		_		D.	a										· .
VESSEL Northwest l	Explorer			CRUISE I	NW14-0	3		PROJECT SECM/GO		(if ne	eded)	CTD FileN	lame (None if	data is live fe	ed)
CTD consec CAST #	58 L	16.32 ATITUDE		,	Z4,6Z		GMT DATE	(note	if not)	GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG	MIN		DEG	MIN		DAY	МО	YR	HR	MIN	(°C)	(m)		
014	58	16.32	N	135	24.02	w	27	07	1 4	15	37	12.10	213	18044	15D
Sensor IDS	8. KUNU.	& swap-outs	s)												= 200.5
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 Transmiss S/N					Ĭ							ect measureme		rocessing	
PAR S/N D2 SBE42S/N	DEPTH	Rosette Note	S	Hu	COD Sta	tion	# 28		ma			10 dup POC 500	acat 02	Comments	

A11-1-4	DEPTH	Rosette Notes	Н	lydro Team-PM	IEL	GFF	>10 Large Vol	GFF dup vol	>10 dup	POC 500		Comments or other	1
Nisk#	DESIRED		SALT Btl	Nut.Btl		vol	Vol	Ci i dap voi	vol (large)	ml		samples	#
1													1_
2	0	4.0	235	0292		250							2
3										0.12012042044==44444414-	-		3
4	5 0	52.5		0293		250							4
5										*************************	-		5
6			V .										6
7					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					7
8													8
9		RIVE AND											9
10													10
11			1										11
12												2.2	12

VESSEL Northy	L west Explore	r_	CRUISE	ID NWIL	1-03		PROJECT & SECM/GOAA		ded)	CTD FileN	ame (None if	data is live feed)	
CTD co	I .	LATITUDE		LONGITUDE		GMT DATE	(note if n	GMT ot) Time		Surface Temp	BOTTOM DEPTH		TN. ME/ID
	DEG	MIN	DEG	MIN		DAY	MO \	'R HR	MIN	(°C)	(m)		
015	5 53	15.18	N 135	26.63	3 _w	27	071	4 184	3	12.3	258	18045 15	X
Indiana for			8 84 . 8									CTD MA	X. DEPTI
SBE type and	r IDS (initially	& swap-outs)		Weather:			10	1 1	1	<u> </u>		711	(17
PRESS S/N		Neviellanie				ult cond	itions, fact	ors that ma	av aff	ect measureme	nts or aid p		<i>(</i> 1 3
TEMP 1 82 S	SNs		100 HE TO										
COND 182 S	S/Ns			Seace	at o	25	did	not re	mory	e HaO tul	e so n	o onfile	
FLUOR S/N								Ü	265	except o	Lioth for	025	
O2 (SBE43) \$	S/N									,	r		
Transmiss S/	/N			COD	Statio	n#a	9						
PAR S/N				1 12			0 - 1				1	<u></u>	
O2 SBE42S/I	N			TOOK	wa	tu (g	20m	or on	10-	provet no	chloro	CON	
	DEPTH	Rosette Notes		Hydro Team-Pl	MEL	GFF	>10 Large		,	10 dup POC 500	1 0 W = 3	Comments or other	r Nisl
Nisk#	DESIRED		SALT Btl	Nut.Btl		vol	Vol	GFF dup v		l (large) ml		samples	#
1	-									i			
2	Ω	-1					1	I	L		_l		1
	1)	3.2		0294		250							1 2
		3.2		0294		250							_
3		3.2											3
3 4	50	3.2		0294		250 250							3 4
3		3.2											3 4 5
3 4 5 6		3.2											3 4 5 6
3 4 5 6	50												3 4 5
3 4 5 6		3.2											3 4 5 6
3 4 5 6 7	50												3 4 5 6 7
3 4 5 6 7 8 9	50												3 4 5 6 7 8
3 4 5 6 7 8	<i>50</i>												3 4 5 6 7 8 9

VESSEL Northwest	Explorer			CRUISE I	NW14-	03		PROJECT SECM/GO/		G (if nee	eded)	CTD FileN	ame (None if	data is live fee	ed)
CTD consec CAST #	L	14,40 Atitude		L	29.85 ONGITUDE		GMT DATE	(note	if not)	GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN.
	DEG	MIN		DEG	MIN		DAY	МО	YR	HR	MIN	(°C)	(m)		
010	58	14:40	N	135	29.85	w	27	07	1 4	22	00	27.6	485	18046	15B
Sensor IDS	(initially &	& swap-outs)												CTD MAX, DEF
BE type and S/N	1 170 82	asiling	(d)	WELL WAR	Weather:										160.8
RESS S/N	T-4		P		COMMENT:	Diffic	ult cond	ditions, fa	ctors	that m	ay affe	ct measureme	nts or aid p	rocessing	
EMP 1 &2 SNs COND 1&2 S/Ns LUOR S/N					Deacat	, (260		5 0.	bo	Hom	depth bo	ngo		
2 (SBE43) S/N ransmiss S/N															
AR S/N 2 SBE42S/N			11		COD Sta	a bio	N#:	30			<u></u>				

Nisk#	DEPTH	Rosette Notes	F	lydro Team-P	MEL	GFF	>10 Large Vol	GFF dup vol	>10 dup	POC 500	Comments or other	Nisl
IVISK #	DESIRED		SALT Btl	Nut.Btl		vol	Vol	GFF dup voi	vol (large)	ml	samples	#
1												1
2	0	35		0296		250						2
3												3
4	50	52.9	1	0297		250						4
5												5
6		M'EUSSPINETE										6
7										<u> </u>		7
8	20	22.6							<u> </u>			8
9												9
10	140	160.8						<u> </u>				10
11												11
12												12

Sensor IDS (initially & swap-outs) Weather:	STN. NAME/IC
CAST # LATITUDE LONGITUDE DATE (note if not) Time Surface Temp DEPTH NUMBER DEG MIN DEG MIN DAY MO YR HR MIN (°C) (m) F O 7 58 3-20 N 35 31.56 w 28 07 1 4 0114 W.B 9 94 18047 Sensor IDS (initially & swap-outs) Weather:	NAME/I
017 58 3.20 N 35 31.56 w 28 07 1 4 0114 W.B 94 18047 Sensor IDS (initially & swap-outs) Weather:	
Sensor IDS (initially & swap-outs) BE type and S/N Weather:	
Sensor IDS (initially & swap-outs) BE type and S/N Weather:	CTD MAX, DEF
BE type and S/N Weather:	==
CONSTRUCT DISC. It as a distance of the second processing	82.2
RESS SIN COMMENT: Difficult conditions, factors that may affect measurements or all processing	
EMP 1 & 2 SNs OND 1 & 2 SNs LUOR S/N Seacat 0 27t Outh Outh	
12 (SBE43) S/N Transmiss S/N COD Station #31 AR S/N 22 SBE42S/N 20 m water sample for phyto project - no chl-a	
DEPTH Rosette Notes Hydro Team-PMEL GFF >10 Large CFE due vol >10 dup POC 500 Comments or	Automorphy Co.
Nisk # DESIRED SALT Bti Nut.Bti vol Vol GFF dup vol (large) ml samples	s #
1 0 4 3 0 250	1
2 0 4.3 0298 250	2
3 50 7 0000	3
4 50 50.8 0299 250 See water sitter	5
4 50 50.8 0299 250 5 Sea water filter 6 Blank Deawer	6
	7
6 7 8 20 20.6	8

VESSEL Northwest (Explore	r		CRUISE I	NW14-03			PROJECT SECM/GO/		3 (if ne	eded)	CTD FileN	lame (None if	data is live fe	ed)
CTD consec CAST #	67	63,56 Atitude		- 137	42. 32	•	GMT DATE	(note	if not)	GMT Time		Surface Temp	BOTTOM DEPTH	32 STATION NUMBER	STN. NAME/II
	DEG	MIN		DEG	MIN		DAY	МО	YR	HR	MIN	(°C)	(m)		1
018	57	53.56	N	137	42.32	w	18	07	1 4	15	19	13.7	0144	18048	IPD
Sensor IDS	initially	& swap-outs)		A. VIET						Į,					CTD MAX. DEP
SBE type and S/N					Weather:										203.4
PRESS S/N	Service S				COMMENT: D	ffic	ult con	ditions, fa	actors	that n	nay aff	ect measureme	ents or aid p	rocessing	
TEMP 1 &2 SNs				1											
COND 182 S/Ns					Seacat	<u></u>	029	_							
LUOR S/N															
02 (SBE43) S/N	C Ves														
Fransmiss S/N												-			
PAR S/N	, 1 <u>5</u>	nkevita e ba													
D2 SBE42S/N					2							**		- 1	
	DEPTH	Rosette Notes		Hv	dro Team-PMEL		GFF	>10 Lar	no l	EE due	,	10 dup POC 500	T NO 1 ST	Comments	or other Ni

Nisk#	DEPTH	Rosette Notes	Н	ydro Team-PM	EL	GFF	>10 Large	GFF dup vol	>10 dup	POC 500	Comments or other	
NISK #	DESIRED		SALT Btl	Nut.Btl		vol	Vol	GFF dup voi	vol (large)	ml	samples	#
-1												1
2	Ø	2,6.	236	0300		250		250	7	,		2
3									1		, g, , , , , , , , , , , , , , , , , ,	3
4	50	51		0301		250					4	4
5												5_
6		The state				<u> </u>			- 1		1	6
7												7
8	20	20.2			_							8
9												9
10	duo	202.5			<u> </u>					4		10
11									19		<u> </u>	11
12									16.	36		12

VESSEL Northwest	Explore	r		CRUISE I	DNW14-0)	3	PROJECT SECM/GO		G (if need	ed)	CTD FileN	lame (None if	data is live fe	ed)	
CTD consec CAST #	1	05.29 ATITUDE		137	20,38		GMT DATE	(note	if not)	GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STI NAME	
	DEG	MIN		DEG	MIN		DAY	МО	YR	HR	MIN	(°C)	(m)			
019	58	05,29	N	137	26.38	w	28	07	1 4	183	8	14.0	126	18049	IPC	<i></i>
Sensor IDS	(initially	& swap-outs)													CTD MAX.	DEPTI
SBE type and S/N PRESS S/N FEMP 1 &2 SNs COND 1&2 S/Ns FLUOR S/N 02 (SBE43) S/N Transmiss S/N PAR S/N					Weather: COMMENT: Di				actors	that may	y affe	ct measureme	ents or aid p	rocessing	[]{[,2	
Nisk#	DEPTH	Rosette Notes		Ну	dro Team-PMEL		GFF	>10 Lan	ge G	FF dup vo) dup POC 500		Comments		Nis

Nisk#	DEPTH	Rosette Notes	Hy	ydro Team-P	MEL	GFF	>10 Large	GFF dup voi	>10 dup	POC 500	Comments or other	Nisł
INISK #	DESIRED		SALT Btl	Nut.Btl		vol	Vol	GFF dup voi	vol (large)	ml	samples	#
1												
2	ø	4.0	Blova	302		250						2
3		TOS OF HAVE										3
4	50	5/16	BUMB	303		250						4_
5			<u> </u>							• D-44-9-1		5
6						_						6
7												7_
8	20	218										8
9												9_
10	deep	110.5										10
11												11
12												12

vessel Northwest I	Explore	r		CRUISE I	- 41 41 M	02	5	PROJECT SECM/GO/		3 (if nee	eded) —	CTD FileN	ame (None if o	data is live fee	ed)
CTD consec CAST #		ATITUDE		137	ONGITUDE		GMT DATE	(note	if not)	GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN.
	DEG	MIN		DEG	MIN		DAY	МО	YR	HR	MIN	(°C)	(m)		
020	53	12.62	N	137	16.54	w	28	07	1 4	21	49	13,6	118	18050	IPB
	(initially	& swap-outs)		Weather:							70			CTD MAX. DEF
BE type and S/N PRESS S/N									actors	that m		ect measureme		rocessing	
2 (SBE43) S/N ansmiss S/N AR S/N							0001				- CO	eaccet ce st. Stut	at new (LOYMMUN	Latio

Mint. 4	DEPTH	Rosette Notes	Н	ydro Team-PM	MEL	GFF	>10 Large Vol	GFF dup vol	>10 dup	POC 500	Comments or oth	er Nisl
Nisk#	DESIRED		SALT Btl	Nut.Btl		vol	Vol	GFF dup voi	vol (large)	ml	samples	#
1												1
2	Ø	8.8		304		250						2
3	/										, ,	3
4	50	51.8		305		250						4
5										***************************************	.======================================	5
6					9							6
7												7
8	20	21.3										8
9												9
10	100	4.001										10
11												11
12		E to V v soli										12

					ř.										
VESSEL Northwest (Explorer	40		CRUISE II	NW 14-0	3)	PROJECT SECM/GOA		6 (if neede	ed)	CTD FileN	lame (None if	data is live fe	eed)
CTD consec CAST #	L	ATITUDE		ji L	.ONGITUDE		GMT DATE	(note i	if not)	GMT Time	5	Surface Temp	BOTTOM DEPTH	35 STATION NUMBER	STN. NAME/I
	DEG	MIN		DEG_	MIN		DAY	МО	YR	HR A	MIN	(°C)	(m)		
021	58	20.10	N	137	06-82	w	29	07	1 4	0036	0	14.0	158	18051	IPA
	20 LUB 192	& swap-outs)					l.					-			CTD MAX. DE
SBE type and S/N				(Citaliana	Weather:										149.8
PRESS S/N					COMMENT: D	iffic	cult con	ditions, fa	ctors	that may	affec	measureme	ents or aid p	rocessing	
TEMP 1 &2 SNs		II TA BINI	77												
COND 1&2 S/Ns	A A	Page That is		Su Seed A		,	= 77.								
LUOR S/N	La Carlo	10,000 000		MITC W	Seacat	L 	99								
D2 (SBE43) S/N															
Fransmiss S/N	T 1														-
PAR S/N		E SEE NAME		BEILINE											
02 SBE425/N															
Nisk#	DEPTH	Rosette Notes	U	Ну	dro Team-PMEL		GFF	>10 Larg	ge G	FF dup vol	1 1 1 1 1 1 1 1 1 1 1 1 1	dup POC 500		Comments	The second secon

Niele #	DEPTH	Rosette Notes	H	lydro Team-PM	EL	GFF	>10 Large	GFF dup vol	>10 dup	POC 500	7772	Comments or other	
Nisk#	DESIRED		SALT Btl	Nut.8tl		vol	Vol	Cit dap to	vol (large)	ml		samples	#
1			Tr.										. 1
2	Ø	4,6		306		a50							2_
3	<i>/</i>									***************************************	Ì		3
4	6 D	5011		307		250					<u>+</u>	A)	4
5											Salvat		5
6			8								blast		6
7													7
8	90	21,6											8
9			š										9
10	148	149.5								ļ			10
11			3										11
12												<u> </u>	12

