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Sidney, B C, Canada

Plankton Net Tow Log Sheet

Cruise #: 1647 **Vessel:** Tully **Page:** 1

Project(s): Laperouse **Contact:** Moira

TSK Serial #: 4888 **RBR serial #:**

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

Date: 25 May 16	Station: JF2		Time: 16:13	**LOCAL**
Net Event # 3	CTD # 2			
Latitude: 48 18 58 N (deg / min.dec)		Longitude: 124 3.97 W (deg / min.dec)		
Wire out: 180	Wire angle: 35		Bottom Depth: 190	
Net Type: BVNH	Tow Type:			
Flow start	Flow end		Flow = frozen	
25005	26972		Non-flow = pickled	

Notes:

Date: 26 May 16	Station: E1		Time: 00:50	**LOCAL**
Net Event # 11	CTD # 10			
Latitude: 48 31.63 N (deg / min.dec)		Longitude: 125 3.83 W (deg / min.dec)		
Wire out: 108	Wire angle: 40		Bottom Depth: 118	
Net Type: B	Tow Type: VNH			
Flow start	Flow end		Flow = frozen	
26975	28560		Non-flow = pickled	

Notes: lots crab megalops UVic picked 30 copes from frozen

Date: 26 May 2016	Station: C1		Time: 03:34	**LOCAL**
Net Event # 15	CTD # 14			
Latitude: 48 28 93 N (deg / min.dec)		Longitude: 125 15 26 W (deg / min.dec)		
Wire out: 144	Wire angle: 35		Bottom Depth: 154	
Net Type: B	Tow Type: VNH			
Flow start	Flow end		Flow = frozen	
28562	30181		Non-flow = pickled	

Notes:

Date: 26 May 2016	Station: C2		Time: 04 42	**LOCAL**
Net Event # 17	CTD # 16			
Latitude: 48 20 04 N (deg / min.dec)		Longitude: 125 9 16 W (deg / min.dec)		
Wire out: 152	Wire angle: 45		Bottom Depth: 162	
Net Type: B	Tow Type: VNH			
Flow start 30202	Flow end 33120		Flow = frozen	
			Non-flow = pickled	

Notes: high wire angle thru out, towed at surface on recovery

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Cruise #: 1647 **Vessel:** Tucu **Page:** 2

Project(s): La Perouse **Contact:** Moore

TSK Serial #: 4888 **RBR serial #:**

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

Date: 26MAY2016	Station: C3		Time: 0620	**LOCAL**	
Net Event # 19	CTD # 18				
Latitude: 48 deg	23 57 N min.dec	Longitude: 125 deg	20 59 W min.dec		
Wire out: 113	Wire angle: 123 25		Bottom Depth: 123		
Net Type: B	Tow Type: VNH				
Flow start 33150	Flow end 34679		Flow = frozen		
			Non-flow = pickled		

Notes:

Date: 26MAY16	Station: LB07		Time: 0738	**LOCAL**	
Net Event # 21	CTD # 20				
Latitude: 48 deg	28 67 N min.dec	Longitude: 125 deg	22 15 W min.dec		
Wire out: 146	Wire angle: 10		Bottom Depth: 156		
Net Type: B	Tow Type: VNH				
Flow start	Flow end		Flow = frozen		
34680	36106		Non-flow = pickled		

Notes:

Date: 26 May 2016	Station: B8		Time: 0912	**LOCAL**	
Net Event # 23	CTD # 22				
Latitude: 48 deg	34 63 N min.dec	Longitude: 125 deg	29 97 W min.dec		
Wire out: 101	Wire angle: 30		Bottom Depth: 111		
Net Type: B	Tow Type: VNH				
Flow start	Flow end		Flow = frozen		
36108	37277		Non-flow = pickled		

Notes:
Eulachon

Date: 26 May 2016	Station: B7		Time: 1017	**LOCAL**	
Net Event # 25	CTD # 24				
Latitude: 48 deg	32 08 N min.dec	Longitude: 125 deg	35 30 W min.dec		
Wire out: 68	Wire angle: 45		Bottom Depth: 79		
Net Type: B	Tow Type: VNH				
Flow start	Flow end		Flow = frozen		
37100	38350		Non-flow = pickled		

Notes: full doliolids 2x 500ml frozen in 3 bags

from RBR: bad downcast

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Cruise #: 1647 **Vessel:** Tully **Page:** 3

Project(s): Laperouse **Contact:** Moira

TSK Serial #: 4888 **RBR serial #:**

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

Date: 26 May 2016	Station: LB08		Time: 1155	**LOCAL**	
Net Event # 27	CTD # 26				
Latitude: 48 25.15 N (deg / min.dec)		Longitude: 125 28.48 W (deg / min.dec)			
Wire out: 125	Wire angle: 25		Bottom Depth: 134		
Net Type: B	Tow Type: VNH				
Flow start	Flow end		Flow = frozen		
38344	39492		Non-flow = pickled		

Notes: TIME ESTIMATED FROM CTD LAT/LONG

Date: 26 May 2016	Station: LB11		Time: 1647	**LOCAL**	
Net Event # 31	CTD # 30				
Latitude: 48 15.16 N (deg / min.dec)		Longitude: 125 47.81 W (deg / min.dec)			
Wire out: 200	Wire angle: 0		Bottom Depth: 208		
Net Type: B	Tow Type: VNH				
Flow start	Flow end		Flow = frozen		
39492	41485		Non-flow = pickled		

