

Water Properties Group

Sampling/Rosette Log

Institute of Ocean Sciences, Ocean Sciences Division

Cruise ID: 2019-016 Station: SL Event #: 1 Vessel: VECTOR UTC Date (dd|mmm|yyyy): 06 | APR | 2019

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		1	100	✓ 100	X	X	X												
2		2	75	✓ 75															
3		3	50	✓ 50															
4		4	40	✓ 40		XX													
5		5	30	✓ 30															
6		6	20	✓ 20	XX			X											
7		7	10	✓ 10				XX											
8		8	5	✓ 5															
9		9	stc	✓ 1.9	X	X		X	XX										
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

Bottom Depth: 174 m
 Transmisso Cleaned: (Y) / N
 Fluorometer Cleaned: (Y) / N

Time	UTC	Local
Start (BE)	02 : 02	19 : 02
Bottom (BO)	02 : 05	19 : 05
End (EN)	02 : 15	19 : 15

Positional Information

Start	Lat: <u>48° 39' .086</u> N
	Lon: <u>123° 29' .854</u> W
Bottom	Lat: <u>48° 39' .102</u> N
	Lon: <u>123° 29' .850</u> W
Finish	Lat: <u>48° 39' .130</u> N
	Lon: <u>123° 28' .880</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: 2019-016

Station: IND0

Event #: 2

Vessel: Vector

UTC Date (dd|mmm|yyyy): 07 | APR | 2019

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		10	B-5	✓ 34.5	X	X			X									
2		11	30	✓	X	X			X									
3		12	20	✓	XX	X		X	X									
4		13	10	✓	X	XX		XX	XX									
5		14	5	✓	X	X			X									
6		15	Surf	✓	X	X		X	X									
7																		
8																		
9																		
10																		
11																		
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: 37 m
 Transmisso Cleaned: (Y) I N
 Fluorometer Cleaned: Y I N
 Time UTC Local
 Start (BE) 15:21 08:21
 Bottom (BO) 15:24 :
 End (EN) 15:33 :

Positional Information
 Start
 Lat: 49° 18.290 N
 Lon: 122° 56.362 W
 Bottom
 Lat: 49° 18.289 N
 Lon: 122° 56.363 W
 Finish
 Lat: 49° 18.288 N
 Lon: 122° 56.362 W

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

SGA TURTLE FOR O₂

Water Properties Group

Sampling/Rosette Log

Institute of Ocean Sciences, Ocean Sciences Division

Cruise ID: 2019-016

Station: IND 4

Event #: 6

Vessel: Vector

UTC Date (dd|mmm|yyyy): 07 | APR | 2019

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	HPLC	Phyto	DA						
1		27	B-5	✓ 218	X	X			X									
2		28	200	✓	X	X												
3		29	175	✓	X	X			X									
4		30	150	✓	X	XX			XX									
5		31	125	✓	XX	X			X									
6		32	100	✓	X	X			X									
7		33	75	✓	X	X			X									
8		34	50	✓	X	XX			X									
9		35	40	✓	X	X												
10		36	30	✓	X	X			XX									
11		37	20	✓	XX	X		X	X									
12		38	10	✓	X	X		X	X									
13		39	5	✓	X	X			X									FLU ≈ 3.2
14		40	Stc	✓	X	X		X	X	XX	X	X						
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 223 m
 Transmisso Cleaned: ☒ Y / ☐ N
 Fluorometer Cleaned: ☐ Y / ☐ N

Time	UTC	Local
Start (BE)	18:07	11:07
Bottom (BO)	18:13	:
End (EN)	18:31	:

Positional Information

Lat:	49° 23.288	N
Lon:	122° 52.502	W

▼

Lat:	49° 23.287	N
Lon:	122° 52.504	W

▼

Lat:	49° 23.288	N
Lon:	122° 52.502	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: 2017-016

Station: IND2

Event #: 4

Vessel: Vector

UTC Date (dd|mmm|yyyy): 07 APR 2019

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	HPLC	DIC								
1		16	B-5	✓ 159	↓					X								
2		17	125	✓						XX								
3		18	100	✓						X								
4		19	75	✓						X								
5		20	50	✓		XX				X								
6		21	40	✓														
7		22	30	✓						XX								
8		23	20	✓	XX			X		X								
9		24	10	✓	↓			XX		X								
10		25	5	✓						X								
11		26	Surf	✓	↓			X	XX	X								
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Profile type:
☒ Ros (default) | ☐ TrMetlRos | ☐ X-Niskin
 Watchkeeper(s):
SR2

Bottom Depth: 164 m
 Transmisso Cleaned: ☒ Y / ☐ N
 Fluorometer Cleaned: ☐ Y / ☐ N

Time	UTC	Local
Start (BE)	16:35	09:35
Bottom (BO)	16:40	:
End (EN)	16:54	:

Positional Information

Lat:	49° 20.998	N
Lon:	122° 54.145	W

Start

Lat:	49° 20.999	N
Lon:	122° 54.134	W

Bottom

Lat:	49° 21.010	N
Lon:	122° 54.119	W

Finish

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: 2019-016 Station: 1ND8 Event #: 7 Vessel: VECTOR UTC Date (dd|mmm|yyyy): 07 | Apr | 2019

