

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>GDA</u>				CTD FileName (None if data is live feed) <u>NW1701_gda_001</u>			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG			DEG			DAY	MO	YR	HR	MIN	(°C)	(m)		
9	59.	1222	N	141.	1673	W	04	JUL	17	15	08	11.9	205	1	YBE40
Sensor IDS (initially & swap-outs)							Weather:							CTD MAX DEPTH =	
SBE type and S/N							SBE 9-11 w/duplicate sensors							200	
PRESS S/N							COMMENT: Difficult conditions, factors that may affect measurements or aid processing								
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															
Nisk #	DEPTH	Rosette Notes	Hydro Team				GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #	
	DESIRED		SALT Btl	Nut.Btl											
1	200			49										1	
2	50			48		250								2	
3	40			47		250								3	
4	30			46		250								4	
5														5	
6														6	
7														7	
8														8	
9														9	
10	20			45		250								10	
11	10			44		250	250							11	
12	0			43		250								12	

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>GOA</u>				CTD FileName (None if data is live feed) <u>NW1702 goa.002</u>			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG			DEG			DAY	MO	YR	HR	MIN	(°C)	(m)		
<u>10</u>	<u>59.</u>	<u>25</u>	<u>81</u>	<u>N</u>	<u>140.</u>	<u>98</u>	<u>37</u>	<u>W</u>	<u>04</u>	<u>JUL</u>	<u>17</u>	<u>49</u>	<u>12.3</u>	<u>170</u>	<u>2</u> <u>YBE30</u>
Sensor IDS (initially & swap-outs)							Weather:							CTD MAX DEPTH =	
SBE type and S/N							SBE 9-11 w/duplicate sensors							<u>165</u>	
PRESS S/N							COMMENT: Difficult conditions, factors that may affect measurements or aid processing								
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															
Nisk #	DEPTH	Rosette Notes	Hydro Team				GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #	
	DESIRED		SALT BU	Nut.Btl											
<u>1</u>	<u>165</u>		<u>28</u>	<u>56</u>										<u>1</u>	
<u>2</u>	<u>50</u>			<u>55</u>		<u>250</u>								<u>2</u>	
<u>3</u>	<u>40</u>			<u>54</u>		<u>250</u>								<u>3</u>	
<u>4</u>	<u>30</u>			<u>53</u>		<u>250</u>		<u>250</u>		<u>200</u>				<u>4</u>	
<u>5</u>														<u>5</u>	
<u>6</u>														<u>6</u>	
<u>7</u>														<u>7</u>	
<u>8</u>														<u>8</u>	
<u>9</u>														<u>9</u>	
<u>10</u>	<u>20</u>			<u>52</u>		<u>250</u>				<u>200</u>				<u>10</u>	
<u>11</u>	<u>10</u>			<u>51</u>		<u>250</u>	<u>250</u>							<u>11</u>	
<u>12</u>	<u>0</u>			<u>50</u>		<u>250</u>				<u>200</u>				<u>12</u>	

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>GOA</u>				CTD FileName (None if data is live feed) <u>NW1702_200003</u>				
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID	
	DEG			DEG			DAY	MO	YR	HR	MIN	(°C)	(m)			
<u>11</u>	<u>59.0</u>	<u>3933</u>	<u>N</u>	<u>140.0</u>	<u>8039</u>	<u>W</u>	<u>04</u>	<u>JUL</u>	<u>17</u>	<u>20</u>	<u>30</u>	<u>12.0</u>	<u>150</u>	<u>3</u>	<u>4BE20</u>	
Sensor IDS (initially & swap-outs)														Weather:		CTD MAX DEPTH =
SBE type and S/N		SBE 9-11 w/duplicate sensors												<u>145</u>		
PRESS S/N		COMMENT: Difficult conditions, factors that may affect measurements or aid processing														
TEMP 1 & 2 S/Ns																
COND 1&2 S/Ns																
FLUOR S/N																
O2 (SBE43) S/N																
Transmiss S/N																
PAR S/N																
O2 SBE42S/N																

Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #
	DESIRED		SALT BU	Nut.BU									
1	<u>145</u>			<u>63</u>								1	
2	<u>50</u>			<u>62</u>		<u>250</u>						2	
3	<u>40</u>			<u>61</u>		<u>250</u>						3	
4	<u>30</u>			<u>60</u>		<u>250</u>						4	
5												5	
6												6	
7												7	
8												8	
9												9	
10	<u>20</u>			<u>59</u>		<u>250</u>						10	
11	<u>10</u>			<u>58</u>		<u>250</u>	<u>250</u>					11	
12	<u>0</u>			<u>57</u>		<u>250</u>						12	

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>GOA</u>				CTD FileName (None if data is live feed) <u>NW1702_goa_004</u>					
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID		
	DEG	MIN	SEC	DEG	MIN	SEC	DAY	MO	YR	HR	MIN	(°C)	(m)				
12	59	53.5		N	140	02.11	W	04	5	04	17	23	40	13.0	260	4	YBE10
Sensor IDS (initially & swap-outs)							Weather:							CTD MAX DEPTH =			
SBE type and S/N							SBE 9-11, w/duplicate sensors							201			
PRESS S/N							COMMENT: Difficult conditions, factors that may affect measurements or aid processing										
TEMP 1 & 2 S/Ns																	
COND 1 & 2 S/Ns																	
FLUOR S/N																	
O2 (SBE43) S/N																	
Transmiss S/N																	
PAR S/N																	
O2 SBE42S/N																	

Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #
	DESIRED		SALT BU	Nut.BU									
1	700			70									1
2	50			69		250							2
3	40			68		250							3
4	30			67		250				200			4
5													5
6													6
7													7
8													8
9													9
10	20			66		250				200			10
11	10			65		250	250						11
12	0			64		250				100			12

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>GOA</u>				CTD FileName (None if data is live feed) <u>NW1702909005</u>				
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID	
	DEG	MIN		DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(m)			
13	59.	6408	N	140.	4845	W	05	JUL	17	15	08	12.8	60	5	YBE0	
Sensor IDS (initially & swap-outs)														Weather:		CTD MAX DEPTH =
SBE type and S/N																55
PRESS S/N																
TEMP 1 & 2 S/Ns																
COND 1 & 2 S/Ns																
FLUOR S/N																
O2 (SBE43) S/N																
Transmiss S/N																
PAR S/N																
O2 SBE42S/N																
COMMENT: Difficult conditions, factors that may affect measurements or aid processing																
Dealing w/ winch sleeve at about 30m as upcast.																
Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #			
	DESIRED		SALT BH	Nut.BH												
1	55			77									1			
2	50			76		250							2			
3	40			75		250							3			
4	30			74		250							4			
5													5			
6													6			
7													7			
8													8			
9													9			
10	20			73		250							10			
11	10			72		250	250						11			
12	0			71		250							12			

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>GoA</u>				CTD FileName (None if data is live feed) <u>NW1702 goa 006</u>			
CTD consec CAST #		LATITUDE		LONGITUDE		GMT DATE (note if not)			GMT Time		Surface Temp		BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
		DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(m)			
14				N		W	05	JUL	1	7		80	6	YBCØ	
Sensor IDS (initially & swap-outs)						Weather:						CTD MAX DEPTH =			
SBE type and S/N						SBE 9-11 w/duplicate sensors									
PRESS S/N												COMMENT: Difficult conditions, factors that may affect measurements or aid processing CTD lost communication... ended rep diving to determine if wire compromised ~ 10m up. AND Cast @ #7 YBC1Ø			
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															
Nisk #	DEPTH DESIRED	Rosette Notes		Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve	Comments or other samples		Nisk #	
1	75			84										1	
2	50			63			250							2	
3	40			82			250							3	
4	30			81			250							4	
5														5	
6														6	
7														7	
8														8	
9														9	
10	20			80			250							10	
11	10			79			250	250						11	
12	0			78			250							12	

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>GOA</u>				CTD FileName (None if data is live feed) <u>NW1702_909 008</u>			
CTD consec CAST #	LATITUDE		LONGITUDE		GMT DATE (note if not)			GMT Time		Surface Temp		BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID	
	DEG		DEG		DAY	MO	YR	HR	MIN	(°C)	(m)				
15	59.	2176	N	140.	2607	W	05	JUL	17	23	40	12.5	122	8 BC20	
Sensor IDS (initially & swap-outs)					Weather:					CTD MAX DEPTH =					
SBE type and S/N					SBE 9-11 w/duplicate sensors					116					
PRESS S/N					COMMENT: Difficult conditions, factors that may affect measurements or aid processing										
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															
First cast after re-terminating.															
Bottle #4 @ 30m did not close at base, hung up.															
Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve	Comments or other samples	Nisk #			
	DESIRED		SALT BU	Nut.BU											
1	115	116		84								1			
2	50			83		250						2			
3	40			82		250		250				3			
4	30			81		250						4			
5												5			
6												6			
7												7			
8												8			
9												9			
10	20			80		250				200		10			
11	10			79		250	250			200		11			
12	0		29	78		250				200		12			

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>GOA</u>				CTD FileName (None if data is live feed) <u>NW1702309009</u>			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG	MIN		DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(m)		
<u>16</u>	<u>59.</u>	<u>0793</u>	<u>N</u>	<u>140.</u>	<u>4487</u>	<u>W</u>	<u>06</u>	<u>JUL</u>	<u>17</u>	<u>01</u>	<u>26</u>	<u>12.6</u>	<u>133</u>	<u>9</u>	<u>YCB30</u>
Sensor IDS (initially & swap-outs)										Weather:			CTD MAX DEPTH =		
SBE type and S/N										SBE 9-11 w/duplicate sensors			<u>125</u>		
PRESS S/N										COMMENT: Difficult conditions, factors that may affect measurements or aid processing <u>Wire jumped out of shieve again...</u> <u>This smashes wire, leading to previous</u> <u>need for re-terminating.</u> <u>Will probably need to do it again.</u>					
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															

Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #
	DESIRED		SALT BU	Nut.BU									
1	<u>125</u>			<u>91</u>									1
2	<u>50</u>			<u>90</u>		<u>250</u>							2
3	<u>40</u>			<u>89</u>		<u>250</u>							3
4	<u>30</u>			<u>88</u>		<u>250</u>							4
5													5
6													6
7													7
8													8
9													9
10	<u>20</u>			<u>87</u>		<u>250</u>							10
11	<u>10</u>			<u>86</u>		<u>250</u>	<u>250</u>						11
12	<u>0</u>			<u>85</u>		<u>250</u>							12

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>GoA</u>				CTD FileName (None if data is live feed) <u>NW1702_goa010</u>				
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID	
	DEG	MIN		DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(m)			
17	58.	9389	N	140.	6194	W	06	JUL	17	15	10	12.5	182	10	YBC40	
Sensor IDS (initially & swap-outs)														Weather:		CTD MAX DEPTH =
SBE type and S/N																177
PRESS S/N																
TEMP 1 & 2 S/Ns																
COND 1&2 S/Ns																
FLUOR S/N																
O2 (SBE43) S/N																
Transmiss S/N																
PAR S/N																
O2 SBE42S/N																
COMMENT: Difficult conditions, factors that may affect measurements or aid processing																
Nisk #	DEPTH	Rosette Notes	Hydro Team				GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #		
	DESIRED		SALT Btl	Nut.Btl												
1	177			98										1		
2	50			97		250								2		
3	40			96		250								3		
4	30			95		250								4		
5														5		
6														6		
7														7		
8														8		
9														9		
10	20			94		250								10		
11	10			93		250	250							11		
12	0			92		250								12		

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>GOA</u>				CTD FileName (None if data is live feed) <u>NW1702 goa 011</u>				
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID	
	DEG	MIN		DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(m)			
<u>18</u>	<u>58</u>	<u>8015</u>	<u>N</u>	<u>140</u>	<u>7963</u>	<u>W</u>	<u>06</u>	<u>50</u>	<u>L</u>	<u>17</u>	<u>18</u>	<u>01</u>	<u>12.5</u>	<u>203</u>	<u>11</u>	
Sensor IDS (initially & swap-outs)														Weather:		CTD MAX DEPTH =
SBE type and S/N		SBE 9-11 w/duplicate sensors												<u>198</u>		
PRESS S/N		COMMENT: Difficult conditions, factors that may affect measurements or aid processing														
TEMP 1 & 2 S/Ns																
COND 1&2 S/Ns																
FLUOR S/N																
O2 (SBE43) S/N																
Transmiss S/N																
PAR S/N																
O2 SBE42S/N																
Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #			
	DESIRED		SALT BU	Nut.BU												
1	<u>198</u>			<u>105</u>									1			
2	<u>50</u>			<u>104</u>		<u>250</u>							2			
3	<u>40</u>			<u>103</u>		<u>250</u>							3			
4	<u>30</u>			<u>102</u>		<u>250</u>				<u>200</u>			4			
5													5			
6													6			
7													7			
8													8			
9													9			
10	<u>20</u>			<u>101</u>		<u>250</u>				<u>200</u>			10			
11	<u>10</u>			<u>100</u>		<u>250</u>	<u>250</u>						11			
12	<u>0</u>			<u>99</u>		<u>250</u>				<u>200</u>			12			

VESSEL Northwest Explorer 2017						CRUISE ID Survey NW1702				PROJECT & LEG (if needed) leg GOA				CTD FileName (None if data is live feed) NW1702909012									
CTD consec CAST #		LATITUDE				LONGITUDE				GMT DATE (note if not)			GMT Time		Surface Temp		BOTTOM DEPTH		STATION NUMBER		STN. NAME/ID		
	DEG			MIN	DEG		MIN		DAY	MO	YR	HR	MIN	(°C)		(m)							
19	58	5216	N	141	1441	W	06	JUL	17	21	59	13.1	3466	12	YBC70								
Sensor IDS (initially & swap-outs)										Weather:												CTD MAX DEPTH =	
SBE type and S/N										SBE 9-11 w/duplicate sensors													
PRESS S/N										COMMENT: Difficult conditions, factors that may affect measurements or aid processing													
TEMP 1 & 2 S/Ns																							
COND 1&2 S/Ns																							
FLUOR S/N																							
O2 (SBE43) S/N																							
Transmiss S/N																							
PAR S/N																							
O2 SBE42S/N																							
Nisk #	DEPTH DESIRED	Rosette Notes	Hydro Team				GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #									
1	200			112										1									
2	50			111			250		250					2									
3	40			110			250							3									
4	30			109			250							4									
5														5									
6														6									
7														7									
8														8									
9														9									
10	20			108			250							10									
11	10			107			250	250						11									
12	0		30	106			250							12									

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>GOA</u>				CTD FileName (None if data is live feed) <u>NW1702 909 013</u>			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG	MIN		DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(m)		
20	58	2444	N	141	49.9	W	07	JUL	17	15	07	12.6	3576	13	YBC90
Sensor IDS (Initially & swap-outs)						Weather:						CTD MAX DEPTH =			
SBE type and S/N		SBE 9-11 w/duplicate sensors													
PRESS S/N		COMMENT: Difficult conditions, factors that may affect measurements or aid processing													
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															
Nisk #	DEPTH DESIRED	Rosette Notes	Hydro Team				GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #	
			SALT BH	Nut.BH											
1	200			119										1	
2	50			118			250							2	
3	40			117			250							3	
4	30			116			250				200			4	
5														5	
6														6	
7														7	
8														8	
9														9	
10	20			115			250				200			10	
11	10			114			250	250						11	
12	0			113			250				200			12	

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>GOA</u>				CTD FileName (None if data is live feed) <u>NW1702909014</u>			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG	MIN		DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(m)		
21	58	0635	N	140	967	W	07	JUL	17	18	58	13.0	3502	14	YBA70
Sensor IDS (initially & swap-outs)						Weather:						CTD MAX DEPTH =			
SBE type and S/N						SBE 9-11 w/duplicate sensors									
PRESS S/N						COMMENT: Difficult conditions, factors that may affect measurements or aid processing									
TEMP 1 & 2 S/Ns															
COND 1 & 2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															

Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #
	DESIRED		SALT BU	Nut.BU									
1	200		31	126									1
2	50			125		250		250					2
3	40			124		250							3
4	30			123		250							4
5													5
6													6
7													7
8													8
9													9
10	20			122		250							10
11	10			121		250	250						11
12	0			120		250							12

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>G0A</u>				CTD FileName (None if data is live feed) <u>NW1702 900 015</u>				
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID	
	DEG	MIN		DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(m)			
22	58.	3434	N	140.	6106	W	07	JUL	17	23	47	13.0	3300	15	Y0A70	
Sensor IDS (Initially & swap-outs)						Weather:									CTD MAX DEPTH =	
SBE type and S/N						SBE 9-11 w/duplicate sensors										
PRESS S/N						COMMENT: Difficult conditions, factors that may affect measurements or aid processing										
TEMP 1 & 2 S/Ns																
COND 1&2 S/Ns																
FLUOR S/N																
O2 (SBE43) S/N																
Transmiss S/N																
PAR S/N																
O2 SBE42S/N																
Nisk #	DEPTH	Rosette Notes	Hydro Team				GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #		
	DESIRED		SALT BU	Nut.BU												
1	200			133										1		
2	50			132		250								2		
3	40			131		250								3		
4	30			130		250								4		
5														5		
6														6		
7														7		
8														8		
9														9		
10	20			129		250								10		
11	10			128		250	250							11		
12	0			127		250					200			12		

VESSEL Northwest Explorer 2017				CRUISE ID Survey NW1702				PROJECT & LEG (if needed) leg G01				CTD FileName (None if data is live feed) NW1702016_g01_016			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG	MIN		DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(m)		
23	58.	6083	N	140.	2618	W	08	06	17	15	08	12.9	776	16	YBASO
Sensor IDS (initially & swap-outs)						Weather:						CTD MAX DEPTH =			
SBE type and S/N						SBE 9-11 w/duplicate sensors						200			
PRESS S/N						COMMENT: Difficult conditions, factors that may affect measurements or aid processing									
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															

Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #
	DESIRED		SALT BU	Nut.BU									
1	200			140									1
2	50			137		250							2
3	40			138		250							3
4	30			137		250							4
5													5
6													6
7													7
8													8
9													9
10	20			136		250							10
11	10			135		250	250						11
12	0			134		250							12

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>GDA</u>				CTD FileName (None if data is live feed) <u>NW1702gda017</u>			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG			DEG			DAY	MO	YR	HR	MIN	(°C)	(m)		
24	75.	7573	N	140.	0829	W	08	JUL	17	18	05	12.6	180	17	YB440
Sensor IDS (initially & swap-outs)				Weather:										CTD MAX DEPTH =	
SBE type and S/N				SBE 9-11 w/duplicate sensors										175	
PRESS S/N				COMMENT: Difficult conditions, factors that may affect measurements or aid processing											
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															
Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #		
	DESIRED		SALT BU	Nut.BU											
1	175			147									1		
2	50			146		250							2		
3	40			145		250							3		
4	30			144		250				200			4		
5													5		
6													6		
7													7		
8													8		
9													9		
10	20			143		250				200			10		
11	10			142		250	250		250				11		
12	0		32	141		250				200			12		

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>11W1702</u>				PROJECT & LEG (if needed) leg <u>C-0A</u>				CTD FileName (None if data is live feed) <u>11W1702gon018</u>			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG		MIN	DEG		MIN	DAY	MO	YR	HR	MIN	(°C)	(m)		
<u>25</u>	<u>56.1</u>	<u>8944</u>	<u>N</u>	<u>139.2</u>	<u>9045</u>	<u>W</u>	<u>08</u>	<u>JUL</u>	<u>17</u>	<u>20</u>	<u>47</u>	<u>13.0</u>	<u>158</u>	<u>18</u>	<u>YB430</u>
Sensor IDS (initially & swap-outs)						Weather:						CTD MAX DEPTH =			
SBE type and S/N						SBE 9-11 w/duplicate sensors						<u>153</u>			
PRESS S/N						COMMENT: Difficult conditions, factors that may affect measurements or aid processing									
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															
Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #		
	DESIRED		SALT BU	Nut.BU											
1	<u>153</u>			<u>154</u>									1		
2	<u>50</u>			<u>153</u>		<u>250</u>							2		
3	<u>40</u>			<u>152</u>		<u>250</u>							3		
4	<u>30</u>			<u>151</u>		<u>250</u>							4		
5													5		
6													6		
7													7		
8													8		
9													9		
10	<u>20</u>			<u>150</u>		<u>250</u>							10		
11	<u>10</u>			<u>149</u>		<u>250</u>	<u>250</u>						11		
12	<u>0</u>			<u>148</u>		<u>250</u>							12		