Notes: SALPS + COROLLA

Date: 27 MAY 16	Station: LB16		Time: ~~1217~~ 0017	**LOCAL**	
Net Event # 36	CTD # 38				
Latitude: 48 00 48 N (deg / min.dec)		Longitude: 126 16.94 W (deg / min.dec)			
Wire out: 250	Wire angle: 10		Bottom Depth: 1811		
Net Type: BONGO	Tow Type: VNH				
Flow start	Flow end		Flow = frozen		
41486	43350		Non-flow = pickled		

Notes: Doliolids + corolla

Date: 27 MAY 16	Station: LB16		Time: 0106	**LOCAL**	
Net Event # 37	CTD # 38				
Latitude: 48 00 55 N (deg / min.dec)		Longitude: 126 16.90 W (deg / min.dec)			
Wire out: 1200	Wire angle: 0		Bottom Depth: 1810		
Net Type: BONGO	Tow Type: VNH				
Flow start	Flow end		Flow = frozen		
43350	52556		Non-flow = pickled		

Notes: Tactostoma macropus in sample (~15 cm?) + another fish transferred from frozen → pickled.

Doliolids + corolla

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Cruise #: 1647 **Vessel:** Tully **Page:** 4

Project(s): Laperouse **Contact:** Moira

TSK Serial #: 4888 **RBR serial #:**

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

Date: 27 May 2016	Station: LC12/A4		Time: 0736		**LOCAL**
Net Event # 40	CTD # 39				
Latitude: 48 deg	14.98 min.dec	N	Longitude: 126 deg	39.98 min.dec	W
Wire out: 250	Wire angle: 0		Bottom Depth: 2540		
Net Type: B	Tow Type: VNH				
Flow start	Flow end		Flow = frozen		
52557	54520		Non-flow = pickled		

Notes: doliolids + corolla

Date: 27 May 2016	Station: LC12/A4		Time: 0821		**LOCAL**
Net Event # 41	CTD # 39				
Latitude: 48 deg	15.03 min.dec	N	Longitude: 126 deg	39.97 min.dec	W
Wire out: 1200	Wire angle: 10		Bottom Depth: 2540		
Net Type: Bongo	Tow Type: VNH				
Flow start	Flow end		Flow = frozen		
54520	62919		Non-flow = pickled		

Notes: lg fish in green side, preserved separately = Bathylagus milleri

Date: 27 May 16	Station: LC11		Time: 1214		**LOCAL**
Net Event # 44	CTD # 43				
Latitude: 48 deg	18.91 min.dec	N	Longitude: 126 deg	26.62 min.dec	W
Wire out: 70	Wire angle: 45		Bottom Depth: 1432		
Net Type: Bongo	Tow Type: Oblique		VNH		
Flow start	Flow end		Flow = frozen		
62920	65240		Non-flow = pickled		

Notes: Oblique targeting 30m layer on acoustics
HETEROPODS - CARINARIA/COROLLA

Date: 27 05 16	Station: LC09		Time: 1532		**LOCAL**
Net Event # 47	CTD # 46				
Latitude: 48° 25.97' deg	min.dec	N	Longitude: 126° 13.50' deg	min.dec	W
Wire out: 250	Wire angle: 5°		Bottom Depth: 597		
Net Type: Bongo	Tow Type: VNH				
Flow start	Flow end		Flow = frozen		
65240	67423		Non-flow = pickled		

Notes:

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Cruise #: 1647 **Vessel:** Tully **Page:** 5

Project(s): Laperouse **Contact:** Moira

TSK Serial #: 4888 **RBR serial #:**

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

Date: 27-05-2016	Station: A2		Time: 1700 **LOCAL**		
Net Event # 48	CTD # 49		0000 UTC		
Latitude: 48 deg	22.73 min.dec	N	Longitude: 126 deg	03.75 min.dec	W
Wire out: 250	Wire angle: 13		Bottom Depth: 350		
Net Type: BONGO	Tow Type: VNH				
Flow start 67423	Flow end 69220		Flow = frozen		
			Non-flow = pickled		

Notes:

Date: 27 05 16	Station: A1		Time: 1739 **LOCAL**		
Net Event # 51	CTD # 52		0239 UTC		
Latitude: 48 deg	29.40 min.dec	N	Longitude: 126 deg	07.23 min.dec	W
Wire out: 195	Wire angle: 5		Bottom Depth: 201		
Net Type: BONGO	Tow Type: VNH				
Flow start 69220	Flow end 70823		Flow = frozen		
			Non-flow = pickled		

Notes:

LC061

Date: 27.05.16	Station: B6		Time: 2202 **LOCAL**		
Net Event # 54	CTD # 55		0502 UTC		
Latitude: 48 deg	36.44 min.dec	N	Longitude: 125 deg	53.97 min.dec	W
Wire out: 85	Wire angle: 10		Bottom Depth: 91		
Net Type: BONGO	Tow Type: VNH				
Flow start 70823	Flow end 71175		Flow = frozen		
			Non-flow = pickled		