VESSEL Northwest	Explore	r	CRUISE	ID			PROJECT SECM/GOA		6 (if need	ed)	CTD FileN	ame (None if	data is live fee	ed)
CTD consec CAST #		LATITUDE		LONGITUDE		GMT DATE	(note i	f not)	GMT Time	Sı	rface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG	MIN	DEG	MIN		DAY	МО	YR	HR	MIN	(°C)	(m)		
022	58	13,27	N 135	31.73	w	30	Jul	1 4	1618	3	0.5	97	18058	ISA
Sensor IDS	(initialiy	& swap-outs)												CTD MAX. DEPTH =
SBE type and S/N				Weather:										81,10
PRESS S/N				COMMENT:	Diffic	ult con	ditions, fa	ctors	that may	y affect	neasureme	ents or aid p	rocessing	
TEMP 1 82 SNs														
COND 1&2 S/Ns	381 10			Not	1,0	_50	mples		ollect	ul_				
FLUOR S/N			TO THE							* * * * * * * * * * * * * * * * * * *				
O2 (SBE43) S/N														
Transmiss S/N	Y. 11 2					7/	(A) 150							
PAR S/N O2 SBE42S/N	-			seaccet	, 9.	560	(G) 120	9						
UZ SBE4ZSM	4.76													
Nisk#	DEPTH	Rosette Notes	H	ydro Team-PMEL		GFF		e G	FF dup vo	>10 d			Comments	1.05-C11111-C2-5-C
	DESIRED		SALT Btl	Nut.Btl		vol	Vol	10		vol (la	ge) mi		sample	75 #
1		10/2017 - 19/2017 20.	No.											1
2														2
				 										3
3														
4		L L W-W						-				 	-	4
5												***		5
6														6

VESSEL Northwe	est Explore	r	c	CRUISE I	D			PROJEC SECM/GC		G (if nee	ded)	С	TD FileNa	ame (None if o	data is live feed	d)
CTD cons		LATITUDE			LONGITUDE		GMT DATE	(note	if not)	GMT Time		Surfac	e Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG	MIN		DEG	MIN		DAY	MO	YR	HR	MIN	(C)	(m)		1 = 0
023	58	1470	N	135	29.2	$ _{\mathbf{w}}$	30	JUL	1	4 166	16	1	.8	188	18059	158
	100	1 1/20			1.0				İ							CTD MAX. DEPTH
		& swap-outs	200	II RATATI	Weather:				1				· -			170.9
SBE type and Si PRESS S/N	/N					IT: Diffic	ult con	ditions, 1	actor	s that ma	y aff	ect mea	sureme	nts or aid p		
TEMP 1 82 SNs																
COND 182 S/Ns			100		No	wat	er :	Same	les	take	1).					
FLUOR S/N			M.T.					/								
O2 (SBE43) S/N				EVAIL I												
Transmiss S/N	874						77-7			117						
PAR S/N	- 1 × 5				Seac	it 0	0+	30/00	JL	1114						
O2 SBE42S/N																
	DEPTH	Rosette Notes		H	ydro Team-PM	MEL	GFF	>10 La	rge	GFF dup v		10 dup	POC 500		Comments o	market transport and the first transport to the first transport transport to the first transport transport to the first transport transport to the first transport transp
Nisk#	DESIRED		S	SALT Btl	Nut.Btl		vol	Vol		GEL GOD A	VO VO	ot (large)	ml		sample	# #
-			= 17													1
1							 							_		2
2 -					-	· · · · ·	╂				_			 		3
3																
4		the Marie To					ļ	_ _							 	4
5													.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			5
6							<u> </u>									6_
7																7
8																88
		Fig. 19 (19)	- 4		+		-					-				9

									3 500							
VESSEL Northwest E	Explorer		CRU	ISE IC				PROJECT SECM/GO/		G (if	neede	ed)	CTD FileN	ame (None if o	data is live fee	ed)
CTD consec CAST #	L	ATITUDE		L(ONGITUDE		GMT DATE	(note	if not)	GM Tim			Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG	MIN	DI	EG	MIN		DAY	МО	YR	Н	IR I	MIN	(°C)	_(m)		
024	58	15.22	N 13	35	26.57	w	30	JUL	1 4	1	839	}	12.3	259	18060	150
Sensor IDS	(initially &	& swap-outs)	in te				6-117									CTD MAX. DEPTH =
SBE type and S/N			19		Weather:				16.71 10.							200.3
PRESS S/N	-		1		COMMENT: D	iffic	ult con	ditions, fa	actors	tha	t may	affe	ect measureme	ents or aid p	rocessing	
TEMP 1 &2 SNs			1													
COND 1&2 S/Ns			2.01		No Her)	San	ples	tal	ke	n_					
FLUOR S/N		a magagina			1			ı						764		
02 (SBE43) S/N																
Transmiss S/N							20	(a) 101								_===
PAR S/N		OLD T			Seacat		000	@ 18:	20							
O2 SBE42S/N																
A15-1-4 I	DEPTH	Rosette Notes		Hyc	iro Team-PMEL		GFF	>10 Lar	ge C		lun vol	>	10 dup POC 500		Comments	or other Nisk

A 1:-1. 4	DEPTH	Rosette Notes	H	lydro Team-	PMEL	GFI		GFF dup vol	>10 dup	POC 500	Comments or other samples	Nisk
Nisk#	DESIRED		SALT Btl	Nut.Btl		vol	Vol	GIT dap voi	vol (large)	ml	samples	
1												1
2				Se ²								2
3	3487 5385											3
4				2					tores ou a surrica			4
5												5
6												6
7	-											7
8												8
9	- 1									ļ		9
10				20								10
11	_		3									11
12				***			E0520					12

VESSEL Northwest	Explore	r	С	RUISE I	D			PROJECT & SECM/GOAA		(if need	ded)	CTD File	lame (None if o	data is live fee	d)
CTD consec CAST #		ATITUDE			LONGITUDE		GMT DATE	(note if n	ot)	GMT Time		Surface Temp		STATION NUMBER	STN. NAME/ID
	DEG	MIN	Щ.	DEG	MIN		DAY	MO '	/R	HR	MIN	(°C)	(m)	100/1	IS D
025	58	16.28	N	135	23.68	w	30	JUL 1	4	211	18	13.4	227	1806	ISD
Sensor IDS	/initially	& swap-outs)	N=13												CTD MAX. DEPTH
SBE type and S/N	Annaany	d ottup outo	- 9		Weather:										203.4
PRESS S/N			10		COMMENT	Γ: Diffic	ult con	ditions, fact	ors	that ma	y affe	ect measurem	ents or aid p	rocessing	
TEMP 1 &2 SNs						110		a madas						punchiller to the second-order	
COND 182 S/Ns					No	1720		amples							
FLUOR S/N O2 (SBE43) S/N	-				4										
Transmiss S/N	-1 + 3 -	1 72	- 1												
PAR S/N		R. H. J. V. II					20	0 0101							
02 SBE42S/N					Macco	t 0,	39	@ 2131							
	DEPTH	Rosette Notes		Н	JI ydro Team-PM	EL	GFF	>10 Large		3,3523	>	10 dup POC 50	0	Comments	or other Nisl
Nisk #	DESIRED	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	S	ALT Bti	Nut.Btl		vol	the first the second se	G	FF dup v	OI VO	l (large) ml		sampl	es #
11 11															
1							1		T						1
1															1 2
2															
2 3															2
3 4															2
3 4 5															2 3 4
3 4															2 3 4 5
3 4 5															2 3 4 5 6
3 4 5															2 3 4 5 6
2 3 4 5 6 7															2 3 4 5 6 7 8
2 3 4 5 6 7 8															2 3 4 5 6 7 8 9
2 3 4 5 6 7 8															2 3 4 5 6 7 8

)		<u>.</u>					
VESSEL Northwe	est Explore		CRUISI	ID			PROJECT SECM/GOA		G (if needed	i)	CTD FileN	ame (None if	data is live fe	ed)
CTD con	sec	ATITUDE		LONGITUDE		GMT DATE	(note if		GMT Time	Surf	ace Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
0,101	DEG	MIN	DEG	MIN		DAY	МО	YR	HR M	IIN	(°C)	(m)		
026	58	04.63	N 135	00.18	⟨ w	31)uL	1 4	1518	12	2.3	447	18064	CTD MAX. DEPTH
Sensor	IDS (initially	& swap-outs)	Part				1) \$1		1 7 9 9					=
SBE type and S		V	10 20	Weather:										206.)
PRESS S/N	THE WAY			COMMEN	T: Diffic	ult condi	itions, fa	ctors	that may	affect m	easureme	ents or aid p	rocessing	
TEMP 1 &2 SNs														
COND 1&2 S/N	s		- 1											
FLUOR S/N														
O2 (SBE43) S/N	۱ <u>-</u>		-0.0	D										
PAR S/N														
O2 SBE42S/N				Slaca	t DI	2	1	J.	out o	20 0	DWNG	ast		
	DEPTH	Rosette Notes		Hydro Team-PN		GFF	>10 Larg				POC 500		Comments	or other Nisk
Nisk #	DESIRED	Nosette Notes	SALT Btl	Nut.Btl		vol	Vol	6	FF dup vol	vol (larg			samp	CALCADA PROPERTY SEE
1														1
	deeo	205.8												2
3	1	, III - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1												3
4	50	51.4		0309		250)		**********					4_
5	<u></u>		12											5
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6														7
7	\sim	001				-								8
8	20	20.1				-		+						9
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10	Ø	3.5	237	0308		257)	+		400_			-		11
11														12
12														12

(1							
VESSE North		xplore	r	CRUIS	E ID			PROJECT &		G (if neede	d)	CTD FileNa	ame (None if o	data is live fee	d)
41	consec ST#	L	ATITUDE		LONGITUE	DΕ	GMT DATE	(note if		GMT Time	Surfa	ce Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
		DEG	MIN	DEG			DAY	МО	YR	HR M		(°C)	(m)		
62	7	58	06.24	N 135	00.80	9 w	31	JUL	1 4	1801	1 12	.3	160	18065	UCB
SBE type at PRESS S/N TEMP 1 &2 COND 1&2	nd S/N V ! SNs ! S/Ns	initially 	& swap-outs)	*	Weather		cult con	ditions, fac	tors	that may	affect me	asureme	nts or aid p		28.7
		_													
FLUOR S/N O2 (SBE43) Transmiss S PAR S/N O2 SBE42S	S/N S/N	DEPTH	Rosette Notes		Alace		043 GFF	58 (SJ-FT8	>10 dup	95 (POC 500	21736	Comments o	
O2 (SBE43) Transmiss S PAR S/N	S/N S/N D	DEPTH ESIRED	Rosette Notes	SALT BU				CONTRACTOR OF THE PARTY OF THE		28 /3 FF dup vol	>10 dup	POC 500	21736	Comments o sample	20 x 20 x 6x car (10)
O2 (SBE43) Transmiss S PAR S/N O2 SBE42S Nisk #	S/N S/N D	ESIRED	Rosette Notes		Hydro Team-		GFF	>10 Large		SJ-FT8	>10 dup	POC 500	21736		20 x 20 x 6x car (10)
O2 (SBE43) Transmiss S PAR S/N O2 SBE42S Nisk #	S/N S/N D	ESIRED			Hydro Team-		GFF	>10 Large Vol		SJ-FT8	>10 dup	POC 500	21736		1 2
O2 (SBE43) Transmiss S PAR S/N O2 SBE42S Nisk #	S/N D DE	ESIRED	128.3		Hydro Team-I		GFF	>10 Large Vol		SJ-FT8	>10 dup	POC 500	21736		1 2 3
O2 (SBE43) Transmiss S PAR S/N O2 SBE42S Nisk # 1 2 3 4	S/N D DE	ESIRED	128.3		Hydro Team-I		GFF	>10 Large Vol		SJ-FT8	>10 dup	POC 500	21736		1 2 3 4 5 6
O2 (SBE43) Transmiss S PAR S/N O2 SBE42S Nisk # 1 2 3 4 5	SIN DE	ESIRED	128.3 SD.4		Hydro Team-I		GFF	>10 Large Vol		SJ-FT8	>10 dup	POC 500	21736		\$ # 1 2 3 4 5 6 7
02 (SBE43) Transmiss S PAR S/N 02 SBE42S Nisk # 1 2 3 4 5 6 7 8	S/N D DE	ESIRED	128.3		Hydro Team-I		GFF	>10 Large Vol		SJ-FT8	>10 dup	POC 500	21736		1 2 3 4 5 6 7 8
02 (SBE43) Transmiss S PAR S/N 02 SBE42S Nisk # 1 2 3 4 5 6 7 8	SIN DE	ESIRED	128.3 50.4 20.6		Hydro Team-I Nut.Btl		GFF vol	>10 Large Vol		SJ-FT8	>10 dup	POC 500	21736		\$ # 1 2 3 4 5 6 7 8 9
02 (SBE43) Transmiss S PAR S/N 02 SBE42S Nisk # 1 2 3 4 5 6 7 8	SIN DE	ESIRED	128.3 SD.4		Hydro Team-I		GFF	>10 Large Vol		SJ-FT8	>10 dup	POC 500	21736		1 2 3 4 5 6 7 8

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VESSEL Northwest	Explore	r		CRUISE I	D			PROJEC SECM/GO		3 (if ne	eded) —	CTD FileN	ame (None if	data is live fe	∍d)
CTD consec CAST#		ATITUDE			ONGITUDE		GMT DATE	(note	if not)	GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG	MIN	Т	DEG	MIN		DAY	МО	YR	HR	MIN	(°C)	(m)		
028	58	1799		135	04.01	w	31	dul	1 4	19	35	12.2	158	18066	ucc
Sensor IDS	(initially)	& swan-out	e)			1					1				CTD MAX. DEPTH
SBE type and S/N	(miciany	G Swap-out	3/	SI II E	Weather:										1409
PRESS S/N TEMP 1 &2 SNs COND 1&2 S/Ns					COMMENT: [Diffic	cult con	ditions, f	actors	that m	nay affe	ect measureme	ents or aid p	rocessing	
FLUOR S/N O2 (SBE43) S/N Transmiss S/N	Ē									V	/ NO	upcast	2/) na hoa	d to 1120	
PAR S/N O2 SBE42S/N					warat	=	049	(a)	195	55		upcast tout e =1?	CTD fo	or profil	Le
Nisk#	DEPTH	Rosette Note	s	Hy	rdro Team-PMEL		GFF vol	>10 La Vol	rge G	FF dup	vol >	10 dup POC 500	M Villa III was a compa	Comments	or other Nisk

A.C. all	DEPTH	Rosette Notes	Н	lydro Team-P	MEL	GFF	>10 Large Vol	GFF dup vol	>10 dup	POC 500		Comments or other	
Nisk#	DESIRED		SALT Bu	Nut.Btl		vol	Vol	Gr 1 dap voi	vol (large)	ml		samples	#
											,		1
2	delp	140.3											2
3	•		B									,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	3
4	50	50.3		0313		250							4
5		NEWSCHOOL STATE	1							000000000000000000000000000000000000000	<u>:</u>	.20222222222222222	5
6													6
7			Ž.									1.66600000000	7
8	20	20,2											8
9						1							9
10	Ø	3,3		0312		250							10
11			1										11
12							T						12

VESSE!	west Explor	er	CRUISE	ID			PROJECT &	LEG_	G (if need	led)	CTD FileNa	ame (None if o	data is live fee	d)
CTD co		LATITUDE		LONGITUDE		GMT DATE	(note if	not)	GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID
	DEG	MIN	DEG	MIN		DAY	мо	YR	HR	MIN	(°C)	(m)		
()2		6799	N 135	04.01	w	21	490.033	1 4	193	5	12.72	158	18066	UCC
<u> </u>		y & swap-outs	(1	1		10						CTD MAX. DEPTH
SBE type an	******	y or swap-ours		Weather:		181		-						140.9
PRESS SAN	u 3/11	<u> </u>			Diffi	cult con	ditions, fac	tors	that ma	v aff	ect measureme	nts or aid p	N	
TEMP 1 &2 !	Chie			OOMMEIT.	, Dilli	one oon	artiono, ido							
	_													
COND 182 S														
FLUOR S/N	_		Western 1997											
02 (SBE43)	_									00	1 occat			
Transmiss S									1/	1.10	upulat	16	1 1 100	
PAR S/N														
				00000		estre!	(2)	ric	-	LL	t ow e 210	CT 1	I 10 am	
O2 SBE42S/	N			Deaca	t		@	95	5	CLO	upcast tow e =13	CTD fo	or people	E
02 SBE42S/	DEPTH	Rosette Notes		WOOD Team-PME		GFF	1 22 1100			Т	10 dup POC 500	CTD fo	Comments o	
	*******	Rosette Notes	SALT BU			1	>10 Large		FF dup ve	, >		CTD fo		r other Nisk
02 SBE42S/	DEPTH	Rosette Notes		Hydro Team-PME		GFF	>10 Large			, >	10 dup POC 500	CTD fo	Comments o	r other Nisk
02 SBE42S/ Nisk #	DEPTH DESIRED		SALT BU	Hydro Team-PME		GFF	>10 Large			, >	10 dup POC 500	CTD fo	Comments o	r other Nisk
02 SBE42S/ Nisk #	DEPTH	Rosette Notes	SALT BU	Hydro Team-PME		GFF	>10 Large			, >	10 dup POC 500	CTD fe	Comments o	r other Nisk #
02 SBE42S/ Nisk #	DEPTH DESIRED	[40.3	SALT BU	Hydro Team-PME		GFF vol	>10 Large Vol			, >	10 dup POC 500	CTD fe	Comments o	r other Nisk #
02 SBE42S/ Nisk #	DEPTH DESIRED		SALT BU	Hydro Team-PME		GFF	>10 Large Vol			, >	10 dup POC 500	CTD fo	Comments o	rother Nisks # 1 2 3 4
02 SBE42S/ Nisk #	DEPTH DESIRED	[40.3	SALT BU	Hydro Team-PME		GFF vol	>10 Large Vol			, >	10 dup POC 500	CTD fo	Comments o	rother Nisks # 1 2 3 4 5
02 SBE42S/ Nisk #	DEPTH DESIRED	[40.3	SALT BU	Hydro Team-PME		GFF vol	>10 Large Vol			, >	10 dup POC 500	CTD fe	Comments o	rother Nisks # 1 2 3 4
02 SBE42S/ Nisk #	DEPTH DESIRED	[40.3	SALT BU	Hydro Team-PME		GFF vol	>10 Large Vol			, >	10 dup POC 500	CTD fe	Comments o	rother Nisks # 1 2 3 4 5
02 SBE42S/ Nisk #	DEPTH DESIRED	140.3	SALT BU	Hydro Team-PME		GFF vol	>10 Large Vol			, >	10 dup POC 500	CTD fo	Comments o	1 2 3 4 5 6 7
02 SBE42S/ Nisk #	DEPTH DESIRED	[40.3	SALT BU	Hydro Team-PME		GFF vol	>10 Large Vol			, >	10 dup POC 500	CTD fe	Comments o	1 2 3 4 5 6 7 8
02 SBE42S/ Nisk #	DEPTH DESIRED	140.3 20.3	SALT BU	Hydro Team-PME Nut.Bt		GFF vol	>10 Large Vol			, >	10 dup POC 500	CTD fe	Comments o	1 2 3 4 5 6 7
02 SBE42S/ Nisk # 1 2 3 4 5 6 7 8	DEPTH DESIRED	140.3	SALT BU	Hydro Team-PME		GFF vol	>10 Large Vol			, >	10 dup POC 500	CTD fe	Comments o	1 2 3 4 5 6 7 8
02 SBE42S/ Nisk #	DEPTH DESIRED	140.3 20.3	SALT BU	Hydro Team-PME Nut.Bt		GFF vol	>10 Large Vol			, >	10 dup POC 500	CTD fo	Comments o	rother Nisk # 1 2 3 4 5 6 7 8 9
02 SBE42S/ Nisk #	DEPTH DESIRED	140.3 20.3	SALT BU	Hydro Team-PME Nut.Bt		GFF vol	>10 Large Vol			, >	10 dup POC 500	CTD fe	Comments o	1 2 3 4 5 6 7 7 8 9 10

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VESSEL Northwest Explorer				RUISE	ID		PROJECT SECM/GO/		G (If need	ded)	CTD FileNa	CTD FileName (None if data is live feed)					
CTD consec CAST #	LATITUDE			LONGITUDE			GMT DATE	(note if not)		GMT Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	STN. NAME/ID		
	DEG MIN			DEG MIN		1	DAY	MO YR		HR	MIN	(°C)	(m)				
029	58	09.58	N	135	02.93	2 w	31	JUL	1 4	231	7	12.2	158	18069	KOD		
Sansor IDS	/initially	& swap-outs	· - · -												CTD MAX. DEPTH		
SBE type and S/N PRESS S/N TEMP 1 &2 SNs					Weather COMME		ult cond	litions, fa	ctors	that ma	y affe	ect measureme	nts or aid p	rocessing	138		
COND 182 S/Ns FLUOR S/N D2 (SBE43) S/N																	
Transmiss S/N	•••••																
PAR S/N 02 SBE42S/N					0.00	nt.	2115	- 6	0 0	045	5	8 09.45	135 024	160			
02 30542314					erec.			/ ₁₀		0,10							
Nisk #	DEPTH Rosette Notes		\dashv		ydro Team-P	MEL	GFF vol	>10 Larg Vol	e G	FF dup v		10 dup POC 500 (large) ml		Comments sampl			
	DESIRED		_ S	ALT BU	Nut.8tl		ā li										
2 100	n 0	137.9													2		
3	c.i.	17 (1	\top			11									3		
	50	51.1		n an an air air air lith did ap pp	0315		250								4		
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7				e nan site işkir dişa ilan elen işkir der eler İs			**************************************										
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7 8 6 9	ald all the tot on sometroon up to to the														6 7 8 9		
7 8 6 9	20	21.1			0314		250								6 7 8 9		
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Sparata mala PROJECT & LEG (if needed) CRUISE ID CTD FileName (None if data is live feed) VESSEL Northwest Explorer SECM/GOAA leg CTD consec **GMT** GMT **BOTTOM** STATION STN. CAST# LATITUDE DATE Surface Temp DEPTH NUMBER NAME/ID LONGITUDE (note if not) Time DEG HR MIN DEG DAY MO YR MIN MIN (°C) (m) W 1 4 CTD MAX. DEPTH Sensor IDS (Initially & swap-outs) Weather: SBE type and S/N COMMENT: Difficult conditions, factors that may affect measurements or aid processing PRESS S/N TEMP 1 &2 SNs 04.59 01/Aug-14 @ UCA COND 182 S/Ns FLUOR S/N 02 (SBE43) S/N 18077 Transmiss S/N 58 8810 03.84 01-Aq 14 @ 2143 1207 PAR S/N 02 SBE42S/N 58 09.75 02.51 01. Rug. 14 10 2338 DEPTH Roselle Notes Hydro Team-PMEL >10 dup |POC 500 **GFF** >10 Large Comments or other Nisk Nisk # GFF dup vol Vol vol (targe) ml vol sampies SALT BU DESIRED NuLBU 2 2 3 3 4 4 5 5 6 6 7 8 8 9 9 10 10 11 11 12 12

VESSEL CRUISE II Northwest Explorer				NW 14	(-03		PROJECT (SECM/GOA/	& LEG (if ne	eded)	CTD FileName (None if data is live feed			
CTD con		LATITUDE		ONGITUDE		GMT DATE	(note if	GMT not) Time		Surface Temp	BOTTOM DEPTH	STATION NUMBER	
0,101	DEG	MIN	DEG	MIN		DAY	МО	YR HR	MIN	(°C)	(m)		T
13C	58	22.00	N 134	39.9.	3 v	, 02	AUG	1 4 15	53	13.0	51	18076	Ī
Sensor I	DS (Initially	& swap-outs)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,										C1
SBE type and Si				Weather:	JI					t measureme			
FLUOR S/N													
FLUOR S/N O2 (SBE43) S/N Transmiss S/N PAR S/N O2 SBE42S/N		Rosette Notes	Hw	dro Team-PN	A Fal.	CEE	21012000			dun POC 500		Comments	=
02 (SBE43) S/N Transmiss S/N PAR S/N	DEPTH DESIRED	Rosette Notes		dro Team-PN	REL III	GFF vol	>10 Large Vol	GFF dup	vol vol (I	dup POC 500 ml		Comments of sample	
O2 (SBE43) S/N Transmias S/N PAR S/N O2 SBE42S/N	DEPTH DESIRED			Nut.Btl	REL I	vol	Vol	GFF dup	vol >10 vol (I	dup POC 500 arge) ml			
O2 (SBE43) S/N Transmiss S/N PAR S/N O2 SBE42S/N NIsk #	DEPTH	Rosette Notes			REL I	_11	Vol	GFF dup	vol >10 vol (I	dup POC 500 arge) ml			
O2 (SBE43) SIN Transmias S/N PAR SIN O2 SBE42S/N NIsk # 1 2 3	DEPTH DESIRED	39,6		Nut.Btl	AEL.	vol	Vol	GFF dup	vol >10 vol (I	dup POC 500 arge) m1			
O2 (SBE43) S/N Transmiss S/N PAR S/N O2 SBE42S/N NIsk #	DEPTH DESIRED			Nut.Btl	REL.	vol	Vol	GFF dup	vol >10 vol (I	dup POC 500 arge) m1			
O2 (SBE43) S/N Transmias S/N PAR S/N O2 SBE42S/N NIsk # 1 2 3 4 5 6	DEPTH DESIRED	39,6		Nut.Btl	IEL.	vol	Vol	GFF dup	vol >10 vol (I	dup POC 500 ml			
02 (SBE43) S/N Transmiss S/N PAR S/N 02 SBE42S/N NIsk # 1 2 3 4 5 6 7	DEPTH DESIRED NOTE	39.6		Nut.Btl	ICL.	vol	Vol	GFF dup	vol >10 vol (I	dup POC 500 arge) m1			
O2 (SBE43) S/N Transmias S/N PAR S/N O2 SBE42S/N NIsk # 1 2 3 4 5 6	DEPTH DESIRED	39,6		Nut.Btl	SEL.	vol	Vol	GFF dup	vol >10 vol (I	dup POC 500 arge) ml			
02 (SBE43) S/N Transmias S/N PAR S/N 02 SBE42S/N NIsk # 1 2 3 4 5 6 7 8	DEPTH DESIRED NOTE	39.6		Nut.Btl		vol	Vol	GFF dup	vol >10 vol (l	dup POC 500 ml			