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>COA</u>				CTD FileName (None if data is live feed) <u>NW1702g09019</u>			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG	MIN		DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(m)		
<u>200</u>	<u>59.</u>	<u>0314</u>	<u>N</u>	<u>139.</u>	<u>7273</u>	<u>W</u>	<u>08</u>	<u>JUL</u>	<u>17</u>	<u>23</u>	<u>23</u>	<u>13.4</u>	<u>118</u>	<u>19</u>	<u>YBA20</u>
Sensor IDS (initially & swap-outs)						Weather:									CTD MAX DEPTH =
SBE type and S/N						SBE 9-11 w/duplicate sensors									<u>113</u>
PRESS S/N						COMMENT: Difficult conditions, factors that may affect measurements or aid processing									
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															
Nisk #	DEPTH DESIRED	Rosette Notes	Hydro Team				GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #	
			SALT BU	Nut.BU											
1	<u>113</u>			<u>161</u>										1	
2	<u>50</u>			<u>160</u>		<u>250</u>								2	
3	<u>40</u>			<u>159</u>		<u>250</u>								3	
4	<u>30</u>			<u>158</u>		<u>250</u>				<u>200</u>				4	
5														5	
6														6	
7														7	
8														8	
9														9	
10	<u>20</u>			<u>157</u>		<u>250</u>								10	
11	<u>10</u>			<u>156</u>		<u>250</u>	<u>250</u>			<u>200</u>				11	
12	<u>0</u>			<u>155</u>		<u>250</u>				<u>200</u>				12	

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>GDA</u>				CTD FileName (None if data is live feed) <u>nw1702_gda_020</u>			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG	MIN		DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(m)		
<u>27</u>	<u>59</u>	<u>1677</u>	<u>N</u>	<u>139</u>	<u>5416</u>	<u>W</u>	<u>09</u>	<u>JUL</u>	<u>17</u>	<u>15</u>	<u>08</u>	<u>13.2</u>	<u>135</u>	<u>20</u>	<u>YBA10</u>
Sensor IDS (initially & swap-outs)				Weather:										CTD MAX DEPTH =	
SBE type and S/N				SBE 9-11 w/duplicate sensors										<u>131</u>	
PRESS S/N				COMMENT: Difficult conditions, factors that may affect measurements or aid processing											
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															

Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #
	DESIRED		SALT Btl	Nut.Btl									
1	<u>130</u>	<u>131</u>		<u>168</u>									1
2	<u>50</u>			<u>167</u>		<u>250</u>							2
3	<u>40</u>			<u>166</u>		<u>250</u>							3
4	<u>30</u>			<u>165</u>		<u>250</u>							4
5													5
6													6
7													7
8													8
9													9
10	<u>20</u>			<u>164</u>		<u>250</u>							10
11	<u>10</u>			<u>163</u>		<u>250</u>	<u>250</u>						11
12	<u>0</u>			<u>162</u>		<u>250</u>							12

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>G0A</u>				CTD FileName (None if data is live feed) <u>NW1702009 021</u>			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG		MIN	DEG		MIN	DAY	MO	YR	HR	MIN	(°C)	(m)		
28	59.	3048	N	139.	3566	W	09	JUL	17	17	51	13.2	52	21	YBA
Sensor IDS (initially & swap-outs)				Weather:										CTD MAX DEPTH =	
SBE type and S/N				SBE 9-11 w/duplicate sensors										47	
PRESS S/N				COMMENT: Difficult conditions, factors that may affect measurements or aid processing											
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															
Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #		
	DESIRED		SALT Btl	Nut.Btl											
1													1		
2	47			174		250							2		
3	40			173		200							3		
4	30			172		250							4		
5													5		
6													6		
7													7		
8													8		
9													9		
10	20			171		250				200			10		
11	10			170		250	250			200			11		
12	0			169		250				200			12		

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg. <u>GOA</u>				CTD FileName (None if data is live feed) <u>NW170290022</u>			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG		MIN	DEG		MIN	DAY	MO	YR	HR	MIN	(°C)	(m)		
29	59		1160	N	138		09	JUL	17	21	10	12.2	53	22	GERØ
Sensor IDS (initially & swap-outs)							Weather:							CTD MAX DEPTH =	
SBE type and S/N							SBE 9-11 w/duplicate sensors							48	
PRESS S/N							COMMENT: Difficult conditions, factors that may affect measurements or aid processing								
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															
Nisk #	DEPTH	Rosette Notes	Hydro Team				GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #	
	DESIRED		SALT Btl	Nut.Btl											
1														1	
2	48			180			250							2	
3	40			177			250							3	
4	30			178			250							4	
5														5	
6														6	
7														7	
8														8	
9														9	
10	20			177			250							10	
11	10			176			250	250						11	
12	0			175			250							12	

VESSEL Northwest Explorer 2017				CRUISE ID Survey NW1702				PROJECT & LEG (if needed) leg GOA				CTD FileName (None if data is live feed) NW1702909023				
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID	
	DEG			DEG			DAY	MO	YR	HR	MIN	(°C)	(m)			
30	58,	9809	N	139,	0129	W	09	JUL	17	23	38	12.5	108	23	SER10	
Sensor IDS (initially & swap-outs)						Weather:									CTD MAX DEPTH =	
SBE type and S/N		SBE 9-11 w/duplicate sensors														
PRESS S/N																
TEMP 1 & 2 S/Ns																
COND 1&2 S/Ns																
FLUOR S/N																
O2 (SBE43) S/N																
Transmiss S/N																
PAR S/N																
O2 SBE42S/N																
COMMENT: Difficult conditions, factors that may affect measurements or aid processing																
Nisk #	DEPTH	Rosette Notes	Hydro Team				GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #		
	DESIRED		SALT Btl	Nut.Btl												
1	103		33	187										1		
2	50			186			250							2		
3	40			185			250							3		
4	30			184			250							4		
5														5		
6														6		
7														7		
8														8		
9														9		
10	20			183			250				200			10		
11	10			182			250	250			200			11		
12	0			181			250		250		200			12		

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg. <u>GOA</u>				CTD FileName (None if data is live feed) <u>NW1702goa024</u>			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG		MIN	DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(m)		
31	58.	8437	N	139.	1917	W	10	JUL	17	15	04	12.2	117	24	SER20
Sensor IDS (initially & swap-outs)				Weather:										CTD MAX. DEPTH =	
SBE type and S/N				SBE 9-11 w/duplicate sensors										112	
PRESS S/N				COMMENT: Difficult conditions, factors that may affect measurements or aid processing											
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															
Nisk #	DEPTH	Rosette Notes	Hydro Team				GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve	Comments or other samples		Nisk #	
	DESIRED		SALT Btl	Nut.Btl											
1	112			194										1	
2	50			193			250							2	
3	40			192			250							3	
4	30			191			250							4	
5														5	
6														6	
7														7	
8														8	
9														9	
10	20			190			250							10	
11	10			189			250	250						11	
12	0			188			250							12	

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>GOA</u>				CTD FileName (None if data is live feed) <u>NW1702309025</u>			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG	MIN		DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(m)		
32	58.1	7082	N	139.	3740	W	10	5	JUL	17	17 44	13.1	234	25	SEK70
Sensor IDS (initially & swap-outs)						Weather:						CTD MAX DEPTH =			
SBE type and S/N						SBE 9-11 w/duplicate sensors						260			
PRESS S/N						COMMENT: Difficult conditions, factors that may affect measurements or aid processing									
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															
Nisk #	DEPTH	Rosette Notes	Hydro Team				GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #	
	DESIRED		SALT Btl	Nut.Btl											
1	200			201										1	
2	50			200			250							2	
3	40			199			250							3	
4	30			198			250				200			4	
5														5	
6														6	
7														7	
8														8	
9														9	
10	20			197			250				200			10	
11	10			196			250	250						11	
12	0			195			250				200			12	

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>GDA</u>				CTD FileName (None if data is live feed) <u>NW1702g0a024</u>			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG		MIN	DEG		MIN	DAY	MO	YR	HR	MIN	(°C)	(m)		
33	58		5717	N	139		5530	W	10	JUL	17	2039	13.3	259	26 SER40
Sensor IDS (initially & swap-outs)							Weather:							CTD MAX DEPTH =	
SBE type and S/N							SBE 9-11 w/duplicate sensors							206	
PRESS S/N							COMMENT: Difficult conditions, factors that may affect measurements or aid processing								
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															

Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #
	DESIRED		SALT Btl	Nut.Btl									
1	200			208									1
2	50			207		250							2
3	40			206		250							3
4	30			205		250							4
5													5
6													6
7													7
8													8
9													9
10	20			204		250							10
11	10			203		250	250	250					11
12	0		34	202		250							12

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>NW1702</u>				CTD FileName (None if data is live feed) <u>NW1702g</u>			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG		MIN	DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(m)		
34	58.	4340	N	139.	7334	W	10	JUL	17	23	30	13.5	386	27	SERSO
Sensor IDS (initially & swap-outs)						Weather:						CTD MAX DEPTH =			
SBE type and S/N						SBE 9-11 w/duplicate sensors						200			
PRESS S/N						COMMENT: Difficult conditions, factors that may affect measurements or aid processing									
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															
Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #		
	DESIRED		SALT Btl	Nut.Btl											
1	200			215									1		
2	50			214		250							2		
3	40			213		250							3		
4	30			212		250				200			4		
5													5		
6													6		
7													7		
8													8		
9													9		
10	20			211		250				200			10		
11	10			210		250	250						11		
12	0			209		250				200			12		

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>GOA</u>				CTD FileName (None if data is live feed) <u>NW1702909028</u>			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG		MIN	DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(m)		
35	58	1576	N	140	0878	W	11	JUL	17	15	08	13.2	3392	28	SEA70
Sensor IDS (initially & swap-outs)						Weather:						CTD MAX DEPTH = 200			
SBE type and S/N		SBE 9-11 w/duplicate sensors													
PRESS S/N		COMMENT: Difficult conditions, factors that may affect measurements or aid processing													
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															
Nisk #	DEPTH	Rosette Notes	Hydro Team				GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #	
	DESIRED		SALT Btl	Nut.Btl											
1	200			222										1	
2	50			221			250							2	
3	40			220			250							3	
4	30			219			250							4	
5														5	
6														6	
7														7	
8														8	
9														9	
10	20			218			250							10	
11	10			217			250	250						11	
12	0			216			250							12	

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>GOA</u>				CTD FileName (None if data is live feed) <u>NW1702</u>			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG		MIN	DEG		MIN	DAY	MO	YR	HR	MIN	(°C)	(m)		
36	57.0	8825	N	140	4350	W	11	JUL	17	19	10	12.9	3344	29	SER90
Sensor IDS (initially & swap-outs)							Weather:							CTD MAX DEPTH =	
SBE type and S/N							SBE 9-11 w/duplicate sensors							200	
PRESS S/N							COMMENT: Difficult conditions, factors that may affect measurements or aid processing								
TEMP 1 & 2 S/Ns															
COND 1 & 2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															

Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #
	DESIRED		SALT Bl	Nut.Bl									
1	200		35	229									1
2	50			228		250							2
3	40			227		250							3
4	30			226		250				200			4
5													5
6													6
7													7
8													8
9													9
10	20			225		250		250		200			10
11	10			224		250	250						11
12	0			223		250				200			12

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg. <u>GOA</u>				CTD FileName (None if data is live feed) <u>NW1702309030</u>			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG	MIN		DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(m)		
<u>37</u>	<u>57.</u>	<u>6979</u>	<u>N</u>	<u>139.</u>	<u>9148</u>	<u>W</u>	<u>11</u>	<u>JUL</u>	<u>17</u>	<u>23</u>	<u>40</u>	<u>13.3</u>	<u>3308</u>	<u>30</u>	<u>SEQ90</u>
Sensor IDS (initially & swap-outs)						Weather:						CTD MAX DEPTH =			
SBE type and S/N						SBE 9-11 w/duplicate sensors						<u>201</u>			
PRESS S/N						COMMENT: Difficult conditions, factors that may affect measurements or aid processing									
TEMP 1 & 2 S/Ns															
COND 1 & 2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															

Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #
	DESIRED		SALT BU	Nut.BU									
1	<u>200</u>			<u>236</u>									1
2	<u>50</u>			<u>235</u>		<u>1.50</u>							2
3	<u>40</u>			<u>234</u>		<u>2.50</u>							3
4	<u>30</u>			<u>233</u>		<u>2.50</u>							4
5													5
6													6
7													7
8													8
9													9
10	<u>20</u>			<u>232</u>		<u>2.50</u>							10
11	<u>10</u>			<u>231</u>		<u>2.50</u>	<u>2.50</u>						11
12	<u>0</u>			<u>230</u>		<u>2.50</u>							12

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>GOA</u>				CTD FileName (None if data is live feed) <u>NW1702300031</u>				
CTD consec CAST #		LATITUDE		LONGITUDE		GMT DATE (note if not)			GMT Time		Surface Temp		BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID	
	DEG	MIN		DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(m)			
38	57	9722	N	139	5681	W	12	JUL	17	15	07	13.3	3167	81	SEQ70	
Sensor IDS (initially & swap-outs)						Weather:						CTD MAX DEPTH =				
SBE type and S/N		SBE 9-11 w/duplicate sensors												200		
PRESS S/N								COMMENT: Difficult conditions, factors that may affect measurements or aid processing								
TEMP 1 &2 S/Ns																
COND 1&2 S/Ns																
FLUOR S/N																
O2 (SBE43) S/N																
Transmiss S/N																
PAR S/N																
O2 SBE42S/N																
Nisk #	DEPTH	Rosette Notes	Hydro Team				GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #		
	DESIRED		SALT Btl	Nut.Btl												
1	200			243										1		
2	50			242			250							2		
3	40			241			250							3		
4	30			240			250				200			4		
5														5		
6														6		
7														7		
8														8		
9														9		
10	20			239			250				200			10		
11	10			238			250	250						11		
12	0			237			250				200			12		

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>GOA</u>				CTD FileName (None if data is live feed) <u>NW1702509032</u>			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG	MIN		DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(m)		
39	58.	2477	N	139.	2085	W	12	JUL	17	18	42	12.8	1280	32	SEQ50
Sensor IDS (initially & swap-outs)						Weather:						CTD MAX DEPTH = 200			
SBE type and S/N		SBE 9-11 w/duplicate sensors													
PRESS S/N															
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															
COMMENT: Difficult conditions, factors that may affect measurements or aid processing															
Nisk #	DEPTH	Rosette Notes	Hydro Team				GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #	
	DESIRED		SALT BH	NuLBH											
1	200			250										1	
2	50			249			250							2	
3	40			248			250							3	
4	30			247			250		250					4	
5														5	
6														6	
7														7	
8														8	
9														9	
10	20			246			250							10	
11	10			245			250	250						11	
12	0		30	244			250							12	

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>GDA</u>				CTD FileName (None if data is live feed) <u>NW1702909033</u>			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG		MIN	DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(m)		
<u>40</u>	<u>58.</u>	<u>3821</u>	<u>N</u>	<u>139.</u>	<u>0267</u>	<u>W</u>	<u>12</u>	<u>JUL</u>	<u>17</u>	<u>21</u>	<u>30</u>	<u>13.1</u>	<u>72</u>	<u>33</u>	<u>SEQ40</u>
Sensor IDS (initially & swap-outs)						Weather:						CTD MAX DEPTH =			
SBE type and S/N		SBE 9-11 w/duplicate sensors													
PRESS S/N		COMMENT: Difficult conditions, factors that may affect measurements or aid processing													
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															

Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #
	DESIRED		SALT BU	Nut.BU									
1	<u>67</u>			<u>257</u>									1
2	<u>50</u>			<u>256</u>		<u>250</u>							2
3	<u>40</u>			<u>255</u>		<u>250</u>							3
4	<u>30</u>			<u>254</u>		<u>290</u>				<u>200</u>			4
5													5
6													6
7													7
8													8
9													9
10	<u>20</u>			<u>253</u>		<u>250</u>				<u>200</u>			10
11	<u>10</u>			<u>252</u>		<u>250</u>	<u>250</u>						11
12	<u>0</u>			<u>251</u>		<u>250</u>				<u>200</u>			12

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>60A</u>				CTD FileName (None if data is live feed) <u>NW1702309034</u>			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG	MIN		DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(m)		
<u>41</u>	<u>58.</u>	<u>5202</u>	<u>N</u>	<u>138.</u>	<u>4492</u>	<u>W</u>	<u>13</u>	<u>JUL</u>	<u>17</u>	<u>15</u>	<u>04</u>	<u>13.2</u>	<u>97</u>	<u>B4</u>	<u>SEQ30</u>
Sensor IDS (Initially & swap-outs)						Weather:						CTD MAX DEPTH =			
SBE type and S/N						SBE 9-11 w/duplicate sensors						<u>93</u>			
PRESS S/N						COMMENT: Difficult conditions, factors that may affect measurements or aid processing									
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															

Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #
	DESIRED		SALT Bl	Nut.Bl									
1	<u>92</u>	<u>93</u>		<u>264</u>									1
2	<u>50</u>			<u>263</u>		<u>250</u>							2
3	<u>40</u>			<u>262</u>		<u>250</u>							3
4	<u>30</u>			<u>261</u>		<u>250</u>							4
5													5
6													6
7													7
8													8
9													9
10	<u>20</u>			<u>260</u>		<u>250</u>							10
11	<u>10</u>			<u>259</u>		<u>250</u>	<u>250</u>						11
12	<u>0</u>			<u>258</u>		<u>250</u>							12

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg. <u>GOA</u>				CTD FileName (None if data is live feed) <u>NW1702son035</u>			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG	MIN		DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(m)		
42	58	6526	N	138	6631	W	13	JUL	17	17	30	13.2	97	35	SEQ00
Sensor IDS (Initially & swap-outs)						Weather:						CTD MAX DEPTH =			
SBE type and S/N						SBE 9-11, w/duplicate sensors						92			
PRESS S/N						COMMENT: Difficult conditions, factors that may affect measurements or aid processing									
TEMP 1 &2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															

Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #
	DESIRED		SALT BH	NuLBH									
1	92		37	271								1	
2	50			270		250						2	
3	40			269		250		250				3	
4	30			268		250				200		4	
5												5	
6												6	
7												7	
8												8	
9												9	
10	20			267		250				200		10	
11	10			266		250	250					11	
12	0			265		250				210		12	

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>GOA</u>				CTD FileName (None if data is live feed) <u>NW1702909036</u>			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG	MIN		DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(m)		
43	58.	7909	N	138.	4766	W	13	JUL	17	20	18	13.7	97	36	SEQ10
Sensor IDS (initially & swap-outs)						Weather:						CTD MAX DEPTH =			
SBE type and S/N						SBE 9-11 w/duplicate sensors						92			
PRESS S/N						COMMENT: Difficult conditions, factors that may affect measurements or aid processing									
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															

Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #
	DESIRED		SALT BU	Nut.BU									
1	92			278								1	
2	50			277	250							2	
3	40			276	250							3	
4	30			275	250							4	
5												5	
6												6	
7												7	
8												8	
9												9	
10	20			274	250							10	
11	10			273	250	250						11	
12	0			272	250							12	

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>GAT</u>				CTD FileName (None if data is live feed) <u>NW170280037</u>			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG		MIN	DEG		MIN	DAY	MO	YR	HR	MIN	(°C)	(m)		
<u>44</u>	<u>58.</u>	<u>9234</u>	<u>N</u>	<u>138.</u>	<u>2884</u>	<u>W</u>	<u>13</u>	<u>JUL</u>	<u>17</u>	<u>22</u>	<u>51</u>	<u>13.8</u>	<u>56</u>	<u>37</u>	<u>SE00</u>
Sensor IDS (initially & swap-outs)						Weather:						CTD MAX DEPTH =			
SBE type and S/N						SBE 9-11 w/duplicate sensors						<u>52</u>			
PRESS S/N						COMMENT: Difficult conditions, factors that may affect measurements or aid processing									
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															

Nisk #	DEPTH	Rosette Notes	Hydro Team				GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #
	DESIRED		SALT Btl	Nut.Btl										
1														1
2	<u>50</u>			<u>284</u>		<u>250</u>								2
3	<u>40</u>			<u>283</u>		<u>250</u>								3
4	<u>30</u>			<u>282</u>		<u>250</u>				<u>200</u>				4
5														5
6														6
7														7
8														8
9														9
10	<u>20</u>			<u>281</u>		<u>250</u>								10
11	<u>10</u>			<u>280</u>		<u>250</u>	<u>250</u>			<u>200</u>				11
12	<u>0</u>			<u>279</u>		<u>250</u>				<u>200</u>				12

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW702</u>				PROJECT & LEG (if needed) leg <u>GOA</u>				CTD FileName (None if data is live feed) <u>NW702909038</u>			
CTD consec CAST #		LATITUDE		LONGITUDE		GMT DATE (note if not)			GMT Time		Surface Temp		BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG	MIN		DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(m)			
<u>45</u>	<u>57.</u>	<u>7507</u>	<u>N</u>	<u>138.</u>	<u>5905</u>	<u>W</u>	<u>15</u>	<u>JUL</u>	<u>1</u>	<u>7</u>	<u>1507</u>	<u>13.8</u>	<u>3009</u>	<u>38</u>	<u>SEM60</u>
Sensor IDS (initially & swap-outs)						Weather:						CTD MAX DEPTH =			
SBE type and S/N						SBE 9-11 w/duplicate sensors						<u>201</u>			
PRESS S/N						COMMENT: Difficult conditions, factors that may affect measurements or aid processing									
TEMP 1 & 2 S/Ns															
COND 1 & 2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															
Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #		
	DESIRED		SALT Btl	Nut.Btl											
1	<u>200</u>			<u>291</u>									1		
2	<u>50</u>			<u>270</u>		<u>250</u>							2		
3	<u>40</u>			<u>289</u>		<u>250</u>							3		
4	<u>30</u>			<u>288</u>		<u>250</u>							4		
5													5		
6													6		
7													7		
8													8		
9													9		
10	<u>20</u>			<u>287</u>		<u>250</u>							10		
11	<u>10</u>			<u>286</u>		<u>250</u>	<u>250</u>						11		
12	<u>0</u>			<u>285</u>		<u>250</u>							12		

VESSEL Northwest Explorer 2017				CRUISE ID Survey NW1702				PROJECT & LEG (if needed) leg 60A				CTD FileName (None if data is live feed) NW1702 909 039			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG		MIN	DEG		MIN	DAY	MO	YR	HR	MIN	(°C)	(m)		
46	57.	5831	N	139.	1267	W	15	JUL	17	19	04		3213	39	SEM80
Sensor IDS (initially & swap-outs)				Weather:										CTD MAX DEPTH =	
SBE type and S/N				SBE 9-11 w/duplicate sensors										200	
PRESS S/N				COMMENT: Difficult conditions, factors that may affect measurements or aid processing											
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															
Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve	Phyto Dup	Comments or other samples	Nisk #		
	DESIRED		SALT Btl	Nut.Btl											
1	200			298								1			
2	50			297		250		250				2			
3	40			296		250						3			
4	30			295		250				200		4			
5												5			
6												6			
7												7			
8												8			
9												9			
10	20			294		250				200		10			
11	10			293		250	250					11			
12	0		38	292		250				200	200	12			

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>GOA</u>				CTD FileName (None if data is live feed) <u>NW1702 909 040</u>				
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID	
	DEG		MIN	DEG		MIN	DAY	MO	YR	HR	MIN	(°C)	(m)			
47	57.	4109	N	139.	6579	W	15	JUL	17	23	04	14.0	2331	40	SEM100	
Sensor IDS (initially & swap-outs)														Weather:		CTD MAX DEPTH =
SBE type and S/N														SBE 9-11 w/duplicate sensors		200
PRESS S/N														COMMENT: Difficult conditions, factors that may affect measurements or aid processing		
TEMP 1 & 2 S/Ns																
COND 1&2 S/Ns																
FLUOR S/N																
O2 (SBE43) S/N																
Transmiss S/N																
PAR S/N																
O2 SBE42S/N																
Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #			
	DESIRED		SALT BU	Nut.BU												
1	200			305									1			
2	50			304		250							2			
3	40			303		250							3			
4	30			302		250							4			
5													5			
6													6			
7													7			
8													8			
9													9			
10	20			301		250							10			
11	10			300		250	250						11			
12	0			299		250							12			

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>G0A</u>				CTD FileName (None if data is live feed) <u>NW1702 999 043</u>			
CTD consec CAST #		LATITUDE		LONGITUDE		GMT DATE (note if not)			GMT Time		Surface Temp		BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
		DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(m)			
		56.	9861	N	136.	0401	W	18	JUL	17	15 10	13.5	119	43	SEE10
Sensor IDS (initially & swap-outs)				Weather:				CTD MAX DEPTH =							
SBE type and S/N				SBE 9-11 w/duplicate sensors				113							
PRESS S/N								COMMENT: Difficult conditions, factors that may affect measurements or aid processing <u>Start of Leg 2</u>							
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															

Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #
	DESIRED		SALT BU	Nut.BU									
1	114	113m	39	312									1
2	50			311		250							2
3	40			310		250							3
4	30			309		250							4
5													5
6													6
7													7
8													8
9													9
10	20			308		250							10
11	10			307		250	250						11
12	0			306		250							12

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>GOA</u>				CTD FileName (None if data is live feed) <u>NW17022009044</u>			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG	MIN		DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(m)		
	56.	9034	N	136.	2950	W	18	JUL	17	17	56	19.0	1514	44	SEE20
Sensor IDS (initially & swap-outs)						Weather:						CTD MAX DEPTH = <u>200</u>			
SBE type and S/N						SBE 9-11 w/duplicate sensors						COMMENT: Difficult conditions, factors that may affect measurements or aid processing			
PRESS S/N															
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															
Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve	Phyto DIP	Comments or other samples	Nisk #		
	DESIRED		SALT Btl	Nut.Btl											
1	200		39	319									1		
2	50			318		250							2		
3	40			317		250							3		
4	30			316		250				200			4		
5													5		
6													6		
7													7		
8													8		
9													9		
10	20			315		250				200	200		10		
11	10			314		250	250						11		
12	0			313		250				200	200		12		

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>GoA</u>				CTD FileName (None if data is live feed) <u>NW1702909 045</u>							
CTD consec CAST #		LATITUDE		LONGITUDE		GMT DATE (note if not)			GMT Time		Surface Temp		BOTTOM DEPTH		STATION NUMBER		STN. NAME/ID		
		DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(m)							
		56.	8172	N	136.	5526	W	18	JUL	17	2048	14.4	2107	45	JEE30				
Sensor IDS (initially & swap-outs)										Weather:									
SBE type and S/N										CTD MAX DEPTH =									
SBE 9-11 w/duplicate sensors										200									
PRESS S/N										COMMENT: Difficult conditions, factors that may affect measurements or aid processing									
TEMP 1 & 2 S/Ns										Accidentally fired 50m bottle @ 200m;									
COND 1&2 S/Ns										No 50m bottle!									
FLUOR S/N																			
O2 (SBE43) S/N																			
Transmiss S/N																			
PAR S/N																			
O2 SBE42S/N										★ Bottle 45, out of order, salinity									

Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #
	DESIRED		SALT BU	NuLBU									
1	200		45	320									1
2	50			325	250								2
3	40			324	250								3
4	30			323	250								4
5													5
6													6
7													7
8													8
9													9
10	20			322	250								10
11	10			321	250	250							11
12	0			320	250		250						12

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>G04</u>				CTD FileName (None if data is live feed) <u>NW1702g0a 046</u>				
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID	
	DEG			DEG			DAY	MO	YR	HR	MIN	(°C)	(m)			
	57.	1160	N	136.	8487	W	19	JUL	17	00	50	14.5	2324	46	SEB30	
Sensor IDS (initially & swap-outs)														Weather:		CTD MAX DEPTH =
SBE type and S/N																200
PRESS S/N																
TEMP 1 & 2 S/Ns																
COND 1&2 S/Ns																
FLUOR S/N																
O2 (SBE43) S/N																
Transmiss S/N																
PAR S/N																
O2 SBE42S/N																
COMMENT: Difficult conditions, factors that may affect measurements or aid processing																
Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #			
	DESIRED		SALT BU	Nut.BU												
1	200			333									1			
2	50			332		250							2			
3	40			331		250							3			
4	30			330		250				200			4			
5													5			
6													6			
7													7			
8													8			
9													9			
10	70			329		250				200			10			
11	10			328		250	250						11			
12	0			327		250				200			12			

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>GOA</u>				CTD FileName (None if data is live feed) <u>NW170290047</u>			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG	MIN	SEC	DEG	MIN	SEC	DAY	MO	YR	HR	MIN	(°C)	(m)		
	57.	2003		N 136.	5901		W 19	JUL	17	15	09	14.4	1701	47	SEG20
Sensor IDS (initially & swap-outs)				Weather:											
SBE type and S/N				CTD MAX DEPTH = <u>200</u>											
SBE 9-11 w/duplicate sensors															
PRESS S/N				COMMENT: Difficult conditions, factors that may affect measurements or aid processing											
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															

Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #
	DESIRED		SALT BH	Nut.BH									
1	200			340									1
2	50			339		250							2
3	40			338		250							3
4	30			337		250							4
5													5
6													6
7													7
8													8
9													9
10	20			336		250							10
11	10			335		250	250						11
12	0		39	334		250							12

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>GGA</u>				CTD FileName (None if data is live feed) <u>NW1702509048</u>			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG	MIN	SEC	DEG	MIN	SEC	DAY	MO	YR	HR	MIN	(°C)	(m)		
	57.	2833	N	136.	3322	W	19	JUL	17	17	37	13.8	402	48	SEG10
Sensor IDS (initially & swap-outs)							Weather:							CTD MAX DEPTH =	
SBE type and S/N							SBE 9-11 w/duplicate sensors							200	
PRESS S/N							COMMENT: Difficult conditions, factors that may affect measurements or aid processing								
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															
Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve	Phy DUP	Comments or other samples	Nisk #		
	DESIRED		SALT BT	Nut.BT											
1	200			347								1			
2	50			346		250						2			
3	40			345		250						3			
4	30			344		250				200		4			
5												5			
6												6			
7												7			
8												8			
9												9			
10	20			343		250				200	200	10			
11	10			342		250						11			
12	0			341		250				200		12			

VESSEL Northwest Explorer 2017				CRUISE ID Survey NW1702				PROJECT & LEG (if needed) leg G01				CTD FileName (None if data is live feed) NW1702909 049			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG			DEG			DAY	MO	YR	HR	MIN	(°C)	(m)		
	57.	3662	N	136.	0711	W	19	JUL	17	20	28	14.1	102	49	SEGO
Sensor IDS (initially & swap-outs)				Weather:											
SBE type and S/N				CTD MAX. DEPTH = 94											
SBE 9-11 w/duplicate sensors				COMMENT: Difficult conditions, factors that may affect measurements or aid processing											
PRESS S/N															
TEMP 1 &2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															
Nisk #	DEPTH DESIRED	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #		
1	94	49	354	40		250							1		
2	50		353			250							2		
3	40		352			250							3		
4	30		351			250							4		
5													5		
6													6		
7													7		
8													8		
9													9		
10	20		350			250							10		
11	10		349			250	250	250					11		
12	0		348			250							12		



VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>GOA</u>				CTD FileName (None if data is live feed) <u>NW1702 9 09 050</u>			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG	MIN		DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(m)		
	57.	6608	N	136.	3451	W	19	JUL	17	23	47	13.7	80	50	SEIØ
Sensor IDS (initially & swap-outs)				Weather:										CTD MAX. DEPTH =	
SBE type and S/N				SBE 9-11 w/duplicate sensors										75	
PRESS S/N				COMMENT: Difficult conditions, factors that may affect measurements or aid processing											
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															
Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve	Comments or other samples	Nisk #			
	DESIRED		SALT BT	Nut.BT											
1	75			361								1			
2	50			360		250						2			
3	40			359		250						3			
4	30			358		250				200		4			
5												5			
6												6			
7												7			
8												8			
9												9			
10	20			357		250				200		10			
11	10			356		250	250	250				11			
12	0			355		250				200		12			

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>Gat</u>				CTD FileName (None if data is live feed) <u>NW1702 goa 051</u>			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG	MIN		DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(m)		
	57.	5827	N	136.	6301	W	20	JUL	17	15	09	14.1	632	51	SET10
Sensor IDS (initially & swap-outs)				Weather:											CTD MAX. DEPTH =
SBE type and S/N				SBE 9-11 w/duplicate sensors											200
PRESS S/N				COMMENT: Difficult conditions, factors that may affect measurements or aid processing											
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															
Nisk #	DEPTH DESIRED	Rosette Notes		Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #	
1	200	199		368										1	
2	50			367			250							2	
3	40			366			250							3	
4	30			365			250							4	
5														5	
6														6	
7														7	
8														8	
9														9	
10	20			364			250							10	
11	10			363			250	250						11	
12	0			362			250							12	

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>SA</u>				CTD FileName (None if data is live feed) <u>NW1702909 05-2</u>			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG	MIN		DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(m)		
	57,	5014	N	136,	8970	W	20	JUL	17	18	09	14.4	1794	52	SET20
Sensor IDS (initially & swap-outs)				Weather:										CTD MAX DEPTH =	
SBE type and S/N				SBE 9-11 w/duplicate sensors										200	
PRESS S/N				COMMENT: Difficult conditions, factors that may affect measurements or aid processing											
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															
Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve	Phyto Dup	Comments or other samples	Nisk #		
	DESIRED		SALT Btl	Nut.Btl											
1	200			375									1		
2	50			374		250							2		
3	40			373		250							3		
4	30			372		250							4		
5													5		
6													6		
7													7		
8													8		
9													9		
10	20			371		250				200	200		10		
11	10			370		250	250			200			11		
12	0			369		250				200			12		

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>GOA</u>				CTD FileName (None if data is live feed) <u>NW1702_goa_053</u>			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG	MIN		DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(m)		
	57.	4184	N	137.	1714	W	20	JUL	17	21	03	14.1	2250	53	SET30
Sensor IDS (Initially & swap-outs)							Weather:							CTD MAX. DEPTH =	
SBE type and S/N							SBE 9-11 w/duplicate sensors							200	
PRESS S/N							COMMENT: Difficult conditions, factors that may affect measurements or aid processing								
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															
Nisk #	DEPTH	Rosette Notes		Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #	
	DESIRED			SALT BH	Nut.BH										
1	200			40	382									1	
2	50				381		250							2	
3	40				380		250							3	
4	30				379		250							4	
5														5	
6														6	
7														7	
8														8	
9														9	
10	20				378		250		250					10	
11	10				377		250	250						11	
12	0			41	376		250							12	

VESSEL Northwest Explorer 2017				CRUISE ID Survey NW1702				PROJECT & LEG (if needed) leg GOA				CTD FileName (None if data is live feed) NW1702 goa 054			
CTD consec CAST #		LATITUDE		LONGITUDE		GMT DATE (note if not)			GMT Time		Surface Temp		BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
		DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(m)			
		57.	3373	N	137.	4308	W	20	JUL	17	23	55	13.9	2740	54 SEI40
Sensor IDS (initially & swap-outs)						Weather:									CTD MAX DEPTH =
SBE type and S/N						SBE 9-11 w/duplicate sensors									200
PRESS S/N						COMMENT: Difficult conditions, factors that may affect measurements or aid processing									
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															
Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #		
	DESIRED		SALT Btl	Nut. Btl											
1	200			387		250							1		
2	50			388									2		
3	40			387		250							3		
4	30			386		250				200			4		
5													5		
6													6		
7													7		
8													8		
9													9		
10	20			385		250				200			10		
11	10			384		250	250						11		
12	0			383		250				200			12		

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>GDA</u>				CTD FileName (None if data is live feed) <u>NW1702909 055</u>			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG	MIN		DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(m)		
		57. 1761	N		137. 9733	W	21	JUL	17	15	08	13.2	2837	55	2E160
Sensor IDS (initially & swap-outs)						Weather:						CTD MAX. DEPTH =			
SBE type and S/N						SBE 9-11 w/duplicate sensors						200			
PRESS S/N						COMMENT: Difficult conditions, factors that may affect measurements or aid processing									
TEMP 1 & 2 S/Ns															
COND 1 & 2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmits S/N															
PAR S/N															
O2 SBE42S/N															
Nisk #	DEPTH	Rosette Notes		Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #	
	DESIRED			SALT BH	Nut.BH										
1	200				396									1	
2	50				395		250							2	
3	40				394		250							3	
4	30				393		250				700			4	
5														5	
6														6	
7														7	
8														8	
9														9	
10	20				392		250				200			10	
11	10				391		250	250						11	
12	0				390		250				200			12	

VESSEL Northwest Explorer 2017				CRUISE ID Survey NW1702				PROJECT & LEG (if needed) leg GOA				CTD FileName (None if data is live feed) NW1702_goa_056				
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID	
	DEG	MIN		DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(m)			
	57.	0137	N	138.	5032	W	21	JUL	17	19	07	12.9	3085	56	SEI80	
Sensor IDS (Initially & swap-outs)														Weather:		CTD MAX. DEPTH =
SBE type and S/N																200
SBE 9-11 w/duplicate sensors																
PRESS S/N																COMMENT: Difficult conditions, factors that may affect measurements or aid processing
TEMP 1 & 2 S/Ns																
COND 1&2 S/Ns																
FLUOR S/N																
O2 (SBE43) S/N																
Transmiss S/N																
PAR S/N																
O2 SBE42S/N																
Nisk #	DEPTH DESIRED	Rosette Notes		Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve	Phyto DUP	Comments or other samples	Nisk #		
1	200			403										1		
2	50			402			250							2		
3	40			401			250							3		
4	30			400			250				200	200		4		
5														5		
6														6		
7														7		
8														8		
9														9		
10	20			399			250				200			10		
11	10			398			250	250			20			11		
12	0			397			250				200			12		

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>GOA</u>				CTD FileName (None if data is live feed) <u>NW1702509057</u>					
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID		
	DEG		<u>MIN</u>	DEG		<u>MIN</u>	DAY	MO	YR	HR	MIN	(°C)	(m)				
		<u>56.</u>	<u>8417</u>	<u>N</u>		<u>139.</u>	<u>0275</u>	<u>W</u>	<u>21</u>	<u>5</u>	<u>06</u>	<u>17</u>	<u>23</u>	<u>26</u>	<u>3291</u>	<u>57</u>	<u>SEI100</u>
Sensor IDS (Initially & swap-outs)							Weather:							CTD MAX DEPTH =			
SBE type and S/N							SBE 9-11 w/duplicate sensors							<u>700</u>			
PRESS S/N							COMMENT: Difficult conditions, factors that may affect measurements or aid processing <u>30 knots, large seas</u> <u>Only a profile to 200m.</u> <u>No water collected b/c too much slack</u> <u>occurring and concern wire would jump out</u> <u>of shive.</u>										
TEMP 1 & 2 S/Ns																	
COND 1 & 2 S/Ns																	
FLUOR S/N																	
O2 (SBE43) S/N																	
Transmiss S/N																	
PAR S/N																	
O2 SBE42S/N																	

Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #
	DESIRED		SALT BH	Nut.BH									
1	<u>200</u>			<u>410</u>								1	
2	<u>50</u>			<u>409</u>		<u>250</u>						2	
3	<u>40</u>			<u>408</u>		<u>250</u>						3	
4	<u>30</u>			<u>407</u>		<u>250</u>		<u>250</u>				4	
5												5	
6												6	
7												7	
8												8	
9												9	
10	<u>20</u>			<u>406</u>		<u>250</u>						10	
11	<u>10</u>			<u>405</u>		<u>250</u>	<u>250</u>					11	
12	<u>0</u>		<u>41</u>	<u>404</u>		<u>250</u>						12	

VESSEL Northwest Explorer 2017				CRUISE ID Survey NW1702				PROJECT & LEG (if needed) leg (r0A				CTD FileName (None if data is live feed) NW1702g0a058			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG		MIN	DEG		MIN	DAY	MO	YR	HR	MIN	(°C)	(m)		
	57.	12	47	N	139.	33	22	JUL	17	15	07	13.0	3370	58	SEK100
Sensor IDS (initially & swap-outs)				Weather:										CTD MAX DEPTH =	
SBE type and S/N				SBE 9-11 w/duplicate sensors										200	
PRESS S/N				COMMENT: Difficult conditions, factors that may affect measurements or aid processing											
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															
Nisk #	DEPTH	Rosette Notes		Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve	Phyto dup	Comments or other samples	Nisk #	
	DESIRED			SALT BH	Nut.BH										
1	200				410									1	
2	50				409		250							2	
3	40				408		250							3	
4	30				407		250		250		200			4	
5														5	
6														6	
7														7	
8														8	
9														9	
10	20				406		250				200			10	
11	10				405		250	250						11	
12	0			41	404		250				200	200		12	

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>G04</u>				CTD FileName (None if data is live feed) <u>NW1702g04 057</u>						
CTD consec CAST #		LATITUDE		LONGITUDE		GMT DATE (note if not)			GMT Time		Surface Temp		BOTTOM DEPTH		STATION NUMBER		STN. NAME/ID	
		DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(m)						
		57.	257	N	138.	8069	W	22	JUL	17	19	07	13.2	3129	59	SEK80		
Sensor IDS (initially & swap-outs)										Weather:								
SBE type and S/N										CTD MAX DEPTH =								
SBE 9-11 w/duplicate sensors										200								
PRESS S/N										COMMENT: Difficult conditions, factors that may affect measurements or aid processing								
TEMP 1 & 2 S/Ns																		
COND 1&2 S/Ns																		
FLUOR S/N																		
O2 (SBE43) S/N																		
Transmiss S/N																		
PAR S/N																		
O2 SBE42S/N																		
Nisk #	DEPTH DESIRED	Rosette Notes	Hydro Team				GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #				
1	200			417										1				
2	50			416			250							2				
3	40			415			250							3				
4	30			414			250							4				
5														5				
6														6				
7														7				
8														8				
9														9				
10	20			413			250							10				
11	10			412			250	250						11				
12	0			411			250							12				

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>GON</u>				CTD FileName (None if data is live feed) <u>NW1702_01060</u>			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG	MIN		DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(m)		
	57.	4631	N	138,	2740	W	22	JUL	17	23	15	14.0	2951	60	SEK60
Sensor IDS (initially & swap-outs)						Weather:						CTD MAX DEPTH =			
SBE type and S/N						SBE 9-11 w/duplicate sensors						201			
PRESS S/N						COMMENT: Difficult conditions, factors that may affect measurements or aid processing X Formalin added the following morning, was forgotten									
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															
Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto ☒ preserve		Comments or other samples	Nisk #		
	DESIRED		SALT BH	Nut.BH											
1	200			424									1		
2	50			423		250							2		
3	40			422		250							3		
4	30			421		250				200			4		
5													5		
6													6		
7													7		
8													8		
9													9		
10	20			420		250				200			10		
11	10			419		250	250						11		
12	0			418		250				200			12		

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>GOA</u>				CTD FileName (None if data is live feed) <u>NW1702 goa 061</u>			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG	MIN		DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(m)		
	57.	6306	N	137.	7387	W	23	JUL	17	15	03	14.6	2551	61	SEK40
Sensor IDS (initially & swap-outs)				Weather:										CTD MAX DEPTH = 200	
SBE type and S/N				SBE 9-11 w/duplicate sensors											
PRESS S/N															
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															
COMMENT: Difficult conditions, factors that may affect measurements or aid processing															
Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #		
	DESIRED		SALT Btl	Nut.Btl											
1	250			431									1		
2	50			430		250							2		
3	40			429		250							3		
4	30			428		250							4		
5													5		
6													6		
7													7		
8													8		
9													9		
10	20			427		250							10		
11	10			426		250	250						11		
12	0			425		250							12		

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>GDA</u>				CTD FileName (None if data is live feed) <u>NW1702 2501 062</u>					
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID		
	DEG		<u>MNC</u>	DEG		<u>MNP</u>	DAY	MO	YR	HR	MIN	(°C)	(m)				
		<u>57.</u>	<u>7112</u>	<u>N</u>	<u>137.</u>	<u>4680</u>	<u>W</u>	<u>23</u>	<u>JUL</u>	<u>1</u>	<u>7</u>	<u>17</u>	<u>59</u>	<u>14.5</u>	<u>2117</u>	<u>62</u>	<u>SEK30</u>
Sensor IDS (initially & swap-outs)						Weather:						CTD MAX DEPTH =					
SBE type and S/N						SBE 9-11 w/duplicate sensors											
PRESS S/N												COMMENT: Difficult conditions, factors that may affect measurements or aid processing					
TEMP 1 & 2 S/Ns																	
COND 1&2 S/Ns																	
FLUOR S/N																	
O2 (SBE43) S/N																	
Transmiss S/N																	
PAR S/N																	
O2 SBE42S/N																	
Nisk #	DEPTH DESIRED	Rosette Notes		Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve	Phyto DUP	Comments or other samples	Nisk #			
1	<u>200</u>			<u>438</u>										1			
2	<u>50</u>			<u>437</u>			<u>250</u>							2			
3	<u>40</u>			<u>436</u>			<u>250</u>							3			
4	<u>30</u>			<u>435</u>			<u>250</u>				<u>200</u>	<u>200</u>		4			
5														5			
6														6			
7														7			
8														8			
9														9			
10	<u>20</u>			<u>434</u>			<u>250</u>				<u>200</u>	<u>200</u>		10			
11	<u>10</u>			<u>433</u>			<u>250</u>	<u>250</u>						11			
12	<u>0</u>			<u>432</u>			<u>250</u>				<u>200</u>			12			

VESSEL Northwest Explorer 2017						CRUISE ID Survey NW1702						PROJECT & LEG (if needed) leg Cat						CTD FileName (None if data is live feed) NW1702_goa_063							
CTD consec CAST #		LATITUDE				LONGITUDE				GMT DATE (note if not)			GMT Time		Surface Temp		BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID						
	DEG		MIN		DEG		MIN		DAY	MO	YR	HR	MIN	(°C)	(m)										
	57.	9941	N	137.	1939	W	23	JUL	1	7	2055	14.9	275	63	SEK20										
Sensor IDS (initially & swap-outs)										Weather:										CTD MAX. DEPTH =					
SBE type and S/N										SBE 9-11 w/duplicate sensors										200					
PRESS S/N										COMMENT: Difficult conditions, factors that may affect measurements or aid processing															
TEMP 1 &2 S/Ns																									
COND 1&2 S/Ns																									
FLUOR S/N																									
O2 (SBE43) S/N																									
Transmiss S/N																									
PAR S/N																									
O2 SBE42S/N																									
Nisk #	DEPTH		Rosette Notes		Hydro Team				GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #									
	DESIRED				SALT BH	Nut.BH																			
1	200				42	445										1									
2	50					444			250							2									
3	40					443			250		250					3									
4	30					442			250							4									
5																5									
6																6									
7																7									
8																8									
9																9									
10	20					441			250							10									
11	10					440			250	250						11									
12	0					439			250							12									

VESSEL Northwest Explorer 2017				CRUISE ID Survey NW1702				PROJECT & LEG (if needed) leg GOA				CTD FileName (None if data is live feed) NW1702_goa_064			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG			DEG			DAY	MO	YR	HR	MIN	(°C)	(m)		
		57.	8730	N		136.	23	JUL	17	23	45	14.5	461	64	SEK10
Sensor IDS (initially & swap-outs)				Weather:											
SBE type and S/N				SBE 9-11 w/duplicate sensors											
PRESS S/N				COMMENT: Difficult conditions, factors that may affect measurements or aid processing											
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															
Nisk #	DEPTH DESIRED	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #		
1	200				452								1		
2	50				451	250							2		
3	40				450	250							3		
4	30				449	200							4		
5													5		
6													6		
7													7		
8													8		
9													9		
10	20				448	250				200			10		
11	10				447	250	250			200			11		
12	0				446	250				200			12		

VESSEL Northwest Explorer 2017				CRUISE ID Survey NW1702				PROJECT & LEG (if needed) leg G0A				CTD FileName (None if data is live feed) NW1702_g0a_065			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG		MIN	DEG		MIN	DAY	MO	YR	HR	MIN	(°C)	(m)		
	57,	9519	N	136,	6488	W	24	JUL	17	15	02	13.7	95	65	SEK8
Sensor IDS (initially & swap-outs)				Weather:										CTD MAX DEPTH =	
SBE type and S/N				SBE 9-11 w/duplicate sensors										90	
PRESS S/N				COMMENT: Difficult conditions, factors that may affect measurements or aid processing											
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															
Nisk #	DEPTH DESIRED	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #		
1	90			459									1		
2	50			458		250							2		
3	40			457		250							3		
4	30			456		250							4		
5													5		
6													6		
7													7		
8													8		
9													9		
10	20			455		250							10		
11	10			454		250	250						11		
12	0			453		250							12		

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>G04</u>				CTD FileName (None if data is live feed) <u>NW1702 g04 066</u>			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG	MIN		DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(m)		
	58.	2438	N	136.	9526	W	24	JUL	17	1818		13.1	156	66	SEMP
Sensor IDS (initially & swap-outs)				Weather:										CTD MAX DEPTH =	
SBE type and S/N				SBE 9-11 w/duplicate sensors										150	
PRESS S/N				COMMENT: Difficult conditions, factors that may affect measurements or aid processing											
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															
Nisk #	DEPTH DESIRED	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve	Phyto SIP	Comments or other samples	Nisk #		
1	150				466								1		
2	50				465	250							2		
3	40				464	250							3		
4	30				463	250							4		
5													5		
6													6		
7													7		
8													8		
9													9		
10	20				462	250				200	200		10		
11	10				461	250	250			200			11		
12	0				460	250				200			12		

VESSEL Northwest Explorer 2017				CRUISE ID Survey NW1702				PROJECT & LEG (if needed) leg GOA				CTD FileName (None if data is live feed) NW17022 on 067			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG			DEG			DAY	MO	YR	HR	MIN	(°C)	(m)		
	58.	1618	N	137.	2268	W	24	JUL	17	21	01	14.0	122	67	SEM10
Sensor IDS (initially & swap-outs)							Weather:							CTD MAX DEPTH =	
SBE type and S/N							SBE 9-11 w/duplicate sensors							115	
PRESS S/N							COMMENT: Difficult conditions, factors that may affect measurements or aid processing								
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															

Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #
	DESIRED		SALT BU	Nut.Btl									
1	115			477								1	
2	50			472		250		250				2	
3	40			471		250						3	
4	30			470		250						4	
5												5	
6												6	
7												7	
8												8	
9	30											9	
10	20			469		250						10	
11	10			468		250	250					11	
12	0		43	467		250						12	

VESSEL Northwest Explorer 2017				CRUISE ID Survey NW1702				PROJECT & LEG (if needed) leg G2A				CTD FileName (None if data is live feed) NW1702 2009 068			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG	MIN		DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(m)		
	58	0805	N	137	5069	W	24	JUL	17	23	32	14.7	145	68	SEM20
Sensor IDS (initially & swap-outs)							Weather:							CTD MAX DEPTH =	
SBE type and S/N							SBE 9-11 w/duplicate sensors							140	
PRESS S/N							COMMENT: Difficult conditions, factors that may affect measurements or aid processing								
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															
Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #		
	DESIRED		SALT BH	Nut.BH											
1	140			450									1		
2	50			479		250							2		
3	40			478		250							3		
4	20			477		250				200			4		
5													5		
6													6		
7													7		
8													8		
9													9		
10	20			476		250				200			10		
11	10			475		250	250						11		
12	0			474		250				200			12		

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>GA</u>				CTD FileName (None if data is live feed) <u>NW1702.you 069</u>			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG	MIN		DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(m)		
		57. 999	N		137. 7755	W	25	JUL	17	15	03	14.4	176	69	SEM30
Sensor IDS (initially & swap-outs)						Weather:						CTD MAX DEPTH =			
SBE type and S/N						SBE 9-11 w/duplicate sensors						170			
PRESS S/N						COMMENT: Difficult conditions, factors that may affect measurements or aid processing									
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															

Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #
	DESIRED		SALT BH	Nut.BH									
1	170		44	487									1
2	50			486		250							2
3	40			485		250							3
4	30			484		250							4
5													5
6													6
7													7
8													8
9													9
10	20			483		250							10
11	10			482		250	250		250				11
12	0			481		250							12

VESSEL Northwest Explorer 2017				CRUISE ID Survey NW1702				PROJECT & LEG (if needed) leg 12A				CTD FileName (None if data is live feed) NW1702_goa_070						
CTD consec CAST #		LATITUDE		LONGITUDE		GMT DATE (note if not)			GMT Time		Surface Temp		BOTTOM DEPTH		STATION NUMBER		STN. NAME/ID	
		DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(m)						
		57.	9166	N	138.	0520	W	25	JUL	17	17 36	14.5	1038	70	SEM40			
Sensor IDS (initially & swap-outs)										Weather:								
SBE type and S/N										CTD MAX DEPTH =								
SBE 9-11 w/duplicate sensors										200								
PRESS S/N										COMMENT: Difficult conditions, factors that may affect measurements or aid processing Last station of GOA survey.								
TEMP 1 & 2 S/Ns																		
COND 1&2 S/Ns																		
FLUOR S/N																		
O2 (SBE43) S/N																		
Transmiss S/N																		
PAR S/N																		
O2 SBE42S/N																		

Nisk #	DEPTH	Rosette Notes	Hydro Team				GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve	Phyto DUP	Comments or other samples	Nisk #
	DESIRED		SALT BU	Nut.BU										
1	200			494										1
2	50			493		250								2
3	40			492		250								3
4	30			491		250				200				4
5														5
6														6
7														7
8														8
9														9
10	20			490		250				200				10
11	10			489		250								11
12	0			488		250				200	200			12

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>G04</u>				CTD FileName (None if data is live feed) <u>NW1702300071</u>			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG		MIN	DEG		MIN	DAY	MO	YR	HR	MIN	(°C)	(m)		
		57.	8538	N	137.	6245	W	27	JUL	17	15 06		1088	71	SEL30
Sensor IDS (initially & swap-outs)							Weather:							CTD MAX DEPTH =	
SBE type and S/N							SBE 9-11 w/duplicate sensors							200	
PRESS S/N							COMMENT: Difficult conditions, factors that may affect measurements or aid processing								
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															

Nisk #	DEPTH	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #
	DESIRED		SALT BH	Nut.BH									
1	200			501									1
2	50			500		250							2
3	40			499		250							3
4	30			498		250							4
5													5
6													6
7													7
8													8
9													9
10	20			497		250							10
11	10			496		250	250						11
12	0			495		250							12

VESSEL Northwest Explorer 2017				CRUISE ID Survey NW1702				PROJECT & LEG (if needed) leg GOA				CTD FileName (None if data is live feed) NW1702 30 a 072			
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG	MIN		DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(m)		
	57.	9377	N	137.	3504	W	27	JUL	17	17	48	14.5	164	72	SEL20
Sensor IDS (initially & swap-outs)													Weather:		CTD MAX DEPTH =
SBE type and S/N													SBE 9-11 w/duplicate sensors		160
PRESS S/N													COMMENT: Difficult conditions, factors that may affect measurements or aid processing		
TEMP 1 & 2 S/Ns															
COND 1&2 S/Ns															
FLUOR S/N															
O2 (SBE43) S/N															
Transmiss S/N															
PAR S/N															
O2 SBE42S/N															
Nisk #	DEPTH DESIRED	Rosette Notes	Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve	Phyte dup	Comments or other samples	Nisk #		
1	160			506									1		
2	50			507		250							2		
3	40			506		250							3		
4	30			505		250				200	200		4		
5													5		
6													6		
7													7		
8													8		
9													9		
10	20			504		250				200			10		
11	10			503		250	250						11		
12	0			502		250				200			12		

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>GOA</u>				CTD FileName (None if data is live feed) <u>NW1702_goa_073</u>				
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE (note if not)			GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID	
	DEG	MIN		DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(m)			
	58.	0107	N	137.	0731	W	27	JUL	17	21	01	14.7	373	73	SEL10	
Sensor IDS (initially & swap-outs)														Weather:		CTD MAX. DEPTH =
SBE type and S/N																200
SBE 9-11 w/duplicate sensors																
PRESS S/N																COMMENT: Difficult conditions, factors that may affect measurements or aid processing
TEMP 1 & 2 S/Ns																
COND 1 & 2 S/Ns																
FLUOR S/N																
O2 (SBE43) S/N																
Transmiss S/N																
PAR S/N																
O2 SBE42S/N																
Nisk #	DEPTH	Rosette Notes		Hydro Team			GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #		
	DESIRED			SALT Btl	Nut.Btl											
1	200				515									1		
2	50				514		250							2		
3	40				513		250							3		
4	30				512		250							4		
5														5		
6														6		
7														7		
8														8		
9														9		
10	20				511		250							10		
11	10				510		250	250						11		
12	0			46	509		250		250		200			12		

VESSEL Northwest Explorer 2017				CRUISE ID Survey <u>NW1702</u>				PROJECT & LEG (if needed) leg <u>60A</u>				CTD FileName (None if data is live feed) <u>NW170290-074</u>							
CTD consec CAST #		LATITUDE		LONGITUDE		GMT DATE (note if not)			GMT Time		Surface Temp		BOTTOM DEPTH		STATION NUMBER		STN. NAME/ID		
		DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(m)							
		58.	0952 N	136.	7958 W	27	JUL	17	23	39	15.0	229	74	SELO					
Sensor IDS (initially & swap-outs)										Weather:									
SBE type and S/N										CTD MAX DEPTH = <u>200</u>									
SBE 9-11 w/duplicate sensors																			
PRESS S/N										COMMENT: Difficult conditions, factors that may affect measurements or aid processing									
TEMP 1 & 2 S/Ns																			
COND 1&2 S/Ns																			
FLUOR S/N																			
O2 (SBE43) S/N																			
Transmiss S/N																			
PAR S/N																			
O2 SBE42S/N																			
Nisk #	DEPTH	Rosette Notes	Hydro Team				GFF vol	>10 Large Vol	GFF dup vol	>10 dup vol (large)	Phyto preserve		Comments or other samples	Nisk #					
	DESIRED		SALT BU	Nut.BU															
1	200			522										1					
2	50			521		250								2					
3	40			520		250								3					
4	30			5A		250					200			4					
5														5					
6														6					
7														7					
8														8					
9														9					
10	20			518		250					200			10					
11	10			517		250	250							11					
12	0			516		250					200			12					