



Plankton Net Tow Log Sheet

Cruise #: 2017-64 Vessel: Vector Page: 1

Project(s): LSOB Contact: Ian Perry/Kenny S.

TSK Serial #: 7131 RBR serial #: 79110

Time offset = + 7 hrs = UTC (please record local time for samples)

Date: 21 June 17	Station: 59	Time: 2125 LOCAL
Net Event # 3	CTD # 4	net back on deck 2140
Latitude: 48 37.8 N	Longitude: 123 14.6 W	
deg min.dec	deg min.dec	
Wire out: 217	Wire angle: 0	Bottom Depth: 228
Net Type: SCOR	Tow Type: VNH	
Flow start 7579	Flow end 8780	Flow = frozen N/A
		Non-flow = pickled SCOR net

Notes: Dusk - lots of ctenophores, chaetognaths

⊕ Flow meter misread, but by same person, therefore flow difference likely correct

Date: 22 June 17	Station: 72	Time: 1836 net LOCAL
Net Event # 013	CTD # 014	net on deck 1839
Latitude: 48 18.6 N	Longitude: 124 44.0 W	
deg min.dec	deg min.dec	
Wire out: 173	Wire angle: 0	Bottom Depth: 184
Net Type: SCOR	Tow Type: VNH	
Flow start	Flow end	Flow = frozen N/A
8780	10912	Non-flow = pickled

Notes: crabs mesalopae, some Euphs, chaetognaths, jellies

⊕ Flow meter misread, but by same person at start + end - therefore difference likely correct

Date: 23 June 2017	Station: 63	Time: 0524 LOCAL
Net Event # 26	CTD # 27	
Latitude: 48 14.602 N	Longitude: 122 58.556 W	
deg min.dec	deg min.dec	
Wire out: 143	Wire angle: ~20°	Bottom Depth: 153
Net Type: SCOR	Tow Type: VNH	
Flow start 00912	Flow end 01889	Flow = frozen
		Non-flow = pickled

Notes: Aft lead on way down ~20°

⊕ Flow meter misread, but by same person. Unsure of flow meter reading. label inside jar has incorrect flow meter values. Please use values above.

Date: 23 June 17	Station: 46	Time: 2128 LOCAL
Net Event # 041	CTD # 042	net on deck at 2130
Latitude: 48 51.32 N	Longitude: 123 10.64 W	
deg min.dec	deg min.dec	
Wire out: 170	Wire angle: 0	Bottom Depth: 179
Net Type: SCOR	Tow Type: VNH	
Flow start	Flow end	Flow = frozen
00889	01928	Non-flow = pickled

Notes: ctenophores, crab mesalopae

⊕ Flow meter readings Correct! (Triple checked by 3 people)



Plankton Net Tow Log Sheet

Cruise #: 2017-64 Vessel: Vector Page: 2

Project(s): SoG

Contact: Ian Perry/Kennedy

TSK Serial #: 7131

RBR serial #: 79110

Time offset = +

hrs = UTC (please record local time for samples)

Date: 24 ~~July~~ 17 Station: N41 Time: 0327 LOCAL

Net Event # 48 CTD # 47

Latitude: 49° 3.315 N Longitude: 123° 22.289 W
deg min.dec deg min.dec

Wire out: 230 Wire angle: 0 Bottom Depth: 240

Net Type: SCOR Tow Type: VNH

Flow start Flow end Flow = frozen

01928 03299 Non-flow = pickled

Notes: Fraser plume in-jar label incorrectly dated as 24 July 2017.
Flow readings correct Plankton visible in prop wash

Date: 24 June 2017 Station: 38 Time: 0555 LOCAL

Net Event # 51 CTD # 52

Latitude: 49° 12.011 N Longitude: 123° 26.414 W
deg min.dec deg min.dec

Wire out: 298 Wire angle: 0 Bottom Depth: 308

Net Type: SCOR Tow Type: VNH

Flow start Flow end Flow = frozen

03299 04962 Non-flow = pickled

Notes: In-jar label incorrectly dated as 24 July 2017

Date: 24 ~~July~~ 2017 Station: 40 Time: 0812 LOCAL

Net Event # 54 CTD # 55

Latitude: 49° 08.604 N Longitude: 123° 36.812 W
deg min.dec deg min.dec

Wire out: 135 Wire angle: 0 Bottom Depth: 145

Net Type: SCOR Tow Type: VNH

Flow start Flow end Flow = frozen

04962 05886 Non-flow = pickled

Notes: In-jar label incorrectly dated as 24 July 2017

Date: 24 June 2017 Station: GE01 Time: 1014 LOCAL

Net Event # 57 CTD # 56

Latitude: 49° 14.985 N Longitude: 123° 44.891 W
deg min.dec deg min.dec

Wire out: 386 Wire angle: 0 Bottom Depth: 396

Net Type: SCOR Tow Type: VNH

Flow start Flow end Flow = frozen

05888 08113 Non-flow = pickled

Notes:



Plankton Net Tow Log Sheet

Cruise #: 2017-64 Vessel: Vector Page: 3

Project(s): SoG

Contact: Ian Perry/Kenny S.

TSK Serial #: 7131

RBR serial #: 79110

Time offset = +

hrs = UTC (please record local time for samples)

Date: 24 June 2017	Station: G E 01	Time: 10 37	LOCAL
Net Event # 58	CTD # 56		
Latitude: 49° 14.997 N	Longitude: 123° 44.950 W		
deg min.dec	deg min.dec		
Wire out: 390	Wire angle: 0	Bottom Depth: 396	
Net Type: SCOR	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
08113	10258	Non-flow = pickled	

Notes: Brian Hunt sample: size fractionated into 5 size groups
- samples frozen: 3-4 Beroe

Date: 24 June 17	Station: 28	Time: 1414	LOCAL
Net Event # 64	CTD # 063		
Latitude: 49° 14.0 N	Longitude: 123° 45.37 W		
deg min.dec	deg min.dec		
Wire out: 123	Wire angle: 0	Bottom Depth: 128	
Net Type: SCOR	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
10258	10995	Non-flow = pickled	

Notes:

Date: 24 June 2017	Station: 24	Time: 1602	LOCAL
Net Event # 065	CTD # 066		
Latitude: 49° 30.34 N	Longitude: 124° 06.03 W		
deg min.dec	deg min.dec		
Wire out: 415	Wire angle: 0	Bottom Depth: 422	
Net Type: SCOR	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
10995	13698	Non-flow = pickled	

Notes: 1 Aequorea removed
5 Beroe (left), Neurobrachia

Sample in
500 ml jar

Date: 24 June 17	Station: CPF1	Time: 1911	LOCAL
Net Event # 070	CTD # 069		
Latitude: 49° 22.03 N	Longitude: 124° 05.16 W		
deg min.dec	deg min.dec		
Wire out: 237	Wire angle: 0	Bottom Depth: 245	
Net Type: SCOR	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
13698	15042	Non-flow = pickled	

Notes:

1 Aequorea (teaspoon size) removed



Plankton Net Tow Log Sheet

Cruise #: 2017-64 Vessel: Vector Page: 4

Project(s): SOG Contact: Ian Perry/Kenny S.

TSK Serial #: 7131 RBR serial #: 79110

Time offset = +

hrs = UTC (please record local time for samples)

Date: 25 June 17	Station: BSL7	Time: 0005	LOCAL
Net Event # 074	CTD # 075		
Latitude: 49 29.00 N	Longitude: 124 46.00 W		
deg min.dec	deg min.dec		
Wire out: 50	Wire angle: 0	Bottom Depth: 58	
Net Type: SCOR	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
15042	15355	Non-flow = pickled	

Notes: 2 Aequorea (soup spoon size) removed

Date: 25 June 2017	Station: CPF2	Time: 0153	LOCAL
Net Event # 76	CTD # 77		
Latitude: 49 27.989 N	Longitude: 124 29.979 W		
deg min.dec	deg min.dec		
Wire out: 315	Wire angle: 0	Bottom Depth: 325	
Net Type: SCOR	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
15355	17210	Non-flow = pickled	

Notes: removed one aequorea

Date: 25 June 2017	Station: N12	Time: 0756	LOCAL
Net Event # 84	CTD # 85		
Latitude: 49 43.622 N	Longitude: 124 40.845 W		
deg min.dec	deg min.dec		
Wire out: 342	Wire angle: 0	Bottom Depth: 352	
Net Type: SCOR	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
17210	19118	Non-flow = pickled	

Notes:

Date: 25 June 17	Station: 14	Time: 1745	LOCAL
Net Event # 093	CTD # 095		
Latitude: 49 53.01 N	Longitude: 124 59.61 W		
deg min.dec	deg min.dec		
Wire out: 305	Wire angle: 0	Bottom Depth: 315	
Net Type: SCOR	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
19118	20885	Non-flow = pickled	

Notes:



Plankton Net Tow Log Sheet

Cruise #: 2017-64 Vessel: Vector Page: 5

Project(s): SOG Contact: Ian Perry/Kenny S.