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		41	5-5	✓ 34	X	XX			X									
2		42	30	✓ 30	1	1	X		X									
3		43	20	✓ 20	XX	1		XX	X									
4		44	10	✓ 10	1	1		X	XX									
5		45	5	✓ 5					X									
6		46	ste	✓ 2.3	X	X		X	X									
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		
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18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

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

Time	UTC	Local
Start (BE)	19 : 19	12 : 19
Bottom (BO)	19 : 21	12 : 21
End (EN)	19 : 28	12 : 28

Positional Information

Lat:	49 ° 26 . 471	N
Lon:	122 ° 52 . 591	W

Bottom

Lat:	49 ° 26 . 470	N
Lon:	122 ° 52 . 594	W

Finish

Lat:	49 ° 26 . 468	N
Lon:	122 ° 52 . 597	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: 2019-016

Station: IND7

Event #: 9

Vessel: VECTRA

UTC Date (dd|mmm|yyyy): 07 | APR | 2019

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		47	6.5	✓ 6.9	X				X										
2		48	50	✓ 50	XX		X		X										
3		49	40	✓ 40															
4		50	30	✓ 30		XX			X										
5		51	20	✓ 20				XX	XX										
6		52	10	✓ 10				X	X										
7		53	5	✓ 5					X										
8		54	8.4	✓ 2.2	X	X		X	X										
9																			
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

Bottom Depth: _____ m
 Transmisso Cleaned: Y / N
 Fluorometer Cleaned: Y / N
 Time UTC Local
 Start (BE) 20:22 13:27
 Bottom (BO) : :
 End (EN) : :

Positional Information
 Lat: 49° 27' .414 N
 Lon: 122° 52' .674 W

▼
 Lat: 49° 27' .414 N
 Lon: 122° 52' .678 W

▼
 Lat: 49° 27' .421 N
 Lon: 122° 52' .680 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: 2019-016 Station: VAN 6 Event #: 13 Vessel: VECTOR UTC Date (dd|mmm|yyyy): 06 | Apr | 2019

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	HPLC								
1		55	6-5	✓ 59	X	X			X									
2		56	50	✓ 50	XX		X		X									
3		57	40	✓ 40														
4		58	30	✓ 30					XX									
5		59	20	✓ 20				X	X									
6		60	10	✓ 10				X	X									
7		61	5	✓ 5		XX			X									
8		62	3fc	✓ 2.3	X	X		XX	X	XX								
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 59 m
 Transmisso Cleaned: (Y) N
 Fluorometer Cleaned: Y / N

Time	UTC	Local
Start (BE)	22 : 58	15 : 58
Bottom (BO)	23 : 00	16 : 00
End (EN)	23 : 08	16 : 08

Positional Information

Lat:	49 ° 17 . 872	N
Lon:	122 ° 58 . 841	W

▼

Lat:	49 ° 17 . 873	N
Lon:	122 ° 58 . 841	W

▼

Lat:	49 ° 17 . 876	N
Lon:	122 ° 58 . 843	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: 2019-016

Station: VAN 5

Event #: 14

Vessel: VECTOR

UTC Date (dd|mmm|yyyy): 07 | APR | 2019

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		63	6-5	✓ 31	X	XX			X										
2		64	30	✓ 30	I	I			X										
3		65	20	✓ 20	XX	I		X	X										
4		66	10	✓ 10	I	I		X	XX										
5		67	5	✓ 5	I	I			X										
6		68	SFC	✓ 24	X	X		XX	X										
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

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

Time	UTC	Local
Start (BE)	23 :47	16 :47
Bottom (BO)	23 :49	16 :49
End (EN)	23 :54	16 :54

Positional Information

Lat:	49 ° 17 . 725	N
Lon:	123 ° 03 . 246	W

Bottom

Lat:	49 ° 17 . 724	N
Lon:	123 ° 03 . 250	W

Finish

Lat:	49 ° 17 . 720	N
Lon:	123 ° 03 . 264	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: 2019-016 Station: VAN4 Event #: 15 Vessel: VECTOR UTC Date (dd|mmm|yyyy): 7/8 | APR | 2019

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	MP	DIC								
1		85	6.5	✓ 53	X	X				X								
2		86	50	✓ 50			X			X								
3		87	40	✓ 40						X								
4		88	30	✓ 30	XX					X								
5		89	20	✓ 20				XX		X								
6		90	10	✓ 10				X		XX								
7		91	5	✓ 5		XX				X								
8		92	str	2.3	X	X		X	XX	X								
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 56 m
 Transmisso Cleaned: Y / N
 Fluorometer Cleaned: Y / N

Time	UTC	Local
Start (BE)	00 : 52	17 : 58
Bottom (BO)	00 : 54	17 : 54
End (EN)	01 : 01	18 : 01

Positional Information

Start	Lat: <u>49° 17' . 917</u> N
	Lon: <u>123° 05' . 782</u> W

Bottom

Lat: <u>49° 17' . 928</u> N
Lon: <u>123° 05' . 774</u> W

Finish

Lat: <u>49° 17' . 960</u> N
Lon: <u>123° 05' . 774</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: 2019-016 Station: VAN 1 Event #: 20 Vessel: VECTOR UTC Date (dd|mmm|yyyy): 08 | APR | 2019

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	MPIC	DIC	P-TO	DA						
1		93	6-5	✓ 111	X	X				X								
2		94	100	✓ 100	1	1	X			X								
3		95	75	✓ 75	XX	1				X								
4		96	50	✓ 50	1	1				XX								
5		97	40	✓ 40		XX				X								
6		98	30	✓ 30		1				X								
7		99	20	✓ 20		1		XX		XX								
8		100	10	✓ 10		1		X		X								
9		101	5	✓ 5		1				X								
10		102	SPC	✓ 2.4	X	X		X	XX	X	X	X						
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 116 m
 Transmisso Cleaned: (Y) N
 Fluorometer Cleaned: Y / N

Time	UTC	Local
Start (BE)	<u>03:30</u>	<u>20:30</u>
Bottom (BO)	<u>03:33</u>	<u>20:33</u>
End (EN)	<u>03:42</u>	<u>20:42</u>

Positional Information

Lat:	<u>49° 18.866</u>	N
Lon:	<u>123° 15.894</u>	W

Bottom

Lat:	<u>49° 18.852</u>	N
Lon:	<u>123° 15.881</u>	W

Finish

Lat:	<u>49° 18.844</u>	N
Lon:	<u>123° 15.896</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: 2019-016 Station: 22

Event #: 23

Vessel: Vector

UTC Date (dd|mmm|yyyy): 08|APR|2019

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	HPLC	Phyto	DA							
1		103	20	✓		XX		X										
2		104	10	✓		X		XX										
3		105	Surf	✓		X		X	XX	X	X							CHL ± 0.6
4																		used 625 ml bot
5																		thinking it was
6																		6.0 not 0.6
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 351 m
 Transmisso Cleaned: (Y) / N
 Fluorometer Cleaned: Y / N

Time	UTC	Local
Start (BE)	<u>09:37</u>	<u>02:37</u>
Bottom (BO)	<u>09:45</u>	:
End (EN)	<u>09:54</u>	:

Positional Information

Lat:	<u>49° 39.930</u>	N
Lon:	<u>124° 15.757</u>	W

▼

Lat:	<u>49° 39.928</u>	N
Lon:	<u>124° 15.757</u>	W

▼

Lat:	<u>49° 39.928</u>	N
Lon:	<u>124° 15.755</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: 2019-016

Station: 16

Event #: 29

Vessel: Vector

UTC Date (dd|mmm|yyyy): 08 | APR | 2019

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	HPLC									
1		107	B-5	✓ 153	X	X												
2		108	125	✓	X	X	X											
3		109	100	✓	X	XX												
4		110	75	✓	X	X												
5		111	50	✓	XX	X												
6		112	40	✓	X	X												
7		113	30	✓	X	X												
8		114	20	✓	X	XX		XX										
9		115	10	✓	XX	X		X										
10		116	5	✓	X	X		X										
11		117	Sfc	✓	X	X	X	X	XX									FLU ≈ 1.7
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: 158 m
 Transmisso Cleaned: (Y) / N
 Fluorometer Cleaned: Y / N

Time	UTC	Local
Start (BE)	17:23	10:23
Bottom (BO)	17:28	:
End (EN)	:	:

Positional Information
 Lat: 49° 57.719 N
 Lon: 125° 8.832 W

▼
 Lat: 49° 57.736 N
 Lon: 125° 08.879 W

▼
 Lat: 49° 57.733 N
 Lon: 125° 8.899 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: 2019-016 Station: 14 Event #: 33 Vessel: Vector UTC Date (dd|mmm|yyyy): 08 | APR | 2019

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	HPLC	Phyto	DA							
1		118	B-5	✓ 309														
2		119	250	✓ 250			X											
3		120	200	✓ 200														
4		121	175	✓ 175		XX												
5		122	150	✓ 150	XX													
6		123	125	✓ 125														
7		124	100	✓ 100														
8		125	75	✓ 75														
9		126	50	✓ 50														
10		127	40	✓ 40														
11		128	30	✓ 30	XX													
12		129	20	✓ 20		XX		X										
13		130	10	✓ 10				X										
14		131	5	✓ 5				XX										
15		132	surf	✓ 2.6	✓	✓	X	X	XX	X	X							
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 312 m
 Transmisso Cleaned: (Y) N
 Fluorometer Cleaned: Y / N

Time	UTC	Local
Start (BE)	21 : 07	14 : 07
Bottom (BO)	21 : 14	14 : 14
End (EN)	21 : 32	14 : 32

Positional Information
 Start
 Lat: 49° 53.008 N
 Lon: 124° 59.606 W

Bottom
 Lat: 49° 53.003 N
 Lon: 124° 59.617 W

Finish
 Lat: 49° 52.999 N
 Lon: 124° 59.638 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: 2019-016 Station: 12 Event #: 39 Vessel: VECTOR UTC Date (dd|mmm|yyyy): 08 | APR | 2019

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	MP	DIC	pH	TO	DA					
1		133	6-5	✓ 352	X	X				X								
2		134	300	✓ 300	1	1	X											
3		135	250	✓ 250	XX	1				X								
4		136	200	✓ 200	1	XX				XX								
5		137	175	✓ 175	1	1												
6		138	150	✓ 150	1	1				X								
7		139	125	✓ 125	1	XX				X								
8		140	100	✓ 100	1	1				X								
9		141	75	✓ 75	XX	1				X								
10		142	50	✓ 50	1	1				XX								
11		143	40	✓ 40	1	1				X								
12		144	30	✓ 30	1	1				X								
13		145	20	✓ 20	1	1		XX		X								
14		146	10	✓ 10	1	1		X		X								
15		147	5	✓ 5	1	1		X		X								
16		148	SPC	✓ 2.1	X	X	X	X	XX	X	X	X						
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

148
SAL
12
2019-016
Bot 16

sample not taken
no water left in Niskin :-

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

Bottom Depth: 355 m
Transmisso Cleaned: Y / N
Fluorometer Cleaned: Y / N
Time UTC Local
Start (BE) 02 : 35 19 : 35
Bottom (BO) 02 : 42 19 : 42
End (EN) 03 : 01 20 : 01

Positional Information
Start
Lat: 49 ° 43 . 616 N
Lon: 124 ° 40 . 799 W
▼
Bottom
Lat: 49 ° 43 . 613 N
Lon: 124 ° 40 . 832 W
▼
Finish
Lat: 49 ° 43 . 590 N
Lon: 124 ° 40 . 836 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: 2019-016

Station: 9

Event #: 41

Vessel: VECTOR

UTC Date (dd|mmm|yyyy): 09 | APR | 2019

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	APLC									
1		149	6-5	✓ 166	X	X												
2		150	150	✓ 150			X											
3		151	125	✓ 125														
4		152	100	✓ 100		XX												
5		153	75	✓ 75														
6		154	50	✓ 50														
7		155	40	✓ 40														
8		156	30	✓ 30	XX													
9		157	20	✓ 20				X										
10		158	10	✓ 10				XX										
11		159	5	✓ 5		XX		X										
12		160	SFC	✓ 2.4	XX	X	X	X	XX									
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

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

Time	UTC	Local
Start (BE)	04 :50	21 :50
Bottom (BO)	04 :54	21 :54
End (EN)	05 :07	22 :07

Positional Information

Lat:	49 ° 35 . 540	N
Lon:	124 ° 38 . 291	W

▼

Lat:	49 ° 35 . 540	N
Lon:	124 ° 38 . 282	W

▼

Lat:	49 ° 35 . 525	N
Lon:	124 ° 38 . 291	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: 2019-016 Station: 6 Event #: 43 Vessel: VECTOR UTC Date (dd|mmm|yyyy): 09 | APR | 2019

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		161	6-5	✓ 189	X	XX												
2		162	175	✓			X											
3		163	150	✓	XX													
4		164	125	✓														
5		165	100	✓														
6		166	75	✓														
7		167	50	✓		XX												
8		168	40	✓														
9		169	30	✓														
10		170	20	✓				X										
11		171	10	✓				X										
12		172	5	✓	XX			X										
13		173	sfc	✓	X	X	X	XX	XX									FW ≈ 1.5
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 194 m
 Transmisso Cleaned: (Y) | N
 Fluorometer Cleaned: Y | N

Time	UTC	Local
Start (BE)	<u>07:18</u>	<u>00:18</u>
Bottom (BO)	<u>07:23</u>	:
End (EN)	:	:

Positional Information
 Lat: 49° 30.595 N
 Lon: 124° 27.786 W

▼
 Lat: 49° 30.595 N
 Lon: 124° 27.788 W

▼
 Lat: 49° 30.594 N
 Lon: 124° 27.791 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: 2019-016

Station: 3

Event #: 47

Vessel: Vector

UTC Date (dd|mmm|yyyy): 09|APR|2019

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	HPLC									
1		174	B-5	✓ 320														
2		175	300	✓			X											
3		176	250	✓														
4		177	200	✓		XX												
5		178	175	✓														
6		179	150	✓	XX													
7		180	125	✓														
8		181	100	✓														
9		182	75	✓														
10		183	50	✓		XX												
11		184	40	✓														
12		185	30	✓														
13		186	20	✓				X										
14		187	10	✓				XX										
15		188	5	✓	XX			X										
16		189	swif	✓	↓	↓	X	X	XX									
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 325 m
 Transmisso Cleaned: (Y) / N
 Fluorometer Cleaned: Y / N

Time	UTC	Local
Start (BE)	<u>10:28</u>	<u>03:28</u>
Bottom (BO)	<u>10:35</u>	:
End (EN)	:	:

Positional Information

Lat:	<u>49° 26.593</u>	N
Lon:	<u>124° 20.203</u>	W

Bottom

Lat:	<u>49° 26.593</u>	N
Lon:	<u>124° 20.208</u>	W

Finish

Lat:	<u>49° 26.593</u>	N
Lon:	<u>124° 20.208</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: 2019-016

Station: CPF1

Event #: 50

Vessel: Vector

UTC Date (dd|mmm|yyyy): 09 | APR | 2019

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		190	20			X		XX									
2		191	10			XX		X									
3		192	Surf			X		X									
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

Profile type:
 Ros (default) | TrMetlRos | X-Niskin
 Watchkeeper(s):
SR / H.M.

