~~85~~ 50 40 35 30 25 20 15 10 5 0

2131

Ship: Surveyor | CHOEX-90 / ICE-90 | 75 | 515

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
000	52 27.94	169 27.29	30 Apr 90	21 56	.	.									755	~~STST~~ 1

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks
on Deck: Press. ____ Temp. ____ Cond. 308
at Surface: Press. 3249.0376 Temp. 7170 Cond. 9386

Times	JD/Time
Data on	2152
at Surface	2152
Start Down	2157
at Bottom	2156
Start Up	2156
at Surface	2203
Data Off	2204

Data Location
Floppy Number

Remarks: 1 est of CTD & Rosette in Bering Sea
(1450 Tape)

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	~~Cond.~~	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		55	—											NO MARK / prob. no trip + index
2		50		2156	50.07	29.19	31.955		S1-S1 #1					trapper set up in wrong position before cast /
3		40		2157	40.69	5.989	31.788							31.95778
4		35		2158	35.66	5.996	31.790							
5		30		2159	30.40	5.998	31.790							
6		25		2200	25.19	6.000	31.792							
7		20		2200	20.36	6.000	31.792							
8		15		2201	15.22	6.010	31.791							
9		10		2202	10.11	6.021	31.791							
10		5		2202	5.20	6.056	31.791		S+S #2					31.79826
11		0		2203	2.11	6.039	31.792							
12														

GRAF

bottles 2, 3, & leaking

Reel depth ____

20

Ship: Surveyor

CHOEX-90/ICE-90

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 275 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
001	63 46.5	171 48.3	020 CT 90	0133	4.8	3.3	1145			200	02				25	REF6

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32470	32472
Temp.	6926	7082
Cond.	31.69	9275

Times	JD/Time
Data on	0132
at Surface	0132
Start Down	0132
at Bottom	0133
Start Up	0133
at Surface	0136
Data Off	0137

Data Location
Floppy Number

Remarks

New audio / 100 min

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	~~Cond.~~ Sal	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		20		0133	21.19	2.893	31.914		REF6 #1					31.91983
2		15		0134	15.28	3.098	31.877							
3		10		0135	10.08	5.222	31.607							
4		5		0135	5.21	5.346	31.595							NO trip / line hung up
5		0		0136	2.18	5.438	31.570							OK trip / line hung up
6														
7														
8														
9														
10														
11														
12														

✓

Ship: Surveyor — CHOEX-90/ICE-90

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 275 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
002	63 51.0 N	171 55.1 W	02 OCT 90	02 42	04.0	03.9	14			155	01				0034	REES

CTD Type & SN	SEABIRD
Press. SN	41681
Temp. SN	1072
Cond. SN	748

Monitor Checks	on Deck:	at Surface:
2 Press.	32467	
0 Temp.	6991	
1 Cond.	3218	

Times	JD/Time
Data on	0240
at Surface	0240
Start Down	0240
at Bottom	0242
Start Up	0242
at Surface	0245
Data Off	0247

Data Location
Floppy Number

Remarks

Audio 5:39

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		30		31.54	31.54	-0.771	32.378							
2		25		25.12	25.12	0.3829	32.196							
3		20		19.42	19.42	5.6000	31.559							
4		15		14.94	14.94	5.6303	31.566		REES #1					31.57442
5		10		9.66	9.66	5.6633	31.565							
6		5		4.59	4.59	5.7501	31.560							
7		SFC		1.88	1.88	6.0015	31.545							
8														
9														
10														
11														
12														

✓

Ship: Surveyor

CHOEX-90/ICE-90

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 275 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
003	63 54.20 N	172 01.80 W	02 OCT 90	03 36	04.0	03.8	14			220	06				0048	REE4

CTD Type & SN: SEABIRD

Press. SN: 41681

Temp. SN: 1072

Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32467	32470
Temp.	6962	7057
Cond.	3350	9245

Times	JD/Time
Data on	0336
at Surface	0336
Start Down	0336
at Bottom	0338
Start Up	
at Surface	
Data Off	

Data Location
Floppy Number

Remarks
AUDIO 1141 START
1811 END

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		45												ELECTRONICS PROBLEMS - RETERMINATE
2		40												
3		35												
4		30												
5		25												
6		20												
7		15												
8		10												
9		5												
10		SFC												
11														
12														

Ship: Surveyor

CHOEX-90/ICE-90

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
004	63 57.00	172 09.00													0057	REE3

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32465	32468
Temp.	6837	7035
Cond.	3108	9247

Times	JD/Time
Data on	0730
at Surface	0730
Start Down	0730
at Bottom	0733
Start Up	
at Surface	
Data Off	

Data Location
Floppy Number

Remarks: AUDIO
START 1821
END 2008
RESTART 2020
3830

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1	↑	~~50~~												3 BOTTLES DID NOT TRIP
2	↑	~~45~~												~~#6, #4, #1~~ 4, 7, 11
3	↑	40												Rosette prob. set up w/ "slot" on 11 & not
4	↑	35												12 → no 50 m bottle, 11 = 45 m etc.
5	↑	30							REE3 #1					- swap out 4 & 7 -
6	↑	25							REE3 #2					6 bad leaker - maybe bad O ring?
7	↑	20												No Mek file generated - had
8	↑	15							REE3 #3					to chl alt del
9	↑	10							REE3 #4					
10	↑	5												
11		sfc												
12														don't use

✓

Ship: Surveyor

CHOEX-90 / ICE-90

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 277 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
005	65 59.3	169 38.2	04 OCT 90	1508	2.9	2.9	97	3-4	4-6	086	15				56	RAD1 ??

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32.464	32.470
Temp.	6.711	6.615-30
Cond.	3.170	9.060

off pump 10 min

Times	JD/Time
Data on	1505
at Surface	1505
Start Down	1505
at Bottom	1508
Start Up	1508
at Surface	1514
Data Off	1516

Data Location
Floppy Number

Remarks 51

/Cassette 0 min/

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		45		1508	43.12	2.138	33.044	—						
2		40		1508	40.65	2.139	33.043		RAD1 #1					33.05614
3		35		1509	35.45	2.139	33.041							
4		30		1510	30.31	2.150	32.999							
5		25		1511	26.41	2.155	32.972						✓	chl 5
6		20		1512	20.50	2.164	32.939							
7		15		1512	14.88	2.202	32.849		RAD1 #2					32.75851
8		10		1513	10.71	2.135	32.654							
9		5		1514	5.85	2.146	32.646							
10		0		1514	3.24	2.137	32.646							
11		↓												
12		↓												

✓

wrong check

Ship: Surveyor | CITOEX-90 / ICE-90 | 48-5

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 277 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
006	65 36.2 N	169 29.1 W	04 Oct 90	1609	3.0	3.0	97	3-4	4-6	085	15				53	RA02

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32464.7	32473
Temp.	6745	6640
Cond.	3167	9101

off pump 10 min

Times: Data on JD/Time 1606; at Surface; Start Down; at Bottom; Start Up; at Surface; Data Off

Data Location: Floppy Number

Remarks: Cassette 10:55

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		50		1609	50.00	2.173	33.033							Nyomuma takes water from 0,10,20... for
2		40		1609	40.78	2.176	33.032		RO2 #1					33.04154 on activity
3		35		1610	35.21	2.186	33.027							
4		30		1611	30.33	2.199	33.021							
5		25		1611	25.33	2.201	33.021							
6		20		1612	19.69	2.222	33.011							
7		15		1613	15.32	2.289	32.980						✓	
8		10		1613	10.41	2.334	32.957		RO2 #2					32.91511 Read?
9		5		1614	5.19	2.435	32.891							
10		0		1615	2.73	2.440	32.892							
11		\												
12		\												

✓

Ship: Surveyor — CHOEX-90 / ICE-90 — 44

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 277 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
007	65 53.9 N	169 18.6 W	04 Oct 90	17 17	2.9	2.8	96	3-4	5-7	083	17				49	RA03

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1077
Cond. SN: 748

Monitor Checks — on Deck / at Surface:
Press. 32464.7 / 32469
Temp. 6717 / 6649
Cond. 3189 / 9104

Times	JD/Time
Data on	1716
at Surface	1716
Start Down	1716
at Bottom	1717
Start Up	1717
at Surface	1722
Data Off	1724

Data Location
Floppy Number

Remarks

Cassette 20:20

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		45		1717	44.43	2.333	32.881							
2		40		1718	39.93	2.335	32.881		RA03 #1					32.892066
3		35		1719	34.37	2.336	32.880							
4		30		1719	30.43	2.343	32.878							
5		25		1720	25.38	2.346	32.878							
6		20		1720	19.90	2.366	32.874							
7		15		1721	14.85	2.382	32.871						✓	
8		10		1721	9.66	2.556	32.829		RA03 #2					32.85047
9		5		1722	4.75	2.566	32.827							
10		0		1722	2.26	2.623	32.828							
11														
12														

✓

#10

March ~ too fast

001

– 609 leakers –

43

Ship: Surveyor | CHOEX-90 / ICE-90

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 277 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
008	65 52.1 N	169 07.1 W	04 OCT 90	1835	3.1	3.0	963.5	0	80	15	–	–	–		48	RA04

CTD Type & SN: SEABIRD

Press. SN: 41681

Temp. SN: 1072

Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32464	32471
Temp.	6703	6593
Cond.	31141	9050

Times	JD/Time
Data on	1834
at Surface	1834
Start Down	1834
at Bottom	1835
Start Up	1835
at Surface	1839
Data Off	1841

Data Location
Floppy Number

Remarks
– down too fast –

Cassette 28; 40

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Sal. ~~Cond.~~	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		45			46.25	1.907	32.870							
2		40			39.78	1.900	32.876		RA04 #1					32.88692
3		35			34.34	1.902	32.876							
4		30			29.49	1.906	32.877							– No trip – hung up
5		25			24.78	1.908	32.875							
6		20			19.27	1.908	32.877							
7		15			14.59	1.914	32.873							
8		10			9.67	1.912	32.876							
9		5			4.64	1.944	32.896							
10		0			1.69	1.983	32.855							
11														
12														

Ship: Surveyor

CHOEX-90/ICE-90

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 277 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
009	65 45.5	168 52.1	04 Oct 90	2020	3.1	3.0	952	5		065	08	/	/	/	46	RA05

CTD Type & SN: SEABIRD

Press. SN: 41681

Temp. SN: 1072

Cond. SN: 748

Monitor Checks	on Deck:	at Surface:
Press.	32465	32468
Temp.	6726	6550
Cond.	3123	9020

Times	JD/Time
Data on	2018
at Surface	2018
Start Down	2018
at Bottom	2020
Start Up	
at Surface	
Data Off	

Data Location
Floppy Number

Remarks: Lee Diomede

Cassette 34:25

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		40		2020	39.63	1.632	32.663							
2		35			34.86	1.678	32.673							
3		30			30.40	1.671	32.670							
4		25			25.22	1.630	32.662		ROS #1					32.67761
5		20			20.01	1.634	32.661							
6		15			15.66	1.789	32.584							
7		10			10.18	1.741	32.605							
8		5			5.65	1.820	32.576							
9		0			3.52	1.806	32.586							
10														
11														
12														

3 bottles did not trip – which

Ship: Surveyor — CHOEX-90 / ICE-90 — 495

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 277 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
910654	44.2	168	45.0	04 Oct 90	2107	3.2	3.1	9425	07	07	16				54	LA06

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
(2) Press.	32464	32470
(0) Temp.	6761	6594
(2) Cond.	3168	9032

Times	JD/Time
Data on	2105
at Surface	2105
Start Down	2105
at Bottom	2107
Start Up	2107
at Surface	2113
Data Off	2115

Data Location
Floppy Number

Remarks

Cassette 00:20

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Sal ~~Cond.~~	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		50		2107	52.45	2.026	32.424							
2		40		2109	40.06	2.025	32.418		Rnoe					32.43180
3		35		2109	34.75	2.024	32.420							
4		25		2110	25.07	2.024	32.421							
5		20		2111	20.04	2.024	32.418							
6		15		2111	15.42	2.024	32.418							
7		10		2112	10.42	2.023	32.421							
8		5		2112	5.00	2.034	32.418							
9		0		2113	2.23	2.147	32.417							
10														
11														
12														

Ship: Surveyor

CH06X-90 / ICE-90

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 277 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
011	65 43.56 N	168 36.894 W	04 Oct 90	22 10	3.3	3.2	94			075	16				53	RA07

CTD Type & SN	SEABIRD	Monitor Checks on Deck:	at Surface:
Press. SN	41681	Press.	32464 / 32470
Temp. SN	1072	Temp.	6790 / 6615
Cond. SN	748	Cond.	3147 / 9031

Times	JD/Time
Data on	2207
at Surface	2207
Start Down	~207
at Bottom	2210
Start Up	2210
at Surface	2221
Data Off	2222

Data Location
Floppy Number

Remarks TAPE
START 10:11
END 2518

Cast # 10:11

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		48		2210	48.36	1.962	32.3570							
2		40		2212	40.55	1.960	32.3563							
3		35		2213	35.10	1.985	32.3559							
4		30		2213	30.21	1.980	32.3566		RA07 # 1					Not Run?
5		25		2214	25.25	1.954	32.3557							
6		20		2215	19.79	2.036	32.3545							
7		15		2219	15.20	2.055	35.3521							
8		10		2219	10.45	2.118	32.3547							
9		5		2220	5.32	2.274	32.3467							
10		SFC		2221	2.21	2.254	32.3468							
11														
12														

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 277 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
012	65 42.69 N	168 28.12 W	04 OCT 90	2331	3.8	3.8	94			075	14				54	RA08

CTD Type & SN	SEABIRD	Monitor Checks on Deck:	at Surface:
Press. SN	41681	Press. 32464	
Temp. SN	1072	Temp. 6760	
Cond. SN	748	Cond. 3438	

Times	JD/Time
Data on	2327
at Surface	2327
Start Down	2327
at Bottom	2331
Start Up	2331
at Surface	2339
Data Off	2339

Data Location
Floppy Number

Remarks
TAPE
START 2530
END 3710

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		50		2331	48.65	3.0013	32.0681							
2		40		2332	39.79	3.0079	32.0615							
3		35		2333	35.60	3.0066	32.0639							
4		30		2334	30.52	3.0084	32.0611		RA08					32.06650
5		25		2335	25.26	3.0160	32.0565							
6		20		2336	20.12	3.0174	32.0554							
7		15		2336	14.67	3.0540	32.0368							
8		10		2337	9.97	3.3425	31.8417							
9		5		2338	4.98	3.7236	31.5206							
10		SFC		2338	3.57	3.7570	31.4724							
11														
12														

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 278 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
013	65 41.66 N	168 19.17 W	05 OC 79 0	0021	4.0	3.9	94			074	14				51	RA07

CTD Type & SN	SEABIRD	Monitor Checks on Deck:	at Surface:
Press. SN	41681	Press. 32465	32470
Temp. SN	1072	Temp. 6893	6955
Cond. SN	748	Cond. 3270	6991

Times	JD/Time
Data on	0019
at Surface	0019
Start Down	0019
at Bottom	0021
Start Up	0022
at Surface	0030
Data Off	0032

Data Location
Floppy Number

Remarks TAPE START 0010 END 1150

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		46		0021	47.63	3.8139	31.4258							
2		40		0023	40.45	3.9148	31.3276							
3		35		0023	35.25	3.9959	31.2396							
4		30		0024	30.09	4.1690	30.9811		RA09					SAL NOT AT VERTICAL LINE ! = not good grad 30.97639
5		25		0025	25.33	4.2628	30.7939							
6		20		0026	20.24	4.2973	30.6845							
7		15		0027	15.08	4.5036	30.2596							
8		10		0027	10.10	4.6235	29.9394							
9		5		0028	5.04	4.6279	29.9354							
10		SFC		0029	2.97	4.6263	29.9365							
11														
12														

Ship: Surveyor	ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 278 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
014	65 40.99N	168 10.63W	05 OCT 90	01 38	4.8	4.6	93			085	10				26	RA10

CTD Type & SN	SEABIRD
Press. SN	41681
Temp. SN	1072
Cond. SN	748

Monitor Checks	on Deck:	at Surface:
Press.	32465	32470
Temp.	6996	6903
Cond.	3231	9061

Times	JD/Time
Data on	0136
at Surface	0136
Start Down	0136
at Bottom	0138
Start Up	0138
at Surface	0141
Data Off	0143

Data Location
Floppy Number

Remarks
TAPE
START 12:00
END 1733

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		20		0137	19.99	4.3006	30.5028							SHEAR LINE PRESENT IN WATER
2		15		0138	15.05	4.3064	30.4999		RA10					30.51207
3		10		0139	10.04	4.3206	30.4812							
4		5		0140	4.84	4.2857	30.4128							
5		SFC		0140	1.50	4.2590	30.3391							
6														
7														
8														
9														
10														
11														
12														

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 278 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
015	66 37.19 N	169 31.15 W	05 OCT 90	0847	2.0	1.9	997			011	28				49	RCD9

CTD Type & SN	SEABIRD		
Press. SN	41681		
Temp. SN	1072		
Cond. SN	748		

Monitor Checks	on Deck:	at Surface:
Press.	32463	32471
Temp.	6733	6597
Cond.	3204	9034

Times	JD/Time
Data on	0845
at Surface	0845
Start Down	0845
at Bottom	0847
Start Up	0847
at Surface	0853
Data Off	0855

Data Location
Floppy Number

Remarks TAPE
START 1743
END 2708

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		44		0847	44.93	2.0954	32.6838							CTD TOOK A HARD HIT AGAINST SIDE OF SHIP
2		40		0848	40.51	2.0953	32.6888	32.69664 RCD9						DURING RECOVERY DUE TO ROLLING 32.69664
3		35		0848	36.43	2.0969	32.6885							
4		30		0849	30.82	2.0886	32.6813							
5		25		0849	24.98	2.0865	32.6716							
6		20		0850	19.95	2.0804	32.6686							
7		15		0850	14.37	2.0844	32.6728							
8		10		0851	10.37	2.0812	32.6694							
9		5		0852	6.11	2.0801	32.6695							
10		SFC		0853	3.38	2.0865	32.6823							
11														
12														

996.9

Ship: Surveyor | CHOEX-90 / ICE-90 | 44

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 278 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
016	66 35.6 N	169 15.9 W	05 06 90	1016	1.5	1.4	977	3-4	6-8	015	32	—	—		49	RCD8

CTD Type & SN	SEABIRD
Press. SN	41681
Temp. SN	1072
Cond. SN	748

Monitor Checks	on Deck:	at Surface:
Press.	32464	32460
Temp.	6580	6626
Cond.	3136	9003

Times	JD/Time
Data on	10 14
at Surface	1014
Start Down	1014
at Bottom	1016
Start Up	1016
at Surface	1022
Data Off	1024

Data Location
Floppy Number

Remarks: TAPE START 27:18 END 36:00

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		45	1016											
2		40	1017						RCD8 #1					32.70848
3		35	1017											
4		30	1018											
5		25	1019											
6		20	1019											
7		15	1020											
8		10	1021											
9		5	1021						RCD8 #2					32.11157
10		Sfc	1022											
11														
12														

```
RCD8.mrk:
mark number 1, system time
      43.65  1.9907 32.6946
mark number 2, system time
      40.11  1.9902 32.6953
mark number 3, system time
      34.94  1.9899 32.6931
mark number 4, system time
      29.42  1.9879 32.6936
mark number 5, system time
      24.74  1.9913 32.6917
mark number 6, system time
      20.40  1.9932 32.6888
mark number 7, system time
      15.99  2.0066 32.6825
mark number 8, system time
      11.07  2.4354 32.1400
mark number 9, system time
       5.68  2.4667 32.1000
mark number 10, system time
       1.99  2.4710 32.0954
```

Ship: Surveyor

CHOEX-90 / ICE-90

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Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
17	66 33.5	169 00.6	050 ct 90	11 30	1.2	1.1	973	8	0	017	30				51	RC07

