



Plankton Net Tow Log Sheet

Cruise #: 2023066 Vessel: PTOLLY Page: 1
 Project(s): LINE P Contact: MG
 TSK Serial #: 5294 RBR serial #: SILVER

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

Date: <u>02.05.23</u>	Station: <u>HARD 59</u>	Time: <u>00:43</u>	LOCAL
Net Event # <u>4</u>	CTD # <u>3</u>		
Latitude: <u>48°36.839</u> N		Longitude: <u>123°14.859</u> W	
deg	min.dec	deg	min.dec
Wire out: <u>225m</u>	Wire angle: <u>15°</u>	Bottom Depth: <u>234m</u>	
Net Type: <u>bongo</u>	Tow Type: <u>vertical</u> <u>VNH</u>		
Flow start <u>8603</u>	Flow end <u>10069</u>	Flow = frozen	
		Non-flow = pickled	

Notes: 8 C. Marshallae, 2x P. elongata taken - Alastair
12 parasagittia elegans, - Julia

BOTTOM TIME
LAT LONG

Date: <u>02.05.23</u>	Station: <u>JF2</u>	Time: <u>1808</u>	LOCAL
Net Event # <u>8</u>	CTD # <u>7</u>		
Latitude: <u>48 17.945</u> N		Longitude: <u>123 59.799</u> W	
deg	min.dec	deg	min.dec
Wire out: <u>180</u>	Wire angle:	Bottom Depth: <u>188</u>	
Net Type: <u>BONGO</u>	Tow Type: <u>VNH</u>		
Flow start	Flow end	Flow = frozen	
<u>10068</u>	<u>11318</u>	Non-flow = pickled	

Notes: SALPS CHAINS VISIBLE IN SURFACE WATERS

Date: <u>02.05.23</u>	Station: <u>P2</u>	Time: <u>19:06</u>	LOCAL
Net Event # <u>14</u>	CTD # <u>13</u>		
Latitude: <u>48 36.124</u> N		Longitude: <u>126 0.12</u> W	
deg	min.dec	deg	min.dec
Wire out: <u>140</u>	Wire angle: <u>11</u>	Bottom Depth: <u>118</u>	
Net Type: <u>BONGO</u>	Tow Type: <u>VNH</u>		
Flow start	Flow end	Flow = frozen	
<u>11389</u>	<u>12125</u>	Non-flow = pickled	

Notes: 23 SALPS AGG 150L REMOVED

Date: <u>02.05.23</u>	Station: <u>P2</u>	Time: <u>19:26</u>	LOCAL
Net Event # <u>15</u>	CTD # <u>16</u>		
Latitude: <u>48°36.157</u> N		Longitude: <u>126°0.047</u> W	
deg	min.dec	deg	min.dec
Wire out: <u>110</u>	Wire angle: <u>5</u>	Bottom Depth: <u>117.7</u> <u>118</u>	
Net Type: <u>bongo</u>	Tow Type: <u>VNH</u>		
Flow start	Flow end	Flow = frozen	
<u>12128</u>	<u>13180</u>	Non-flow = pickled	

Notes: PICKED EUTIM CLYGR
FOR JBC BUT PICKLED/FROZE

6 dytia (gregaria), 2 eutonia indicans - Julia



Plankton Net Tow Log Sheet

Cruise #: 2023 066 Vessel: JP Tully Page: 2

Project(s): LINE P

Contact: MG

TSK Serial #: 5294

RBR serial #: SILVER

Time offset = +

hrs = UTC (please record local time for samples)

Date: 02.05.2023	Station: PY	Time: 1:17	LOCAL
Net Event # 20	CTD # 19		
Latitude: 48° 38.943 N		Longitude: 126° 39.901 W	
deg min.dec		deg min.dec	
Wire out: 250	Wire angle: 70	Bottom Depth: 1316	
Net Type: Bongo	Tow Type: VNH		
Flow start 1308	Flow end 1534	Flow = frozen	
		Non-flow = pickled	

Notes: FORMALIN SIDE = 28 Salps Algae removed, 10 N. plumchus → Alastair UIC
FROZEN: 21 neocalanus plumchus - Julia 3 N. cristatus

Date: 02.05.2023	Station: PY	Time: 1:27	LOCAL
Net Event # 21	CTD # 19		
Latitude: 48° 38.999 N		Longitude: 126° 38.931 W	
deg min.dec		deg min.dec	
Wire out: 1200	Wire angle: 3	Bottom Depth: 1318	
Net Type: Bongo	Tow Type: VNH		
Flow start 1534	Flow end 2599	Flow = frozen	
		Non-flow = pickled	

Notes: FROZEN SIDE: Julia UIC took 8 calocanthid, 2 tuniculidae, 2 rastanellidae
FORMALIN SIDE: Alastair took 15 N. plumchus, 5 N. cristatus, 16 Thysanoessa

Date: 03.05.2023	Station: P8	Time: 1556	LOCAL
Net Event # 31	CTD # 30		
Latitude: 48 48 994 N		Longitude: 128 39 952 W	
deg min.dec		deg min.dec	
Wire out: 250	Wire angle: 4	Bottom Depth: 2519	
Net Type: Bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
28928	37245	Non-flow = pickled	

Notes: 22 Salps removed (FROZEN) 31 N. cristatus removed for 18 Eucalanus spp.
Remain from 42 Eucalanus spp. removed from FROZEN FORMALIN, 18 removed
FORMALIN 15 N. cristatus + 4 N. plumchus removed from FROZEN FORMALIN

Date: 03.05.2023	Station: P8	Time: 1655	LOCAL
Net Event # 32	CTD # 30		
Latitude: 48 49.00 N		Longitude: 128 40.28 W	
deg min.dec		deg min.dec	
Wire out: 1200	Wire angle: 5	Bottom Depth: 2519	
Net Type: Bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
28928	37245	Non-flow = pickled	

Notes: 42 Eucalanus spp. removed FROZEN
15 N. cristatus spp. removed FROZEN

Frozen: Julia took
3 Thysanoessa
inspirata, 8 N.
cristatus, 16
Limacina helicina,
7 N. plumchus,
1 pseudosquilla
viridis, 6
N. flemingii

44 Agg Salps
1 Sol Salp
44 Agg Salps
1 Sol Salp
4 N. plumchus removed FROZEN



Plankton Net Tow Log Sheet

Cruise #: 2023066 Vessel: JPTOUY Page: 3

Project(s): KINEP Contact: MG

TSK Serial #: RBR serial #:

Time offset = +

hrs = UTC (please record local time for samples)

Date: 4 MAY 23	Station: P12	Time: 20:03	LOCAL
Net Event # 42	CTD # 39		
Latitude: 48° 58.295 N		Longitude: 136° 40.069 W	
deg min.dec		deg min.dec	
Wire out: 250	Wire angle: 5	Bottom Depth: 3228	
Net Type: Bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
37245	39541	Non-flow = pickled	

Notes: Formalin: Julia took 2 pseudosquilla scirpsae, 1 s. elegans

Frozen: Julia took 2 p. scirpsae, 21 N. cristatus, 20 N. plumchris

FORMALIN: (Alaska)

• 12 L. helicina → UBC

FROZEN:

• 88 N. cristatus

• 42 N. plumchris

• 5 E. bungii/californicus

→ TO UBC (Alaska)

Date: 04 65 23	Station: P12	Time: 1402	LOCAL
Net Event # 43	CTD #		
Latitude: 48° 58.55 N		Longitude: 130° 39.82 W	
deg min.dec		deg min.dec	
Wire out: 1200	Wire angle: 9	Bottom Depth: 3229	
Net Type: Bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
39541	49342	Non-flow = pickled	

Notes: Frozen: Julia took 23 N. flemingeri, 4 eukronia hamata, 7 p. scirpsae

Formalin: removed 3 castanellidae, 8 autocanthidae, 1 sp. scirpsae

Julia took 19 N. plumchris, 1 eukronia hamata, 8 autocanthidae, 1 labradoriensis, 1 flemingeri, 1 scirpsae

Date: 05.05.2023	Station: P16	Time: 22:48	LOCAL
Net Event # 50	CTD # 49		
Latitude: 49° 17.041 N		Longitude: 134° 40.102 W	
deg min.dec		deg min.dec	
Wire out: 250	Wire angle: 6	Bottom Depth: 3638	
Net Type: BONGO	Tow Type: VNH		
Flow start 49341	Flow end	Flow = frozen	
	51495	Non-flow = pickled	

Notes: Frozen: Julia took 1 eukronia hamata, Steph took 1 salp (aspin) 10 N. cristatus

Formalin: Julia took 35 N. cristatus, 30 N. flemingeri, 5 eukronia hamata

Date: 05.05.2023	Station: P16	Time: 23:05	LOCAL
Net Event # 51	CTD # 49		
Latitude: 49° 17.028 N		Longitude: 134° 40.129 W	
deg min.dec		deg min.dec	
Wire out: 1200	Wire angle: 8	Bottom Depth: 3638	
Net Type: BONGO	Tow Type: VNH		
Flow start 51495	Flow end 61248	Flow = frozen	
		Non-flow = pickled	

Notes: Ethanol → 3 castanellidae, 5 autocanthidae, Julia took 9 eukronia hamata, 30 N. plumchris, 21 N. flemingeri

Formalin → 7 castanellidae, 4 autocanthidae, 5 sp. scirpsae

FORMALIN:

• 52 N. cristatus
• 52 N. plumchris
• 52 N. flemingeri

TO UBC (Alaska)

Ethanol side:

• 20 N. cristatus
• 50 N. plumchris
• 50 N. flemingeri
• 12 L. helicina
• 1 Hymenodora

TO UBC (Alaska)



Plankton Net Tow Log Sheet

Cruise #: 207-066 Vessel: JP Tully Page: 4

Project(s): LINE P Contact: MORRIS

TSK Serial #: 5294 RBR serial #: SEUER

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

Date: 7 May 2003	Station: P20	Time: 1207 LOCAL
Net Event # 65	CTD # 68	(0001)
Latitude: 49 34.055 N	Longitude: 138 40.097 W	
deg min.dec	deg min.dec	
Wire out: 250	Wire angle: 2	Bottom Depth: 3965
Net Type: Bongo	Tow Type: VNH	
Flow start 61248	Flow end 63020	Flow = frozen
		Non-flow = pickled

Notes: red side: 150 neocristatus steph, Julia: 2 aglantha, 1 thysanoessa inspinata, 8 eukronia hamata, 20 N. cristatus, 5 themisto pacifica, 1 pseudosquilla dentatum

Date: 7 May 2003	Station: P20	Time: 09:05 LOCAL
Net Event # 66	CTD # 68	(02:05)
Latitude: 49.34.224 N	Longitude: 138 37.900 W	
deg min.dec	deg min.dec	
Wire out: 1200	Wire angle: 0	Bottom Depth: 3946
Net Type: Bongo	Tow Type: VNH	
Flow start 63020	Flow end 71505	Flow = frozen
		Non-flow = pickled

Notes: Formalin side: removed 15 spum, 17 cast, 7 autocanthidae, 1 challengeridae, 1 tuscacelidae

Date: 09.05.23	Station: P26	Time: 1339 LOCAL
Net Event # 92	CTD # 90	
Latitude: 50 0.09 N	Longitude: 145 0.08 W	
deg min.dec	deg min.dec	
Wire out: 250	Wire angle: 10	Bottom Depth: 4242
Net Type: Bongo	Tow Type: VNH	
Flow start 71518	Flow end 74736	Flow = frozen
		Non-flow = pickled

Notes: (RED) Julia: 1 stenobrachius leucopsanus, 11 N. cristatus, 65 N. plumchus, 1 pseudosquilla scripsae, 7 eukronia hamata

(Green) Julia: 1 eukronia hamata, 40 N. plumchus

Date: 09.05.23	Station: P26	Time: 1444 LOCAL
Net Event # 93	CTD # 90	
Latitude: 49 59.19 N	Longitude: 145 0.32 W	
deg min.dec	deg min.dec	
Wire out: 1200	Wire angle: 8	Bottom Depth: 4235
Net Type: Bongo	Tow Type: VNH	
Flow start 74730	Flow end 86052	Flow = frozen
		Non-flow = pickled

Notes: (RED) Talia: 8 eukronia hamata, 30 N. plumchus, 1 tomopteris septentrionalis

Diura: 1 challengeridae, 5 cast, 5 scudocoride, 8 spumellaria

(Green) Julia: 18 N. plumchus, Diura 2 isochanodes, 1 spumellaria



Plankton Net Tow Log Sheet

Cruise #: 223-066 Vessel: JP RUBY Page: 5
 Project(s): LONG P Contact: MAURA
 TSK Serial #: 5294 RBR serial #: SILVER

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

Date: <u>13 May 2023</u>	Station: <u>CPE1</u>	Time: <u>02:42</u>	LOCAL
Net Event # <u>111</u>	CTD # <u>109</u>		
Latitude: <u>51° 0' 02" N</u>	Longitude: <u>127° 58' 05" W</u>		
deg min.dec	deg min.dec		
Wire out: <u>135</u>	Wire angle: <u>0</u>	Bottom Depth: <u>140</u>	
Net Type: <u>Bongo</u>	Tow Type: <u>VNH</u>		
Flow start	Flow end	Flow = frozen	
<u>86052</u>	<u>86859</u>	Non-flow = pickled	

Notes:

Date: <u>13 May 2023</u>	Station: <u>14</u>	Time: <u>16:53</u>	LOCAL
Net Event # <u>119</u>	CTD # <u>118</u>		
Latitude: <u>49° 52' 84" N</u>	Longitude: <u>124° 59' 47" W</u>		
deg min.dec	deg min.dec		
Wire out: <u>303</u>	Wire angle: <u>20</u>	Bottom Depth: <u>313</u>	
Net Type: <u>Bongo</u>	Tow Type: <u>VNH</u>		
Flow start <u>86859</u>	Flow end	Flow = frozen	
	<u>89130</u>	Non-flow = pickled	

Notes: Alastair took 25x Themisto pacifica, 25x N. plumchani, 20x C. challengerii, 1x Euphausia pacifica FORMALIN SIDE

Julia took:
 frozen side:
 4 clytia, 6
 tomopteris septentrionalis,
 4 aglantha, 4
 parasagitta elegans

Date: <u>13 May 2023</u>	Station: <u>12</u>	Time: <u>19:48</u>	LOCAL
Net Event # <u>121</u>	CTD # <u>120</u>		
Latitude: <u>49° 43' 66" N</u>	Longitude: <u>124° 40' 94" W</u>		
deg min.dec	deg min.dec		
Wire out: <u>345</u>	Wire angle: <u>10</u>	Bottom Depth: <u>355</u>	
Net Type: <u>Bongo</u>	Tow Type: <u>VNH</u>		
Flow start	Flow end	Flow = frozen	
<u>89130</u>	<u>91300</u>	Non-flow = pickled	

Notes: Alastair took 35x N. plumchani, 15x E. bungii FRZN SIDE

Julia took:
 formalin side:
 3 clytia, 28
 pseudocalanus minutus,
 11 tomopteris
 septentrionalis, 2
 aglantha, 6 parasag.
 elegans, 10 calanoid
 marshallae,
 17 disco. elegans

Date: <u>14 May 2023</u>	Station: <u>CPF2</u>	Time: <u>6:53</u>	LOCAL
Net Event # <u>125</u>	CTD # <u>124</u>		
Latitude: <u>49° 27' 94" N</u>	Longitude: <u>124° 29' 96" W</u>		
deg min.dec	deg min.dec		
Wire out: <u>317</u>	Wire angle: <u>40</u>	Bottom Depth: <u>327</u>	
Net Type: <u>Bongo</u>	Tow Type: <u>VNH</u>		
Flow start	Flow end	Flow = frozen	
<u>91300</u>	<u>93215</u>	Non-flow = pickled	

Notes:

Julia took:
 frozen side:
 24 N. plumchani,
 47 C. marshallae



Plankton Net Tow Log Sheet

Cruise #: 2023-066 Vessel: Tully Page: 6

Project(s): Line P Contact: MOIRA

TSK Serial #: 5294 506 RBR serial #: Silver

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

Date: 14 May 2023	Station: 24	Time: 04:07	LOCAL
Net Event # 130	CTD # 129		
Latitude: 49 30.318 N	Longitude: 124 5.939 W		
deg min.dec	deg min.dec		
Wire out: 415	Wire angle: 0	Bottom Depth: 425	
Net Type: Bongo	Tow Type: VNH		
Flow start 93215	Flow end 95722	Flow = frozen	
		Non-flow = pickled	

Notes:

Date: 14 May 2023	Station: 22	Time: 06:16	LOCAL
Net Event # 132	CTD # 131		
Latitude: 49 40.205 N	Longitude: 124 16.268 W		
deg min.dec	deg min.dec		
Wire out: 343	Wire angle: 0	Bottom Depth: 353	
Net Type: Bongo	Tow Type: VNH		
Flow start 95722	Flow end 97777	Flow = frozen	
		Non-flow = pickled	

Notes:

Date: 14 May 2023	Station: LPT-1	Time: 08:32	LOCAL
Net Event # 134	CTD # 133		
Latitude: 49 21.94 N	Longitude: 124 04.96 W		
deg min.dec	deg min.dec		
Wire out: 236	Wire angle: 0	Bottom Depth: 240	
Net Type: Bongo	Tow Type: VNH		
Flow start 97777	Flow end 99171	Flow = frozen	
		Non-flow = pickled	

Notes:

Date: 14 May 2023	Station: 2B	Time: 10:35	LOCAL
Net Event # 136	CTD # 135		
Latitude: 49 24.032 N	Longitude: 123 45.239 W		
deg min.dec	deg min.dec		
Wire out: 125	Wire angle: 0	Bottom Depth: 134.7	
Net Type: Bongo	Tow Type: VNH		
Flow start 99171	Flow end 99615	Flow = frozen	
		Non-flow = pickled	

Notes:



Plankton Net Tow Log Sheet

Cruise #: 2023-066 Vessel: Tully

Page: 7

Project(s): Live P Soli

Contact:

TSK Serial #: 5294

RBR serial #:

Time offset = +

hrs = UTC (please record local time for samples)

Date: 14 May 2023	Station: 601	Time: 13:16	LOCAL
Net Event # 139	CTD # 138		
Latitude: 49 15.02 N	Longitude: 123 45.13 W		
deg min.dec	deg min.dec		
Wire out: 402	Wire angle: 7°	Bottom Depth: 392	
Net Type: Bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
99624	2132	Non-flow = pickled	

Notes:

Julia took:
frozen side
8 cyphocaris
Challengeri

Date: 14 May 2023	Station: 38	Time: 15:30	LOCAL
Net Event # 141	CTD # 140		
Latitude: 49 11.94 N	Longitude: 123 26.60 W		
deg min.dec	deg min.dec		
Wire out: 298	Wire angle: 50°	Bottom Depth: 303	
Net Type: Bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
2132	34912	Non-flow = pickled	

Notes:

Julia took
frozen side
2 aglantha,
2 tomopteris
sepiotrialis

Date: 14.05.23	Station: 40	Time: 17:44	LOCAL
Net Event # 143	CTD # 142		
Latitude: 49° 08.61 N	Longitude: 123° 36.03 W		
deg min.dec	deg min.dec		
Wire out: 136	Wire angle: 40°	Bottom Depth: 196	
Net Type: Bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
03912	04719	Non-flow = pickled	

Notes:

Date: 15.05.23	Station: 42	Time: 20:12	LOCAL
Net Event # 146	CTD # 145		
Latitude: 49° 01.92 N	Longitude: 123° 26.43 W		
deg min.dec	deg min.dec		
Wire out: 308	Wire angle: 90°	Bottom Depth: 318	
Net Type: Bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
04719	06789	Non-flow = pickled	

Notes:



Plankton Net Tow Log Sheet

Cruise #: 2023-061 Vessel: Tully Page: 8

Project(s): LRP S.G Contact:

TSK Serial #: RBR serial #:

Time offset = +

hrs = UTC (please record local time for samples)

Date: May 15 2023	Station: 46	Time: 2220	LOCAL
Net Event # 148	CTD # 147		
Latitude: 46 51.41 N	Longitude: 123 10.84 W		
deg min.dec	deg min.dec		
Wire out: 179	Wire angle: 0	Bottom Depth: 179	
Net Type: bongo	Tow Type: VNH		
Flow start 06789	Flow end 08018	Flow = frozen	
		Non-flow = pickled	

Notes: Had to stop upcast at ~10m depth for "fwd beam" under let down to 15m, paused flow up to surface & recovered

Date: May 15 2023	Station: G101	Time: 10:19	LOCAL
Net Event # 152	CTD # 151		
Latitude: 48.45 739 N	Longitude: 123.20 454 W		
deg min.dec	deg min.dec		
Wire out: 55	Wire angle: 0	Bottom Depth: 65	
Net Type: Bongo	Tow Type: VNH-1		
Flow start 08018	Flow end 08335	Flow = frozen	
		Non-flow = pickled	

Notes:

Date: 15 May 2023	Station: 804	Time: 0913	LOCAL
Net Event # 154	CTD # 153		
Latitude: 48 43 505 N	Longitude: 123 24 983 W		
deg min.dec	deg min.dec		
Wire out: 87	Wire angle: 0°	Bottom Depth: 96	
Net Type: Bongo	Tow Type: VNH-1		
Flow start 08335	Flow end 09702	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: