ESSEL	CRUISE ID	PROJECT & LEG		i	STATION NO.	
UV Pr. Khromov	RUSALCA	RUSALCA 2014	FileName= rusa	ca 1429	29	
CONSC CAST # LATITUDE	LONGITUDE	UTC (GMT)	DRY BULB WET BULB AND SAUCH	SEA STATE VISIBILITY  VISIBILI		A. NAME/
DEG MIN		DAY MO YR HR MIN	(°C) (°C) (mb)	* * (deg) (kts) *	* * (m)	470
6638.640	N 16933.140W	14 JUL 1 4 0818		××	x x 50,7 C	X+-2
SBE 9+	FLUOR S/N	REMARKS	Cast depth: 4	6m	MAX. DEPT	TH= r
PRESS SN PRI TEMP SN	SBE43-Oxy (prime)		- U			
SEC TEMP SN	Transmissometer	Auton	omous cost		,	
PRI COND SN	PAR S/N	0 7	ing CX7			
SEC COND SN			ING CXT			Tri I
DEPTH Rosette Notes	Hydro Team-PMEL	- OTHER	0		Comments	١
DESIRED	OXYGEN NUTS CHL S	ALT				N
	1.60	000				
	\/\(\)	1 601	1/A			
	140					

VESSEL	CRUISE ID	PROJECT & LEG	STATION NO.	
RIV Pr. Khrom	RUSALCA	RUSALCA 2014	FileName= rusa/ca 1428 28	
CONSC CAST # LATITUDE DEG MIN	LONGITUDE DEG MIN	DAY MO YR HR MIN	DRY BULB WET BULB WEATHER WEATHER WEATHER (c) (c) (c) (mp) * * (deg) (kts) * * * (mp)	
G G Y 9 .75  SBE 9+  PRESS SN  PRI TEMP SN  SEC TEMP SN  PRI COND SN	FLUOR S/N SBE43-Oxy (prime) Transmissometer PAR S/N	REMARKS (	ast depth: 44 (CTD), 45/60H/es) MAX. DEPTH	11 = m
SEC COND SN NIS DEPTH Rosette Notes	Hydro Team-PMEL		Comments	N
No DESIRED 66°49,75 B 06/27 169°04.41		SALT COST		N
1 40	310 131 131	1391		- 1
2 30	132 137			
3 20	133 133			;
4 40	134 134		CLV = 13-5	
5 Bucket	136 135	83 138	100+ = 136, 135 Not is miss	53 5
7				
8				

VES	SEL	1 21	CRUIS	EID			PROJEC	T & LE	G				1			S	TAT	ON NO		
R	Vir	Khromov	RUS	ALCA			RUSALC	A 2014	4	File	Name= /	usa	lca:	142=	7				7	
	NSC ST#	LATITUDE		LONGIT			ИТС		TIME (GMT)	DRY BULE	WET BULE	PRESSURE	SEA STATE VISIBILITY	WIND DIRN.	WIN D SPD	CLOUD (amt	WEATHER		H STA. N	AME/ID
	DE		DEG		MIN	DAY		YR	HR MIN	(°C)	(°C)	(mb)	* *	(deg)	(kts)	* *	*	(m)	0 110	
F	SBE 9+ PRESS SI		FLU	9 1 8 JOR S/N E43-Oxy (p		w 1 4	JUL			Cast a	depth;	451	ČTĒ	),4	7/b	× ×	es)	50,2 MAX.	DEPTH=	m
F	SEC TEM PRI COND SEC CON	P SN D SN ID SN	PAI	nsmissome R S/N					Auton	emous	cast.									
-		Rosette Notes			am-PMEL		OTHE	R			1					C	Comn	nents		Nis
		00 11/201	OXYGEN	NUTS	CHL	SALT	cité					*								No.
В	05:10	169°18,777																		В
1	42			125	125		139													1
2	32			126	126															2
3	22			127	127															3
4	12			128	128	*84														4
5	2			129	129		V													5
6	bucké			130	130		1398													6
7								in alle date light date days days												7
8																				8
9																				9

٥	00	7	o	C)	4	w	2	_	В	No	Zis								000	*	SI
			pake	es	23	23	33	43	03:50	DESIRE	_	PRI COND SN SEC COND SN	SEC TEMP SN	PRI TEMP SN	PRESS SN	SBE 9+	9	D	CONSC CAST#	AN AN	VESSEL
									03:50 769° 33.277	DESIRED 66'58,589	DEPTH Rosette Notes	DSN	AP SN	PSN	SZ.		6638.636N	DEG MIN	LATITUDE	KIV Vr. Thromov	1/1
			124	123 1	احدا	121	起			OXYGEN NUTS	Hydro Team-PMEL	PAR S/N	Transmissometer		SBE43-Oxy (prime)	FLUOR S/N	16933	DEG MIN	LONGITUDE	RUSALCA	CRUISE ID
			124	20	لدوا	121	OEI	119		CHL SALT	1-PMEL		5		ne)		188 w 14	N DAY	Ж М		
			138	6				139		S. S.	OTHER						4 JUL 1 4	Y MO YR	MIC	RUSALCA 2014	PROJECT & LEG
												Engine	Autonomous	-		REMARKS (	0334	HR MIN	TIME (GMT)	14	LEG
												working => up	mous cast.			Cast depth: 45/cTD		(°C) (mb)	DRY BULB WET BULB PRESSURE SEA STATE	FileName= rusa/co	
											Comments	per 2-3 m scramb				) 48 (bottles) MAX	× × × ×	(kts) * * *	VISIBILITY DIRN. SPD. CLOUD (amt TYPE WEATHER M DEPTH	LA 1426 26	STATION
D	8	7	6	Ch	4	ω	2	-	В	No.	Nis	bled				MAX. DEPTH = m	CXZ		O STA. NAME/ID	U3	

CAST# NO DESIRED 66 33423 OXYGEN NUTS Nis DEPTH Rosette Notes B 2:33 16947.666 SBE 9+ SEC TEMP SN SEC COND SN PRI COND SN PRI TEMP SN PRESS SN 25 35 45 DEG 851.8899 Pr. Khromov LATITUDE RUSALCA 16947.583 W14 JUL 1 40218 CRUISE ID DEG SBE43-Oxy (prime) Transmissometer PAR S/N FLUOR S/N Hydro Team-PMEL LONGITUDE 7 3 11 こ CHL 二 711 = 1 5 18 SALT DAY MO PROJECT & LEG RUSALCA 2014 500 38 139 8 OTHER REMARKS (ast Autonomous Cas HR MIN (GMT) DRY BULB WET BULB (°C) FileName= rusalca 1425 depth: 54 (°C) PRESSURE SEA STATE VISIBILITY WIND DIRN. (deg) WIN CLOUD (amt)
TYPE
WEATHER
M
DEPTH STA. NAME/ID STATION NO. Comments 592 / MAX. DEPTH = 25 (m) SXO No. 3 W 9 00 0 C 4 w 2

swell

Rus

VESSEL No DESIRED 46 29, 129 Nis DEPTH Rosette Notes CAST # B 01:22 169°58.369 CR. Bukar SBE 9+ PRI COND SN SEC TEMP SN SEC COND SN PRI TEMP SN PRESS SN 12 42 32 22 DEG 6629.157 16957.914 w14 JUL 1 LATITUDE OXYGEN 306 RUSALCA CRUISE ID DEG SBE43-Oxy (prime) FLUOR S/N PAR S/N Transmissometer Hydro Team-PMEL NUTS 100 = LONGITUDE コン 7 00 107 MIN 108 107 30 CHL 109 112 3 SALT DAY PROJECT & LEG Char RUSALCA 2014 138 MO 139 OTHER YR 40107 REMARKS (ast depth; Autonomous casi HR MIN (GMT) DRY BULB WET BULB (°C) FileName= MSa/Ca 1424 (°C) (mb) PRESSURE SEA STATE VISIBILITY both DIRN. (deg) WIN CLOUD (amt
TYPE
WEATHER
M
DEPTH STA. NAME/ID TOX bett/8) MAX. DEPTH = (kts) MXXX ON NOITATS Comments × 547 CX3 (m) 2 Nis 3 No 9 6 w N w 00 7 O 4

KUS

VESSEL No DESIRED 66'56.112 Nis DEPTH Rosette Notes CAST# W 00 7 0 S たに SEC COND SN PRI COND SN SEC TEMP SN SBE 9+ PRI TEMP SN 35 PRESS SN 25 DEG 6656.077 N 1 10 59.517 W 13 J U L 1 4 1 1 3 1 34 170° 53665 LATITUDE OXYGEN NUTS 242 RUSALCA CRUISE ID DEG SBE43-Oxy (prime) PAR S/N Transmissometer FLUOR S/N Hydro Team-PMEL 202 LONGITUDE 201 106 ha! ho! 20 S 106 CHL 102 03 14 SALT DAY PROJECT & LEG Set Set RUSALCA 2014 138 MO 139 OTHER YR REMARKS 开 (GMT) Z Z DRY BULB WET BULB ast depth: 40 m/cto (°C) FileName= Kusalca 1423 (00) PRESSURE SEA STATE VISIBILITY WIND DIRN. (deg) WIN CLOUD (amt)
CLOUD (amt)
TYPE
WEATHER
M
DEPTH STA. NAME/ID 40 m/bottles MAX. DEPTH = (kts) WEdgmentshu ON NOITATS 442 CS4 23 Nis No 3 w 2 8 œ 7 6 CI 4 9