CTD Type & SN: SEABIRD

Press. SN:

Temp. SN:

Cond. SN:

Monitor Checks	on Deck:	at Surface:
Press.	32464	32468
Temp.	6653	6619
Cond.	9080	8996

Times	JD/Time
Data on	11 27
at Surface	11 27
Start Down	11 27
at Bottom	11 30
Start Up	11 30
at Surface	11 36
Data Off	11 38

Data Location
Floppy Number

Remarks

Cassette 36120

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	~~Cond.~~ Sal	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		45		1130	45.83	1.899	32.714							
2		40		1130	41.36	1.800	32.713		RC07 #1					32.72259
3		35		1131	36.11	1.500	32.712							
4		30		1132	31.16	1.911	32.701							
5		25		1133	25.41	1.953	32.662							
6		20		1133	19.84	1.954	32.654							
7		15		1134	14.83	2.310	32.244							
8		10		1134	10.74	2.360	32.176							
9		5		1135	5.50	2.408	32.173		RC07 #2					32.18502
10		4c		1136	1.83	2.424	32.174							
11														
12														

Ship: Surveyor

CHOEX-90 ICE-90

51

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
18	66 31.2	168 45.7	050 Oct 90	1240	1.3	1.3	963	3	9	025	27				56	RCD6

CTD Type & SN: SEABIRD

Press. SN: 41681

Temp. SN: 1072

Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32464	32468
Temp.	6624	6566
Cond.	9046	90002

Times	JD/Time
Data on	1238
at Surface	1238
Start Down	1238
at Bottom	1240
Start Up	1240
at Surface	1246
Data Off	1248

Data Location
Floppy Number

Remarks Cassette 00:20-09:23

Cassette 00:20-09

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		50		1240	50.94	1.830	32.658							
2		40		1241	40.23	1.835	32.654							
3		35		1242	35.91	1.836	32.653							
4		30		1242	30.05	1.883	32.616							
5		25		1243	24.71	1.897	32.602							
6		20		1244	20.65	1.900	32.596							
7		15		1244	14.55	1.901	32.587		12006 #1					32.59027
8		10		1245	10.26	1.901	32.589							
9		5		1245	5.03	1.902	32.588							
10		0		1246	2.52	1.913	32.591							
11														
12														

Ship: Surveyor | CHOEX - 90 / ICE - 90 | 50

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 278 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
19	66 29.0	168 31.3	05 Oct 90	1354	1.7	1.7	973	3	6	010	28				55	RCD5

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32464	32473
Temp.	6677	6580
Cond.	9087	8997

Times	JD/Time
Data on	13 53
at Surface	13 53
Start Down	13 53
at Bottom	13 54
Start Up	13 54
at Surface	13 59
Data Off	14 01

Data Location
Floppy Number

Remarks: Cassette 09:23 / 16:22

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		50		1354	48.72	1.986	32.441							
2		40		1355	41.26	2.011	32.436							
3		35		1355	34.36	2.013	32.432		RCD5 #1					32.44247
4		30		1356	30.32	2.014	32.431							
5		25		1356	24.94	2.017	32.419							
6		20		1357	20.63	2.026	32.411							
7		15		1357	15.14	2.022	32.414							
8		10		1358	10.06	2.034	32.406							
9		5		1358	5.62	2.039	32.405							
10		5/c		1359	2.74	2.038	32.405							
11														
12														

Ship: Surveyor — CHOEX-90/ICE-90 — 38

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
20	66 27.0	168 15.7	05 Oct 90	1506	1.2	1.7	963	3	5	007	30				43	RC43

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32464	32471
Temp.	6654	6745
Cond.	3162	9030

Times	JD/Time
Data on	1505
at Surface	1505
Start Down	1505
at Bottom	1506
Start Up	1506
at Surface	1511
Data Off	1513

Data Location
Floppy Number

Remarks: Cassette 16:34 / 26:43

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	~~Cond.~~ Sal	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		40		1506	39.40	3.058	31.974							
2		35		1507	35.00	3.075	31.964							
3		30		1508	31.62	3.089	31.956							
4		25		1508	24.81	3.102	31.947							
5		20		1509	20.62	3.164	31.882		RC04 #1					31.85779
6		15		1509	14.49	3.214	31.832							
7		10		1510	11.00	3.220	31.829							
8		5		1510	5.65	3.224	31.823							
9		sfc		1511	2.98	3.227	31.821							
10														
11														
12														

pos 6

Ship: Surveyor — CHOEX-90/ICE-90 — 38

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
21	66 27.2 N	168 15.9	06 Oct 90	12 28	1.4	1.4	01	34	4	015	32	—	—		43	RC04B2

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32463	32469
Temp.	6614	6833
Cond.	3240	9012

Times	JD/Time
Data on	12 26
at Surface	12 26
Start Down	12 26
at Bottom	12 28
Start Up	12 28
at Surface	12 33
Data Off	12 35

Data Location
Floppy Number

Remarks: Repeat of stn. after dropping off Clark

Cassette 26:43/33:56

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		40		1228	39.13	2.890	32.021		CD4B2 #1					32.02857
2		35		1229	34.70	2.900	32.016							
3		30		1229	30.34	2.948	31.978							
4		25		1230	24.92	3.011	31.942							
5		20		1231	19.73	3.668	31.392							
6		15		1231	14.84	3.780	31.280		CD4B2 #2					31.28477
7		10		1232	10.60	3.784	31.271							
8		5		1232	5.53	3.837	31.268							
9		sfc		1233	2.87	3.918	31.267							
10														
11														
12														

Ship: Surveyor | CHOEX-90 / ICE-90 | 20

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
22	66 25.0 N	168 00.1 W	06 Oct 90	1340	1.8	1.7	014	5	012	26		—	—		25	RCD4A

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.		32472
Temp.		6808
Cond.		9062

Times	JD/Time
Data on	13 38
at Surface	13 38
Start Down	13 38
at Bottom	13 40
Start Up	13 40
at Surface	13 42
Data Off	13 44

Data Location
Floppy Number

Remarks: Cassette
34:23/38:53

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		20		1339	21.00	3.619	31.471							
2		15		1340	15.49	3.619	31.468		RCDA #1					31.47759
3		10		1341	10.20	3.622	31.467							
4		5		1341	5.56	3.620	31.468							
5		Sfc		1342	2.88	3.615	31.470							
6														
7														
8														
9														
10														
11														
12														

✓

Ship: Surveyor

CHOEX-90/ICE-90

18

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
23	66 23.0 N	167 45.2 W	06 Oct 90	1440	2.1	2.0	004	5	007	22	—	—	—		23	RCD3B

CTD Type & SN	SEABIRD
Press. SN	41681
Temp. SN	1072
Cond. SN	748

Monitor Checks	on Deck:	at Surface:
Press.	32465	32472
Temp.	6714	6780
Cond.	3300	9045

Times	JD/Time
Data on	14 39
at Surface	14 39
Start Down	14 39
at Bottom	14 40
Start Up	14 40
at Surface	14 42
Data Off	14 44

Data Location: 1000.2
Floppy Number

Remarks: cassette 00:15/04:41

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		20		1440	18.99	3.428	31.697		RC038 H1					31.71146
2		15		1441	16.11	3.425	31.697							
3		10		1442	10.29	3.422	31.700							
4		5		1442	4.91	3.421	31.702							
5		sfc		1443	2.72	3.423	31.703							
6														
7														
8														
9														
10														
11														
12														

Ship: Surveyor

CHOEX-90/ICE-90

19 ~~12~~

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
24	66 21.1 N	167 30.3 W	060 C 90	1542	2.7	2.6	00	3-4	6	005	23	—	—		2Y	RCD34

CTD Type & SN	SEABIRD
Press. SN	41681
Temp. SN	1072
Cond. SN	748

Monitor Checks	on Deck:	at Surface:
Press.	32465	32470
Temp.	6752	6769
Cond.	3310	9078

Times	JD/Time
Data on	1541
at Surface	1541
Start Down	1541
at Bottom	1542
Start Up	1542
at Surface	1544
Data Off	1546

Data Location: 998,8
Floppy Number

Remarks: Cassette 04:54 / 09:10

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		20		1542	20.49	3.326	31.878		RC03A #1					31.88818 (OR 805)
2		15		1543	15.05	3.341	31.874							
3		10		1543	10.42	3.338	31.874							
4		5		1544	5.71	3.337	31.874							
5		Sfr		1545	2.08	3.331	31.878							
6														
7														
8														
9														
10														
11														
12														

Ship: Surveyor

CHOGX-90/ICE-90

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Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
25	66 19.1 N	167 15.3 W	060 c 90	1637	3.2	3.1	1003	6	0	060	24	—	—	—	27	RCD2

CTD Type & SN: SEABIRD

Press. SN: 41681

Temp. SN: 1072

Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32465	32472
Temp.	6802	6826
Cond.	3240	9076

Times	JD/Time
Data on	16 36
at Surface	16 36
Start Down	16 36
at Bottom	16 37
Start Up	16 37
at Surface	16 40
Data Off	16 42

Data Location: 999,18

Floppy Number

Remarks: Cassette

09:27 / 14:04

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		25		16.37	24.20	3.454	31.799		ecoa #1					31.80986
2		20		16.37	20.34	3.454	31.791							
3		15		16.38	15.04	3.691	31.683							
4		10		16.38	10.59	3.726	31.578							
5		5		16.39	5.20	3.736	31.495							
6		5 fw		16.40	1.70	3.736	31.495							
7														
8														
9														
10														
11														
12														

✓

Ship: Surveyor

CHOEX-90 / ICE-90

19

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
266	66 17.1 N	167 00.4 W	06 Oct 90	17 35	3.6	3.5	003	6	0	005	24	—	—	—	24	RCD 1

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32465	
Temp.	6871	
Cond.	3380	

Times	JD/Time
Data on	17 35
at Surface	17 35
Start Down	17 35
at Bottom	1735
Start Up	1735
at Surface	1737
Data Off	1739

Data Location: 999.2
Floppy Number

Remarks: Cassette 14:04 / 17:22

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	~~Cond.~~ Sal.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		20		1735	19.65	4.192	31.080		12(A) #1					30.95391
2		15		1736	15.19	4.458	30.784							
3		10		1736	10.29	4.594	30.672							
4		5		1737	4.99	4.872	30.119							
5		Sfc		1737	3.09	4.920	30.037							
6														
7														
8														
9														
10														
11														
12														

Ship: Surveyor — CHOEX-90 / ICE-90

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
27	66 06.9 N	167 28.6 W	06 Oct 90	1922	2.9	2.8	00	3	6	350	24	—	—		23	RL01

CTD Type & SN	SEABIRD		
Press. SN	41681		
Temp. SN	1072		
Cond. SN	748		

Monitor Checks	on Deck:	at Surface:
Press.	32465	32471
Temp.	6708	6891
Cond.	31491-662	9046

Times	JD/Time
Data on	1922
at Surface	1922
Start Down	1920
at Bottom	1922
Start Up	1922
at Surface	1924
Data Off	1926

Data Location: 1000.2
Floppy Number

Remarks

Cassette 17:22/20:47

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Sal ~~Cond.~~	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		20		1922	18.57	4.287	30.728		RL01 #1					30.73669
2		15		1923	13.69	4.282	30.734							
3		10		1923	9.23	4.292	30.729							
4		5		1924	4.81	4.290	30.729							
5		0		1924	3.54	4.289	30.727							
6														
7														
8														
9														
10														
11														
12														

534

Ship: Surveyor — CHOEX-90/ ICE-90

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
28	66 25.0 N	167 19.7 W	06 Oct 90	21 16	3.7	3.7	00	3	3-4	000	20	—	—	—	28	RL02

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32465	32472
Temp.	6858	6818
Cond.	3202	9070

Times	JD/Time
Data on	2115
at Surface	2115
Start Down	2115
at Bottom	2116
Start Up	2116
at Surface	2118
Data Off	2120

1000.2
Data Location
Floppy Number

Remarks

Cassette 21:05/25:23

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		25		2116	24.24	3.016	32.086							
2		20		2116	19.96	2.958	32.088		RW2 #1					32.09622
3		15		2117	14.81	2.930	32.087							
4		10		2117	9.98	3.293	31.690						✓	
5		5		2118	4.35	3.633	31.387							
6		0		2118	1.71	3632	31.390							
7														
8														
9														
10														
11														
12														

Ship: Surveyor

CHOEX-90/ICE-90

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 279 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
029	66 45.08 N	167 08.35 W	06 OCT 90	23 26	5.2	5.2	01			085	11				36	RL03

CTD Type & SN	SEABIRD		
Press. SN	41681	Press.	32465 / 32472
Temp. SN	1072	Temp.	7194 / 7061
Cond. SN	748	Cond.	3444 / 9078

Monitor Checks: on Deck / at Surface

Times	JD/Time
Data on	2324
at Surface	2324
Start Down	2324
at Bottom	2325
Start Up	2526
at Surface	2330
Data Off	2332

Data Location: Floppy Number

Remarks: TAPE START 25:30 END 31:45

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		30		2325	29.87	2.5748	32.3254							
2		25		2326	25.72	2.8600	32.2690							
3		20		2327	20.02	3.0307	32.2306		RLØ3 #1					32.24667
4		15		2327	15.81	3.2870	32.1351							
5		10		2328	9.67	5.1471	29.9366							
6		5		2328	4.98	5.2664	29.8436		RLØ3 #2					29.85565
7		SFC		2329	2.96	5.2813	29.8416							
8														
9														
10														
11														
12														

Ship: Surveyor

ICE - 90

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 280 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
030	67 05.09 N	166 58.06 W	07 OCT 90	01 34	5.0	4.9	01			080	14				43	RL04

CTD Type & SN	SEABIRD		
Press. SN	41681		
Temp. SN	1072		
Cond. SN	748		

Monitor Checks	on Deck:	at Surface:
Press.	32.465	32.471
Temp.	7.236	7.094
Cond.	3.387	9.050

Times	JD/Time
Data on	0131
at Surface	0131
Start Down	0131
at Bottom	0134
Start Up	0134
at Surface	0138
Data Off	0140

Data Location
Floppy Number

Remarks
TAPE
START 31:55
END 40:30

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		38		0133	37.82	2.4166	32.3651							
2		35		0134	34.61	2.4158	32.3642		RL04 #1					32.35006
3		30		0135	30.32	2.4103	32.3648							
4		25		0135	25.49	2.4106	32.3656							
5		20		0136	20.77	2.4158	32.3624							
6		15		0136	15.47	3.6377	31.7231							
7		10		0137	9.91	5.4869	29.5929		RL04 #2					29.61340
8		5		0138	5.60	5.4948	29.5959							
9		SFC		0138	2.39	5.4950	29.5957							
10														
11														
12														

Ship: Surveyor

ICE - 90

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 280 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
031	67 45.06 N	166 46.68 W	07 OCT 90	03	4.3	3.7	02			072	25				47	RL05

CTD Type & SN	SEABIRD
Press. SN	41681
Temp. SN	1072
Cond. SN	748

Monitor Checks	on Deck:	at Surface:
Press.	32465	32474
Temp.	7096	6993
Cond.	3294	9177

Times	JD/Time
Data on	0334
at Surface	0334
Start Down	0334
at Bottom	0336
Start Up	0336
at Surface	0344
Data Off	0346

Data Location
Floppy Number

Remarks: TAPE START 00:10 END 10:43

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		42		0336	42.56	2.5987	32.5287							OIL SLICK SEEN ON SURFACE, CTD HELD
2		40		0337	39.85	2.5976	32.5273		RLOS #1					UNDER SURFACE UNTIL IT CLEARED
3		35		0337	34.29	2.6587	32.5086							32.53220
4		30		0338	30.34	3.3983	32.3280							
5		25		0339	24.80	4.8552	32.0337							
6		20		0339	19.37	5.1884	31.2104							
7		15		0340	15.33	5.2516	30.9501							
8		10		0341	10.14	5.2542	30.9218		RLOS #2					30.93659
9		5		0341	5.88	5.2757	30.9204							
10		SFC		0344	2.66	5.2949	30.9201							
11														
12														

Ship: Surveyor

ICE -90

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 280 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
032	67 45.20 N	166 35.92 W	07 OCT 90	0628	3.0	2.8	04			070	24				49	RL06

CTD Type & SN	SEABIRD		
Press. SN	41681		
Temp. SN	1072		
Cond. SN	748		

Monitor Checks	on Deck:	at Surface:
Press.	32464	32468
Temp.	6772	6885
Cond.	3186	9084

Times	JD/Time
Data on	0626
at Surface	0626
Start Down	0626
at Bottom	0628
Start Up	0628
at Surface	0635
Data Off	0637

Data Location
Floppy Number

Remarks: TAPE START 10:53 END 20:00

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		44		0628	46.44	2.4810	32.8804		RL06 #1					32.84260
2		40		0629	40.18	2.3913	32.8336							
3		35		0629	32.87	3.0003	32.6421							
4		30		0630	30.70	3.0584	32.6948							
5		25		0631	24.80	2.3822	32.6379							
6		20		0631	20.11	2.7589	32.3595							
7		15		0632	14.54	4.3029	30.9782							
8		10		0632	10.10	4.3572	31.0124		RL06 #2					31.05401
9		5		0633	4.93	4.3616	31.0425							
10		SFC		0634	3.17	4.3585	31.0425							
11														
12														

Ship: Surveyor

ICE - 90

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 280 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
033	68 05.36 N	166 24.51 W	07 OCT 90	08 28	2.6	2.3	04			040	10				27	RL07

CTD Type & SN	SEABIRD		
Press. SN	41681	Monitor Checks on Deck: Press.	32464
Temp. SN	1072	Temp.	6714
Cond. SN	748	Cond.	3161

Monitor Checks at Surface:	
Press.	32469
Temp.	7125
Cond.	8935

Times	JD/Time
Data on	0827
at Surface	0827
Start Down	0827
at Bottom	0828
Start Up	0828
at Surface	0832
Data Off	0835

Data Location
Floppy Number

Remarks TAPE START 20:10 END 24 52

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		22		0828	23.62	6.1757	28.6352							5 BOTTLES TRIPPED, 1 DID NOT TRIP
2		20		0828	20.24	6.1746	28.6352		RL07					28.64232
3		15		0829	14.75	6.1755	28.6313							
4		10		0829	9.66	6.1691	28.6267							
5		5		0830	4.89	6.1523	28.6222							
6		SFC		0830	2.43	6.1260	28.6180							
7														
8														
9														
10														
11														
12														

145

Ship: Surveyor | CHOEX-90 / ICE-90 | 30

Consec. Cast #	Latitude Deg.	Latitude Min.	Longitude Deg.	Longitude Min.	Date JD = Day	Mo.	Yr.	Time, GMT Hr.	Time, GMT Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
034	67	16.9 N	165	45.4 W	07	Oct	90	13	00	3.6	3.5	1003	1-2	8	071	11	—	—		35	RM01

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks	on Deck:	at Surface:
Press.	32465	32470
Temp.	6847	7085
Cond.	3106	9018

Times	JD/Time
Data on	1259
at Surface	1259
Start Down	1259
at Bottom	1300
Start Up	1300
at Surface	1304
Data Off	1306

Data Location: 1002.9
Floppy Number:

Remarks: TAPE START 25:00 END 30:34
bucket had bumped dec - hose detached - Retrieved after cast; pump OK

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond. (Sal)	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		30		1300	30.22	5.690	31.508							
2		25		1301	24.73	5.692	31.506		RM01 #1					31.50579
3		20		1302	19.98	5.722	31.430							
4		15		1302	15.34	5.560	31.014							
5		10		1303	8.98	5.565	30.095							
6		5		1303	5.99	5.579	30.095		RM01 #2					30.10492
7		sfc.		1304	3.22	5.582	30.095							bottle fired but was empty; maybe didn't seat well? O-Rings OK
8														
9														
10														
11														
12														

Ship: Surveyor — CHOEX-90 / ICE-90

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
35	67 07.2 N	164 59.8 W	070 C 690	1459	3.4	3.1	1028.3	8	8	080	14	—	5	30	RM02

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32465	32471
Temp.	6819	7116
Cond.	3176	9104

Times	JD/Time
Data on	1458
at Surface	1458
Start Down	1458
at Bottom	1459
Start Up	1459
at Surface	1502
Data Off	1504

Data Location
Floppy Number

Remarks: Cassette 30:49/36:4

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Sal ~~Cond.~~	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		25		1459	25.73	6.304	31.199							
2		20		1459	19.64	6.390	31.046						✓	chl
3		15		1500	15.39	5.654	29.945							
4		10		1501	11.04	5.649	29.938		RM02 #1					10m 29.94895
5		5		1501	5.38	5.648	29.939							
6		Sfc.		1502	3.36	5.689	29.938							
7														
8														
9														
10														
11														
12														

631

845

Ship: Surveyor — CHOEX-90/ICE-90 — 21

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
36	66 57.0 N	164 14.8 W	07 Oct 90	17 00	3.9	3.5	02	2-3	7-10	097	14	1	2	6	26	RM03

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32465	32471
Temp.	6881	7136
Cond.	3207	9016

Times	JD/Time
Data on	1659
at Surface	1659
Start Down	1659
at Bottom	1700
Start Up	1700
at Surface	1703
Data Off	1705

Data Location
Floppy Number

Remarks
Cassette: 36:26/40:55

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Sal ~~Cond.~~	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		20		1700	21.26	5.795	29.130							
2		15		1701	14.94	5.789	29.101		RM03 #1					~~29.76830~~ 29.11361
3		10		1701	10.28	5.787	29.100							
4		5		1702	5.32	5.784	29.100							
5		sfc		1703	2.23	5.809	29.101							
6														
7														
8														
9														
10														
11														
12														

✓

Ship: Surveyor — CHOEX-90 / ICE-90 — 16

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
37	66 47.1	163 30.1	07 Oct 90	19 07	3.5	3.0	02	9	10	110	17				21	RM04

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks	on Deck:	at Surface:
Press.	32465	32471
Temp.	6819	7074
Cond.	3165	8785

Times	JD/Time
Data on	19 07
at Surface	19 07
Start Down	19 07
at Bottom	19 07
Start Up	19 07
at Surface	19 09
Data Off	19 11

Data Location
Floppy Number

Remarks: New Cassette 00:15/03:36

S < 28‰

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	~~Cond.~~ Sal	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		20		1907	19.69	5.428	22.129							
2		15		1908	14.57	5.298	21.840							
3		10		1908	9.89	5.371	21.777							
4		5		1909	5.29	5.402	21.762		RM04 #1					27.58854 ??
5		sfc		1909	2.17	5.484	21.750							
6		sfc												
7														
8														
9														
10														
11														
12														

Ship: Surveyor

CHOEX-90 / ICE-90

21

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
38	66 38.0 N	163 35.6 W	07 Oct 90	20 17	3.6	3.0	002	6-1	10+	125	10	—	—	—	26	RN01

CTD Type & SN: SEABIRD

Press. SN: 41681

Temp. SN: 1072

Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32466	32470
Temp.	6845	7006
Cond.	3187	8756

Times	JD/Time
Data on	20 17
at Surface	20 17
Start Down	20 17
at Bottom	20 17
Start Up	20 17
at Surface	20 19
Data Off	20 21

Data Location
Floppy Number

Remarks

03136 / 07:07

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		20		20.17	22.74	5.261	27.923							
2		15		20.18	14.93	5.236	27.906		RN01 #1					27.91718
3		10		20.19	9.49	5.217	27.899							
4		5		20.19	4.62	4.949	27.725							
5		sfc		20.19	2.21	5.005	27.767							
6														
7														
8														
9														
10														
11														
12														

Ship: Surveyor

CHOEX-90 / ICE-90

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 280 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
39	66 40.63 N	164 29.97 N	07 Oct 90	22 18	4.1	3.9	02			095	05				18	RN02

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks	on Deck:	at Surface:
Press.	32465	32470
Temp.	7141	7069
Cond.	3290	8861

Times	JD/Time
Data on	2218
at Surface	2218
Start Down	2218
at Bottom	2218
Start Up	2218
at Surface	2221
Data Off	2223

Data Location
Floppy Number

Remarks
Cassette
START 07:17
END 13:20

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		13		2218	15.40	5.5877	28.5458							
2		10		2219	9.89	5.5817	28.5396		RN02					28.52402
3		5		2220	5.11	5.5466	28.4684							
4		SFC		2221	2.16	5.4937	28.4028							
5														
6														
7														
8														
9														
10														
11														
12														

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 281 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
040	6642.04N	1652.95W	08 OCT 90	0020	4.6	4.2	03			020	10				21	RN03

CTD Type & SN	SEABIRD		
Press. SN	41681		
Temp. SN	1072		
Cond. SN	748		

Monitor Checks	on Deck:	at Surface:
Press.	32465	32470
Temp.	7180	7123
Cond.	3263	9110

Times	JD/Time
Data on	0019
at Surface	0019
Start Down	0019
at Bottom	0020
Start Up	0020
at Surface	0023
Data Off	0025

Data Location
Floppy Number

Remarks
TAPE
START 13:30
END 17:37

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		15		0020	15.09	5.8187	30.7747							
2		10		0021	9.86	5.8172	30.7553		RN03 #1					30.76491
3		5		0022	4.76	5.7492	30.0796		RN03 #2					30.12876
4		SFC		0022	1.76	5.7747	30.0119							
5														
6														
7														
8														
9														
10														
11														
12														

Ship: Surveyor

ICE - 90

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 281 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
041	66 43.98 N	166 18.20 W	08 OC 79	02	3.1	3.0	03			315	18				20	RN04

CTD Type & SN	SEABIRD	Monitor Checks on Deck:		at Surface:	Times	JD/Time	Data Location Floppy Number	Remarks
Press. SN	41681	Press.	32465	32469	Data on	0218		TAPE START 17:47 END 22:32
Temp. SN	1072	Temp.	7108	6775	at Surface	0218		
Cond. SN	748	Cond.	3460	9022	Start Down	0218		
					at Bottom	0219		
					Start Up	0219		
					at Surface	0222		
					Data Off	0223		

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		15		0219	15.48	3.7437	31.6025							
2		10		0220	9.89	3.7487	31.5695		RN04					31.57791
3		5		0220	4.93	4.0370	31.2451							
4		SFC		0221	2.00	4.6825	30.4113							
5														
6														
7														
8														
9														
10														
11														
12														

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 281 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
042	66 46.05 N	167 12.08 W	08 07 90	04 22	1.8	1.6	04			310	28				36	RNØ5

CTD Type & SN	SEABIRD		
Press. SN	41681	Press.	32464 / 32470
Temp. SN	1072	Temp.	6783 / 6986
Cond. SN	748	Cond.	3389 / 9012

Monitor Checks: on Deck / at Surface

Times	JD/Time
Data on	0421
at Surface	0421
Start Down	0421
at Bottom	0422
Start Up	0422
at Surface	0426
Data Off	0428

Data Location
Floppy Number

Remarks: TAPE START 22:42 END 30:18

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		30		0422	30.66	2.1453								
2		25		0422	24.57	2.2476								
3		20		0423	20.13	2.4019			RNOS #1					32.35678
4		15		0424	14.98	2.4220								
5		10		0424	10.05	2.9286								
6		5		0425	5.09	5.2765			RNOS #2					29.80095
7		SFC		0425	2.73	5.2818								
8														
9														
10														
11														
12														

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 281 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
043	66 48.04 N	168 06.20 W	08 OCT 90	06 52	0.8	-0.5	06			305	30				32	RN06

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32463	32470
Temp.	6551	6551
Cond.	3358	8942

Times	JD/Time
Data on	0652
at Surface	0652
Start Down	0652
at Bottom	0652
Start Up	0652
at Surface	0656
Data Off	0658

Data Location
Floppy Number

Remarks
TAPE
START 30:28
END 35:45

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		25		0652	26.36	2.1740	32.3492							
2		20		0653	20.20	2.1727	32.3490		RN06					32.36613
3		15		0653	15.18	2.1693	32.3497							
4		10		0654	9.19	2.1705	32.3505							
5		5		0655	4.27	2.1731	32.3483							
6		SFC		0656	2.44	2.1677	32.3508							
7														
8														
9														
10														
11														
12														

6596 - 2.17 ✓

Ship: Surveyor | CHOEX-90/ ICE-90 | 42

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
44	66 50.0 N	168 59.7 W	080ct90	0958	-0.2	-1.5	08	3-4	6-8	301	28	—	—		47	RN07

CTD Type & SN	SEABIRD		
Press. SN	41681		
Temp. SN	1072		
Cond. SN	748		

Monitor Checks	on Deck:	at Surface:
Press.	32462.5	32468
→ Temp.	6297	6515-44
Cond.	3175-83	8945-61

Times	JD/Time
Data on	0956
at Surface	0956
Start Down	0956
at Bottom	0958
Start Up	0958
at Surface	1002
Data Off	1004

Data Location
Floppy Number

Remarks tape 00:15/07:11

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	~~Cond.~~ Sal	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1				0958	43.43	1.823	32.720?							
2				0958	36.10	1.822	32.726		RN07 #1					32.73879
3				0959	29.79	1.823	32.724							
4				1000	25.41	1.823	32.728							
5				1000	19.98	1.821	32.727							
6				1001	14.95	1.822	32.727							
7				1001	10.20	1.824	32.727							
8	—	—	—	1001	5.62	1.824	32.728		—	—	—	—	—	x click past - line broke on set up
9				1002	2.32	1.823	32.728							
10														
11														
12														

Ship: Surveyor — CHOEX-90 / ICE-90 — 43

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
45	66 51.8	169 54.2	08 Oct 90	1235	-2.2	-3.0	1010	4	6	280	22				48	RN08

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32462	32467
Temp. (shot bottle)	6001	6665
Cond.	3214	8948

Times	JD/Time
Data on	12 33
at Surface	1233
Start Down	1233
at Bottom	1235
Start Up	1235
at Surface	1240
Data Off	1242

Data Location
Floppy Number

Remarks 07:21 - 15:06
heater on pump is burned out? sal high, T=-0.1 (> f.p. at that S)

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		45		12 35	43.56	2.656	32.658							
2		40		12 35	40.26	2.660	32.658		RN08 #1					32.67238
3		35		12 36	35.01	2.662	32.659							
4		30		12 36	30.52	2.663	32.658							
5		25		12 37	25.44	2.610	32.112							
6		20		12 37	20.57	2.481	31.900							
7		15		12:38	15.89	2.426	31.739							
8		10		12 38	10.06	2.627	31.136							
9	✓	—	—	—	—	—	—	—	—	—	—	—		Not used
10		5		12 39	5.27	2.667	31.376		RN08 #2					31.39212
11		sfc		12 40	1.93	2.668	31.381							
12														

✓ 865

Ship: Surveyor

CHOEX-90/ICE-90

37

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
46	66 56.0	170 59.9	08 Oct 90	15 24	-4.5	-5.0	11	3	6	275	13				42	RN09

CTD Type & SN: SEABIRD

Press. SN: 41681

Temp. SN: 1072

Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32461	32466
Temp.	6141	6567
Cond.	3620	8901

Times	JD/Time
Data on	15 23
at Surface	15 23
Start Down	15 23
at Bottom	15 24
Start Up	15 24
at Surface	15 28
Data Off	15 30

Data Location

Floppy Number

Remarks

ALSO RB1A

Cassette 15:17/21:55

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond. (Sal)	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		35		15 24	38.08	2.262	32.486							
2		30		1525	31.31	2.238	32.431		RN09 #1					32.44281 -
3		25		1526	24.82	1.976	31.813							
4		20		1526	19.98	1.966	31.807							
5		15		1527	15.22	1.960	31.794							
6		10		1527	10.69	1.958	31.776							
7		5		1528	4.98	1.901	31.679		RN09 #2					31.70871
8		surf		1528	2.78	1.908	31.690							
9	—	—	—	—	—	—	—	—	—	—	—	—	—	- skip -
10														
11														
12														

Ship: Surveyor | CHOEX-90/ **ICE-90** | 41

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
47	67 04.4	170 39.9	08 Oct 90	1658	-3.7	-4.1	1010	3-4	10	240	10	—	—		46	RB013

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks on Deck: at Surface:
Press. ____ 32471
Temp. ____ 6651
Cond. ____ 8888

Times	JD/Time
Data on	16 56
at Surface	16 56
Start Down	16 56
at Bottom	16 58
Start Up	16 58
at Surface	17 03
Data Off	17 05

Data Location
Floppy Number

Remarks: Cassette 21:55/29:37
CTD freeze - heater out, then pump's lin freeze
Warted - 5 min at surface
Also: had top plug in during dau?

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		40		16.58	39.97	1.058	33.113		RB013 #1					33.12802
2		35		16.58	36.66	1.292	33.052							
3		30		16.59	30.03	2567	32.708							
4		25		17.00	24.79	2.555	31.022							
5		20		17.00	19.78	2.544	31.018							
6		15		17.01	15.05	2.536	31.014		RB013 #2					31.01897
7		10		17.02	9.48	2.543	31.014							
8		5		17.02	4.76	2.539	31.016							
9														
10		surf		17.03	3.40	2.552	31.016							
11														
12														

Ship: Surveyor — CHOEX-90/ICE-90 — 43

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
48	67 13.0	170 20.3	08 Oct 90	18 27	-2.0	-3.5	10	1/2	10+	230	14				48	RB02

CTD Type & SN	SEABIRD
Press. SN	41681
Temp. SN	1072
Cond. SN	748

Monitor Checks	on Deck:	at Surface:
Press.	32463	32468
Temp.	5901	6615
Cond.	3153	8953

Times	JD/Time
Data on	18 25
at Surface	18 25
Start Down	18 25
at Bottom	18 27
Start Up	18 27
at Surface	18 31
Data Off	18 43

Data Location
Floppy Number

Remarks
Cassette 29:48/36:41

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		45		18 27	43.96	0.685	33.207		RB02 #1					33.22027
2		40		1827	39.27	0.679	33.207							
3		35		18 28	34.91	1.750	32.792							
4		30		18 28	30.10	2.430	32.442							
5		25		18 29	24.63	2.289	31.814							
6		20		18 29	19.63	2.293	31.811		RB02 #2					31.81996
7		15		18 30	14.49	2.284	31.814							
8		10		18 30	8.69	2.283	31.812							
9		5		18 31	4.76	2.284	31.813							
10		58		18 31	4.21	2.284	31.813							
11														
12														

✓ 46 - 38

120

Ship: Surveyor — CHOEX-90 / ICE-90 — 46

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
49	67 25.7 N	169 39.6 W	08 Oct 90	2058	0.0	-0.8	10	1-2	10+	220	16	—			51	R303

CTD Type & SN	SEABIRD	Monitor Checks on Deck:	at Surface:
Press. SN	41681	Press. 32463	32471.6
Temp. SN	1072	Temp. 6195	6590
Cond. SN	748	Cond. 3143	8913-96

Times	JD/Time
Data on	2056
at Surface	2056
Start Down	2056
at Bottom	2058
Start Up	2058
at Surface	2101
Data Off	2103

Data Location
Floppy Number

Remarks
Cassette 3654 / 42:36

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	~~Cond.~~	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		45		2058	47.48	0.803	33.219							
2		40		2058	39.62	0.891	33.194							
3		35		2058	34.55	2.083	32.833		R303 #1					Only one good ds kz 32.84871
4		30		2059	29.84	2.101	32.827							
5		25		2059	24.54	2.119	32.783							
6		20		2100	19.59	2.130	32.440							
7		15		2100	14.16	2.140	32.419							
8		10		2101	9.67	2.150	32.364							
9		5		2101	4.95	2.153	32.360							
10		5c		2101	2.75	2.160	32.360							
11														
12														

Ship: Surveyor

ICE -90

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 281 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
50	67 38.73 N	169 00.00 W	08 OCT 90	23 23	-1.0	-2.6	1010			195	12				52	RB04

CTD Type & SN	SEABIRD
Press. SN	41681
Temp. SN	1072
Cond. SN	748

Monitor Checks	on Deck:	at Surface:
Press.	32463	32471
Temp.	6347	6553
Cond.	3114	8985

Times	JD/Time
Data on	2321
at Surface	2321
Start Down	2322
at Bottom	2323
Start Up	2323
at Surface	2328
Data Off	2330

Data Location
Floppy Number

Remarks
New Cassette
START 00:11
END 07:47

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		47		2323	47.31	1.0953	33.1559							
2		40		2324	40.69	1.9731	32.8993							
3		35		2324	35.08	2.0001	32.8935		RB04 #1					32.89940
4		30		2325	29.47	2.0015	32.8914							
5		25		2325	24.46	2.0050	32.8840							
6		20		2326	19.87	2.0077	32.8677							
7		15		2326	14.77	2.0245	32.8160							
8		10		2326	8.79	2.0240	32.8020		RB04 #2					32.81143
9		5		2327	4.51	2.0203	32.8018							
10		SFC		2327	2.47	2.0212	32.8016							
11														
12														

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 282 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
51	67 51.96 N	168 19.78 W	09 Oct 79	01 32	-0.2	-2.0	10			180	12				57	RB05

CTD Type & SN	SEABIRD		
Press. SN	41681		
Temp. SN	1072		
Cond. SN	748		

Monitor Checks	on Deck:	at Surface:
Press.	32463	32468
Temp.	6420	6693
Cond.	3140	8938

Times	JD/Time
Data on	0131
at Surface	0131
Start Down	0131
at Bottom	0132
Start Up	0132
at Surface	0137
Data Off	0140

Data Location
Floppy Number

Remarks TAPE START 0757 END 15:37

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		52		0132	52.66	0.8857	33.2234							BOTTLE #4 DIDNOT TRIP
2		50		0133	49.33	0.8945	33.2206		RBOS #1					~~32.22561~~ 33.23547
3		40		0134	40.32	1.9809	32.8782							
4		35		0134	34.21	2.2487	32.7939							
5		30		0135	29.96	2.2923	32.7357							
6		25		0135	24.37	2.3299	32.6724							
7		20		0135	19.55	2.3620	32.3524							
8		15		0136	12.77	2.3014	32.3270							
9		10		0136	9.65	2.3172	32.2077							
10		5		0137	4.81	2.3168	32.2085		RBOS #2					32.22561
11		SFC		0137	1.47	2.3995	32.2059							
12														

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 282 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
052	68 05.11 N	167 39.95 W	09 OCT 90	0355	0.2	-1.4	10			170	20				53	RB06A

CTD Type & SN	SEABIRD		
Press. SN	41681		
Temp. SN	1072		
Cond. SN	748		

Monitor Checks	on Deck:	at Surface:
Press.	32462	32467
Temp.	6318	6890
Cond.	3144	8863

Times	JD/Time
Data on	0354
at Surface	0354
Start Down	0354
at Bottom	0355
Start Up	0355
at Surface	0400
Data Off	0402

Data Location
Floppy Number

Remarks
TAPE
START 15:47
END 23:23

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		48		0355	48.01	2.4487	32.7888							
2		40		0356	39.48	2.4390	32.7886		RB06A #1					32.79858
3		35		0357	35.22	2.4434	32.7856							
4		30		0357	30.37	2.4927	32.7400							
5		25		0358	25.66	2.1921	32.6267							
6		20		0358	19.79	2.4506	32.6390							
7		15		0359	14.93	2.9435	32.3304							
8		10		0359	10.27	3.8123	30.4696		RB06A #2					30.50228
9		5		0400	5.24	3.8159	30.4701							
10		SFC		0400	2.50	3.8094	30.4706							
11														
12														