Notes:

Date: 27 MAI 2016	Station: B5		Time: 2314 **LOCAL**		
Net Event # 56	CTD # 57		0614 UTC		
Latitude: 48 deg	39.90 min.dec	N	Longitude: 125 deg	47.41 min.dec	W
Wire out: 58	Wire angle: 0		Bottom Depth: 63		
Net Type: BONGO	Tow Type: VNH				
Flow start 71175	Flow end 71574		Flow = frozen		
			Non-flow = pickled		

Notes:

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Cruise #: 1647 **Vessel:** Tully **Page:** 6

Project(s): Laperouse **Contact:** Moira

TSK Serial #: 4888 **RBR serial #:**

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

Date: 28 May 2016	Station: LD02		Time: 04:36	**LOCAL**	
Net Event # 62	CTD # 63				
Latitude: 48 deg 58.40 min.dec N	Longitude: 125 deg 47.04 min.dec W				
Wire out: 34	Wire angle: 0		Bottom Depth: 44		
Net Type: B	Tow Type: VNH				
Flow start	Flow end		Flow = frozen		
71574	71791		Non-flow = pickled		

Notes: phyto - 500ml jar + Eutin

Date: 28 May 2016	Station: LD04		Time: 06:17	**LOCAL**	
Net Event # 65	CTD # 64				
Latitude: 48 deg 53.24 min.dec N	Longitude: 125 deg 57.33 min.dec W				
Wire out: 55	Wire angle: 10		Bottom Depth: 65		
Net Type: B	Tow Type: VNH				
Flow start	Flow end		Flow = frozen		
71791	72180		Non-flow = pickled		

Notes: doliolids

Date: 28·05·16	Station: LG09		Time: 1913	**LOCAL**	
Net Event # 70	CTD # 69				
Latitude: 48 deg 51.16 min.dec N	Longitude: 127 deg 19.31 min.dec W				
Wire out: 250	Wire angle: 5		Bottom Depth: 2049		
Net Type: BONGO	Tow Type: VNH				
Flow start 72180	Flow end 74120		Flow = frozen		
			Non-flow = pickled		

Notes:

Date: 28·05·16	Station: LG07		Time: 2228	**LOCAL**	
Net Event # 72	CTD # 73		0528 UTC		
Latitude: 48° 59.38 deg min.dec N	Longitude: 127° 07.20 deg min.dec W				
Wire out: 250	Wire angle: 0		Bottom Depth: 1753		
Net Type: BONGO	Tow Type: VNH				
Flow start 74120	Flow end 75980		Flow = frozen		
			Non-flow = pickled		

Notes: RELEASE 1 LIPFU
1 LESTIDIUM RINGENS

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Cruise #: 1647 **Vessel:** Tully **Page:** 7

Project(s): Laperouse **Contact:** Moira

TSK Serial #: 4888 **RBR serial #:**

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

Date: 29 May 2016	Station: LG04		Time: 03 17	**LOCAL**	
Net Event # 76	CTD # 77				
Latitude: 49 11 30 N		Longitude: 126 49 36 W			
deg	min.dec		deg	min.dec	
Wire out: 135	Wire angle: 5		Bottom Depth: 145		
Net Type: B	Tow Type: VNH				
Flow start	Flow end		Flow = frozen		
75980	77030		Non-flow = pickled		

Notes: fish jumping @ stern; fishing boats around (Herring?)

Date: 29 May 2016	Station: LG02		Time: 05 25	**LOCAL**	
Net Event # 79	CTD # 80				
Latitude: 49 18 69 N		Longitude: 126 38 08 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		
77035	77720		Non-flow = pickled		

Notes: full doliolids. 3 500 mL jars, 4 bags

Date: 29.05.16	Station: LBP2		Time: 1533	**LOCAL**	
Net Event # 85	CTD # 84		2233	UTC	
Latitude: 50 04 06 N		Longitude: 127 54 21 W			
deg	min.dec		deg	min.dec	
Wire out: 85	Wire angle: 40		Bottom Depth: 88		
Net Type: Bongo	Tow Type: VNH				
Flow start	Flow end		Flow = frozen		
77721	78192		Non-flow = pickled		

Notes:

Date: 29-5-16	Station: LBP3		Time: 1623	**LOCAL**	
Net Event # 87	CTD # 86				
Latitude: 50 03.16 N		Longitude: 127 55.29 W			
deg	min.dec		deg	min.dec	
Wire out: 163	Wire angle: 5		Bottom Depth: 167		
Net Type: Bongo	Tow Type: VNH				
Flow start	Flow end		Flow = frozen		
78192	79340		Non-flow = pickled		

Notes:

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Cruise #: 2016-47 **Vessel:** TULLY **Page:** 8

Project(s): LA PEROUSE **Contact:** MOIRA

TSK Serial #: 4888 **RBR serial #:**

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

Date: 29.05.16	Station: LBP5		Time: 1917	**LOCAL**	
Net Event # 90	CTD # 89				
Latitude: 49 59.99 N		Longitude: 127 59.97 W			
deg	min.dec	deg	min.dec		
Wire out: 250	Wire angle: 5		Bottom Depth: 1267		
Net Type: BONGO	Tow Type: VNH				
Flow start	Flow end		Flow = frozen		
79340	891110		Non-flow = pickled		

