

# Water Properties Group

# Sampling/Rosette Log

Institute of Ocean Sciences, Ocean Sciences Division

Cruise ID: 2013-12 Station: SI Event #: 1 Vessel: VECTOR UTC Date (dd|mmm|yyyy): 10 | 04 | 13

Bottles & Samples			Rosette Operation		Samples Taken (↓ write samplers' initials under each sample type)										Comments			
Niskin #	Firing #	Sample #	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a										
1		001	bot-5	✓	88	✓	✓											
2		002	75	✓	75	✓	✓											
3		003	50	✓	50	✓	✓											
4		004	40	✓	40	✓	✓											
5		005	30	✓	30	✓	✓											
6		006	20	✓	20	✓	✓		✓	✓								
7		007	10	✓	10	✓	✓		✓	✓								
8		008	5	✓	5	✓	✓		✓	✓								
9		009	sfc	✓	2.0	✓	✓		✓	✓								
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Profile type:  
 Ros (default) | TrMet/Ros | X-Niskin  
 Watchkeeper(s):  
ICERKS KICWGR

Bottom Depth: 88 m  
 Transmisso Cleaned: Y / N  
 Fluorometer Cleaned: Y / N

Time	UTC	Local
Start (BE)	<u>21 : 20</u>	<u>14 : 20</u>
Bottom (BO)	<u>21 : 26</u>	<u>14 : 26</u>
End (EN)	<u>21 : 34</u>	<u>14 : 34</u>

Positional Information  
 Start  
 Lat: 48° 38.88 N  
 Lon: 123° 28.80 W

Bottom  
 Lat: 48° 38.88 N  
 Lon: 123° 28.80 W

Finish  
 Lat: 48° 38.88 N  
 Lon: 123° 28.88 W

Extra comments: (e.g., DMS cast, PAR on, Heavy Rain, Niskins out of order, etc)

# Water Properties Group

# Sampling/Rosette Log

Institute of Ocean Sciences, Ocean Sciences Division

Cruise ID: 2013-12

Station: 56

Event #: 4

Vessel: VECTOR

UTC Date (dd|mmm|yyyy): 11 | APR | 2013

Bottles & Samples			Rosette Operation		Samples Taken (↓ write samplers' initials under each sample type)										Comments			
Niskin #	Firing #	Sample #	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a										
1		10	bot-5	✓	208	✓	✓											
2		11	200	✓	200			✓										
3		12	175	✓	175	✓												
4		13	150	✓	150		✓											
5		14	125	✓	125													
6		15	100	✓	100													
7		16	75	✓	75													
8		17	50	✓	50													
9		18	40	✓	40													
10		19	30	✓	30	✓												
11		20	20	✓	20		✓		✓	✓								
12		21	10	✓	10				✓	✓								
13		22	5	✓	5													
14		23	stc	✓	2.4	✓	✓		✓	✓								
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Profile type:  
 Ros (default) | TrMetlRos | X-Niskin  
 Watchkeeper(s):  
R RS LY

Bottom Depth: 211 m  
 Transmisso Cleaned: (Y) / N  
 Fluorometer Cleaned: Y / N  
 Time UTC Local  
 Start (BE) 01:13 18:13  
 Bottom (BO) 01:16 18:16  
 End (EN) : :

Positional Information  
 Start  
 Lat: 48 ° 46.38 N  
 Lon: 123 ° 1.61 W  
 Bottom  
 Lat: 48 ° 46.40 N  
 Lon: 123 ° 1.57 W  
 Finish  
 Lat: 48 ° 46.57 N  
 Lon: 123 ° 1.45 W

Extra comments: (e.g., DMS cast, PAR on, Heavy Rain, Niskins out of order, etc)

# Water Properties Group

# Sampling/Rosette Log

Institute of Ocean Sciences, Ocean Sciences Division

Cruise ID: 2013-12

Station: 46

Event #: 11

Vessel: VECTOR

UTC Date (dd|mmm|yyyy): 11 | APR | 2013

Bottles & Samples			Rosette Operation		Samples Taken (↓ write samplers' initials under each sample type)										Comments			
Niskin #	Firing #	Sample #	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a										
1		24	bst-5	✓	172	✓	✓											
2		25	150	✓	150	✓		✓										
3		26	125	✓	125	✓		✓										
4		27	100	✓	100	✓												
5		28	75	✓	75	✓												
6		29	50	✓		✓												
7		30	40	✓		✓												
8		31	30	✓		✓												
9		32	20	✓					✓	✓								
10		33	10	✓					✓	✓								
11		34	5	✓														#11 did not fire
12		35	ste	✓		✓	✓		✓	✓								
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Profile type:  
 Ros (default) | TrMetlRos | X-Niskin  
 Watchkeeper(s):  
REMYKS

Bottom Depth: 178 m  
 Transmisso Cleaned: Y / N  
 Fluorometer Cleaned: Y / N  
 Time UTC Local  
 Start (BE) 06:46 23:46  
 Bottom (BO) 06:50 23:50  
 End (EN) 07:03 00:03

Positional Information  
 Start Lat: 48° 51.38 N  
 Lon: 123° 10.81 W  
 Bottom Lat: 48° 51.41 N  
 Lon: 123° 10.77 W  
 Finish Lat: 48° 51.59 N  
 Lon: 123° 10.65 W

Extra comments: (e.g., DMS cast, PAR on, Heavy Rain, Niskins out of order, etc)

# Water Properties Group

# Sampling/Rosette Log

Institute of Ocean Sciences, Ocean Sciences Division

Cruise ID: 2013-12

Station: 42

Event #: 15

Vessel: Vector

UTC Date (dd|mmm|yyyy): 11 | Apr | 2013

Bottles & Samples			Rosette Operation		Samples Taken (↓ write samplers' initials under each sample type)										Comments			
Niskin #	Firing #	Sample #	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a	DIC									
1		36	Bot-5	314	✓				X									
2		37	300				✓											
3		38	250				XX		XX									
4		39	200			XX			X									
5		40	175															
6		41	150						X									
7		42	125															
8		43	100						X									
9		44	75						X									
10		45	50						XX									
11		46	40															
12		47	30			XX			X									
13		48	20				XX	XX	X									
14		49	10					XX	XX									
15		50	5						X									
16		51	Surf			↓	↓	XX	X									
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Profile type:  
 Ros (default) | TrMetlRos | X-Niskin  
 Watchkeeper(s):  
SR

Bottom Depth: 320 m  
 Transmisso Cleaned:  Y / N  
 Fluorometer Cleaned: Y / N

Time	UTC	Local
Start (BE)	11:10	04:10
Bottom (BO)	11:16	:
End (EN)	11:34	:

Positional Information

Start	Lat: <u>49° 1.80</u> N
	Lon: <u>123° 26.17</u> W

Bottom

	Lat: <u>49° 1.79</u> N
	Lon: <u>123° 26.17</u> W

Finish

	Lat: <u>49° 1.75</u> N
	Lon: <u>123° 26.25</u> W

Extra comments: (e.g., DMS cast, PAR on, Heavy Rain, Niskins out of order, etc)

# Water Properties Group

# Sampling/Rosette Log

Institute of Ocean Sciences, Ocean Sciences Division

Cruise ID: 2013-12

Station: 2

Event #: 24

Vessel: Vector

UTC Date (dd|mmm|yyyy): 11 | April | 2013

Bottles & Samples			Rosette Operation		Samples Taken (↓ write samplers' initials under each sample type)										Comments			
Niskin #	Firing #	Sample #	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a										
1		52	B-?	✓	270	↓												
2		53	250	✓	250	↓		X										
3		54	200	✓	200	XX												
4		55	175	✓	175	↓												
5		56	150	✓	150		XX											
6		57	125	✓	125	↓												
7		58	100	✓	100	↓												
8		59	75	✓	75	↓												
9		60	50	✓	50	↓												
10		61	40	✓	40	↓												
11		62	30	✓	30	↓												
12		63	20	✓	20	XX	↓		XX									
13		64	10	✓	10	↓	XX		XX									
14		65	5	✓	5	↓	↓											
15		66	surf	✓	2.5	↓	↓		XX									
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Profile type:  
 Ros (default) | TrMetlRos | X-Niskin  
 Watchkeeper(s):

Bottom Depth: 275 m  
 Transmisso Cleaned:  Y /  N  
 Fluorometer Cleaned:  Y /  N

Time	UTC	Local
Start (BE)	20 : 52	13 : 52
Bottom (BO)	20 : 58	13 : 58
End (EN)	21 : 13	14 : 13

Positional Information  
 Start  
 Lat: 49 ° 24 . 12 N  
 Lon: 124 ° 9 . 37 W

Bottom  
 Lat: 49 ° 24 . 13 N  
 Lon: 124 ° 9 . 43 W

Finish  
 Lat: 49 ° 24 . 14 N  
 Lon: 124 ° 9 . 43 W

Extra comments: (e.g., DMS cast, PAR on, Heavy Rain, Niskins out of order, etc)

# Water Properties Group

# Sampling/Rosette Log

Institute of Ocean Sciences, Ocean Sciences Division

Cruise ID: 2013-12 Station: 3 Event #: 29 Vessel: VECTOR UTC Date (dd|mmm|yyyy): 12 | APR | 2013

Bottles & Samples			Rosette Operation		Samples Taken (↓ write samplers' initials under each sample type)										Comments			
Niskin #	Firing #	Sample #	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a										
1		67	bat-5	✓	317		✓											
2		68	300	✓	300		✓											
3		69	250	✓	250													
4		70	200	✓	200		✓											
5		71	175	✓	175													
6		72	150	✓	150													
7		73	125	✓	125													
8		74	100	✓	100													
9		75	75	✓	75													
10		76	50	✓	50													failed integrity test
11		77	40	✓	40													
12		78	30	✓	30		✓											
13		79	20	✓	20 *				✓									
14		80	10	✓	10				✓									
15		81	5	✓	5													
16		82	ste	✓	2.04		✓		✓									slow leak
17																		
18																		
19																		
20		79	20		20 *													bottle 13 dup
21																		given bottle 13
22																		miss-firing
23																		
24																		

Profile type:  
 Ros (default) | TrMetlRos | X-Niskin  
 Watchkeeper(s):

Bottom Depth: 825 m  
 Transmisso Cleaned: Y / N  
 Fluorometer Cleaned: Y / N

Time	UTC	Local
Start (BE)	00 :32	17 :32
Bottom (BO)	00 :38	17 :38
End (EN)	00 :55	17 :55

Positional Information

Start	Lat: <u>49</u> ° <u>26</u> . <u>63</u> N
	Lon: <u>124</u> ° <u>20</u> . <u>34</u> W

Bottom

Lat: <u>49</u> ° <u>26</u> . <u>68</u> N
Lon: <u>124</u> ° <u>20</u> . <u>41</u> W

Finish

Lat: <u>49</u> ° <u>26</u> . <u>71</u> N
Lon: <u>124</u> ° <u>20</u> . <u>64</u> W

Extra comments: (e.g., DMS cast, PAR on, Heavy Rain, Niskins out of order, etc)

# Water Properties Group

# Sampling/Rosette Log

Institute of Ocean Sciences, Ocean Sciences Division

Cruise ID: 2013-12

Station: 6

Event #: 33

Vessel: VECTOR

UTC Date (dd|mmm|yyyy): 12 | APR | 2013

Bottles & Samples			Rosette Operation		Samples Taken (↓ write samplers' initials under each sample type)										Comments			
Niskin #	Firing #	Sample #	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a										
1		83	bot-5	✓	189	✓	✓											
2		84	175	✓	175			✓										
3		85	150	✓	150													
4		86	125	✓	125		XX											
5		87	100	✓	100	XX												
6		88	75	✓	75													
7		89	50	✓	50													
8		90	40	✓	40													
9		91	30	✓	30		XY											
10		92	20	✓	20					✓								
11		93	10	✓	10	XX				✓								
12		94	5	✓	5					✓								
13		95	stc*		2.5	✓	✓			✓								
14		95	stc		2.5													did not fire use bottle 14
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Profile type:  
 Ros (default) | TrMetlRos | X-Niskin  
 Watchkeeper(s):  
R KY KS

Bottom Depth: 194 m  
 Transmisso Cleaned: Y / N  
 Fluorometer Cleaned: Y / N

Time	UTC	Local
Start (BE)	03 : 04	20 : 04
Bottom (BO)	03 : 07	20 : 07
End (EN)	:	:

Positional Information

Start	Lat: <u>49 ° 30 . 59</u> N
	Lon: <u>124 ° 27 . 84</u> W

Bottom

Lat: <u>49 ° 30 . 60</u> N
Lon: <u>124 ° 27 . 84</u> W

Finish

Lat: <u>49 ° 30 . 60</u> N
Lon: <u>124 ° 27 . 89</u> W

Extra comments: (e.g., DMS cast, PAR on, Heavy Rain, Niskins out of order, etc)

# Water Properties Group

# Sampling/Rosette Log

Institute of Ocean Sciences, Ocean Sciences Division

Cruise ID: 2013-12 Station: 9 Event #: 36 Vessel: VECTOR UTC Date (dd|mmm|yyyy): 12 | APR | 2013

Bottles & Samples			Rosette Operation		Samples Taken (↓ write samplers' initials under each sample type)										Comments			
Niskin #	Firing #	Sample #	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a										
1		96	bat-5	✓	165		✓											
2		97	150	✓	150			X										
3		98	125	✓	125													
4		99	100	✓	100		XX											
5		100	75	✓	75													
6		101	50	✓	50													
7		102	40	✓	40		XX											
8		103	30	✓	30													
9		104	20	✓	20					XX								
10		105	10	✓	10					XX								
11		106	5	✓	5													
12		107	stc	✓	2.5		✓			XX								
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Profile type:  
 Ros (default) | TrMetlRos | X-Niskin  
 Watchkeeper(s):  
PC KS KY

Bottom Depth: 170 m  
 Transmisso Cleaned: Y / N  
 Fluorometer Cleaned: Y / N

Time	UTC	Local
Start (BE)	<u>05:47</u>	<u>22:47</u>
Bottom (BO)	<u>05:50</u>	<u>22:50</u>
End (EN)	<u>06:01</u>	<u>23:01</u>

Positional Information  
 Start  
 Lat: 49° 35' . 56 N  
 Lon: 124° 38' . 30 W

Bottom  
 Lat: 49° 35' . 58 N  
 Lon: 124° 38' . 29 W

Finish  
 Lat: 49° 35' . 71 N  
 Lon: 124° 38' . 31 W

Extra comments: (e.g., DMS cast, PAR on, Heavy Rain, Niskins out of order, etc)



# Water Properties Group

# Sampling/Rosette Log

Institute of Ocean Sciences, Ocean Sciences Division

Cruise ID: 2013-12 Station: 12 Event #: 41 Vessel: VECTOR UTC Date (dd|mmm|yyyy): 12 | APR | 2013

Bottles & Samples			Rosette Operation		Samples Taken (↓ write samplers' initials under each sample type)										Comments				
Niskin #	Firing #	Sample #	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a	DIC										
1		108	bd-5	✓	350	✓	✓			X									
2		109	300			✓	✓	X											
3		110	250			XX				XX									
4		111	200			✓	XX			X									
5		112	175			✓	✓												
6		113	150			✓	✓			X									
7		114	125			✓	✓												
8		115	100			✓	✓			X									
9		116	75			✓	✓			X									
10		117	50			XX				XX									
11		118	40			✓	XX												
12		119	30			✓	✓			X									
13		120	20*			✓	✓			XX	X								
14		121	10			✓	✓			XX	XX								
15		122	5			✓	✓			X									
16		123	sfc			✓	✓			XX	X								
17																			
18																			
19																			
20		120	20*																
21																			
22																			
23																			
24																			

Profile type:  
 Ros (default) | TrMetlRos | X-Niskin  
 Watchkeeper(s):  
SR

Bottom Depth: 358 m  
 Transmisso Cleaned: Y / N  
 Fluorometer Cleaned: Y / N

Time	UTC	Local
Start (BE)	08:41	01:41
Bottom (BO)	08:48	:
End (EN)	09:02	:

Positional Information  
 Start  
 Lat: 49° 43.61 N  
 Lon: 124° 40.81 W

Bottom  
 Lat: 49° 43.60 N  
 Lon: 124° 40.77 W

Finish  
 Lat: 49° 43.60 N  
 Lon: 124° 40.77 W

Extra comments: (e.g., DMS cast, PAR on, Heavy Rain, Niskins out of order, etc)

# Water Properties Group

# Sampling/Rosette Log

Institute of Ocean Sciences, Ocean Sciences Division

Cruise ID: 2013-12 Station: 14 Event #: 43 Vessel: Vector UTC Date (dd|mmm|yyyy): 12 | APR | 2013

Bottles & Samples			Rosette Operation		Samples Taken (↓ write samplers' initials under each sample type)										Comments			
Niskin #	Firing #	Sample #	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a										
1		124	B-5		(311)	X												
2		125	250			XX		X										
3		126	200				XX											
4		127	175															
5		128	150															
6		129	125															
7		130	100															
8		131	75															
9		132	50			XX												
10		133	40				XX											
11		134	30*															
12		135	20						XX									
13		136	10						XX									
14		137	5															
15		138	surf			↓	↓		XX									
16																		
17																		
18		134	30*			X	X		XX									
19																		
20																		
21																		
22																		
23																		
24																		

Profile type:  
 Ros (default) | TrMetlRos | X-Niskin  
 Watchkeeper(s):  
SR

Bottom Depth: 318 m  
 Transmisso Cleaned: (Y) / N  
 Fluorometer Cleaned: Y / N

Time	UTC	Local
Start (BE)	11 :35	04 :35
Bottom (BO)	11 :41	:
End (EN)	11 :58	:

Positional Information

Lat:	49 ° 52.99	N
Lon:	124 ° 59.63	W

Start  
Bottom  
Finish

Lat: 49 ° 52.99 N  
 Lon: 124 ° 59.64 W

Lat: 49 ° 52.96 N  
 Lon: 124 ° 59.62 W

Extra comments: (e.g., DMS cast, PAR on, Heavy Rain, Niskins out of order, etc)

# Water Properties Group

# Sampling/Rosette Log

Institute of Ocean Sciences, Ocean Sciences Division

Cruise ID: 2013-12

Station: 16

Event #: 46

Vessel: Vector

UTC Date (dd|mmm|yyyy): 12 | APR | 2013

Bottles & Samples			Rosette Operation		Samples Taken (↓ write samplers' initials under each sample type)										Comments			
Niskin #	Firing #	Sample #	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a										
1		139	B-5	152														
2		140	125				X											
3		141	100															
4		142	75															
5		143	50			XX												
6		144	40				XX											
7		145	30															
8		146	20						XX									
9		147	10						XX									
10		148	5															
11		149	Surf															
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Profile type:  
 Ros (default) | TrMetlRos | X-Niskin  
 Watchkeeper(s):  
SR

Bottom Depth: 159 m  
 Transmisso Cleaned:  Y / N  
 Fluorometer Cleaned: Y / N

Time	UTC	Local
Start (BE)	15:12	08:12
Bottom (BO)	15:15	:
End (EN)	15:26	:

Positional Information  
 Start  
 Lat: 49° 57.70 N  
 Lon: 125° 8.84 W

Bottom  
 Lat: 49° 57.72 N  
 Lon: 125° 8.85 W

Finish  
 Lat: 49° 57.74 N  
 Lon: 125° 8.89 W

Extra comments: (e.g., DMS cast, PAR on, Heavy Rain, Niskins out of order, etc)

# Water Properties Group

# Sampling/Rosette Log

Institute of Ocean Sciences, Ocean Sciences Division

Cruise ID: 2013-12 Station: 27 Event #: 54 Vessel: VECTOR UTC Date (dd|mmm|yyyy): 12 | APR | 2013

Bottles & Samples			Rosette Operation		Samples Taken (↓ write samplers' initials under each sample type)										Comments			
Niskin #	Firing #	Sample #	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a										
1		150	bat-5	✓	342	✓	✓											
2		151	300	✓	300	↓	↓	X										
3		152	250	✓	250	↓	↓											
4		153	200	✓	200	↓	XX											
5		154	175	✓	175	XX	↓											
6		155	150	✓	150	↓	↓											
7		156	125	✓	125	↓	↓											
8		157	100	✓	100	↓	↓											
9		158	75	✓	75	↓	↓											
10		159	50	✓	50	↓	XX											
11		<del>160</del>	<del>40</del>	✓	<del>40</del>	<del>XX</del>	<del>↓</del>											
12		161	30	✓	30	↓	↓											
13		162	20	✓	20	↓	↓			XX								
14		163	10	✓	10	↓	↓			XX								
15		164	5	✓	5	↓	↓											
16		165	stc	✓	2.2	↓	↓			XX								
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Profile type:  
 Ros (default) | TrMetlRos | X-Niskin  
 Watchkeeper(s):  
RC KS KY

Bottom Depth: 350 m  
 Transmisso Cleaned: Y / N  
 Fluorometer Cleaned: Y / N  
 Time UTC Local  
 Start (BE) 01 : 19 18 : 19  
 Bottom (BO) 01 : 25 18 : 25  
 End (EN) 01 : 42 18 : 42

Positional Information  
 Start  
 Lat: 48 ° 19.12 N  
 Lon: 123 ° 48.01 W  
 Bottom  
 Lat: 48 ° 19.14 N  
 Lon: 123 ° 47.98 W  
 Finish  
 Lat: 48 ° 19.11 N  
 Lon: 123 ° 48.03 W

Extra comments: (e.g., DMS cast, PAR on, Heavy Rain, Niskins out of order, etc)

# Water Properties Group

# Sampling/Rosette Log

Institute of Ocean Sciences, Ocean Sciences Division

Cruise ID: 2013-12

Station: 39

Event #: 59

Vessel: Vector

UTC Date (dd|mmm|yyyy): 1 | Apr | 2013

Bottles & Samples			Rosette Operation		Samples Taken (↓ write samplers' initials under each sample type)										Comments		
Niskin #	Firing #	Sample #	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a									
1		166	B-5	✓	370	X	X										
2		167	350	✓	350			X									
3		168	300	✓	300												
4		169	250	✓	250												
5		170	200	✓	200	XX											
6		171	175	✓	175												
7		172	150	✓	150		XX										
8		173	125	✓	125												
9		174	100	✓	100												
10		175	75	✓	75												
11		176	50*	✓	50												
12		177	40	✓	40												
13		178	30	✓	30												
14		179	20	✓	20	XX			XX								
15		180	10	✓	10		XX		XX								
16		181	5	✓	5												
17		182	surf	✓	2.4	↓	↓		XX								
18																	
19																	
20		176	50*	✓	50												fine in case bottle 11 misfire
21																	
22																	
23																	
24																	

Profile type:  
 Ros (default) | TrMetlRos | X-Niskin  
 Watchkeeper(s):  
AC KY KS

Bottom Depth: 378 m  
 Transmisso Cleaned:  Y /  N  
 Fluorometer Cleaned:  Y /  N

Time	UTC	Local
Start (BE)	05:09	22:09
Bottom (BO)	05:16	22:16
End (EN)	05:35	22:35

Positional Information

Start	Lat: 49° 9.83' N
	Lon: 123° 32.93' W

Bottom

Lat: 49° 9.91' N
Lon: 123° 32.85' W

Finish

Lat: 49° 10.13' N
Lon: 123° 32.56' W

Extra comments: (e.g., DMS cast, PAR on, Heavy Rain, Niskins out of order, etc)

# Water Properties Group

# Sampling/Rosette Log

Institute of Ocean Sciences, Ocean Sciences Division

Cruise ID: 2013-12

Station: 59

Event #: 61

Vessel: Vector

UTC Date (dd|mmm|yyyy): 13 | Apr | 2013

Bottles & Samples			Rosette Operation		Samples Taken (↓ write samplers' initials under each sample type)										Comments				
Niskin #	Firing #	Sample #	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a	DEC	Alk									
1		183	8-5		230	x	x			x									
2		184	200			x		x											
3		185	175			x													
4		186	150			xx	xx			xx									
5		187	125			x	x												
6		188	100			x													
7		189	75			x				x									
8		190	50			x													
9		191	40			x													
10		192	30			x				x									
11		193	20			x				xx									
12		194	10			xx	xx			xx	x								
13		195	5			x	x												
14		196	Surface			x	x			xx	x								
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

Profile type:  
 Ros (default) | TrMetlRos | X-Niskin  
 Watchkeeper(s):  
EAR

Bottom Depth: 236 m  
 Transmisso Cleaned: (Y) / N  
 Fluorometer Cleaned: Y / N

Time	UTC	Local
Start (BE)	11:01	04:01
Bottom (BO)	11:07	:
End (EN)	11:20	:

Positional Information  
 Start  
 Lat: 48° 37.78 N  
 Lon: 123° 14.60 W

Bottom  
 Lat: 48° 37.78 N  
 Lon: 123° 14.61 W

Finish  
 Lat: 48° 37.77 N  
 Lon: 123° 14.63 W

Extra comments: (e.g., DMS cast, PAR on, Heavy Rain, Niskins out of order, etc)

# Water Properties Group

# Sampling/Rosette Log

Institute of Ocean Sciences, Ocean Sciences Division

Cruise ID: 2013-12 Station: 69 Event #: 66 Vessel: VECTOR UTC Date (dd|mmm|yyyy): 14 | APR | 2013

Bottles & Samples			Rosette Operation		Samples Taken (↓ write samplers' initials under each sample type)										Comments			
Niskin #	Firing #	Sample #	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a										
1		197	B-5	✓	176													
2		198	150	✓	150			X										
3		199	125	✓	125													
4		200	100	✓	100													
5		201	75	✓	75													
6		202	50	✓	50													
7		203	40	✓	40													
8		204	30	✓	30													
9		205	20	✓	20	XX	XX		XX									
10		206	10	✓	10	↓	↓		XX									
11		207	5	✓	5	↓	↓											
12		208	stc	✓	2.0	↓	↓		XX									
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Profile type:  
 Ros (default) | TrMetlRos | X-Niskin  
 Watchkeeper(s):

Bottom Depth: 179 m  
 Transmisso Cleaned: Y / N  
 Fluorometer Cleaned: Y / N

Time	UTC	Local
Start (BE)	03 :47	20 :47
Bottom (BO)	03 :50	20 :50
End (EN)	04 :00	21 :00

Positional Information  
 Start  
 Lat: 48 ° 15 . 64 N  
 Lon: 123 ° 43 . 19 W

Bottom  
 Lat: 48 ° 15 . 63 N  
 Lon: 123 ° 43 . 19 W

Finish  
 Lat: 48 ° 15 . 56 N  
 Lon: 123 ° 43 . 18 W

Extra comments: (e.g., DMS cast, PAR on, Heavy Rain, Niskins out of order, etc)

# Water Properties Group

# Sampling/Rosette Log

Institute of Ocean Sciences, Ocean Sciences Division

Cruise ID: 2013-12

Station: 72

Event #: 69

Vessel: VECTOR

UTC Date (dd|mmm|yyyy): 14 | APR | 2013

Bottles & Samples			Rosette Operation		Samples Taken (↓ write samplers' initials under each sample type)										Comments				
Niskin #	Firing #	Sample #	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a	DIC										
1		209	60-5		186					X									
2		210	175					X											
3		211	150			XX				XX									
4		212	125				XX												
5		213	100																
6		214	75							X									
7		215	50																
8		216	40																
9		217	30							X									
10		218	20				XX			XX									
11		219	10			XX				XX	XX								
12		220	5																
13		221	ste							XX	X								
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

Profile type:  
 Ros (default) | TrMetRos | X-Niskin  
 Watchkeeper(s):  
SR

Bottom Depth: 190 m  
 Transmisso Cleaned:  / N  
 Fluorometer Cleaned: Y / N

Time	UTC	Local
Start (BE)	07:13	06:13
Bottom (BO)	07:17	:
End (EN)	07:31	:

Positional Information  
 Start  
 Lat: 48° 18.63 N  
 Lon: 124° 3.98 W

Bottom  
 Lat: 48° 18.64 N  
 Lon: 124° 3.97 W

Finish  
 Lat: 48° 18.67 N  
 Lon: 124° 3.94 W

Extra comments: (e.g., DMS cast, PAR on, Heavy Rain, Niskins out of order, etc)



# Water Properties Group

# Sampling/Rosette Log

Institute of Ocean Sciences, Ocean Sciences Division

Cruise ID: 2013-12 Station: 102 Event #: 75 Vessel: Vector UTC Date (dd|mmm|yyyy): 14 | APR | 2013

Bottles & Samples			Rosette Operation		Samples Taken (↓ write samplers' initials under each sample type)										Comments			
Niskin #	Firing #	Sample #	Target Pressure	Confirmed Pressure ✓	Oxy	Nut	Sal	Chl a										
1		236	B-10	249														
2		237	200					X										
3		238	175															
4		239	150				XX											
5		240	125			XX												
6		241	100															
7		242	75															
8		243	50															
9		245	40															
10		246	30															
11		247	20			XX			XX									
12		248	10				XX		XX									
13		249	5															
14		250	Surf						XX									
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Profile type:  
 Ros (default) | TrMetlRos | X-Niskin  
 Watchkeeper(s):  
SR

Bottom Depth: 257 m  
 Transmisso Cleaned: (Y) N  
 Fluorometer Cleaned: Y / N

Time	UTC	Local
Start (BE)	15:09	08:09
Bottom (BO)	15:16	:
End (EN)	:	:

Positional Information  
**Start**  
 Lat: 48° 30.02 N  
 Lon: 124° 44.04 W

**Bottom**  
 Lat: 48° 30.01 N  
 Lon: 124° 44.02 W

**Finish**  
 Lat: 48° N  
 Lon: 124° W

Extra comments: (e.g., DMS cast, PAR on, Heavy Rain, Niskins out of order, etc)

# Water Properties Group

# Sampling/Rosette Log

Institute of Ocean Sciences, Ocean Sciences Division

Cruise ID: 2013-12 Station: 75

Event #: 77(12)

Vessel: Vector

UTC Date (dd|mmm|yyyy): 14 | Apr | 2013

Bottles & Samples			Rosette Operation		Samples Taken (↓ write samplers' initials under each sample type)										Comments			
Niskin #	Firing #	Sample #	Target Pressure	Confirmed Pressure ✓	Oxy	Nut	Sal	Chl a										
1		222	B-5		219													
2		223	200					X										
3		224	175															
4		225	150				XX											
5		226	125			XX												
6		227	100															
7		228	75															
8		229	50															
9		230	40															
10		231	30															
11		232	20			XX			XX									
12		233	10				XX		XX									
13		234	5															
14		235	surf			↓	↓		XX									
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Profile type:  
 Ros (default) | TrMetlRos | X-Niskin  
 Watchkeeper(s):  
SR

Bottom Depth: 226 m  
 Transmisso Cleaned:  Y /  N  
 Fluorometer Cleaned:  Y /  N

Time	UTC	Local
Start (BE)	11:16	04:16
Bottom (BO)	11:22	:
End (EN)	11:37	:

Positional Information  
 Start  
 Lat: 48° 28.16 N  
 Lon: 124° 32.78 W

Bottom  
 Lat: 48° 28.09 N  
 Lon: 124° 32.67 W

Finish  
 Lat: 48° 27.97 N  
 Lon: 124° 32.41 W

Extra comments: (e.g., DMS cast, PAR on, Heavy Rain, Niskins out of order, etc)

# Water Properties Group

# Sampling/Rosette Log

Institute of Ocean Sciences, Ocean Sciences Division

Cruise ID: 2013-12

Station: ADCP

Event #: 78

Vessel: VECTOR

UTC Date (dd|mmm|yyyy): 14 | APR | 2013

Bottles & Samples			Rosette Operation		Samples Taken (↓ write samplers' initials under each sample type)										Comments			
Niskin #	Firing #	Sample #	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a										
1		251	bot-5	✓	115													
2		252	100	✓	100			X										
3		253	75	✓	75													
4		254	50	✓	50													
5		255	40	✓	40	XY												
6		256	30	✓	30		XX											
7		257	20	✓	20								XX					
8		258	10	✓	10								XX					
9		259	5	✓	5													
10		260	surf	✓	1.4								XX					
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Profile type:  
 Ros (default) | TrMetlRos | X-Niskin  
 Watchkeeper(s):  
RE KY KS

Bottom Depth: 120 m  
 Transmisso Cleaned: Y / N  
 Fluorometer Cleaned: Y / N

Time	UTC	Local
Start (BE)	<u>23 : 44</u>	<u>16 : 44</u>
Bottom (BO)	<u>23 : 47</u>	<u>16 : 47</u>
End (EN)	<u>23 : 54</u>	<u>16 : 54</u>

Positional Information  
 Start  
 Lat: 48 ° 13 . 97 N  
 Lon: 123 ° 17 . 97 W

Bottom  
 Lat: 48 ° 13 . 98 N  
 Lon: 123 ° 17 . 93 W

Finish  
 Lat: 48 ° 13 . 90 N  
 Lon: 123 ° 17 . 94 W

Extra comments: (e.g., DMS cast, PAR on, Heavy Rain, Niskins out of order, etc)

# Water Properties Group

# Sampling/Rosette Log

Institute of Ocean Sciences, Ocean Sciences Division

Cruise ID: 2013-12

Station: 62

Event #: 84

Vessel: VECTOR

UTC Date (dd|mmm|yyyy): 15 | APR | 2013

Bottles & Samples			Rosette Operation		Samples Taken (↓ write samplers' initials under each sample type)										Comments			
Niskin #	Firing #	Sample #	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a										
1		271	bot-5	✓	145													
2		272	125	✓	125			X										
3		273	100	✓	100													
4		274	75	✓	75													
5		275	50	✓	50		XX											
6		276	40	✓	40	XX												
7		277	30	✓	30													
8		278	20	✓	20				XX									
9		279	10	✓	10				XX									
10		280	5	✓	5													
11		281	sfc	✓	2.5				XX									
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Profile type:  
 Ros (default) | TrMetlRos | X-Niskin  
 Watchkeeper(s):  
RE KEY KS

Bottom Depth: 148 m  
 Transmisso Cleaned: Y / N  
 Fluorometer Cleaned: Y / N

Time	UTC	Local
Start (BE)	04:08	21:08
Bottom (BO)	04:12	21:12
End (EN)	04:21	21:21

Positional Information

Start	Lat: <u>48</u> ° <u>22.81</u> N
	Lon: <u>123</u> ° <u>2.58</u> W

Bottom

Lat: <u>48</u> ° <u>22.80</u> N
Lon: <u>123</u> ° <u>2.58</u> W

Finish

Lat: <u>48</u> ° <u>22.75</u> N
Lon: <u>123</u> ° <u>2.57</u> W

Extra comments: (e.g., DMS cast, PAR on, Heavy Rain, Niskins out of order, etc)

# Water Properties Group

# Sampling/Rosette Log

Institute of Ocean Sciences, Ocean Sciences Division

Cruise ID: 2013-12 Station: 65 Event #: 81 Vessel: VECTOR UTC Date (dd|mmm|yyyy): 15 | APR | 2013

Bottles & Samples			Rosette Operation		Samples Taken (↓ write samplers' initials under each sample type)										Comments			
Niskin #	Firing #	Sample #	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a										
1		261	bot-5	✓	121													
2		262	100	✓	100			X										
3		263	75	✓	75													
4		264	50	✓	50		XX											
5		265	40	✓	40													
6		266	30	✓	30													
7		267	20	✓	20				XX									
8		268	10	✓	10				XX									
9		269	5	✓	5													
10		270	ste	✓	2.7				XX									
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Profile type:  
 Ros (default) | TrMetlRos | X-Niskin  
 Watchkeeper(s):  
PKS KY

Bottom Depth: 125 m  
 Transmisso Cleaned: Y / N  
 Fluorometer Cleaned: Y / N

Time	UTC	Local
Start (BE)	01 : 35	18 : 35
Bottom (BO)	01 : 37	18 : 37
End (EN)	01 : 45	18 : 45

Positional Information  
 Start  
 Lat: 48 ° 15.96 N  
 Lon: 123 ° 9.76 W

Bottom  
 Lat: 48 ° 16.00 N  
 Lon: 123 ° 9.73 W

Finish  
 Lat: 48 ° 15.98 N  
 Lon: 123 ° 9.69 W

Extra comments: (e.g., DMS cast, PAR on, Heavy Rain, Niskins out of order, etc)