Bottom Depth: 245 m
 Transmisso Cleaned: Y / N
 Fluorometer Cleaned: Y / N
 Time UTC Local
 Start (BE) 13:32 06:32
 Bottom (BO) 13:38 :
 End (EN) 13:44 :

Positional Information
 Start
 Lat: 49 ° 21.989 N
 Lon: 124 ° 5.033 W
 ▼
 Bottom
 Lat: 49 ° 21.994 N
 Lon: 124 ° 5.022 W
 ▼
 Finish
 Lat: 49 ° 21.996 N
 Lon: 124 ° 5.024 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: 2019-016 Station: 2 Event #: 51 Vessel: Vector UTC Date (dd|mmm|yyyy): 09 | APR | 2019

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	DA	PHY	HPLC							
1		193	blm-5	✓ 276	X	XX												
2		194	250	✓	X	X	X											
3		195	200	✓	X	X												
4		196	175	✓	X	X												
5		197	150	✓	XX	X												
6		198	125	✓	X	X												
7		199	100	✓	X	X												
8		200	75	✓	X	X												
9		201	50	✓	X	X												
10		202	40	✓	X	XX												
11		203	30	✓	X	X												
12		204	20	✓	X	X		XX										
13		205	10	✓	X	X		X										
14		206	5	✓	XX	X		X										
15		207	Sfc	✓	X	X	X	X	X	X	XX							
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 280 m
 Transmisso Cleaned: ☒ Y / ☐ N
 Fluorometer Cleaned: ☐ Y / ☐ N

Time	UTC	Local
Start (BE)	<u>14:19</u>	<u>07:19</u>
Bottom (BO)	<u>14:23</u>	:
End (EN)	<u>14:44</u>	:

Positional Information

Start	Lat: <u>49° 24.085</u> N
	Lon: <u>124° 9.342</u> W
Bottom	Lat: <u>49° 24.097</u> N
	Lon: <u>124° 9.341</u> W
Finish	Lat: <u>49° 24.088</u> N
	Lon: <u>124° 9.346</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: 2019-016 Station: 24 Event #: 54 Vessel: Vector UTC Date (dd|mmm|yyyy): 09 | APR | 2019

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		208	20	/		X		X										
2		209	10	/		XX		X										
3		210	Surf	/		X		XX										
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
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: 427 m
 Transmisso Cleaned: ☒ Y / ☐ N
 Fluorometer Cleaned: ☐ Y / ☐ N

Time	UTC	Local
Start (BE)	<u>16:35</u>	<u>09:35</u>
Bottom (BO)	<u>16:44</u>	:
End (EN)	<u>16:53</u>	:

Positional Information

Start	Lat: <u>49° 30.311</u> N
	Lon: <u>124° 6.006</u> W
Bottom	Lat: <u>49° 30.312</u> N
	Lon: <u>124° 6.007</u> W
Finish	Lat: <u>49° 30.304</u> N
	Lon: <u>124° 6.013</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: 2019-016 Station: 27 Event #: 58 Vessel: Vector UTC Date (dd|mmm|yyyy): 09 | APR | 2019

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	HPIC	DIC								
1		211	B-5	✓ 342						X								
2		212	300	✓ 300			X			X								
3		213	250	✓ 250						XX								
4		214	200	✓ 200						X								
5		215	175	✓ 175		XX												
6		216	150	✓ 150	XX													
7		217	125	✓ 125														
8		218	100	✓ 100														
9		219	75	✓ 75														
10		220	50	✓ 50														
11		221	40	✓ 40		XX												
12		222	30	✓ 30	XX													
13		223	20	✓ 20				X										
14		224	10	✓ 10				X										
15		225	5	✓ 5	✓	✓		XX										
16		226	surf	✓ 2.3	X	X	X	X	XX									
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 343 m
 Transmisso Cleaned: Y / N
 Fluorometer Cleaned: Y / N

Time	UTC	Local
Start (BE)	19:58	12:58
Bottom (BO)	20:05	13:05
End (EN)	:	:

Positional Information

Lat:	49° 19' .130	N
Lon:	123° 47' .942	W

Start

Lat:	49° 19' .139	N
Lon:	123° 47' .938	W

Bottom

Lat:	49° 19' .135	N
Lon:	123° 47' .939	W

Finish

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: 2019-016 Station: GEO1 Event #: 63 Vessel: VECTOR UTC Date (dd|mmm|yyyy): 09 | APR | 2019

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	HPLC									
1		227	20	✓ 20		X		XX										
2		228	10	✓ 10		XX		X										
3		229	sfc	✓ 2.7		X		X	XX									
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 400 m
 Transmisso Cleaned: Y / N
 Fluorometer Cleaned: Y / N

Time	UTC	Local
Start (BE)	<u>23:16</u>	<u>16:16</u>
Bottom (BO)	<u>23:23</u>	<u>16:23</u>
End (EN)	<u>23:32</u>	<u>16:32</u>

Positional Information

Lat:	<u>49° 15.017</u>	N
Lon:	<u>123° 45.008</u>	W

Start

▼

Lat:	<u>49° 15.046</u>	N
Lon:	<u>123° 45.007</u>	W

Bottom

▼

Lat:	<u>49° 15.054</u>	N
Lon:	<u>123° 45.008</u>	W

Finish

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: 2019-016 Station: 39 Event #: 66 Vessel: VECTOR UTC Date (dd|mmm|yyyy): 10 | APR | 2019

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	HPLC									
1		230	6-5	✓ 371	x	x												
2		231	350	✓ 350			x											
3		232	300	✓ 300														
4		233	250	✓ 250	xx													
5		234	200	✓ 200														
6		235	175	✓ 175		xx												
7		236	150	✓ 150														
8		237	125	✓ 125														
9		238	100	✓ 100														
10		239	75	✓ 75		xx												
11		240	50	✓ 50														
12		241	40	✓ 40														
13		242	30	✓ 30														
14		243	20	✓ 20				x										
15		244	10	✓ 10				xx										
16		245	5	✓ 5	xx			x										
17		246	Sfc	✓ 3.0	x	x	x	x	xx									
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 374 m
 Transmisso Cleaned: (Y) / N
 Fluorometer Cleaned: Y / N

Time	UTC	Local
Start (BE)	<u>01 : 26</u>	<u>18 : 26</u>
Bottom (BO)	<u>01 : 33</u>	<u>18 : 33</u>
End (EN)	:	:

Positional Information

Lat:	<u>49 ° 09 .848</u>	N
Lon:	<u>123 ° 32 .977</u>	W

▼

Lat:	<u>49 ° 09 .853</u>	N
Lon:	<u>123 ° 32 .975</u>	W

▼

Lat:	<u>49 ° .</u>	N
Lon:	<u>123 ° .</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: 2019-016 Station: 42

Event #: 73

Vessel: VECTOR

UTC Date (dd|mmm|yyyy): 10 | APR | 2019

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	HPLC	DIC	PAT10	DA						
1		247	6-5	✓/317	X	X				X								
2		248	300	/	XX		X											
3		249	250	/						X								
4		250	200	/						X								
5		251	175	/		XX												
6		252	150	/						X								
7		253	125	/						XX								
8		254	100	/						X								
9		255	75	/						X								
10		256	50	/		XX				X								
11		257	40	/						X								
12		258	30	/						X								
13		259	20	/				XX		X								
14		260	10	/				X		XX								
15		261	5	/	XX			X		X								
16		262	sfc	/	X	X	X	X	XX		X	X						
17		263	sfc	/						X								
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 321 m
 Transmisso Cleaned: ☒ Y / ☐ N
 Fluorometer Cleaned: ☐ Y / ☐ N

Time	UTC	Local
Start (BE)	07:01	00:01
Bottom (BO)	07:07	:
End (EN)	07:28	:

Positional Information

Lat:	<u>49°</u>	<u>1.781</u>	N
Lon:	<u>123°</u>	<u>26.106</u>	W

▼

Lat:	<u>49°</u>	<u>1.775</u>	N
Lon:	<u>123°</u>	<u>26.111</u>	W

▼

Lat:	<u>49°</u>	<u>1.768</u>	N
Lon:	<u>123°</u>	<u>26.106</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: 2019-016 Station: 46 Event #: 76 Vessel: Vector UTC Date (dd|mmm|yyyy): 10 | APR | 2019

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	HPLC									
1		264	B-5	✓ 175														
2		265	150	✓		XX	X											
3		266	125	✓	XX													
4		267	100	✓														
5		268	75															
6		269	50															
7		270	40			XX												
8		271	30															
9		272	20					X										
10		273	10		XX			X										
11		274	5					XX										
12		275	Surf		↓	↓	X	X	XX									Flu ≈ 0.5
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 180 m
 Transmisso Cleaned: ☒ Y ☐ N
 Fluorometer Cleaned: ☐ Y ☐ N

Time	UTC	Local
Start (BE)	10:30	07:30
Bottom (BO)	10:34	:
End (EN)	10:50	:

Positional Information
 Lat: 48° 51.409 N
 Lon: 123° 10.806 W

▼
 Lat: 48° 51.409 N
 Lon: 123° 10.800 W

▼
 Lat: 48° 51.406 N
 Lon: 123° 10.788 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: 2019-016

Station: 56

Event #: 82

Vessel: Vector

UTC Date (dd|mmm|yyyy): 10 | APR | 2019

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	HPLC	PHYTO	DA							
1		276	B-5	✓ 210	↓	↓												
2		277	200	✓ 200			X											
3		278	175	✓ 175	XX													
4		279	150	✓ 150	↓	↓												
5		280	125	✓ 125														
6		281	100	✓ 100		↓												
7		282	75	✓ 75		XX												
8		283	50	✓ 50		↓												
9		284	40	✓ 40		↓												
10		285	30	✓ 30		XX												
11		286	20	✓ 20		↓		X										
12		287	10	✓ 10	↓	↓		XX										
13		288	5	✓ 5	XX	↓		X										
14		289	surf	✓ sfc	↓	↓	X	X	XX	X	X							
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 215 m
 Transmisso Cleaned: Y / N
 Fluorometer Cleaned: Y / N
 Time UTC Local
 Start (BE) 15:10 8:10
 Bottom (BO) 15:15 8:10
 End (EN) 15:32 8:32

Positional Information
 Start
 Lat: 48° 46.388 N
 Lon: 123° 01.597 W
 Bottom
 Lat: 48° 46.392 N
 Lon: 123° 01.600 W
 Finish
 Lat: 48° 46.387 N
 Lon: 123° 01.600 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: 2019-016 Station: 59 Event #: 85 Vessel: Vector UTC Date (dd|mmm|yyyy): 10|APR|2019

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	Phy	DA					
1		290	B-5	✓ 225						X							
2		291	200	✓			X			X							
3		292	175	✓													
4		293	150	✓	XX					XX							
5		294	125	✓													
6		295	100	✓						X							
7		296	75	✓		XX				X							
8		297	50	✓						XX							
9		298	40	✓													
10		299	30	✓						X							
11		300	20	✓				X		X							
12		301	10	✓				X		X							
13		302	5	✓	↓	↓		X		X							
14		303	Surf	✓		XX		XX			X	X					
15		304	Surf	✓	XX		X			X							
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

Profile type:
☒ Ros (default) ☐ TrMet/Ros ☐ X-Niskin
 Watchkeeper(s):
SR

Bottom Depth: 230 m
 Transmisso Cleaned: ☒ Y ☐ N
 Fluorometer Cleaned: ☐ Y ☐ N

Time	UTC	Local
Start (BE)	<u>18:15</u>	<u>11:15</u>
Bottom (BO)	<u>18:20</u>	<u>11:20</u>
End (EN)	<u>18:39</u>	<u>11:39</u>

Positional Information
 Lat: 48° 37.811 N
 Lon: 123° 14.598 W

Start
 Lat: 48° 37.810 N
 Lon: 123° 14.604 W

Bottom
 Lat: 48° 37.808 N
 Lon: 123° 14.603 W

Finish
 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: 2019-016 Station: 102 Event #: 89 Vessel: VECTOR UTC Date (dd|mmm|yyyy): 11 | APR | 2019

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	HPLC	PHYTO	DA						
1		305	6-5	✓ 250	X	X											
2		306	200				X										
3		307	175														
4		308	150		XX												
5		309	125														
6		310	100														
7		311	75														
8		312	50				XX										
9		313	40														
10		314	30			XX											
11		315	20					X									
12		316	10		XX			X									
13		317	5					XX									
14		318	ste		X	X	X	X	XX	X	X						
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth: 255 m
Transmisso Cleaned: Y / N
Fluorometer Cleaned: Y / N
Time UTC Local
Start (BE) 06:59 11:59
Bottom (BO) 07:06 :
End (EN) 07:24 :

Positional Information
Start Lat: 48° 30.012 N
Lon: 124° 44.007 W
Bottom Lat: 48° 30.013 N
Lon: 124° 44.010 W
Finish Lat: 48° 30.012 N
Lon: 124° 44.011 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: 2019-016

Station: 75

Event #: 93

Vessel: Vector

UTC Date (dd|mmm|yyyy): 11 | APR | 2019

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	HPLC									
1		319	B-5	✓ 221		1												
2		320	200	✓ 200		XX	X											
3		321	175	✓ 175														
4		322	150	✓ 150														
5		323	125	✓ 125														
6		324	100	✓ 100														
7		325	75	✓ 75														
8		326	50	✓ 51	XX													
9		327	40	✓ 41														
10		328	30	✓ 30														
11		329	20	✓ 20		XX		X										
12		330	10	✓ 10				XX										
13		331	5	✓ 5	XX		X	X										
14		332	surf	surf	↓	↓		X	XX									
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 226 m
 Transmisso Cleaned: Y / N
 Fluorometer Cleaned: Y / N
 Time UTC Local
 Start (BE) 10:01 03:01
 Bottom (BO) 10:06 03:06
 End (EN) 10:25 03:25

Positional Information
 Lat: 48°28.200 N
 Lon: 124°32.816 W
 ▼
 Lat: 48°28.200 N
 Lon: 124°32.821 W
 ▼
 Lat: 48°28.207 N
 Lon: 124°32.840 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: 2019-016 Station: 72 Event #: 97 Vessel: Vector UTC Date (dd|mmm|yyyy): 11 | APR | 2019

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	HPIC	DIC	Phyto	DA					
1		333	B-5	✓ 185	↓	↓				X							
2		334	175	✓	↓	↓	X										
3		335	150	✓	↓	↓				X							
4		336	125	✓	XX	XX											
5		337	100	✓	↓	↓				XX							
6		338	75	✓	↓	↓				X							
7		339	50		↓	XX				X							
8		340	40		↓	↓											
9		341	30		↓	↓				X							
10		342	20		XX	↓		X		XX							
11		343	10		↓	↓		X		X							
12		344	5		↓	↓		XX		X							
13		345	Surf		↓	↓	X	X	XX	X	X	X					
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth: 190 m
 Transmisso Cleaned: ☒ Y | ☐ N
 Fluorometer Cleaned: ☐ Y | ☐ N

Time	UTC	Local
Start (BE)	<u>14 : 35</u>	<u>07 : 35</u>
Bottom (BO)	<u>14 : 39</u>	<u>07 : 39</u>
End (EN)	<u>14 : 54</u>	<u>07 : 54</u>

Positional Information
 Lat: 48° 18.608 N
 Lon: 124° 04.002 W

Start
 Lat: 48° 18.610 N
 Lon: 124° 04.016 W

Bottom
 Lat: 48° 18.641 N
 Lon: 124° 04.003 W

Finish
 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: 2017-016 Station: 69 Event #: 100 Vessel: Vector UTC Date (dd|mmm|yyyy): 11 | APR | 2019

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	HPLC									
1		346	B-5	17.5														
2		347	150		XX		X											
3		348	125															
4		349	100	75														
5		350	75	50														
6		351	50	40		XX												
7		352	40	100	XX													
8		353	30															
9		354	20					X										
10		355	10			XX		X										
11		356	5					XX										
12		357	Surf		✓	✓	X	X	XX									
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Profile type:
☒ Ros (default) ☐ TrMetiRos ☐ X-Niskin
 Watchkeeper(s):
SR

Bottom Depth: 17.5 m
 Transmisso Cleaned: Y / N
 Fluorometer Cleaned: Y / N

Time	UTC	Local
Start (BE)	17:51	10:51
Bottom (BO)	17:55	10:55
End (EN)	18:14	11:14

Positional Information
 Lat: 48° 15.628 N
 Lon: 123° 43.211 W

▼
 Lat: 48° 15.622 N
 Lon: 123° 43.194 W

▼
 Lat: 48° 15.612 N
 Lon: 123° 43.166 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: 2019-016

Station: ADCP

Event #: 103

Vessel: VECTOR

UTC Date (dd|mmm|yyyy): 11 | APR | 2019

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	HPIC	PAR	DA							
1		358	6-5	✓ 113	XX	X												
2		359	100	✓ 100			X											
3		360	75	✓ 75														
4		361	50	✓ 50														
5		362	40	✓ 40		XX												
6		363	30	✓ 30														
7		364	20	✓ 20	XX			X										
8		365	10	✓ 10				XX										
9		366	5	✓ 5		XX		X										
10		367	sfc	✓ 2.7	X	X	X	X	XX	X	X							
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 120 m
 Transmisso Cleaned: Y / N
 Fluorometer Cleaned: Y / N
 Time UTC Local
 Start (BE) 21:32 14:32
 Bottom (BO) 21:35 14:35
 End (EN) 21:46 14:46

Positional Information
 Start
 Lat: 48° 13.975 N
 Lon: 123° 18.058 W
 Bottom
 Lat: 48° 13.966 N
 Lon: 123° 18.059 W
 Finish
 Lat: 48° 13.964 N
 Lon: 123° 18.078 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: 2019-016 Station: 65 Event #: 108 Vessel: VECTOR UTC Date (dd|mmm|yyyy): 12 | APR | 2019

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	MP									
1		368	6-5	✓ 121	X	X												
2		369	100	✓ 100			X											
3		370	75	✓ 75		XX												
4		371	50	✓ 50														
5		372	40	✓ 40														
6		373	30	✓ 30	XX													
7		374	20	✓ 20				X										
8		375	10	✓ 10				X										bottle 8 no trip
9		376	5	✓ 5				X										
10		377	stc	✓ 2.6	X	X	X	XX	XX									trip bottle
11		375	10	10														11 @ 10m as bottle 8 mis fired
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

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

Time	UTC	Local
Start (BE)	00:36	17:36
Bottom (BO)	00:39	17:39
End (EN)	00:50	17:50

Positional Information

Lat:	48° 15.918	N
Lon:	123° 09.790	W

Bottom

Lat:	48° 15.922	N
Lon:	123° 09.788	W

Finish

Lat:	48° 15.911	N
Lon:	123° 09.752	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: 2019-016 Station: 63 Event #: 110 Vessel: VECTOR UTC Date (dd|mmm|yyyy): 12 | APR | 2019

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	HPLC									
1		378	20	✓ 20		XX		X										
2		379	10	✓ 10		X		XX										
3		380	sfe	✓ 2.6		X		X	XX									
4																		
5																		
6																		
7																		
8		— test trip —				bottle 8 —												tipped away
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 157 m
Transmisso Cleaned: Y / N
Fluorometer Cleaned: Y / N

Time	UTC	Local
Start (BE)	02 : 19	19 : 19
Bottom (BO)	02 : 22	19 : 22
End (EN)	02 : 28	19 : 28

Positional Information
Start
Lat: 48 ° 14 . 520 N
Lon: 122 ° 58 . 535 W

Bottom
Lat: 48 ° 14 . 516 N
Lon: 122 ° 58 . 531 W

Finish
Lat: 48 ° 14 . 522 N
Lon: 122 ° 58 . 524 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: 2019-016 Station: 62 Event #: 111 Vessel: VECTOR UTC Date (dd|mmm|yyyy): 12 | APR | 2019

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	HPIC									
1		381	6-5	✓ 143	X	XX												
2		382	125	✓ 125			X											
3		383	100	✓ 100														
4		384	75	✓ 75														
5		385	50	✓ 50														
6		386	40	✓ 40	XX													
7		387	30	✓ 30		XX												
8		388	20	✓ 20				X										
9		389	10	✓ 10				X										
10		390	5	✓ 5	XX			X										
11		391	sf	✓ 2.8	X	X	X	XX	XX									
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

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

Time	UTC	Local
Start (BE)	03 : 39	20 : 39
Bottom (BO)	03 : 42	20 : 42
End (EN)	08 : 54	20 : 54

Positional Information
Start
Lat: 48 ° 22 . 880 N
Lon: 123 ° 02 . 569 W

Bottom
Lat: 48 ° 22 . 837 N
Lon: 123 ° 02 . 569 W

Finish
Lat: 48 ° 22 . 846 N
Lon: 123 ° 02 . 587 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: 2019-016 Station: SC-04 Event #: 119 Vessel: Vector UTC Date (dd|mmm|yyyy): 12 | 004 | 2019

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	HPLC	PHY							
1		392	20	✓		X		XX									
2		393	10	✓		X		X									
3		394	5SC	✓		XX		X	XX	X							
4																	
5																	
6																	
7																	
8			swt		for testing purposes only												
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth: 96 m
Transmisso Cleaned: (Y) / N
Fluorometer Cleaned: Y / N

Time	UTC	Local
Start (BE)	12:00	05:00
Bottom (BO)	12:02	:
End (EN)	12:06	:

Positional Information
Start
Lat: 48° 43.495 N
Lon: 123° 25.016 W

Bottom
Lat: 48° 43.496 N
Lon: 123° 25.018 W

Finish
Lat: 48° 43.494 N
Lon: 123° 25.021 W

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