



Plankton Net Tow Log Sheet

Cruise #: 2017-09 Vessel: JP Tully Page: 1/

Project(s): LA PEROUSE Contact: MOIRA

TSK Serial #: 4748 RBR serial #: 79081

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

Date: 31.08.17	Station: HARO 59	Time: 1608	LOCAL
Net Event # 3	CTD # 2		
Latitude: 48 36.93 N	Longitude: 123 14.63 W		
deg min.dec	deg min.dec		
Wire out: 215m	Wire angle: 0	Bottom Depth: 221m	
Net Type: Bongo	Tow Type: VNH		
Flow start 21289	Flow end 22555	Flow = frozen	
		Non-flow = pickled	

Notes:

Date: 1 Sept 2017	Station: E1	Time: 0514	LOCAL
Net Event # 13	CTD # 12		
Latitude: 48 31.76 N	Longitude: 125 03.85 W		
deg min.dec	deg min.dec		
Wire out: 100	Wire angle: 20	Bottom Depth: 114	
Net Type: B	Tow Type: VNH		
Flow start 22555	Flow end 23500	Flow = frozen	
		Non-flow = pickled	

Notes:

Date: 1 Sept 2017	Station: C1	Time: 0739	LOCAL
Net Event # 17	CTD # 16		
Latitude: 48 28.83 N	Longitude: 125 15.27 W		
deg min.dec	deg min.dec		
Wire out: 141	Wire angle: 10°	Bottom Depth: 151	
Net Type: B	Tow Type: VNH		
Flow start 23500	Flow end 24564	Flow = frozen	
		Non-flow = pickled	

Notes:

Date: 1/9/17	Station: C2	Time: 0851	LOCAL
Net Event # 19	CTD # 18		
Latitude: 48 26.21 N	Longitude: 125 09.28 W		
deg min.dec	deg min.dec		
Wire out: 149	Wire angle: 10	Bottom Depth: 159	
Net Type: B	Tow Type: VNH		
Flow start 24562	Flow end 25638	Flow = frozen	
		Non-flow = pickled	

Notes:

UVIC took 4 small krill (frozen side)



Plankton Net Tow Log Sheet

Cruise #: 1709 Vessel: Tully Page: 2

Project(s): vepc Contact: Maira

TSK Serial #: 4798 RBR serial #: 79081

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

Date: 1 Sept 2017	Station: C3	Time: 10:08	LOCAL
Net Event # 21	CTD # 20		
Latitude: 48 23 43 N	Longitude: 125 20 80 W		
deg min.dec	deg min.dec		
Wire out: 112	Wire angle: 10	Bottom Depth: 122	
Net Type: B	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
25637	26437	Non-flow = pickled	

Notes: rem 1 sol--S3 from pickled.

Date: 1 Sept 2017	Station: L807	Time: 1107	LOCAL
Net Event # 23	CTD # 22		
Latitude: 48 28 72 N	Longitude: 125 22 05 W		
deg min.dec	deg min.dec		
Wire out: 148	Wire angle: 5	Bottom Depth: 156	
Net Type: B	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
26437	27391	Non-flow = pickled	

Notes: rem 1 sol--S3 from pickled

Date: 1 Sept 2017	Station: B8	Time: 1226	LOCAL
Net Event # 25	CTD # 24		
Latitude: 48 34 29 N	Longitude: 125 30 06 W		
deg min.dec	deg min.dec		
Wire out: 127	Wire angle: 5	Bottom Depth: 137	
Net Type: B	Tow Type: VNH		
Flow start 27391	Flow end 28327	Flow = frozen	
		Non-flow = pickled	

Notes: rem 1 sol--S3 pickled

Date: 01-07-09	Station: B7	Time: 1325	LOCAL
Net Event # 27	CTD # 26		
Latitude: 48 31.98 N	Longitude: 125 35.27 W		
deg min.dec	deg min.dec		
Wire out: 70	Wire angle: 10	Bottom Depth: 80	
Net Type: Bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
28327	28900	Non-flow = pickled	

Notes:



Plankton Net Tow Log Sheet

Cruise #: 2017-09 Vessel: Tully Page: 3
Project(s): La Perouse Contact: Moira
TSK Serial #: 4798 RBR serial #: 79081
Time offset = + hrs = UTC (please record local time for samples)

Date: 1 Sep 2017	Station: LB08	Time: 1456	LOCAL
Net Event # 29	CTD # 28		
Latitude: 48 25.34 N	Longitude: 125 28.38 W		
deg min.dec	deg min.dec		
Wire out: 130	Wire angle: 10	Bottom Depth: 138	
Net Type: Bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
28900	29835	Non-flow = pickled	

Notes: Limacina pickled

Date: 1 Sep 2017	Station: LB08	Time: 1511	LOCAL
Net Event # 30	CTD # 28		
Latitude: 48 25.32 N	Longitude: 125 28.63 W		
deg min.dec	deg min.dec		
Wire out: 130	Wire angle: 15	Bottom Depth: 138	
Net Type: Ring	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
13978	14693	Non-flow = pickled	

Notes: Evgeny net TSK 7133

Date: 01.09.17	Station: LB11	Time: 1811	LOCAL
Net Event # 34	CTD # 33		
Latitude: 48 15.19 N	Longitude: 125 47.77 W		
deg min.dec	deg min.dec		
Wire out: 195	Wire angle: 8	Bottom Depth: 204	
Net Type: Bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
29835	31275	Non-flow = pickled	

Notes:

Date: 2 Sep 2017	Station: LC12	Time: 924	LOCAL
Net Event # 43	CTD # 41		
Latitude: 48 14.96 N	Longitude: 126 39.87 W		
deg min.dec	deg min.dec		
Wire out: 250	Wire angle: 20°	Bottom Depth: 2525	
Net Type: B	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
31275	33155	Non-flow = pickled	

Notes:



Plankton Net Tow Log Sheet

Cruise #: 2017-09 Vessel: Tully Page: 4
Project(s): La Perouse Contact: Miron
TSK Serial #: 4798 RBR serial #: 79081
Time offset = + 7 hrs = UTC (please record local time for samples)

Date: 02 Sept 17	Station: A3/LC09	Time: 15 11	LOCAL
Net Event # 47	CTD # 46		
Latitude: 48 25.91 N	Longitude: 126 13.63 W		
deg min.dec	deg min.dec		
Wire out: 250	Wire angle: 10	Bottom Depth: 602	
Net Type: Bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
33155	34934	Non-flow = pickled	

Notes: Limacina picked

PYRO

Date: 02 Sept 17	Station: A3/LC09	Time: 15 30	LOCAL
Net Event # 48	CTD # 46		
Latitude: 48 25.91 N	Longitude: 126 13.659 W		
deg min.dec	deg min.dec		
Wire out: 250	Wire angle: 5	Bottom Depth: 602	
Net Type: ring	Tow Type: VNH		
Flow start	Flow end 5	Flow = frozen	
14693	16118	Non-flow = pickled	

Notes: UVIa EVGENY TSK 7133

Date: 02.09.17	Station: A2	Time: 16 59	LOCAL
Net Event # 50	CTD # 49		
Latitude: 48 22.68 N	Longitude: 126 3.86 W		
deg min.dec	deg min.dec		
Wire out: 250	Wire angle: 0	Bottom Depth: 347	
Net Type: BONGO	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
34934	36681	Non-flow = pickled	

Notes:

Date: 02.09.17	Station: A1	Time: 18 23	LOCAL
Net Event # 52	CTD # 51		
Latitude: 48 29.36 N	Longitude: 126 06.92 W		
deg min.dec	deg min.dec		
Wire out: 190	Wire angle: 0	Bottom Depth: 198	
Net Type: BONGO	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
36681	37934	Non-flow = pickled	

Notes: a few calanoid copepods + 1 Corolla picked from frozen side for DOMAIC Acid analyses



Plankton Net Tow Log Sheet

Cruise #: 2017-09 Vessel: JPTOLLY Page: 5

Project(s): LAPEROUSE Contact: MOIRA

TSK Serial #: 4798 RBR serial #: 79081

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

Date: 02-09-17	Station: 86	Time: 2051	LOCAL
Net Event # 56	CTD # 55		
Latitude: 48 36.49 N	Longitude: 125 53.94 W		
deg min.dec	deg min.dec		
Wire out: 83	Wire angle: 25	Bottom Depth: 93	
Net Type: Bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
37934	38525	Non-flow = pickled	

Notes:

SMELLY DMS

Date: 02-09-17	Station: B5	Time: 2154	LOCAL
Net Event # 58	CTD # 57		
Latitude: 48 40.07 N	Longitude: 125 47.20 W		
deg min.dec	deg min.dec		
Wire out: 55	Wire angle: 0	Bottom Depth: 65	
Net Type: Bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
38525	38890	Non-flow = pickled	

Notes:

UVIC took 5 small krill

Date: 02-09-17	Station: LC04	Time: 2317	LOCAL
Net Event # 60	CTD # 59		
Latitude: 48 53.59 N	Longitude: 125 40.62 W		
deg min.dec	deg min.dec		
Wire out: 156	Wire angle: 5	Bottom Depth: 166	
Net Type: Bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
38890	39990	Non-flow = pickled	

Notes:

Date: 02-09-17	Station: LC04	Time: 2336	LOCAL
Net Event # 61	CTD # 59		
Latitude: 48 43.59 N	Longitude: 125 40.62 W		
deg min.dec	deg min.dec		
Wire out: 156	Wire angle: 35	Bottom Depth: 166	
Net Type: RING	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
16118	17090	Non-flow = pickled	

Notes:

EUGENY TSK 7133



Plankton Net Tow Log Sheet

Cruise #: 2017-09 Vessel: Tully Page: 6

Project(s): La Perouse Contact: Moira

TSK Serial #: 4798 RBR serial #: 79081

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

Date: 3/9/17	Station: LD02	Time: 04:10	LOCAL
Net Event # 67	CTD # 66		
Latitude: 48 53.44 N	Longitude: 125 46.96 W		
deg min.dec	deg min.dec		
Wire out: 37	Wire angle: 0	Bottom Depth: 42	
Net Type: BONGO	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
40057	40362	Non-flow = pickled	