TSK Serial #: 7131/4926 RBR serial #: 79110

Time offset = +

hrs = UTC (please record local time for samples)

Date: 25 June 2017	Station: 14	Time: 1809	LOCAL
Net Event # 094	CTD # 095		
Latitude: 49 53.00 N	Longitude: 124 59.62 W		
deg min.dec	deg min.dec		
Wire out: 305	Wire angle: 0	Bottom Depth: 315	
Net Type: SCOR	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
20885	22565	Non-flow = pickled	

Notes: Size fractionated for Brian Hunt (URBC)

⊕ Small (2mm) hole noted in net where previous patched failed

Date: 26 June 2017	Station: 22	Time: 23:30	LOCAL
Net Event # 98	CTD # 100		
Latitude: 49 40.17 N	Longitude: 124 16.32 W		
deg min.dec	deg min.dec		
Wire out: 342	Wire angle: 0°	Bottom Depth: 350	
Net Type: SCOR	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
55269 57155	59011 57155	Non-flow = pickled	

Sample in
500ml jar

Notes: Switched to second net: new TSK Ser# 4926; RBR Ser# 79110 (same)
• small salmon observed during cast - in 500ml jar

Date: 26 June 17	Station: 22	Time: 23:57	LOCAL
Net Event # 99	CTD # 100		
Latitude: 49 40.17 N	Longitude: 124 16.32 W		
deg min.dec	deg min.dec		
Wire out: 342	Wire angle: 0°	Bottom Depth: 350	
Net Type: SCOR	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
57155	59011	Non-flow = pickled	

Notes: • Small salmon observed during cast

• Size Fractionation sample for Brian Hunt.

4090 fraction: 1 Aequorea; 4 Beroe (all left in sample)

Date: 26 June 17	Station: 38	Time: 11:01	LOCAL
Net Event # 107	CTD # 106		
Latitude: 49 12.001 N	Longitude: 123 26.402 W		
deg min.dec	deg min.dec		
Wire out: 295	Wire angle: 0	Bottom Depth: 303	
Net Type: SCOR	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
59011	60911	Non-flow = pickled	

Notes: • Revisited station for size fractionation sampling previously missed.



Plankton Net Tow Log Sheet

Cruise #: 2017-64 Vessel: VECTOR Page: 6

Project(s): SOG

Contact: J. Perry / K. Perry S.

TSK Serial #: 4926

RBR serial #: 79110

Time offset = +

hrs = UTC (please record local time for samples)

Date: 26 June 2017	Station: GI-01	Time: 1358	LOCAL
Net Event # 108	CTD # 109		
Latitude: 48 45.814 N	Longitude: 123 20.558 W		
deg min.dec	deg min.dec		
Wire out: 53	Wire angle: ~5°	Bottom Depth: 61	
Net Type: SCOR	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
61058	61402	Non-flow = pickled	
Notes: Crab megalopae heaven (from a salmon point of view) lots (+ lots) of crab megalopae			

Date: 26 June 17	Station: SC-04	Time: 1455	LOCAL
Net Event # 111	CTD # 110		
Latitude: 48 43.496 N	Longitude: 123 25.034 W		
deg min.dec	deg min.dec		
Wire out: 87	Wire angle: 10°	Bottom Depth: 95	
Net Type: SCOR	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
61402	61936	Non-flow = pickled	
Notes: lots of crab megalopae			

Date:	Station:	Time:	LOCAL
Net Event #	CTD #		
Latitude:	N	Longitude:	W
deg min.dec		deg min.dec	
Wire out:	Wire angle:	Bottom Depth:	
Net Type:	Tow Type:		
Flow start	Flow end	Flow = frozen	
		Non-flow = pickled	
Notes:			

Date:	Station:	Time:	LOCAL
Net Event #	CTD #		
Latitude:	N	Longitude:	W
deg min.dec		deg min.dec	
Wire out:	Wire angle:	Bottom Depth:	
Net Type:	Tow Type:		
Flow start	Flow end	Flow = frozen	
		Non-flow = pickled	
Notes:			

8 Cruise # 2017-64 Vector
SOG

①

Tan Perry

21 June 2017 Time 2130

Sta 59

Flow start 7579 TSK # 7131

Flow end 8780 RBR # 79110

Zmax Bottom Depth 228 m

Tow Depth 217 → 0 m

wire out 217 m wire angle 0°

48 37.8 123 14.6

Time out 2140 ⊗ Flow meter read
back

incorrectly, but by
same person therefore
difference should
be ok.

Tan Perry 22 June 17

Domestic Acid Sampling

stus 59 and 102 - 1040 ml filtered

72 - 1040 ml filtered

56 - 1040 ml filtered

for all

Rite in the Rain

22 June 2017 SOG Stn 72

Event 013

CTD 014

SCOR VNH 236 μ m mesh

Flow meter TSK Ser# 7131

RBR Serial # 79110

Flow meter start 8780

end 10912

Bottom depth 184

Tow range 173 $\rightarrow$ 0 m

Lat 48 18.6 Lon 124 44.0

Time 1830

Time bottom 1836 Lat bottom 48.124 Lon 124.440

Time stop 1839 $\oplus$ Flow meter read wrong
but by same person so difference
should be ok

23 June 2017

SOG Stn 63

Event 26¹³

CTD Event 27

Bottom depth 153

Flow start 00912

Flow end 01889

Tow range 143 - 0 m

$\oplus$ Flow meter read incorrectly

01889

00889
00889

2017.64

②

23 June 2017 SOG STN 46

Net Event 041

CTD Event 042

SCOR UNH 236 μ m

TSK Ser# 7131

RBR Ser# 79110

Flow metre start 00889 } Correct!

end 01928 } (checked by

Bottom depth 178 m } 3 people

Tow range 170 - 0

Time in 2123

Time bottom 2128

Time surf 2130

Bottom lat 48 51.32

Lon 123 10.64

wire out 170

wire angle 0°

June

24 July 2017 SOG stn: N41

net event: 48

Flow start: 01928

CTD event: 47

Flow end: 03299

bottom depth: 2450

wire straight 16

tow range: 230 - 0 m

TSK s/n: 7131

RBR s/n: 79110

Rite in the Rain

June
24 ~~July~~ 2017

SoG

Stn: 38

net event: 51

W event: 52

bottom depth: 308 m

Flow start: 03299

Flow end: 04962

Wire Angle: 0°

Tow range: 298-0 m

June
24 ~~July~~ 2017

SoG

Stn: 40

net event: 54

W event: 55

bottom depth: 145

Flow start: 04962

Flow end: 05886

Wire angle: 0°

Tow range: 135-0

Tide line with bits of debris and
plant life floated by. Avoided it with
net when reaching surface.

2017-64

3

June

24 July 2017 SOG Stn GEO1

Net evant: 57

CTD evant: 56

SCOR UNIT 236 μ m

TSK ser# 7131

RBR ser# 79110

Flow start: 05888

Flow end: 08113

Tow range: 386 $\rightarrow$ 0

Time IN 1005

Time bottom: 1015

Time sfc: 1020

Bottom Lat 49 14.99

lon 123 44.89

wire out 386 m

wire angle 0°

Bottom depth: 396 m

Rite in the Rain.

24 June 2017 SOG 2017-64

STN GEO1

net event 58

CTD event 56

SCOR UNH 236 μ m

Flow start 08113

Flow end ~~081~~ 10258

Bottom depth 396

Tow range 390-0

Time in 1028

Time bottom 10:39

Time surf 10:45

Bottom lat 49 15.0

lon 123 44.95

wire out 390

wire angle 0°

seived into >4000, 4000-2000,

2000-1000, 1000-500, 500-250 μ m

fractions + frozen

for Brian Hunt (UBC)

2017-64

4

24 June 2017 SOG 2017-64

stn 28

CTD event 063

Net event 064

Tsk 7131

Flow start 10258

end 10995

Bottom depth 128

Tow range 123 → 0

Time in 1409

Time bottom 1414

Time sfc 1416

Bottom lat 49 14

Lon 123 45.37

Wire out 123

Wire angle 0°

Rite in the Rain.

24 June 2017 207.64 stn 24 (50m)

net event: 065

CTD event: 066

TSK ser# 7131

Flow start 10995

end 13698

Bottom depth 422

Tow range 415 - 0

Time in 1548

Time Bottom 1602

Time Sfc 1610

Bottom lat 49 30.34

lon 124 06.03

wire out 415

wire angle 2°

1 Aequorea removed

5 Beroe (left in), Pleurobrachia

2017-64

5

24 June 2017

2017-64

SOG

Stn

CPE1

CTD Event 069

Net Event 070

TSK Ser. # 7131

Flow start 13698

Flow end 15042

Bottom depth 245m

Tow range 237 - 0

Time in 1902

Time Bottom 1911

Time sfc 1915

Bottom Lat 49 22.03

lon 124 05.16

wire out 237

wire angle 0°

1 Aegvorea removed (teaspoon size)

Rite in the Rain

25 June 2017 2017-6f

SOG

Stn BS17

Net event # 074

CTD event # 075

TSK Ser # 7131

Flow start 150 42

Flow end 153 55

Bottom depth 58

Tow range 50-0

Time IN 0003

Time Bottom 0005

Time sfc 0006

Bottom lat 49 29.00

lon 124 46.00

wire out 50

wire angle 0°

2 Aequorea (soup spoon size) removed

2017-64

25 June 2017

SOG

Stn. CPF2

6

net event 76

wire angle: 0

old event 77

bottom depth: 325

Flow start: 15355

low range: 315-0 m

Flow end: 17210

25 June 2017

SOG

Stn: 12

net event 84

wire angle: 0

old event 85

bottom depth: 352

Flow start: 17210

low range: 342-0 m

Flow end: 19118

25 June 2017

2017-64 SOG Stn 14

net event 093

CTD event 095

Flow start 19118

End 20885

Bottom depth 315

Tow range 305-0

Time in 1734

Time Bottom 1745

Time sfc 1750

Bottom lat 49

53.01

lon

124

59.61

wire out 305

wire angle 0°

Rite in the Rain.

25 June 2017 2017-64 SOG str 14

net event 094 CTD event 095

Flow start 20885 end 22565

Bottom depth 315 Tow range 305-0

Time in 1757

Time bottom 1809

Time sle 1814

Bottom lat 49 53.00

lon 124 59.62

wire out 305 wire angle 0°

(X) Switched to 2nd net because of
hole (failed repair) in 1st net

New TSK Ser# 4926

RRR Ser# 79110 (same)

4926/55269

25 June 2017 2017-64 SOG sta 22

net event 098

CTD event 100

TSK Ser# 4926

RBR Ser# 79110

Flow start 55269

end 57155

Bottom depth 350

Time in 2317

Time bottom 2330

Time sfc 2336

Bottom lat 49 40.17

Lon 124 16.31

Wire out 342 wire angle 0

Several small fish feeding at sfc
under lights - possibly juvenile salmon

25-26 June 2017 2017-64 SOG stn 22

Net event 099

CTD event 100

Tsk Ser # 4926

RBR Ser # 79110

Flow start 57155

end 59011

Bottom depth 350

Time in 2345

Time bottom 2357

Time sfc 0003

Bottom Lat 49 40.17

Lon 124 16.32

wire out 342 wire angle 0°

⊕ Samples size fractioned + frozen
for Brian Hunt

595

8

26 June 2017 506 Stn: 38
 net event: 107 wire angle: 0°
 ctd event: 106 bottom depth: 303
 Flow start: 5901 tow range: 295
 Flow end: 60911

• Samples for Brian Hunt

• Flow meter reading ambiguous, ~~ton~~
~~snapped a photo for confirmation by~~
~~Kelly or Maira.~~

26 June 2017 506 Stn GI-01
 net event 108
 CTD event 109
 Flow start 61058 T TSK^u 4926
 Flow end 61402
 Bottom depth 61
 Time in 1355
 Time Bottom 1358
 Time asc 1359
 wire out 53 wire angle 5°
 Bottom lat 48 45.814 Lon 123 20.558
 Tow range 53-0

Lots of crab megalopae

Rite in the Rain.

26 June 2017	2017-64	506
stn	SC-04	
net event	111	
CTD event	110	
Flow start	61402	
end	61936	
Bottom depth	95	
Time in	1452	
Time bottom	1455	
Time sfc	1457	
Bottom Lat	48	43.496
Lon	123	25.034
wire out	87	wire angle 10°
TSK	4926	

Lots of mosculopae