ell

RUS

ME/ID
Nis
No.
В
1
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0	œ	7	o	ci	4	w	2	-	œ	No.	Zig									CAC	_	VE
*	1		Buker	1	1	24	24	44	08:13	DESIRE		SEC COND SN	PRI COND SN	SEC TEMP SN	PRI TEMP SN	PRESS SN	SBE 9+			CONSC CAST#	R/V	VESSEL
			P.						3 470°16.961	No DESIRED 67 11.248	DEPTH Rosette Notes	ND SN	ND SN	MP SN	AP SN	NS		6711.383	DEG MIN	LATITUDE	Kr. Khronw	5 5
			95 0	94 9	93 9	920	910	234 90 9		OXYGEN NUTS	Hydro Team-PMEL		PAR S/N	Transmissometer		SBE43-Oxy (prime)	FLUOR S/N	N 17017.117w13JUL	DEG MIN	LONGITUDE	RUSALCA	CROISE ID
_			95	94	93	92	91	90 7		CHL S	PMEL					9)		117 w		m		
			138	<				75 139		SALT CUR	OTHER							4	DAY MO YR	270	RUSALCA 2014	PROJECT & LEG
														Autonomo			REMARKS (	075g	HR MIN	TIME (GMT) DRY	4	EG
														ous casi		146m/bott	ast depth: 45m(CTD	x **	(°C) (°C) (mb) * * (deg)	DRY BULB WET BULB PRESSURE SEA STATE VISIBILITY DIRN.	FileName= rusalca 14:	
											Comments			X		(59	MAX. DEPTH =	× × × 50,5 C56	(kts) * * * (m)	SPD. CLOUD (amt TYPE WEATHER M DEPTH STA. NAME/ID	1421 21	STATION NO.
0	co	7	6	5	4	ω	22	-	В	No.	Nis						В			IE/ID		

\* swell...

Rus

VESSEL	01/1	CRUIS	SE ID	·		PROJE	CT & L	EG							S	TATI	ON NO.		,,
RIV	Pr. Khromov	RUS	ALCA			RUSAL	CA 201	4	Filel	Name= h	usa	lea:	1420	2			20		
CONSC CAST#			LONGIT	UDE		UTO	(ع	TIME (GMT)	DRY BULB		ESSURE	SEA STATE VISIBILITY	WIND DIRN.	WIN D SPD.	CLOUD (amt	WEATHER	BOTTO M DEPTH	STA. NA	ME/II
	DEG MIN	DEC		MIN	DAY		YR	HR MIN	(°C)	(°C)	(mb)	* *	(deg)	(kts)	* *	*	(m)		
	6718.665	N 16	956	.440	w 13	JUL	1 4	0617				2 ×			x x	x	51.5	CS7	
SEC T		SB	UOR S/N E43-Oxy (p ansmissome R S/N					2 4	Cast o	1	96,	(17	D),	47(	boi	tt/es	MAX.	DEPTH =	m
	TH Rosette Notes		Hydro Tea	am-PMEL		ОТН	ER							<del></del>	(	Comm	ents		Nis
	RED 67°18.504	OXYGEN	NUTS	CHL	SALT	ene													No
	31 169°56.119												A	lot	0	f	chl	/	В
1 42		221	84	84		139							in T	he	W	lat	er 1	ッ	1
2 32	2		85	85		1													2
3 22	2		86	86															3
4 12			87	87															4
5 2	-		68	88		V													5
6 Bul	Kal		89	89		138													6
7																			7
8							and will they have help that the co												8
9																			9

/ESSEL				CRUIS	E ID			PROJE	CT & L	EG					1				STA	TION	NO.	10	
RIV	Pr.	Khro	mor	RUS	ALCA			RUSAL	CA 201	14	F	FileNa	ame= h	159	cas	419						19	
CONSC	#	LATIT			LONGIT			ит		TIME (GMT)			WET BULB		SEA STATE VISIBILITY				TYPE			STA. NA	ME/
	DEC			DEG		MIN	DAY	МО	YR		(°C	)	(°C)	(mb)	* *	(deg)	(kts)		* *		(m)		
	6.	725	. 949	N 16	935	.787	w 13	JUL	1 4	0438					2 ×			X.	x x	5	3.2	CSF	
PRI T	9+ SS SN TEMP : TEMP COND	SN SN		SBI	JOR S/N E43-Oxy ( nsmissom R S/N	prime)				Autor	Cast		,	48	( bo	th	CTE	2	batt	les	MAX. D	EPTH =	
		Rosette N	otes		Hydro Te	am-PMEL		OTH	IER								:		Cor	nmer	nts		1
			-	OXYGEN	NUTS	CHL	SALT	St															1
_		169°34																					
1 4	3			211	78	78		139															
3	3				79	79																	
2					80	80																	
13	- 11				81	81																	
3	[				82	82		W														4======	
					83	83		138				$\exists$		-									
Buch	KET				93	9		90															
1									-														+
3					M die die die der der der eel																	, ma me me me me me me me	
9																							

VES	SELO	. 1	CRUIS	SE ID			PROJE	CT & L	EG				1				STA	TION NO		
K	IV Yr.	Khromov	RUS	ALCA			RUSAL	CA 201	14	File	Name= 1	rus	alca	1418	?				18	
	NSC ST#	LATITUDE		LONGIT			ит	C	TIME (GMT)		WET BULB	ESSURE	SEA STATE VISIBILITY	WIND DIRN.	WIN D SPD	CLOUD (amt	TYPE	BOTTO M DEPTH	H STA. NA	AME/ID
	DE		DEC		MIN	DAY	МО	YR	HR MIN	(°C)	(°C)	(mb)	* *	(deg)	(kts)	*	* *	(m)		
- 11	6	732.027	N 16	9 18	. 370	w 13	JUL	1 4	0306				2 × ×			x	x x	52.7	cs9	
==	SBE 9+			UOR S/N					REMARKS	Cast	depth	: 4	8(1	ooth	a.	2	both	(es) MAX.	DEPTH =	m
	PRESS SN PRI TEMP		SB	8E43-Oxy (p	orime)				Autono	W. Co.	cost							/		
	SEC TEMP		Tra	ansmissom	eter				HIMON	muns	C451.									
	PRI COND		PA	R S/N		-														
	SEC COND	Rosette Notes		Hydro Tea	om DMEI		ОТН	ED									0			617
		67°31,864			CHL	SALT	CLL	EN			1 1		-				Com	ments		Nis
			UNTGEN	NUIS	CHL	SALI	Ush	<u> </u>												No.
В	03:23	169° 17.726															*			В
1	43		207	72	72		139													1
2	53			73	73															2
	23	<u> </u>		74	74			<b>†</b>												
3					-			-					$-\parallel$					<del> </del>		3
4	13			75	75															4
5	3			76	76		· di													5
6	bucket			77	77	76	138													6
7															~ = ~ ~ ~ ~					7
-				-									-							/
8																				. 8
9																				9

RUS

9	00	7	6	5	4	w	2		l m	Z o	Zis								T	00	1	<u></u>
*			Вико	7	1	24	34		03:45			SEC	PRIC	SEC.	PRI T	PRESS SN	SBE 9+			CONSC CAST#	KV Yr. Khromov	VESSEL
			<u>\$</u>		7	7	4	44	15 3	RED (	TH R	SEC COND SN	PRI COND SN	SEC TEMP SN	PRI TEMP SN	NS S	+	F. 9	DEG		Tr. K	<b>O</b>
									169°00,420	DESIRED 67 37.901	DEPTH Rosette Notes	SZ	z 	ž	2					LAT	hro	-
									20,4	7.90	Notes							·	MN	ATITUDE	SMC	
									20	5								38.102 N			7	
								187	秦	OXYGEN									D		RU	CKC
		-		7	EN.	68	<b>E</b>	6	M	NUTS	Hydr	-	PAR S/N	Transmissometer		SBE43-Oxy (prime)	FLUOR S/N	16900.853w13	DEG	<u></u>	RUSALCA	CROISE
			71	70	1869		おり	68	The same of the sa	STL	Hydro Team-PMEI		_	ssomete		Эху (ргі	S/N	00	Σ	LONGITUDE	Ä	
			16	70	69.0K	600	6867	66	SA.	CHL	n-PME			e l		me)		853	N N	DE		
							7			SALT								8				
										П								S	DAY		R	7
											OTHER							JUL	MO	7	RUSALCA 2014	KOJEC
	1					:					R							1 4	Ϋ́R	1	A 201	PROJECT & LEG
	1													Au			REMARKS	0432	퓨	TIME (GMT)	4	Ġ
												100		2			RKS	2	N N	J m		
														Autonomous			[5V]		000	DRY BULB		
														7			70	•	_		FileName=	
			1											e s		1	cot		(°C)	WET BULB	ame=	
															-	4	,	_				
												APO CLASSIC CALLAS LA SELACIONA				2	8h	×P	(mb) *	PRESSURE SEA STATE	rusalca 1437	-
					İ										-	_	M	Х		VISIBILITY	91	
																607	107		(deg)	WIND DIRN.	117	
			1				6 6 8 8									1/05	0)		(kts)	WIN		
											C					_		×	*	CLOUD (amt TYPE		U.
			8				i ! ! !				Comments							×	*	WEATHER		STATION NO
											nts						MAX. [	532	(m)	BOTTO M DEPTH	17	NNO
																	MAX. DEPTH =	CSID		STA	7	
										-	-							10		STA. NAME/ID		
9	00	7	0	Cī	4	w	2	4	В	No.	Nis						3			/iD		



VE	SSEL	CRUI	ISE ID			PROJEC	CT & LI	EG				ii.			S	TATI	ON NO.		
R	IV Pr. Khroma	/ RUS	SALCA			RUSALO	CA 201	4	File	Name=	rus	alca	141	6			16		
CC	ONSC AST# LATITUD		LONGIT	UDE		итс		TIME (GMT)	DRY BULE	WET BUL	PRESSURE	SEA STATE VISIBILITY	WIND DIRN.	WIN D SPD.	CLOUD (amt	WEATHER	BOTTO M DEPTH	STA. NA	AME/IC
	DEG MIN	DE		MIN	DAY		YR	HR MIN	(°C)	(°C)	(mb)	* *	(deg)	(kts)	* *	*	(m)		
	6745.	312 N 16	839	.836	w12	JUL	1 4	2348				1 × ×			x x	×	52.7	CSI	1
	SBE 9+ PRESS SN PRI TEMP SN SEC TEMP SN PRI COND SN SEC COND SN	S	LUOR S/N BE43-Oxy (p ransmissom AR S/N					Auto	Cast 48 m/c nomous	depth TDD, s cas	501	n (be	At le				MAX.	DEPTH =	m
Nis	DEPTH Rosette Note:	s	Hydro Te	am-PMEL		ОТН	ER								(	Comm	nents		Nis
	DESIRED 67°45,		200000000000000000000000000000000000000	CHL	SALT	cly													No.
В	00:03 168°39,5																		В
1	45	176	60	60		139													1
2	35		61	61															2
3	25		62	62															3
4	15		63	63															4
5	5		64	64		V													5
	Bulet		65	65		138													6
7																			7
8																			8
9																			9

depth

VEC05:				105.15														VL	
VESSEI	0 1/1		CRU	ISE ID			PROJEC	T & LEG					1			STA	N NOITA	_	
HVV	Vr. KI	hroncov	RU:	SALCA			RUSALC	A 2014		File	Name=	USa	Ica	14.7	5			5	
PRI	DEG 6 7 5	ATITUDE MIN 52 . 52 7	S	LONGIT EG LUOR S/N BE43-Oxy (p	MIN . 739	DAY w12	,	YR H	MIN 207	(°C)	wet BUL (°C) depth	(mb)	W × * SEA STATE	(deg)	(KIS)	* CLOUD (amt	59.2	H STA. N	12
	COND SN	tte Notes		Hydro Te	am-PMFI		OTHE	D D								Cor	nments		Nis
			OVVCE		CHL	SALT	che					<u> </u>	-			Coi	mnems		-
		7052.308	UNTGE	N NUIS	CML	SALI	vel					-	_						No.
в 22	2:21 168	18504																	В
1	發 機	49	173	54	54	77	139												1
2	華 鑿	39		55	55														2
3 3	¥ 🚳	29		56	56														3
4	<b>E</b>	₹ 19		57	57														4
5		2 9		58	58		4	No. 20- pp ma left with die led de											5
0	N. A			59	59		138												
6 Bu	cke				21		130												6
7																			7
8						a lake side into the own two (40 mg mg mm r													8
9																			9

VESSEL	(2)	CRUIS	SE ID "			PROJE	CT & L	EG	T	-			1				STA	ATION			
BIV Pr	Khromov	RUS	ALCA			RUSAL	CA 201	4	F	FileN	ame=	rus	alco	1414	4				14		
CONSC CAST#	LATITUDE EG MIN	DEC	LONGIT	UDE MIN	DAY	UT(	C	TIME (GMT) HR MIN	DRY B		WET BU	PRESSURE	* SEA STATE	WIND DIRN (deg)		IN OD.	* TYPE		OTTO M EPTH (m)	STA. N	AME/II
	759.354		_	.378				2034			(0)	(IIID)		(deg)	(KI					CSJ	3
SBE 9+ PRESS SM PRI TEMP SEC TEMM PRI COND SEC CONI	N SN PSN	SB	UOR S/N E43-Oxy (p ansmissom R S/N	orime)				Autora	Cast		1 6		m ( (	TD)	,5	2n	(ba	#/les	MAX. D	EPTH =	m
	Rosette Notes		Hydro Tea	am-PMEL		ОТН	ER		<del></del>		<del> </del>						Con	nmen	ts		Nis
No DESIRED	67°59,382	OXYGEN	NUTS	CHL	SALT	cue															No
	167°59.283																				В
1 1	47	171	48	48		139															1
2	37		49	49																	2
3	27		50	50		1															3
4	17		51	51	-																4
5	7		52	52		V															5
6 bucket			53	53		138	and mind that man man man on														6
7																					7
8															www.						8
9																					9

VESSEL	CRUISE	E ID			PROJECT & I	EG								STAT	ION NO.		
RIV Pr. Khromov	RUSA	ALCA			RUSALCA 20	14	File	Name= Y	usa	lca.	14餐上	3			1	3	
CONSC CAST # LATITUDE		LONGITU	JDE		utc	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIN D SPD	CLOUD (amt	TYPE	BOTTO M DEPTH	STA. N	IAME/ID
DEG MIN	DEG		IIN	DAY			(°C)	(°C)	(mb)	* *	(deg)	(kts)	*	* *	(m)		. la . l
6806.117	116	739	.948	w 12	J U L 1 4	1905				××				x x	53	CS!	
SBE 9+		OR S/N				REMARKS	Cast	depth:	51	(C-	(D)	51/	bo	ttle	MAX.	DEPTH =	m
PRESS SN PRI TEMP SN	SBE	43-Oxy (pr	ime)			N. tou	omous	cost		-		- 10					
SEC TEMP SN	Tran	nsmissome	ter			HWION	omous	Casi									
PRI COND SN	PAR	R S/N															
NIS DEPTH Rosette Notes		lydro Tea	m DMEI	-	OTHER				<del></del>		<del>- ; </del>			0		· · · · · ·	Nis
		-		0.11.7										Com	ments		
No DESIRED 68°06.059	DXYGEN	NUTS	CHL	SALT	cul					_ _							No
в 19:17 167°39.714												don may seek hard jibur dilje o					В
1 486	133	42	47		139												1
2 346		43	413														2
3 2数6		44	44														3
4 196		45	45														4
6		46	46		V												
6 Bucker			47	01													5
e Izickei		47	71	87	138												6
7																	7
8																	8
9																	

/ESSEL			CRUIS	SE ID			PROJEC	CT & L	EG					1			-	S	TAT	ION NO		VV
R/V F	r. Khi	romov	RUS	ALCA			RUSALO	CA 201	4	Fi	ileN	ame= /	uso	alca	7 141	2				1	2	
CONSC CAST#	DEG	LATITUDE MIN	DEC	LONGIT	UDE MIN	DAY	UTC MO	YR	TIME (GMT) HR MIN	DRY BU	LB \	WET BULB	PRESSURE	* SEA STATE	WIN DIRI	D I		* CLOUD (amt	* WEATHER	BOTTO M DEPTH	H STA.	NAME/
	68	12.042	N 16	721	. 337	w 12	JUL	1 4	1739					1				x x	x	50.7	CS	15
SEC T	_		SB	UOR S/N BE43-Oxy (pansmissom					Auto	Cast		depth.		3m	(07)	);(	18n	,(b	att)	MAX.	DEPTH	= (1
		ette Notes		Hydro Te	am-PMEL		ОТН	ER										C	omn	nents		1
DESIF	RED 68	2°11.925	OXYGEN	NUTS	CHL	SALT	Chil															1
17:5	52 16	7°21.413																				
48	5		111	36	36		139															
33				37	37																	1
23		no man and and and app and any and any and any and any and any		38	38																	
13				39	39																	
3				40	40		V															
buck	V 1			41	41		138															
,																						
9																						

VESSEL	CRUISE	ID		PROJECT &	LEG		1	STATION NO.	V( )
RIV Pr. Khromov	RUSA	LCA		RUSALCA 20	014	FileName= VuSa	ca 1411	11	
CONSC CAST # LATITUDE  DEG MIN  6815.000 I  SBE 9+  PRESS SN  PRI TEMP SN  SEC TEMP SN  PRI COND SN	DEG N 1 6 7 FLUO SBE4	3-Oxy (prime)	9 w 12	MO YR	HR MIN 4 1 6 39 REMARKS	(°C) (°C) (mb)	WIND DIRN. SPD. SPD. SPD. SPD. SPD. SPD. SPD. SPD		516
SEC COND SN  Nis DEPTH Rosette Notes	7.7	dro Team-PME	L.	OTHER				Comments	Nis
No DESIRED 68 14.857	OXYGEN I	NUTS CHL	SALT	che					No
в 16:53 167°12.353			40						В
1 40	72	31 31	72	139			_		1
2 30		32 32							2
3 20		33 33							3
3 200							11		
4 10	8	34 34							4
		34 34 35 35		1					4 5
4 10 1m				1					5
4 10 1m				1					5 6 7
4 10 1m				1					5 6 7

No DESIRED 68° 18 414 Nis DEPTH Rosette Notes CAST# 00 6 O 7 SBE 9+ SUR 30m SEC TEMP SN SEC COND SN PRI COND SN PRESS SN 20m PRI TEMP SN 15:42 40, M 68 18.631 N 16658. 466 W 12 JUL 1 4 1527 166.58.816 LATITUDE 16 OXYGEN RUSALCA CRUISE ID DEG SBE43-Oxy (prime) Transmissometer FLUOR S/N PAR S/N Hydro Team-PMEL 7 29 28 NUTS 30 LONGITUDE 30 29 28 27 CHL SALT DAY RUSALCA 2014 PROJECT & LEG MO 139 9 OTHER YR REMARKS HR MIN (GMT) Autonomous cast DRY BULB WET BULB (°C) FileName= / USa/ca (°C) (mb) PRESSURE SEA STATE VISIBILITY XN WIND DIRN. (deg) WIN CLOUD (amt TYPE WEATHER M DEPTH STA. NAME/ID 34 m-bottle casi (kts) STATION NO. Comments 37.0 CS18 MAX. DEPTH = No. Nis 3 N B 00 0 UI 4 w 9 7

2 N

No DESIRED 65°58 666 RIV P. Khromov Nis DEPTH Rosette Notes CAST# 0 SBE 9+ SEC COND SN PRI COND SN SEC TEMP SN bucket 19:39 PRI TEMP SN PRESS SN 器 # 平年 DEG 6538.611 1 168 15.093 W 11 JUL 1 4 1927 836,41,891 LATITUDE OXYGEN CRUISE ID RUSALCA DEG SBE43-Oxy (prime) FLUOR S/N Transmissometer PAR S/N Hydro Team-PMEL STUN 30 2 22 23 ONGITUDE 21 24 22 26 23 2 CHL SALT DAY RUSALCA 2014 PROJECT & LEG MO OTHER YR REMARKS HR MIN TIME (GMT) Autonomous DRY BULB WET BULB (°C) FileName= rusa/ca 1409 (°C) (mb) PRESSURE SEA STATE VISIBILITY 25 3 mz WIND DIRN. (deg) SPD. (kts) CLOUD (amt.
TYPE
WEATHER
DEPTH ON NOITATS Comments 2 60 hr sq WSh DEPTH STA. NAME/ID MAX. DEPTH = 8 (E) Nis No 8 9 00 7 6 S 4 w 2

3

VESSEL	-	CRUIS	E ID		· · · · · · · · · · · · · · · · · · ·	PROJEC	T & LE	G							ISTA	TION NO		
R/V	Pr. Khromov	RUS				RUSALC	A 2014	1	File	Name= Y	usa	Ca	140	18		Oc	44	
CONSC CAST #	LATITUDE DEG MIN	DEG	LONGIT	MIN	DAY		YR	TIME (GMT) HR MIN		WET BULE	g PRESSURE	* VISIBILITY	WIND DIRN. (deg)	WIN D SPD. (kts)	* * *	(m)		
PRI SEC	9+ SS SN TEMP SN TEMP SN COND SN COND SN	SBE	BBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBB	orime)	w 1 1	JUL	1 4	1750 REMARKS	Cast	depth:	50 t.	m, 48	( C	TD both	x  x  x  )  Hes]		DEPTH =	108 m
Nis DEF	PTH Rosette Notes	ŀ	Hydro Tea	am-PMEL		OTHE	R		<del></del>						Con	nments		Nis
No DES	IRED 65°42,112.	OXYGEN	NUTS	CHL	SALT	de												No.
	05 168° 30.695					1												В
1 4	5 43 M		15	15	73	139												1
2 3	33 m		16	16		1												2
3	23 m		17	17								W	ayb	e	eak	7		3
4	£ 13m		18	18													enger	4
5	3 m		19	19		V							Was	J 4	tilgue	und	er th	£ 5
6 640	1 1 1		20	20		138									cap	)		6
7														1	1 /			7
8																		8
9	1																	9

Olocy

B 16:56 No DESIRED Nis DEPTH Rosette Notes CAST # 8/V Pr. Khromov SBE 9+ PRESS SN SEC COND SN PRI COND SN SEC TEMP SN PRI TEMP SN DEG 65 45.308 N168 43.099 WALJUL 1 4 1615 b We ket 5 Marin 5 Mahry LATITUDE OXYGEN RUSALCA CRUISE ID DEG SBE43-Oxy (prime) FLUOR S/N PAR S/N Transmissometer Hydro Team-PMEL NUTS LONGITUDE ō 0 11 シ w M 0 CHL 6 2 ら 14 = SALT DAY MO PROJECT & LEG RUSALCA 2014 OTHER YR HR MIN REMARKS (GMT) e have two de DRY BULB WET BULB ast (°C) FileName= rusalca 1407 two downcours and (°C) (mb) \* PRESSURE SEA STATE VISIBILITY maybe WIND DIRN. SPD. CLOPE WEATHER M DEPTH STA. NAME/ID (deg) (kts) x x 55.2 65/407 ON NOITATS Comments 40 (m) MAX. DEPTH = Chlor 138 39 Zis No 6 w 8 0 00 G 4 2

5 M

10	00	7	6	Ci	4	ω	2		B	N <sub>o</sub>	Zis							<u> </u>		22	70	VE
	8 8 1 4 1		Bock		3.8 M	14.5	34.5	44.5	15:14	No DESIRED		SEC COND SN	PRI COND SN	SEC TEMP SN	PRI TEMP SN	PRESS SN	SBE 9+	*	0	CONSC CAST#	N	SSEL
									168 55.054		DEPTH Rosette Notes	ND SN	ND SN	MP SN	MPSN	SN		65 48.34 N	DEG MIN	LATITUDE	RN K. Khromov	10.01
			08	medicania de la compania del la compania de  la compania de la com	90	28.55	Caro.	3	-> battle	OXYGEN NUTS	Hydro Team-PMEL		PAR S/N	Transmissometer		SBE43-Oxy (prime)	FLUOR S/N	16855	DEG MIN	LONGITUDE	RUSALCA	CRUISE ID
	1		8	Age and the control of the control o	6	7	4	3	cust 1	CHL SALT	PMEL					e)		. 754 w 11 J U L	DAY	ĬĒ	R	ק
									do Juni		OTHER			C.	0		REA	4	MO YR HR	100	RUSALCA 2014	PROJECT & LEG
									position					othe cas		real-time	MARKS (a5	1447	MIN (°C)	TIME ORY BULB	F	
														1 willed	,	dold ac	dept :		(°C) (	WET BULB	FileName=   u	
	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6								CLS					2 2 2 2	-	quisi ion	46	دع x x	(mb) * * (deg)	PRESSURE SEA STATE VISIBILITY DIRN.	usalca 1406	1
			136,26		e				Q 139 Ws		Comments				•	for CTD cast.	MAX. DEPTH =	× × × 49.87 406	) (kts) * * * (m)	SPD WIN CLOUD (amt TYPE WEATHER M DEPTH		STATION NO.
9	œ	7	б	O.	4	ω	2	-	В	No.	Nis						H m	37406		STA. NAME/ID		

9	œ	7	თ	(J1	4	co	N	-	[m	No	Zig									CA	5	VESSE
								20 m	MS	DESIRED	DEPTH	SEC COND SN	PRI COND SN	SEC TEMP SN	PRI TEMP SN	PRESS SN	SBE 9+	6	D	CONSC CAST#	1 / /	SEL
								Niskin 1	Niskin 2		DEPTH Rosette Notes	ND SN	DSN	PSN	PSN	Z		65 50.192 N	DEG MIN	£61.05°29	r. KNOMEN	
								ht 100 100	200 2000	OXYGEN NUTS CHL SALT	Hydro Team-PMEL		PAR S/N	Transmissometer		SBE43-Oxy (prime)	FLUOR S/N	N 16910.049 W 10 JUL		169° 40.930	RUSALCA	CRUISE ID
								4		4	OTHER			Same	bottle	0 11	REMARKS	0 1 1 1 4 0 3 5 6	DAY MO YR HR MIN	UTC (GMT)	RUSALCA 2014	PROJECT & LEG
															cast was done		Cast depth: 45		(°C) (°C) (mb)	DRY BULB WET BULB PRESSUR	533	Mrus
								139 mils	139 mls		Comments			O Jeast.	e by hands at			× × ×	*	SEA STAT VISIBILITY DIRN. SPD. WIN CLOUD (at TYPE WEATHER	nt	alcathos STATION NO
9	8	7	6	5	4	ú	2	1	В	No.	nts				1 he	11	MAX. DEPTH = m	49,5 651405	(m)	BOTTO M DEPTH STA. NAME/ID	05	NO.

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VESSEL	CRUISE ID	PROJECT & LEG	Louis also AVOU	STATION NO.
RIV Pr. Khromov	RUSALCA	RUSALCA 2014	rusalca1404 FileName=	04
CONSC CAST # LATITUDE  DEG MIN  6552.083 N  SBE 9+  PRESS SN  PRI TEMP SN  SEC TEMP SN  PRI COND SN		TIME (GMT) DRY	BULB WET BULB BULB SEA STATE  C) (°C) (mb) * (deg)	OTTOD (amt NEATHER WEATHER NEW
SEC COND SN  Nis DEPTH Rosette Notes	Hydro Team-PMEL	OTHER		Comments
B B	XYGEN NUTS CHL SA			No.
2	10 8	ATT FE		2
4				3 4
-				-
5 6				6

VESSEL O 1	Topulos ip			1(V( )
DIV D. VI.	CRUISE ID	PROJECT & LEG	rusalca1403	STATION NO.
KIV Fr. Knr	ONNOV RUSALCA	RUSALCA 2014	rusalca1403 FileName=	03
consc 65°54.( cast # Latitul	99 169°25.822	REMARKS	DRY BULB WET BULB A SEA STATE  (°C) (°C) (mb) * (deg	N. SPD. 3 ≥ S DEPTH STA. NAME/ID
SEC COND SN				
Nis DEPTH Rosette Note	es Hydro Team-PMEL	OTHER		Comments
No DESIRED	OXYGEN NUTS CHL	SALT		No.
В				В
1				1
2				2
3	10	0 0	rc	3
4	NV	DUIL		4
5				5
6				6
7				7
8				8
9				9

RIV Pr. Khromov CAST# No DESIRED Nis DEPTH Rosette Notes 2 8 00 7 6 CT 4 PRI COND SN SEC TEMP SN PRESS SN SEC COND SN PRI TEMP SN DEG 65 56.097 65°56.094N169°36.130W10JUL140128 LATITUDE OXYGEN NUTS RUSALCA CRUISE ID 16936.081 SBE43-Oxy (prime) PAR S/N Transmissometer FLUOR S/N Hydro Team-PMEL LONGITUDE CH SALT DAY RUSALCA 2014 PROJECT & LEG MO OTHER REMARKS (GMT) S DRY BULB WET BULB (°C) FileName= (00) PRESSURE SEA STATE VISIBILITY WIND DIRN. (deg) SPD. CLOUD (amt
TYPE
WEATHER
M
DEPTH STA. NAME/ID (kts) STATION NO. Comments 52.5 MAX. DEPTH = 551402 B Nis No σ 00 o យ 4 w 2 7

KW5

					1
R/V Profesor Khromorrusalca	RUSALCA	PROJECT & LEG RUSALCA 2014	FileName= 1991	STATION NO.	
b5°56.523	928. 98. 941		SSURE STATE BILITY	UD (amt) E	
CAST # LATITUDE	LONGITUDE	WTC (GMT) DR	SEA	SPD. CLYP	E/ID
DEG MIN	DEG MIN DAY	MO YR H	(mb) * *	(kts) * * * (m)	
6556.52Q	16939.360 w 10 JUL	JUL140040		××× 48.5 651401	1
SBE 9+	FLUOR S/N	REMARKS		MAX. DEPTH =	В
PRESS SN	SBE43-Oxy (prime)	90	90" - 00"		
PRI TEMP SN		0 1			
SEC TEMP SN	Transmissometer	(as)	depth 45 m		
PRI COND SN	PAR S/N				
Nis DEPTH Rosette Notes	Hydro Team-PMEL	OTHER		Comments	Nis
No DESIRED OX	OXYGEN NUTS CHL SALT				No.
B					В
					-
2					2
3	こう	5)	7		ယ
4	7	150	SHI		4
Cri Cri			``		5
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