



Plankton Net Tow Log Sheet

Cruise #: 201901 Vessel: JPTULLY Page: 1/
Project(s): LINE P Contact: MOIRA
TSK Serial #: 7057 RBR serial #: 78976

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

Date: 06 FEB 2019	Station: P2	Time: 1113	LOCAL
Net Event # 8	CTD # 7		
Latitude: 48 36.18 N	Longitude: 125 59.95 W		
deg min.dec	deg min.dec		
Wire out: 105	Wire angle: 0	Bottom Depth: 112	
Net Type: BONGO	Tow Type: VNH		
Flow start 66575	Flow end 67259	Flow = frozen	
		Non-flow = pickled	

Notes:

BOTTOM
TIME
LAT
LONG

Date: 06 FEB 2019	Station: P2	Time: 1130	LOCAL
Net Event # 9	CTD # 7		
Latitude: 48 36.18 N	Longitude: 125 59.95 W		
deg min.dec	deg min.dec		
Wire out: 107	Wire angle: 0	Bottom Depth: 112	
Net Type: RING	Tow Type: VNH		
Flow start 98703	Flow end 99248	Flow = frozen	
		Non-flow = pickled	

Notes:

RING NET TSK 4877

Date: 6 Feb 2019	Station: P4	Time: 1643	LOCAL
Net Event # 15	CTD # 14		
Latitude: 48° 39.02 N	Longitude: 126° 40.02 W		
deg min.dec	deg min.dec		
Wire out: 250	Wire angle: 0	Bottom Depth: 1331	
Net Type: Bongo	Tow Type: VNH		
Flow start 67260	Flow end 68040	Flow = frozen	
	69040	Non-flow = pickled	

Notes:

Removed N5 UMHE from the frozen side

Date: 06.02.19	Station: P4	Time: 1923	LOCAL
Net Event # 17	CTD # 16		
Latitude: 48° 39.04 N	Longitude: 126° 39.98 W		
deg min.dec	deg min.dec		
Wire out:	Wire angle: 20°	Bottom Depth: 1321	
Net Type: RING	Tow Type:		
Flow start	Flow end	Flow = frozen	
99248	100460	Non-flow = pickled	

Notes:

TSK 4877



Plankton Net Tow Log Sheet

Cruise #: 2019-01 Vessel: JP TOW Page: 2/

Project(s): LINE P Contact:

TSK Serial #: RBR serial #:

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

Date: 06-02-19	Station: P4	Time: 2017	LOCAL
Net Event # 18	CTD # 16		
Latitude: 48 39.14 N	Longitude: 126 39.85 W		
deg min.dec	deg min.dec		
Wire out: 1200	Wire angle: 10	Bottom Depth: 1325	
Net Type: BONGO	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
69040 68040	76900	Non-flow = pickled	

Notes: SEA HONG ~ 7 LOTS OF SEAGULLS SQUID SMALL FISH

+ BOTTOM
TIME
LAT
LONG

Date: 07-02-19	Station: P8	Time: 1103	LOCAL
Net Event # 26	CTD # 25		
Latitude: 48 49.03 N	Longitude: 128 40.00 W		
deg min.dec	deg min.dec		
Wire out: 250	Wire angle:	Bottom Depth: 2546	
Net Type: BONGO	Tow Type: VNH		
Flow start 76900	Flow end	Flow = frozen	
	78645	Non-flow = pickled	

Notes:

Date: 07-02-19	Station: P8	Time: 1157	LOCAL
Net Event # 27	CTD # 25	1954 UTC	
Latitude: 48 49.02 N	Longitude: 128 39.99 W		
deg min.dec	deg min.dec		
Wire out: 1200	Wire angle: 0	Bottom Depth: 2541	
Net Type: BONGO	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
78645	86206	Non-flow = pickled	

Notes:

Date: 07-02-19	Station: P8	Time: 1233	LOCAL
Net Event # 28	CTD # 25	2033	
Latitude: 48 49.02 N	Longitude: 128 39.98 W		
deg min.dec	deg min.dec		
Wire out: 250	Wire angle: 0	Bottom Depth: 2541	
Net Type: Ring	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
100460	101848	Non-flow = pickled	

Notes:

TSK 4877



Plankton Net Tow Log Sheet

Cruise #: 2019-01 Vessel: J P Tully Page: 3/

Project(s): LINE P Contact:

TSK Serial #: RBR serial #:

Time offset = +

hrs = UTC (please record local time for samples)

Date: 8 Feb 2019	Station: P12	Time: 01:43	LOCAL
Net Event # 34	CTD # 33		
Latitude: 48° 58.22 N	Longitude: 130° 40.07 W		
deg min.dec	deg min.dec		
Wire out: 250	Wire angle: 0	Bottom Depth: 3255	
Net Type: RING	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
1848	3360	Non-flow = pickled	

Notes:

TSK 4877

Date: 8 Feb 2019	Station: P12	Time: 02:03	LOCAL
Net Event # 35	CTD # 33		
Latitude: 48° 58.23 N	Longitude: 130° 40.08 W		
deg min.dec	deg min.dec		
Wire out: 250	Wire angle: 5	Bottom Depth: 3257	
Net Type: BONGO	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
86205	87939	Non-flow = pickled	

Notes:

Date: 8 Feb 2019	Station: P12	Time: 02:56	LOCAL
Net Event # 36	CTD # 33		
Latitude: 48° 58.23 N	Longitude: 130° 40.07 W		
deg min.dec	deg min.dec		
Wire out: 1200	Wire angle: 0	Bottom Depth: 3245	
Net Type: BONGO	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
87939	95961	Non-flow = pickled	

Notes:

Formalin side (green) clogged with large red jelly fish that was shredded the cod end mesh was also detached by jelly

Date: 10 Feb 2019	Station: P20	Time: 00:13	LOCAL
Net Event # 45	CTD # 44		
Latitude: 49° 33.97 N	Longitude: 138° 40.05 W		
deg min.dec	deg min.dec		
Wire out: 250	Wire angle: 10	Bottom Depth: 3981	
Net Type: BONGO	Tow Type: BONGO / VNH		
Flow start	Flow end	Flow = frozen	
95961	98280	Non-flow = pickled	

Notes:



Plankton Net Tow Log Sheet

Cruise #: 10A-001 Vessel: JP Tully Page: 41
Project(s): LIMAP Contact: M.G.
TSK Serial #: _____ RBR serial #: _____

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

Date: <u>10 FEB 2019</u>	Station: <u>P20</u>	Time: <u>0038</u>	LOCAL
Net Event # <u>46</u>	CTD # <u>44</u>		
Latitude: <u>49</u> <u>33</u> <u>97</u> N	Longitude: <u>138</u> <u>40</u> <u>05</u> W		
deg min.dec	deg min.dec		
Wire out: <u>250</u>	Wire angle: <u>8</u>	Bottom Depth: <u>3981</u>	
Net Type: <u>RENG</u>	Tow Type: <u>VNH</u>		
Flow start <u>3360</u>	Flow end <u>5220</u>	Flow = frozen <u>3360</u>	
		Non-flow = pickled	

Notes:

TSK 4877

BOTTOM
TIME
LAT
LONG

Date: <u>12 FEB 2019</u>	Station: <u>P26</u>	Time: <u>0426</u>	LOCAL
Net Event # <u>52</u>	CTD # <u>51</u>		
Latitude: <u>49° 59.99</u> N	Longitude: <u>145° 00.64</u> W		
deg min.dec	deg min.dec		
Wire out: <u>250</u>	Wire angle: <u>5</u>	Bottom Depth: <u>4263</u>	
Net Type: <u>BONGO</u>	Tow Type: <u>VNH</u>		
Flow start <u>339</u>	Flow end <u>2468</u>	Flow = frozen	
		Non-flow = pickled	

Notes:

Date: <u>12 FEB 2019</u>	Station: <u>P26</u>	Time: <u>4:52 AM</u>	LOCAL
Net Event # <u>53</u>	CTD # <u>54</u>		
Latitude: <u>49</u> <u>59</u> <u>97</u> N	Longitude: <u>145</u> <u>00</u> <u>08</u> W		
deg min.dec	deg min.dec		
Wire out: <u>250</u>	Wire angle: <u>0</u>	Bottom Depth: <u>4264</u>	
Net Type: <u>RENG</u>	Tow Type: <u>VNH</u>		
Flow start <u>5223</u>	Flow end <u>7452</u>	Flow = frozen	
		Non-flow = pickled	

Notes:

RENG NG

TSK 4877

Date: <u>15 FEB 2019</u>	Station: <u>D1X 5</u>	Time: <u>00:07</u>	LOCAL
Net Event # <u>68</u>	CTD # <u>67</u>		
Latitude: <u>54</u> <u>19</u> <u>98</u> N	Longitude: <u>133</u> <u>20</u> <u>18</u> W		
deg min.dec	deg min.dec		
Wire out: <u>250</u>	Wire angle: <u>10</u>	Bottom Depth: <u>456 m</u>	
Net Type: <u>BONGO</u>	Tow Type: <u>VNH</u>		
Flow start <u>2468</u>	Flow end <u>4398</u>	Flow = frozen	
		Non-flow = pickled	

Notes:

Glass shrimps w parasitic isopods.
Removed 5 LIMAPE from frozen side.



Plankton Net Tow Log Sheet

Cruise #: 2019-01 Vessel: JPTOLY Page: 5/

Project(s): UNEP Contact: MORA

TSK Serial #: RBR serial #:

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

Date: 15 FEB 2019	Station: DIX3	Time: 06:08	LOCAL
Net Event # 70	CTD # 69	0702	
Latitude: 54° 29.02 N	Longitude: 132° 18.04 W		
deg min.dec	deg min.dec		
Wire out: 250	Wire angle: 16°	Bottom Depth: 366	
Net Type: BONGO	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
4645	6172	Non-flow = pickled	

Notes:

Date: 15 Feb 2019	Station: HECS 8	Time: 21:07	LOCAL
Net Event # 78	CTD # 77		
Latitude: 54° 23.25 N	Longitude: 131° 05.39 W		
deg min.dec	deg min.dec		
Wire out: 110m	Wire angle: 5	Bottom Depth: 114	
Net Type: BONGO	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
6172	6815	Non-flow = pickled	

Notes: RELEASE 1 PANDA WITH EGGS

Date: 16 FEB 2019	Station: CH1	Time: 13:36	LOCAL
Net Event # 84	CTD # 83		
Latitude: 54° 41.71 N	Longitude: 130° 27.17 W		
deg min.dec	deg min.dec		
Wire out: 610	Wire angle: 5	Bottom Depth: 614	
Net Type: Bongo	Tow Type: VNH-B		
Flow start	Flow end	Flow = frozen	
6815	10260	Non-flow = pickled	

Notes:

Date: 17 Feb 2019	Station: CH19	Time: 12:28	LOCAL
Net Event # 99	CTD # 98		
Latitude: 54° 15.31 N	Longitude: 130° 35.57 W		
deg min.dec	deg min.dec		
Wire out: 82	Wire angle:	Bottom Depth: 87	
Net Type: Bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
40268	40891	Non-flow = pickled	

Notes:

BOTTOM TIME
LAT
LONG



Plankton Net Tow Log Sheet

Cruise #: 209.01 Vessel: JP TULLY Page: 6/

Project(s): LINE P

Contact: MOKA

TSK Serial #:

RBR serial #:

Time offset = +

hrs = UTC (please record local time for samples)

Date: 19 FEB 2019	Station: CPE1	Time: 11:23	LOCAL
Net Event # 116	CTD # 115		
Latitude: 50° 59.961 N	Longitude: 127° 49.792 W		
deg min.dec	deg min.dec		
Wire out: 148	Wire angle: 4	Bottom Depth: 152	
Net Type: Bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
40891	41905	Non-flow = pickled	

Notes: Removed 6 LIMHE from frozen side.
Herring on depth sounder.

Date: 20 FEB 2019	Station: 14	Time: 08:11	LOCAL
Net Event # 121	CTD # 120		
Latitude: 49 53.11 N	Longitude: 124 59.70 W		
deg min.dec	deg min.dec		
Wire out: 310	Wire angle: 0	Bottom Depth: 315	
Net Type: BONGO	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
41906	43828	Non-flow = pickled	

Notes:

Date: 20 FEB 2019	Station: 12	Time: 11:45	LOCAL
Net Event # 125	CTD # 124		
Latitude: 49 43 635 N	Longitude: 124 40 713 W		
deg min.dec	deg min.dec		
Wire out: 348	Wire angle: 5	Bottom Depth: 354	
Net Type: Bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
43828	45770	Non-flow = pickled	

Notes: SEA LION

Date: 20.02.19	Station: 22	Time: 1537	LOCAL
Net Event # 128	CTD # 128		
Latitude: 49 40.30 N	Longitude: 124 16.33 W		
deg min.dec	deg min.dec		
Wire out: 350	Wire angle: 5	Bottom Depth: 355	
Net Type: Bongo	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
45770	47645	Non-flow = pickled	

Notes:



Plankton Net Tow Log Sheet

Cruise #: 2019-001 Vessel: J.P. Tully Page: 7/

Project(s): Line P Contact: Moira

TSK Serial #: RBR serial #:

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

Date: 20-02-19	Station: CPF2	Time: 21:54 LOCAL
Net Event # 132	CTD # 130	
Latitude: 49 28.00 N	Longitude: 124 30.01 W	
deg min.dec	deg min.dec	
Wire out: 320m	Wire angle: 8	Bottom Depth: 326m
Net Type: Bongo	Tow Type: VNH	
Flow start	Flow end	Flow = frozen
47645	49555	Non-flow = pickled

Notes: BONGO @ 24 CANCELLED DUE TO HYDRAULIC PROBLEM

~30-40 scallops @ CPF2

Date: 20-02-19	Station: CPF1	Time: 2325 LOCAL
Net Event # 133	CTD # 132	
Latitude: 49 21.98 N	Longitude: 124 04.98 W	
deg min.dec	deg min.dec	
Wire out: 235	Wire angle: 10	Bottom Depth: 240
Net Type: Bongo	Tow Type: VNH	
Flow start	Flow end	Flow = frozen
49555	50898	Non-flow = pickled

Notes:

Date: 21-02-19	Station: 28	Time: 0122 LOCAL
Net Event # 135	CTD # 134	
Latitude: 49 24.17 N	Longitude: 123 48.29 W	
deg min.dec	deg min.dec	
Wire out: 125	Wire angle: 3	Bottom Depth: 130
Net Type: BONGO	Tow Type: BONGO VNH	
Flow start	Flow end	Flow = frozen
50898	52633	Non-flow = pickled

Notes:

TWIG REMOVED FROM PICKLED SIDE

Date: 21-02-19	Station: GEO1	Time: 0318 LOCAL
Net Event # 137	CTD # 136	
Latitude: 49 15 24 N	Longitude: 123 45 48 W	
deg min.dec	deg min.dec	
Wire out: 280	Wire angle: 8	Bottom Depth: 400
Net Type: BONGO	Tow Type: VNH	
Flow start	Flow end	Flow = frozen
52635	53141	Non-flow = pickled

Notes:



Plankton Net Tow Log Sheet

Cruise #: 2019-001 Vessel: TULLY Page: 8/

Project(s): LINE P Contact:

TSK Serial #: 7057 RBR serial #: 78976

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

Date: 21-02-19	Station: GEO1	Time: 03:40	LOCAL
Net Event # 138	CTD # 136		
Latitude: 49° 15.81 N	Longitude: 123° 45.65 W		
deg min.dec	deg min.dec		
Wire out: 395	Wire angle: 0	Bottom Depth: 400	
Net Type: BONGO	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
53141	55520	Non-flow = pickled	

Notes:

Date: 21-02-19	Station: 38	Time: 0602	LOCAL
Net Event # 140	CTD # 139		
Latitude: 49° 12.01 N	Longitude: 123° 26.54 W		
deg min.dec	deg min.dec		
Wire out: 300	Wire angle: 9	Bottom Depth: 307	
Net Type: BONGO	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
55522	57361	Non-flow = pickled	

Notes:

Date: 21-02-19	Station: 42	Time: 08:58	LOCAL
Net Event # 142	CTD # 141		
Latitude: 49 01.73 N	Longitude: 123 26.11 W		
deg min.dec	deg min.dec		
Wire out: 305	Wire angle:	Bottom Depth: 319	
Net Type: BONGO	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
57361	59300	Non-flow = pickled	

Notes: 348?

Date: 21 Feb 2019	Station: 59	Time: 1233	LOCAL
Net Event # 144	CTD # 143	2033	UTC
Latitude: 48 36.27 N	Longitude: 123 14.67 W		
deg min.dec	deg min.dec		
Wire out: 220	Wire angle: 5	Bottom Depth: 224	
Net Type: BONGO	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
59398	60605	Non-flow = pickled	

Notes:

CRUISE 201901 TRK 7051 RBR 78916 ⁹					
STN	Tow Z	Tow Z	START	END	WIRE
P2	112	107	66575	67259	0
P2 (RBR)	112	107	98703	99248	0
P4	1331	250	67260	68040	0
(RING) P4	1322	250	99248	10460	20
P4	1200	250	68040	76900	10
P8 ^{250m} Bongo	2540	250	76900	78645	4 ^{4.300m down on top 20m}
P8 ^{1200m} Bongo	2540	1200	78645	86206	0
P8 ^{250m} Ring	2540	250	460	1848	0
P12 ^{RING}	3255	250	1848	3360	0
P12	3257	250	86205	87939	5
P12	3245	1200	87939	95961	0
P20	3980	250	95961	98280	10
P20 ^{RING}	3980	250	3360	8220	8
P26	4263	250	00339	02468	5
P26 RING	4264	250	5223	7452	0
DIX5	454	250	2469	4398	10
DIX3	366	256	4645	6172	16
HECS8	114	110	6172	6815	5
CH1	616	610	6815	40260	5 ^{THAT'S IT}
CH19	87	82	40268	40891	3
CPE1	152	148	40891	41905	4
14	314	310	41906	43828	0
12	354	348	43828	45770	5
22					
Bongo 236 Score 64 B Return the R					

¹⁰ CRUSE	2019.01	TSK	7057	RBR	78976	
STN	2 SN	TOW 2	FLOWMETER		START	END
22	355	350	45770	47645	5	
24	426	420				
CPF2	326	320	47645	49555	8	
CPF1	240	235	49555	50898	10	
28	130	125	50898	52633	3	
GEO1	400	280	52635	53141	5	
GEO1	400	395	53141	55528	0	
38	307	300	55522	57361	9	
42	319	315	57361	59308	5	
HAR059	224	220	59398	60605	5	