Notes: doliolids

Date: 3/9/17	Station: LD04	Time: 05:41	LOCAL
Net Event # 70	CTD # 69		
Latitude: 48 53.32 N	Longitude: 125 56.88 W		
deg min.dec	deg min.dec		
Wire out: 50	Wire angle: 30	Bottom Depth: 60	
Net Type: BONGO	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
40360	41800	Non-flow = pickled	

Notes: doliolids

Date: 3 Sept 2017	Station: LD09	Time: 1142	LOCAL
Net Event # 76	CTD # 75		
Latitude: 48 35.64 N	Longitude: 126 30.04 W		
deg min.dec	deg min.dec		
Wire out: 250	Wire angle: 0	Bottom Depth: 1046	
Net Type: B	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
40800	42349	Non-flow = pickled	

Notes: REMOVE CLIL FOR MATT EXPT
PYRAT FOR LIPIDS/ISOTOPES

Date: 03-09-17	Station: LD11	Time: 1627	LOCAL
Net Event # 79	CTD # 78		
Latitude: 48 28.688 N	Longitude: 126 42.656 W		
deg min.dec	deg min.dec		
Wire out: 1200	Wire angle: 5	Bottom Depth: 1577	
Net Type: BONGO	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
42458	50415	Non-flow = pickled	

Notes:



Plankton Net Tow Log Sheet

Cruise #: 2017-09 Vessel: Tully Page: 7
Project(s): Laparouse Contact: Moira
TSK Serial #: 4798 RBR serial #: 79081

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

Date: 03-09-17	Station: LD11	Time: 1707	LOCAL
Net Event # 80	CTD # 79		
Latitude: 48 28.800 N		Longitude: 126 42.926 W	
deg min.dec		deg min.dec	
Wire out: 250	Wire angle: 0	Bottom Depth: 1578	
Net Type: Bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
50415	52160	Non-flow = pickled	
Notes: PYROSOMES			

Date: 04-09-17	Station: LG09	Time: 1835	LOCAL
Net Event # 83	CTD # 782		
Latitude: 48 51 29 N		Longitude: 127 19 60 W	
deg min.dec		deg min.dec	
Wire out: 250	Wire angle: 5	Bottom Depth: 2044	
Net Type: Bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
52161	54020	Non-flow = pickled	
Notes: rem. of pyrat, 1551-53 pickled side			

Date: 04-09-17	Station: LG09	Time: 0101	LOCAL
Net Event # 84	CTD # 82		
Latitude: 48 51 24 N		Longitude: 127 19 60 W	
deg min.dec		deg min.dec	
Wire out: 250	Wire angle: 15	Bottom Depth: 2037	
Net Type: Ring	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
17089	18597	Non-flow = pickled	
Notes: Euryx TSK 7133 + RBR 110			

Date: 4 Sept 2017	Station: LG07	Time: 0503	LOCAL
Net Event # 87	CTD # 86		
Latitude: 48 59 42 N		Longitude: 127 07 40 W	
deg min.dec		deg min.dec	
Wire out: 250	Wire angle: 5	Bottom Depth: 1744	
Net Type: B	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
54018	55780	Non-flow = pickled	
Notes: freeze 1 pyrat from freeze side separately			



Plankton Net Tow Log Sheet

Cruise #: 2017-09 Vessel:

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Project(s): Laprise

Contact: Moring

TSK Serial #: 4798

RBR serial #: 81

Time offset = + 7

hrs = UTC (please record local time for samples)

Date: 4 Sept 2017	Station: LG04	Time: 0848	LOCAL
Net Event # 91	CTD # 90		
Latitude: 49 11 44N	Longitude: 126 49 24W		
deg min.dec	deg min.dec		
Wire out: 133	Wire angle: 15	Bottom Depth: 143	
Net Type: B	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
55780	56753	Non-flow = pickled	

Notes: coprolids

Date: 4 Sept 2017	Station: LG02	Time: 1031	LOCAL
Net Event # 94	CTD # 93	1731 UTC	
Latitude: 49 18 70 N	Longitude: 126 38 11 W		
deg min.dec	deg min.dec		
Wire out: 90	Wire angle: 0	Bottom Depth: 100	
Net Type: B	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
56758	57352	Non-flow = pickled	

Notes: picked 200p for DA from frozen side

Date: 4 Sept 2017	Station: LG02	Time: 1044	LOCAL
Net Event # 95	CTD # 93	1744 UTC	
Latitude: 49 18 72 N	Longitude: 126 38 09 W		
deg min.dec	deg min.dec		
Wire out: 90	Wire angle: 10	Bottom Depth: 100	
Net Type: RING	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
18595	19090	Non-flow = pickled	

Notes: RING NET

Date: 4 Sept 17	Station: LJ02	Time: 1536	LOCAL
Net Event # 99	CTD # 98	2236 UTC	
Latitude: 49 42.591 N	Longitude: 127 05.277 W		
deg min.dec	deg min.dec		
Wire out: 75	Wire angle: 0	Bottom Depth: 83	
Net Type: bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
57353	57833	Non-flow = pickled	

Notes:



Plankton Net Tow Log Sheet

Cruise #: 2017-09 Vessel:

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Project(s): Laperouse

Contact: Moira

TSK Serial #: 4798

RBR serial #: 81

Time offset = + 7

hrs = UTC (please record local time for samples)

Date: 4 Sept 17	Station: LJ04	Time: 17:15 LOCAL
Net Event # 102	CTD # 102	00:15 UTC 5 Sept 17 UTC
Latitude: 49 35.525 N	Longitude: 127 16.690 W	
deg min.dec	deg min.dec	
Wire out: 150	Wire angle: 15	Bottom Depth: 158
Net Type: bongo	Tow Type: VNH	
Flow start	Flow end	Flow = frozen
57833	58945	Non-flow = pickled

Notes: PYRO

Date: 4 Sept 17	Station: LJ06	Time: 20:25 LOCAL
Net Event # 105	CTD # 104	03:25 5 Sept 17 UTC
Latitude: 49 28.126 N	Longitude: 127 28.717 W	
deg min.dec	deg min.dec	
Wire out: 250	Wire angle: 10	Bottom Depth: 975
Net Type: bongo	Tow Type: VNH	
Flow start	Flow end	Flow = frozen
58945	60553	Non-flow = pickled

Notes: IREQ 1 MPRX from FROZEN SIDE UVIC took 6 small krill

Date: 5 Sept 2017	Station: LJ09	Time: 02:20 LOCAL
Net Event # 109	CTD # 108	
Latitude: 49 16.09 N	Longitude: 127 47.06 W	
deg min.dec	deg min.dec	
Wire out: 250	Wire angle: 25	Bottom Depth: 2483
Net Type: B	Tow Type: VNH	
Flow start	Flow end	Flow = frozen
60552	62222	Non-flow = pickled

Notes: transferred 1 lg shrimp from frozen to pickled a few pyrosomes in water

Date: 5 Sept 2017	Station: LBP08	Time: 0808 LOCAL
Net Event # 111	CTD # 110	
Latitude: 49 48.60 N	Longitude: 128 16.97 W	
deg min.dec	deg min.dec	
Wire out: 250	Wire angle: 20	Bottom Depth: 2064
Net Type: B	Tow Type: VNH	
Flow start	Flow end	Flow = frozen
62220	63900	Non-flow = pickled

Notes:



Plankton Net Tow Log Sheet

Cruise #: 20709 Vessel: Tully Page: 10

Project(s): La perovse Contact: Moira

TSK Serial #: 4798 RBR serial #: 81

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

Date: 5 Sept 2017	Station: LBP08	Time: 0833	LOCAL
Net Event # 112	CTD # 110		
Latitude: 49 48 58 N	Longitude: 128 16 39 W		
deg min.dec	deg min.dec		
Wire out: 250	Wire angle: 25	Bottom Depth: 2064	
Net Type: ring	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
19085	20564	Non-flow = pickled	

Notes: Evgeny net 7133

Date: 5 Sept 2017	Station: LBP7	Time: 1307	LOCAL
Net Event # 115	CTD # 114		
Latitude: 49 52.47 N	Longitude: 128 16.79 W		
deg min.dec	deg min.dec		
Wire out: 250	Wire angle: 5	Bottom Depth: 2199	
Net Type: B	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
63902	65653	Non-flow = pickled	

Notes:

Date: 05.09.17	Station: LBP5	Time: 1625	LOCAL
Net Event # 118	CTD # 117	2325 UTC	
Latitude: 49 59.87 N	Longitude: 128 0.123 W		
deg min.dec	deg min.dec		
Wire out: 250	Wire angle: 5	Bottom Depth: 1277	
Net Type: Bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
65653	67422	Non-flow = pickled	

Notes:

Date: 05.09.17	Station: LBP 3	Time: 1952	LOCAL
Net Event # 122	CTD # 123 121	0152 UTC	
Latitude: 50 03.160 N	Longitude: 127 55.346 W		
deg min.dec	deg min.dec		
Wire out: 155	Wire angle: 5	Bottom Depth: 168	
Net Type: Bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
67422	68488	Non-flow = pickled	

Notes:



Plankton Net Tow Log Sheet

Cruise #: 2017-09 Vessel: *SPYGLASS* Page: 11/
Project(s): *KAPELOWSE* Contact: *Moira*
TSK Serial #: *4798* RBR serial #: *81*
Time offset = + *7* hrs = UTC (please record local time for samples)

Date: <i>05.09.17</i>	Station: <i>LBP3</i>	Time: <i>1906</i> LOCAL
Net Event # <i>123</i>	CTD # <i>121</i>	<i>0206</i> UTC <i>6 Sept 17 UTC</i>
Latitude: <i>50</i> <i>03.114</i> N	Longitude: <i>127</i> <i>55.533</i> W	
deg min.dec	deg min.dec	
Wire out: <i>155</i>	Wire angle: <i>12</i>	Bottom Depth: <i>180</i>
Net Type: <i>Ring</i>	Tow Type: <i>VNH</i>	
Flow start	Flow end	Flow = frozen
<i>20504</i>	<i>21425</i>	Non-flow = pickled

Notes: *EUGENE NET TSK 7133*

Date: <i>5 Sept 2017</i>	Station: <i>LBP2</i>	Time: <i>1943</i> LOCAL
Net Event # <i>125</i>	CTD # <i>124</i>	
Latitude: <i>50</i> <i>03.89</i> N	Longitude: <i>127</i> <i>54.26</i> W	
deg min.dec	deg min.dec	
Wire out: <i>85</i>	Wire angle: <i>25</i>	Bottom Depth: <i>96</i>
Net Type: <i>Bongo</i>	Tow Type: <i>VNH</i>	
Flow start	Flow end	Flow = frozen
<i>68488</i>	<i>69034</i>	Non-flow = pickled

Notes: *a few Doliolids + juvenile euphausiids picked from frozen side for Domoic Acid analyses*

Date: <i>6 Sept 2017</i>	Station: <i>CPE 2</i>	Time: <i>0220</i> LOCAL
Net Event # <i>129</i>	CTD # <i>128</i>	
Latitude: <i>50</i> <i>43 01</i> N	Longitude: <i>128</i> <i>39 04</i> W	
deg min.dec	deg min.dec	
Wire out: <i>116</i>	Wire angle: <i>10</i>	Bottom Depth: <i>126</i>
Net Type: <i>B</i>	Tow Type: <i>VNH</i>	
Flow start	Flow end	Flow = frozen
<i>69360</i>	<i>70162</i>	Non-flow = pickled

Notes:

Date: <i>6 Sept 2017</i>	Station: <i>LQ03</i>	Time: <i>0507</i> LOCAL
Net Event # <i>132</i>	CTD # <i>131</i>	
Latitude: <i>50</i> <i>39 69</i> N	Longitude: <i>129</i> <i>02 03</i> W	
deg min.dec	deg min.dec	
Wire out: <i>250</i>	Wire angle: <i>15</i>	Bottom Depth: <i>1297</i>
Net Type: <i>Bongo</i>	Tow Type: <i>VNH</i>	
Flow start	Flow end	Flow = frozen
<i>70175</i>	<i>71830</i>	Non-flow = pickled

Notes:



Plankton Net Tow Log Sheet

Cruise #: 2017-09 Vessel: Tully Page: 12

Project(s): La Perouse Contact: Moira

TSK Serial #: 4798 RBR serial #: 81

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

Date: 6 Sept 2017	Station: 2122	Time: 0728	LOCAL
Net Event # 134	CTD # 133		
Latitude: 50 39 81 N	Longitude: 129 17 61 W		
deg min.dec	deg min.dec		
Wire out: 250	Wire angle: 5	Bottom Depth: 1520	
Net Type: B	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
71830	73552	Non-flow = pickled	

Notes: Fin whale next to ship @ station transferred 1 saky siphonophore from frozen -> pickled for ID

Date: 06.09.17	Station: CS00	Time: 1413	LOCAL
Net Event # 137	CTD # 136	2113	
Latitude: 50 28.41 N	Longitude: 129 55.32 W		
deg min.dec	deg min.dec		
Wire out: 250	Wire angle: 15	Bottom Depth: 2170	
Net Type: Bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
73550	75580	Non-flow = pickled	

Notes:

Date: 06.09.17	Station: CS01	Time: 17:02	LOCAL
Net Event # 139	CTD # 138		
Latitude: 50 34.90 N	Longitude: 129 41.44 W		
deg min.dec	deg min.dec		
Wire out: 250	Wire angle: 5	Bottom Depth: 2100	
Net Type: Bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
75580	77263	Non-flow = pickled	

Notes:

PYAD

Date: 6 Sept 17	Station: CS02	Time: 1959	LOCAL
Net Event # 141	CTD # 140	0259 UTC	7 Sept 17 UTC
Latitude: 50 41.289 N	Longitude: 129 28.058 W		
deg min.dec	deg min.dec		
Wire out: 250	Wire angle: 0	Bottom Depth: 1893	
Net Type: bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
77263	79210	Non-flow = pickled	

Notes:



Plankton Net Tow Log Sheet

Cruise #: 2017-09 Vessel: Tully Page: 13
Project(s): Lapouse Contact: Noira
TSK Serial #: 4798 RBR serial #: 81
Time offset = + 7 hrs = UTC (please record local time for samples)

Date: 6 Sept 17	Station: C502	Time: 20 23 LOCAL
Net Event # 142	CTD # 140	03 23 UTC 7 Sept 17
Latitude: 50 41.270 N deg min.dec	Longitude: 129 28.060 W deg min.dec	
Wire out: 250	Wire angle: 0	Bottom Depth: 1895
Net Type: Ring	Tow Type: VNH	
Flow start	Flow end	Flow = frozen
21425	22865	Non-flow = pickled

Notes:

Eugeny net TSK 7133

Date: 06.09.17	Station: C503	Time: 2147 LOCAL
Net Event # 144	CTD # 143	
Latitude: 50 45.64 N deg min.dec	Longitude: 129 20.00 W deg min.dec	
Wire out: 225	Wire angle: 10	Bottom Depth: 235
Net Type: Bongo	Tow Type: VNH	
Flow start	Flow end	Flow = frozen
79210	81010	Non-flow = pickled