Notes:

Date: 29.05.16	Station: LBP7		Time: 2815	**LOCAL**	
Net Event # 93	CTD # 92				
Latitude: 49 52.47 N		Longitude: 128 11.27 W			
deg	min.dec	deg	min.dec		
Wire out: 250	Wire angle: 5		Bottom Depth: 2135		
Net Type: BONGO	Tow Type: VNH				
Flow start	Flow end		Flow = frozen		
891110	892870		Non-flow = pickled		

Notes: removed 2 AEG-- 53 from pickled

Date: 30 May 2016	Station: LBP8		Time: 0136	**LOCAL**	
Net Event # 95	CTD # 94				
Latitude: 49 48 64 N		Longitude: 128 17 03 W			
deg	min.dec	deg	min.dec		
Wire out: 250	Wire angle: 5		Bottom Depth: 2064		
Net Type: B	Tow Type: VNH				
Flow start	Flow end		Flow = frozen		
82869	84435		Non-flow = pickled		

Notes:
Velella at surface

Date: 30 May 16	Station: LBP8		Time: 0225	**LOCAL**	
Net Event # 96	CTD # 94				
Latitude: 49 48 60 N		Longitude: 128 16 88 W			
deg	min.dec	deg	min.dec		
Wire out: 1200	Wire angle: 0		Bottom Depth: 2064		
Net Type: B	Tow Type: VNH				
Flow start	Flow end		Flow = frozen		
84435	91820		Non-flow = pickled		

Notes: transferred large shrimp, Cyclothone microdon, 2 deepwater jellies from frozen to pickled. Fish + shrimp in separate jars.
lots large jellies in water (fried egg? or sea nettle?), salp chains

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Cruise #: 1647. **Vessel:** Tully **Page:** 9

Project(s): Laperouse **Contact:** Moira

TSK Serial #: 4888 **RBR serial #:**

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

Date: 30 May 2016	Station: CPE2		Time: 0933	**LOCAL**	
Net Event # 98	CTD # 97				
Latitude: 50 43 03 N		Longitude: 128 39 81 W			
deg min.dec		deg min.dec			
Wire out: 114	Wire angle: 0		Bottom Depth: 124		
Net Type: B	Tow Type: VNH				
Flow start	Flow end		Flow = frozen		
91820	92550		Non-flow = pickled		

Notes:

Date: 30 05 16	Station: LQ03		Time: 1403	**LOCAL**	
Net Event # 101	CTD # 100		2103 UTC		
Latitude: 50 39.70 N		Longitude: 129 01 99 W			
deg min.dec		deg min.dec			
Wire out: 250	Wire angle: 0		Bottom Depth: 1250		
Net Type: BONGO	Tow Type: VNH				
Flow start	Flow end		Flow = frozen		
92550	94045		Non-flow = pickled		

Notes: VELELLA ON SURFACE

Date: 30 MAI 2016	Station: LL22		Time: 1630	**LOCAL**	
Net Event # 103	CTD # 102		9 2330 UTC		
Latitude: 50 ' 39.81 N		Longitude: 127 ' 17 38 W			
deg min.dec		deg min.dec			
Wire out: 250	Wire angle: 5		Bottom Depth: 1394		
Net Type: BONGO	Tow Type: VNH				
Flow start	Flow end		Flow = frozen		
94045	95675		Non-flow = pickled		

Notes: VELELLA ON SURFACE

Date: 31 MAI 16	Station: C500		Time: 00:20	**LOCAL**	
Net Event # 106	CTD # 105				
Latitude: 50 27.68 N		Longitude: 129 55.07 W			
deg min.dec		deg min.dec			
Wire out: 250	Wire angle: 0		Bottom Depth: 2167		
Net Type: BONGO	Tow Type: VNH				
Flow start	Flow end		Flow = frozen		
95675	97226		Non-flow = pickled		

Notes:
Doliolids. Tomopterans full of doliolids w/ guts
removed 1 AEQ 53 from pickled

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Cruise #: 1647 **Vessel:** Tully **Page:** 10

Project(s): Laperouse **Contact:** Moira

TSK Serial #: 4888 **RBR serial #:**

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

Date: 31 May 2016	Station: CS01		Time: 0309		**LOCAL**
Net Event # 108	CTD # 107				
Latitude: 50 34 95 N		Longitude: 129 41 60 W			
deg	min.dec		deg	min.dec	
Wire out: 250	Wire angle: 10		Bottom Depth: 2095		
Net Type: B	Tow Type: VNH				
Flow start	Flow end 8		Flow = frozen		
97226	98908		Non-flow = pickled		

Notes: doliolids labels have wrong flow end, should be 98908
furseal.

Date: 31 May 2016	Station: CS02		Time: 0440		**LOCAL**
Net Event # 109	CTD # 110				
Latitude: 50 41 32 N		Longitude: 129 27 91 W			
deg	min.dec		deg	min.dec	
Wire out: 250	Wire angle: 0		Bottom Depth: 1893		
Net Type: B	Tow Type: VNH				
Flow start	Flow end		Flow = frozen		
98908	100365		Non-flow = pickled		

Notes: some Euphausiids, jellies (mioce?)
+ another Dragonfish in pickled side

Date: 31 May 2016	Station: CS03		Time: 0737		**LOCAL**
Net Event # 112	CTD # 111				
Latitude: 50 45 64 N		Longitude: 129 19 80 W			
deg	min.dec		deg	min.dec	
Wire out: 220	Wire angle: 20		Bottom Depth: 230		
Net Type: B	Tow Type: VNH				
Flow start	Flow end		Flow = frozen		
365	1789		Non-flow = pickled		

Notes: Humpbacks in area
1 AEQ removed from preserved, 1 MIOCE from frozen

Date: 31 May 2016	Station: CS04		Time: 0843		**LOCAL**
Net Event # 114	CTD # 113				
Latitude: 50 49 23 N		Longitude: 129 12 96 W			
deg	min.dec		deg	min.dec	
Wire out: 90	Wire angle: 10		Bottom Depth: 96		
Net Type: B	Tow Type: VNH				
Flow start	Flow end		Flow = frozen		
01791	02480		Non-flow = pickled		

Notes: Jelly soup.
8 MIOCES3 removed pickled
1 AEQ S3 removed frozen

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Cruise #: 1647 **Vessel:** Tully **Page:** 11

Project(s): Laperouse **Contact:** Moira

TSK Serial #: 4888 **RBR serial #:**

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

Date: 2016 May 31	Station: NEWODAS	Time: 1649	**LOCAL**
Net Event # 117	CTD # 116		
Latitude: 50° 56.37 N (deg / min.dec)		Longitude: 129° 58.82 W (deg / min.dec)	
Wire out: 350	Wire angle:	Bottom Depth: 2097	
Net Type: B	Tow Type: VNH		
Flow start 2510	Flow end 5034	Flow = frozen	
		Non-flow = pickled	

Notes: VELELLA ON SURFACE

Date: 31·05·16	Station: CS3B	Time: 2003	**LOCAL**
Net Event # 120	CTD # 119	0303	UTC
Latitude: 50° 59.96 N (deg / min.dec)		Longitude: 129° 27.06 W (deg / min.dec)	
Wire out: 215	Wire angle: 12	Bottom Depth: 221	
Net Type: BONGO	Tow Type: VNH		
Flow start 5059	Flow end 7112	Flow = frozen	
		Non-flow = pickled	

Notes:

Date: 31·05·16	Station: CS05	Time: 2250	**LOCAL**
Net Event # 122	CTD # 121	0550	
Latitude: 50° 55.94 N (deg / min.dec)		Longitude: 128° 59.80 W (deg / min.dec)	
Wire out: 60	Wire angle: 15	Bottom Depth: 65	
Net Type: BONGO	Tow Type: VNH		
Flow start 7112	Flow end 7657	Flow = frozen	
		Non-flow = pickled	

Notes:

Date: 1 June 2016	Station: CS1B	Time: 0247	**LOCAL**
Net Event # 124	CTD # 123		
Latitude: 50 52 99 N (deg / min.dec)		Longitude: 128 39 97 W (deg / min.dec)	
Wire out: 64	Wire angle: 5	Bottom Depth: 72	
Net Type: B	Tow Type: VNH		
Flow start 0766	Flow end 0841	Flow = frozen	
		Non-flow = pickled	

Notes:

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Cruise #: 2016-47 **Vessel:** Tully **Page:** 12

Project(s): La Perouse **Contact:** Moira

TSK Serial #: 4888 **RBR serial #:**

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

Date: 1 Jun 2016	Station: CS06		Time: 02:08	LOCAL
Net Event # 125	CTD # 126			
Latitude: 50 59.98 N (deg / min.dec)		Longitude: 128 51.76 W (deg / min.dec)		
Wire out: 54	Wire angle: 30		Bottom Depth: 64	
Net Type: BONGO	Tow Type: VNH			
Flow start 08413	Flow end 09053		Flow = frozen	
			Non-flow = pickled	

Notes: rem 1 AEQ --53 from both sides

Date: 1 June 2016	Station: CS07		Time: 03:37	LOCAL
Net Event # 128	CTD # 127			
Latitude: 51 4.60 N (deg / min.dec)		Longitude: 128 44.20 W (deg / min.dec)		
Wire out: 53	Wire angle: 10		Bottom Depth: 63	
Net Type: B	Tow Type: VNH			
Flow start 9053	Flow end 9939		Flow = frozen	
			Non-flow = pickled	

Notes: high wire angle at start of cast (~ 30-40°)

Date: 1 June 2016	Station: CS08		Time: 04:57	LOCAL
Net Event # 130	CTD # 129			
Latitude: 51 8.74 N (deg / min.dec)		Longitude: 128 36.50 W (deg / min.dec)		
Wire out: 132	Wire angle: 5		Bottom Depth: 142	
Net Type: B	Tow Type: VNH			
Flow start 9946	Flow end 11298		Flow = frozen	
			Non-flow = pickled	

Notes: 2 Frozen bags

Date: 1 June 16	Station: CS09		Time: 0627	LOCAL
Net Event # 132	CTD # 131			
Latitude: 51 12.42 N (deg / min.dec)		Longitude: 128 27.65 W (deg / min.dec)		
Wire out: 182	Wire angle: ~~15~~		Bottom Depth: 193	
Net Type: B	Tow Type: VNH			
Flow start 11296	Flow end 12950		Flow = frozen	
			Non-flow = pickled	

Notes:
- Picked 10 Mitrocoma from pickled side
- Picked 6 Mitrocoma + 1 Aequorea(?) from ~~PFE~~ biomass side. J.D.

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Plankton Net Tow Log Sheet

Cruise #: 2016-47 / JUN2016 **Vessel:** TULLY **Page:** 13

Project(s): La Perouse **Contact:** Moira

TSK Serial #: 4888 **RBR serial #:**

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

Date: 1 JUN 2016	Station: CS10		Time: 07:37	**LOCAL**	
Net Event # 134	CTD # 133				
Latitude: 51 deg	16.49 min.dec	N	Longitude: 128 deg	19.78 min.dec	W
Wire out: 67	Wire angle: 0		Bottom Depth: 77		
Net Type: BONGO	Tow Type: VNH				
Flow start	Flow end		Flow = frozen		
12950	13523		Non-flow = pickled		

Notes:

Date: 01-06-16	Station: S500		Time: 1904	**LOCAL**	
Net Event # 138	CTD # 137				
Latitude: 51° 00.08 deg min.dec		N	Longitude: 130°50.02 deg min.dec		W
Wire out: 250	Wire angle: 8		Bottom Depth: 2626		
Net Type: BONGO	Tow Type: VNH				
Flow start 13523	Flow end 15506		Flow = frozen		
			Non-flow = pickled		

Notes: Neocalanus.

Date: 01-06-16	Station: S500		Time: 1920	**LOCAL**	
Net Event # 139	CTD # 137				
Latitude: 51°00.68 deg min.dec		N	Longitude: 130°05.01 deg min.dec		W
Wire out: 1200	Wire angle: 0		Bottom Depth: 2628		
Net Type: BONGO	Tow Type: VNH				
Flow start 15506	Flow end 25011		Flow = frozen		
			Non-flow = pickled		

Notes:

Date: 2-06-2016	Station: SS1		Time: 0021	**LOCAL**	
Net Event # 143	CTD # 142				
Latitude: 51 11 98 deg min.dec		N	Longitude: 129 59 96 deg min.dec		W
Wire out: 250	Wire angle: 20		Bottom Depth: 490		
Net Type: B	Tow Type: VNH				
Flow start	Flow end		Flow = frozen		
24984	26654		Non-flow = pickled		

Notes: Corolla + Neocalanus crist + plum.
Salps in frozen side only (was a chain), transferred a couple to pickled side

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Plankton Net Tow Log Sheet

Cruise #: 1647 **Vessel:** Tully **Page:** 14

Project(s): Laperouse **Contact:** Moira

TSK Serial #: 4888 **RBR serial #:**

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

Date: 2 JUNE 2016	Station: SS2	Time: 02:21	**LOCAL**
Net Event # 145	CTD # 144		
Latitude: 51 12.94 N (deg / min.dec)	Longitude: 129 42.90 W (deg / min.dec)		
Wire out: 250	Wire angle: 10	Bottom Depth: ~~582~~ 566	
Net Type: B	Tow Type: VNH		
Flow start 26653	Flow end 28567	Flow = frozen	
		Non-flow = pickled	

Notes: Sm. larval fish w/ stripes/spot pattern transferred frozen -> pickled
really long larval fish pickled in scint vial, from frozen side.

Date: 2 JUN 2016	Station: SS3	Time: 0429	**LOCAL**
Net Event # 147	CTD # 146		
Latitude: 51 15 06 N (deg / min.dec)	Longitude: 129 21 28 W (deg / min.dec)		
Wire out: 250	Wire angle: 40	Bottom Depth: 289	
Net Type: ~~Bongo~~	Tow Type: VNH		
Flow start 21111	Flow end 23180	Flow = frozen	
		Non-flow = pickled	

Notes:

Date: 02-06-2016	Station: SS4	Time: 0731	**LOCAL**
Net Event # 149	CTD # 148		
Latitude: 51° 21.07' N (deg / min.dec)	Longitude: 128° 59.92' W (deg / min.dec)		
Wire out: 228	Wire angle: 5°	Bottom Depth: 238	
Net Type: Bongo	Tow Type: VNH		
Flow start 23191	Flow end 25945	Flow = frozen	
		Non-flow = pickled	

Notes: 2 aeq picked out

Date: 2-6-2016	Station: SS05	Time: 0914	**LOCAL**
Net Event # 152	CTD # 151		
Latitude: 51 28 03 N (deg / min.dec)	Longitude: 128 30 05 W (deg / min.dec)		
Wire out: 189	Wire angle: 10	Bottom Depth: 200	
Net Type: ~~Bongo~~	Tow Type: ~~B~~ VNH		
Flow start 24991	Flow end 26890	Flow = frozen	
		Non-flow = pickled	

Notes:

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Cruise #: 1647 **Vessel:** Tully **Page:** 15

Project(s): Laperouse **Contact:** Moira

TSK Serial #: 4888 **RBR serial #:**

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

Date: 2 JUN 2016	Station: QCS-1		Time: 11:35	LOCAL
Net Event # 155	CTD # 154			
Latitude: 51° 42.35' N (deg / min.dec)		Longitude: 128° 14.32' W (deg / min.dec)		
Wire out: 128	Wire angle: 15°		Bottom Depth: 140	
Net Type: BONGO	Tow Type: VNH			
Flow start	Flow end		Flow = frozen	
26891	28562		Non-flow = pickled	

Notes:

Date: 02 06 16	Station: SSG		Time: 1500	LOCAL
Net Event # 157	CTD # 156			
Latitude: 51.19.98 N (deg / min.dec)		Longitude: 128.00.04 W (deg / min.dec)		
Wire out: 172	Wire angle:		Bottom Depth: 177	
Net Type: BONGO	Tow Type: VNH			
Flow start	Flow end		Flow = frozen	
28655	29910		Non-flow = pickled	

Notes:

Date: 2016 JUN 2	Station: 557		Time: 1638	LOCAL
Net Event # 159	CTD # 158			
Latitude: 51 24.80 N (deg / min.dec)		Longitude: 127° 47.69 W (deg / min.dec)		
Wire out: 115	Wire angle: 0		Bottom Depth: 120	
Net Type: BONGO	Tow Type: VNH			
Flow start 29910	Flow end 30691		Flow = frozen	
			Non-flow = pickled	

Notes:

Date: 02.06.16	Station: URC7		Time: 1743	LOCAL
Net Event # 161	CTD # 160		0043	UTC
Latitude: 51 30.07 N (deg / min.dec)		Longitude: 127 49.09 W (deg / min.dec)		
Wire out: 153	Wire angle: 10		Bottom Depth: 158	
Net Type: BONGO	Tow Type: VNH			
Flow start	Flow end		Flow = frozen	
~~299~~ 30691	31577		Non-flow = pickled	

Notes:

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Plankton Net Tow Log Sheet

Cruise #: 2016-47 **Vessel:** Tully **Page:** 16

Project(s): RIVERS/LAP **Contact:**

TSK Serial #: 4888 **RBR serial #:**

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

Date: 02 06 16	Station: Ri 1	Time: 0715 **LOCAL**
Net Event # 163	CTD # 162	
Latitude: 51 26.49 N (deg / min.dec)	Longitude: 127 38.45 W (deg / min.dec)	
Wire out: 298	Wire angle: 0	Bottom Depth: 303
Net Type: Bongo	Tow Type: VNH	
Flow start	Flow end	Flow = frozen
31578	33355	Non-flow = pickled

Notes:

Date: 02.06.16	Station: Ri 2	Time: 2030 **LOCAL**
Net Event # 165	CTD # 164	0330 UTC
Latitude: 51 31.22 N (deg / min.dec)	Longitude: 127 33.70 W (deg / min.dec)	
Wire out: 325	Wire angle: 0	Bottom Depth: 330
Net Type: Bongo	Tow Type: VNH	
Flow start	Flow end	Flow = frozen
33355	35236	Non-flow = pickled

Notes:

Date: 02.06.16	Station: Ri 3	Time: 2142 **LOCAL**
Net Event # 167	CTD # 166	0442 UTC
Latitude: 51 35.79 N (deg / min.dec)	Longitude: 127 32.08 W (deg / min.dec)	
Wire out: 325	Wire angle: 0	Bottom Depth: 325
Net Type: Bongo	Tow Type: VNH	
Flow start	Flow end	Flow = frozen
35236	37185	Non-flow = pickled

Notes:

Date: 02 06 19	Station: Ri 4	Time: 2235 **LOCAL**
Net Event # 168	CTD # 169	0535 UTC
Latitude: 51 38.90 N (deg / min.dec)	Longitude: 127 26.58 W (deg / min.dec)	
Wire out: 295	Wire angle: 5	Bottom Depth: 296
Net Type: Bongo	Tow Type: VNH	
Flow start	Flow end	Flow = frozen
37185	39948	Non-flow = pickled

Notes:

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Plankton Net Tow Log Sheet

Cruise #: 2016-47 **Vessel:** Tully **Page:** 17

Project(s): LC Program **Contact:** Moira

TSK Serial #: 4888 **RBR serial #:**

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

Date: 3 June 2016	Station: CPE1		Time: 0351		**LOCAL**
Net Event # 172	CTD # 171		1051		UTC
Latitude: 51 deg	00.18 min.dec	N	Longitude: 127 deg	50.18 min.dec	W
Wire out: 132	Wire angle: 0		Bottom Depth: 142		
Net Type: B	Tow Type: VNH				
Flow start	Flow end		Flow = frozen		
38969	40090		Non-flow = pickled		

Notes: high wire angle at start

Date: 03·06'16	Station: 14		Time: 1935		**LOCAL**
Net Event # 177	CTD # 176		0235		
Latitude: 49 deg	53.13 min.dec	N	Longitude: 124 deg	59.71 min.dec	W
Wire out: 309	Wire angle: 5		Bottom Depth: 314		
Net Type: Bongo	Tow Type: VNH				
Flow start 40091	Flow end 42170		Flow = frozen		
			Non-flow = pickled		

Notes:

Date: 03·06'16	Station: 11		Time: 2134		**LOCAL**
Net Event # 179	CTD # 178		0434		
Latitude: 49° 42.67 deg min.dec		N	Longitude: 124° 43.71 deg min.dec		W
Wire out: 296	Wire angle: 0		Bottom Depth: 301		
Net Type: Bongo	Tow Type: VNH				
Flow start 42170	Flow end 43948		Flow = frozen		
			Non-flow = pickled		

Notes:

Date: 03·06'16	Station: CPFZ		Time: 0000		**LOCAL**
Net Event # 181	CTD # 180		0700		
Latitude: 49° deg	28.04 min.dec	N	Longitude: 124° deg	29.95 min.dec	W
Wire out: 314	Wire angle: 0		Bottom Depth: 324		
Net Type: Bongo	Tow Type: VNH				
Flow start	Flow end 45779		Flow = frozen		
43948			Non-flow = pickled		

Notes: Cyanea + Aeq in water

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Cruise #: 2016-47 **Vessel:** Tully **Page:** 18

Project(s): La Perouse - SoG **Contact:** Moira B

TSK Serial #: 4888 **RBR serial #:**

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

Date: 4JUN2016	Station: CPF1		Time: 0215	**LOCAL**	
Net Event # 183	CTD # 182				
Latitude: 49 deg	21 99 min.dec	N	Longitude: 124 deg	5 16 min.dec	W
Wire out: 239	Wire angle: 0		Bottom Depth: 244		
Net Type: Bongo	Tow Type: VNH				
Flow start 45778	Flow end 47237		Flow = frozen		
			Non-flow = pickled		

Notes:

Date: 4 June 16	Station: 22		Time: 0454	**LOCAL**	
Net Event # 185	CTD # 184		124 16 60		
Latitude: 49 deg	40 51 min.dec	N	Longitude: deg	min.dec	W
Wire out: 354	Wire angle: 0		Bottom Depth: 360		
Net Type: B	Tow Type: VNH				
Flow start 47236	Flow end 49418		Flow = frozen		
			Non-flow = pickled		

Notes:

Date: 4JUN2016	Station: 24		Time: 0637	**LOCAL**	
Net Event # 187	CTD # 186				
Latitude: 49° 30.26 deg	min.dec	N	Longitude: 124° 06.94 deg	min.dec	W
Wire out: 418	Wire angle: 0		Bottom Depth: 423		
Net Type: Bongo	Tow Type: VNH				
Flow start 49418	Flow end 51930		Flow = frozen		
			Non-flow = pickled		

Notes:

Date: 4JUN2016	Station: 28		Time: 0850	**LOCAL**	
Net Event # 189	CTD # 188		1550		
Latitude: 49 deg	24 06 min.dec	N	Longitude: 123 deg	43 13 min.dec	W
Wire out: 129	Wire angle: 0		Bottom Depth: 134		
Net Type: Bongo	Tow Type: VNH				
Flow start 51930	Flow end 52755		Flow = frozen		
			Non-flow = pickled		

Notes:

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Cruise #: 2016-47 **Vessel:** TULLY **Page:** 1

Project(s): La Perouse · LG **Contact:** Moira G

TSK Serial #: 4888 **RBR serial #:** -

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

Date: 4 JUN 2016	Station: GEO1	Time: 1028	**LOCAL**
Net Event # 191	CTD # 190		
Latitude: 49° 14.92 N (deg / min.dec)		Longitude: 123° 45.02 W (deg / min.dec)	
Wire out: 393	Wire angle: 0	Bottom Depth: 398	
Net Type: BONGO	Tow Type: VNH		
Flow start 52755	Flow end 55151	Flow = frozen	
		Non-flow = pickled	

Notes:

Date: 4 JUN 2016	Station: GEO1	Time: 1058	**LOCAL**
Net Event # 192	CTD # 190		
Latitude: 49° 14.91 N (deg / min.dec)		Longitude: 123° 45.01 W (deg / min.dec)	
Wire out: 100	Wire angle:	Bottom Depth: 398	
Net Type: BONGO	Tow Type: VNH		
Flow start 55151	Flow end 55782	Flow = frozen	
		Non-flow = pickled	

Notes:

Date: 4 JUN 2016	Station: 38	Time: 1251	**LOCAL**
Net Event # 194	CTD # 193		
Latitude: 49° 11.89 N (deg / min.dec)		Longitude: 123° 26.42 W (deg / min.dec)	
Wire out: 295	Wire angle: 0	Bottom Depth: 300	
Net Type: BONGO	Tow Type: VNH		
Flow start 55782	Flow end 57609	Flow = frozen	
		Non-flow = pickled	

Notes:

Date: 4 JUN 2016	Station: 41	Time: 1435	**LOCAL**
Net Event # 196	CTD # 195		
Latitude: 49° 03.28 N (deg / min.dec)		Longitude: 123° 22.24 W (deg / min.dec)	
Wire out: 230	Wire angle: 0	Bottom Depth: 236	
Net Type: BONGO	Tow Type: VNH		
Flow start 57640	Flow end 59192	Flow = frozen	
		Non-flow = pickled	

Notes:

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Cruise #: **Vessel:** **Page:**

Project(s): **Contact:**

TSK Serial #: **RBR serial #:**

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

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

Notes: