VESSEL		CRUISE	CRUISE ID (e.g. 1NW13-1)	N13-1)	PRC	PROJECT & LEG	-EG	If ye	If you download data after cast- fill this out	ata after cast	t- fill this ou		STATION NO.	40.	
thwes	Northwest Explorer 2013		10013-	_	709	GOA-JERP-UTL 2013	TL 2013	Fil	Filename=				ā		
CTD CAST#	LATITUDE	77	LONGITUDE		<b>≥</b> છ	MT	TIME (GMT)	DRY BUL	DRY BULB WET; BULB	PRESSURE SEA STATE VISIBILITY	WIND DIRN.	S o Williams	ahtaaw	BOTTO M DEPTH STA, NAME/ID	AME/ID
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Pycnocline Depth // Chlorophyll Max Depth //

VESSEL		CRUISE	ISE ID (e.g. 1NW13-1)	W13-1)	PR(	PROJECT & LEG	LEG	If you	if you download data after cast- fill this out	ta after cast-	fill this ou		STATION NO	NO.	
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i d	)))))j[PP	A4.6	4446		G M T	T N	Shirt Think			SSURE STATE YTUIB	CINDAN	N N Imp) aU	83HT/	вотто	
CAST#	LATITUDE		LONGITUDE				(GMT)	DRY BULB	DRY BULB WET BULB	SEA	DIRN.	СГО		DEPTH STA, NAME/ID	AME/ID
	DEG MIN	DEG	M		DAY	MO YR	HR MIN	Temp (°C)	Temp (°C)	, , (dm)	(geb)	(kts)		(m)	
00	356,39539	N 135	5,3260		WD 3 54/		32108			×		×	x	63564	10
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	Pyc	Pycnocline Depth	epth ()		마	orophyl	Chlorophyll Max Depth	12							

VESSEL	CRUISE ID (e.g. 1NW13-1)	PROJECT & LEG	If you download data after cast- fill this out STA	STATION NO.
Northwest Explorer 2013		GOA-IERP-UTL 2013	Filename=	05
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PAR S/N	and an			
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Pycnocline Depth 40rd 40 AU Chlorophyll Max Depth 18 m

VESSEL		CRUISE	CRUISE ID (e.g. 1NW13-1)	IW13-1)	PR(	PROJECT & LEG	LEG	If y	ou download	If you download data after cast- fill this out	- fill this out		STATION NO.		Г
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DEG	├	DEG	NA SERVICE		DAY N	MO YR	HR MIN	Temp (°C)	C) Temp (°C)	;) ((uup) (;	(geb)	(kts) 🔭	(m)		
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9		19h	6/10	329	_ 	139,42	25								
	Pyc	Pycnocline Depth		S.M.	5	orophyll	Chlorophyll Max Depth	<i>()</i> -17	В						

VESSEL		CRUISE	E ID (e.g. 1NW13-1)		PROJECT & LEG	. & LEG	If y	If you download data after cast- fill this out	t- fill this out	STATION NO.		
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DEG	 	DEG /	MIN	DAY	MO	YR HR	MiN Temp (°C)	Temp (°C) (mb)	(deg) (kts)	(m)		T
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PROJECT & LEG	GOA-IERP-UTL 2013	G M T	DAY MO YR HR	055461319	1 3	icult conditions, fa		***************************************					***************************************			CHLOR Samples	Btl ID Chl VOL Filter Vial #			1 138,87 47	2 139.57 411	3 139,79 40		8  39,39 34	6 139,42 37	11
ISE ID (e.g. 1NW13-1)	1413-1	LONGITUDE	MIN	20147 W	ap-o1 Local Time (ADT)	COMMENT: Diff		***************************************								Hydro Sampling	# Nut.# OXY #	<u></u>	95	2	52	53	54	55	55	
CRUISI	Northwest Explorer 2013   1//	LATITUDE	MIN DEG	12667 1 N 1	Sensor S/N (At Start of cruise or swap-ot Local Time (ADT)	-						N/S-		and the second s		Rosette Notes Hyd	# SALT #	七分								1/2/2018/1/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2
VESSEL	Northwest E	CTD CAST#	DEG	75600	Sensor S/N (	SBE type and S/N	PRESS S/N	TEMP 1 &2 SNs	COND 182 S/Ns	FLUOR S/N	02 (SBE43) S/N	Transmissometer S/N	PAR SIN	O2 SBE42S/N		Nis DEPTH R	No.DESIRED	1900	00/	<u></u>			<u>;</u>			2

Pycnocline Depth 12 M Chlorophyll Max Depth 28 M

VESSEL	The state of the s	CRUISE 1	SE ID (e.g. 1NW13-1)	3-1)	PROJECT & LEG	& LEG	If you	If you download data after cast- fill this out	t- fill this out	STATION NO	STATION NO.
Northwest	Northwest Explorer 2013	11/V	/W/13-1		GOA-IERP	GOA-IERP-UTL 2013	Filer	Filename≃		9	
CTD CAST#	LATITUDE	Y	LONGITUDE		₽ ₩	Start TIME (GMT)	DRY BULB	DRY BULB WET BULB	SIGNIND D D DIRN. SPD.	CLOUD (ami TYPE WEATHER	STA. NAME/ID
DEG	⊢	DEG	MIN	DAY	M	YR HR MIN	Temp (°C)	Temp (°C) (mb) 🔭	(deg) (kts)	(E)	
00856	6,43653 N		6,4052	20 m	7 K	30104		. X	X	× × 2/2	2/2/3/5/ECH/Ø
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COND 182 S/Ns	15						***************************************				The state of the s
FLUOR S/N											
O2 (SBE43) S/N	z							***************************************			
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PAR S/N							***************************************				
02 SBE42S/N									***************************************		
Nis DEPTH	Nis DEPTH Rosette Notes	Hydro	Hydro Sampling		CHLOR Samples	nples		Comments			Nis
No.DESIRED		SALT#	Nut.#	OXY# Btl	ID ChI VO	Btl ID Chi VOL Filter Vial #				T. WINNESS	No.
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	Pyc	Pycnocline Depth	epth 12 A	2	Chloroph	Chlorophyll Max Depth	3/-				

VESSEL Northwe	vesser. Northwest Explorer 2013	CRUISE ////	CRUISE ID (e.g. 1NW13-1) $ A\rangle  B\rangle  S\rangle  S\rangle  S\rangle  S\rangle  S\rangle  S\rangle  S\rangle  S\rangle  S\rangle  S$		PROJECT & LEG GOA-IERP-UTL 2013	LEG TL 2013	If you download data after cast- fill this out Filename=	STATION NO.	
CTD CAST#	LATITUDE	ľ	LONGITUDE	9	GMT	± 4E €	PRESSURE SEASTATE VISIBILITY VISIBILITY OIRN.	WIN (@E) DODE THE BOTTO DODE TYPE M SPD. CLOW	9
	DEG MIN	DEG	Min	DAY	MO YR	HR MIN	Temp (°C) Temp (°C) (mb) 1 1 (deg) (1	(kts) * * * (m)	
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PRESS S/N									
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COND 1&2 S/Ns	S/Ns								
FLUOR S/N				***************************************					T
02 (SBE43) S/N	S/N			**************************************	***************************************	**************************************			П
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	ν̈́d	Pycnocline De	Depth 17	장	lorophyll	Chlorophyll Max Depth	6		

		EVID		0	175								Ī		N.S.	o N	-	24	ო	4	ις	ဖ		8	
It STATION NO.	18	WIN CONTROL OF THE BOTTO DO CONTROL OF THE BOTTO DO CONTROL OF THE STAN NAME/ID	(kts)  *  *   *   (m)	x x x   180   SECTO	MAX, DEPTH = \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \																				
If you download data after cast- fill this out	<u>u</u>	BULB SYSTEM VIND WIND DIRN.	Temp (*C) (mb)  *  *   (deg)	X		COMMENT: Difficult conditions, factors that may affect measurements or aid processing									Comments										
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& LEG	.UTL 2013	Start TIME (GMT)	YR HR	3 1 74	3	ons, facto									ples	Filter Vial #			(20)	~ ~ :	83	53	56	55	
PROJECT & LEG	GOA-IERP-UTL 2013	G M T	MO	JUL 1	<del>-</del>	lt condition		***************************************							CHLOR Samples	Btl ID Chl VOLFilter Vial			48,88	139.59	139,34	139,39	(34,39		
13-1)			DAY	w 06 Tu	(ADT)	T: Difficu										OXY# Btl				2	3	7	7	9	
ISE ID (e.g. 1NW13-1)	11/1/13	LONGITUDE	MIN	12433	-Ot Local Time	COMMEN									II Hydro Sampling	Nut.# O	73	ht	75	75	拉	24	53	80	
CRUISE	11010	, IC	DEG	N 1351	e or swap-										Hydro	SALT#									
	Northwest Explorer 2013	LATITUDE	G MIN	1 2316917	Sensor S/N (At Start of cruise or swap-ou Local Time (ADT)	N/S		S	s)		Z	ter S/N			Nis DEPTH Rosette Notes										
VESSEL	Northwest	CTD CAST#	DEG	D11   0   S	Sensor S/N	SBE type and S/N	PRESS S/N	TEMP 1 &2 SNS	COND 182 S/Ns	FLUOR S/N	02 (SBE43) S/N	Transmissometer S/N	PAR S/N	O2 SBE42S/N	Nis DEPTH	No.DESIRED	1 135 1 135	2 100	<u> </u>	4 40	5 30	9	01 4	() 8	

Pycnocline Depth | 3 Chlorophyll Max Depth | 5

VESSEL	CRUISEI		PROJECT & LEG	LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2013	10013		GOA-IERP-UTL 2013	JTL 2013	Filename≕	2)
CTD CAST#	HONGILOBE		₽ ₩	Sport TIME (GMT)	DRY BULB PRESSURE STATE	OUD (amf) PPE MEATHER D M THER D M TH
DEG	DEG MIN	DAY	MO YR	HR	Temp (°C) (mb) * * (deg)	(E)
011156,73406N	113,261	W065K	7	3 21 30	X X	x x x / 138 SECS
Sensor S/N (At Start of cruise or sw	or swap-or Local Time (ADT)	le (ADT)		3		MAX. DEPTH = / 23
SBE type and S/N	COMME	VT: Difficult	t condition	ns, factors th	COMMENT: Difficult conditions, factors that may affect measurements or aid processing	essing
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						
02 SBE42S/N						
Nis DEPTH Rosette Notes	II Hydro Sampling	D	CHLOR Samples	sel	Comments	Nis
No.DESIRED	SALT# Nut.# (	OXY # Btl II	Btl ID Chl VOLFilter Vial #	Filter Vial #		No.
1/35	[8]					
[ 00]	B					2
3 50	83		138,82	99		n
4/0	8н	2	139,52	65		4
5 30	85	3	139,79	P9		3
6 20	86	7	139, 74	63		Φ.
7 7 2	£8	N	139,39	<u> </u>		
8	%3 8	_0	139.42	61		8
Pycn	Pycnocline Depth 1)		Chlorophyl	Chlorophyll Max Depth		

VESSEL	CRUISE ID (e.g. 1NW13-1)	PROJECT & LEG	If you download data after cast- fill this out STAT	STATION NO.
Northwest Explorer 2013	1//////	GOA-IERP-UTL 2013		22
CTD CAST# LATITUDE	LONGITUDE	ja €	DRY BULB WET BULB PR SHOWN SPD. CLODE PR SHOWN	BOTTO M DEPTH STA, NAME/ID
DEG MIN	DEG MIN D	DAY MO YR HR MIN T	Тетр (°C)   Тетр (°C)   (mb)   *   *   *   *	(m)
r,	13 2 5 1	JUL 132228	x	9115ECB
Sensor S/N (At Start of cruise or swap-ot Local Time (ADT)	e or swap-ot Local Time (ADT)	7		MAX. DEPTH ≈ \(\ext{\epsilon}\)
SBE type and S/N	COMMENT: Diff	cult conditions, factors tha	COMMENT: Difficult conditions, factors that may affect measurements or aid processing	)
PRESS S/N	Dunger, Con	poduciota and Temperature	ture all diverted significantly to	ron downcast
TEMP 1 &2 SNs	į,			
COND 1&2 S/Ns	-			
FLUOR S/N				
O2 (SBE43) S/N	***************************************			
Transmissometer S/N		THE RESIDENCE AND THE PROPERTY OF THE PROPERTY		
PAR S/N		***************************************		
02 SBE42S/N				
Nis DEPTH Rosette Notes	Hydro Sampling	CHLOR Samples	Comments	Nis
No.DESIRED	SALT# Nut.# OXY#	Btl ID Chl VOLFilter Vial #	Manager and the second	No.
100 X	86			-
2 75	99			2
<del></del>	16	7 72 72		3
4 40	92	2 129,52 71		4
5 30	93	3 139,79 76		ភេ
6 20	Hb	19, 99, 69		S
2 0 2	56	5 139.39 68		7
8	96			83
Control of the Contro		]	- V I	