Notes:

Krill yay

Date: 06.09.17	Station: C504	Time: 2306 LOCAL
Net Event # 146	CTD # 145	06 06 UTC 7 Sept 17
Latitude: 50 49.393 N deg min.dec	Longitude: 129 12.916 W deg min.dec	
Wire out: 88	Wire angle: 20	Bottom Depth: 98
Net Type: Bongo	Tow Type: VNH	
Flow start	Flow end	Flow = frozen
81010	82012	Non-flow = pickled

Notes:

Date: 7/9/17	Station: New ODAS	Time: 0355 LOCAL
Net Event # 148	CTD # 147	
Latitude: 50 56.46 N deg min.dec	Longitude: 129 58.87 W deg min.dec	
Wire out: 250	Wire angle: 5	Bottom Depth: 2110
Net Type: Bongo	Tow Type: VMA	
Flow start	Flow end	Flow = frozen
82021	83810	Non-flow = pickled

Notes:

large pyrosomes in water



Plankton Net Tow Log Sheet

Cruise #: 2017-09 Vessel: Tully Page: 14

Project(s): Le Perovsk Contact: Moira

TSK Serial #: 4798 RBR serial #: 81

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

Date: 7 Sept 2017	Station: CS 38	Time: 0653 LOCAL
Net Event # 150	CTD # 149	
Latitude: 50 00 07 N	Longitude: 129 27 0 W	
deg min.dec	deg min.dec	
Wire out: 208	Wire angle: 5	Bottom Depth: 218
Net Type: Bongo	Tow Type: VNH	
Flow start	Flow end	Flow = frozen
83895	85430	Non-flow = pickled

Notes:

Date: 7 Sept 2017	Station: CS 05	Time: 0915 LOCAL
Net Event # 152	CTD # 151	128 59 97
Latitude: 50 56 00 N	Longitude: 7 8 1 W	
deg min.dec	deg min.dec	
Wire out: 52	Wire angle: 30	Bottom Depth: 62
Net Type: B	Tow Type: VNH	
Flow start	Flow end	Flow = frozen
85429	85844	Non-flow = pickled

Notes:

Date: 7/9/17	Station: CS 18	Time: 1058 LOCAL
Net Event # 154	CTD # 153	
Latitude: 50 53 02 N	Longitude: 128 39 65 W	
deg min.dec	deg min.dec	
Wire out: 66	Wire angle: 45°	Bottom Depth: 72
Net Type: Bongo	Tow Type: VNH	
Flow start	Flow end	Flow = frozen
85848	87000	Non-flow = pickled

Notes: TOWED AT SURFACE - SURFACE CURRENT ~ 3 KNOTS

Date: 07-09-17	Station: CS 06	Time: 1246 LOCAL
Net Event # 157	CTD # 156	1947 UTC
Latitude: 50 59 888 N	Longitude: 128 51 568 W	
deg min.dec	deg min.dec	
Wire out: 55	Wire angle: 30	Bottom Depth: 65
Net Type: Bongo	Tow Type: VNH	
Flow start	Flow end	Flow = frozen
87048	87360	Non-flow = pickled

Notes:

a few small copepods, euphausiids, + decapod zoea
pickled from frozen side for Domoic Acid analyses



Plankton Net Tow Log Sheet

Cruise #: 2017-09 Vessel: Tully Page: 15
Project(s): Lapouse Contact: Meira
TSK Serial #: 4798 RBR serial #: 81
Time offset = + 7 hrs = UTC (please record local time for samples)

Date: 07-09-17	Station: C507	Time: 1355	LOCAL
Net Event # 159	CTD # 158		
Latitude: 51 04.41 N	Longitude: 128 44.02 W		
deg min.dec	deg min.dec		
Wire out: 55	Wire angle: 25	Bottom Depth: 66	
Net Type: Bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
87760	88372	Non-flow = pickled	

Notes:

Date: 07-09-17	Station: C508	Time: 1510	LOCAL
Net Event # 162	CTD # 161	2210	UTC
Latitude: 51 08.455 N	Longitude: 128 36.002 W		
deg min.dec	deg min.dec		
Wire out: 135	Wire angle: 0	Bottom Depth: 145	
Net Type: Bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
88372	89302	Non-flow = pickled	

Notes:

Date: 07 Sept 17	Station: C509	Time: 1634	LOCAL
Net Event # 164	CTD # 163		
Latitude: 51 12.471 N	Longitude: 128 28.377 W		
deg min.dec	deg min.dec		
Wire out: 185	Wire angle: 10	Bottom Depth: 195	
Net Type: bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
89302	91945	Non-flow = pickled	

Notes:

Date: 07 Sept 17	Station: C509	Time: 1654	LOCAL
Net Event # 165	CTD # 163		
Latitude: 51 12.288 N	Longitude: 128 28.471 W		
deg min.dec	deg min.dec		
Wire out: 185	Wire angle: 10	Bottom Depth: 196	
Net Type: RING	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
22865	24328	Non-flow = pickled	

Notes:

Evgeny net TSK 7133



Plankton Net Tow Log Sheet

Cruise #: 2017-09 Vessel: Tully Page: 16

Project(s): Laperouse Contact: Moira

TSK Serial #: 4798 RBR serial #: 81

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

Date: 7 Sept 17	Station: CS10	Time: 1805	LOCAL
Net Event # 167	CTD # 166		
Latitude: 51 16.486 N	Longitude: 128 20.093 W		
deg min.dec	deg min.dec		
Wire out: 70	Wire angle: 10	Bottom Depth: 80	
Net Type: bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
91945	92503	Non-flow = pickled	

Notes: got distracted - did not record bottom location - data above is location of end + time @ bottom

Date: 07-09-17	Station: 954	Time: 2126	LOCAL
Net Event # 169	CTD # 168		
Latitude: 51 21.024 N	Longitude: 128 59.910 W		
deg min.dec	deg min.dec		
Wire out: 228	Wire angle: 5	Bottom Depth: 237	
Net Type: Bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
92503	93482	Non-flow = pickled	

Notes:

LMACINA E304

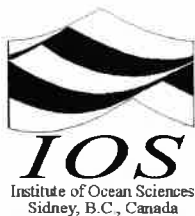
Date: 07-09-17	Station: 553	Time: 2353	LOCAL
Net Event # 172	CTD # 171		
Latitude: 51 15.134 N	Longitude: 129 21.030 W		
deg min.dec	deg min.dec		
Wire out: 250	Wire angle: 0	Bottom Depth: 289	
Net Type: Bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
93482	95395	Non-flow = pickled	

Notes: 10 Euphausiid sp. removed from frozen side for Domoic Acid analysis.

Date: 8 Sept 2017	Station: 552	Time: 0217	LOCAL
Net Event # 174	CTD # 173		
Latitude: 51 12 91 N	Longitude: 129 43 06 W		
deg min.dec	deg min.dec		
Wire out: 250	Wire angle: 5	Bottom Depth: 584	
Net Type: B	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
95475	97346	Non-flow = pickled	

Notes:

large fish (Eelpout?) removed from pickled + frozen



Plankton Net Tow Log Sheet

Cruise #: 2017-09 Vessel: Tully Page: 17

Project(s): Laperouse Contact: Moira

TSK Serial #: 4798 RBR serial #: 81

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

Date: 8 Sept 2017 Station: SS1 Time: 0414 LOCAL

Net Event # 176 CTD # 175

Latitude: 51 11 96 N Longitude: 129 59 95 W
deg min.dec deg min.dec

Wire out: 250 Wire angle: 0 Bottom Depth: 491

Net Type: B Tow Type: VNH

Flow start Flow end Flow = frozen

97347 99018 Non-flow = pickled

Notes: removed 1 Clio from pickled side, preserved in EtOH
removed 10 Euph from frozen + some Limacina, in same EtOH as Clio

Date: 8 Sept 2017 Station: NL01 Time: 0945 LOCAL

Net Event # 178 CTD # 177

Latitude: 51 22 26 N Longitude: 130 50 73 W
deg min.dec deg min.dec

Wire out: 250 Wire angle: 0' Bottom Depth: 2194

Net Type: B Tow Type: VNH

Flow start Flow end Flow = frozen

98020 101185 Non-flow = pickled

Notes: 99020

Date: 8 Sept 2017 Station: NL01 Time: 1038 LOCAL

Net Event # 179 CTD # 177

Latitude: 51 22 35 N Longitude: 130 51 02 W
deg min.dec deg min.dec

Wire out: 1200 Wire angle: 5 Bottom Depth: 2913

Net Type: Bongo Tow Type: VNH

Flow start Flow end Flow = frozen

1185 9450 Non-flow = pickled

Notes: myctophid transferred from frozen to pickled

Date: 8 Sept 2017 Station: NL02 Time: 1428 LOCAL

Net Event # 181 CTD # 180

Latitude: 51 33.623 N Longitude: 130 16.318 W
deg min.dec deg min.dec

Wire out: 250 Wire angle: 5 Bottom Depth: 850

Net Type: Bongo Tow Type: VNH

Flow start Flow end Flow = frozen

9450 11424 Non-flow = pickled

Notes:



Plankton Net Tow Log Sheet

Cruise #: 2017-09 Vessel: JP TOLLY Page: 18/

Project(s): LA PEROUSE Contact: MOIRA

TSK Serial #: 4798 RBR serial #: 81

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

Date: 08-09-17	Station: NLO3	Time: 1730	LOCAL
Net Event # 183	CTD # 182	0030 UTC (9)	
Latitude: 51 deg 47.76 min.dec N	Longitude: 129 deg 39.72 min.dec W		
Wire out: 250	Wire angle: 10	Bottom Depth: 294	
Net Type: BONGO	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
11424	13388	Non-flow = pickled	

Notes:

Date: 08-09-17	Station: NLO4	Time: 1954	LOCAL
Net Event # 185	CTD # 184		
Latitude: 51 deg 55.857 min.dec N	Longitude: 129 deg 12.004 min.dec W		
Wire out: 155	Wire angle: 5	Bottom Depth: 165	
Net Type: BONGO	Tow Type: BONGO/VNH		
Flow start	Flow end	Flow = frozen	
13388	14462	Non-flow = pickled	

Notes:

LIMACINE FISH

Date: 08-09-17	Station: NLO5	Time: 2203	LOCAL
Net Event # 187	CTD # 186		
Latitude: 51 deg 40.563 min.dec N	Longitude: 128 deg 54.527 min.dec W		
Wire out: 34	Wire angle: 10	Bottom Depth: 44	
Net Type: BONGO	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
14462	14754	Non-flow = pickled	

Notes:

Date: 09-09-17	Station: 355	Time: 0033	LOCAL
Net Event # 189	CTD # 188		
Latitude: 51 deg 27.98 min.dec N	Longitude: 128 deg 30.00 min.dec W		
Wire out: 189	Wire angle: 0	Bottom Depth: 200	
Net Type: BONGO	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
14753	15007	Non-flow = pickled	

Notes:

windy night (20-25 kn.)



Plankton Net Tow Log Sheet

Cruise #: 2017-09 Vessel: Tully Page: 19

Project(s): Leperouse Contact: Moira

TSK Serial #: 4798 RBR serial #: 81

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

Date: 9 Sept 17	Station: SS6	Time: 0250	LOCAL
Net Event # 191	CTD # 190		
Latitude: 51 19 99 N	Longitude: 127 59 77 W		
deg min.dec	deg min.dec		
Wire out: 166	Wire angle: 30	Bottom Depth: 178	
Net Type: Bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
16005	17400	Non-flow = pickled	

Notes:

Date: 9 Sept 2017	Station: SS7	Time: 0406	LOCAL
Net Event # 193	CTD # 192		
Latitude: 51 24 58 N	Longitude: 127 47 55 W		
deg min.dec	deg min.dec		
Wire out: 114	Wire angle: 5	Bottom Depth: 124	
Net Type: Bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
17495	18340	Non-flow = pickled	

Notes: larval fish transferred from frozen → pickled (cottid)

Date: 9 Sept 2017	Station: CPE1	Time: 0729	LOCAL
Net Event # 195	CTD # 194		
Latitude: 50 59 97 N	Longitude: 127 50 12 W		
deg min.dec	deg min.dec		
Wire out: 133	Wire angle: 0	Bottom Depth: 143	
Net Type: Bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
26885	27808	Non-flow = pickled	

Notes: 5m spun in wind before Station.

Date: 10 Sept 2017	Station: 14	Time: 2300	LOCAL
Net Event # 198	CTD # 197		
Latitude: 49 53.089 N	Longitude: 124 59.673 W		
deg min.dec	deg min.dec		
Wire out: 302	Wire angle: 5	Bottom Depth: 312	
Net Type: Bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
28456	30718	Non-flow = pickled	

Notes:

frozen SIZE FRACTIONATION HUNT

Clione + Limacina from frozen side for Matt (Uvic) ~~in E10H~~
kept live (feeding exp.)



Plankton Net Tow Log Sheet

Cruise #: 2017-09 Vessel: Tully Page: 20

Project(s): Leperouse Contact: Moira

TSK Serial #: 4798 RBR serial #: 81

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

Date: 10 Sept 2017	Station: 11	Time: 01:12	LOCAL
Net Event # 201	CTD # 200		
Latitude: 49 42.40 N	Longitude: 124 43.31 W		
deg min.dec	deg min.dec		
Wire out: 284	Wire angle: 5	Bottom Depth: 297	
Net Type: Bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
30716	32508	Non-flow = pickled	

Notes: high wire angle at start. DIC station
Limacina from frozen for EtOH

Date: 10 Sept 17	Station: CPF2	Time: 0343	LOCAL
Net Event # 204	CTD # 203		
Latitude: 49 27 98 N	Longitude: 124 30 07 W		
deg min.dec	deg min.dec		
Wire out: 313	Wire angle: 5	Bottom Depth: 323	
Net Type: B	Tow Type: VNH		
Flow start 32510	Flow end 34489	Flow = frozen	
		Non-flow = pickled	

Notes:
Limacina from frozen ^{side} for EtOH

Date: 10 Sept 2017	Station: BS11	Time: 1055	LOCAL
Net Event # 208	CTD # 207		
Latitude: 49 29.03 N	Longitude: 124 46.02 W		
deg min.dec	deg min.dec		
Wire out: 50	Wire angle: 0	Bottom Depth: 62	
Net Type: Bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
34489	34837	Non-flow = pickled	

Notes: removed 1 octru, Gast. pac from pickled.

DIC station: No Limacina picked - too small
None in sample

Date: 10 Sept 2017	Station: CPF1	Time: 1406	LOCAL
Net Event # 210	CTD # 209		
Latitude: 49 21.985 N	Longitude: 124 04.979 W		
deg min.dec	deg min.dec		
Wire out: 229	Wire angle: 5	Bottom Depth: 243	
Net Type: Bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
34837	36265	Non-flow = pickled	

Notes: