 Lat: 22 15.657 S  
 Lon: 82 20.873 W  
 SST: 17.82

Rosette Position	Desired Depth	DOP Repeta	FCM UH/UC	PC/PN UH	PPO4 UH	PSi UH	Abs. Spec. OSU
1	80	X	X			2L	
2	80			2L	2L		
3	80						4L
4	60	X	X			2L	
5	60			2L	2L		
6	60						4L
7	45	X	X			2L	
8	45			2L	2L		
9	45						4L
10	32	X	X			2L	
11	32			2L	2L		
12	32						4L
13	23	X	X			2L	
14	23			2L	2L		
15	23						4L
16	12	X	X			2L	
17	12			2L	2L		
18	12						4L
19	12						
20	10						
21	10						
22	10						
23	10						
24	10						

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # \_\_\_\_\_  
 Station # 3  
 Cast# 25  
 Operators KD, ST  
 DCM: \_\_\_\_\_

Date: 27 Nov 2010 GMT  
 Time: 12:37:12 GMT  
 Lat: 22 15.657 S  
 Lon: 82 20.873 W  
 SST: 17.82

Rosette Position	Desired Depth	Chl. A Repeta	Pigments Fong	FRRF Tozzi	White	Duhamel	
1	80	X	X	X			
2	80						
3	80						
4	60	X	X	X			
5	60						
6	60						
7	45	X	X	X			
8	45						
9	45						
10	32	X	X	X			
11	32						
12	32						
13	23	X	X	X			
14	23						
15	23						
16	12	X	X	X			
17	12						
18	12						
19	12					10L	
20	10				10L		
21	10				10L		
22	10				10L		
23	10				10L		
24	10						

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # \_\_\_\_\_  
 Station # 3  
 Cast# 26  
 Operators KD, ST  
 DCM: \_\_\_\_\_

Date: 27 Nov 2010 GMT  
 Time: 15:15:28 GMT  
 Lat: 22 15.657 S  
 Lon: 82 20.873 W  
 SST: 17.82

Rosette Position	Desired Depth	Oxygen UH	Gases OSU	Gases Repeta	DIC UH	Nuts UH	DOC/DON Repeta
1	1000						
2	1000				X		
3	1000		X			X	X
4	800						
5	750				X		
6	750		X			X	X
7	750	11					
8	500				X		
9	500		X			X	X
10	500						
11	340	12			X		
12	340		X			X	X
13	340			X			
14	200			X			
15	120			X			
16	100			X			
17	80						
18	75						
19	60						
20	45			X			
21	32						
22	23			X			
23	12			X			
24	5						

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # \_\_\_\_\_  
 Station # 3  
 Cast# 26  
 Operators KD, ST  
 DCM: \_\_\_\_\_

Date: 27 Nov 2010 GMT  
 Time: 15:15:28 GMT  
 Lat: 22 15.657 S  
 Lon: 82 20.873 W  
 SST: 17.82

Rosette Position	Desired Depth	CDOM Repeta	DOP Repeta	FCM UH/UC	PC/PN UH	PPO4 UH	PSi UH
1	1000				4L		
2	1000					4L	
3	1000	X	X	X			4L
4	800						
5	750					4L	
6	750	X	X	X			4L
7	750				4L		
8	500					4L	
9	500	X	X	X			4L
10	500				4L		
11	340					4L	
12	340	X	X	X			4L
13	340				4L		
14	200			X			
15	120			X			
16	100			X			
17	80						
18	75			X			
19	60						
20	45						
21	32						
22	23						
23	12						
24	5						

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # \_\_\_\_\_  
 Station # 3  
 Cast# 26  
 Operators KD, ST  
 DCM: \_\_\_\_\_

Date: 27 Nov 2010 GMT  
 Time: 15:15:28 GMT  
 Lat: 22 15.657 S  
 Lon: 82 20.873 W  
 SST: 17.82

Rosette Position	Desired Depth	Berube	Sonya	Jeanett	Cristina N2 Cycling	FRRF UCSC	Abs Spec OSU
1	1000						
2	1000						
3	1000						
4	800				X		
5	750						
6	750			X	X		
7	750						
8	500						
9	500			X	X		
10	500						
11	340						
12	340						
13	340		X				
14	200	X	X				
15	120	X	X			X	X
16	100	X	X			X	X
17	80	X	X				
18	75		X				X
19	60	X	X				X
20	45	X	X				
21	32	X	X				
22	23	X	X				
23	12	X	X				
24	5		X				

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # 64  
 Station # 3  
 Cast# 27  
 Operators NAP  
 DCM: \_\_\_\_\_

Date: 27 Nov 2010 GMT  
 Time: 20:52:00 GMT  
 Lat: 22 15.658 S  
 Lon: 82 20.872 W  
 SST: 17.89

Rosette Position	Desired Depth	nifH Nicole	Alli	Elisha	Cristina	Jeanett	Lydia	Shimi
1	1012					X		
2	1012		X		X			
3	1012			X				X
4	900				X	X		
5	700				X	X		
6	600				X	X		
7	500		X		X			
8	500			X				X
9	500						X	
10	340		X		X			
11	340			X				X
12	340	X						
13	340						X	
14	120	X						
15	80		X					
16	60						X	
17	60		X	X				
18	60	X						
19	34	X						
20	24	X						
21	24		X	X				
22	24						X	
23	12	X						
24	5						X	

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event #	<u>65</u>	Date:	<u>27 Nov 2010</u> GMT
Station #	<u>3</u>	Time:	<u>22:59:00</u> GMT
Cast#	<u>28</u>	Lat:	<u>22 15.656 S</u>
Operators	<u>SR</u>	Lon:	<u>82 20.871 W</u>
DCM:	<u></u>	SST:	<u>17.86</u>

Rosette Position	Desired Depth	Gadiel Flow Sort	Shimi Peuk Div.	Paul Metagen.	Jeanett Fung. Div.	Cristina N-oxide	
1	300				2L	0.5L	
2	200					0.5L	
3	150		5L			0.5L	
4	120		5L		2L		
5	120	10L					
6	120	10L					
7	120	10L					
8	100		5L				
9	75		5L		2L		
10	75			X	2L	0.5L	
11	75			X			
12	75			X			
13	75			X			
14	75			X			
15	60		5L				
16	50	10L					
17	50	10L					
18	45		5L				
19	23		5L		2L	0.5L	
20	12		5L		2L	0.5L	
21	5				2L	0.5L	
22	5	10L					
23	5	10L					
24	5						

Notes:300m Cast



# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event #	<u>70</u>	Date:	<u>29 Nov 2010</u>	GMT
Station #	<u>4</u>	Time:	<u>12:43:12</u>	GMT
Cast#	<u>29</u>	Lat:	<u>23 27.510 S</u>	
Operators	<u>PB, KD</u>	Lon:	<u>88 46.089 W</u>	
DCM:	<u>112</u>	SST:	<u>18.65</u>	

Rosette Position	Desired Depth	Gadiel	Solange	Berube	Elisha	Adrian Transcript.	
1	500					X	
2	500					X	
3	500					X	
4	500				X		
5	190			X			
6	160	X					
7	160	X					
8	150			X			
9	120	X					
10	120	X					
11	112					X	
12	112					X	
13	112					X	
14	112		X	X			
15	90			X			
16	80	X					
17	80	X					
18	69		X	X			
19	52		X	X			
20	37		X	X			
21	27		X	X			
22	14		X	X			
23	5	X					
24	5	X					

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # \_\_\_\_\_  
 Station # 4  
 Cast# 30  
 Operators NAP  
 DCM: \_\_\_\_\_

Date: 20 Nov 2010 GMT  
 Time: 17:09:00 GMT  
 Lat: 23 27.705 S  
 Lon: 88 45.774 W  
 SST: 18.7

Rosette Position	Desired Depth	Nicole nifH	Gadiel	Sasha Acid. Inc.	Nilo	Marillo	
1	400	X					
2	400	X					
3	300			X			
4	160		X				
5	160		X				
6	112		X				
7	112		X				
8	112	X					
9	112	X			X		
10	112		X			X	
11	112		X			X	
12	70		X				
13	70		X				
14	52	X					
15	52	X					
16	37	X					
17	37	X					
18	27	X					
19	27	X					
20	5	X					
21	5	X					
22	5		X				
23	5		X				
24							

Notes: 500m cast, Niskin 21 didn't fire

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # 77  
Station # 4  
Cast# 31  
Operators SR  
DCM: 100

Date: 29 Nov 2010 GMT  
Time: 21:49:06 GMT  
Lat: 23 27.704 S  
Lon: 88 45.775 W  
SST: 18.68

Rosette Position	Desired Depth	Gadiel	Alli	Shimi			
1	500		X				
2	400		X				
3	160			x			
4	160	X					
5	160	X					
6	150		X				
7	135			X			
8	100			X			
9	100		X				
10	100	X					
11	100	X					
12	90		X				
13	90			X			
14	80		X				
15	70			X			
16	60	X					
17	60	X					
18	52		X				
19	52			X			
20	37			X			
21	14		X				
22	14			X			
23	5	X					
24	5	x					

Notes: 500m cast, Niskin 21 didn't fire

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event #	<u>82</u>	Date:	<u>30 Nov 2010</u>	GMT
Station #	<u>4</u>	Time:	<u>10:03:23</u>	GMT
Cast#	<u>32</u>	Lat:	<u>23 27.509 S</u>	
Operators	<u>SR, GG, RL</u>	Lon:	<u>88 46.088 W</u>	
DCM:	<u>110</u>	SST:	<u>18.63</u>	

Rosette Position	Desired Depth	Elisha Viral DNA	Gadiel Cell Cycle	Angel N2 Fix	Solange	Shimi HPLC DNA	
1	1000	5L				5L	
2	500	5L				5L	
3	400					5L	
4	250	5L				5L	
5	160					X	
6	152		X				
7	152		X				
8	135					X	
9	110					X	
10	110		X				
11	110		X				
12	88					X	
13	70					X	
14	70		X				
15	70		X				
16	14				X		
17	10					X	
18	10			X			
19	10			X			
20	10			X			
21	10			X			
22	10			X			
23	5		X				
24	5		X				

Notes: 500m cast, Niskin 21 didn't fire

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event #	_____	Date:	30 Nov 2010	GMT
Station #	4	Time:	15:13:45	GMT
Cast#	33	Lat:	23 27.509 S	
Operators	KD, ST	Lon:	88 46.089 W	
DCM:	118	SST:	18.62	

Rosette Position	Desired Depth	PC/PN UH	PPO4 UH	PSi UH	Lydia	Sonya	Gases OSU
1	1000	8					
2	1000		8				
3	1000			4			X
4	750	8					
5	750		8				
6	750			4			X
7	600				X		X
8	500	8					
9	500		8				
10	500			4			X
11	400				X		
12	400	8					
13	400		8				
14	400			4		X	X
15	200					X	X
16	118				X	X	X
17	96					X	X
18	73					X	X
19	56					X	X
20	50					X	
21	40				X	X	X
22	29					X	X
23	15					X	X
24	5				X	X	

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # \_\_\_\_\_  
 Station # 4  
 Cast# 34  
 Operators KD  
 DCM: 118

Date: 30 Nov 2010 GMT  
 Time: 18:15:50 GMT  
 Lat: 23 27.508 S  
 Lon: 88 46.090 W  
 SST: 18.63

Rosette Position	Desired Depth	Oxygen UH	DIC UH	Nuts UH	DOC/DON Repeta	CDOM Repeta
1	1000		X	X	X	X
2	750	1	X	X	X	X
3	500		X	X	X	X
4	400	2	X	X	X	X
5	200		X	X	X	X
6	110					
7	110					
8	110	3,4	X	X	X	X
9	96		X	X	X	X
10	73					
11	73					
12	73		X	X	X	X
13	56					
14	56					
15	56		X	X	X	X
16	40					
17	40					
18	40		X	X	X	X
19	29					
20	29					
21	29	5	X	X	X	X
22	15					
23	15					
24	15		X	X	X	X

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # \_\_\_\_\_  
 Station # 4  
 Cast# 34  
 Operators KD  
 DCM: 118

Date: 30 Nov 2010 GMT  
 Time: 18:15:50 GMT  
 Lat: 23 27.508 S  
 Lon: 88 46.090 W  
 SST: 18.63

Rosette Position	Desired Depth	DOP Repeta	FCM UH/UC	PC/PN UH	PPO4 UH	PSi UH	Abs. Spect. OSU
1	1000	X	X				
2	750	X	X				
3	500	X	X				
4	400	X	X				
5	200	X	X				4
6	110					2	4
7	110			4	4		
8	110	X	X				
9	96	X	X				4
10	73					2	4
11	73			4	4		
12	73	X	X				
13	56					2	4
14	56			4	4		
15	56	X	X				
16	40					2	4
17	40			4	4		
18	40	X	X				
19	29					2	4
20	29			4	4		
21	29	X	X				
22	15					2	4
23	15			4	4		
24	15	X	X				

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event #	_____	Date:	<u>30 Nov 2010</u>	GMT
Station #	<u>4</u>	Time:	<u>18:15:50</u>	GMT
Cast#	<u>34</u>	Lat:	<u>23 27.508 S</u>	
Operators	<u>KD</u>	Lon:	<u>88 46.090 W</u>	
DCM:	<u>118</u>	SST:	<u>18.63</u>	

Rosette Position	Desired Depth	Chl. A Repeta	Pigs Fong	FRRF UCSC	MIT Culture		
1	<b>1000</b>						
2	<b>750</b>						
3	<b>500</b>						
4	<b>400</b>						
5	<b>200</b>	X	X	X			
6	<b>110</b>						
7	<b>110</b>						
8	<b>110</b>	X	X	X			
9	<b>96</b>	X	X	X			
10	<b>73</b>				X		
11	<b>73</b>						
12	<b>73</b>	X	X	X			
13	<b>56</b>						
14	<b>56</b>						
15	<b>56</b>	X	X	X			
16	<b>40</b>						
17	<b>40</b>						
18	<b>40</b>	X	X	X			
19	<b>29</b>						
20	<b>29</b>						
21	<b>29</b>	X	X	X			
22	<b>15</b>						
23	<b>15</b>						
24	<b>15</b>	X	X	X			

Notes:



# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event #	<u>90</u>	Date:	<u>30 Nov 2010</u>	GMT
Station #	<u>4</u>	Time:	<u>22:10:28</u>	GMT
Cast#	<u>35</u>	Lat:	<u>23 27.508 S</u>	
Operators	<u>SR, AF</u>	Lon:	<u>88 46.091 W</u>	
DCM:	<u></u>	SST:	<u>18.62</u>	

Rosette Position	Desired Depth	Virus Div Elisha	pEUK Shimi	DNA/RNA Fong	Angel		
1	160	X	X				
2	135		X				
3	118	X	X				
4	118			X			
5	96	X	X				
6	75				X		
7	75				X		
8	75				X		
9	75				X		
10	75				X		
11	75				X		
12	75				X		
13	75				X		
14	75				X		
15	75				X		
16	75				X		
17	75		X				
18	40	X	X				
19	40			X			
20	29		X				
21	29			X			
22	15	X	X				
23	15			X			
24							

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # 93  
 Station # 4  
 Cast# 36  
 Operators Cristina  
 DCM: \_\_\_\_\_

Date: 01 Dec 2010 GMT  
 Time: 07:24 GMT  
 Lat: 23 27.509 S  
 Lon: 88 46.089 W  
 SST: 18.56

Rosette Position	Desired Depth	Gadiel AND/ARN	Jeanett Biomarkers	Cristina N2O	Angel		
1	1516		X				
2	1000	X					
3	1000		X	X			
4	900		X	X			
5	800		X	X			
6	700		X	X			
7	620		X	X			
8	500	X					
9	400	X					
10	400		X	X			
11	300	X					
12	300		X	X			
13	200	X					
14	180	X					
15	180	X					
16	120	X					
17	120	X					
18	120		X	X			
19	75	X					
20	75				X		
21	60		X	X			
22	20		X	X			
23	5		X	X			
24	5	X					

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # 97  
Station # 4  
Cast# 37  
Operators SR  
DCM: \_\_\_\_\_

Date: 01 Dec 2010 GMT  
Time: 13:53:09 GMT  
Lat: 23 27.507 S  
Lon: 88 46.089 W  
SST: 18.56

Rosette Position	Desired Depth	Gadiel meta-g/p	Solange P-uptake	Shimi pEUK div			
1	175			X			
2	160	X					
3	160	X					
4	135			X			
5	120	X					
6	120	X					
7	120			X			
8	120		X				
9	97			X			
10	74		X				
11	74			X			
12	70	X					
13	70	X					
14	56		X				
15	40		X				
16	40			X			
17	29		X				
18	29			X			
19	15		X				
20	15		X				
21	15			x			
22	5	X					
23	5	X					
24							

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # 96  
Station # 4  
Cast# 38  
Operators KD  
DCM: 120

Date: 01 Dec 2010 GMT  
Time: 15:24:36 GMT  
Lat: 23 27.508 S  
Lon: 88 46.089 W  
SST: 18.58

Rosette Position	Desired Depth	Gases Repeta	Sonya	PC/PN UH	PPO4 UH	PSi UH
1	1000			8		
2	1000				8	
3	1000					4
4	750			8		
5	750				8	
6	750					4
7	500			8		
8	500				8	
9	500	X				4
10	400			8		
11	400				8	
12	400	X	X			4
13	300	X				
14	200	X	X			
15	160	X				
16	140	X				
17	125	X	X			
18	97		X			
19	74		X			
20	56	X	X			
21	40		X			
22	29	X	X			
23	15		X			
24	5	X	X			

Notes: Lots of variability between upcast and downcast trace.  
Sample PPO4-11 lost

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # 100  
 Station # 4  
 Cast# 39  
 Operators KD  
 DCM: 120

Date: 01 Dec 2010 GMT  
 Time: 17:49:57 GMT  
 Lat: 23 27.507 S  
 Lon: 88 46.088 W  
 SST: 18.72

Rosette Position	Desired Depth	Oxygen UH	Katherine OP	DIC UH	Nuts UH	DOC/DON Repeta	CDOM Repeta
1	1000			X	X	X	X
2	750	6		X	X	X	X
3	500			X	X	X	X
4	400	7		X	X	X	X
5	200		X	X	X	X	X
6	120		X				
7	120						
8	120	8,9		X	X	X	X
9	97			X	X	X	X
10	74		X				
11	74						
12	74			X	X	X	X
13	56						
14	56						
15	56			X	X	X	X
16	40		X				
17	40						
18	40			X	X	X	X
19	29		X				
20	29						
21	29	10		X	X	X	X
22	15		X				
23	15						
24	15			X	X	X	X

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event #	<u>99</u>	Date:	<u>01 Dec 2010</u>	GMT
Station #	<u>4</u>	Time:	<u>17:49:57</u>	GMT
Cast#	<u>39</u>	Lat:	<u>23 27.507 S</u>	
Operators	<u>KD</u>	Lon:	<u>88 46.088 W</u>	
DCM:	<u>120</u>	SST:	<u>18.72</u>	

Rosette Position	Desired Depth	LLN UH	LLP UH	LLSi UH	DOP Repeta	FCM UH/UC	Abs. Spect. OSU
1	<b>1000</b>	X			X	X	
2	<b>750</b>	X			X	X	
3	<b>500</b>	X			X	X	
4	<b>O2min</b>	X			X	X	
5	<b>200</b>	X	X	X	X	X	4
6	<b>DCM</b>						4
7	<b>DCM</b>						
8	<b>DCM</b>	X	X	X	X	X	
9	<b>1%</b>	X	X	X	X	X	4
10	<b>3%</b>						4
11	<b>3%</b>						
12	<b>3%</b>	X	X	X	X	X	
13	<b>7%</b>						4
14	<b>7%</b>						
15	<b>7%</b>	X	X	X	X	X	
16	<b>15%</b>						4
17	<b>15%</b>						
18	<b>15%</b>	X	X	X	X	X	
19	<b>25%</b>						4
20	<b>25%</b>						
21	<b>25%</b>	X	X	X	X	X	
22	<b>50%</b>						4
23	<b>50%</b>						
24	<b>50%</b>	X	X	X	X	X	

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # 100  
 Station # 4  
 Cast# 39  
 Operators KD  
 DCM: 120

Date: 01 Dec 2010 GMT  
 Time: 17:49:57 GMT  
 Lat: 23 27.507 S  
 Lon: 88 46.088 W  
 SST: 18.72

Rosette Position	Desired Depth	PC/PN UH	PPO4 UH	PSi UH	Chl. A Repeta	Pigs Fong	FRRF UCSC
1	<b>1000</b>						
2	<b>750</b>						
3	<b>500</b>						
4	<b>O2min</b>						
5	<b>200</b>				X	X	X
6	<b>DCM</b>			2			
7	<b>DCM</b>	4	4				
8	<b>DCM</b>				X	X	X
9	<b>1%</b>				X	X	X
10	<b>3%</b>			2			
11	<b>3%</b>	4	4				
12	<b>3%</b>				X	X	X
13	<b>7%</b>			2			
14	<b>7%</b>	4	4				
15	<b>7%</b>				X	X	X
16	<b>15%</b>			2			
17	<b>15%</b>	4	4				
18	<b>15%</b>				X	X	X
19	<b>25%</b>			2			
20	<b>25%</b>	4	4				
21	<b>25%</b>				X	X	X
22	<b>50%</b>			2			
23	<b>50%</b>	4	4				
24	<b>50%</b>				X	X	X

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # 103  
Station # 4  
Cast# 40  
Operators KD  
DCM: 118

Date: 02 Dec 2010 GMT  
Time: 01:03:57 GMT  
Lat: 23 27.525 S  
Lon: 88 46.154 W  
SST: 18.82

Rosette Position	Desired Depth	DOM Inc Sharma					
1	170	X					
2	170	X					
3	170	X					
4	170	X					
5	170	X					
6	170	X					
7	170	X					
8	170	X					
9	170	X					
10	170	X					
11	170	X					
12	170	X					
13	15	X					
14	15	X					
15	15	X					
16	15	X					
17	15	X					
18	15	X					
19	15	X					
20	15	X					
21	15	X					
22	15	X					
23	15	X					
24	15	X					

Notes:500mcast



# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event #	_____	Date:	<u>02 Dec 2010</u>	GMT
Station #	<u>4</u>	Time:	<u>08:10:00</u>	GMT
Cast#	<u>41</u>	Lat:	<u>23 27.509 S</u>	
Operators	<u>NAP</u>	Lon:	<u>88 46.089 W</u>	
DCM:	_____	SST:	<u>18.6</u>	

Rosette Position	Desired Depth	Nicole	Gadiel				
1			X				
2			X				
3	<b>400</b>	X					
4			X				
5			X				
6			X				
7			X				
8	<b>120</b>	X					
9	<b>120</b>	X					
10			X				
11			X				
12			X				
13			X				
14			X				
15			X				
16	<b>56</b>	X					
17	<b>40</b>	X					
18	<b>29</b>	X					
19	<b>15</b>	X					
20	<b>15</b>	X					
21			X				
22			X				
23			X				
24			X				

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # 108  
 Station # 4  
 Cast# 42  
 Operators KD  
 DCM: 110

Date: 02 Dec 2010 GMT  
 Time: 17:54:10 GMT  
 Lat: 23 25.673 S  
 Lon: 88 50.072 W  
 SST: 18.75

Rosette Position	Desired Depth	Lydia	Jeanett	Barube			
1	500		X				
2	500		X				
3	500		X				
4	500		X				
5	500		X				
6	500		X				
7	500		X				
8	500		X				
9	500		X				
10	500		X				
11	500		X				
12	500		X				
13	500		X				
14	500		X				
15	500		X				
16	500		X				
17	500		X				
18	500		X				
19	500		X				
20	500		X				
21	500	X					
22	400	X					
23	400	X					
24	150			X			

Notes: Cast off of actual station by 4 miles

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event #	_____	Date:	<u>02 Dec 2010</u>	GMT
Station #	<u>4</u>	Time:	<u>22:35:00</u>	GMT
Cast#	<u>43</u>	Lat:	<u>23 27.501 S</u>	
Operators	<u>NAP</u>	Lon:	<u>88 46.501 W</u>	
DCM:	<u>110</u>	SST:	<u>18.7</u>	

Rosette Position	Desired Depth	Gadiel	Jeanett	Solange			
1	300		X				
2	300		X				
3	300		X				
4	300		X				
5	300		X				
6	300		X				
7	300		X				
8	300		X				
9	300		X				
10	300		X				
11	300		X				
12	300		X				
13	300		X				
14	300		X				
15	300		X				
16	300		X				
17	300		X				
18	300		X				
19	300		X				
20	110	X					
21	110	X					
22	15			X			
23	5	X					
24	5	X					

Notes: 800m cast

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # 115  
 Station # 5  
 Cast# 44  
 Operators PB  
 DCM: 125

Date: 04 Dec 2010 GMT  
 Time: 10:40:10 GMT  
 Lat: 24 33.616 S  
 Lon: 94 43.484 W  
 SST: 19.58

Rosette Position	Desired Depth	Paul	Solange	Angel	Cristina	Jeanett	Dan
1	800				X	X	
2	600				X	X	
3	250	X					
4	220	X					
5	190	X					
6	160	X					X
7	130	X					X
8	100	X					
9	100	X					
10	100	X					
11	100	X					
12	100	X					
13	70	X					X
14	40	X					X
15	15		X				X
16	10	X					
17	10	X					
18	10	X					
19	10	X					
20	10	X					
21	10			X			
22	10			x			
23	10			X			
24	10			X			

Notes: ML 1-28, O2max 70, O2min 400, part.max 97

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # 117  
 Station # 5  
 Cast# 45  
 Operators KD, ST  
 DCM: 125

Date: 04 Dec 2010 GMT  
 Time: 17:11:21 GMT  
 Lat: 24 33.617 S  
 Lon: 94 43.482 W  
 SST: 19.60

Rosette Position	Desired Depth	Gases Repeta	PC/PN UH	PPO4 UH	PSi UH	Nutrients OSU	Sonya
1	1000		8			X	
2	1000			8			
3	1000				8		
4	750		8			X	
5	750			8			
6	750				8		
7	500		8			X	
8	500			8			
9	500				8		
10	400		8			X	
11	400			8			
12	400	X			8		X
13	300	X				X	
14	200	X				X	X
15	160	X				X	
16	140	X				X	
17	125	X				X	X
18	105					X	X
19	80					X	X
20	60	X				X	X
21	43					X	X
22	31	X				X	X
23	16					X	X
24	5	x				X	

Notes: PPO4 5-45-8 filter malfunction

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # 117  
 Station # 5  
 Cast# 45  
 Operators KD, ST  
 DCM: 125

Date: 04 Dec 2010 GMT  
 Time: 17:11:21 GMT  
 Lat: 24 33.617 S  
 Lon: 94 43.482 W  
 SST: 19.60

Rosette Position	Desired Depth	Nuts UH	Pigs Fong				
1	1000	X					
2	1000						
3	1000						
4	750	X					
5	750						
6	750						
7	500	X					
8	500						
9	500						
10	400	X					
11	400						
12	400	X					
13	300	X					
14	200	X	X				
15	160						
16	140						
17	125	X	X				
18	105	X	X				
19	80	X	X				
20	60	X	X				
21	43	X	X				
22	31	X	X				
23	16	X	X				
24	5	X					

Notes: PPO4 5-45-8 filter malfunction

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event #	_____	Date:	04 Dec 2010	GMT
Station #	5	Time:	20:05:30	GMT
Cast#	46	Lat:	24 33.619 S	
Operators	LB	Lon:	94 43.480 W	
DCM:	125	SST:	19.66	

Rosette Position	Desired Depth	Gadiel	Shimi 18S/HPLC	Nilo	Jeanett Fungus	Dan Trip Iso	Lydia
1	1000		5				
2	500		5		2		
3	500						10
4	400						10
5	180	10					
6	180		7			0.1	
7	180		5		2		
8	125	10					
9	125	10					
10	125		7			0.1	
11	125		5	1	2		
12	125						10
13	106		7			0.1	
14	106		5		2		
15	80		7			0.1	
16	80		5		2		
17	43		7				
18	43		5		2		
19	40					0.1	10
20	25					0.1	
21	16		7				
22	16		5		2		
23	5						10
24	5	10				0.1	

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event #	_____	Date:	04 Dec 2010	GMT
Station #	5	Time:	12:21:31	GMT
Cast#	47	Lat:	24 33.619 S	
Operators	KD, ST	Lon:	94 43.481 W	
DCM:	125m	SST:	19.68	

Rosette Position	Desired Depth	Oxygen UH	DIC UH	Nuts UH	DOC/DON Repeta	CDOM Repeta
1	16		X	X		
2	1000	1	X	X	X	X
3	750		X	X	X	X
4	500	2	X	X	X	X
5	400		X	X	X	X
6	200			X	X	X
7	125					
8	125	3,4	X	X	X	X
9	125		X	X		
10	105			X	X	X
11	80					
12	80		X	X	X	X
13	80					
14	60					
15	60		X	X	X	X
16	60					
17	43					
18	43		X	X	X	X
19	43					
20	31					
21	31	5	X	X	X	X
22	31					
23	16					
24	16		X	X	X	X

**Notes: Bottles were off by one. Depths are correct. FCM tubes are labeled as Noted. Extra samples were taken to account for missing depths and noted.**



# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event #	_____	Date:	04 Dec 2010	GMT
Station #	5	Time:	12:21:31	GMT
Cast#	47	Lat:	24 33.619 S	
Operators	KD, ST	Lon:	94 43.481 W	
DCM:	125	SST:	19.68	

Rosette Position	Desired Depth	DOP Repeta	FCM UH/UC	PC/PN UH	PPO4 UH	PSi UH	Chl. A Repeta
1	16		#24				
2	1000	X	#1				
3	750	X	#2				
4	500	X	#3				
5	400	X	#4				X
6	200	X	#5				X
7	125					4	
8	125	X		4	4		X
9	125		#8				X
10	105	X	#9				
11	80					4	
12	80	X		4	4		X
13	80		#12				
14	60					4	
15	60	X		4	4		X
16	60		#15				
17	43					4	
18	43	X		4	4		X
19	43		#18				
20	31					4	
21	31	X		4	4		X
22	31		#21				
23	16					4	
24	16	X		4	4		X

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # \_\_\_\_\_  
 Station # 5  
 Cast# 47  
 Operators KD, ST  
 DCM: 125m

Date: 04 Dec 2010 GMT  
 Time: 12:21:31 GMT  
 Lat: 24 33.619 S  
 Lon: 94 43.481 W  
 SST: 19.68

Rosette Position	Desired Depth	FRRF UCSC					
1	16						
2	1000						
3	750						
4	500	X					
5	400						
6	200						
7	125						
8	125	X					
9	125	X					
10	105	X					
11	80						
12	80	X					
13	80						
14	60						
15	60	X					
16	60						
17	43						
18	43	X					
19	43						
20	31						
21	31	X					
22	31						
23	16						
24	16	X					

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event #	<u>121</u>	Date:	<u>05 Dec 2010</u>	GMT
Station #	<u>5</u>	Time:	<u>01:11:03</u>	GMT
Cast#	<u>48</u>	Lat:	<u>24 33.618 S</u>	
Operators	<u>EWC, NP</u>	Lon:	<u>94 43.483 W</u>	
DCM:	<u>115</u>	SST:	<u>19.62</u>	

Rosette Position	Desired Depth	Alli	Elisha V. Arch.	Nicole nifH	Jeanett	Cristina	Lydia
1	1000	8				0.5	
2	1000		10				
3	700				2	0.5	
4	500		10			0.5	
5	500						10
6	400	8				0.5	
7	400			8			
8	300						10
9	200	6	2.5				
10	115	6	2.5			0.5	
11	115			8			
12	115						10
13	105	6					
14	80	6					
15	60			8			
16	60	6				0.5	
17	43			8			
18	40						10
19	31	6	2.5			0.5	
20	31			8			
21	16			8			
22	5					0.5	
23							
24							

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # \_\_\_\_\_  
Station # 5  
Cast# 49  
Operators Nicole/Mar  
DCM: \_\_\_\_\_

Date: 05 Dec 2010 GMT  
Time: 05:08:00 GMT  
Lat: 24 33.267 S  
Lon: 94 42.043 W  
SST: 19.6

Rosette Position	Desired Depth	DOC/N Repeta	FDOM Repeta	Jeanett			
1	1000	X	X	2			
2	975	X	X				
3	950	X	X				
4	900	X	X				
5	850	X	X	2			
6	800	X	X				
7	725	X	X				
8	700	X	X	2			
9	675	X	X				
10	650	X	X				
11	600	X	X				
12	550	X	X				
13	500	X	X				
14	450	X	X				
15	400	X	X	2			
16	380	X	X				
17	350	X	X				
18	300	X	X				
19	250	X	X				
20	200	X	X				
21	125	X	X	2			
22	75	X	X				
23	44	X	X				
24	20	X	X				

Notes: 1000 m cast

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event #	<u>126</u>	Date:	<u>06 Dec 2010</u>	GMT
Station #	<u>6</u>	Time:	<u>14:30</u>	GMT
Cast#	<u>50</u>	Lat:	<u>25 33.069 S</u>	
Operators	<u>Jesse, Paul</u>	Lon:	<u>100 08.135W</u>	
DCM:	<u>125</u>	SST:	<u>20.62</u>	

Rosette Position	Desired Depth	Paul	Solange	Angel			
1	200	X					
2	170	X					
3	125	X					
4	125		X				
5	113	X					
6	113	X					
7	113	X					
8	113	X					
9	113	X					
10	113	X					
11	86	X					
12	86		X				
13	65	X					
14	65		X				
15	47	X					
16	47		X				
17	34	X					
18	34		X				
19	17	X					
20	17		X				
21	10			X			
22	10			X			
23	10			X			
24	10			X			

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # 127  
 Station # 6  
 Cast# 51  
 Operators KD  
 DCM: 130

Date: 06 Dec 2010 GMT  
 Time: 16:23:21 GMT  
 Lat: 25 33.070S  
 Lon: 100 08.135W  
 SST: 20.71

Rosette Position	Desired Depth	Gases Repeta	PC/PN UH	PPO4 UH	PSi UH	Nuts UH	Pigs Fong	Sonya
1	1000		8			X		
2	1000			8				
3	1000				8			
4	750		8			X		
5	750			8				
6	750				8			
7	500		8			X		
8	500			8				
9	500				8			
10	400		8			X		
11	400			8				
12	400	X			8			X
13	300	X				X		
14	200	X				X	X	X
15	160	X				X	X	
16	140	X				X	X	
17	125	X				X	X	X
18	113					X	X	X
19	86					X	X	X
20	65	X				X	X	X
21	47					X	X	X
22	34	X				X	X	X
23	17					X	X	X
24	5	X				X		X

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # 127  
 Station # 6  
 Cast# 51  
 Operators KD  
 DCM: 130

Date: 06 Dec 2010 GMT  
 Time: 16:23:21 GMT  
 Lat: 25 33.070S  
 Lon: 100 08.135W  
 SST: 20.71

Rosette Position	Desired Depth	Abs. Spec. OSU	Alt. Nuts OSU					
1	1000		X					
2	1000							
3	1000							
4	750		X					
5	750							
6	750							
7	500		X					
8	500							
9	500							
10	400		X					
11	400							
12	400							
13	300		X					
14	200	4	X					
15	160	4	X					
16	140		X					
17	125	4	X					
18	113	4	X					
19	86	4	X					
20	65	4	X					
21	47	4	X					
22	34	4	X					
23	17	4	X					
24	5		X					

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # 130  
 Station # 6  
 Cast# 52  
 Operators KD  
 DCM: 120

Date: 06 Dec 2010 GMT  
 Time: 19:33:09 GMT  
 Lat: 25 33.071S  
 Lon: 100 08.134W  
 SST: 20.72

Rosette Position	Desired Depth	Oxygen UH	DIC UH	Nuts UH	DOC/DON Repeta	CDOM Repeta	DOP Repeta
1	1000		X	X	X	X	X
2	750	6	X	X	X	X	X
3	500		X	X	X	X	X
4	400	7	X	X	X	X	X
5	200		X	X	X	X	X
6	125						
7	125						
8	125	8,9	X	X	X	X	X
9	113		X	X	X	X	X
10	86						
11	86						
12	86		X	X	X	X	X
13	65						
14	65						
15	65		X	X	X	X	X
16	47						
17	47						
18	47		X	X	X	X	X
19	34						
20	34						
21	34	10	X	X	X	X	X
22	17						
23	17						
24	17		X	X	X	X	X

Notes: #13 PSi filter ripped



# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # 130  
 Station # 6  
 Cast# 52  
 Operators KD  
 DCM: 120

Date: 06 Dec 2010 GMT  
 Time: 19:33:09 GMT  
 Lat: 25 33.071S  
 Lon: 100 08.134W  
 SST: 20.72

Rosette Position	Desired Depth	LLN UH	LLP UH	LLSi UH	FCM UH/UC	Chl. A Repeta	Pigs Fong
1	1000	X			X		
2	750	X			X		
3	500	X			X		
4	400	X			X		
5	200	X	X	X	X	X	X
6	125						
7	125						
8	125	X	X	X	X	X	X
9	113	X	X	X	X	X	X
10	86						
11	86						
12	86	X	X	X	X	X	X
13	65						
14	65						
15	65	X	X	X	X	X	X
16	47						
17	47						
18	47	X	X	X	X	X	X
19	34						
20	34						
21	34	X	X	X	X	X	X
22	17						
23	17						
24	17	X	X	X	X	X	X

Notes: #13 PSi filter ripped

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # 130  
 Station # 6  
 Cast# 52  
 Operators KD  
 DCM: 120

Date: 06 Dec 2010 GMT  
 Time: 19:33:09 GMT  
 Lat: 25 33.071 S  
 Lon: 100 08.134 W  
 SST: 20.72

Rosette Position	Desired Depth	PC/PN UH	PPO4 UH	PSi UH	FRRF UCSC		
1	<b>1000</b>						
2	<b>750</b>						
3	<b>500</b>						
4	<b>400</b>						
5	<b>200</b>				X		
6	<b>125</b>			4			
7	<b>125</b>	4	4				
8	<b>125</b>				X		
9	<b>113</b>				X		
10	<b>86</b>			4			
11	<b>86</b>	4	4				
12	<b>86</b>				X		
13	<b>65</b>			4			
14	<b>65</b>	4	4				
15	<b>65</b>				X		
16	<b>47</b>			4			
17	<b>47</b>	4	4				
18	<b>47</b>				X		
19	<b>34</b>			4			
20	<b>34</b>	4	4				
21	<b>34</b>				X		
22	<b>17</b>			4			
23	<b>17</b>	4	4				
24	<b>17</b>				X		

Notes: #13 PSi filter ripped

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # 132  
 Station # 6  
 Cast# 53  
 Operators LB  
 DCM: 125

Date: 07 Dec 2010 GMT  
 Time: 01:19:00 GMT  
 Lat: 25 33.070S  
 Lon: 100 08.135W  
 SST: 20.62

Rosette Position	Desired Depth	Gadiel FCM	Shimi HPLC/DNA	Nilo	Jeanett Fungus	Lydia DNA/RNA	
1	1000		X		X		
2	500		X		X		
3	500					X	
4	423					X	
5	200	X					
6	200	X					
7	170		X				
8	170		X		X		
9	125		X				
10	125		X	X	X		
11	120					X	
12	120	X					
13	120	X					
14	113		X				
15	113		X		X		
16	86		X				
17	86		X		X		
18	50					X	
19	47		X				
20	47		X		X		
21	17		X				
22	17		X		X		
23	5					X	
24	5	X					

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event #	<u>133</u>	Date:	<u>07 Dec 2010</u>	GMT
Station #	<u>6</u>	Time:	<u>03:28:56</u>	GMT
Cast#	<u>54</u>	Lat:	<u>25 33.069 S</u>	
Operators	<u>EWC</u>	Lon:	<u>100 08.133 W</u>	
DCM:	<u>130</u>	SST:	<u>20.73</u>	

Rosette Position	Desired Depth	Alli	Elisha Viral DNA	Nicole	Jeanett Fungus	Cristina	
1	1000	8				0.5	
2	1000		5				
3	800				2	0.5	
4	700				2	0.5	
5	600				2	0.5	
6	500		5			0.5	
7	420	8			2	0.5	
8	420			8			
9	200	6				0.5	
10	130	6	0.5			0.5	
11	130			8			
12	113	6					
13	86	6					
14	65	6	0.5			0.5	
15	65			8			
16	47			8			
17	34	6	2.5			0.5	
18	34			8			
19	17			8			
20	5					0.5	
21							
22							
23							
24							

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event #	_____	Date:	08 Dec 2010	GMT
Station #	<u>7</u>	Time:	00:01:00	GMT
Cast#	<u>55</u>	Lat:	<u>26 14.844 S</u>	
Operators	<u>ST, GA</u>	Lon:	<u>103 57.676 W</u>	
DCM:	<u>180</u>	SST:	<u>21.54</u>	

Rosette Position	Desired Depth	Jeanett	Sasha	Gadiel			
1	1000	X					
2	1000	X					
3	1000	X					
4	1000	X					
5	1000	X					
6	1000	X					
7	1000	X					
8	1000	X					
9	1000	X					
10	1000	X					
11	1000	X					
12	1000	X					
13	1000	X					
14	1000	X					
15	1000	X					
16	1000	X					
17	1000	X					
18	1000	X					
19	1000	X					
20	1000	X					
21	1000	X					
22	300		X				
23	180			X			
24	180			X			

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event #	<u>138</u>	Date:	<u>08 Dec 2010</u>	GMT
Station #	<u>7</u>	Time:	<u>08:13:00</u>	GMT
Cast#	<u>56</u>	Lat:	<u>26 14.899S</u>	
Operators	<u>GD</u>	Lon:	<u>103 57.646W</u>	
DCM:	<u>170</u>	SST:	<u>21.44</u>	

Rosette Position	Desired Depth	Angel	Jeanett	Gadiel			
1	<b>215</b>			X			
2	<b>215</b>			X			
3	<b>170</b>		X				
4	<b>170</b>		X				
5	<b>170</b>		X				
6	<b>170</b>		X				
7	<b>170</b>		X				
8	<b>170</b>		X				
9	<b>170</b>		X				
10	<b>170</b>		X				
11	<b>170</b>		X				
12	<b>170</b>		X				
13	<b>170</b>		X				
14	<b>170</b>			X			
15	<b>170</b>			X			
16	<b>120</b>			X			
17	<b>120</b>			X			
18	<b>10</b>			X			
19	<b>10</b>			X			
20	<b>10</b>	X					
21	<b>10</b>	X					
22	<b>10</b>	X					
23	<b>10</b>	X					
24	<b>10</b>	X					

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event #	<u>139</u>	Date:	<u>08 Dec 2010</u>	GMT
Station #	<u>7</u>	Time:	<u>12:45:00</u>	GMT
Cast#	<u>57</u>	Lat:	<u>26 14.939 S</u>	
Operators	<u>PB</u>	Lon:	<u>103 57.507 W</u>	
DCM:	<u>180</u>	SST:	<u>21.45</u>	

Rosette Position	Desired Depth	Paul DNA/RNA FCM	Solange Production	Adrian -omics	Gadiel		
1	500			X			
2	500			X			
3	500			X			
4	250	X					
5	180	X					
6	180			X			
7	180			X			
8	180			X			
9	180		X				
10	180				X		
11	180				X		
12	140	X					
13	94	X					
14	71	X					
15	71		X				
16	54	X					
17	54		X				
18	39	X					
19	39		X				
20	28	X					
21	28		X				
22	14	X					
23	14		X				
24	14						

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # 143  
Station # 7  
Cast# 58  
Operators JWB  
DCM: 150,190

Date: 08 Dec 2010 GMT  
Time: 17:04:15 GMT  
Lat: 26 14.928 S  
Lon: 103 57.508 W  
SST: 21.62

Rosette Position	Desired Depth	Jeanett	Gadiel				
1	240	X					
2	240	X					
3	240	X					
4	240	X					
5	240	X					
6	240	X					
7	240	X					
8	240	X					
9	240	X					
10	240	X					
11	240	X					
12	240	X					
13	240	X					
14	240	X					
15	240	X					
16	240	X					
17	220		X				
18	220		X				
19	190		X				
20	190		X				
21	120		X				
22	120		X				
23	10		X				
24	10		X				

Notes: 500m Cast



# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event #	<u>146</u>	Date:	<u>08 Dec 2010</u>	GMT
Station #	<u>7</u>	Time:	<u>21:37:00</u>	GMT
Cast#	<u>59</u>	Lat:	<u>26 14.909 S</u>	
Operators	<u>JWB</u>	Lon:	<u>103 57.398 W</u>	
DCM:	<u></u>	SST:	<u>21.89</u>	

Rosette Position	Desired Depth						
1	2						
2	2						
3	2						
4	2						
5	2						
6	2						
7	2						
8	2						
9	2						
10	2						
11	2						
12	2						
13	2						
14	2						
15	2						
16	2						
17	2						
18	2						
19	2						
20	2						
21	2						
22	2						
23	2						
24	2						

**Notes: Surface cast for camera footage**

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event #	<u>147</u>	Date:	<u>08 Dec 2010</u>	GMT
Station #	<u>7</u>	Time:	<u>21:55:00</u>	GMT
Cast#	<u>60</u>	Lat:	<u>26 14.909 S</u>	
Operators	<u>SR, JWB</u>	Lon:	<u>103 57.401 W</u>	
DCM:	<u></u>	SST:	<u>21.92</u>	

Rosette Position	Desired Depth	Elisha Virus Div.	Shimi 18S Div.	Lydia	Alli D/RNA	Nilo	
1	1000	X	X				
2	1000				X		
3	500	X	X				
4	500			X			
5	500			X	X		
6	400			X			
7	400			X			
8	400		X		X		
9	250	X	X				
10	215		X				
11	190	X	X				
12	165	X	X				
13	165			X			
14	165			X			
15	141		X		X		
16	94	X	X				
17	71		X		X		
18	39		X				
19	36			X			
20	36			X			
21	36	X			X		
22	14	X	X			X	
23	5			X			
24	5			X	X		

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event #	<u>153</u>	Date:	<u>09 Dec 2010</u>	GMT
Station #	<u>7</u>	Time:	<u>13:17:35</u>	GMT
Cast#	<u>61</u>	Lat:	<u>26 14.898 S</u>	
Operators	<u>Cristina</u>	Lon:	<u>103 57.645 W</u>	
DCM:	<u></u>	SST:	<u>21.77</u>	

Rosette Position	Desired Depth	Gadiel	Alli	Solange	Cristina	Jeanett
1	<b>1000</b>	X			X	X
2	<b>1000</b>	X				
3	<b>1000</b>	X				
4	<b>1000</b>		X			
5	<b>500</b>		X			
6	<b>200</b>	X				
7	<b>200</b>	X				
8	<b>165</b>	X				
9	<b>165</b>	X				
10	<b>165</b>		X			
11	<b>165</b>			X		
12	<b>150</b>		X			
13	<b>125</b>	X				
14	<b>125</b>	X				
15	<b>97</b>		X			
16	<b>74</b>		X			
17	<b>74</b>			X		
18	<b>56</b>			X		
19	<b>40</b>			X		
20	<b>40</b>		X			
21	<b>29</b>			X		
22	<b>15</b>			X		
23	<b>10</b>	X				
24	<b>10</b>	X				

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # \_\_\_\_\_  
 Station # 7  
 Cast# 62  
 Operators KD  
 DCM: 140

Date: 09 Dec 2010 GMT  
 Time: 15:30:39 GMT  
 Lat: 26 14.898 S  
 Lon: 103 57.644 W  
 SST: 21.83

Rosette Position	Desired Depth	Gases Repeta	PC/PN UH	PPO4 UH	PSi UH	Nuts UH	Pigs Fong	Sonya
1	1000		8			X		
2	1000			8				
3	1000				8			
4	750		8			X		
5	750			8				
6	750				8			
7	500		8			X		
8	500			8				
9	500				8			
10	414		8			X		
11	414			8				
12	414	X			8			X
13	300	X				X		
14	200	X				X	X	X
15	175	X				X		
16	150	X				X		
17	135	X				X	X	X
18	122					X	X	X
19	93					X	X	X
20	70	X				X	X	X
21	50					X	X	X
22	37	X				X	X	X
23	18					X	X	X
24	5	X				X		X

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # \_\_\_\_\_  
 Station # 7  
 Cast# 62  
 Operators KD  
 DCM: 140

Date: 09 Dec 2010 GMT  
 Time: 15:30:39 GMT  
 Lat: 26 14.898 S  
 Lon: 103 57.644 W  
 SST: 21.83

Rosette Position	Desired Depth	Abs. Spec. OSU	Alt. N OSU					
1	1000		X					
2	1000							
3	1000							
4	750		X					
5	750							
6	750							
7	500		X					
8	500							
9	500							
10	414		X					
11	414							
12	414							
13	300		X					
14	200	X	X					
15	175	X	X					
16	150	X	X					
17	135	X	X					
18	122	X	X					
19	93	X	X					
20	70	X	X					
21	50	X	X					
22	37	X	X					
23	18	X	X					
24	5	X	X					

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # 157  
 Station # 7  
 Cast# 63  
 Operators SR  
 DCM: 145, 180

Date: 09 Dec 2010 GMT  
 Time: 18:22:00 GMT  
 Lat: 26 14.898 S  
 Lon: 103 57.646 W  
 SST: 21.87

Rosette Position	Desired Depth	FCM UH	CDOM Mar	Genomics Paul	Pigments Repeta	FCM Gadiel	18S Shimi	Lydia
1	250	X	X	X	X	X		
2	235	X	X	X	X	X		
3	220	X	X	X	X	X	X	
4	210	X	X	X	X	X	X	X
5	200	X	X	X	X	X	X	
6	190	X	X	X	X	X	X	X
7	185	X	X	X	X	X		
8	180	X	X	X	X	X	X	X
9	175	X	X	X	X	X		
10	170	X	X	X	X	X	X	
11	165	X	X	X	X	X	X	
12	160	X	X	X	X	X	X	X
13	155	X	X	X	X	X	X	
14	150	X	X	X	X	X	X	
15	145	X	X	X	X	X	X	X
16	140	X	X	X	X	X	X	X
17	135	X	X	X	X	X		
18	130	X	X	X	X	X	X	X
19	125	X	X	X	X	X		
20	120	X	X	X	X	X	X	
21	115	X	X	X	X	X		
22	110	X	X	X	X	X	X	
23	105	X	X	X	X	X		
24	100	X	X	X	X	X	X	

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # \_\_\_\_\_  
 Station # 7  
 Cast# 64  
 Operators KD  
 DCM: \_\_\_\_\_

Date: 09 Dec 2010 GMT  
 Time: 20:20:01 GMT  
 Lat: 26 14.897 S  
 Lon: 103 57.645 W  
 SST: 21.96

Rosette Position	Desired Depth	Oxygen UH	DIC UH	Nuts UH	DOC/DON Repeta	CDOM Repeta	DOP Repeta
1	1000		X	X	X	X	X
2	750	11	X	X	X	X	X
3	500		X	X	X	X	X
4	406	12	X	X	X	X	X
5	200		X	X	X	X	X
6	160						
7	160						
8	160	13,14	X	X	X	X	X
9	122		X	X	X	X	X
10	93						
11	93						
12	93		X	X	X	X	X
13	70						
14	70						
15	70		X	X	X	X	X
16	50						
17	50						
18	50		X	X	X	X	X
19	37						
20	37						
21	37	15	X	X	X	X	X
22	18						
23	18						
24	18		X	X	X	X	X

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # \_\_\_\_\_  
 Station # 7  
 Cast# 64  
 Operators KD  
 DCM: \_\_\_\_\_

Date: 09 Dec 2010 GMT  
 Time: 20:20:01 GMT  
 Lat: 26 14.897 S  
 Lon: 103 57.645 W  
 SST: 21.96

Rosette Position	Desired Depth	LLN UH	LLP UH	LLSi UH	FCM UH/UC	Chl. A Repeta	Pigs Fong
1	<b>1000</b>	X			X		
2	<b>750</b>	X			X		
3	<b>500</b>	X			X		
4	<b>400</b>	X			X		
5	<b>200</b>	X	X	X	X	X	X
6	<b>Dcm</b>						
7	<b>Dcm</b>						
8	<b>Dcm</b>	X	X	X	X	X	X
9	<b>122</b>	X	X	X	X	X	X
10	<b>93</b>						
11	<b>93</b>						
12	<b>93</b>	X	X	X	X	X	X
13	<b>70</b>						
14	<b>70</b>						
15	<b>70</b>	X	X	X	X	X	X
16	<b>50</b>						
17	<b>50</b>						
18	<b>50</b>	X	X	X	X	X	X
19	<b>37</b>						
20	<b>37</b>						
21	<b>37</b>	X	X	X	X	X	X
22	<b>18</b>						
23	<b>18</b>						
24	<b>18</b>	X	X	X	X	X	X

Notes:



# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # \_\_\_\_\_  
 Station # 7  
 Cast# 64  
 Operators KD  
 DCM: \_\_\_\_\_

Date: 09 Dec 2010 GMT  
 Time: 20:20:01 GMT  
 Lat: 26 14.897 S  
 Lon: 103 57.645 W  
 SST: 21.96

Rosette Position	Desired Depth	PC/PN UH	PPO4 UH	PSi UH	FRRF UCSC		
1	<b>1000</b>						
2	<b>750</b>						
3	<b>500</b>						
4	<b>400</b>						
5	<b>200</b>				X		
6	<b>Dcm</b>			4			
7	<b>Dcm</b>	4	4				
8	<b>Dcm</b>				X		
9	<b>122</b>				X		
10	<b>93</b>			4			
11	<b>93</b>	4	4				
12	<b>93</b>				X		
13	<b>70</b>			4			
14	<b>70</b>	4	4				
15	<b>70</b>				X		
16	<b>50</b>			4			
17	<b>50</b>	4	4				
18	<b>50</b>				X		
19	<b>37</b>			4			
20	<b>37</b>	4	4				
21	<b>37</b>				X		
22	<b>18</b>			4			
23	<b>18</b>	4	4				
24	<b>18</b>				X		

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event #	<u>161</u>	Date:	<u>10 Dec 2010</u>	GMT
Station #	<u>7</u>	Time:	<u>01:36:42</u>	GMT
Cast#	<u>65</u>	Lat:	<u>26 14.899 S</u>	
Operators	<u>SR</u>	Lon:	<u>103 57.646 W</u>	
DCM:	<u>165</u>	SST:	<u>21.96</u>	

Rosette Position	Desired Depth	Gadiel	Lydia	Shimi			
1	700	X					
2	700	X					
3	700	X					
4	700	X					
5	500		X				
6	400		X				
7	225	X					
8	225	X					
9	225			7			
10	165		3	7			
11	165		X				
12	165	X					
13	165	X					
14	122		X				
15	122		3	7			
16	120	X					
17	120	X					
18	93			7			
19	50			7			
20	30		X				
21	18			7			
22	10	X					
23	10	X					
24	5		X				

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # 162  
Station # 7  
Cast# 66  
Operators SR  
DCM: 160

Date: 10 Dec 2010 GMT  
Time: 05:08:01 GMT  
Lat: 26 14.902 S  
Lon: 103 57.644 W  
SST: 21.89

Rosette Position	Desired Depth	Gadiel	Alli	Shimi			
1	500		X				
2	300		X				
3	225	X					
4	225	X					
5	225			X			
6	185			X			
7	160		X				
8	160	X					
9	160	X					
10	160			X			
11	150		X				
12	150			X			
13	122			X			
14	120	X					
15	120	X					
16	93			X			
17	70		X				
18	50		X				
19	50			X			
20	25		X				
21	25			X			
22	10	X					
23	10	X					
24							

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # 165  
Station # 7  
Cast# 67  
Operators KD  
DCM: 150

Date: 10 Dec 2010 GMT  
Time: 11:59:22 GMT  
Lat: 26 14.899 S  
Lon: 103 57.647 W  
SST: 21.68

Rosette Position	Desired Depth	Jeanett	Gadiel	Cristina			
1	500	X		X			
2	500	X					
3	500	X					
4	500	X					
5	500	X					
6	500	X					
7	500	X					
8	500	X					
9	500	X					
10	500	X					
11	500	X					
12	500	X					
13	500	X					
14	500	X					
15	500	X					
16	500	X					
17	500	X					
18	500	X					
19	500	X					
20	500	X					
21	500	X					
22	500	X					
23	500		X				
24	500		X				

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # 166  
 Station # 7  
 Cast# 68  
 Operators JWB  
 DCM: 150 – MLD=45

Date: 10 Dec 2010 GMT  
 Time: 15:03:15 GMT  
 Lat: 26 14.899 S  
 Lon: 103 57.645 W  
 SST: 21.65

Rosette Position	Desired Depth	Nicole	Shimi	Alli	Solange	Paul	
1	500			X			
2	420	X					
3	200		X				
4	180	X					
5	180		X				
6	150	X					
7	150		X	X			
8	150	X					
9	150					X	
10	150					X	
11	150					X	
12	150					X	
13	150					X	
14	120		X				
15	80	X					
16	80		X	X			
17	61		X				
18	50			X			
19	33	X					
20	33		X				
21	12	X					
22	12	X					
23	12		X				
24	12				X		

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event #	<u>169</u>	Date:	<u>10 Dec 2010</u>	GMT
Station #	<u>7</u>	Time:	<u>18:17:10</u>	GMT
Cast#	<u>69</u>	Lat:	<u>26 14.900 S</u>	
Operators	<u>KD</u>	Lon:	<u>103 57.645 W</u>	
DCM:	<u></u>	SST:	<u>21.74</u>	

Rosette Position	Desired Depth	FCM UH/UdeC	FRRF UCSC	Abs. Spec. OSU	Pigments Repeta	Nuts UH	CDOM Mar
1	320	X			X	X	X
2	310	X			X	X	X
3	300	X			X	X	X
4	290	X			X	X	X
5	280	X		X	X	X	X
6	270	X			X	X	X
7	260	X	X	X	X	X	X
8	250	X			X	X	X
9	240	X	X	X	X	X	X
10	230	X		X	X	X	X
11	220	X		X	X	X	X
12	210	X			X	X	X
13	200	X	X	X	X	X	X
14	190	X			X	X	X
15	180	X	X	X	X	X	X
16	170	X			X	X	X
17	160	X	X	X	X	X	X
18	150	X	X	X	X	X	X
19	140	X		X	X	X	X
20	130	X			X	X	X
21	120	X	X	X	X	X	X
22	110	X			X	X	X
23	100	X	X	X	X	X	X
24	90	X		X	X	X	X

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # 169  
Station # 7  
Cast# 69  
Operators KD  
DCM: \_\_\_\_\_

Date: 10 Dec 2010 GMT  
Time: 18:17:10 GMT  
Lat: 26 14.900 S  
Lon: 103 57.645 W  
SST: 21.74

Rosette Position	Desired Depth	TOP Katherine	Viral Rate Elisha	Paul Single Cell			
1	320	X	X				
2	310	X	X				
3	300	X	X				
4	290	X	X				
5	280	X	X				
6	270	X	X				
7	260	X	X				
8	250	X	X				
9	240	X	X	X			
10	230	X	X				
11	220	X	X				
12	210	X	X	X			
13	200	X	X				
14	190	X	X				
15	180	X	X	X			
16	170	X	X				
17	160	X	X	X			
18	150	X	X	X			
19	140	X	X	X			
20	130	X	X	X			
21	120	X	X				
22	110	X	X				
23	100	X	X				
24	90	X	X				

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # 171  
Station # 7  
Cast# 70  
Operators JWB  
DCM: 160 MLD = 40

Date: 11 Dec 2010 GMT  
Time: 00:04:00 GMT  
Lat: 26 14.900 S  
Lon: 103 57.645 W  
SST: 21.80

Rosette Position	Desired Depth	Sharma DOM Inc.					
1	210	X					
2	210	X					
3	210	X					
4	210	X					
5	210	X					
6	210	X					
7	210	X					
8	210	X					
9	210	X					
10	210	X					
11	210	X					
12	210	X					
13	15	X					
14	15	X					
15	15	X					
16	15	X					
17	15	X					
18	15	X					
19	15	X					
20	15	X					
21	15	X					
22	15	X					
23	15	X					
24	15	X					

Notes:



# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # 172  
Station # 7  
Cast# 71  
Operators NAP  
DCM: \_\_\_\_\_

Date: 11 Dec 2010 GMT  
Time: 03:05 GMT  
Lat: 26 14.899 S  
Lon: 103 57.644 W  
SST: 21.7

Rosette Position	Desired Depth	Nicole	Gadxiel	Elisha	Cristina		
1	500		X				
2	500		X				
3	500				X		
4	420	X	X				
5	420		X				
6	420		X				
7	420		X		X		
8	300		X				
9	300		X				
10	300		X		X		
11	250		X				
12	250	X					
13	180	X					
14	150	X					
15	150						
16	150		X				
17	150		X				
18	80	X					
19	75			X			
20	75			X			
21	33	X					
22	12	X					
23							
24	12	X					

Notes: Bottle 23 Misfire

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # \_\_\_\_\_  
 Station # 7  
 Cast# 72  
 Operators KD  
 DCM: \_\_\_\_\_

Date: 11 Dec 2010 GMT  
 Time: 14:05:28 GMT  
 Lat: 26 14.903 S  
 Lon: 103 57.647 W  
 SST: 21.64

Rosette Position	Desired Depth	Gases Repeta	Gases OSU	PC/PN UH	PPO4 UH	PSi UH	Nuts UH	Pigs Fong
1	1000		X	8			X	
2	1000				8			
3	1000					8		
4	750		X	8			X	
5	750				8			
6	750					8		
7	500		X	8			X	
8	500				8			
9	500					8		
10	430		X	8			X	
11	430				8			
12	430	X				8		
13	300	X	X				X	
14	250	X	X				X	X
15	200	X	X				X	
16	150	X	X				X	
17	111	X	X				X	X
18	85		X				X	X
19	64		X				X	X
20	46	X	X				X	X
21	33		X				X	X
22	24	X	X				X	X
23	17						X	X
24	5	X	X				X	

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # \_\_\_\_\_  
Station # 7  
Cast# 72  
Operators KD  
DCM: \_\_\_\_\_

Date: 11 Dec 2010 GMT  
Time: 14:05:28 GMT  
Lat: 26 14.903 S  
Lon: 103 57.647 W  
SST: 21.64

Rosette Position	Desired Depth	Sonya					
1	1000						
2	1000						
3	1000						
4	750						
5	750						
6	750						
7	500						
8	500						
9	500						
10	430						
11	430						
12	430	X					
13	300						
14	250	X					
15	200						
16	150	X					
17	111	X					
18	85	X					
19	64	X					
20	46	X					
21	33	X					
22	24	X					
23	17	X					
24	5	X					

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # 177  
 Station # 7  
 Cast# 73  
 Operators KD, ST  
 DCM: \_\_\_\_\_

Date: 11 Dec 2010 GMT  
 Time: 19:24:13 GMT  
 Lat: 26 14.902 S  
 Lon: 103 57.648 W  
 SST: 21.69

Rosette Position	Desired Depth	Oxygen UH	Gases OSU	DIC UH	Nuts UH	DOC/DON Repeta	CDOM Repeta	DOP Repeta
1	1000			X	X	X	X	X
2	750	1		X	X	X	X	X
3	500			X	X	X	X	X
4	400	2		X	X	X	X	X
5	200			X	X	X	X	X
6	155							
7	155							
8	155	3,4		X	X	X	X	X
9	122			X	X	X	X	X
10	94							
11	94							
12	94			X	X	X	X	X
13	72							
14	72							
15	72			X	X	X	X	X
16	51							
17	51							
18	51			X	X	X	X	X
19	37							
20	37							
21	37	5		X	X	X	X	X
22	19							
23	19							
24	19			X	X	X	X	X

Notes: Repeat – first cast vents all open – repeat trace = 73r  
 Oxygen 1 – still had color in sample after titration

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event #	<u>177</u>	Date:	<u>11 Dec 2010</u>	GMT
Station #	<u>7</u>	Time:	<u>19:24:13</u>	GMT
Cast#	<u>73</u>	Lat:	<u>26 14.902 S</u>	
Operators	<u>KD, ST</u>	Lon:	<u>103 57.648 W</u>	
DCM:	<u></u>	SST:	<u>21.69</u>	

Rosette Position	Desired Depth	LLN UH	LLP UH	LLSi UH	FCM UH/UC	Chl. A Repeta	
1	<b>1000</b>	X			X		
2	<b>750</b>	X			X		
3	<b>500</b>	X			X		
4	<b>400</b>	X			X		
5	<b>200</b>	X	X	X	X	X	
6	<b>Dcm</b>						
7	<b>Dcm</b>						
8	<b>Dcm</b>	X	X	X	X	X	
9	<b>122</b>	X	X	X	X	X	
10	<b>93</b>						
11	<b>93</b>						
12	<b>93</b>	X	X	X	X	X	
13	<b>70</b>						
14	<b>70</b>						
15	<b>70</b>	X	X	X	X	X	
16	<b>50</b>						
17	<b>50</b>						
18	<b>50</b>	X	X	X	X	X	
19	<b>37</b>						
20	<b>37</b>						
21	<b>37</b>	X	X	X	X	X	
22	<b>18</b>						
23	<b>18</b>						
24	<b>18</b>	X	X	X	X	X	

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event #	<u>177</u>	Date:	<u>11 Dec 2010</u>	GMT
Station #	<u>7</u>	Time:	<u>17:42:18</u>	GMT
Cast#	<u>73</u>	Lat:	<u>26 14.902 S</u>	
Operators	<u>KD, ST</u>	Lon:	<u>103 57.647 W</u>	
DCM:	<u></u>	SST:	<u>21.67</u>	

Rosette Position	Desired Depth	PC/PN UH	PPO4 UH	PSi UH	FRRF UCSC		
1	<b>1000</b>						
2	<b>750</b>						
3	<b>500</b>						
4	<b>400</b>						
5	<b>200</b>				X		
6	<b>Dcm</b>			4			
7	<b>Dcm</b>	4	4				
8	<b>Dcm</b>				X		
9	<b>122</b>				X		
10	<b>93</b>			4			
11	<b>93</b>	4	4				
12	<b>93</b>				X		
13	<b>70</b>			4			
14	<b>70</b>	4	4				
15	<b>70</b>				X		
16	<b>50</b>			4			
17	<b>50</b>	4	4				
18	<b>50</b>				X		
19	<b>37</b>			4			
20	<b>37</b>	4	4				
21	<b>37</b>				X		
22	<b>18</b>			4			
23	<b>18</b>	4	4				
24	<b>18</b>				X		

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # 178  
Station # 7  
Cast# 74  
Operators Cristina  
DCM: \_\_\_\_\_

Date: 11 Dec 2010 GMT  
Time: 22:00:00 GMT  
Lat: 26 14.902 S  
Lon: 103 57.648 W  
SST: 21.71

Rosette Position	Desired Depth	Gadiel	Cristina	Jeanett			
1	250		X	X			
2	250	X					
3	250	X					
4	225		X	X			
5	225	X					
6	225	X					
7	200		X	X			
8	200	X					
9	200	X					
10	150		X	X			
11	150	X					
12	150	X					
13	120		X	X			
14	120	X					
15	120	X					
16	80		X	X			
17	80	X					
18	80	X					
19	50		X	X			
20	50	X					
21	50	X					
22	10		X	X			
23	10	X					
24	10	X					

Notes:

# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # \_\_\_\_\_  
Station # 7  
Cast# 75  
Operators Cristina  
DCM: \_\_\_\_\_

Date: 12 Dec 2010 GMT  
Time: 03:30:17 GMT  
Lat: 26 09.189 S  
Lon: 104 15.260 W  
SST: 21.67

Rosette Position	Desired Depth	Jeanett	Gadiel	Cristina			
1	3074	X					
2	3074	X					
3	3074	X					
4	3074	X					
5	3074	X					
6	3074	X					
7	3074	X					
8	3074	X					
9	3074	X					
10	3074	X					
11	3074	X					
12	3074	X					
13	3074	X					
14	3074	X					
15	3074	X					
16	3074	X					
17	3074	X					
18	3074	X					
19	3074	X					
20	3074	X					
21	420			X			
22	300			X			
23	180		X				
24	180		X				

Notes:



# C-MORE BiGRAPA

11/18 – 12/14/10

## Cast Data Sheet

Event # 182  
Station # 7  
Cast# 76  
Operators NAP, Mar  
DCM: 170m

Date: 12 Dec 2010 GMT  
Time: 17:21:48 GMT  
Lat: 26 04.708 S  
Lon: 104 00.232 W  
SST: 21.79

Rosette Position	Desired Depth	DOC Mar	CDOM Mar	FCM UH	Nuts UH	Gadiel	
1	<b>3080</b>	X	X	X	X		
2	<b>2950</b>	X	X	X	X		
3	<b>2900</b>	X	X	X	X		
4	<b>2850</b>	X	X	X	X		
5	<b>2750</b>	X	X	X	X		
6	<b>2600</b>	X	X	X	X		
7	<b>2450</b>	X	X	X	X		
8	<b>2300</b>	X	X	X	X		
9	<b>2150</b>	X	X	X	X		
10	<b>2000</b>	X	X	X	X		
11	<b>1750</b>	X	X	X	X		
12	<b>1500</b>	X	X	X	X		
13	<b>1300</b>	X	X	X	X		
14	<b>955</b>	X	X	X	X		
15	<b>870</b>	X	X	X	X		
16	<b>800</b>	X	X	X	X		
17	<b>650</b>	X	X	X	X		
18	<b>540</b>	X	X	X	X		
19	<b>540</b>	X	X	X	X		
20	<b>540</b>	X	X	X	X		
21	<b>540</b>	X	X	X	X		
22	<b>540</b>	X	X	X	X		
23	<b>400</b>	X	X	X	X		
24	<b>300</b>	X	X	X	X		

Notes: Bottles 19 – 22 mistrip