Pycnocline Depth Very aradvar Chlorophyll Max Depth 10 M

VESSEL		CRUISE ID	CRUISE ID (e.g. 1NW13-1)		PROJECT & LEG	ı, LEG	If you download data after cast- fill this out STATION NO.	ter cast- fill this out	STATION	NO.	
Northwe	Northwest Explorer 2013	11/11/1	3	g	GOA-IERP-UTL 2013	UTL 2013	Filename=	The state of the s	1. 2	3	
CTD	L C	Š	BOILE	9	MT	Start	AV WHITE	SEA STATE	Mo Windows Country of Mindows	BOTTO M DEPTH STA NAME/ID	<u> </u>
CAS! #	DEG MIN	DEG	MIN	DAY	MO	Tz	Temp (°C) (i	* * (deg)	N .		
01135		13	2	W D 7 JUL L	17715	31500		X	×	855EF75	7
Sensor S.	Sensor S/N (At Start of cruise or swap-ou Local Time (ADT)	or swap-o	Local Time (AD	Ē	<b></b>	3			<b></b>	мах. DEPTH = 80 n.	3
SBE type and S/N	N/S F	၁	OMMENT: I	Difficult	conditic	ons, factors tf	COMMENT: Difficult conditions, factors that may affect measurements or aid processing	ements or aid pr	rocessing		Ī
PRESS S/N										week to the state of the state	
TEMP 1 &2 SNs	NS.		***************************************		***************************************		***************************************				
COND 182 S/Ns	S/NS				mmorting of the distance of	THE REAL PROPERTY OF THE PERSON OF THE PERSO					
FLUOR S/N											Γ
02 (SBE43) S/N	N/S		•								
Transmissometer S/N	neter S/N										
PAR S/N			The state of the s					***************************************			
O2 SBE42S/N	X.						The state of the s			***************************************	
Nis DEPTH	Vis DEPTH Rosette Notes	Hydro Sampling	ampling	H5	CHLOR Samples	səld	Com	Comments			Nis
No.DESIRED	Q	SALT#	Nut.# OXY #		Chi VOI	Btl ID Chl VOL Filter Vial #					Š
Soft Soft		3	tub				Trans.				-
5		2	98	_	138.87	¥£.					2
<u> </u>			00	2	139,52	t t					3
<u>i</u>			es	~	139, 79						4
			Q	7	139,39	35				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5
<u> </u>			Z.	7	139,39						ဖ
			103	9	139,42	73					7
8							** Company of the Com		**************************************		8
	Pycn	Pycnocline Depth	ıth		Chloroph	Chlorophyll Max Depth	13				

IISE ID	CRUISE ID (e.g. 1NW13-1)	PROJECT & LEG	93	If you download data after cast- fill this out	STATIO	N NO.
<i>ハル/</i>   ン   GOA-IERP-UTL 2013	GOA-IERP-	텕	2013		100	4-1
C M T G M T	L ₩ 5		Start TIME (GMT)	DRY WELS WEET BULLS SER STATE SER STATE	WIND WIND GED GED GED GED GED GED GED GED GED GE	BOTTO M DEPTH STA. NAME/ID
DEG MIN DAY MO	_	YR		Темр (°C)   Темр (°C)  (mb)   *   *	(deg) (kts) *  *  *	(m)
102	77260	1 3	1341	X X	×	III DSEEII Ø
Sensor S/N (At Start of cruise or swap-ot Local Time (ADT)		1 3				MAX. DEPTH = 1/25
COMMENT: Difficult condit	ficult condit	ions	, factors th	COMMENT: Difficult conditions, factors that may affect measurements or aid processing	or aid processing	
					***************************************	
				V. Mariannia in managarina in the state of t		
The second secon				**************************************		
Hydro Sampling CHLOR Samples	CHLORS	amples		Comments		Nis
SALT # Nut.# OXY # Btl ID Chi VOL Filter Vial #	Bel ID Chi VC		ter Vial #	a canada de la companya de la compan	. 0.02 (11.10.10.)	No.
105						-
901	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	<u> </u>				2
107 1 138,87	1 138,8	i '	20 T			8
108 2 139,52			63			4
109 3 139.79			82			cı
7		<u> </u>	18			9
111 5 139,39			98	1	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	7
112 6 139,42			2			80
				J. 5.4		

Pycnocline Depth |4/7, Chlorophyll Max Depth |5

VESSEL	CRUISE ID (e.g. 1NW13-1)	1NW13-1)	PROJE	PROJECT & LEG		if you download	If you download data after cast fill this out	ill this out	STATION NO	NO.	
Northwest Explorer 2013	11/11/11/2		GOA-1E	GOA-IERP-UTL 2013	013	Filename≕			7	9	
CTD LATITUDE	LONGITUDE	JDE	GMT		Sart Time (GMT) DI	DRY BULB WET BULB	PRESSURE SEA STATE VISIBILITY	WIND D DIRN. SPD.	CLOUD (ami PAYT MEATHER	BOTTO M DEPTH STA. NAME/ID	E/ID
DEG MIN	DEG	NIN	DAY MO	YR T	-	Temp (°C) Temp (°C)	* * (qm) (;	(deg) (kts)	2.6 2.6	(m)	
01 556,90182	N 136296D		w025111	1 3 2	7   1		x		x x x 1498	1913/5/2/2	Ø
Sensor S/N (At Start of cruise or swap-ot Local Time (ADT)	e or swap-or Loca	I Time (ADT)		1 3						MAX. DEPTH = ∠	DO
SBE type and S/N	COMP	MENT: Dif	ficult cond	litions, f	actors tha	COMMENT: Difficult conditions, factors that may affect measurements or aid processing	asurements	or aid proc	essing		
PRESS S/N											
TEMP 1 &2 SNS			***************************************								
COND 1&2 S/Ns											
FLUOR S/N			***************************************								
O2 (SBE43) S/N										de filles est de sesses servir les servir servir servir de servir de servir de servir de servir de servir de s	
Transmissometer S/N											
PAR S/N											
02 SBE42S/N											
							***				
Nis DEPTH Rosette Notes	Hydro Sampling	ng	CHLOR Samples	samples			Comments				Nis Si
No.DESIRED	SALT # Nut.#	# XXO	Btl ID Chl VOL Filter Vial	/Ot Filter	Vial#						No.
1 200	8/1   69/7	333									-
2 100	711										7
<u> </u>	211		138	06 38.82							က
4 40	911		7 139.50	59 89	Armon						4
5 30	tII		3 139,79	38  bt	, .						'n
e 20	811		4 139,29	78 PT	<u></u>						ဖ
Q(   Z	611		5 139,39	<i>9</i> /5   6€	. 0			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			7
0 8	120		6 139.42	42 85	١,0						∞
	Pycnocline Depth	W U	Chloro	Chlorophyll Max Depth	x Depth	in 51					

VESSEL		CRUISE	CRUISE ID (e.g. 1NW13-1)		PROJECT & LEG	3 LEG	If you download data after cast- fill this out	st-fill this out	STATION NO.	
Northwes	Northwest Explorer 2013	10 kg	UW/13-1	J	GOA-JERP-UTL 2013	UTL 2013	Filename=		29	
CTD CAST#	LATITUDE		LONGITUDE		₽ ₩ 1	TIME (GMT)	DRY BULB PRESSURE PRESSURE BULB PRESSURE	VIND WIND D O DIRN. SPD. 7	COUDE ME BOTTO SEE M STA NAME/ID	ME/ID
<u> </u>	DEG MIN	DEG	WIN	DAY	MO Y	YR HR MIN	Temp (°C) Temp (°C) (mb) *	(kts)	(m)	
0/16/5/6,	73874	N 136,	6,8160	w 0 %	7 M Z	31502	•		x x x 2/435 E E 40	40
Sensor S/I	Sensor S/N (At Start of cruise or swap-ot L∞al Time (ADT)	e or swap	-Ot Local Time (	ADT)		С			MAX. DEPTH = .	10%
SBE type and S/N	S/N		COMMENT	: Difficult	conditic	ins, factors t	COMMENT: Difficult conditions, factors that may affect measurements or aid processing	ts or aid proce:		
PRESS S/N										
TEMP 1 &2 SNS	Ns									
COND 182 S/NS	Ns									
FLUOR S/N										
02 (SBE43) S/N	N/S								***************************************	
Transmissometer S/N	ater S/N								A man de alemante de la companya de	***************************************
PAR S/N										
02 SBE42S/N							And the second of the second o			
	STORY OLD TO SERVE STORY OF SERVER STORY OF SE	Section Section 1	(M. Joseph J. C. Company of Mary Company of Ma		ACAPAGA CHARLES CONSTRUCTION	Security of the Control of the Control				]
NIS DEPTH	Nis DEPTH Rosette Notes	Hyarc	Hydro Sampling	9.9%	CHLOR Samples	bies	Comments			2
No.DESIRED	(	SALT#	Nut.# OXY #	_	Chi VOL	Btl ID Chl VOL Filter Vial #	W0770000000000000000000000000000000000			ģ
1 200			121							4
2 100			122							7
3 50			123		138,831	%			3	က
4 JH			124	2	139.52	95				4
5 30			125	3	139,59	<i>h</i> 6		1		5
6 20			126	Ч	139,79	<u>م</u>				φ
9 2			129	3	139.39	42				7
Q 8			128	9	139.42	<u>~~</u>			The state of the s	8
	Pyci	Pycnocline Depth	epth 20 m		Chlorophy	Chlorophyll Max Depth	32			

		STA. NAME/ID		2131215151510	MAX. DEPTH =		water	2. Hoperalt	*						Nis	, N	-	2	9	4	ស	9	7	
STATION NO	$\frac{1}{2}$	ЖЕАТНЕК WEATHO M DEPTH	## ##	×	MAX	•	70 64 4/2	terrinabon.	*/			٠												,
this out		WIND WIN SPD. CLOUD (APPL)		×		COMMENT: Difficult conditions, factors that may affect measurements or aid processing	The CT	1/16 fers	1.00 1dn't +all													;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;		-
If you download data after cast-fill this out		PRESSURE SEA STATE VISIBILITY	) . (qw)	X		urements o	this easi	stretched	Sea cart bie						Comments									
ı download dat	Filename=	DRY BULB WET BULB	Temp (°C)			ıffect meası	1 huring	) and	Sound	~					O									*
If you	File		N Temp (°C)		- 1.	s that may a	5/0006	1000	onice the	·														
& LEG	-UTL 2013	Star C TIME (GMT)	YR HR MIN	3 20 59	r	ons, factor	an never	10 / 1/2 t	tous.						səld	Filter Vial #			102	101	100	]	98	(
PROJECT & LEG	GOA-IERP-UTL 2013	G M T	MO	3 JUL 1		ult condition	to stream	1	At 13th						CHLOR Samples	Btl ID Chl VOL Filter Vial			138.87	139.52	139.79			4
IW13-1)		ш	DAY	3 W D 8	ime (ADT)	ENT: Diffic	uch do	Valuet	reterminated							OXY # Bt		E E E E E E E			~		332 5	
ISE ID (e.g. 1NW13-1)	1/10/13-1	LONGITUDE	MIM	7,3289	ap-ot Local T	COMME	Although	hand	réfer						II Hydro Sampling	L# Nut#	67	2	M	32	/33	/34	135	
CRUIS			DEG	SN 13	uise or sw										H	SALT							130	
	Northwest Explorer 2013	LATITUDE	⊢⊸	5672	Sensor S/N (At Start of cruise or swap-or Local Time (ADT)	N.						- S/N			osette Notes			2 (Sa)						
VESSEL	Northwest I	CTD CAST#	DEG	011 256	Sensor S/N	SBE type and S/N	PRESS S/N	TEMP 1 &2 SNs	COND 182 S/Ns	FLUOR S/N	O2 (SBE43) S/N	Transmissometer S/N	PAR S/N	02 SBE42S/N	Nis DEPTH Rosette Notes	No.DESIRED	1 200	2 100	3	0,7	33	<u> </u>	9 2	

10

ten 46 - 250/x

( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

VESSEL		CRUISE II	CRUISE ID (e.g. 1NW13-1)		PROJECT & LEG	LEG	If you download data after cast- fill this out	STATION	
Northwe	Northwest Explorer 2013	1 N/b) 1	13	00	GOA-IERP-UTL 2013	TL 2013	Filename=	₹	
CTD CAST#	LATITUDE	9	LONGITUDE	Ŋ	± ≅	Hine (GMT)	DRY BULB WET BULB PR SEASON OIRN.	WIN COUNTY BOTTO BOTTO MANGING SPD. COLD WE WAS DEPTH STA. NAME/ID	
	DEG MIN	DEG	MIN	DAY	MO YR	HR MIN	Temp (°C) Temp (°C) (mb) * * (deg)	(kts) * * (m)	
8110	85736385'N	3	60752° W	WIDJUL	-	3 / 5 6 /	X X	x x x 100 SEG0	
Sensor	Sensor S/N (At Start of cruise or swap-or Local Time (ADT)	or swap-	Ot Local Time (ADT		-			MAX. DEPTH = 95	F
SBE type and S/N	nd S/N	)	COMMENT: D	ifficult c	ondition	is, factors th	COMMENT: Difficult conditions, factors that may affect measurements or aid processing	l processing	1
PRESS SAN	7		Da serbar	1001 105	1014 70	Working - W.	11 try a back flush	And the second s	T
TEMP 1 &2 SNs	SNS		,			الم		AAAAA	Т
COND 182 S/Ns	S/Ns		manusconnect but by the first						1
FLUOR S/N	7							the state of the s	T
02 (SBE43) S/N	N/S (								
ransmisso	Transmissometer S/N						***************************************	The second state of the se	Т
PAR S/N								10 m m m m m m m m m m m m m m m m m m m	
O2 SBE42S/N	S/N							THE PROPERTY OF THE PROPERTY O	$\overline{\top}$
is DEPT	Vis DEPTH Rosette Notes	Hydro	Hydro Sampling	H5	CHLOR Samples	es .	Comments	Nis	<u>.v</u>
No.DESIRED	ED	SALT#	Nut.# OXY #		Chi VOL	Btl ID Chl VOL Filter Vial #	Additional management of the state of the st	No.	ं
1 Bit			137					-	
175			<u> </u>					N	~
			20	**********	13821	801		n	m
<del></del>				6~7	159, PEI	107		4	4
				N	139,79	701		9	ro.
<u>'                                    </u>			4	e agrico o	139,729	105		9	و
<del>                                     </del>			[2] 23 24	>~\{	139.39	H01		7	
0			16/14		139,42	103	A CANADA TO THE TAXABLE TO THE TAXAB	8	8
	Pycr	Pycnocline Depth	17 m	Ç	larophyl	Chlorophyll Max Depth	14 m		

VESSEL		CRUISE IC	ID (e.g. 1NW13-1)		PROJECT & LEG	EG	If you download data after cast- fill this out	STATION NO.	_
orthwest	Northwest Explorer 2013	INUM	13	ŏ	GOA-IERP-UTL 2013	L 2013	Filename=	35	
CTD CAST#	LATITUDE	ΓC	LONGITUDE	Ŋ	T W	Start TIME (GMT)	DRY BULB WET BULB RESIDENT SPD.	CLOUD (GET) WEATHER WATO WEATHER M STA. NAME/ID	
DEG	G MIN	DEG	MIN	DAY	MO YR	HR MIN	Temp (°C)   Temp (°C) (mb)   •   • (deg) (kts)	(m)	
011 1915	95732317"N	[1]3 6.	2055° w	105 U	WL 13	7 1 7 1 7	×	x x x 11425EBS	—
sensor S/A	Sensor S/N (At Start of cruise or swap-	e or swap-	-01 Local Time (ADT)		1 3			MAX. DEPTH = 168	
SBE type and S/N	N/S		COMMENT: D	ifficult (	ondition	s, factors th	COMMENT: Difficult conditions, factors that may affect measurements or aid processing	essing	
PRESS S/N			On sensor	son not	ot wor	Working - 7	FII Flush the system Again	and check connection	<u> </u>
TEMP 1 &2 SNS	ls.		/			٠,		The second state of the se	_
COND 1&2 S/NS	٧s						And the state of t		1
FLUOR S/N									
O2 (SBE43) S/N	Z								
Transmissometer S/N	ter S/N						The second secon		
PAR S/N					***************************************				
02 SBE42S/N						The second secon	1994 p. (A)		
	N P I THE THE PARTY IN A PARTY NAMED TO		A CONTRACTOR OF THE PROPERTY O	220672118022000	Complete to the Complete Street	Charles (constant			
S DEPTH	Ais DEPTH Rosette Notes	~ I	Sampling	5	CHLOK Samples	es es	COMMEMS		<u>, Т</u>
No.DESIRED		SALT#	Nut.# OXY #	Btl ID	Chi VOL Filter Vial #	ilter Vial#	A CONTRACT OF THE PROPERTY OF	No.	انہ
1 62 Part			SHI				-		-
2 /0D			146						~
			<i>th</i>		4,8,1821	71			ო
<u> </u>			81-18	7	139,52	1/3			-4
\$			57	دما	179,749	112			r.
<del>:</del>			B	h	139,74	111			9
2 2			181	~		1(0			~
0 8			15.5		139,42	109	TOOMS A PROPERTY OF THE PROPER	An Andread Conference of the C	
	Pvc	Pycnocline Depth	apth /L/		hlorophyll	Chlorophyll Max Depth	20		
	Į.		ı						

Ŏ.	37	TO TH STA. NAME/ID		3115E6110	MAX. DEPTH = $200$		here	20010							Nis	No.		2	3	4	ស	9	7	
STATION NO.	~	N CCOUD (amt CLOUD (amt PER POTTER POTT PER POT	(m)	× × ×	MA	cessing	16	system ag	>		***************************************	ļ					:							
ast-fill this out		VISION D D DIRN. SPD.	* (deg) (kts)	×		ats or aid pro	take 0;	hill flush	(e a call		W				S									
If you download data after cast- fill this out	:e:=	WET BULB PEEA STATE	Temp (°C) (mb) *	*		COMMENT: Difficult conditions, factors that may affect measurements or aid processing	goines In	175-17	d to make						Comments									,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
If you dow	Filename=	DRY BULB WE	Temp (°C)			that may affec	I was	5023500	he I no															,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
& LEG	GOA-IERP-UTL 2013	್ರಸ್ಟ್ TIME (GMT)		3 00	е	ons, factors t	neantive	Fro He	ons Maube						nples	L Filter Vial #			120	119	811	5	711	
PROJECT & LEG	GOA-IERF	GMT	DAY MO	10541	***	fficult conditi	r reading		k cónnections						CHLOR Samples	Btl ID Chl VOL Filter Vial #			F8, 821	2 139,42	5 139 F	1 (39.75)	\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	de de
ISE ID (e.g. 1NW13-1)	3	LONGITUDE	WIN	3323 w	1 Local Time (ADT)	COMMENT: Di	D, senso	15.4 7.4	and check						ampling	Nut# OXY#	/53	154	155	151	151	158	159	1/ ^
CRUISE ID	1/3/1/	joj	DEG	N / 36	e or swap-c	) 									Hydro Sampling	SALT#						1		
VESSEL CRU	Northwest Explorer 2013	LATITUBE		28314	Sensor S/N (At Start of cruise or swap-ol Local Time (ADT)	N						I S/N			Rosette Notes									
VESSEL	Northwest	CTD CAST#	DEG	02057	Sensor S/N	SBE type and S/N	PRESS S/N	TEMP 1 &2 SNs	COND 182 S/Ns	FLUOR SIN	02 (SBE43) S/N	Transmissometer S/N	CO SREADON	200	NIS DEPTH R	No.DESIRED	1 200	2 100		4 UD	20		<u>!</u>	4

Pycnocline Depth // Chlorophyll Max Depth //

VESSEL	CRUISE	CRUISE ID (e.g. 1NW13-1)	) PROJECT & LEG	LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2013	3 11/11/13	13	GOA-IERP-UTL 2013	JTL 2013	Filename=	38
CTD CAST# LATITUDE	רנ	LONGITUDE	6 M T	TIME (GMT) DR	PRESOURE SEA STATE VIOLENT DIRECT VIOLENT DIRECT VIOLENT VIOLENT DIRECT VIOLENT D	WIN G EE BOTTO D D E M SPD. C D E M D D EPTH STA. NAME/ID
DEG MIN	DEG	MIN	DAY MO YR	HR MIN	Temp (°C)   Temp (°C)   (mb)  *  *   (deg)   (kts)	) * * (* (m)
021157,20067N		36,5948 W	11 Tul.	3 00 20	X X X	x x x 16003 E620
Sensor S/N (At Start of cruise or swap-ou Local Time (ADT)	lise or swap	-ot Local Time (ADI	)     1	3		MAX. DEPTH = $200$
SBE type and S/N		COMMENT: D	ifficult conditio	ns, factors that	COMMENT: Difficult conditions, factors that may affect measurements or aid processing	cessing
PRESS S/N						
TEMP 1 &2 SNs			***************************************			
COND 182 S/Ns						
FLUOR S/N						The second secon
02 (SBE43) S/N	The same	5 0° 60	Section Comoved	d 11/14 /2	tested offer this cast.	***************************************
Transmissometer S/N		<i>}</i>				
PAR S/N						
O2 SBE42S/N						
Nis Depart   Bassak Notes		III	Sulcames at Ind	]	Commonte	SIN
wis DEF III Moseue Noise	25.1		19	200	Carponing Co.	
No.DESIRED	SALT#	Nut.# OXY #	Btl ID Chl VOL Filter Vial #	Filter Vial #	To the second section of the second section se	No.
1 200		191				
2 100		162				8
<u> </u>		163	1-8-8-	761		8
9-7-		h91	2 139.52 125	7.5		4
5 30		5%	3 139,79	124		\$
<u> </u>		166	4 1391.79	123		9
0/ 2		<i>1.9</i> 1	5 139,39	122		
8 0		168	139.42	121		8
	Pycnocline Depth	epth 13 m	Chlorophy	Chlorophyll Max Depth	7 m	

VESSEL	CRUISE ID (e.g. 1NW13-1)	PROJECT & LEG	If you download data after cast- fill this out STA1	STATION NO.
Northwest Explorer 2013	11/14/13	GOA-IERP-UTL 2013	Filename=	40
CTD CAST# LATITUDE	LONGITUDE	G M T TIME (GMT)	DRY BULB WET BULB PR SPD DIRN.	BOTTO M DEPTH STA. NAME/ID
DEG MIN	DEG MIN	Z	Temp (°C)   Temp (°C)   (mb)   *   *   (deg)   (kts)   *   *	(m)
08680.	N 137,1175 W	43	×	24375640
Sensor S/N (At Start of cruise or swap-or Local Time (ADT)	e or swap-ot Local Time (ADT)			MAX. DEPTH = $200$
SBE type and S/N	COMMENT: Diff	icult conditions, factors th	COMMENT: Difficult conditions, factors that may affect measurements or aid processing	
PRESS S/N				
TEMP 1 &2 SNs	D, sevisor	ic re-altowhed, but	t readings are still bad	
COND 1&2 S/Ns	j	***************************************	7	
FLUORSAN	The second secon			
O2 (SBE43) S/N				***************************************
Transmissometer S/N				
PAR S/N			eryphyddiadau acanan acanan ar a canan	
O2 SBE42S/N				
Nis DEPTH Rosette Notes	Hydro Sampling	CHLOR Samples	Comments	Nis
No.DESIRED	SALT# Nut# OXY#	Btl ID Chi VOL Filter Vial #		No.
1 300	67			γ <del>-</del>
2 100	9.1			2
3 59	21	1 34.87 13.2		3
4 40	192	7 39,52 131		4
5 30	193	3 130		S
g 20	hć!	1 (2) (2)		9
01 2	571	5 129 128		7
0	光	till oniver 9		80

Pycnocline Depth |3 m Chlorophyll Max Depth 35

VESSEL	CRUISE ID (e.g. 1NW13-1)	) PROJECT & LEG	If you download data after cast- fill this out STATION NO.	Г
Northwest Explorer 2013	11/4/13	GOA-IERP-UTL 2013	Filename=	
CTD LATITUDE	LONGITUDE	G M T TIME (GMT)		<u></u>
DEG MIN	DEG MIN	DAY MO YR HR MIN	Temp (*C)   Temp (*C)   (mb)   *   *   (deg)   (kts)   *   *   *   (m)	
02356869211N	1336404	W/115/4/132140		
Sensor S/N (At Start of cruise or swap-ot Local Time (ADT)	or swap-or Local Time (AD		MAX. DEPTH = $20$ .	$\overset{\sim}{\sim}$
SBE type and S/N	COMMENT: E	difficult conditions, factors th	COMMENT: Difficult conditions, factors that may affect measurements or aid processing	Ī
PRESS S/N		NAME AND ADDRESS OF THE PARTY O		
TEMP 1 &2 SNs	D, SENSON	or No Japac recolura	meaning but perhalitia very spotatically.	Ì
COND 1&2 S/Ns	Restan	50 meters had maked	vable values, hence the sample, but tone	
FLUOR S/N	rest	looks like innk.		T
02 (SBE43) S/N		7		Т
Transmissometer S/N		The second secon	***************************************	T
PAR S/N				T
02 SBE42S/N		100 mm my \$4 \$40 \$45 \$45 \$45 \$45 \$100 \$100 \$100 \$100 \$100 \$100 \$100 \$10		
		212320 90 100	Commonts	1.9
NIS DEFIN		200		T
No.DESIRED	SALT#   Nut#   OXY#	# Btl ID Chl VOLFilter Vial #	NO.	او
1 200	177 334		T-	-
2 (0)	861		2	2
3 2	150	1 138,47 138	8	 E
4 40	0.81		4	4
8	181	3 139,79 136	<b>ω</b>	5
R 9	781		Φ	ဖ
0 2	<i>29</i>	5 (39,39 )3H		7
8 0 8	472 184		8	
Pyci	Pycnocline Depth $2b$	Chlorophyll Max Depth	22	

VESSEL		CRUISE ID (	CRUISE ID (e.g. 1NW13-1.)	PROJECT & LEG	& LEG	If you download data after cast- fill this out	I this out	STATION NO.	
Northwe	Northwest Explorer 2013	ME) 13		GOA-IERF	GOA-IERP-UTL 2013	Filename≕		ন	
CTD CAST#	LATITUDE	LONG	LONGITUDE	GMT	Start TIME (GMT)	PRESSURE SEASTATE VISIBILITY	WIND D OO	39YT	ME/ID
	DEG MIN	DEG	MIN	DAY MO	YR HR MIN	Temp (°C) Temp (°C) (mb) 1 1	(deg) (kts) *	(ш)	
0245	N 1 2 1 2 1 2 1	137,9528	528 W	12 Jul 1	3 1853	×	×	x x 27935 E I 60	0
Sensor S.	Sensor S/N (At Start of cruise or		<b>swap-ot</b> Local Time (ADT)	-	3			MAX. DEPTH = $20$	100
SBE type and S/N	N/S P	3	OMMENT: Dif	icult conditi	ons, factors tl	COMMENT: Difficult conditions, factors that may affect measurements or aid processing	r aid proces		-
PRESS S/N									
TEMP 1 &2 SNS	SNS								Ì
COND 1&2 S/Ns	S/NS								
FLUOR S/N									
02 (SBE43) S/N	SIN					***************************************			
Transmissometer S/N	neter S/N	+74						The state of the s	
PAR S/N						***************************************			-
02 SBE42S/N	Z								
			L					***************************************	
Nis DEPTH	Vis DEPTH Rosette Notes	Hydro Sampling	mpling	CHLOR Samples	uples	Comments			Nis
No.DESIRED	Ω:	SALT# N	Nut.# OXY #	Btl ID Chl VOLFilter Vial #	Filter Vial #				No.
1 200			581						-
2 100			7,8,1						7
35			781	14,450					<sub>8</sub>
4 7			188	7 139,52	143			Total International Control	4
5 30		and the second	189	3 139.79	142				ಬ
<u> </u>		marriage	85	130 J	i				ဖ
2 2		-	6	5 139,39	1.70				7
0	1		75.	Th'621 )					8
	T		0.			00			

Pycnocline Depth 12 Chlorophyll Max Depth 22

VESSEL	MANUAL STREET,	CRUISE II	ISE ID (e.g. 1NW13-1)	/13-1)	PR	PROJECT & LEG	EG	11	non down	If you download data after cast-fill this out	ast-fill this	ont	STATION NO.	N NO.	
Northwes	Northwest Explorer 2013	100/13	13		00	GOA-1ERP-UTL 2013	TL 2013		Filename=	11			l II	4,4	
CTD CAST#	LATITUDE	21	LONGITUDE		Ö	GMT	TIME (GMT)	DRY BL	DRY BULB WET BULB	BULB PRESSURE SEASTATE	VISIBILITY VIND DIRN.	CLOUD (emt	MEATHER.	BOTTO M DEPTH ST	STA. NAME/ID
	DEG MIN	DEG	MIN		DAY	MO YR	HR MIN	Temp (°C)		Temp (°C) (mb) *	(geb)	(kts)		(E)	
0255	59,3352 N	_	३१२ मा ११ म	w   3	3 7	J4213	3000			×	X		x x Z	512/2/3	x x  x 259236 IU D
Sensor S/	Sensor S/N (At Start of cruise or swap-ou Local Time (ADT)	or swap-	Ot Local Time	e (ADT)		<del>-</del>	3							MAX, DEP	MAX. DEPTH = $DC$
SBE type and S/N	S/N		COMMEN	T: Diff	icult co	ndition	s, factors	that ma	y affect	COMMENT: Difficult conditions, factors that may affect measurements or aid processing	nts or aic	proces	ssing		
PRESS S/N			-												
TEMP 1 &2 SNS	NS.													W	and the second second
COND 182 S/NS	Ns										***************************************				
FLUOR S/N															
02 (SBE43) S/N	N)														
Transmissometer S/N	ater S/N												***************************************		
PAR S/N		-						***************************************			- The state of the				
02 SBE42S/N													and the second s		
Nis DEPTH	Nis DEPTH Rosette Notes	Hydro	Hydro Sampling		СНГ	CHLOR Samples	es			Comments	ıts				Nis
No.DESIRED	9	SALT#	Nut.#	# XXO	Bil ID (	hi vou	Btl ID Chl VOL Filter Vial #								No.
1 200		173	193								3		1	1	, , ,
901			194												2
<u> </u>			195		_	48,84	150							1	8
4 HO		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	251		2	139.57	149								4
			かない		~	(36, 195)	IHK I							1	ស
!			25			PA, PEY	ĽΗ								9
7 10			189	33.5	5	139.39	7/1				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	111111111111			7
0 8			2002			34/HP 1455	75				Total Park Control of the Control of				8
	Pyc	Pycnocline Depth	1) http://	(	5	lorophyll	Chlorophyll Max Depth	18							

VESSEL		CRUISE	SE ID (e.g. 1NW13-1)	PROJE	PROJECT & LEG	9	If you download	If you download data after cast- fill this out	this out	STATION NO	Ġ.	Γ
Northwes	Northwest Explorer 2013		UV-13	GOA-1	GOA-IERP-UTL 2013	2013	Filename=			S		
CTD CAST#	LATITUDE	T	LONGITUDE	GMT	-	TY TY	DRY BULB WET BULB	PRESSURE SEA STATE VISIBILITY	WIND D COURN. SPD.	CLOUD (ami	BOTTO M DEPTH STA. NAME/ID	밁
	DEG MIN	DEG	MIN	DAY MO	YR	HR MIN	Temp (°C) Temp (°C)	· QW)	(deg) (kts)	* * *		1
0265	- ુપ	3	8,2622 W	1354.	7 1 3	11939	•	x		x x x 278	27855EK60	0
Sensor S/	Sensor S/N (At Start of cruise or swap-ot Local Time (ADT)	or swap-	-01 Local Time (ADT)		<u>ئ</u> ى					MAX	МАХ. DEPTH = 200	
SBE type and S/N	S/N		COMMENT: Di	fficult con	ditions,	factors th	COMMENT: Difficult conditions, factors that may affect measurements or aid processing	easurements or	aid proce	ssing		
PRESS S/N										***************************************		T
TEMP 1 &2 SNs	Ns		0, 500	sensor loo	vokina	setter.	J 1 37	fiving itself?	Hicking	109 140		
COND 1&2 S/Ns	Ns		replac	Acoment T	Jourt Clow	10 G.O.C.	will swap	OUL		~		
FLUOR S/N				+								
O2 (SBE43) S/N	N/S											T
Transmissometer S/N	eter S/N		***************************************		-							
PAR S/N												
02 SBE42S/N								A			-	
1. FOLO - 34	Dagate Nates		Jaro Campillac	aO ino	Selumes do Inc			Comments				Š
No DESIRED	Noselle House		Nut# OXY#	E	VOLFIIL	er Vial #						ő
			٠,	<u> </u>								Γ,
297 -			47-	1							1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-
2 100			202									2
3			203	<u>ず</u>		156						6
1			204	2 (3)	_	/5.5						4
5 30			205	3		154			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			ς.
<u>:                                    </u>			20%		i	53						9
01 2			20°4	2		152					1	7
0			20%	<sup>3</sup>	!	151						8
1	water to the control of the control			- 10		1	-2					

Pycnocline Depth | 7 Chlorophyll Max Depth | 3

VESSEL	MANAGAMANA.	CRUISE	CRUISE ID (e.g. 1NW13-1)	PRO.	PROJECT & LEG	5.5	If you de	If you download data after cast- fill this out	- fill this out	STATION NO.	).	Г
Northwe	Northwest Explorer 2013	11010113	13	GOĄ	GOA-IERP-UTL 2013	L 2013	Filename=	ıme=		52	(	
CTD	LATITUDE	)	LONGITUDE	G M	<b>⊢</b>	TIME (GMT)	DRY BULB WET BULB	MET BULB PRESSURE VET BULB	WIN WIN D D DIRN. SPD.	CLOUD (ami	BOTTO M DEPTH STA. NAME/ID	읡
	DEG	DEG		DAY MO	) YR	HR MIN	Temp (°C)	Temp (°C) (mb) 🕨 🕒	(deg) (kts)	[*  *   *   (m)		
027	0275763461°N	~	717269° W	W/354L	7 1 3	25 2 1	•	x		x x 250L	45EM4D	0
Sensor	Sensor S/N (At Start of cruise or swap-ot Local Time (ADT)	or swap	-01 Local Time (ADT)		1 3					MAX	MAX. DEPTH = $200$	
SBE type and S/N	N/S pu		COMMENT: Dif	ficult co	nditions	, factors t	hat may aff	COMMENT: Difficult conditions, factors that may affect measurements or aid processing	s or aid proc			
PRESS S/N	7		,				-		ļ		-	
TEMP 1 &2 SNs	2 SNs		Corduction	in cell	Mas	9,0,00	Suprace	readings	antina	Second :	79	4
COND 1&2 S/Ns	S/Ns		₹ 151',t	7.4 met	eters.	Jelist	14 / Va	shed cool as	700			T
FLUOR S/N	~			<u></u>		7		, , , ,	( /	,		T
02 (SBE43) S/N	3) S/N		Lost signa	10	~ 30ks	100	Casi	Hestarted and	Jan + Clebra	20 5	M	T
Transmissometer S/N	ometer S/N		40 bollec	4	remaining s	50.000 12.	Took 1	iret Six walle	Some Services	Com 157 C.	1220	Ī
PAR S/N					3			THE THE PERSON NAMED IN TH				
02 SBE42S/N	S/N											
	Control of the second s	The agost the day 6525.	APPROAPES COST CONTROL BREVISING TO	A. C.	Digital aparticulary, 20th and the sections	100000000000000000000000000000000000000		-				1 2
Nis DEP	NIS DEPTH ROsette Notes	בואמור	ے ا	בבו בבו								T
No.DESIRED	(ED,	SALT#	Nut.# OXY #	Bil ID C	Btl ID Chl VOL Filter Vial #	ter Vial #						ş
1 300			209									-
<del> </del>			616									~
<del>_</del>			2 6	-	49.60	9						,
8		1	117	1		166					 	<u>م</u>
4			212	2 /	139.54	[0]						4
5 30			23	~	139.79	09						3
6 20			714	<u> </u>		159	> top	an 2nd "di	"dio, after	Dower (	ucha	9
7 (1)		HźH	215	\chi_		15%		Used Wis	Viskins 6-8		7	7
) 8			216	_	(34.42)	153	000000000			The state of the s		80
	Pycn	Pycnocline Depth	epth /5	Chlc	rophyll	Chlorophyll Max Depth	(3	ı				

VESSEL		CRUISE I	CRUISE ID (e.g. 1NW13-1)	PRO,	PROJECT & LEG	55	If you download data after cast- fill this out	r cast- fill this out	STATION NO.	
Northwe	Northwest Explorer 2013	10013	13	GOA-	GOA-IERP-UTL 2013	L 2013	Filename=		53	
CTD CAST#	LATITUDE	) T	LONGITUDE	GMT	<b>⊢</b>	Short TIME (GMT)	E BRESSURE	SEA STATE VISIBILITY DIRN. B D WIN SPD. CLOUD (ami	TYPE WEATHER BY THE PARTY OF TH	STA, NAME/ID
	DEG MIN	DEG	MIN	DAY MO	YR	HR MIN	Temp (°C) Temp (°C) (mb)	* * (deg) (kts)	(m)	
0 28	5 765 839 m	136	3648 W	1 1 1 1 1 1 1	413	2012		×		タロゴタ
Sensor S	Sensor S/N (At Start of cruise or swap-out.ccal Time (ADT)	or swap-	Ot Local Time (ADT)		1 3				MAX.	MAX. DEPTH = ૠ
SBE type and S/N	N/S PI		COMMENT: Di	fficult co	ditions	, factors th	COMMENT: Difficult conditions, factors that may affect measurements or aid processing	ents or aid proces	ssing	-
PRESS S/N			,		***************************************					
TEMP 1 &2 SNS	SNs		u pig	not swaw	Day	0,	Sp. 1365 116t	***************************************		
COND 1&2 S/NS	S/NS					,	<i>t j</i>			
FLUOR S/N										
02 (SBE43) S/N	N/S			***************************************						
Transmissometer S/N	neter S/N			***************************************	**************************************			***************************************		
O2 SBE42S/N	N.								***************************************	
Nis DEPTF	Nis DEPTH Rosette Notes	Hydro	 Hydro Sampling	CHLO	CHLOR Samples	ø	Comments	ents		Nis
No.DESIRED		SALT#	Nut.# OXY #	Btl ID Chl VOL Filter Vial #	I VOL Fil	ter Vial #	The state of the s	a de la companya de l		No.
Bot			2,17							
			218					***************************************		-
7 %			219	-	138,87	891				1 m
1			220	7 13	:					4
			221	~		9				
<u> </u>			222		ì	291				9
<del></del>			223	<u>بر</u>		164				2
٩			224	9		163				80
							1 2			

Pycnocline Depth 13 Chlorophyll Max Depth 15

MESSEI	A A A STREET,	II ESIII ISE	CRITISE ID (A.M. 1NW/13-1)		PROJECT & 1EG	8 1 EG		If you di	If you download data after cast- fill this out	after cast.	fill this out		ON NOITATS	CN		
			, , , , , ,		)	} ! !			5				,	; : -		
Northwest	Northwest Explorer 2013	10013	3	Ť	GOA-IERP-UTL 2013	UTL 201	3	Filename=	ıme=				54			
ST. ST.	£9819,£S	136.	36.49867		G M T		u W	2 maga ga at a a 1 a 1 a 1 a 1 a 1 a 1 a 1 a 1 a		ESSURE X STATE YTIBI		ims) aUc	лтв) QUC Зо ЯЗНТА Ж	BOTT0		
CAST #	LATITUDE	LO	LONGITUDE			- &	(GMT)	DRY BULB WET BULB	35905	/ <b>3</b> \$	DIRN.	SPD. CL	ᄣ	EPTH S	DEPTH STA. NAME/ID	8
DEG	MIN	DEG	NIM	DAY	ΨQ	YR HR	HR MIN	Temp (°C)	Temp (°C) (r	; (qw)	(deg)	(kts) *	9% 9%	Œ		T
029			•	w   H	JK 1	က		•	•	×		×	×	1582	SEZ5	
Sensor S/N	Sensor S/N (At Start of cruise or swap-ou Local Time (ADT)	or swap-	Ot Local Time (AE	Ü,		3								MAX. DEPTH =	7	153
SBE type and S/N	N/	-	COMMENT: Difficult conditions, factors that may affect measurements or aid processing	Difficult	conditi	ons, fac	ctors tha	at may aff	ect measu	rements	or aid p	rocessi	ing			
PRESS S/N																
TEMP 1 &2 SNs	5											***************************************				
COND 1&2 S/Ns	8						the second secon									
FLUOR S/N																ĺ
02 (SBE43) S/N	7															
Transmissometer S/N	er S/N										***************************************					
PAR S/N							WHAT THE PARTY OF	***************************************				and the state of t				
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()			232	و	1381	691 milyEl										æ
7			\(\frac{1}{2}\)					Ţ								

Pycnocline Depth /5 Chlorophyll Max Depth /7

		BOTTO M DEPTH STA. NAME/ID		SEL10	MAX, DEPTH = $20/$								mrerent in the second		Nis	No.		2	6	4	<sub>Ω</sub>	ၒ	7	80
STATION NO.	55	MEATHER BOTTO M M DEPTH S	(E)		MAX. DE			,	e contractor de la cont												3		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
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9	L 2013	TIME (GMT)	HR MIN	2246		s, factors									Si	lter Vial #			3	179	941	<i>tt</i> )	75.	天 
PROJECT & LEG	GOA-IERP-UTL 2013	G M T	MO YR	UL 1 3	1 3	onditions		A PARTICULAR DE LA PART							CHLOR Samples	Btl ID Chl VOL Filter Vial #			4.8'481		139,79	tt1 65,851	961 65.981	129,42
	9	U	DAY	w/4 Jul-1	)	ifficult c									СНІ	ļ				2	~	:	7	_
NW13-1		빚	z		Time (ADT	IENT: D									D	# XXO	336	1						
ID (e.g. 1	11/W/13	LONGITUDE	NIW	36,63116	-Ot Local	COMIN									Hydro Sampling	Nut.#	<u> </u>	234	3	133	8	2	3	33
CRUISE ID (e.g. 1NW13-1)			DEG	N 1 36	e or swap										Hydro	# LTYS	47.5							
	er 2013	LATITUDE	MIN	5 28 8	Sensor S/N (At Start of cruise or swap-or Local Time (ADT)					:					Votes						8 8			
	Northwest Explorer 2013	<u> </u>	DEG M	5 3 5 5	/N (At Sta	N/S		3Ns	3/Ns		S/N	neter S/N		z	Rosette									
VESSEL	Northwe	CTD CAST#		030	Sensor S	SBE type and S/N	PRESS SAN	TEMP 1 &2 SNs	COND 1&2 S/NS	FLUOR S/N	02 (SBE43) S/N	Fransmissometer S/N	PAR S/N	02 SBE42S/N	Vis DEPTH Rosette Notes	No.DESIRED	1 200			<u> </u>	<u> </u>	<del></del>	<del></del>	6

		BOTTO M DEPTH STA, NAME/ID		86556220	MAX. DEPTH = 100							***************************************	-	***	Nis	No.	~	2	က	4	ν.	9	7	
STATION NO.	56	A∃HTA∃W BOTTO M M PTH S	(E)	× 1865	MAX. DE								- Allendaria											
STA		S O WINCE	(kts) * *	×		rocessing		and the same of th																
t- fill this out		VISIBILITY O WIND N. D. W. N.	(deg)			s or aid p	***************************************																	
lata after cas		BRESSURE BTATS ABS	. (qm) (	×		surement		***************************************							Comments									
If you download data after cast- fill this out	Filename=	DRY BULB WET BULB	(C)	•		affect mea																		
lf yo	Ē		N Temp (°C)	·		that may																		
LEG	JTL 2013	Start TIME (GMT)	R MIN	3 0200	3	COMMENT: Difficult conditions, factors that may affect measurements or aid processing									les	Filter Vial #			181	1%5	184	1	182	•
PROJECT & LEG	GOA-IERP-UTL 2013	GM⊤	MO YR	JUL 1	<b>*</b> -	t condition									CHLOR Samples	Bil ID Chi VOL Filter Vial #			£3.85.	\c21,52	1.05°	139.29	139,39	
			DAY	w 	(ADT)	T: Difficul									0	OXY # Btl 1				2	~	J	~	
SE ID (e.g. 1NW13-1)	NW13	LONGITUDE	NIM	6,8942	-01 Local Time	COMMEN									Hydro Sampling	: [	24/	242	243	244	348	245	ST.	
CRUISE	10/	T	DEG	N     3	se or swap										Hydro	SALT#				[		1		
	orer 2013	LATITUDE	NIM	672	Sensor S/N (At Start of cruise or swap-ou Local Time (ADT)					<b>1</b> ,1.					Notes									
	Northwest Explorer 2013	, Y	DEG	Н,	r S/N (At S	SBE type and S/N	N.	&2 SNs	\$2 S/Ns	N/S	02 (SBE43) S/N	Fransmissometer S/N		12S/N	TH Rosette Notes	IRED	1006							
VESSEL	North	CTD CAST#		03	Senso	SBE type	PRESS S/N	TEMP 1 &2 SNs	COND 1&2 S/Ns	FLUOR SAN	O2 (SBE	Transmit	PAR S/N	02 SBE42S/N	Nis DEPTH	No.DESIRED	16 1	<del> </del>	<u> </u>				. <del></del>	1

Pycnocline Depth | 7 Chlorophyll Max Depth | 3

VESSEL		CRUISE II	CRUISE ID (e.g. 1NW13-1)		PROJECT & LEG	& LEG	lf you	If you download data after cast- fill this out	ter cast- fill this	s out	STATIC	STATION NO.	
Northwes	Northwest Explorer 2013	110113	~		GOA-IERP-UTL 2013	-UTL 2013	Filer	Filename=				55	
CTD CAST#	LATITUBE	3	LONGITUDE		± W ±	TIME (GMT)	DRY BULB	DRY BULB WET BULB	SEA STATE VISIBILITY D WIN D R.N.	WIN D SPD.	CLOUD (amt) TYPE SHITAEW	BOTTO M DEPTH 8	BOTTO M DEPTH STA. NAME/ID
	DEG MIN	DEG	MIN	DAY	MO	YR HR MIN		Temp (°C) (mb)	(deg)	j) (kts)		(m)	
0328	57,95406°		36,65700	7 71 5 1 m	Ju 6.1	131512		•	×		×	l bb.	DNJSODI
Sensor S.	Sensor S/N (At Start of cruise or swap-ot Local Time (ADT)	or swap-	ot Local Time (Al	נדי	4-	3	*************					MAX. DEPTH =	26 = HT4
SBE type and S/N	N/S P		COMMENT:	Difficul	t conditie	ons, factors	that may a	COMMENT: Difficult conditions, factors that may affect measurements or aid processing	ments or a	id proce	ssing		
PRESS S/N													
TEMP 1 &2 SNs	SNS												
COND 1&2 S/Ns	S/NS		www.mmmm.ledj								***************************************		
FLUOR S/N													
O2 (SBE43) S/N	SIN												
Transmissometer S/N	neter S/N												
PAR S/N						, and the second							
02 SBE42S/N	2												
Nic DEPTH	Vic DEDTH   Rosette Notes	Hvdro	II Avdro Sampling	2	CHI OR Samples	Selo		Com	Comments				Nis
No DESTRE		# ⊥  ∀%	# XXO   ##!N	8	Chi VO	Bri ID Chi VOI Filter Vial #							No
) 		1	╬	⋣									
1 95			249							1		1	-
2 35			250										2
			251		C. S.	66							က
<u> </u>			32.5	2	55,457								4
1			253	$\sim$	Sec.	061							S
1	1		254	7	(3,9,9)	631							·
21 '2			55°C	λ.	139.39	1364						1	
○ 8		-	256	٥	139,47	181 0x180		- Carlot States					8
	Pycn	Pycnocline Depth	)	And the second second second	Chloroph	Chlorophyll Max Depth	20						

VESSEL		CRUISE IC	SE ID (e.g. 1NW13-1)	N13-1)	PRC	PROJECT & LEG	156	lf you	download da	If you download data after cast- fill this out	Ithis out	STAT	STATION NO.	
Northwest Explorer 2013	rer 2013	11/11/13	27		60	GOA-IERP-UTL 2013	TL 2013	Filen	Filename=				28	
CTD CAST# LATI	LATITUDE	P	LONGITUDE		G M ⊤	<u>⊢</u>	Start TIME (GMT)	DRY BULB	DRY BULB WET.BULB	PRESSURE SEA STATE VISIBILITY	WIND DIRN. SP	SON WIND (SIMI) TYPE TYPE WEATHER		BOTTO M DEPTH STA. NAME/ID
DEG	MIN	DEG	N N		DAY M	MO YR	HR MIN	Тетр (°С)	Temp (°C)	* * (qw)	(deg) (kts)	(5	(m)	
03357,91	3 7 2°	~	6,74119	٥	W1554L	-	3 1738		•	x		× × ×		SEKS
Sensor S/N (At Start of cruise or swap-or Local Time (ADT)	ert of cruise	or swap-	ot Local Tim	ne (ADT)		-	3						MAX. DE	MAX. DEPTH = \\ \frac{2}{1}
SBE type and S/N			COMME	NT: Diff	icult co	ndition	COMMENT: Difficult conditions, factors that may affect measurements or aid processing	ıat may ai	ffect meas	urements	or aid pro	cessing		
PRESS S/N												***************************************		
TEMP 1 &2 SNS													***************************************	
COND 1&2 S/Ns										***************************************		1		
FLUOR S/N														
O2 (SBE43) S/N														
Transmissometer S/N														***************************************
PAR S/N														
02 SBE42S/N														
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Nis DEPTH Rosette Notes	Notes	Hydro (	Hydro Sampling		CHEC	CHLOR Samples	es		١	Comments				Nis
No.DESIRED	The second second	SALT#	Nut# (	exγ #	Btl ID C	IN VOL	Chi VOL Filter Vial #							No.
1 3224 1			257										•	-
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8		1	7 3		į	125 et	"	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			1			
0/7 4			7007		7		111							4
5 30			261		W	ور ريخ ريخ	200	111111111111111111111111111111111111111			1		111111111111111111111111111111111111111	S
9			26.2		4	8- 16-15-15-15-15-15-15-15-15-15-15-15-15-15-								9
01 2			263		ν,	139.34	76						F	7
Q 8			264		9	139,42	193							8
A Language of the Control of the Con	Pycn	Pycnocline Depth	) / / htt		ਓ	orophyll	Chlorophyll Max Depth	61						

VESSEL		CRUISE	CRUISE ID (e.g. 1NW13-1)	-1)	PROJECT & LEG	T & LEG	:	If you down	If you download data after cast- fill this out	fill this out		STATION NO.	Ö	
Northwe	Northwest Explorer 2013	11/11/13	7/3		GOA-IER	GOA-IERP-UTL 2013		Filename=	1]			9		
CTD CAST#	LATITUDE	, FC	LONGITUDE	:	£ ₩ ±	TIME (GMT)		DRY BULB WET BULB	BULB SEA STATE VISIBILITY	WIND DIRN.	SPD. VIIN CLOUD (ami	AEATHER WEATHER B □	BOTTO M DEPTH STA. NAMEJID	NAME/ID
٥	DEG MIN	DEG	MIN	DAY	MO	YR HR	AT NIM	Temp (°C)   Tem	Temp (°C) (mb) 🛂	) (Gep)	(kts) 🐛 💺	n)	(m)	
0345	03459,874640		369276	w / S	W/551/213	1 3 1 9	113	•	×		×	ш	41418561110	4110
Sensor S	Sensor S/N (At Start of cruise or swap-ou Local Time (ADT)	or swap-	Ot Local Time (A	OT)		1 3						Ψ	MAX. DEPTH ≈ 202	102
SBE type and S/N	d S/N		COMMENT	Difficu	it condi	ions, fact	ors that	t may affect	COMMENT: Difficult conditions, factors that may affect measurements or aid processing	or aid p	rocessii			
PRESS S/N														
TEMP 1 &2 SNs	SNS													
COND 182 S/Ns	S/Ns		***************************************											
FLUOR S/N														
02 (SBE43) S/N	S/N													
Transmissometer S/N	neter S/N										***************************************			
PAR S/N														
02 SBE42S/N	N.													
Nis DEPTH	Vis DEPTH Rosette Notes	Hydro	lydro Sampling	٠	CHLOR Samples	mples			Comments					Nis
No.DESIRED	O:	SALT#	Nut.# OXY #		D ChI VO	Btl ID Chl VOL Filter Vial #	1 #							ò.
102			245											-
2 100			266											2
S)			七%	<b></b>	K. 1967	7707 x								೯
4			397	7	75. (gr)	i 1								4
( <u>)</u> 2			1697	3	6.55.	100								æ
%			170	Paris	Gr.									9
()			121 337	7 2	65.65	200	I I I			1				7
°			777	0				-						8
	Pycn	Pycnocline Depth	pth //		Chlorop	Chlorophyll Max Depth	epth	18	5 -					

VESSEL	CRUISE ID (e	SE ID (e.g. 1NW13-1)	PROJECT & LEG	T & LEG	If you download data after cast- fill this out	filt this out STATION NO.	
Northwest Explorer 2013	11/11/13		GOA-IER	GOA-IERP-UTL 2013	Filename=	19	
CTD CAST#		LONGITUBE	GMT	TIME (GMT)	DRY BULB WET BULB	WIND D OUT ME ME MAN SPD. OF SET ME STA. NAME/ID	E/ID
DEG	DEG	MIN	DAY MO	YR HR MIN	Temp (°C) Temp (°C) (mb) 🔭 🔭	(deg) (kts) *  *  *   (m)	
03552,79400	N 1 317, 11°	37, 1940° W115 JUL		132217	×	1	0
Sensor S/N (At Start of cruise or swap-ou Local Time (ADT)	se or swap-o∟	ocal Time (ADT)		1 3		MAX. DEPTH = $20$	7
SBE type and S/N	00	MMENT: Dii	Ticult condi	tions, factors tl	COMMENT: Difficult conditions, factors that may affect measurements or aid processing	or aid processing	
PRESS S/N				***************************************	Apple Apple Company of the Company o	and the second s	
TEMP 1 &2 SNs							
COND 1&2 S/Ns							
FLUOR S/N							
02 (SBE43) S/N							
Transmissometer S/N							
PAR S/N							Ī
02 SBE42S/N					4+14-44		
					And the state of t		
Nis DEPTH Rosette Notes	Hydro Sampling	guildr	CHLOR Samples	imples	Comments		ž
No.DESIRED	SALT # N	Nut.# OXY #	Bti ID Chi V	Btl ID Chl VOL Filter Vial #			ģ
1 200	273	13					۳-
!	72升	fn					2
<u> </u>	275	750	138.83	210			က
4 40	2.	276	25,981 (	209			4
\$ 30	25	7.5.7	3 139,79	208			5
<u> </u>	2	278		207			9
2 10	2.	259	S 139,39	39 206			7
8 0	280	6		12 205	A A WAY TIME IT		8
P <sub>y</sub>	Pycnocline Depth	8,16	Chlorop	Chlorophyll Max Depth	1 183		

VESSEL		CRUISE ID	CRUISE ID (e.g. 1NW13-1)		PROJECT & LEG	N LEG	If you download data after cast- fill this out	ata after cast- fill	this out	STATION NO	NO.	
Northwe	Northwest Explorer 2013	11/11/13	<u>ر</u>		GOA-IERP-UTL 2013	UTL 2013	Filename=			65	(	
	œ	C.			GMT			ESSURE ESTATE STLITY		Mas) OUG SABHTA	вотто	
CAST #	LATITUDE	LO	LONGITUDE			(GMT)	DRY BULB WET BULB	PRI A∃S NSIV	DIRN. SPD	ΠΛΛ	DEPTH STA NAME/ID	EVID
	DEG MIN	DEG	MIN	DAY	ΨQ	YR HR MIN	Temp (°C) (mb)		(deg) (kts)		(m)	Ţ
0365	03657,62697°	_	384184	W/16 JUL 13	Jul 1.	3 1857	•	x		× × ×	28935ELB	0
Sensor S	Sensor S/N (At Start of cruise or swap-or Local Time (ADT)	or swap-c	Local Time (A	ОΤ)		3				<u></u> ;	MAX. DEPTH = 20	7
SBE type and S/N	N/S P	ارد	:OMMENT:	Difficult	condition	ons, factors t	COMMENT: Difficult conditions, factors that may affect measurements or aid processing	surements o	r aid proc	essing		
PRESS S/N												
TEMP 1 &2 SNS	SNS				***************************************							T
COND 1&2 S/NS	S/NS											
FLUOR S/N												
02 (SBE43) S/N	SIN											
Transmissometer S/N	neter S/N											
PAR S/N						***************************************						
O2 SBE42S/N	Z.											
i	The state of the s		SECTION TO THE PROPERTY.	<b>C</b> (8)	solume a a o lino			Commonte				N.
NIS OFF	I Koselle Notes	Dipku				2016						2
No.DESIRED	0:	SALT#	Nut,# OXY #	4	Chi VO	Btl ID Chi VOL Filter Vial #		The state of the s	**			
1000			281									-
			149									~
1			283		£8.9%)	216						ო
<del></del>			284	5	139.52	215						4
<u> </u>			295	~	136,78							S
<u> </u>			286	7	139,76	213						ဖ
<u> </u>			282	V	139,39	212				1 1 1 1 1 1		7
2 8			28%	2	129, 42	211	- Military et a	. Lader				80
	Pycr	Pycnocline Depth 20	1th 20		Chloroph	Chlorophyll Max Depth	28					

VESSEL	- HAMMIT	CRUISE	SE ID (e.g. 1NW13-1)	13-1)	PRO	PROJECT & LEG	LEG	If yo	If you download data after cast- fill this out	sta after cast-	- fill this ou		STATION NO.	Ö.	
Northwe	Northwest Explorer 2013	11/11/13	13		GOA	GOA-IERP-UTL 2013	TL 2013	Ē	Filename=				49		
CTD CAST#	LATITUDE	707	LONGITUDE		M	M T	start TIME (GMT)	DRY BULB	B WET BULB	PRESSURE SEA STATE VISIBILITY	WIND DIRN.	S D WIN CLOUD (ami	яантааw В В В В В В В В В В В В В В В В В В В	TO TH STA. NAME/ID	ME/ID
	DEG MIN	DEG	MIN	Ď	DAY MO	) YR	HR MIN	Temp (°C)	) Temp (°C)	• (qui)	(deg)	(kts) *	(m)	(1	Ī
037	512,76433N	3	9,818 1013	/ w	1951	7	30051	•	•	×		×	×	25295E1410	<u> </u>
Sensor (	Sensor S/N (At Start of cruise or swap-ot Local Time (ADT)	or swap.	-Ot Local Time	(ADT)		-	3						<u>*</u>	MAX. DEPTH = 20	- Q
SBE type and S/N	N/S pu		COMMEN	T: Diffi	cult co	ndition	is, factors	that may	COMMENT: Difficult conditions, factors that may affect measurements or aid processing	surements	s or aid	orocessii	ng		
PRESS S/N															
TEMP 1 &2 SNs	SNS														
COND 182 S/Ns	S/Ns														
FLUOR S/N															
02 (SBE43) S/N	) S/N						***************************************		***************************************						
Transmissometer S/N	meter S/N									***************************************		***************************************		***	
PAR S/N					***************************************							***************************************			
02 SBE42S/N	N/S														
Nis DEPT	Vis DEPTH Rosette Notes	Hydro	II Hydro Sampling		CHLO	CHLOR Samples	les			Comments					Š
No.DESIRED	ED	SALT#		OXY#	34 ID CI	1 VOLF	Btl ID Chi VOL Filter Vial #								No.
- 36 -		批	289 3	338						•					-
÷			290	<u> </u>	!		111111111111111111111111111111111111111								2
<u> </u>			791			P. 45)	229								ო
<u> </u>			292		7	139,52	221								4
\S\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			293		~	139,79	220			3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3			1		S
<u>:                                    </u>			294			139,79	219								φ
2			295		5	139,39	218	1 1 1 1 1 1 1			111111111111111111111111111111111111111		1		_
۵ «			296			139,42	217								8
	Company of the Compan							1							

Pycnocline Depth 12 Chlorophyll Max Depth 15

VESSEL		CRUISE	CRUISE ID (e.g. 1NW13-1)		PROJECT & LEG	931	If you download data after cast- fill this out	ast- fill this out	STATION NO.	
Northwe	Northwest Explorer 2013		1/11/13		GOA-IERP-UTL 2013	JTL 2013	Filename=		20	
CTD CAST#	LATITUDE		LONGITUDE		G M T	Start TIME (GMT)	DRY BULB WET: BULB R S S S S S S S S S S S S S S S S S S	VISIBILITY  WIND D NIN SPD. CLOUD (SIMIL	E BOTTO  M A M	IE/ID
	DEG MIN	DEG	MIN	DAY	MO YR	R MIN	Temp (°C) Temp (°C) (mb)	* (deg) (kts) *	(m)	
0385	57,94241°	~	7,3388"	4 / m	70亿1	3 1 90 1	×	×	57359011 ×××	20
Sensor S.	Sensor S/N (At Start of cruise or swap-ou Local Time (ADT)	or swap	-Ot Local Time (Al	ОТ)	1	3			MAX. DEPTH =	19
SBE type and S/N	N/S P		COMMENT:	Difficult	conditio	ns, factors t	COMMENT: Difficult conditions, factors that may affect measurements or aid processing	nts or aid proces	ssing	
PRESS S/N								***************************************		
TEMP 1 &2 SNS	SNS									
COND 1&2 S/Ns	S/NS			***************************************						
FLUOR S/N										Ī
02 (SBE43) S/N	SiN									
Transmissometer S/N	neter S/N							***************************************	The second secon	
PAR S/N										
02 SBE42S/N	Z									
Nis DEPTH	Vis DEPTH Rosette Notes	Hydro	Hydro Sampling	Ó	CHLOR Samples	les	Comments	ts	* * * * * * * * * * * * * * * * * * * *	Nis
No.DESIRED	Q	SALT#	Nut# OXY#	-	Btl ID Chl VOL Filter Vial #	Filter Vial #				Š
Q9 -			7.66						The state of the s	-
<u> </u>			29%	1				***************************************		~
<u> </u>			299		138.87	228				<sub>6</sub>
<u> </u>	186,4715 319 M78 196 NF 18715 M		300	<b>~</b>	139,52		bottle leading, Checked	O-ring of bu	Enthon stagger, Lasked ck.	4
25			301	?	139,79	977	7	•		τυ
9			302	7	139,79	205				φ
91 2		光片	303 339	ν)	129,39	224				~
<u>۵</u>			304	9	(30 H)	223		The state of the s		8
	Pycr	Pycnocline Depth	epth 25		Chlorophyl	Chlorophyll Max Depth	9/			

VESSEL Northwest Explorer 2013	CRUISE ID (e.g. 1NW13-1 )   //// ) / マ	NW13-1)	PRO.	PROJECT & LEG		If you download data after cast- fill this out	nis out STATION NO.	
	· ·		G M T	<b>⊢</b>	編れ TIME	RESSURE SASTE SIBILITY	WIND WIN (SIM) CPE EATHER BY THE PROPERTY OF T	
0	LONGITUDE DEG MIN		DAY MO	YR C	(GMT) HR MIN	DRY BULB WET BULB	SPD. 6 F 3 DEPTH (Kts) * * (m)	STA, NAME/ID
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İ	310		7		23.1	<b>.</b> 1.	Α	φ
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	3/2		و	139,42	229	corresponds with a o	brastic On increase	950, 8
딧	Pycnocline Depth	10m	Chlo	rophyll A	Chlorophyll Max Depth	1 1	, comp	

VESSEL		CRUISE ID (e.g. 1NW13-1)	13-1)	PROJECT & LEG	& LEG	If you downloa	If you download data after cast- fill this out	his out	STATION NO.	N NO.		
Wes	Northwest Explorer 2013	11/W/13		GOA-IER	GOA-IERP-UTL 2013	Filename=			73	~		
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	DEG MIN	DEG MIN	DAY	Y MO	YR HR N	MIN Temp (°C) Temp (°C)	(gm)	(kts) (kts)		(m)		
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sor S/	Sensor S/N (At Start of cruise or swap-ou Local Time (ADT)	or swap-outocal Time	, (ADT)							MAX. DEP	MAX. DEPTH = $20$	=
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۵		320	)	129.W	<sup>2</sup> 235							8
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Pycnocline Depth 8-20? Chlorophyll Max Depth 8

VESSEL	CRUISE ID (e	ISE ID (e.g. 1NW13-1)	PROJECT & LEG	T & LEG	If you download data after cast- fill this out	Il this out STATION NO.	
Northwest Explorer 2013	11/4/13		GOA-IER	GOA-IERP-UTL 2013	Filename=	74	
CTD CATITUDE	LONG	LONGITUDE	GMT	Start TIME (GMT)	DRY BULB WET BULB PE SE	E   E   E   E   E   E   E   E   E   E	A. NAME/ID
DEG	DEG	MIN	DAY MO	YR HR MIN	Temp (°C)   Temp (°C)   (mb)  *  *	(deg) (kts) * * (m)	
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02 (SBE43) S/N							
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Nis DEPTH Rosette Notes	Hydro Sampling	ıpling	CHLOR Samples	mples	Comments		Zis
No.DESIRED	SALT# Nu	Nut.# OXY #	Btl ID Chl V(	Btl ID Chl VOL Filter Vial #	A ADMINISTRAÇÃO DE CONTRACTOR		No.
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Pycr	Pycnocline Depth	g m	Chlorop	Chlorophyll Max Depth	surface		

VESSEL		CRUISE ID	CRUISE ID (e.g. 1NW13-1)		PROJECT & LEG	LEG	If you d	If you download data after cast- fill this out	ı after cast- fil	I this out	STATION NO.	ON NO.	
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CTD CAST#	LATITUDE		LONGITUDE	o o	T W	TIME (GMT)	DRY BULB V	WETBULB	PRESSURE SEA STATE VISIBILITY	WIN D DIRN. SPD.	CLOUD (ami TYPE RAHTARY	вотто М рертн ST	STA, NAME/ID
DEG	MIN	DEG	Min	DAY	MO YR	HR MIN	Temp (°C)	Temp (°C) (r		(deg) (kts)	200 200	(m)	
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A principal of the state of the	Pycn	Pycnocline Depth	)th //	5	lorophyl	Chlorophyll Max Depth	13	ı					

VESSEL	***************************************	CRUISE II	SE ID (e.g. 1NW13-1)		PROJECT & LEG	.EG	If you download data	If you download data after cast- fill this out	STATION NO.	ō.
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	Pycr	Pycnocline Depth	pth //	Ç	hlorophyll	Chlorophyll Max Depth	11/			

VESSEL		CRUISE	ISE ID (e.g. 1NW13-1)		PROJECT & LEG	If you download data after cast- fill this out	this out STATION NO.	
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CTD CAST#	LATITUDE	Y	LONGITUDE	G M T	Shrt TIME (GMT)	DRY BULB WET BULB SEA STATE YES STATE	WIN D D BETTO TO SPD. CL DEPTH	BOTTO M DEPTH STA. NAME/ID
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COND 1&2 S/NS	/Ns							
FLUOR S/N						***************************************		
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Nis DEPTH	Vis DEPTH Rosette Notes	Hydro	ydro Sampling	CHLOR Samples	Samples	Comments	TO THE PARTY OF TH	Nis
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۵			352	y <sub>21</sub>	139,W2 259	Combined and any other transfer of the combined and the c	1000 miles and an analysis of the second	8
	Pycr	Pycnocline Depth	)/ yth	Chloro	Chlorophyll Max Depth	19		

VESSEL		CRUISE IC	) (e.g. 1NV	V13-1)	PRC	PROJECT & LEG	.EG	If y	If you download data after cast- fill this out	data after ca	st-fill this o	rt	STATION NO.	NO.		
Northwes	Northwest Explorer 2013	11/10	11/16/13		⁄ò	GOA-IERP-UTL 2013	L 2013	正	Filename=				38			
CTD CAST#	LATITUDE	TO	LONGITUDE		₩ ٦	F	がた TIME (GMT)	DRY BULB	B WET BULB	BRESSURE BTATS ABS	VSIBILITY VIND VIND VIND	O O O O O O O O O O O O O O O O O O O	99YT SAHTAAW	зотто М ОЕРТН	STA. NAME/ID	9
ō	DEG MIN	DEG	NIW	G	DAY M	MO YR	HR MIN	1 Temp (°C)	3) Temp (°C)	) (mb) *	ې (deg)	(kts)		(m)		
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SBE type and S/N	N/S		COMME	NT: Diff	icult cc	ndition	s, factors	that may	COMMENT: Difficult conditions, factors that may affect measurements or aid processing	asuremen	its or aid	proces	sing		,	
PRESS S/N											•					
TEMP 1 &2 SNs	Ns														***************************************	T
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Pycnocline Depth  $1 \partial_{\mu \eta}$  Chlorophyll Max Depth  $\mathcal{P}_{\mu \eta}$ 

VESSEL	VESSEL		ISE ID (e.g. 1NW13-1)		PROJECT & LEG	LEG V	If you downloa	If you download data after cast- fill this out	this out	STATION NO.	N NO.	
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CTD CAST#	LATITUDE	Y	LONGITUDE	Ŋ	GMT	TIME (GMT)	DRY BULB WET; BULB	PRESSURE SEA STATE VISIBILITY	WIND WIN SPD. (ami	HATAEW	BOTTO M DEPTH STA. NAME/ID	AME/ID
	DEG MIN	DEG	ZIW	DAY	MO YR	A HR MIN	Temp (°C) Temp (°C)	; (qw)	(deg) (kts)		(m)	
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Pycnocline Depth / 3 Chlorophyll Max Depth 20

VESSEL	VESSEL Northwest Explorer 2013	CRUISE	// NSE ID (e.g. 1NW13-1)	N13-1 )	PR(	PROJECT & LEG GOA-IERP-UTL 2013	LEG TL 2013	If you downloa Filename=	If you download data after cast⊷fill this out Filename≕	fill this out		STATION NO		
CTD CAST#	LATITUDE		LONGITUDE		້ວ	G M T	Short TIME (GMT)	DRY BULB WET BULB	SULB SEA STATE YISIBILITY	WIND DIRN.	CLOUD (ami	E BOTTO M	O H STA. NAME/ID	<b>Q</b>
D	DEG MIN	DEG	MIN	1	DAY N	MO YR	HR MIN	Temp (°C) Temp (°C)	(*C) (mb) * 1	(Gap)	(kts) *	(m)		
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SBE type and S/N	N/S		COMME	NT: Diff	icult co	ndition	is, factors th	at may affect r	COMMENT: Difficult conditions, factors that may affect measurements or aid processing	or aid p	orocessi	ng		
PRESS S/N														
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COND 1&2 S/Ns	INS													
FLUOR S/N										***************************************				1
02 (SBE43) S/N	N/S							***************************************				٠		
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	βλζ	Pycnocline Depth	epth 7		동	orophyl	Chlorophyll Max Depth	41						

VESSEL	CRUISE	CRUISE ID (e.g. 1NW13-1)		PROJECT & LEG	99	If you download data after cast- fill this out	STATION NO	<u> </u>
Northwest Explorer 2013	<u>-</u>	V 13	GO,	GOA-IERP-UTL 2013	L 2013	Filename=	20	
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PRESS S/N								
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02 SBE42S/N								
Nis DEPTH Rosette Notes	Hydr	II Hydro Sampling	CHL	CHLOR Samples	S	Comments	Z	N. Si
No.DESIRED	\$ALT#	Nut# OXY#	$oxed{oxed}$	Btl ID Chl VO! Filter Vial #	ter Vial #		Z	Š
ممر		1545						-
90		3 + 8			1 1 1 1 1 1 1 1 1			73
\$		379		138,87	788			က
94		380	Св	139.52	787			₹
30		182	m	139.39	98€			5
20		785	2-	139.39	286		1	9
0,1		383	1/2	139.39	h 82			~
0		384		er: 621	283	The state of the s		8
		MILL 1 WIM		laranhull B	Chlorophyll May Danth	1930		

Pycnocline Depth | U|M Chlorophyll Max Depth | 9 m

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STATION NO.	CLOUD (amt) TYPE WEATHER WEATHER TYPE WEATHER STA NAME/ID	(m)	x   x   x   30   8   5   5   5   6   8   8	MAX. DEPTH = 20(	ssing	is but then	- The state of the	and the state of t					recommend by the state of the s											
If you download data after cast- fill this out Filename=	ULB WET BULB SSURE SSURE SSURE SSURE SSURE SSURE SPD OUD (ARE THE THE THE THE THE THE THE THE THE TH	Temp (*C) (mb) * * (deg) (kts)	×		COMMENT: Difficult conditions, factors that may affect measurements or aid processing	st from ~ 105m to ~ 100m		***************************************				***************************************		The state of the s	Comments	The Control of the Co								
PROJECT & LEG GOA-IERP-UTL 2013	ME MT) DRY E	Y MO YR HR MIN Temp (*C)	w20JuL132035	89	ult conditions, factors that ma	Neat crazu on works	itself for remainder							- I Constitution -	CHLOR Samples	Btl ID Chi VOL Filter Vial #			hb2 t8881 1	Sp 2 63.98	3 139.79 292	1 b2 bEb51 h	0 62 65.981 5	b82 4h'b81 9
CRUISE ID (e.g. 1NW13-1)     // \www.1	LONGITUDE		138,9765 W2	Swap-ot Local Time (ADT)	COMMENT: Diffic	Dr 500/50r	Corrected				**************************************				Hydro Sampling	SALT# Nut# OXY# B	81 385 342	386,	185	388	389	898		393
VESSEL CR Northwest Explorer 2013	LATITUDE	DEG MIN	57,46365N	Sensor S/N (At Start of cruise or swap-ou Local Time (ADT)	N/S pu		SNS	S/Ns		N/S (	meter S/N		N/s		Rosette Notes		8 h							
VESSEL Northwe	CTD CAST#		9 N O	Sensor (	SBE type and S/N	PRESS S/N	TEMP 1 &2 SNs	COND 182 S/NS	FLUOR S/N	O2 (SBE43) S/N	Transmissometer S/N	PAR S/N	02 SBE42S/N		Nis DEPTH	No.DESIRED	30%	, ,	200	40	30	<u> </u>	0 -	0

Pycnocline Depth 9 Chlorophyll Max Depth 20

VESSEL	CRUISE ID (e.g. 1NW13-1)		PROJECT & LEG	If you download data after cast- fill this out	STATION NO.
Northwest Explorer 2013	1,00013		GOA-IERP-UTL 2013	Filename=	0000
CTD LATITUDE	LONGITUDE	GMT	TIME (GMT)	SURE SOUR WIND DIEN. SPD.	COUD (4mm)
DEG MIN	DEG MIN	DAY MO	YR HR MIN	Temp (°C)   Temp (°C) (mb)   *   *   (deg)   (kts)	(m)
0505731372	4 1 3 8 3 79 74	70 I 12 M	13000	×	x x 8 10 7 10 5 10 10 10 10 10 10 10 10 10 10 10 10 10
Sensor S/N (At Start of cruise or swap-ot Local Time (ADT)	ie or swap-ot Local Time (P	(та	1 3		мах. рертн = 207
SBE type and S/N	COMMENT	Difficult con	ditions, factors t	COMMENT: Difficult conditions, factors that may affect measurements or aid processing	gui
PRESS S/N	0, %	Sensor had	spikes	around 105m, + 112m	
TEMP 1 &2 SNs					
COND 1&2 S/Ns				A control of the cont	
FLUOR S/N					
O2 (SBE43) S/N		***************************************			
Transmissometer S/N	**************************************			A A PARA A A A A A A A A A A A A A A A A	
PAR S/N					
02 SBE42S/N					
Nis DEPTH Rosette Notes	II Hydro Sampling	CHLOR	CHLOR Samples	Comments	Nis
No.DESIRED	SALT# Nut.# OXY#	<del>  -</del>	Btl ID Chi VOL Filter Vial #		No.
1 300	78.3				-
2 100	344	1			2
3 50	395	1 138	138-87 300		8
4 40	968	<u>₹</u>	13.52 हे9		4
9 30	397		864 61		\$
0 Y O	348	H 130	139.74 7.19.7		9
10	349	5 13	139,29 296		
0	700	£1 9	12g.10 2,95		æ

Pycnocline Depth (0か/15劇 Chlorophyll Max Depth えみM

VESSEL		CRUISE ID	CRUISE ID (e.g. 1NW13-1)	PRC	PROJECT & LEG	LEG	If you	download d	If you download data after cast- fill this out	fill this ou		STATION NO	Š.	
Northwes	Northwest Explorer 2013	11011	$\sim$	/OS	GOA-IERP-UTL 2013	TL 2013	Filer	Filename=				2	_	
CTD CAST#	LATITUDE	PON	LONGITUDE	GMT	F =	TIME (GMT)	DRY BULB WET BULB	WET BULE	PRESSURE SEA STATE VISIBILITY	WIND DIRN.	SPD. CLOUD (amit	CLOUD (ami YYPE WEATHER B B	BOTTO M DEPTH ST	BOTTO M DEPTH STA. NAME/ID
	DEG MIN	DEG		DAY M	MO YR	HR MIN	Temp (°C)	Temp (°C)	*  *   (qw)	(gab)	(kts)		(m)	
115115	7,007,40	138.4	38.4820 W21	21 JUL	1 1 3	3 1 5 0 0	•	######################################	X	1 1		rG X	9/2/5	2 × × A1 9 10 3 E 工名 6
Sensor S/	Sensor S/N (At Start of cruise or swap-ot Local Time (ADT)	or swap-o	t Local Time (ADT)		-	м —							AX. DEPT	MAX. DEPTH = 201
SBE type and S/N	1S/N	Ö	COMMENT: Difficult conditions, factors that may affect measurements or aid processing	Ficult co	ndition	s, factors th	iat may al	ffect mea	surements	or aid g	processi			
PRESS S/N												Y.		
TEMP 1 &2 SNs	SNS													
COND 182 S/Ns	/Ns													
FLUOR S/N														
02 (SBE43) S/N	N/S													
Transmissometer S/N	neter S/N													
PAR S/N														
02 SBE42S/N	2													
Nis DEPTH	Nis DEPTH Rosette Notes	II Hydro Sampling	ampling	CHIC	CHLOR Samples	sa			Comments					Nis
No.DESIRED	D	SALT# 1	Nut.# OXY #	Bil ID C	hi VOLF	Btl ID Chi VOL Filter Vial #								No.
1 200			104						Mary of the					
2 100		3-	40h											2
2		3-	463	_	138.83	308								8
4 CH		7	<b>ኮ</b> oh	~	159.53	305		,						4
5		7	Soh	~		304								r.
e 20		3	<i>Jo</i> h	, h	139,79	303								9
1 10		٠,	toh	ν _	139,39	\$0 <i>}</i>		1	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8		1	1		7
()			Soh	•	39.42 301	301								ဆ
	Pycn	Pycnocline Depth	th 12 m	CP.	orophyil	Chlorophyll Max Depth	20 m							

VESSEL.		CRUISE	CRUISE ID (e.g. 1NW13-1)	W13-1)	RA	PROJECT & LEG	LEG	If y	ou downloa	If you download data after cast- fill this out	t- fill this ou	nt.	STATION NO.	NO.	
Northwes	Northwest Explorer 2013	<i>''</i>	1012/3		8	GOA-IERP-UTL 2013	JTL 2013	Ē	Filename=				16		
CTD CAST#	LATITUDE	<u> </u>	LONGITUDE		<u></u>	₽ ₩	TIME (GMT)	DRY BUI	DRY BULB WET BULB	BRUSSBR9 BTATS ABS	VISIBILITY OIRN	S O S CLOUD (ami YPE WEATHER	ASTHER WEATHER © FII	BOTTO M DEPTH STA. NAME/ID	AME/ID
+	DEG MIN	DEG	NIW		DAY	MO YR	HR MIN		C) Temp (°C)	C) (mb)	(deg)	(kts)	22	Œ	
0525	56,7065119	N 1 3 8	38,1621° W2	3	21 Ju	4 41 3	3 1918	~		X		×	x × 29	x x x 298755580	<u>20</u>
Sensor S/	Sensor S/N (At Start of cruise or swap-ou Local Time (ADT)	e or swap	-Ot Local Tin	ne (ADT)		- <b>-</b>	3						W	мах. рертн = 202	202
SBE type and S/N	N/SI		COMME	NT: Diff	icult c	ondition	1s, factors	that may	affect m	COMMENT: Difficult conditions, factors that may affect measurements or aid processing	s or aid	process			
PRESS S/N															
TEMP 1 &2 SNS	Ns				1										
COND 182 S/Ns	/Ns								***************************************						
FLUOR S/N															
02 (SBE43) S/N	N/S														
Transmissometer S/N	eter S/N									***************************************					
PAR S/N															
02 SBE42S/N	7									,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					ļ
							Ĺ			,					ļ
NIS DEPTH	Nis DEPTH Rosette Notes	Hydro	Hydro Sampling		품	CHLOR Samples	les			Comments					N.S.
No.DESIRED	C	SALT#	Nut.#	# \XO	Btl ID (	וווכ זיונ:	Btl ID Chi VOI Filter Vial #								ž
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			71/4			139,79	309								ဖ
01 '		482	1/1	343	<b>~</b> 7	139,39 308	308			1 1 2 2 3 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1		111111111111111111111111111111111111111	
() 8			4116			139.47	30.7								8
	ру́ч	Pycnocline Depth	epth 24		ਠ	lorophyl	Chlorophyll Max Depth	79					·		

VESSEL		CRUISE ID (e	ISE ID (e.g. 1NW13-1)	PROJ	PROJECT & LEG	C	lf you c	If you download data after cast- fill this out	ta after cast-	fill this out		STATION NO.		
Northw	Northwest Explorer 2013	INVII	M	GOA-I	GOA-IERP-UTL 2013	2013	Filen	Filename=				2		
CTD CAST#	LATITUDE	LONG	LONGITUDE	6 M →	<b>}</b>	TIME (GMT)	DRY BULB	WET BULB	PRESSURE SEA STATE VISIBILITY	WIND DIRN.	SP o Min CLOUD (ami	ABHTABW WEATHER BOTTO M DEPTH	STA, NAME/ID	E/ID
,	DEG MIN	DEG	MIN	DAY MO	YR	HR MIN	Temp (°C)	Temp (°C)	* (dm)	) (gab)	(kts) * *	(E)		
053	2		3	21 Ju	7 1 3	2229	•	•	X		×	x 289'	28975EE810	2
Sensor	Sensor S/N (At Start of cruise or sw	e or swap-oil	vap-or Local Time (ADT)		1 3							MAX.	MAX. DEPTH = $202$	$\simeq$
SBE type and S/N	N/S pue		COMMENT: Difficult conditions, factors that may affect measurements or aid processing	ficult con	ditions,	factors ti	hat may af	fect meas	urements	or aid p	rocessing			
PRESS S/N	2													
TEMP 1 &2 SNs	2 SNs		***************************************			-								
COND 182 S/Ns	2 S/Ns													
FLUOR S/N	Z.													
O2 (SBE43) S/N	3) S/N													
Transmiss	Transmissometer S/N												mantenning 1-4-1-5-1-6-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4	
OZ SBE42S/N	N/S													
Nis DEPTH	TH Rosette Notes	Hydro Sampling	gujidi	CHLOR	CHLOR Samples	100,000		O	Comments					Nis
No.DESIRED	3ED.	SALT# N	Nut.# OXY #	Btl ID Chi	Btl ID Chl VOL Filter Vial	ır Vial #								Š.
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5 30		471		~	l	3116								5
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0		7.7	3	<u>ئ</u> و	139.42-3	. 313								ω
4			111		:	-	0/							

Pycnocline Depth

Chlorophyll Max Depth /9