VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	Ø92

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE *	VISIBILITY *	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (am) *	TYPE *	WEATHER *	BOTTOM DEPTH (m)	STA. NAME/ID
001	59	21.00	N	140	04.04	W	03	06	12	23	30	.	.		x	x			x	x	x	0161	Y8C10

| Sensor S/N (At Start of cruise or swap ou | Local Time (ADT) | | |

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012		GOA-IERP-UTL 2012	Filename=	93

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD (kts)	CLOUD (em)	TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
002	59	29.51	N	139	53.21	W	04	AUG	12	02	00	.	.		x	x			x	x	x	00754	BC0

Sensor S/N (At Start of cruise or swap out)	Local Time (ADT)
	12

MAX. DEPTH = 51.02

SBE type and S/N
PRESS S/N
TEMP 1 &2 SNs
COND 1&2 S/Ns
FLUOR S/N
O2 (SBE43) S/N
Transmissometer S/N
PAR S/N
O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Nis No	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Nut.#	OXY #	CHEOR Samples Btl ID	Chl VOL	Filter Vial #	Comments	Nis No.
1	50			0415		411	130	6		1
2	40			0416		410	130	5		2
3	30			0417		409	130	4		3
4	20			0418		408	130	3		4
5	10			0419		407	130	2		5
6	0		157	0420	144	406	130	1		6
7										7
8										8

Pycnocline Depth _____ Fluor Max Depth _____

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	94

CTD CAST #	LATITUDE (DEG MIN)	LONGITUDE (DEG MIN)	GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (am)	TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
003	59 43.99 N	145 53.09 W	04	AUG	12	17	42	.	.		x	x			x	x	x	106	KIB07

Sensor S/N (At Start of cruise or swap-out)	Local Time (ADT)	MAX. DEPTH =
	12	94.79

SBE type and S/N
PRESS S/N
TEMP 1 &2 SNs
COND 1&2 S/Ns
FLUOR S/N
O2 (SBE43) S/N
Transmissometer S/N
PAR S/N
O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Nis No	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Hydro Sampling Nut.#	Hydro Sampling OXY #	CHLOR Samples Btl ID	CHLOR Samples Chl VOL	CHLOR Samples Filter Vial #	Comments	Nis No.
1	50			0421		417	130	6		1
2	40			0422		416	130	5		2
3	30			0423		415	130	4		3
4	20			0424		414	130	3		4
5	10			0425		413	130	2		5
6	0			0426		412	130	1		6
7										7
8										8

Pycnocline Depth _____ Fluor Max Depth _____

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	95

CTD CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN	GMT DAY MO YR	TIME (GMT) HR MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD (kts)	CLOUD (arm)	TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
ØØ4	5436.06 N	14455.00 W	04AUG12	2006	.	.									161	KIB2

Sensor S/N (At Start of cruise or swap)	Local Time (ADT)
	12

150.7
MAX. DEPTH =

SBE type and S/N
PRESS S/N
TEMP 1 &2 SNs
COND 1&2 S/Ns
FLUOR S/N
O2 (SBE43) S/N
Transmissometer S/N
PAR S/N
O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Nis No	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Nut #	OXY #	CHLOR Samples Btl ID	Chl VOL	Filter Vial #	Comments	Nis No.
1	150			427						1
2	100			428						2
3	50			429		423		6		3
4	40			430		422		5		4
5	30			431		421		4		5
6	20			432		420		3		6
7	10			433		419		2		7
8	0			434		418		1		8

Pycnocline Depth _____ Fluor Max Depth _____

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	96

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD (kts)	CLOUD (amt)	TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
00559	28.19	N		144	55.03	W	04	AUG	12	22	24	.	.		x	x			x	x	x	563	KIB3

Sensor S/N (At Start of cruise or swap)	Local Time (ADT)
	12

200.77
MAX. DEPTH =

SBE type and S/N
PRESS S/N
TEMP 1 &2 SNs
COND 1&2 S/Ns
FLUOR S/N
O2 (SBE43) S/N
Transmissometer S/N
PAR S/N
O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Nis No	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Nut #	OXY #	CHLOR Samples Btl ID	Chl VOL	Filter Vial #	Comments	Nis No.
1	200			435						1
2	100			436						2
3	50			437		429	130	6		3
4	40			438		428	130	5		4
5	30			439		427	130	4		5
6	20			440		426	130	3		6
7	10			441		425	130	2		7
8	0			442		424	130	1		8

Pycnocline Depth _____ **Fluor Max Depth** _____

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	97

CTD CAST #	LATITUDE DEG	LATITUDE MIN	LONGITUDE DEG	LONGITUDE MIN	GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD (kts)	CLOUD (amt)	TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
06	59	20.14 N	144	55.11 W	05	AUG	12	00	47				x	x			x	x	x	200	KIB4

Sensor S/N (At Start of cruise or swap) Local Time (ADT) 12

200.87
MAX. DEPTH =

SBE type and S/N
PRESS S/N
TEMP 1 &2 SNs
COND 1&2 S/Ns
FLUOR S/N
O2 (SBE43) S/N
Transmissometer S/N
PAR S/N
O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Nis No	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Nut.#	OXY #	CHLOR Samples Btl ID	Chl VOL	Filter Vial #	Comments	Nis No.
1	200		158	443	146					1
2	100			444						2
3	50			445		435		6		3
4	40			446		434		5		4
5	30			447		433		4		5
6	20			448		432		3		6
7	10			449		431		2		7
8	0			450		430		1		8

Pycnocline Depth _____ Fluor Max Depth _____

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	98

CTD CAST #	LATITUDE DEG	LATITUDE MIN	LONGITUDE DEG	LONGITUDE MIN	GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE *	VISIBILITY *	WIND DIRN. (deg)	WIND SPD (kts)	CLOUD (amt) *	TYPE *	WEATHER *	BOTTOM DEPTH (m)	STA. NAME/ID hx 217
0075	8	33.13 N	147	42.83 W	05	AUG	12	14	54	.	.		x	x			x	x	x	2198	Kx217

Sensor S/N (At Start of cruise or swap)	Local Time (ADT)	MAX. DEPTH =
	12	199.22

SBE type and S/N
PRESS S/N
TEMP 1 &2 S/Ns
COND 1&2 S/Ns
FLUOR S/N
O2 (SBE43) S/N.
Transmissometer S/N
PAR S/N
O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Nis No	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Nut.#	OXY #	CHLOR Samples Btl ID	Chl VOL	Filter Vial #	Comments	Nis No.
1	200			451						1
2	100			452						2
3	50			453		441	130	6		3
4	40			454		440	130	5		4
5	30			455		439	130	4		5
6	20			456		438	130	3		6
7	10			457		437	130	2		7
8	0			458		436	130	1		8

Pycnocline Depth

Fluor Max Depth

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	99

CTD CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN	GMT DAY	MO	YR	TIME (GMT) HR	MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE *	VISIBILITY *	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (am) *	TYPE *	WEATHER *	BOTTOM DEPTH (m)	STA. NAME/ID
008	58 46.48 N	148 08.00 W	05	AUG	12	18	46	.	.		x	x			x	x	x	577	h+217

| Sensor S/N (At Start of cruise or swap) | Local Time (ADT) | | |

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	8NW12	GOA-IERP-UTL 2012	Filename=	100

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE *	VISIBILITY *	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (am) *	TYPE *	WEATHER *	BOTTOM DEPTH (m)	STA. NAME/ID
009	59	00.38	N	148	32.19	W	05	AUG	12	22	29	.	.		x	x			x	x	x	235	hp2117

Sensor S/N (At Start of cruise or swap-out)	Local Time (ADT)
	12

MAX. DEPTH = 199.08

SBE type and S/N
PRESS S/N
TEMP 1 &2 S/Ns
COND 1&2 S/Ns
FLUOR S/N
O2 (SBE43) S/N
Transmissometer S/N
PAR S/N
O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Nis No	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Hydro Sampling Nut.#	Hydro Sampling OXY #	CHLOR Samples Btl ID	CHLOR Samples Chl VOL	CHLOR Samples Filter Vial #	Comments	Nis No.
1	200		159	467	233					1
2	100			468						2
3	50			469		453	130			3
4	40			470		452	130			4
5	30			471		451	130			5
6	20			472		450	130	3		6
7	10			473		449	130	2		7
8	0			474	3	448	130	1		8

Pycnocline Depth

Fluor Max Depth

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	101

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt)	TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
01	05	9 27.23	N	149	22.13	W	06	AUG	12	18	41	.	.		x	x			x	x	x		hh217

Sensor S/N (At Start of cruise or swap)	Local Time (ADT)											
								1	2			

99.06
MAX. DEPTH =

SBE type and S/N
PRESS S/N
TEMP 1 &2 S/Ns
COND 1&2 S/Ns
FLUOR S/N
O2 (SBE43) S/N
Transmissometer S/N
PAR S/N
O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

weather: overcast/cloudy
Sea State: 5-7ft seas

Nis No	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Nut.#	OXY #	CHLOR Samples Btl ID	Chl VOL	Filter Vial #	Comments	Nis No.
1	100			475						1
2	50			476		459				2
3	40			477		458				3
4	30			478		457				4
5	20			479		456		3		5
6	10			480		455		2		6
7	0					454		1		7
8										8

Pycnocline Depth

Fluor Max Depth

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	102

CTD CAST #	LATITUDE (DEG MIN)	LONGITUDE (DEG MIN)	GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (am)	TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
011	59 39.86 N	149 48.44 W	06	AUG	12	21	03											62	h02117

Sensor S/N (At Start of cruise or swap)	Local Time (ADT)	MAX. DEPTH =
	12	56.91

SBE type and S/N
PRESS S/N
TEMP 1 &2 SNs
COND 1&2 SNs
FLUOR S/N
O2 (SBE43) S/N
Transmissometer S/N
PAR S/N
O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Weather: overcast, rainy, 10m visibility
Sea State: 0-1 ft swells

Nis No	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Hydro Sampling Nut.#	Hydro Sampling OXY #	CHLOR Samples Btl ID	CHLOR Samples Chl VOL	CHLOR Samples Filter Vial #	Comments	Nis No.
1	50			482		6	130			1
2	40			483		64	130			2
3	30			484		463	130			3
4	20			485			130			4
5	10			486		461	130			5
6	0		160	487	215	460	130	1		6
7										7
8										8

Pycnocline Depth

Fluor Max Depth

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	103

CTD CAST #	LATITUDE DEG	LATITUDE MIN	LONGITUDE DEG	LONGITUDE MIN	GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE *	VISIBILITY *	WIND DIRN. (deg)	WIND SPD (kts)	CLOUD (amt) *	TYPE *	WEATHER *	BOTTOM DEPTH (m)	STA. NAME/ID
012	59	25.86 N	156	14.34 W	07	AUG	12	14	54	.	.		x	x			x	x	x	0098	hd213

Sensor S/N (At Start of cruise or swap out)	Local Time (ADT)
	12

90.96
MAX. DEPTH =

SBE type and S/N
PRESS S/N
TEMP 1 &2 SNs
COND 1&2 S/Ns
FLUOR S/N
O2 (SBE43) S/N
Transmissometer S/N
PAR S/N
O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Weather: overcast/cloudy
Sea State: 1-3 ft seas

Nis No.	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Nut.#	OXY #	CHLOR Samples Btl ID	Chl VOL	Filter Vial #	Comments	Nis No.
1	90			488		47		-		1
2	50			489		471	130	6		2
3	4			490		70	130	5		3
4	3			491			130	4		4
5	20			492		468	130	3		5
6	10			493		467	130	2		6
7	0			494		466	130	1		7
8										8

Pycnocline Depth _____ Fluor Max Depth _____

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	104

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt)	TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
013	59	12.80	N	149	48.98	W	07	AUG	12	18	31	.	.		x	x			x	x	x	162	hh213

Sensor S/N (At Start of cruise or swap out)	Local Time (ADT)										
					12						

150.80
MAX. DEPTH =

SBE type and S/N
PRESS S/N
TEMP 1 &2 SNs
COND 1&2 S/Ns
FLUOR S/N
O2 (SBE43) S/N
Transmissometer S/N
PAR S/N
O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Nis No	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Nut.#	OXY #	CHLOR Samples Btl ID	Chl VOL	Filter Vial #	Comments	Nis No.
1	150			495						1
2	100			496						2
3	50			497		477	130	5		3
4	40			498		476	130	4		4
5	30			499		475	130	3		5
6	20			500		474	130	2		6
7	10			501		473	130	1		7
8	0			502		472				8

Pycnocline Depth _____ Fluor Max Depth _____

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	105

CTD CAST #	LATITUDE DEG	LATITUDE MIN	LONGITUDE DEG	LONGITUDE MIN	GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD (kts)	CLOUD (atm)	TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
014	58	58.93 N	149	25.14 W	07	AUG	12	22	36	.	.		x	x			x	x	x	235	h1213

Sensor S/N (At Start of cruise or swap ou	Local Time (ADT)																				
							1	2													

MAX. DEPTH = 201.28

SBE type and S/N
PRESS S/N
TEMP 1 &2 SNs
COND 1&2 S/Ns
FLUOR S/N
O2 (SBE43) S/N
Transmissometer S/N
PAR S/N
O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Nis No	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Hydro Sampling Nut.#	Hydro Sampling OXY #	CHLOR Samples Btl ID	CHLOR Samples Chl VOL	CHLOR Samples Filter Vial #	Comments	Nis No.
1	200		161	503	127					1
2	100			504						2
3	50			505		483	130			3
4	40			506		482	130			4
5	30			507		481	130			5
6	20			508		480	130			6
7	10			509		479	130			7
8	0			510		478	130	1		8

Pycnocline Depth _____ Fluor Max Depth _____

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	106

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE *	VISIBILITY *	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt) *	TYPE *	WEATHER *	BOTTOM DEPTH (m)	STA. NAME/ID
016	59	13.65	N	148	58.04	W	08	AUG	12	02	43	.	.		x	x			x	x	x	158	h2117

| Sensor S/N (At Start of cruise or swap) | Local Time (ADT) | | |

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	107

CTD CAST #	LATITUDE (DEG MIN)	LONGITUDE (DEG MIN)	GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE	VISIBLITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (am)	TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
016	59 45.72 N	148 59.69 W	08	AUG	12	14	53	.	.		x	x			x	x	x	207	hp213

Sensor S/N (At Start of cruise or swap-out)	Local Time (ADT)
	12

191.35
MAX. DEPTH =

SBE type and S/N
PRESS S/N
TEMP 1 &2 SNs
COND 1&2 S/Ns
FLUOR S/N
O2 (SBE43) S/N
Transmissometer S/N
PAR S/N
O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Nis No	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Hydro Sampling Nut. #	Hydro Sampling OXY #	CHLOR Samples Btl ID	CHLOR Samples Chl VOL	CHLOR Samples Filter Vial #	Comments	Nis No.
1	190			519						1
2	100			520						2
3	50			521		495	130	6		3
4	40			522		494	130	5		4
5	30			523		493	130	4		5
6	20			524		492	130	3		6
7	10			525		491	130	2		7
8	0			526		490	130	1		8

Pycnocline Depth _____ Fluor Max Depth _____

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	108

CTD CAST #	LATITUDE (DEG MIN)	LONGITUDE (DEG MIN)	GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (8ths)	TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
01	75 83 1.65 N	148 35.32 W	08	06	12	18	24	.	.		X	X			X	X	X	119	hc213

Sensor S/N (At Start of cruise or swap)	Local Time (ADT)	MAX. DEPTH =
	12	100.95

SBE type and S/N
PRESS S/N
TEMP 1 &2 SNs
COND 1&2 S/Ns
FLUOR S/N
O2 (SBE43) S/N
Transmissometer S/N
PAR S/N
O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Nis No	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Nut.#	OXY #	CHLOR Samples Btl ID	Chl VOL	Filter Vial #	Comments	Nis No.
1	100			527						1
2	50			528		501				2
3	40			529						3
4	30			530		4		4		4
5	20			531		498		3		5
6	10			532		497		2		6
7	0			533		496		1		7
8										8

Pycnocline Depth _____ Fluor Max Depth _____

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	109

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE *	VISIBILITY *	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (am) *	TYPE *	WEATHER *	BOTTOM DEPTH (m)	STA. NAME/ID
018	58	17.87	N	148	10.95	W	08	AUG	12	21	52	.	.		x	x			x	x	x	1330	hx213

| Sensor S/N (At Start of cruise or swap ou | Local Time (ADT) | | |

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	110

CTD CAST #	LATITUDE DEG	LATITUDE MIN	LONGITUDE DEG	LONGITUDE MIN	GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD (kts)	CLOUD (am)	TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
019	58	02.46 N	148	39.66 W	09	AUG	12	01	31	.	.		x	x			x	x	x	635	hx209

Sensor S/N (At Start of cruise or swap)	Local Time (ADT)	
	12	

201.80
MAX. DEPTH =

SBE type and S/N
PRESS S/N
TEMP 1 &2 SNs
COND 1&2 S/Ns
FLUOR S/N
O2 (SBE43) S/N
Transmissometer S/N
PAR S/N
O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Nis No.	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Nut #	OXY #	CHLOR Samples Btl ID	Chl VOL	Filter Vial #	Comments	Nis No.
1	200			542						1
2	100			543						2
3	50			544		513	150	6		3
4	40			545		512	130	5		4
5	30			546		511	130	4		5
6	20			547		510	130	3		6
7	10			548		509	130	2		7
8	0			549		508	130	1		8

Pycnocline Depth _____ Fluor Max Depth _____

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	111

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE *	VISIBILITY *	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (am *	TYPE *	WEATHER *	BOTTOM DEPTH (m)	STA. NAME/ID
020	58	16.40	N	149	03.67	W	09	AUG	12	17	48				x	x			x	x	x	0117	ht209

Sensor S/N (At Start of cruise or swap-ou	Local Time (ADT)												
									1	2			

101.16
MAX. DEPTH =

SBE type and S/N
PRESS S/N
TEMP 1 &2 SNs
COND 1&2 S/Ns
FLUOR S/N
O2 (SBE43) S/N
Transmissometer S/N
PAR S/N
O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Weather: foggy
Sea State: 0-2 ft seas.

Nis No	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Nut #	OXY #	CHLOR Samples Btl ID	Chl VOL	Filter Vial #	Comments	Nis No.
1	100			550						1
2	50			551		519	130	6		2
3	40			552		518	130	5		3
4	30			553		517	130	4		4
5	20			554		516	130	3		5
6	10			555		515	130	2		6
7	0			556		514	130	1		7
8										8

Pycnocline Depth _____ Fluor Max Depth _____

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	112

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt)	TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
021	58	30.30	N	149	27.84	W	09	AUG	12	21	13	.	.		x	x			x	x	x	120	hp209

Sensor S/N (At Start of cruise or swap-out)	Local Time (ADT)	MAX. DEPTH =
	12	100.75

SBE type and S/N
PRESS S/N
TEMP 1 &2 S/Ns
COND 1&2 S/Ns
FLUOR S/N
O2 (SBE43) S/N
Transmissometer S/N
PAR S/N
O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Weather: Overcast/cloudy
Sea State: 0-1 foot seas.

Nis No	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Nut. #	OXY #	CHLOR Samples Btl ID	Chl VOL	Filter Vial #	Comments	Nis No.
1	100			557						1
2	50			558		525	130	6		2
3	40			559		524	130	5		3
4	30			560		523	130	4		4
5	20			561		522	130	3		5
6	10			562		521	130	2		6
7	0			563		520	130	1		7
8										8

Pycnocline Depth _____ Fluor Max Depth _____

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	113

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE *	VISIBILITY *	WIND DIRN. (deg)	WIND SPD (kts)	CLOUD (amt) *	TYPE *	WEATHER *	BOTTOM DEPTH (m)	STA. NAME/ID
Ø22	58	44.51	N	149	52.00	W	10	AUG	12	00	34	.	.		x	x			x	x	x	173	h2240 9

| Sensor S/N (At Start of cruise or swap) | Local Time (ADT) | | |

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	114

CTD CAST #	LATITUDE DEG	LATITUDE MIN	LONGITUDE DEG	LONGITUDE MIN	GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD (kts)	CLOUD (amt)	TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
123	58	58.25 N	150	15.84 W	10	AUG	12	16	03	.	.		x	x			x	x	x	173	hh209

Sensor S/N (At Start of cruise or swap)	Local Time (ADT)	MAX. DEPTH=
	12	160.59

SBE type and S/N
PRESS S/N
TEMP 1 &2 SNs
COND 1&2 S/Ns
FLUOR S/N
O2 (SBE43) S/N
Transmissometer S/N
PAR S/N
O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Nis No	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Hydro Sampling Nut.#	Hydro Sampling OXY #	CHLOR Samples Btl ID	CHLOR Samples Chl VOL	CHLOR Samples Filter Vial #	Comments	Nis No.
1	160			572						1
2	100			573						2
3	50			574		537	130	6		3
4	40			575		536	130	5		4
5	30			576		535	130	4		5
6	20			577		534	130	3		6
7	10			578		533	130	2		7
8	0			579		532	130	1		8

Pycnocline Depth _____ Fluor Max Depth _____

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	115

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (am)	TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
024	59	11.87	N	150	40.70	W	16	AUG	12	18	33	.	.		x	x			x	x	x	122	hd209

Sensor S/N (At Start of cruise or swap)	
SBE type and S/N	
PRESS S/N	
TEMP 1 &2 SNs	
COND 1&2 S/Ns	
FLUOR S/N	
O2 (SBE43) S/N	
Transmissometer S/N	
PAR S/N	
O2 SBE42S/N	

Local Time (ADT)	12
MAX. DEPTH =	100.95

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Weather: overcast/cloudy
Sea State: 1-2 ft seas

Nis No	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Nut #	OXY #	CHLOR Samples Btl ID	Chl VOL	Filter Vial #	Comments	Nis No.
1	100			580						1
2	50			581		543	130	6		2
3	40			582		542	130	5		3
4	30			583		541	130	4		4
5	20			584		540	130	3		5
6	10			585		539	130	2		6
7	0			586		538	130	1		7
8										8

Pycnocline Depth _____ Fluor Max Depth _____

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	116

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE *	VISIBILITY *	WIND DIRN. (deg)	WIND SPD (kts)	CLOUD (am) *	TYPE *	WEATHER *	BOTTOM DEPTH (m)	STA. NAME/ID
325	58	57.40	N	151	06.91	W	10	AUG	12	21	54	.	.		x	x			x	x	x	169	hd205

Sensor S/N (At Start of cruise or swap out)	Local Time (ADT)
	12

150.98 MAX. DEPTH =

SBE type and S/N
PRESS S/N
TEMP 1 &2 SNs
COND 1&2 S/Ns
FLUOR S/N
O2 (SBE43) S/N
Transmissometer S/N
PAR S/N
O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Nis No	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Hydro Sampling Nut.#	Hydro Sampling OXY #	CHLOR Samples Btl ID	CHLOR Samples Chl VOL	CHLOR Samples Filter Vial #	Comments	Nis No.
1	150			587						1
2	100			588						2
3	50			589		549	130	6		3
4	40			590		548	130	5		4
5	30			591		547	130	4		5
6	20			592		546	130	3		6
7	10			593		545	130	2		7
8	0			594		544	130	1		8

Pycnocline Depth _____ Fluor Max Depth _____

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	117

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE *	VISIBILITY *	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (am) *	TYPE *	WEATHER *	BOTTOM DEPTH (m)	STA. NAME/ID
026	58	43.75	N	150	42.74	W	11	AUG	12	01	42	.	.			x	x			x	x	x	188	1122 05

Sensor S/N (At Start of cruise or swap)	Local Time (ADT)	MAX. DEPTH =
	12	171.61

SBE type and S/N
PRESS S/N
TEMP 1 &2 SNs
COND 1&2 S/Ns
FLUOR S/N
O2 (SBE43) S/N
Transmissometer S/N
PAR S/N
O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Nis No	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Nut.#	OXY #	CHLOR Samples Btl ID	Chl VOL	Filter Vial #	Comments	Nis No.
1	170			595						1
2	100			596						2
3	50			597		555	130	6		3
4	40			598		554	130	5		4
5	30			599		553	130	4		5
6	20			600		552	130	3		6
7	10			601		551	130	2		7
8	0		164	602	220	550	130	1		8

Pycnocline Depth _____ Fluor Max Depth _____

VESSEL	CRUISE ID (e.g 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012		GOA-IERP-UTL 2012	Filename=	118

CTD CAST #	LATITUDE DEG	LATITUDE MIN	LONGITUDE DEG	LONGITUDE MIN	GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE *	VISIBILITY *	WIND DIRN. (deg)	WIND SPD (kts)	CLOUD (am) *	TYPE *	WEATHER *	BOTTOM DEPTH (m)	STA. NAME/ID
027	58	30.18 N	150	18.19 W	11	AUG	12	14	52	.	.		x	x			x	x	x	00856h	12005

| Sensor S/N (At Start of cruise or swap-pu | Local Time (ADT) | | |

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	119

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE *	VISIBILITY *	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (am) *	TYPE *	WEATHER *	BOTTOM DEPTH (m)	STA. NAME/ID
028	58	15.46	N	150	44.44	W	11	AUG	12	18	24	.	.		x	x			x	x	x	0066	h0201

| Sensor S/N (At Start of cruise or swap) | Local Time (ADT) | | |

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	120

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE *	VISIBILITY *	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (am) *	TYPE *	WEATHER *	BOTTOM DEPTH (m)	STA. NAME/ID
0	29	58	24.23 N	151	09.00 W		11	AUG	12	01	51	.	.			x			x	x	x	190	hh24 1

| Sensor S/N (At Start of cruise or swap ou | Local Time (ADT) | | |

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	121

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD (kts)	CLOUD (am)	TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
030	54	42.54	N	151	33.87	W	12	AUG	12	01	25	.	.	.	x	x			x	x	x	175.20	1

Sensor S/N (At Start of cruise or swap)	Local Time (ADT)																						
										12													

161.00
MAX. DEPTH =

SBE type and S/N
PRESS S/N
TEMP 1 &2 SNs
COND 1&2 S/Ns
FLUOR S/N
O2 (SBE43) S/N
Transmissometer S/N
PAR S/N
O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Nis No	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Hydro Sampling Nut #	Hydro Sampling OXY #	CHLOR Samples Btl ID	CHLOR Samples Chl VOL	CHLOR Samples Filter Vial #	Comments	Nis No.
1	150		165	621	209					1
2	100			622						2
3	50			623		579		6		3
4	40			624		578		5		4
5	30			625		577		4		5
6	20			626		576		3		6
7	10			627		575		2		7
8	0			628		574		1		8

Pycnocline Depth _____ Fluor Max Depth _____

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	122

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE *	VISIBILITY *	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (am) *	TYPE *	WEATHER *	BOTTOM DEPTH (m)	STA. NAME/ID
03	58	28.39	N	151	59.80	W	12	AUG	12	14	51	.	.			x			x	x	x	0062	1197

| Sensor S/N (At Start of cruise or swap) | Local Time (ADT) | | |

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	123

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE *	VISIBILITY *	WIND DIRN. (deg)	WIND SPD (kts)	CLOUD (em) *	TYPE *	WEATHER *	BOTTOM DEPTH (m)	STA. NAME/ID
43	58	14.68	N	151	35.32	W	12	AUG	12	18	22	.	.		x	x			x	x	x	65	hh197

Sensor S/N (At Start of cruise or swap-out)	Local Time (ADT)
	12

51.02
MAX. DEPTH =

SBE type and S/N
PRESS S/N
TEMP 1 &2 S/Ns
COND 1&2 S/Ns
FLUOR S/N
O2 (SBE43) S/N
Transmissometer S/N
PAR S/N
O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Nis No	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Nut.#	OXY #	CHLOR Samples Btl ID	Chl VOL	Filter Vial #	Comments	Nis No.
1	50			635		591	130	6		1
2	40			636		590	130	5		2
3	30			637		589	130	4		3
4	20			638		588	130	3		4
5	10			639		587	130			5
6	0			640		586	130			6
7										7
8										8

Pycnocline Depth _____ Fluor Max Depth _____

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	124

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD (kts)	CLOUD (8ths)	TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
03	58	00.87	N	151	10.58	W	12	AUG	12	21	45	.	.		x	x			x	x	x	77	h2197

Sensor S/N (At Start of cruise or swap-out)

	Local Time (ADT)							
						12		

MAX. DEPTH = 62.02

SBE type and S/N

PRESS S/N

TEMP 1 &2 SNs

COND 1&2 S/Ns

FLUOR S/N

O2 (SBE43) S/N

Transmissometer S/N

PAR S/N

O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Nis No	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Hydro Sampling Nut.#	Hydro Sampling OXY #	CHLOR Samples Btl ID	CHLOR Samples Chl VOL	CHLOR Samples Filter Vial #	Comments	Nis No.
1	50			641		597				1
2	40			642		596				2
3	30			643		595				3
4	20			644		594				4
5	10			645		593				5
6	0			646		592				6
7										7
8										8

Pycnocline Depth _____ Fluor Max Depth _____

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	125

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	GMT HR	GMT MIN	TIME (GMT)	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE *	VISIBILITY *	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (am) *	TYPE *	WEATHER *	BOTTOM DEPTH (m)	STA. NAME/ID
034	57	47.05	N	150	45.47	W	13	AUG	12	01	02		.	.		x	x			x	x	x	33	hp197

Sensor S/N (At Start of cruise or swap-out)	Local Time (ADT)
	12

MAX. DEPTH = 71.3

SBE type and S/N

PRESS S/N

TEMP 1 &2 S/Ns

COND 1&2 S/Ns

FLUOR S/N

O2 (SBE43) S/N

Transmissometer S/N

PAR S/N

O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Nis No	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Hydro Sampling Nut.#	Hydro Sampling OXY #	CHLOR Samples Btl ID	CHLOR Samples Chl VOL	CHLOR Samples Filter Vial #	Comments	Nis No.
1	50			647		603	130	6		1
2	40			648		602	130	5		2
3	30			649		601	130	4		3
4	20			650		600	130	3		4
5	10			651		599	130	2		5
6	0		166	652	208	598	130	1		6
7										7
8										8

Pycnocline Depth

Fluor Max Depth

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	126

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE *	VISIBILITY *	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (am) *	TYPE *	WEATHER *	BOTTOM DEPTH (m)	STA. NAME/ID
03	54	748.06	N	149	04.43	W	13	AUG	12	14	51	.	.		x	x			x	x	x	140	h x 2 a 5

| Sensor S/N (At Start of cruise or swap-out) | Local Time (ADT) | | |

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	127

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE *	VISIBILITY *	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt) *	TYPE *	WEATHER *	BOTTOM DEPTH (m)	STA. NAME/ID
03	05	58 02.11	N	149	29.39	W	13	AUG	12			.	.		x	x			x	x	x	191	h t 2 0 5

Sensor S/N (At Start of cruise or swap out)	Local Time (ADT)
	12

180.98
MAX. DEPTH =

SBE type and S/N
PRESS S/N
TEMP 1 &2 SNs
COND 1&2 S/Ns
FLUOR S/N
O2 (SBE43) S/N
Transmissometer S/N
PAR S/N
O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Nis No	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Nut.#	OXY #	CHLOR Samples Btl ID	Chl VOL	Filter Vial #	Comments	Nis No.
1	180			661						1
2	100			662						2
3	50			663		615	130	6		3
4	40			664		614	130	5		4
5	30			665		613	130	4		5
6	20			666		612	130	3		6
7	10			667		611	130	2		7
8	0			668		610	130	1		8

Pycnocline Depth

Fluor Max Depth

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	if you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	128

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE *	VISIBILITY *	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (am) *	TYPE *	WEATHER *	BOTTOM DEPTH (m)	STA. NAME/ID
037	58	16.08	N	149	53.80	W	13	AUG	12			.	.		x	x			x	x	x	00516	02005

| Sensor S/N (At Start of cruise or swap-out) | Local Time (ADT) | | |

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	129

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (am)	TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
038	58	01.55	N	150	19.87	W	14	AUG	12	01	47	.	.		x	x			x	x	x	170	hp2001

Sensor S/N (At Start of cruise or swap out)	Local Time (ADT)
	12

MAX. DEPTH = 150.9

SBE type and S/N
PRESS S/N
TEMP 1 &2 SNs
COND 1&2 S/Ns
FLUOR S/N
O2 (SBE43) S/N
Transmissometer S/N
PAR S/N
O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Nis No	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Nut #	OXY #	CHLOR Samples Btl ID	Chl VOL	Filter Vial #	Comments	Nis No.
1	150		167	674	205					1
2	100			675	206					2
3	50			676		626	130	6		3
4	40			677		625	130	5		4
5	30			678		624	130	4		5
6	20			679		623	130	3		6
7	10			680		622	130	2		7
8	0			681		621	130	1		8

Pycnocline Depth _____ Fluor Max Depth _____

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	130

CTD CAST #	LATITUDE DEG	LATITUDE MIN	LONGITUDE DEG	LONGITUDE MIN	GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE *	VISIBILITY *	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (8ths) *	TYPE *	WEATHER *	BOTTOM DEPTH (m)	STA. NAME/ID
039	57	47.71 N	149	54.65 W	14	AUG	12	18	01	.	.		x	x			x	x	x	280	h-t2a1

Sensor S/N (At Start of cruise or swap-ou	Local Time (ADT)
	12

MAX. DEPTH = 201.39

SBE type and S/N
PRESS S/N
TEMP 1 &2 SNs
COND 1&2 S/Ns
FLUOR S/N
O2 (SBE43) S/N
Transmissometer S/N
PAR S/N
O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Nis No.	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Hydro Sampling Nut.#	Hydro Sampling OXY #	CHLOR Samples Btl ID	CHLOR Samples Chl VOL	CHLOR Samples Filter Vial #	Comments	Nis No.
1	200			682						1
2	100			683						2
3	50			684		632	130	6		3
4	40			685		631	130	5		4
5	30			686		630	130	4		5
6	20			687		629	130	3		6
7	10			688		628	130	2		7
8	0			689		627	130	1		8

Pycnocline Depth _____ Fluor Max Depth _____

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	2NW131

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE *	VISIBILITY *	WIND DIRN. (deg)	WIND SPD (kts)	CLOUD (am) *	TYPE *	WEATHER *	BOTTOM DEPTH (m)	STA. NAME/ID
24P	57	33.58	N	149	30.07	W	4	AUG	12	22	37	.	.		x	x			x	x	x	154	3h x24P1

Sensor S/N (At Start of cruise or swap)	Local Time (ADT)	MAX. DEPTH =
	12	200.15

SBE type and S/N
PRESS S/N
TEMP 1 &2 S/Ns
COND 1&2 S/Ns
FLUOR S/N
O2 (SBE43) S/N
Transmissometer S/N
PAR S/N
O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Sea State: 8-9ft Swells

Nis No	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Nut. #	OXY #	CHLOR Samples Btl ID	Chl VOL	Filter Vial #	Comments	Nis No.
1	200			690						1
2	100			691						2
3	50			692		638	130	6		3
4	40			693		637	130	5		4
5	30			694		636	130	4		5
6	20			695		635	30	3		6
7	10			696		634	130	2		7
8	0			697		633	130	1		8

Pycnocline Depth _____ Fluor Max Depth _____

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	132

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD (kts)	CLOUD (amt)	TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
04	57	19.33	N	149	55.62	W	15	AUG	12	07	39	.	.		x	x			x	x	x	1303	hx197

Sensor S/N (At Start of cruise or swap)	Local Time (ADT)	
		12

200.25
MAX. DEPTH =

SBE type and S/N
PRESS S/N
TEMP 1 &2 S/Ns
COND 1&2 S/Ns
FLUOR S/N
O2 (SBE43) S/N
Transmissometer S/N
PAR S/N
O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Nis No	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Nut.#	OXY #	CHLOR Samples Btl ID	Chl VOL	Filter Vial #	Comments	Nis No.
1	200			698						1
2	100			699						2
3	50			700		644	130	6		3
4	40			701		643	130	5		4
5	30			702		642	130	4		5
6	20			703		641	130	3		6
7	10			704		640	130	2		7
8	0		168	705	197	639	130	1		8

Pycnocline Depth _____ Fluor Max Depth _____

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	133

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE *	VISIBILITY *	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (am) *	TYPE *	WEATHER *	BOTTOM DEPTH (m)	STA. NAME/ID
04	57	33.48	N	150	29.42	W	15	AUG	12	17	53	.	.		x	x			x	x	x	173.4197	

Sensor S/N (At Start of cruise or swap-out)	Local Time (ADT)
	12

MAX. DEPTH = 151.86

SBE type and S/N
PRESS S/N
TEMP 1 &2 SNs
COND 1&2 S/Ns
FLUOR S/N
O2 (SBE43) S/N
Transmissometer S/N
PAR S/N
O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Nis No.	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Nut #	OXY #	CHLOR Samples Btl ID	Chl VOL	Filter Vial #	Comments	Nis No.
1	150			706						1
2	100			707						2
3	50			708		650	130	6		3
4	40			709		649	130	5		4
5	30			710		648	130	4		5
6	20			711		647	130	3		6
7	10			712		646	130	2		7
8	0			713		645	130	1		8

Pycnocline Depth _____ Fluor Max Depth _____

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	134

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp.(°C)	PRESSURE (mb)	SEA STATE *	VISIBILITY *	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt) *	TYPE *	WEATHER *	BOTTOM DEPTH (m)	STA. NAME/ID
04	57	04.80	N	150	21.67	W	15	AUG	12	22	49	.	.		x	x			x	x	x	1638	hx193

| Sensor S/N (At Start of cruise or swap-out) | Local Time (ADT) | | |

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	2135

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE *	VISIBILITY *	WIND DIRN. (deg)	WIND SPD (kts)	CLOUD (amt) *	TYPE *	WEATHER *	BOTTOM DEPTH (m)	STA. NAME/ID
0	44	57 18.88	N	150	45.82	W	16	AUG	12	02	27	.	.		x	x			x	x	x	165 / 150.08	193

Sensor S/N (At Start of cruise or swap-ou	Local Time (ADT)																						
										1	2												

MAX. DEPTH =

SBE type and S/N

PRESS S/N

TEMP 1 &2 S/Ns

COND 1&2 S/Ns

FLUOR S/N

O2 (SBE43) S/N

Transmissometer S/N

PAR S/N

O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Nis No	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Hydro Sampling Nut.#	Hydro Sampling OXY #	CHLOR Samples Btl ID	CHLOR Samples Chl VOL	CHLOR Samples Filter Vial #	Comments	Nis No.
1	150		169	722	182					1
2	100			723						2
3	50			724		662	130	6		3
4	40			725		661	130	5		4
5	30			726		660	130	4		5
6	20			727		659	130	3		6
7	10			728		658	130	2		7
8	0			729		657	130	1		8

Pycnocline Depth

Fluor Max Depth

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	136

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE *	VISIBILITY *	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt) *	TYPE *	WEATHER *	BOTTOM DEPTH (m)	STA. NAME/ID
04	57	32.77	N	151	11.06	W	16	AUG	12	14	50	.	.			x	x		x	x	x	6711	193

| Sensor S/N (At Start of cruise or swap) | Local Time (ADT) | | |

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	137

CTD CAST #	LATITUDE DEG	LATITUDE MIN	LONGITUDE DEG	LONGITUDE MIN	GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt)	TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
0	46	57 46.45 N	151 36.78 W		16	AUG	12	19	12	.	.		x	x			x	x	x	46 h 2 1 9 3	

Sensor S/N (At Start of cruise or swap out)	Local Time (ADT)	MAX. DEPTH =
	12	34.

SBE type and S/N
PRESS S/N
TEMP 1 &2 S/Ns
COND 1&2 S/Ns
FLUOR S/N
O2 (SBE43) S/N
Transmissometer S/N
PAR S/N
O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Nis No	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Hydro Sampling Nut.#	Hydro Sampling OXY #	CHLOR Samples Btl ID	CHLOR Samples Chl VOL	CHLOR Samples Filter Vial #	Comments	Nis No.
1	~~3~~			~~7~~						1
2	30			736		672	130	4		2
3	20			737		671	130	3		3
4	10			738		670	130	2		4
5	0			739		669	130	1		5
6										6
7										7
8										8

Pycnocline Depth _____ Fluor Max Depth _____

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	138

CTD CAST #	LATITUDE DEG	LATITUDE MIN	LONGITUDE DEG	LONGITUDE MIN	GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (atm)	TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
047	58	00.17 N	152	01.52 W	16	AUG	12	21	20	.	.		x	x			x	x	x	164	hh193

Sensor S/N (At Start of cruise or swap)	Local Time (ADT)																				
								1	2												

150.80
MAX. DEPTH =

SBE type and S/N
PRESS S/N
TEMP 1 &2 SNs
COND 1&2 S/Ns
FLUOR S/N
O2 (SBE43) S/N
Transmissometer S/N
PAR S/N
O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Nis No	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Hydro Sampling NUT #	Hydro Sampling OXY #	CHLOR Samples Btl ID	CHLOR Samples Chl VOL	CHLOR Samples Filter Vial #	Comments	Nis No.
1	150			740						1
2	100			741						2
3	50			742		678	130	6		3
4	40			743		677	130	5		4
5	30			744		676	130	4		5
6	20			745		675	130	3		6
7	10			746		674	130	2		7
8	0			747		673	130	1		8

Pycnocline Depth _____ Fluor Max Depth _____

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	139

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE *	VISIBILITY *	WIND DIRN. (deg)	WIND SPD (kts)	CLOUD (arm) *	TYPE *	WEATHER *	BOTTOM DEPTH (m)	STA. NAME/ID
048	57	31.95	N	152	02.34	W	17	AUG	12	02	00	.	.		x	x			x	x	x	165	h2189

| Sensor S/N (At Start of cruise or swap-out) | Local Time (ADT) | | |

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOAHERP-UTL 2012	Filename=	140

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD (kts)	CLOUD (am	TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
049	57	18.19	N	151	36.54	W	17	AUG	12	17	31	.	.		x	x			x	x	x	61	h p189

Sensor S/N (At Start of cruise or swap out) Local Time (ADT) 12

MAX. DEPTH = 51.53

SBE type and S/N

PRESS S/N

TEMP 1 & 2 S/Ns

COND 1&2 S/Ns

FLUOR S/N

O2 (SBE43) S/N

Transmissometer S/N

PAR S/N

O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Nis No.	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Nut. #	OXY #	CHLOR Samples Bll ID	Chl VOL	Filter Vial #	Comments	Nis No.
1	50			754		690	130	6		1
2	40			755		689	130	5		2
3	30			756		688	130	4		3
4	20			757		687	130	3		4
5	10			758		686	130	2		5
6	0			759		685	130	1		6
7										7
8										8

Pycnocline Depth _____ Fluor Max Depth _____

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	141

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE *	VISIBILITY *	WIND DIRN. (deg)	WIND SPD (kts)	CLOUD (am) *	TYPE *	WEATHER *	BOTTOM DEPTH (m)	STA. NAME/ID
0	5	57	04.32	N 151	11.27	W	17	AUG	12	20	52	.	.	.	x	x			x	x	x	434	4 7 189

Sensor S/N (At Start of cruise or swap)	Out Local Time (ADT)	
		12

MAX. DEPTH = 200.77

SBE type and S/N
PRESS S/N
TEMP 1 & 2 S/Ns
COND 1&2 S/Ns
FLUOR S/N
O2 (SBE43) S/N
Transmissometer S/N
PAR S/N
O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Bottle 4 did Not fire at 40M instead fired at 30M (No water was collected from 40M

Nis No	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Hydro Sampling NuL#	Hydro Sampling OXY #	CHLOR Samples Bit ID	CHLOR Samples Chl VOL	CHLOR Samples Filter Vial #	Comments	Nis No.
1	200			760						1
2	100			761		696	130	6		2
3	50			762		695	130			3
4	30			763		694	130			4
5	20			764		693	130			5
6	10			765		692	130			6
7	0			766		691	130			7
8										8

Pycnocline Depth _____ Fluor Max Depth _____

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	8NW12	GOA-IERP-4/TL 2012	Filename=	142

CTD CAST #	LATITUDE DEG	LATITUDE MIN	LONGITUDE DEG	LONGITUDE MIN	GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE *	VISIBILITY *	WIND DIRN. (deg)	WIND SPD (kts)	CLOUD (8ths) *	TYPE *	WEATHER *	BOTTOM DEPTH (m)	STA. NAME/ID
05	1	56 50.34 N	150 46.14 W		18	AUG	12	00	49	.	.		x	x			x	x	x	169	hx189

Sensor S/N (At Start of cruise or swap) | Local Time (ADT) 12

MAX. DEPTH = 200.77

SBE type and S/N
PRESS S/N
TEMP 1 &2 S/Ns
COND 1&2 S/Ns
FLUOR S/N
O2 (SBE43) S/N
Transmissometer S/N
PAR S/N
O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Nis No.	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Hydro Sampling Nut.#	Hydro Sampling OXY #	CHLOR Samples Bt ID	CHLOR Samples Chl VOL	CHLOR Samples Filter Vial #	Comments	Nis No.
1	200		171	767	179					1
2	100			768						2
3	50			769		702				3
4	40			770		701				4
5	30			771		700				5
6	20			772		699				6
7	10			773		698				7
8	0			774		697				8

Pycnocline Depth _____ Fluor Max Depth _____

VESSEL	CRUISE ID (e.g. NOV12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-ERP-UTL 2012	Filename=	148

CTD CAST #	LATITUDE DEG	LATITUDE MIN	LONGITUDE DEG	LONGITUDE MIN	G M T DAY	G M T MO	G M T YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE *	VISIBILITY *	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (am *	TYPE *	WEATHER *	BOTTOM DEPTH (m)	STA. NAME/ID
05	56	35.54 N	151	11.53 W	18	AUG	12	14	52	.	.		x	x	.		x	x	x	202	hx185

Sensor S/N (At Start of cruise or swap ou Local Time (ADT) 12.

202 201.82 MAX. DEPTH =

SBE type sau S/N	COMMENT: Difficult conditions; factors that may affect measurements or aid processing
PRESS S/N	
TEMP 1 &2 SNs	
COND 1&2 S/Ns	
FLUOR S/N	
O2 (SBE43) S/N	
Transmissometer S/N	
PAR S/N	
O2 SBE42S/N	

Nis No.	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Hydro Sampling Nut #	Hydro Sampling OXY #	CHLOR Samples Btl ID	CHLOR Samples Chl VOL	CHLOR Samples Filter Vial #	Comments	Nis No.
1	200			775						1
2	100			776						2
3	50			777		708	130	6		3
4	40			778		707	130	5		4
5	30			779		706	130	4		5
6	20			780		705	130	3		6
7	10			781		704	130	2		7
8	0			782		703	130	1		8

Pycnocline Depth _____ Fluor Max Depth _____

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	144

CTD CAST #	LATITUDE DEG	LATITUDE MIN	LONGITUDE DEG	LONGITUDE MIN	GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE *	VISIBILITY *	WIND DIRN. (deg)	WIND SPD (kts)	CLOUD (ant) *	TYPE *	WEATHER *	BOTTOM DEPTH (m)	STA. NAME/ID
053	56	49.73 N	151	37.03 W	18	AUG	12	18	35	.	.		x	x			x	x	x	58	N1185

| Sensor S/N (At Start of cruise or swap) | OU Local Time (ADT) | | |

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012		GOA-IERP-UTL 2012	Filename=	145

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE *	VISIBILITY *	WIND DIRN. (deg)	WIND SPD (kts)	CLOUD (am) *	TYPE *	WEATHER *	BOTTOM DEPTH (m)	STA. NAME/ID
054	57	03.73	N	152	02.33	W	18	AUG	12	22					x	x			x	x	x	70 hp	188

Sensor S/N (At Start of cruise or swap)	DU Local Time (ADT)	
	12	

76. MAX. DEPTH =

SBE type and S/N
PRESS S/N
TEMP 1 &2 S/Ns
COND 1&2 S/Ns
FLUOR S/N
O2 (SBE43) S/N
Transmissometer S/N
PAR S/N
O2 SBE43S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

instrument hit seafloor

Nis No	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Nut #	OXY #	CHLOR Samples Btl ID	Chl VOL	Filter Vial #	Comments	Nis No.
1	50			791		720				1
2	40			792		719				2
3	30			793		718				3
4	20			794		717				4
5	10			795		716				5
6	0			796		715				6
7										7
8										8

Pycnocline Depth _____ Fluor Max Depth _____

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	146

CTD CAST #	LATITUDE DEG	LATITUDE MIN	LONGITUDE DEG	LONGITUDE MIN	GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE *	VISIBILITY *	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (am) *	TYPE *	WEATHER *	BOTTOM DEPTH (m)	STA. NAME/ID
055		. . . 6 N	152	28.05 W	19	AUG	12	01	37	.	. .		x	x			x	x	x	0076	h2185

| Sensor S/N (At Start of cruise or swap ou | Local Time (ADT) | | |

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	147

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD (kts)	CLOUD (amt)	TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
054	57	02.82	N	152	53.49	W	19	AUG	12	17	54				x	x			x	x	x	0083h	0181

Sensor S/N (At Start of cruise or swap-out)	Local Time (ADT)	MAX. DEPTH =
	12	

SBE type and S/N
PRESS S/N
TEMP 1 &2 S/Ns
COND 1&2 S/Ns
FLUOR S/N
O2 (SBE43) S/N
Transmissometer S/N
PAR S/N
O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Nis No	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Nut #	OXY #	CHLOR Samples Bll ID	Chl VOL	Filter Vial #	Comments	Nis No.
1	50			803		732	130	6		1
2	40			804		731	130	5		2
3	30			805		730	130	4		3
4	20			806		729	130	3		4
5	10			807		728	130	2		5
6	0			808		727	130	1		6
7										7
8										8

Pycnocline Depth _____ Fluor Max Depth _____

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NWI'd	GOA-IERP-UTL 2012	Filename=	148

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN. (deg)	WIND SPD (kts)	CLOUD (amt)	TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
0	57	56	48.91	N 152	27.35	W	19	AUG	12	21	28				x	x			x	x	x	171	hp181

Sensor S/N (At Start of cruise or swap out)	Local Time (ADT)
	12

MAX. DEPTH =

SBE type and S/N
PRESS S/N
TEMP 1 &2 S/Ns
COND 1&2 S/Ns
FLUOR S/N
O2 (SBE43) S/N
Transmissometer S/N
PAR S/N
O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

No	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Nut #	OXY #	CHLOR Samples Bti ID	Chl VOL	Filter Vial #	Comments	No.
1	150			809						1
2	100			810						2
3	50			811		738	130	6		3
4	40			812		737	130	5		4
5	30			813		736	130	4		5
6	20			814		735	130	3		6
7	10			815		734	130	2		7
8	0			816		733	130	1		8

Pycnocline Depth _____ Fluor Max Depth _____

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-IERP-UTL 2012	Filename=	149

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE *	VISIBILITY *	WIND DIRN. (deg)	WIND SPD (kts)	CLOUD (am) *	TYPE *	WEATHER *	BOTTOM DEPTH (m)	STA. NAME/ID
05	56	34.88	N	152	02.42	W	20	AUG	12	01	18				x	x			x	x	x	92	61 81

Sensor S/N (At Start of cruise or swap) 24 Local Time (ADT) 12

MAX. DEPTH = 72.21

SBE type and S/N

PRESS S/N

TEMP 1 &2 S/Ns

COND 1&2 S/Ns

FLUOR S/N

O2 (SBE43) S/N

Transmissometer S/N

PAR S/N

O2 SBE42S/N

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

Nis No	DEPTH DESIRED	Rosette Notes	Hydro Sampling SALT #	Nut #	OXY #	CHLOR Samples Bll ID	Chl VOL	Filter Vial #	Comments	Nis No.
1	50		173	817	168	744				1
2	40			818		743				2
3	30			819		742				3
4	20			820		741				4
5	10			821		740				5
6	0			822		739				6
7										7
8										8

Pycnocline Depth

Fluor Max Depth

VESSEL	CRUISE ID (e.g. 1NW12)	PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2012	2NW12	GOA-ERP-UTL 2012	Filename=	150

CTD CAST #	LATITUDE DEG	LATITUDE MIN		LONGITUDE DEG	LONGITUDE MIN		GMT DAY	GMT MO	GMT YR	TIME (GMT) HR	TIME (GMT) MIN	DRY BULB Temp (°C)	WET BULB Temp (°C)	PRESSURE (mb)	SEA STATE *	VISIBILITY *	WIND DIRN. (deg)	WIND SPD (kts)	CLOUD (am) *	TYPE *	WEATHER *	BOTTOM DEPTH (m)	STA. NAME/ID
0	59	56	20.70 N	151	37.16 W		20	AUG	12	04	51				x	x			x	x	x	3866	hx1b1

| Sensor S/N (At Start of cruise or swap) | Off Local Time (ADT) | | | |