Ship: Surveyor

ICE -90

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 282 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
053	68 11.60 N	167 20.09 W	09 OCT 90	0504	0.8	-0.6	10			177	19				49	RB06B

CTD Type & SN	SEABIRD		
Press. SN	41681	Press.	32463 / 32469
Temp. SN	1072	Temp.	6388 / 6909
Cond. SN	748	Cond.	3121 / 9071

Monitor Checks: on Deck / at Surface

Times	JD/Time
Data on	0503
at Surface	0503
Start Down	0503
at Bottom	0504
Start Up	0504
at Surface	0510
Data Off	0512

Data Location
Floppy Number

Remarks
TAPE
START 23:33
END 31:14

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		44		0504	44.08	4.7906	31.9854							
2		40		0505	40.35	4.7949	31.9833		RB06B #1					31.98903
3		35		0505	35.24	4.8004	31.9800							
4		30		0506	30.22	4.8077	31.9759							
5		25		0507	24.84	4.8279	31.9622							
6		20		0507	19.63	4.7247	31.2882							
7		15		0508	15.05	4.6973	31.2578							
8		10		0508	9.94	4.6732	31.2445		RB06B #2					31.25210
9		5		0509	4.49	4.6744	31.2455							
10		SFC		0509	2.15	4.6710	31.2460							
11														
12														

Ship: Surveyor

ICE - 90

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 282 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
54	68 19.48 N	166 52.35 W	09 OCT 90	0647	2.0	0.8	09			160	30				30	RB07

CTD Type & SN	SEABIRD	Monitor Checks on Deck:		at Surface:	Times	JD/Time	Data Location Floppy Number	Remarks
Press. SN	41681	Press.	32464	32469	Data on	0647		TAPE
Temp. SN	1072	Temp.	6545	7076	at Surface	0647		START 31:24
Cond. SN	748	Cond.	3134	8872	Start Down	0647		END 38:20
					at Bottom	0647		
					Start Up	0647		
					at Surface	0651		
					Data Off	0653		

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		25		0647	26.12	4.7247	28.6804		RB07 #1					28.67732
2		20		0648	19.70	5.1983	28.6076							
3		15		0649	14.18	5.5814	28.5823							
4		10		0649	9.85	5.6258	28.5840							
5		5		0650	4.32	5.6340	28.5840		RB07 #2					28.58921
6		SFC		0650	2.65	5.6409	28.5857							
7														
8														
9														
10														
11														
12														

Ship: Surveyor

CHOEX-90/ICE-90

25

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
55	68 54.5 N	166 20.0 W	09 OCT 90	1047	1.2	0.6	09	3	10	163	34	—	—	—	30	RC11

CTD Type & SN: SEABIRD

Press. SN: 41681

Temp. SN: 1072

Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32464	32472
Temp.	6523	6966
Cond.	3121	8959-76

Times	JD/Time
Data on	1046
at Surface	1046
Start Down	1046
at Bottom	1047
Start Up	1047
at Surface	1049
Data Off	1051

Data Location: 1008,8

Floppy Number

Remarks: Cassette 58:29/42:42

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		25		1047	25.99	4.676	29.761		Rc11 #1					29.76835
2		20		1047	19.71	4.676	29.761							
3		15		1048	14.42	4.674	29.761							
4		10		1048	10.53	4.669	29.762							
5		5		1049	5.26	4.669	29.761							
6		Sfc		1049	3.12	4.670	29.761							
7														
8														
9														
10														
11														
12														

Ship: Surveyor

CHOEX-90/ICE-90

42

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
56	68 56.3 N	166 59.3 W	090 Oct 90	12 35	3.2	2.1	073	3	10	155	35	—	—	—	47	RC10

CTD Type & SN: SEABIRD

Press. SN: 41681

Temp. SN: 1072

Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32465	32470
Temp.	7203	7090
Cond.	3320	9069

Times	JD/Time
Data on	12 33
at Surface	12 33
Start Down	12 33
at Bottom	12 35
Start Up	
at Surface	
Data Off	

Data Location

Floppy Number

Remarks

cassette

42:53/47:50

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		45		1235	44.11	4.503	31.564							
2		40		1235	39.89	4.386	31.419							
3		35		1236	34.63	4.670	31.001							
4		30		1236	30.59	4.774	30.906		RC10 #1					30.89804
5		25		1237	24.27	4.713	30.861							
6		20		1237	20.11	4.759	30.739							
7		15		1238	15.33	5.213	30.137							
8		10		1238	9.86	5.470	29.814		RC10 #2					29.80275
9		5		1239	4.27	5.489	29.781							
10		sfc		1239	2.39	5.485	29.788							
11														
12														

Ship: Surveyor

CHOEX-90 / ICE-90

46

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
57	68 56.1 N	167 59.6 W	09 Oct 90	14 55	3.0	2.5	044	10	1	58	34	—	—		51	RC09

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32465	32473
Temp.	6821	6759
Cond.	31.70	9048

Times	JD/Time
Data on	1454
at Surface	1454
Start Down	1454
at Bottom	1455
Start Up	1455
at Surface	1500
Data Off	1502

Data Location: 1004.5
Floppy Number

Remarks: Cassette 00:08 / 07:22

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		48		1455	48.84	2.230	32.905		RC09 #1				✓	- - check #5 32.91085
2		40		1455	40.45	2.224	32.895							
3		35		1456	34.34	2.192	32.800							
4		30		1457	29.48	2.190	32.688							
5		25		1457	24.73	2.724	32.505							
6		20		1458	20.78	2.808	32.188							
7		15		1458	14.89	2.821	32.138						✓	
8		10		1459	9.39	3.237	31.709		RC09 #2					31.71434
9		5		1459	5.95	3.235	31.711							
10		SFC		1500	2.04	3.249	31.716						✓	
11														
12														

S ✓

Ship: Surveyor | CHOEX-90/ICE-90 | 48

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
58	68 56.4	168 59.4	09 Oct 90	17 14	3.4	2.8	03	6	10	150	36	—	—		53	RC08

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks — on Deck / at Surface:
Press. 32465 / 32473
Temp. 6880 / 7061
Cond. 3165 / 9123

Times	JD/Time
Data on	17 13
at Surface	1713
Start Down	1713
at Bottom	1714
Start Up	1714
at Surface	1720
Data Off	1722

Data Location
Floppy Number

Remarks: Bongo tow cassette
07:22 / 15:00

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		45		1714	45.33	2.968	32.608		RC08 #1					32.61449
2		40		1715	42.36	3.009	32.588							
3		35		1716	36.24	4.582	31.905						✓	
4		30		1716	31.15	5.315	30.451							
5		25		1717	25.15	5.318	30.406							
6		20		1717	20.35	5.309	30.360		RC08 #2					30.40393
7		15		1718	13.88	5.303	30.396							
8		10		1719	11.33	5.306	30.396							
9		5		1719	4.88	5.308	30.396							
10		Sfc		1720	3.81	5.323	30.398							
11														
12														

✓

Ship: Surveyor — CHOEX-90/ICE-90 — 51

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
59	68 56.1	169 59.7	09 Oct 90	20 14	3.5	2.5	10	6-8	10	150	34	—	—		56	RC07

CTD Type & SN	SEABIRD		
Press. SN	41681		
Temp. SN	1072		
Cond. SN	748		

Monitor Checks	on Deck:	at Surface:
Press.	32465	32470
Temp.	6925	6835
Cond.	3213	8992

Times	JD/Time
Data on	2013
at Surface	2013
Start Down	2013
at Bottom	2014
Start Up	2014
at Surface	2018
Data Off	2020

Data Location: 999.5
Floppy Number

Remarks: Cassette 15:12/21:08

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	~~Cond.~~ Sal	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		50		2014	52.08	2.909	32.836		RC07 #1					32.84003
2		40		2015	37.67	3.023	32.752							
3		35		2015	35.82	2.996	32.739							
4		30		2016	30.24	3.161	32.583							
5		25		2016	24.07	3.765	30.778							
6		20		2017	19.73	3.771	30.776							
7		15		2017	14.25	3.756	30.785		RC07 #2					30.77889
8		10		2018	10.22	3.765	30.782							
9		5		2018	4.28	3.790	30.766							
10		Sfc.		2018	1.69	3.796	30.764							
11														
12														

Ship: Surveyor

ICE-90

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 282 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
60	68 48.10N	170 46.68W	09 OCT 90	2235	2.9	2.5	996			135	38				56	RC06

CTD Type & SN	SEABIRD
Press. SN	41681
Temp. SN	1072
Cond. SN	748

Monitor Checks	on Deck:	at Surface:
Press.	32465	32472
Temp.	7072	6732
Cond.	3523	9019

Times	JD/Time
Data on	2234
at Surface	2234
Start Down	2234
at Bottom	2235
Start Up	2235
at Surface	2240
Data Off	2243

Data Location
Floppy Number

Remarks
TAPE
START 23:01
END 31:31

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		50		2235	49.78	2.8396	32.8009							FIRST ATTEMPT AT CAST. A PARITY ERROR CRASHED THE
2		40		2236	41.12	2.8374	32.8004		✓		3280756			COMPUTER. 2nd ATTEMPT EVERYTHING SEEMED
3		35		2237	35.06	2.8401	32.7903							TO WORK FINE.
4		30		2237	28.69	3.0560	31.9126							SHIP TAKING MODERATE ROLLS
5		25		2238	25.81	3.0756	31.4989							
6		20		2238	19.29	3.0758	31.4977							
7		15		2239	14.95	3.0737	31.5001							
8		10		2239	9.90	3.0738	31.4995		✓					31.50389
9		5		2240	5.42	3.0737	31.5011							
10		SFC		2240	2.19	3.0861	31.5011							
11														
12														

✓

1650

Ship: Surveyor

ICE - 90

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 283 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
61	68 36.32 N	171 36.41 W	10 OCT 90	0053	2.7	2.3	994			120	36				55	RC05

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32464	32471
Temp.	6809	6663
Cond.	3302	9061

Times	JD/Time
Data on	0052
at Surface	0052
Start Down	0052
at Bottom	0053
Start Up	0053
at Surface	0058
Data Off	0100

Data Location
Floppy Number

Remarks
TAPE
START 31:41
END 39:07

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		50		0053	52.54	2.5450	33.0263							
2		40		0054	40.09	2.8987	32.9625							
3		35		0055	33.74	2.6128	32.4559							
4		30		0055	29.97	2.6367	32.4190		RCOS #1					32.42195
5		25		0055	24.78	2.6540	32.4026							
6		20		0056	21.14	2.6570	32.4006							
7		15		0056	16.18	2.6551	32.4014							
8		10		0057	11.09	2.6608	32.3963		RCOS #2					32.40320
9		5		0058	6.30	2.6568	32.3994							
10		SFC		0058	5.16	2.6689	32.3992							
11														
12														

✓

Ship: Surveyor

ICE - 90

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 283 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
626	68 24.29 N	172 14.66 W	100 C 790	0300	2.0	1.7	88			115	40				51	RC04

CTD Type & SN	SEABIRD		
Press. SN	41681		
Temp. SN	1072		
Cond. SN	748		

Monitor Checks	on Deck:	at Surface:
Press.	32463	32472
Temp.	6941	6689
Cond.	9268	9093

Times	JD/Time
Data on	0259
at Surface	0259
Start Down	0259
at Bottom	0300
Start Up	0300
at Surface	0306
Data Off	0308

Data Location
Floppy Number

Remarks
TAPE
START 00:10
END 10:42

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		46		0300	47.51	2.4675	32.8389		RC04 #1					32.83730
2		40		0301	39.39	2.5984	32.6642							
3		35		0302	36.28	2.6900	32.5106							
4		30		0302	30.29	2.6895	32.5110							
5		25		0303	25.39	2.6897	32.5108							
6		20		0304	19.74	2.6887	32.5091							
7		15		0304	16.34	2.6882	32.5084		RC04 #2					32.51501
8		10		0305	10.16	2.6901	32.5080							
9		5		0306	6.07	2.6889	32.5086							
10		Sfc		0306	3.53	2.7254	32.5063							
11														
12														

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 283 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
63	68 12.06 N	173 12.34 W	10 OCT 90	0546	-2.0	-2.0	83			135	30				49	RCØ3

CTD Type & SN: SEABIRD

Press. SN: 41681

Temp. SN: 1072

Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32463	32471
Temp.	7008	6609
Cond.	3363	9072

Times	JD/Time
Data on	0544
at Surface	0544
Start Down	0544
at Bottom	0546
Start Up	0546
at Surface	0551
Data Off	0553

Data Location
Floppy Number

Remarks: TAPE START 10:52 END 18:18

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		44		0546	44.27	2.2203	32.6935							
2		40		0546	40.16	2.2203	32.6926		RCØ3 #1					Δ 32.70000
3		35		0547	34.27	2.2195	32.6930							
4		30		0548	30.63	2.2195	32.6929							
5		25		0548	24.68	2.2187	32.6927							
6		20		0549	19.85	2.2191	32.6927							
7		15		0549	14.02	2.2184	32.6935							
8		10		0550	10.40	2.2180	32.6934		RCØ3 #2					32.69823
9		5		0550	5.36	2.2195	32.6925							
10		SFC		0551	2.18	2.2183	32.6916							
11														
12														

Ship: Surveyor

ICE - 90

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 283 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
64	68 05.97 N	173 36.174	10 OCT 90	07 21	2.3	2.1	83			160	25				50	RC02B

CTD Type & SN	SEABIRD	Monitor Checks on Deck:		at Surface:	Times	JD/Time	Data Location	Remarks
Press. SN	41681	Press.	32463	32467	Data on	0720	Floppy Number	TAPE
Temp. SN	1072	Temp.	6600	6624	at Surface	0720		START 18:28
Cond. SN	748	Cond.	3131	9052	Start Down	0720		END 24:50
					at Bottom	0721		
					Start Up	0721		
					at Surface	0723		
					Data Off	0725		

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		45												NO RC02B.MRK FILE SAVED DUE TO
2		40							RC02B #1					PROGRAM CRASH
3		35							RC02B #1					BOTTLE # 10 BROKEN
4		30												
5		25												
6		20												
7		15												
8		10							RC02B #2					
9		5												
10		SFC												
11														
12														

Ship: Surveyor

ICE -90

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 283 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
065	67 59.60 N	173 59.61 W	100CT90	0917	2.0	1.5	83			180	20				48	RCØ2A

CTD Type & SN: SEABIRD	Monitor Checks on Deck: / at Surface:	Times / JD/Time	Data Location / Remarks
Press. SN: 41681	Press. 32463 / 32473	Data on 0916	Floppy Number
Temp. SN: 1072	Temp. 6966 / 6562	at Surface 0916	Remarks: TAPE
Cond. SN: 748	Cond. 3764 / 9034	Start Down 0916	START 25:00
		at Bottom 0917	END 31:45
		Start Up 0917	
		at Surface 0922	
		Data Off 0924	

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		43		0917	44.67	1.9116	32.7617							4 BROKEN BOTTLES i.e Rough weather!
2		40		0918	41.33	1.9090	32.7614							#2,
3		35		0918	34.20	1.9065	32.7621		Rcd A #1					32.77002
4		30		0919	29.36	1.9075	32.7618							
5		25		0919	25.93	1.8993	32.7638							
6		20		0920	20.88	1.8980	32.7636							
7		15		0920	15.31	1.8980	32.7637							
8		10		0921	9.60	1.8946	32.7645		Rcd A #2					32.76391
9		5		0921	4.41	1.8920	32.7646							
10		SFC		0922	0.92	1.8912	32.7644							
11														
12														

Ship: Surveyor | CHOEX-90 / ICE-90 | 32

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
066	68 47.8 N	178 24.0 W	100 Oct 90	1950	-2.5	-3.5	855	1/2	9	000	02				37	RD01A

CTD Type & SN SEABIRD

		Monitor Checks on Deck:	at Surface:
Press. SN	41681	Press. 3246D	3246G
Temp. SN	1072	Temp. 6472	6349
Cond. SN	748	Cond. 3285	8722

Times	JD/Time
Data on	1948
at Surface	1948
Start Down	1948
at Bottom	1950
Start Up	1950
at Surface	1953
Data Off	1955

Data Location
Floppy Number

Remarks: Broke 5 bottles during last 2 casts! skipped C1A & C1B because of heavy weather - went on to D
Cassette 31:45 / 36:27

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Sal. ~~Cond.~~	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		35		1950	33.81	0.517	31.611							
2		30		1950	29.25	0.524	31.623		Rosette #1					31.63778
3		25		1951	23.66	0.530	31.623							
4		20		1951	19.55	0.522	31.629							
5		15		1951	14.72	0.521	31.618							
6		10		1952	8.90	0.512	31.601							
7		5		1952	4.51	0.499	31.590							
8		5CK		1953	2.72	0.509	31.596							
9														
10														
11														
12														

Ship: Surveyor — CHOEX-90 / ICE-90 — 42

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
67	68 54.4 N	177 58.4 W	100 Oct 90	21 19	-3.0	-3.5	86	1½	7	050	04	—			47	R0013

CTD Type & SN	SEABIRD	Monitor Checks on Deck:	at Surface:
Press. SN	41681	Press.	32461 / 32467
Temp. SN	1072	Temp. (on pump but last min.)	6562 / 6254 / 6375
Cond. SN	748	Cond.	8872 / 3253 / 8680-90

Times	JD/Time
Data on	2118
at Surface	2118
Start Down	2118
at Bottom	2119
Start Up	2119
at Surface	2123
Data Off	2125

Data Location: 985.5
Floppy Number

Remarks: Cassette 36:39 / 42:39

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		42		2119	43.22	0.017	32.997		RAOIB #1					3300042
2		35		2120	33.79	0.022	32.991							
3		30		2120	30.99	0.046	32.974							
4		25		2121	25.51	0.656	31.382							
5		20		2121	20.30	0.652	31.380							
6		15		2122	15.39	0.653	31.380		RAOIB #2					31.38877
7		10		2122	10.27	0.652	31.381							
8		5		2123	5.80	0.648	31.380							
9														No bottle in 9 – Rosette pin broken off
10		Sfc		2123	3.15	0.654	31.379							
11														
12														

Ship: Surveyor

ICE -90

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 283 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
68	69 00.75N	177 32.93W	10 OCT 90	22 52	-2.8	-3.2	86			065	04				51	RD02A

CTD Type & SN: SEABIRD	Monitor Checks on Deck: / at Surface:	Times / JD/Time	Data Location / Remarks
Press. SN: 41681	Press. 32461 / 32467	Data on: 2251	Floppy Number:
Temp. SN: 1072	Temp. 6289 / 6214	at Surface:	Remarks: TAPE START 00:10 END 09:30
Cond. SN: 748	Cond. 3255 / 8769	Start Down:	
		at Bottom:	
		Start Up:	
		at Surface: 56	
		Data Off:	

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		46		2252	46.82	0.2363	33.1919							
2		40		2253	40.08	0.2313	33.1913		#1					33.19785
3		35		2253	35.17	0.0002	33.0963							
4		30		2254	29.44	1.2164	31.9718							
5		25		2254	24.89	1.2175	31.9674							
6		20		2255	20.18	1.2109	31.9630							
7		15		2255	14.82	1.2013	31.9568		#2					31.95633
8		10		2256	9.32	1.1541	31.9305							
9		5		2256	5.04	1.1328	31.9080							
10		SFC		2257	2.44	1.1149	31.9031							
11														
12														

1325

Ship: Surveyor

ICE - 90

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 284 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
69	69 06.83W	177 06.81W	11 OCT 90	0017	-2.0	-3.0	86			155	10				51	AD02B

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32462	32466
Temp.	6673	6485
Cond.	3347	8838

Times	JD/Time
Data on	0016
at Surface	0016
Start Down	0016
at Bottom	0017
Start Up	0017
at Surface	0021
Data Off	0023

Data Location
Floppy Number

Remarks TAPE
START 08:40
END 14:37

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		46		0017	46.18	1.6684	32.6028		#1					32.568807
2		40		0018	41.00	1.6711	32.5978							
3		35		0018	35.46	1.9067	31.9898							
4		30		0018	29.96	1.9320	31.9750							
5		25		0019	24.89	1.9330	31.9753							
6		20		0019	19.74	1.8257	31.9555		#2					
7		15		0020	15.07	1.7600	31.9448		#2					BOTTLE #6 DID NOT TRIP 31.94097
8		10		0020	9.68	1.6308	31.9140							
9		5		0021	4.75	1.6165	31.9096							
10		SFC		0021	2.32	1.6050	31.9090							
11														
12														

Ship: Surveyor

ICE-90

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 284 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
70	69 13.62 N	176 40.73 W	11 OCT 90	0243	-2.9	-3.9	86			210	10				53	RD03

CTD Type & SN: SEABIRD

Press. SN: 41681

Temp. SN: 1072

Cond. SN: 748

Monitor Checks	on Deck:	at Surface:
Press.	32462	32462
Temp.	6512	6557
Cond.	3644	894

Times	JD/Time
Data on	
at Surface	
Start Down	
at Bottom	
Start Up	
at Surface	
Data Off	

Data Location
Floppy Number

Remarks: TAPE START 14:47 END 22:37

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		48		0243	47.23									
2		40		0244	39.71				#1					32.02555
3		35		0244	35.79									
4		30		0245	30.34									
5		25		0245	25.13									
6		20		0246	19.99									
7		15		0246	14.96									
8		10		0247	9.92				#2					32.01247
9		5		0247	5.48									
10		SFC		0248	2.40									
11														
12														

Ship: Surveyor

ICE-90

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 284 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
71	69 26.20 N	175 50.98 W	11 OCT 90	0509	-2.6	-3.1	87			248	19				55	RD04

CTD Type & SN	SEABIRD		
Press. SN	41681		
Temp. SN	1072		
Cond. SN	748		

Monitor Checks	on Deck:	at Surface:
Press.	32461	32468
Temp.	6215	6511
Cond.	3298	8866

Times	JD/Time
Data on	0507
at Surface	0507
Start Down	0507
at Bottom	0509
Start Up	0509
at Surface	0514
Data Off	0516

Data Location
Floppy Number

Remarks
TAPE
START 22:47
END 33:12

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		50		0509	48.68	1.7297	32.3138							NO Mek? not copied to tape
2		40		0509	40.36	1.8227	32.2130		#1					
3		35		0510	35.21	1.8200	32.2107							
4		30		0511	30.16	1.8155	32.2103							
5		25		0511	25.85	1.8136	32.2092							
6		20		0512	20.43	1.8123	32.2085							
7		15		0512	15.11	1.8099	32.2092							
8		10		0513	9.65	1.8039	32.2081		#2					32.22300
9		5		0513	4.51	1.6667	32.3473							
10		SFC		0514	1.54	1.8098	32.2076							
11														
12														

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 284 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
72	69 39.03 N	174 59.98 W	11 OCT 90	07 16	-2.5	-3.2	89			220	19				54	RD05

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks	on Deck:	at Surface:
Press.	32461	32467
Temp.	6793	6513
Cond.	3658	8912

Times	JD/Time
Data on	0715
at Surface	0715
Start Down	0715
at Bottom	0716
Start Up	0716
at Surface	0720
Data Off	0722

Data Location
Floppy Number

Remarks: TAPE START 33:22 END 39:40

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		49		0716	49.79	1.7512	32.3841							
2		40		0716	39.98	1.7633	32.3443		#1					32.35098
3		35		0717	34.99	1.7548	32.3386							
4		30		0717	29.77	1.7510	32.3380							
5		25		0718	23.94	1.7425	32.3352							
6		20		0718	19.34	1.7415	32.3352							
7		15		0719	14.48	1.7452	32.3352							
8		10		0719	10.62	1.7468	32.3354		#2					32.35206
9		5		0720	4.79	1.7432	32.3352							
10		SFC		0720	2.18	1.7402	32.3355							
11														
12														

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 284 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
73	69 52.00 N	174 09.13 W	11 OCT 90	0942	-2.1	-2.9	990			180	16				54	RD06

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32461	32465
Temp.	6547	6555
Cond.	3654	8817

Times	JD/Time
Data on	0941
at Surface	0941
Start Down	0941
at Bottom	0942
Start Up	0942
at Surface	0946
Data Off	0948

Data Location
Floppy Number

Remarks
TAPE
START 00:10
END 06:18

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		49		0942	50.64	2.3329	32.9686							32.97511
2		40		0942	40.18	2.6843	32.7297							
3		35		0943	34.49	2.1880	32.2982							
4		30		0943	29.71	2.1536	32.2875							
5		25		0944	24.58	2.1538	32.2751							
6		20		0944	19.48	2.1675	32.2628							BOTTLE #6 LEAKED OUT
7		15		0945	14.26	2.1938	32.2412							
8		10		0945	9.98	2.1979	32.2394		✓					32.24767
9		5		0945	5.76	2.1938	32.2384							
10		SFC		0946	1.94	2.2041	32.2382							
11														
12														

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Ship: Surveyor — CHOEX-90 / ICE-90 — 44

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 284 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
74	70 04.6 N	173 17.8 W	11 Oct 90	11 50	-2.2	-3.2	990.2	4-5	10	185	08	—	—	—	49	RD07

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks	on Deck:	at Surface:
Press.	32461	32465
Temp.	6320	6664
Cond.	3250↓	9010

Times	JD/Time
Data on	1148
at Surface	1148
Start Down	1148
at Bottom	1150
Start Up	1150
at Surface	1153
Data Off	1155

Data Location: Floppy Number

Remarks: TAPE START 06:28 END 12:25

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		42		1150	42.94	2.624	32730		RD07 #1					32.73753
2		35		1151	34.73	2.605	32.709							
3		30		1151	30.77	2.570	32.075							
4		25		1151	25.39	2.649	31.974							
5		20		1152	19.45	2.644	31.971		RD07 #2					- bad leaker - 31.98585 use?
6		15		1152	14.69	2.642	31.968							- No trip -
7		10		1153	9.56	2.636	31.967							
8		5		1153	4.32	2.640	31.968							
9		Sfc.		1153	2.10	2.644	31.970							
10														
11														
12														

Ship: Surveyor

CHOEX-90/ ICE-90

36

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
75	70 17.2 N	172 26.3 W	110ct90	1355	-1.6	-2.0	91	3-5	10	155	07	—	—	—	41	RD08

CTD Type & SN: SEABIRD

Press. SN: 41681

Temp. SN: 1072

Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32461	32467
Temp.	6150	6608
Cond.	32081-21	8962

Times	JD/Time
Data on	1354
at Surface	1354
Start Down	1354
at Bottom	1355
Start Up	1355
at Surface	1358
Data Off	1400

Data Location: 990.7

Floppy Number

Remarks: Tape 12:34/ 17:05

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Sal ~~Cond.~~	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		35		1355	35.91	2.247	31.961							
2		30		1355	30.71	2.242	31.959							
3		25		1356	24.71	2.236	31.942							
4		20		1356	20.18	2.259	31.930							
5		15		1357	14.43	2.286	31.915		RD08 #1					31.93024
6	3 bottles	10		1357	—	—	—							Don't trust / trip 2 bottles here / No mark
7	3 depth	10		1357	9.59	2.287	31.911							
8		5		1358	6.11	2.282	31.910							
9		surf		1358	1.49	2.290	31.908							
10														
11														
12														

Ship: Surveyor

CHOEX-90/ICE-90

24

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
76	70 30.1 N	171 35.3 W	11 Oct 90	1556	-0.1	-0.5	991	2-3	10	110	04	—	—	—	29	R009

CTD Type & SN	SEABIRD	Monitor Checks on Deck:	at Surface:
Press. SN	41681	Press.	32462 / 32467
Temp. SN	1072	Temp.	6670 ↕ / 6607
Cond. SN	748	Cond.	3270 / 8960

Times	JD/Time
Data on	1555
at Surface	1555
Start Down	1555
at Bottom	1556
Start Up	1556
at Surface	1559
Data Off	1601

Data Location: 9910
Floppy Number

Remarks: tape 17:05/22:48

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	~~Cond.~~ Sal.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		22		1556	23.00	2.249	31.921		R009 #1					31.93620
2		15		1557	14.84	2.245	31.912							
3		10		1558	10.34	2.247	31.918							
4		5		1558	4.49	2.245	31.918							
5		5fc		1559	2.17	2.288	31.919							
6														
7														
8														
9														
10														
11														
12														

Ship: Surveyor

CHOEX-90 / ICE-90

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Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
77	70 33.3 N	170 29.3 W	10 Oct 90	17 57	+1.1	0.1	90	2-3	10	050	10	—	—		31	RJ01

CTD Type & SN: SEABIRD

Press. SN: 41681

Temp. SN: 1072

Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32463	32470
Temp.	6669	6494
Cond.	3270	8859

Times	JD/Time
Data on	1756
at Surface	1756
Start Down	1756
at Bottom	1757
Start Up	1757
at Surface	1759
Data Off	1801

Data Location: 990.1

Floppy Number

Remarks: Tape 22:54 / 26:22

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	~~Cond.~~ S.S.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		25			25.	1.528	31.816		RS01 #1					31.83214 bad so <Chl&C> out of program => no
2		20			20.	1.523	31.815							.mrk file (don't use)
3		15			15.	1.517	31.813							
4		10			10.	1.491	31.804							
5		5			5.	1.468	31.799							
6		5fr			3.	1.468	31.800							
7														
8														
9														
10														
11														
12														

2054 → 1154 42

1:40

Ship: Surveyor

CHOEX-90/ICE-90

31

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
78	70 36.1 N	169 29.6 W	1 Oct 90	2037	2.1	2.0	990	2-3	10	055	16	~	~		36	RJ02

CTD Type & SN	SEABIRD
Press. SN	41681
Temp. SN	1072
Cond. SN	748

Monitor Checks	on Deck:	at Surface:
Press.	32464	32469
Temp.	6634	6542
Cond.	3215	8894

Times	JD/Time
Data on	2036
at Surface	2036
Start Down	2036
at Bottom	2037
Start Up	2037
at Surface	2039
Data Off	2041

989.5

Data Location
Floppy Number

Remarks
tape 26:35 / 45 ?? how?
Cast

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		30		2037	30.79	1.803	31.717		RJ02 #1					31.73529
2		25		2037	24.64	1.805	31.716							
3		20		2038	19.39	1.800	31.715							
4		15		2038	15.42	1.799	31.714							
5		10		2038	10.19	1.800	31.714							
6		5		2039	4.36	1.801	31.713							
7		5R		2039	1.99	1.802	31.712							
8														
9														
10														
11														
12														

1445

Ship: Surveyor — ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 284 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
79	70 36.08 N	168 29.49 W	11 OCT 90	2239	3.0	2.7	89			068	19				37	RJ03

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32464	32470
Temp.	6893	6783
Cond.	3311	8962

Times	JD/Time
Data on	2238
at Surface	2238
Start Down	2238
at Bottom	2239
Start Up	2239
at Surface	2242
Data Off	2244

Data Location
Floppy Number

Remarks: TAPE START 00:10 END 05:25

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		32		2239	31.93	2.0960	31.7298							
2		30		2239	29.96	2.1119	31.7242							
3		25		2240	25.10	2.1617	31.7089		#1					31.72144
4		20		2240	19.96	2.2362	31.6943							
5		15		2241	14.93	2.2722	31.6828							
6		10		2241	9.66	2.3230	31.6640							
7		5		2242	5.08	2.3624	31.6474							
8		SFC		2242	2.00	2.3650	31.6465							
9														
10														
11														
12														

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 285 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
80	70 36.30 N	167 29.72 W	120 07 90	00 40	3.0	2.78	8			060	25				55	RJ04

CTD Type & SN	SEABIRD	Monitor Checks on Deck:		at Surface:	Times	JD/Time	Data Location Floppy Number	Remarks
Press. SN	41681	Press.	32466	32472	Data on	0039		TAPE
Temp. SN	1072	Temp.	6912	6708	at Surface	0039		START 05:35
Cond. SN	748	Cond.	3361	9003	Start Down	0039		END 11:41
					at Bottom	0040		
					Start Up	0040		
					at Surface	0044		
					Data Off	0046		

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		50		0040	49.46	3.2290	32.6255		#1					32.61941
2		40		0041	40.56	3.2125	32.6071							
3		35		0041	35.18	2.8159	31.5965							
4		30		0041	30.00	2.8084	31.5941							
5		25		0042	24.56	2.8075	31.5918							
6		20		0042	20.00	2.8081	31.5916							
7		15		0043	14.44	2.8064	31.5943							
8		10		0043	10.53	2.8075	31.5927		#2					31.58013
9		5		0043	5.23	2.8075	31.5927							
10		SFC		0044	3.41	2.8074	31.5933							
11														
12														

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 285 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
81	70 36.10 N	166 30.12 W	12 OCT 90	02 37	2.9	2.4	87			060	22				45	PJ05

CTD Type & SN	SEABIRD		
Press. SN	41681		
Temp. SN	1072		
Cond. SN	748		

Monitor Checks	on Deck:	at Surface:
Press.	32465	32470
Temp.	7188	6824
Cond.	3378	9031

Times	JD/Time
Data on	0236
at Surface	0236
Start Down	0236
at Bottom	0237
Start Up	0237
at Surface	0242
Data Off	0244

Data Location
Floppy Number

Remarks TAPE
START 11:51
END 19:51

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		40		0237	40.19	3.5146	32.5453		#1					32.48009
2		35		0238	35.26	3.6098	31.7353							
3		30		0239	29.95	3.7729	31.1766							
4		25		0239	25.14	3.8242	31.1652							
5		20		0240	19.99	3.7575	31.1340							
6		15		0240	14.95	3.6613	30.9588							
7		10		0240	9.54	3.6336	30.9066		#2					30.92092 ~~[illegible]~~
8		5		0241	5.66	3.6362	30.9091							
9		SFC		0242	3.13	3.6344	30.9069							
10														
11														
12														

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 285 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
82	70 28.18 N	165 29.69 W	12 OCT 90	0449	2.5	1.7	87			090	24				45	RJ06

CTD Type & SN: SEABIRD

Press. SN: 41681

Temp. SN: 1072

Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32464	32470
Temp.	7046	6858
Cond.	3413	8970

Times	JD/Time
Data on	0448
at Surface	0448
Start Down	0448
at Bottom	0449
Start Up	0449
at Surface	0453
Data Off	0455

Data Location

Floppy Number

Remarks

TAPE

START 20:00

END 26:28

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		40		0449	40.48	3.7504	32.3797		#1					32.266099
2		35		0450	34.66	4.0605	30.5831							
3		30		0450	29.95	4.0102	30.5032							
4		25		0451	24.91	4.0136	30.5081							
5		20		0451	19.68	4.0144	30.5070							
6		15		0452	15.50	4.0034	30.5007							
7		10		0452	10.38	4.0019	30.5017		#2					30.51757
8		5		0453	4.83	4.0025	30.5006							
9		SFC		0453	3.39	4.0038	30.5010							
10														
11														
12														

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 285 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
83	70 20.18 N	164 27.97 W	120 C 90	07 18	2.4	1.3	88			065	24				43	RJ07

CTD Type & SN	SEABIRD		
Press. SN	41681		
Temp. SN	1072		
Cond. SN	748		

Monitor Checks	on Deck:	at Surface:
Press.	32463	32470
Temp.	7062	6892
Cond.	3372	9002

Times	JD/Time
Data on	0717
at Surface	0717
Start Down	0717
at Bottom	0718
Start Up	0718
at Surface	0722
Data Off	0724

Data Location
Floppy Number

Remarks
TAPE
START 26:38
END 32:45

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		38		0718	39.30	3.8519	32.2457		#1					32.25530
2		35		0719	34.35	3.8535	32.2427							
3		30		0720	29.29	4.1316	30.3858							
4		25		0720	25.14	4.1311	30.3857							
5		20		0721	19.84	4.1308	30.3852							
6		15		0721	13.89	4.1292	30.3848							
7		10		0721	10.06	4.1287	30.3849		#2					30.39712
8		5		0722	4.38	4.1679	30.3854							
9		SFC		0722	3.91	4.1330	30.3854							
10														
11														
12														

Ship: Surveyor

CHOEX-90 / ICE-90

24

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 285 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
84	70 12.2 N	163 29.8 W	12 OCT 90		1.0	0.5	98	3-4	8-10	080	22				29	RJ08

CTD Type & SN: SEABIRD

Press. SN: 41681

Temp. SN: 1072

Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32464	32472
Temp.	6438	variable 6835 3
Cond.	3484	8902

Times	JD/Time
Data on	0931
at Surface	
Start Down	
at Bottom	
Start Up	
at Surface	
Data Off	

Data Location
Floppy Number

Remarks

TAPE
START 32:55
END 36:36

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		25		09.32	24.68	3.8773	31.1286							
2		20		09.32	19.31	3.7953	31.0664							
3		15		~~09.33~~										] trip at same depth 13 has bad nipple
4		13		09.33	14.44	3.8591	31.0060							
5		10		09.33	9.93	3.8287	30.9070		R508 #1					30.92309
6		5		09.34	4.69	3.8077	30.8631							
7		sfc		09.34	2.15	3.8678	30.8516							
8		sfc		09.34	1.85	3.8425	30.8579							
9														
10														
11														
12														

Ship: Surveyor

CHOEX-90/ ICE-90

18

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
85	70 51.5 N	159 25.7 W	12 Oct 90	1649	-1.6	-2.1	942	4		091	04	—	—		23	RK01 A

CTD Type & SN	SEABIRD		
Press. SN	41681		
Temp. SN	1072		
Cond. SN	748		

Monitor Checks	on Deck:	at Surface:
Press.	32462	32466
Temp.	6433	6599
Cond.	3286	8780

Times	JD/Time
Data on	1649
at Surface	1649
Start Down	1649
at Bottom	1649
Start Up	1649
at Surface	1651
Data Off	1653

Data Location: 9935
Floppy Number

Remarks: cassette 36:39 / 39:33

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Sal ~~Cond.~~	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		17		1649	16.80	2.046	30.500		R1001A #1					30.50352
2		10		1650	10.28	2.1108	30.488							
3		5		1650	4.94	2187	30.388							
4		SFC		1651	1.80	2.187	30.388							
5														
6														
7														
8														
9														
10														
11														
12														

Ship: Surveyor | CHOEX-90 / ICE-90 | 66

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
86	71 00.0	159 41.8	12 Oct 90	1806	-0.4	-0.4	994	1	4	155	04				71	12K01B

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32463	32469
Temp.	6579	6588
Cond.	3272	8834

Times	JD/Time
Data on	1805
at Surface	1805
Start Down	1805
at Bottom	1806
Start Up	1806
at Surface	1811
Data Off	1813

Data Location
Floppy Number

Remarks
Cassette
39:49 / 46:47

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		65		1806	64.35	2.6072	31.0551		BKOB #1					31.07518 .02 off
2		50		1807	50.00	2.5946	31.0531							
3		40		1808	39.99	2.5718	31.0484							
4		35		1808	34.37	2.5636	31.0474							
5		30		1808	29.70	2.5271	31.0397							
6		25		1809	24.77	2.2934	30.9746							
7		20		1809	19.83	2.1885	30.9399							
8		15		1810	14.24	2.1606	30.9310		RKOIB #2					30.95022 ? ~~[illegible]~~ .02 off
9		10		1810	9.63	2.1471	30.9277							
10		5		1810	4.36	2.1274	30.9234							
11		SSL		1811	2.26	2.1156	30.9193							
12														

Ship: Surveyor — CHOEX-90/ ICE-90 — 60

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
87	71 09.0 N	159 57.3 W	12 Oct 90		0.0	-0.1	951	1	<3	050	10				65	RR02A

CTD Type & SN	SEABIRD		
Press. SN	41681		
Temp. SN	1072		
Cond. SN	748		

Monitor Checks	on Deck:	at Surface:
Press.	32463.6	32468
Temp.	6276	6430
Cond.	3211	8677

Times	JD/Time
Data on	19 37
at Surface	19 37
Start Down	19 37
at Bottom	19 38
Start Up	19 38
at Surface	19 42
Data Off	19 44

Data Location
Floppy Number

Remarks
Tape 00:11/06:24

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		60		19.38	60.44	-0.4701	32.6881							
2		50		19.39	49.57	-0.4651	32.6852		RKOJA #1					32.70497
3		40		19.39	39.71	-0.3003	32.6121							
4		35		19.39	34.20	-0.2131	32.5760							
5		30		19.40	29.27	0.8790	31.1197							
6		25		19.40	24.23	1.2968	30.7459							
7		20		19.41	19.19	1.2352	30.7065							
8		15		19.41	15.21	1.1608	30.6743							
9		10		19.41	9.19	1.0151	30.6182							
10		5		19.42	4.99	1.0103	30.6169		RKOJA #2					30.63443
11		Sfc		19.42	2.28	1.0164	30.6184							
12														

Ship: Surveyor

CHOEX-90 / ICE-90

47

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
88	71 18.2 N	160 13.1 W	20 Oct 90	20 59	-0.5	-0.79	951	1	10	050	10				52	RKO 213

CTD Type & SN: SEABIRD

Press. SN: 41681

Temp. SN: 1072

Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32463	32469
Temp.	6259	6349
Cond.	3217	8610

Times	JD/Time
Data on	2058
at Surface	2058
Start Down	2058
at Bottom	2059
Start Up	2059
at Surface	2102
Data Off	2104

Data Location: 995.3

Floppy Number:

Remarks: Cassette 06:32 / 12:01

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	~~Cond.~~	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		45		2059	46.85	-0.870	32.8996		R16078 #1					~~30.60909~~ 32.91590
2		40		2059	39.58	-0.871	32.898							
3		35		2100	34.46	-0.871	32.898							
4		30		2100	29.52	-0.872	32.898							
5		25		2101	24.84	-0.675	32.786							
6		20		2101	18.93	0.573	30.602							
7		15		2101	14.13	0.5533	30.596							
8		10		2102	9.62	0.4544	30.5802		R16078 #2					30.60909
9		5		2102	4.33	0.4594	30.5791							
10		SFC		2102	2.73	0.4590	30.5809							
11														
12														

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 285 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
89	71 36.22 N	160 44.53 W	12 OCT 90		-2.2	-2.6	97			038	10				51	RK03

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks	on Deck:	at Surface:
Press.	32461	32467
Temp.	6348	6273
Cond.	3207	8525

Times	JD/Time
Data on	2258
at Surface	2258
Start Down	2259
at Bottom	2259
Start Up	2259
at Surface	2303
Data Off	2305

Data Location
Floppy Number

Remarks: TAPE START 12:10 END 18:04

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		46		2259	45.12	-1.0760	32.9524							
2		40		2300	39.55	-1.0761	32.9514		#1					32.97107
3		35		2300	34.60	-1.0756	32.9508							
4		30		2301	29.78	-1.0753	32.9510							
5		25		2301	25.15	-1.0186	32.9036							
6		20		2301	19.23	-0.1015	30.5469							
7		15		2302	14.98	-0.0293	30.5418							
8		10		2302	10.07	-0.0150	30.5407		#2					30.56014
9		5		2303	5.24	-0.0304	30.5370							
10		SFC		2303	2.74	-0.0337	30.5358							
11														
12														

1705

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 286 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
90	71 54.20 N	161 15.92 W	13 OCT 90	01 17	-3.8	-4.0	998			015	10				41	RX04

CTD Type & SN	SEABIRD		
Press. SN	41681		
Temp. SN	1072		
Cond. SN	748		

Monitor Checks	on Deck:	at Surface:
Press.	32460	32466
Temp.	6293	6167
Cond.	3341	8427

Times	JD/Time
Data on	0116
at Surface	0116
Start Down	0116
at Bottom	0117
Start Up	0117
at Surface	0121
Data Off	0123

Data Location
Floppy Number

Remarks
TAPE
START 18:14
END 23:43

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		35		0117	34.84	-0.7001	32.7457							
2		30		0118	29.98	-0.7273	32.7237		#1					32.74403
3		25		0118	24.82	-0.8938	32.6482							
4		20		0119	19.82	-0.7027	30.6565							
5		15		0119	15.28	-0.7131	30.6496							
6		10		0120	10.05	-0.7161	30.6459		#2					30.63265
7		5		0120	4.91	-0.7182	30.6457							
8		SFC		0121	2.00	-0.7189	30.6165							
9														
10														
11														
12														

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 286 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
91	72 12.02 N	161 46.61 W	13 OCT 90	0309	-4.4	-4.8	998			004	14				35	RK05

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32460	32465
Temp.	6521	6204
Cond.	3531	8447

Times	JD/Time
Data on	0308
at Surface	0308
Start Down	0308
at Bottom	0309
Start Up	0309
at Surface	0313
Data Off	0315

Data Location
Floppy Number

Remarks
TAPE
START 23:53
END 27:06

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		30		0309	29.96	-0.6556	32.7542		#1					32.70464
2		25		0310	24.99	-0.6196	32.7005							
3		20		0310	20.12	-0.5436	30.4818							
4		15		0311	15.11	-0.5483	30.4587							
5		10		0312	9.98	-0.4774	30.3020							
6		5		0312	5.08	-0.4812	30.2904		#2					BOTTLE #6 LEAKED DURING RECOVERY
7		SFC		0313	3.14	-0.4690	30.2877							
8														
9														
10														
11														
12														

940

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 286 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
92	72 29.93 N	162 17.5 W	13 Oct 90	05 31	-3.7	-4.5	00			350	10				41	RK06

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks	on Deck:	at Surface:
Press.	32460	32465
Temp.	6566	6227
Cond.	3535	8510

Times	JD/Time
Data on	0530
at Surface	0530
Start Down	0530
at Bottom	0531
Start Up	0531
at Surface	0535
Data Off	0537

Data Location
Floppy Number

Remarks
TAPE
START 29:16
END 34:40

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		35		0531	35.32	-0.9176	32.7566							
2		30		0532	29.61	0.0857	31.3454							
3		25		0532	24.93	0.0065	31.2060							
4		20		0533	19.92	-0.1113	30.9944							
5		15		0533	14.73	-0.2130	30.8220							
6		10		0534	10.13	-0.3828	30.7130							
7		5		0534	5.12	-0.4229	30.6953		✓					30.71 0660
8		SFC		0535	3.37	-0.4227	30.6977							
9														
10														
11														
12														

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 286 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
93	72 48.05 W	162 48.57 W	13 Oct 90	07 54	-4.5		01			010	10				64	RK07

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks	on Deck:	at Surface:
Press.	32460	32464
Temp.	6049	6248
Cond.	3257	8613

Times	JD/Time
Data on	0753
at Surface	0753
Start Down	0753
at Bottom	0754
Start Up	0754
at Surface	0759
Data Off	0801

Data Location
Floppy Number

Remarks
TAPE START 34:50
END 41:43

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		59		0754	59.11	-1.2461	32.9217							
2		50		0755	49.62	-1.2470	32.9209		#1					32.93908
3		40		0756	39.48	-1.4473	32.6599							
4		35		0756	34.86	-0.0201	31.7672							
5		30		0757	29.42	0.1031	31.7509							
6		25		0757	24.33	0.0871	31.7337							
7		20		0757	19.36	0.0006	31.6937							
8		15		0758	14.70	-0.0768	31.6400							
9		10		0758	10.05	-0.1198	31.6112		#2					31.63492
10		5		0759	4.34	-0.1321	31.6092							
11		4C		0759	2.49	-0.0603	31.6089							
12														

120 110 100 90 80 70 60 50 40 35 30 25 20 15 10 5 0

Ship: Surveyor | **ICE** | 118

Consec. Cast #	Latitude Deg.	Latitude Min.	Longitude Deg.	Longitude Min.	Date JD = Day	Mo.	Yr.	Time, GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
94	73	06.2	163	19.9	130	06	90	10	42	-5.3	—	02	1-2	8-10	345	15				123	R K Ø 8

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32460	32465
Temp.	5810	6223
Cond.	3259	8586

Times	JD/Time
Data on	1039
at Surface	1039
Start Down	1039
at Bottom	1042
Start Up	1042
at Surface	1048
Data Off	1050

Data Location
Floppy Number

Remarks: tape 00:10/11:26

NO Seacat

Rest 1/deep

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nul.	Chl.	Comments
1		120		1042	118.67	-0.4681	34.3888							
2		100		1043	99.62	-0.8624	34.0102							
3		80		1044	80.51	-1.5180	33.2461		RKO8 #1					33.266005
4		70		1045	70.07	-1.5184	33.1670							
5		60		1045	60.20	-1.5678	32.8130							
6		50		1046	50.61	-1.5583	32.4701							
7		40		1046	40.26	-0.5032	31.8692							
8		35		1047	34.70	-0.1697	31.4539							
9		30		1047	30.03	-0.1743	31.3901							
10		25		1048	24.77	-0.1851	31.3790							
11		20		1048	20.16	-0.1860	31.3730		RKO8 #2					poss. not good site 31.392260
12														

RK09 73° 24' 163° 50'
RK10 73 42 164 21

Ship: Surveyor

ICE

115

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
95	73 06.4 N	163 21.1 W	130 09	1110	-5.3	—	02	1-2	6	350	19	—			120	RK08B

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32461	32465
Temp.	6052	6205
Cond.	3322	8576

Times	JD/Time
Data on	1108
at Surface	1108
Start Down	1108
at Bottom	1110
Start Up	1110
at Surface	1114
Data Off	1116

Data Location
Floppy Number

Remarks Tape
11:26 / 18:59
Seacat on / cast to 100m
2nd Cast Same Pos as 94

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		100		1110	102.85	-0.9199	33.9592							
2		50		1112	50.47	-1.5551	32.4915		RK08B #1					32.49028
3		20		1113	20.36	-0.1998	31.3670							
4		15		1113	15.32	-0.2306	31.3608							
5		10		1114	10.21	-0.4351	31.2932		RK08B #2					31.34423
6		5		1114	4.99	-0.4437	31.2930							
7		Sfc.		1114	1.93	-0.4485	31.2948							
8														
9														
10														
11														
12														

Ship: Surveyor | CHDEX-90 / ICE-90 | 87

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
96	73 24.2 N	163 50.4 W	130 06 90		-5.8	—	021	1	6-8	350	10	~	~		92	RK09

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32461	32465
Temp.	6643	6180
Cond.	3651 ↓	8442

just off pump

Times	JD/Time
Data on	1325
at Surface	1325
Start Down	1325
at Bottom	1326:52
Start Up	1327
at Surface	1331
Data Off	1333

1002.4
Data Location
Floppy Number

Remarks: tape! 18:59/27:03

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	~~Cond.~~ Sal.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		85		1326	85.34	-1.5918	33.2669		RK09 #1					33.28510
2		70		1327	70.01	-1.5940	33.2578							—No trip—
3		50		1328	50.00	-1.5876	32.3628							
4		40		1328	40.17	-1.3966	32.0934							
5		30		1329	30.59	-0.5466	31.5548							
6		25		1329	25.35	-0.3764	31.0823							
7		20		1330	20.35	-0.3688	30.9301							
8		15		1330	14.94	-0.5197	30.7703							
9		10		1330	9.59	-0.6470	30.5290						✓	
10		5		1331	5.00	-0.7861	30.2552		RK09 #2					(Not great grad) 30.37122
11		Sfc		1331	1.76	-0.7824	30.2541							
12														

✓

170 150 125 100 80 60 50 40 35 30 25
170

Ship: Surveyor — CHOEX-90 / ICE-90 — 171

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
97	73 42.0 N	164 21.9 W	13 Oct 90		-6.2	--	03	1	6	350	12	--		176	RK10

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks — on Deck / at Surface:
Press. 32461 / 32466
Temp. 6200 ↓ / 6090
Cond. 3343 ↓ / 8262
just off pump

Times — JD/Time:
Data on 1542
at Surface 1542
Start Down 1542
at Bottom 1545
Start Up 1545
at Surface 1552
Data Off 1554

Data Location
Floppy Number

Remarks
Tape: 27:03 / 38:29
1st Cast: no Seacat

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Sal ~~Cond.~~	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		170		1545	170.96	-0.2579	34.5235		RK10 #1					3454114 (Near pancake ice but main ice pack not yet present).
2		150		1546	148.77	-0.5163	34.3602							
3		125		1547	124.35	-1.0917	33.8878							
4		100		1548	100.12	-1.6326	33.3450							
5		80		1549	79.24	-1.6270	32.9657		RK10 #2					32.95718
6		60		1549	59.79	-1.5818	32.3069							
7		50		1550	50.05	-1.4507	32.0453							
8		40		1550	40.50	-0.1329	31.2634							
9		35		1551	35.05	0.7932	30.5548							
10		30		1551	30.53	1.2873	30.1486							
11		25		1552	25.75	-0.9445	29.6237							
12														

Ship: Surveyor

CHOEX-90 / ICE-90

172

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
98	73 42.0 N	164 21.9 W	13 Oct 90		-6.2	--	031	1	6	350	12	~	~		177	2K1013

CTD Type & SN: SEABIRD

Press. SN: 41681

Temp. SN: 1072

Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32461	32466
Temp.	6184	6124
Cond.	3398	8289

Times	JD/Time
Data on	16 10
at Surface	
Start Down	
at Bottom	
Start Up	
at Surface	
Data Off	

Data Location: 1002.2

Floppy Number

Remarks: Tape 00:13 / 07:15

2nd Cast w/ Seacat

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		100		1611	100.47	-1.6155	33.3502		RK105 #1					33.3626 215 (No good S stat)
2		50		1612	49.41	-1.4203	31.9739							
3		25		1613	25.30	-0.9557	29.6264							
4		20		1614	20.12	-1.0259	29.5654							
5		15		1614	15.00	-1.0896	29.4494							
6		10		1615	10.16	-1.1503	29.3470							
7		5		1615	4.75	-1.3110	29.2368							
8		Sfc		1615	1.82	-1.2150	29.2370							- No trip -
9														
10														
11														
12														

Ship: Surveyor — CHOEX-90/ICE-90

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 286 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
99	73 58.53 N	165 11.71 W	13 Oct 90	22 47	-6.1	+.+	05			330	08				181	RK11

CTD Type & SN	SEABIRD		
Press. SN	41681		
Temp. SN	1072		
Cond. SN	748		

Monitor Checks	on Deck:	at Surface:
Press.	32462	32466
Temp.	6630	6049
Cond.	3538	8286

Times	JD/Time
Data on	2243
at Surface	2243
Start Down	2243
at Bottom	2247
Start Up	2247
at Surface	2256
Data Off	2258

Data Location
Floppy Number

Remarks
176 ALSO RI01
tape 7:22
END 22:20
Cast 1: to depth: no Seacat

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments: At ice edge
1		175		2247	173.90	-0.4535	34.3963							
2		150		2248	149.50	-0.9650	33.9821							
3		125		2250	125.57	-1.6070	33.3471		#1					33.33012
4		100		2251	99.93	-1.6353	33.0479							
5		80		2252	79.48	-1.6254	32.6209							
6		60		2253	59.74	-1.0678	32.0855							
7		50		2253	49.95	0.3009	31.3212							
8		40		2254	40.30	0.8720	30.694		#2					30.70531
9		35		2255	34.80	1.1319	30.1609		#3					30.24751
10		30		2255	29.92	0.9098	29.9987							
11		25		2256	25.18	-0.0847	29.5031							
12														

155
170

113 115 117 119-127

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 286 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
100	73 58.27	165 12.38	30 OCT 90	2328	-6.1	--	95			330	08				180	RK11B

CTD Type & SN	SEABIRD		
Press. SN	41681		
Temp. SN	1072		
Cond. SN	248		

Monitor Checks	on Deck:	at Surface:
Press.	32462	32467
Temp.	6035	6032
Cond.	3174	8295

Times	JD/Time
Data on	2326
at Surface	2320
Start Down	2320
at Bottom	2328
Start Up	2328
at Surface	2332
Data Off	2335

Data Location
Floppy Number

Remarks TAPE
START 22:30
END 2505
RESTART 2215
END 33:36

2nd CAST AT ICE EDGE

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		100		2328	99.83	-1.6092	33.0854		#1					33.05073 First Attempt At CAST - Frozen instruments
2		25		2330	25.39	-0.3921	29.5305							RESTART - First 10m still suspect
3		20		2330	20.11	-1.0310	29.3611							
4		15		2331	15.12	-0.7696	29.2526		#~					29.26082
5		10		2331	10.21	-1.1338	28.9993							
6		5		2332	5.11	-1.5035	28.7968							
7		SFC		2332	1.97	-1.4150	28.7770							
8														
9														
10														
11														
12														

95
98
100

165.5

Ship: Surveyor | **ICE**

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 287 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
101	73 45.07N	165 31.10W	14 OCT 90	01 37	-3.8	-4.2	06			04	06				135	RI02

CTD Type & SN: SEABIRD	Monitor Checks on Deck: / at Surface:	Times / JD/Time	Data Location / Remarks
Press. SN: 41681	Press.: 32461 / 32465	Data on: 0135	Floppy Number:
Temp. SN: 1072	Temp.: 6385 / 6079	at Surface: 0135	Remarks: TAPE START 33:46 END 42:58
Cond. SN: 748	Cond.: 3816 / 8233	Start Down: 0135	
		at Bottom: 0137	
		Start Up: 0137	
		at Surface: 0143	
		Data Off: 0145	1st CAST

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		138		0137	130.37	-0.9612	34.6419							
2		125		0138	125.47	-1.3249	33.6841							
3		100		0139	100.28	-1.6665	33.3192		#1					33.305 06
4		80		0139	80.19	-1.6266	33.0330							
5		60		0140	59.67	-1.5672	32.4465							
6		50		0140	49.75	-1.5158	32.2110							
7		40		0141	40.15	-0.3532	31.0886							
8		35		0141	34.76	0.6797	30.3675							
9		30		0142	29.18	-0.7410	29.8062							
10		25		0142	25.36	-0.8119	29.7784		#2					29.82947
11		20		0143	19.92	-0.8746	29.7483							
12														

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 287 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
10	7344.95N	1653411W	140790	2222	-4.2	-5.0	06			340	04				135	RI02B

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32461	32465
Temp.	6201	6062
Cond.	3227	8212

Times	JD/Time
Data on	0221
at Surface	0221
Start Down	0221
at Bottom	0222
Start Up	0222
at Surface	0226
Data Off	0228

Data Location
Floppy Number

Remarks TAPE
START 00:10
END 07:42

2nd CAST

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		100		0222	100.05	-1.6654	33.3367		✓					33.33449
2		20		0224	20.05	-0.8725	29.7380							
3		15		0225	14.69	-0.9778	29.5490							
4		10		0225	9.78	-1.1358	29.4365							
5		5		0226	5.38	-1.4995	28.9690		✓					29.18387 off
6		SFC		0226	2.11	-1.4938	28.9558							
7														
8														
9														
10														
11														
12														

✓

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 287 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
103	73 29.89 N	166 01.19 W	14 OCT 90	0432	-4.5	-5.1	06			308	05				93	RI03

CTD Type & SN	SEABIRD	Monitor Checks on Deck:	at Surface:
Press. SN	41681	Press. 32461	32461
Temp. SN	1072	Temp. 6038	6350
Cond. SN	748	Cond. 5425	3197

Times	JD/Time
Data on	0430
at Surface	0430
Start Down	0430
at Bottom	0432
Start Up	0432
at Surface	0437
Data Off	0441

Data Location
Floppy Number

Remarks TAPE START 07:52 END 16:31

CAST 1

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		88		0432	86.47	-1.3148	33.6786							TOP 25m SUSPECT DUE to icing
2		80		0433	80.38	-1.5723	33.2715							
3		70		0434	70.09	-1.5457	33.2349		#1					33.24988
4		60		0435	59.61	-1.5329	33.2047							
5		50		0435	49.31	-1.6038	32.9492							
6		40		0436	39.94	-1.5103	32.4824		#2					32.50451
7		35		0436	35.28	-1.4229	32.3849							
8		30		0437	29.91	-0.4433	31.9477							
9		25		0437	24.57	-0.0864	31.6921							
10		20		0438	20.44	-0.1018	31.598							
11		15		0438	15.30	-0.1750	31.4180							
12														

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 287 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
104	73 29.65 N	166 02.27 W	14 Oct 90	05 04	-4.1	-4.3	06			320	06				91	RIØ3B

CTD Type & SN	SEABIRD
Press. SN	41681
Temp. SN	1072
Cond. SN	748

Monitor Checks	on Deck:	at Surface:
Press.	32461	32467
Temp.	6030	6045
Cond.	3186	8479

Times	JD/Time
Data on	0502
at Surface	0502
Start Down	0502
at Bottom	0504
Start Up	0504
at Surface	0507
Data Off	0509

Data Location
Floppy Number

Remarks
TAPE
START 16:41
END 22:25

CAST 2

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		86		0504	84.53	-1.4118	33.5776							UPPER 25m SUSPECT DUE TO FREEZING
2		15		0506	15.51	-0.2032	31.4043							
3		10		0506	9.96	-0.1895	31.2198							
4		5		0507	5.04	-1.1389	30.6047							
5		SFC		0507	2.63	-1.1905	30.5622							
6														
7														
8														
9														
10														
11														
12														

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 287 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
105	73 15.07 N	166 30.71 W	140 07 90	07 36	-6.0	-.-	07			330	18				66	RI04

CTD Type & SN	SEABIRD		
Press. SN	41681		
Temp. SN	1072		
Cond. SN	748		

Monitor Checks	on Deck:	at Surface:
Press.	32465	32470
Temp.	6276	6186
Cond.	3858	8607

Times	JD/Time
Data on	0734
at Surface	0734
Start Down	0734
at Bottom	0736
Start Up	0736
at Surface	0741
Data Off	0743

Data Location
Floppy Number

Remarks
TAPE
START 22:35
END 30:44

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		60		0736	61.33	-1.3633	33.0823							
2		50		0736	49.95	-1.5219	32.6615							
3		40		0737	39.65	-0.8858	32.1200							
4		35		0738	35.05	0.2075	31.9311		#1					31.94812
5		30		0738	30.14	0.2968	31.9237							
6		25		0738	25.18	0.2203	31.8857							
7		20		0739	19.81	-0.1005	31.8181							
8		15		0739	15.01	-0.5480	31.6946							
9		10		0740	10.08	-0.5629	31.6936		#2					31.70754
10		5		0740	5.27	-0.5613	31.6935							
11		SFC		0741	2.39	-0.5644	31.6931							
12														

145 738 1685 to same

Ship: Surveyor — CHOEX-90/ICE-90 — 54

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 287 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
106	72 59.9 N	167 00.2 W	14 OCT 90	0951	-5.8	—	08	1	10	323	13				59	RI05

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks — on Deck / at Surface:
Press. 32466 / 32472
Temp. 6200↓ / 6379 (not off pump)
Cond. 3400↓ / 8784

Times	JD/Time
Data on	950
at Surface	950
Start Down	950
at Bottom	951
Start Up	952
at Surface	956
Data Off	958

Data Location 1007.6
Floppy Number

Remarks: TAPE START 30:54 END 37:16 54

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		55		0951	53.45	-1.2383	32.9874		RI05 #1					32.97666
2		50		0952	49.77	-1.2409	32.9859							
3		40		0952	39.96	-1.1009	32.7421							
4		35		0953	35.03	0.6559	31.9620							
5		30		0953	30.24	0.6297	31.9551							leaker — swap out or fix
6		25		0954	25.14	0.6140	31.9494							
7		20		0954	20.48	0.6238	31.9475		RI05 #2					31.95791
8		15		0954	15.01	0.6542	31.9404							
9		10		0955	10.19	0.6504	31.9419							
10		5		0955	5.24	0.6420	31.9400							
11		5sc		0956	2.16	0.7433	31.9388							
12														

Ship: Surveyor — cttoex-90 / ICE-90 — 67

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
107	73 14.9 N	167 30.1 W	140 ct 90	1159	-6.2	—	08	1	10	005	13	~	~		72	RI06

CTD Type & SN	SEABIRD	Monitor Checks on Deck:	at Surface:
Press. SN	41681	Press.	32464 / 32469
Temp. SN	1072	Temp.	6421 / 6176
Cond. SN	748	Cond.	3800 / 8563

Times	JD/Time
Data on	1157
at Surface	1157
Start Down	1157
at Bottom	1159
Start Up	1159
at Surface	1204
Data Off	1206

Data Location: 1007.9 Floppy Number

Remarks: tape start 37:16 end 45:14

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	~~Cond.~~ Sal	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		68		1159	68.49	-1.4736	33.2311							
2		60		1200	59.75	-1.4378	33.1892		RI06 #1					33.20986
3		50		1200	49.85	-1.3333	33.0018							
4		40		1201	39.97	-1.6147	32.4235							
5		30		1202	30.25	0.1100	31.9829		RI06 #2					32.00225
6		25		1202	25.51	0.1267	31.9859							
7		20		1202	19.80	0.1044	31.9525							
8		15		1203	14.73	-0.1587	31.8251							
9		10		1203	9.87	-0.4515	31.6672							
10		5		1204	5.18	-0.7691	31.3551							
11		Sfc		1204	2.60	-0.7493	31.3602							
12														

Ship: Surveyor | CHOEX-90 / ICE-90 | 114

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
108	73 30.1 N	168 00.7 W	140 Oct 90	1402	-6.3	—	08	1-2	8-10	343	11	—	—		119	R107

CTD Type & SN	SEABIRD
Press. SN	41681
Temp. SN	1072
Cond. SN	748

Monitor Checks	on Deck:	at Surface:
Press.	32463	32469
Temp.	6213	6153
Cond.	3302	8425

Times	JD/Time
Data on	13 60
at Surface	13 60
Start Down	13 60
at Bottom	14 02
Start Up	14 02
at Surface	14 07
Data Off	14 09

Data Location
Floppy Number

Remarks
tape: 00:11 / 08:50

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		110		14.02	111.13	-0.8763	34.0518		R107 #4					No good salinities 34.04890
2		100		14.02	99.41	-1.4773	33.2584							
3		80		14.03	80.07	-1.4558	33.1081							
4		70		14.04	69.88	-1.6196	32.6027							
5		60		14.04	59.87	-1.4595	32.2943							
6		50		14.04	49.33	-0.2584	31.7000							
7		40		14:05	39.93	-0.2717	31.5851							
8		35		14.05	35.48	-0.2697	31.4831							
9		30		14.06	30.44	-0.2711	31.4848							
10		25		14.06	25.60	-0.2334	31.1904							
11		20		14.07	19.99	-0.4724	30.9979							
12														

Ship: Surveyor — CHOEX-90 / ICE-90 — 114

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
109	73 29.9 N	168 01.7 W	14 Oct 90	1425	-5.8	~	08	1-2	8-10	346	08	~			119	RI07B

CTD Type & SN	SEABIRD	Monitor Checks on Deck:	at Surface:
Press. SN	41681	Press.	32462 / 32468
Temp. SN	1072	Temp.	6376 / 6137
Cond. SN	748	Cond.	3801 / 8421

Times	D/Time
Data on	1423
at Surface	1423
Start Down	1423
at Bottom	1425
Start Up	1425
at Surface	1429
Data Off	1431

Data Location: 1008.3
Floppy Number

Remarks: TAPE 08:50 / 15:02

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	~~Cond.~~ Sal	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		100		1425	100.56	-1.4160	33.4019							
2		20		1427	20.41	-0.5254	30.9532							
3		15		1427	14.32	-0.3526	30.8666							
4		10		1428	9.88	-0.3998	30.8450							
5		5		1428	5.11	-0.9737	30.2991		RT 18 D/					30.31289
6		SFC		1429	2.40	-0.9623	30.2977							
7														
8														
9														
10														
11														
12														

✓

Ship: Surveyor — CHOEX-90 / ICE-90 — 150

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
11	07 34.9 N	168 30.3 W	14 Oct 90	17 09	-5.0	~	09	1	8	350	10	~	~		155	RI/8

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32465	32469
Temp.	6163	6077
Cond.	3354	8177

Times	JD/Time
Data on	17 07
at Surface	17 07
Start Down	17 07
at Bottom	17 09
Start Up	17 09
at Surface	17 15
Data Off	17 17

Data Location: 1008.9
Floppy Number

Remarks: TAPE 15:02 / 24:37

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments: Didn't reset counter; Started
1		145		17 09	146.84	-0.2454	34.5159		RS08 #1					~~7~~ Only one good ~~d2~~ ds w/ 7
2		125		17 10	125.93	-0.8742	34.0379							~~8~~
3		100		17 11	99.41	-1.6023	33.2363							~~9~~
4		80		17 11	80.13	-1.6308	32.8000							~~10~~
5		70		17 12	69.96	-1.5834	32.5590							~~11~~
6		60		17 12	60.09	-1.5169	32.3445							~~12~~ No trip
7		50		17 13	50.20	-1.3179	31.9606	—						~~1~~ 32.11271 prob not good site
8		40		17 13	39.97	-1.0004	31.5580							2
9		35		17 14	35.26	-0.7304	31.2490							3
10		30		17 14	30.55	-0.4484	30.9125							4
11		25		17 15	25.24	1.3849	30.3756						✓	5
12														

~~Possibly~~ Probably started w/ bottle 7 not 1? ✓

Ship: Surveyor — CHOEX-90 / ICE-90 — 15Y

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
111	73 44.9 N	168 30.3 W	14 Oct 90	17 34	-5.0	—	091	8	35	10	10	—			159	RJ08B

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks — on Deck / at Surface:
Press. 32465 / 32469
Temp. 6160 / 6078
Cond. 3562 / 8175

Times	JD/Time
Data on	1733
at Surface	1733
Start Down	1733
at Bottom	1734
Start Up	1734
at Surface	1739
Data Off	1741

Data Location: 1008.9
Floppy Number

Remarks: TAPE 21:37/

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Sal ~~Cond.~~	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Bottles	Comments
1		100		1734	99.86	-1.6348	33.2771							6	
2		60		1735	60.11	-1.5577	32.3888							7	
3		25		1736	25.31	1.1361	30.3669		RJ08 #1					8	30.34318
4		20		1737	20.23	-0.3843	29.1056							9	
5		15		1737	14.41	-1.5084	28.6213		RJ08B #2					10	28.66581
6		10		1738	10.04	-1.5058	28.6107							11	
7		5		1738	5.48	-1.5106	28.5761							12	— No trip —
8		S/C		1739	2.19	-1.5052	28.5781							1	
9															- 7 bottles trapped -
10															Didn't reset counter before cast
11															
12															

~~165~~ ~~150~~ ~~125~~ ~~100~~
~~80~~ ~~70~~ ~~60~~ ~~50~~ ~~40~~ ~~35~~ ~~30~~

Ship: Surveyor — CHOEX-90/ICE-90

169

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
112	73 54.4 N	168 37.3 W	140 CE 90	2000	-3.9	—	1018	0	0	0	10	—	—		174	12109

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32464	32469
Temp.	5836	6072
Cond.	3201	81150

~2 min off pump

Times	JD/Time
Data on	1956 (30)
at Surface	1956
Start Down	1957
at Bottom	2000
Start Up	2000
at Surface	2006
Data Off	2008

1009.5
Data Location
Floppy Number

Remarks
tape 31/32/42?
Also RHOJ
propwash at Surface

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	~~Cond.~~ Sal	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		165		2000	166.44	-0.4709	34.3755		12109 #1					Only good site 34.39071
2		150		2001	148.96	-0.8013	34.1148							
3		125		2002	125.12	-1.6094	33.3760							
4		100		2003	99.72	-1.5946	33.0607							
5		80		2004	79.68	-1.5600	32.6593							
6		70		2004	70.40	-1.4951	32.5737							
7		60		2005	59.87	-1.5065	32.3551							
8		50		2005	49.96	-1.2792	31.9586							
9		40		2006	39.34	-0.3659	30.9573							
10		35		2006	34.78	0.8960	30.4953							
11		30		2006	29.65	-0.2149	29.1071							
12														

Ship: Surveyor — CTD68-90 / ICE-90

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
11	73 54.3 N	168 38.1 W	14 Oct 90	2023	-4.3	—	1018	0	0	0	10	—			1174	RE096

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32467	32468
Temp.	62427	60777
Cond.	3460	8167

Times	JD/Time
Data on	2021
at Surface	2021
Start Down	2021
at Bottom	2023
Start Up	2023
at Surface	2027
Data Off	2029

Data Location: 100.9 b
Floppy Number

Remarks: tape 001:11/07:19

— Seacat on —
— Cast to 100 m —

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	~~Cond.~~ Sal.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		100		2023	100.78	-1.6089	33.0798							
2		30		2025	30.88	-0.2046	29.1355							
3		25		2025	24.29	-1.4507	28.5089							
4		20		2026	20.03	-1.4070	28.4919							
5		15		2026	14.94	-1.5059	28.4677							
6		10		2026	10.65	-1.5324	28.4514		12K046 41					28.46971
7		5		2027	5.80	-1.5333	28.4511							
8		SFC		2027	2.46	-1.5361	28.4483							
9														
10														
11														
12														

1570

Ship: Surveyor — CHOEX-90 / ICE-90

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 287 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
114	73 50.19 N	169 00.08 W	14 Oct 90	22 19	-4.2	-.-	10			342	11				162	RH02

CTD Type & SN	SEABIRD		
Press. SN	41681		
Temp. SN	1072		
Cond. SN	748		

Monitor Checks	on Deck:	at Surface:
Press.	32464	32469
Temp.	6378	6086
Cond.	3340	8201

Times	JD/Time
Data on	2216
at Surface	2216
Start Down	2216
at Bottom	2219
Start Up	2219
at Surface	2228
Data Off	2230

Data Location
Floppy Number

Remarks
(RI09 was also RH01)
Tape 07:26 / 20:45
CAST 1

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		157		2219	153.29	-0.3814	34.4289							
2		150		2220	150.39	-0.3814	34.4293		#1					34.44988
3		125		2221	125.44	-1.4725	33.5328							
4		100		2222	100.01	-1.6156	33.1012							
5		80		2223	80.16	-1.5778	32.6366							
6		60		2224	60.37	-1.4524	32.2292		#2					31.97755
7		50		2225	50.24	-1.2387	31.8574							
8		40		2226	40.33	0.0544	30.9095							
9		35		2226	35.11	-0.5489	30.4374							
10		30		2227	29.78	-0.7667	30.0233							
11		25		2227	24.73	-1.0910	29.6928							
12														

152-5
137.20

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 287 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
115	73 50.31 N	169 00.55 W	14 OCT 90	22 53	-4.2	—	10			00	13				162	RH02B

CTD Type & SN: SEABIRD	Monitor Checks on Deck: / at Surface:	Times / JD/Time	Data Location / Remarks
Press. SN: 41681	Press. 32463 / 32467	Data on 2250	Floppy Number
Temp. SN: 1072	Temp. 6364 / 6079	at Surface 2250	TAPE
Cond. SN: 748	Cond. 3237 / 8196	Start Down 2250	START 20:55
		at Bottom 2253	END 29:52
		Start Up 2253	
		at Surface 2258	
		Data Off 2300	CAST 2

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		100		2253	99.94	-1.6167	33.0801							
2		30		2255	29.96	-0.8722	30.1092							
3		25		2256	24.89	-1.0854	29.7636							
4		20		2256	19.93	-0.9100	29.6654		#1					29.69442
5		15		2257	14.80	-1.3128	29.0673							
6		10		2257	9.84	-1.4908	28.8931							
7		5		2257	5.10	-1.5373	28.6967		#2					28.70887
8		SFC		2258	1.81	-1.5286	28.6891							
9														
10														
11														
12														

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 288 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
116	73 39.97 N	169 01.46 W	15 OCT 90	0032	-4.3	--	10			351	11				142	PH03

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks	on Deck:	at Surface:
Press.	32465	32469
Temp.	6275	6093
Cond.	3679	8220

Times	JD/Time
Data on	0029
at Surface	0029
Start Down	0029
at Bottom	0032
Start Up	0032
at Surface	0039
Data Off	0041

Data Location
Floppy Number

Remarks: TAPE START 30:00 END 42:05

1st CAST

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		137		0032	133.31	-0.3702	34.4418							
2		125		0033	125.34	-0.3706	34.4424		#1					34.45940
3		100		0034	99.99	-1.6345	33.3173							
4		80		0035	80.06	-1.6390	32.7274							
5		60		0036	60.28	-1.5970	32.3097							
6		50		0037	50.47	-1.0302	31.9936							
7		40		0037	39.99	-0.2449	31.6298		#2					31.63249
8		35		0038	35.00	-0.5065	31.5086							
9		30		0038	29.98	-0.6747	31.1081							
10		25		0039	25.03	-0.9137	30.5669							
11		20		0039	19.72	-0.8166	30.1884							
12														

132-5
117-20

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 288 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
117	73 39.66 N	169 03.42 W	15 OCT 90	0057	-4.3	—	10			351	11				140	RH Ø3B

CTD Type & SN	SEABIRD		
Press. SN	41681		
Temp. SN	1072		
Cond. SN	748		

Monitor Checks	on Deck:	at Surface:
Press.	32465	32468
Temp.	6315	6076
Cond.	3504	8189

Times	JD/Time
Data on	0055
at Surface	0055
Start Down	0055
at Bottom	0057
Start Up	0057
at Surface	0102
Data Off	0104

Data Location
Floppy Number

Remarks TAPE START 42:15 END 47:47

2nd CAST

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		100		0057	100.27	-1.6326	33.3355							
2		20		0100	19.97	-0.3932	30.2254							
3		15		0100	14.86	-0.5228	29.8448							
4		10		0101	10.16	-1.3214	29.3136							
5		5		0101	5.25	-1.4783	28.7384		#1					28.75997.
6		SFC		0102	2.25	-1.4178	28.7263							
7														
8														
9														
10														
11														
12														

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 288 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
118	73 19.86N	169 01.55W	15 OCT 90	0306	-4.3	-.-	10			345	10				90	RH04

CTD Type & SN	SEABIRD		
Press. SN	41681		
Temp. SN	1072		
Cond. SN	748		

Monitor Checks	on Deck:	at Surface:
Press.	32463	32466
Temp.	6548	6148
Cond.	3445	8519

Times	JD/Time
Data on	0305
at Surface	0305
Start Down	0305
at Bottom	0306
Start Up	0306
at Surface	0311
Data Off	0314

Data Location
Floppy Number

Remarks
TAPE
START 00:10
END 07:33

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		80		0306	79.97	-1.5038	33.2245							
2		50		0307	49.60	-1.5486	32.4104							
3		40		0308	39.87	-1.1699	32.0208							
4		35		0308	34.95	-0.5724	31.8876		#1					31.86758
5		30		0308	29.99	-0.3958	31.7740							
6		25		0309	25.20	-0.4014	31.7681							
7		20		0309	20.22	-0.4258	31.7453							
8		15		0310	14.89	-0.5503	31.7199							
9		10		0310	9.53	-0.8633	31.4559							#9 DID NOT TRIP
10		5		0311	4.80	-1.0427	30.9767		#2					31.05556
11		SFC		0311	1.72	-1.0064	31.0040							
12														

90

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 288 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
119	72 59.95 N	169 00.37 W	15 OCT 90	05 31	-3.4	--	11			350	10				77	RH05

CTD Type & SN	SEABIRD		
Press. SN	41681		
Temp. SN	1072		
Cond. SN	748		

Monitor Checks	on Deck:	at Surface:
Press.	32464	32471
Temp.	6241	6146
Cond.	3420	8554

Times	JD/Time
Data on	0529
at Surface	0529
Start Down	0529
at Bottom	0531
Start Up	0531
at Surface	0536
Data Off	0538

Data Location
Floppy Number

Remarks TAPE START 07:43 END 15:21

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		72		0531	71.08	-1.3565	33.0807		#1					33.09524
2		50		0532	49.68	-1.3340	33.0480							
3		40		0533	39.51	-1.4143	32.4645							
4		35		0533	35.32	-1.4922	32.3022							
5		30		0534	30.30	-0.9631	31.9561							
6		25		0534	25.12	-0.6379	31.7122							
7		20		0535	20.03	-0.7256	31.6594							
8		15		0535	14.80	-0.9862	31.5782							
9		10		0536	9.81	-0.9913	31.5568							
10		5		0536	5.17	-0.9439	31.5480		#2					2 31.56472
11		SFC		0536	2.78	-0.9532	31.5478							
12														

68

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 288 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
120	72 37.99 N	169 01.06 W	15 OCT 90	07 43	-3.9	—	11			340	08				88	RH06

CTD Type & SN	SEABIRD
Press. SN	41681
Temp. SN	1072
Cond. SN	748

Monitor Checks	on Deck:	at Surface:
Press.	32463	32469
Temp.	6451	6320
Cond.	3567	8718

Times	JD/Time
Data on	0741
at Surface	0741
Start Down	0741
at Bottom	0743
Start Up	0743
at Surface	0749
Data Off	0751

Data Location
Floppy Number

Remarks
TAPE
START 15:31
END 25:43

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		80		0743	82.56	-1.1130	32.9185							
2		50		0744	49.51	-1.0401	32.8917		#1					32.90491
3		40		0745	39.56	-0.7046	32.5418							
4		35		0745	35.13	0.7825	32.1823							
5		30		0746	29.94	0.8989	32.1559							
6		25		0746	25.01	0.8990	32.1498							
7		20		0747	19.71	0.5982	32.0842							
8		15		0747	15.07	0.3503	32.0386							#8 - NO WATER
9		10		0748	9.96	0.3349	32.0388							
10		5		0748	6.37	0.3455	32.0382		#2					32.05347
11		SFC		0749	2.74	0.3378	32.0393							
12														

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 289 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
121	72 20.19N	169 00.45W	15 OCT 90	0940	-3.1	—	12			328	08				66	R1H07

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32466	32472
Temp.	6501	6462
Cond.	3374	8821

Times	JD/Time
Data on	0939
at Surface	0937
Start Down	0939
at Bottom	0940
Start Up	0940
at Surface	0946
Data Off	0948

Data Location
Floppy Number

Remarks: TAPE START 25:53 END 33:55

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		61		0940	59.78	-0.7736	32.7175		#1					32.08931 not ppss maybe not filled/ retested ~~old water?~~
2		50		0941	50.38	-0.4648	32.3350							
3		40		0942	40.25	1.4585	31.9820							
4		35		0942	35.02	1.4685	31.9323							Reversed
5		30		0943	30.00	1.4257	31.9421							
6		25		0943	24.69	1.4471	31.9542							
7		20		0944	20.10	1.4003	31.9254		#2					32.77341
8		15		0944	15.10	1.3764	31.9154							— #8 - NO WATER
9		10		0945	9.78	1.3318	31.6108							
10		5		0945	5.02	1.3224	31.6031							
11		SFC		0946	2.23	1.3874	31.6357							
12														

Ship: Surveyor — CHOEX-90/ICE-90 — 48

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
122	72 00.00 N	169 00.0 W	150 Oct 90		-2.8	—	1012.1	1	8/10	345	08	~			53	RH08

CTD Type & SN	SEABIRD
Press. SN	41681
Temp. SN	1072
Cond. SN	748

Monitor Checks	on Deck:	at Surface:
Press.	32465	32469
Temp.	6548 ↓	6470
Cond.	3343	8867

Times	JD/Time
Data on	139
at Surface	1139
Start Down	1139
at Bottom	1140
Start Up	1140
at Surface	1145
Data Off	1147

Data Location
Floppy Number

Remarks
tape 33:55
40:40

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		48		1140	47.40	0.5459	32.5824							
2		40		1141	40.51	1.4486	32.1692							
3		35		1141	35.03	1.544	32.0790							
4		30		1142	30.50	1.5332	32.0751							
5		25		1142	25.30	1.5166	32.0608		RH08 #1					32.07610
6		20		1143	19.98	1.4318	32.0041							
7		15		1143	15.67	1.4276	32.0039							
8		10		1144	10.13	1.4210	32.0010							
9		5		1144	4.66	1.3888	31.9984		RH08 #2					32.01333 ?
10		SFC		1145	1.81	1.3804	31.9933							
11														
12														

Ship: Surveyor — CHOEX-90 / ICE-90 — 46

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
123	71 40.1 N	169 00.0 W	15 Oct 90	1340	-2.1	—	1218			010	06	—	—		51	RH-019

CTD Type & SN	SEABIRD
Press. SN	41681
Temp. SN	1072
Cond. SN	748

Monitor Checks	on Deck:	at Surface:
Press.	32465	32469
Temp.	6660	0505
Cond.	3411	8874

Times	JD/Time
Data on	1339
at Surface	1339
Start Down	1339
at Bottom	1340
Start Up	1340
at Surface	1344
Data Off	1346

Data Location: 1011.5
Floppy Number

Remarks: TAPE 00:15 / 06:31

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Sal. ~~Cond.~~	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		46		1340	45.59	1.0502	32.3534							
2		40		1340	39.83	1.7831	31.9309							
3		35		1341	34.70	1.7911	31.9119							
4		30		1341	29.68	1.7151	31.8862							
5		25		1342	25.11	1.7338	31.8858							
6		20		1342	20.20	1.5464	31.8515							
7		15		1343	15.06	1.5485	31.8521							
8		10		1343	10.37	1.5562	31.8519		RHO9 #1					31.8.6996 (? Q about 1D)
9		5		1344	4.95	1.5508	31.8522							
10		Sfc.		1344	1.72	1.5505	31.8523							
11														
12														

Kiva Freitag hat Manna hat Manka ~Knott hat Manotka

Ship: Surveyor CHOEX-90 / ICE-90 45

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
124	7120.0	16902.0	15 Oct 90	1536	-1.5	-1.7	1210	1	10	008	04	~	~		50	RA10

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32466	32469
Temp.	6581	6585
Cond.	3678 ↓	8898

Times	JD/Time
Data on	1535
at Surface	1535
Start Down	1535
at Bottom	1536
Start Up	1536
at Surface	1540
Data Off	1542

Data Location: 1012.0
Floppy Number

Remarks: TAPE 06:43 / 12:09

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		45		1536	44.62	2.8879	32.5573							
2		40		1536	39.29	1.7473	31.7166							
3		35		1537	34.30	1.7355	31.7058		12410 #1					31.72133
4		30		1537	30.08	1.7400	31.7001							
5		25		1537	24.74	1.9314	31.6870							
6		20		1538	20.01	2.0277	31.6652							
7		15		1538	14.36	2.1202	31.6252							
8		10		1539	9.80	2.1148	31.5088							
9		5		1539	5.29	2.1052	31.5081							
10		SFC		1540	2.36	2.1071	31.5056							
11														
12														

Ship: Surveyor — CHOEX-90 / ICE-90 — 40

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
125	70 59.9 N	168 59.9	150 Oct 90	1729	-2.0	-2.1	1012.6	1	10	000	02	~		~	45	RH11

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32467	32472
Temp.	6525	6519
Cond.	3618	8880

Times	JD/Time
Data on	1728
at Surface	1728
Start Down	1728
at Bottom	1729
Start Up	1729
at Surface	1732
Data Off	1734

Data Location
Floppy Number

Remarks
TAPE
12:09 / 16:59

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		40		1729	39.19	1.6631	31.8216		RH11 #1					31.84177
2		35		1729	34.42	1.6576	31.8205							
3		30		1729	30.62	1.6516	31.8189							
4		25		1730	24.90	1.6485	31.8182							
5		20		1730	19.49	1.6475	31.8185							
6		15		1731	14.71	1.6452	31.8185							
7		10		1731	10.25	1.6492	31.8190							
8		5		1732	5.14	1.6372	31.8153							
9		5fr		1732	3.19	1.6391	31.8142							
10														
11														
12														

✓

Ship: Surveyor

CHOCKX90/ICE-90

33

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
126	70 47.9 N	169 00.4 W	15 Oct 90	18 46	-1.5	-1.7	121	1	10	020	04	~	~		38	RH12

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32466	32472
Temp.	6475	6478
Cond.	3266	8844

Times	JD/Time
Data on	1845
at Surface	1845
Start Down	1845
at Bottom	1846
Start Up	1846
at Surface	1848
Data Off	1850

Data Location: 1011.6
Floppy Number

Remarks: ~~also RF01~~
tape 17:08/ 21:06

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	~~Cond.~~ Sal.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		35		1846	34.27	1.5838	31.8606							
2		30		1846	28.66	1.5849	31.8595		RH12 #1					31.87744
3		25		1846	24.59	1.5719	31.8516							
4		20		1847	20.23	1.3942	31.7911							
5		15		1847	15.73	1.3760	31.7871							
6		10		1847	9.73	1.3475	31.7842							
7		5		1848	5.51	1.3641	31.7800							
8		SFC		1848	2.66	1.3475	31.7847							
9														
10														
11														
12														

~~Nomark~~

Ship: Surveyor — CHOEX-90 / ICE-90 — 34

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
127	70 47.9 N	170 00.7 W	15 Oct 90		1.5	1.2	111	1	10	225	04	—	—		39	RF01

CTD Type & SN	SEABIRD
Press. SN	41681
Temp. SN	1072
Cond. SN	748

Monitor Checks	on Deck:	at Surface:
Press.	32467	32473
Temp.	6309 ↓	6477
Cond.	3231 ↕	8859

Times	JD/Time
Data on	2039
at Surface	2039
Start Down	2039
at Bottom	
Start Up	
at Surface	
Data Off	

Data Location: 1011.3
Floppy Number

Remarks: tape 2115 - 25:59

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		35		2039	35.10	1.3490	31.9238							
2		30		2040	28.82	1.3431	31.9249							
3		25		2040	25.05	1.3374	31.9242							
4		20		2040	19.76	1.3437	31.9239		12502 #1					
5		15		2041	14.98	1.3410	31.9240							
6		10		2041	9.46	1.3417	31.9242							
7		5		2042	3.45	1.3437	31.9237							
8		SK		2042	2.73	1.3430	31.9251							
9														
10														
11														
12														

✓

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 288 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
128	7047.94N	171 10.01W	15 OCT 90	2248	-0.2	-0.5	11			190	07				40	RF02

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32465	32472
Temp.	6530	6549
Cond.	3320	9002

Times	JD/Time
Data on	2247
at Surface	2247
Start Down	2247
at Bottom	2248
Start Up	2248
at Surface	2251
Data Off	2253

Data Location
Floppy Number

Remarks TAPE
START 26:08
END 31:10

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		35		2248	34.66	1.8260	32.0288							
2		30		2248	29.99	1.8271	32.0280		✓					32.04731
3		25		2249	24.78	1.8260	32.0286							
4		20		2249	19.49	1.8273	32.0279		✓					31.94203 ?
5		15		2250	15.26	1.8166	32.0291							
6		10		2250	10.00	1.8207	32.0288							
7		5		2251	5.11	1.8217	32.0281							
8		SFC		2251	1.68	1.9065	32.0278							
9														
10														
11														
12														

✓

1700

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 289 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
129	7048.08N	17219.80W	16 OCT 90	0056	-0.4	-3.7	10			160	16				39	RF03

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32464	32469
Temp.	6870	6520
Cond.	3410	8982

Times	JD/Time
Data on	0055
at Surface	0055
Start Down	0055
at Bottom	0056
Start Up	0056
at Surface	0057
Data Off	0101

Data Location
Floppy Number

Remarks: TAPE
START 31:20
END 36:19

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		34		0056	33.84	1.7077	32.4289							
2		30		0056	30.03	1.7104	32.4276		#1					3246864
3		25		0057	24.93	1.7124	32.4264							
4		20		0057	20.02	1.7124	32.4259							
5		15		0058	15.10	1.7289	32.4142							
6		10		0058	10.06	1.6378	32.1593							
7		5		0058	5.12	1.6091	32.1452		#2					32.16472
8		SFC		0059	1.76	1.7075	32.1410							
9														
10														
11														
12														

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 289 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
130	70 48.16N	173 29.46W	16 OCT 90	0305	-0.2	-0.5	07			165	15				37	RF04

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32463	32470
Temp.	6838	6571
Cond.	3644	8984

Times	JD/Time
Data on	0304
at Surface	0304
Start Down	0304
at Bottom	0305
Start Up	0305
at Surface	0309
Data Off	0311

Data Location
Floppy Number

Remarks
TAPE START 36:29
END 41:32

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		32		0305	32.87	2.0026	32.3183							
2		30		0306	30.19	2.0121	32.3093		✓					32.31953
3		25		0306	24.63	2.0115	32.2169							
4		20		0307	19.23	1.9130	32.1841							
5		15		0307	14.75	1.8700	32.1361							
6		10		0308	9.72	1.9125	32.1169							
7		5		0308	5.40	1.9116	32.1185							
8		SFC		0309	2.42	2.0126	32.1168							
9														
10														
11														
12														

✓

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 289 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
131	70 52.74 N	174 14.91 W	16 OCT 90	05 14	-1.2	-1.9	06			190	10				62	RF05

CTD Type & SN	SEABIRD		
Press. SN	41681	Press.	32466 / 32471
Temp. SN	1072	Temp.	6803 / 6575
Cond. SN	748	Cond.	3602 / 3986

Monitor Checks: on Deck / at Surface

Times	JD/Time
Data on	0513
at Surface	0513
Start Down	0513
at Bottom	0514
Start Up	0514
at Surface	0520
Data Off	0522

Data Location
Floppy Number

Remarks TAPE
START 00:10
END 07:42

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		55		0514	55.25	2.6036	32.8256							
2		50		0515	50.45	2.6019	32.8265		#1					32.84568
3		40		0516	40.02	2.6047	32.8155							
4		35		0516	35.02	2.2728	32.4902							
5		30		0517	29.48	2.0259	32.2178							
6		25		0517	24.60	2.0829	32.1981							
7		20		0518	20.14	2.0917	32.1599							
8		15		0518	15.02	2.0703	32.0825							
9		10		0519	9.93	2.0632	32.0782		#2					32.09530
10		5		0519	5.13	2.0741	32.0750							
11		SFC		0520	2.31	2.0741	32.0742							
12														

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 289 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
132	70 56.88 N	175 00.27 W	16 Oct 79	06 57	-1.2	-1.6	04			180	10				72	RF06

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32465	32469
Temp.	6398	6511
Cond.	3286	8897

Times	JD/Time
Data on	0656
at Surface	0656
Start Down	0656
at Bottom	0657
Start Up	0657
at Surface	0702
Data Off	0703

Data Location
Floppy Number

Remarks: TAPE START 07:52 END 15:11

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		67		0657	68.24	-1.2098	33.3759							
2		50		0658	49.51	1.8320	32.2932		#1					32.33574
3		40		0658	38.82	1.9111	32.2709							
4		35		0659	35.26	1.9476	32.2001							
5		30		0659	29.92	1.8815	32.1618							
6		25		0700	24.58	1.8563	32.1528							
7		20		0700	20.17	1.7529	32.1388							
8		15		0701	14.98	1.8974	32.1107							
9		10		0701	10.01	1.7518	32.0444		#2					32.06754
10		5		0702	4.78	1.7715	32.0446							
11		SFC		0702	1.69	1.7770	32.0434							
12														

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 289 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
133	7101.61 N	175 44.37 W	16 OCT 90	0844	-1.0	-1.5	03			177	05				58	RF07

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32466	32472
Temp.	6727	6526
Cond.	3442	8927

Times	JD/Time
Data on	0842
at Surface	0842
Start Down	0842
at Bottom	0844
Start Up	0844
at Surface	0848
Data Off	0850

Data Location
Floppy Number

Remarks: TAPE
START 15:21
END 21:59

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		53		0844	53.35	-1.0646	33.2604							
2		50		0844	50.09	-0.2672	32.9415							
3		40		0845	40.01	1.7105	32.0190							
4		35		0845	34.42	1.7018	32.0110		#1					32.03162
5		30		0846	29.88	1.7015	32.0117							
6		25		0846	25.02	1.7042	32.0109							
7		20		0846	19.44	1.7045	32.0107							
8		15		0847	14.30	1.7025	32.0098							
9		10		0847	9.74	1.6970	32.0087		#2					32.02911
10		5		0848	5.38	1.6962	32.0088							
11		SFC		0848	3.65	1.6924	32.0083							
12														

Ship: Surveyor | CHOEX-90 / ICE-90 | 36

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
134	71 06.2 N	176 30.3 W	160 Oct 90	1031	-1.2	-2.3	02	2-3	8-10	167	16	)	)		41	RF08

CTD Type & SN	SEABIRD
Press. SN	41681
Temp. SN	1072
Cond. SN	748

Monitor Checks	on Deck:	at Surface:
Press.	32467	32471
Temp.	6521	6265
Cond.	3386	8547

Times	JD/Time
Data on	1030
at Surface	1030
Start Down	1030
at Bottom	1031
Start Up	1031
at Surface	1033
Data Off	1035

Data Location: 1001.7
Floppy Number

Remarks: TAPE START 22:09 END 26:52

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	~~Cond.~~ Sal	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		35		1031	35.49	1.4236	32.0879		RF08 #1					Not good seal. 32.08317
2		30		1031	30.02	1.4003	32.0238							
3		25		1031	24.83	1.2496	31.9549							
4		20		1032	20.01	1.0104	31.8771							
5		15		1032	14.98	0.4286	31.5633							
6		10		1033	10.09	0.2805	31.4245							
7		5		1033	5.40	-0.6654	30.7042							
8		SFC		1033	2.27	-0.2179	30.9852							
9														
10														
11														
12														

Длинный лёд

28

Ship: Surveyor (CHOEX-90) ICE-90

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
135	71 09.2 N	176 58.8 W	16 Oct 90	1149	-1.7	-2.7	011	1	8-10	164	12	~	~		33	RF09

CTD Type & SN	SEABIRD
Press. SN	41681
Temp. SN	1072
Cond. SN	748

Monitor Checks	on Deck:	at Surface:
Press.	32465	32470
Temp.	6436	6074
Cond.	3319	8261

Times	JD/Time
Data on	11 49
at Surface	11 49
Start Down	11 49
at Bottom	1149
Start Up	1150
at Surface	1152
Data Off	1154

Data Location 1001.0
Floppy Number

Remarks
tape 27:01 / 31:11
In pancake ice
W. Cast beams. F, near Wrangel I

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		25		1149	27.28	1.1916	31.7049							
2		20		1150	20.16	0.5330	31.0868							
3		15		1150	14.73	-1.3143	29.5909							
4		10		1151	9.78	-1.3896	29.5368							
5		5		1151	5.01	-1.5290	29.3873		RF09 #1					29.40390
6		SR		1152	2.48	-1.4857	29.3890							
7														
8														
9														
10														
11														
12														

127

Ship: Surveyor

CHOEX-90/ICE-90

49

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
136	72 12.1 N	173 59.4 W	160 Oct 90	1918	-0.6	-2.2	999	2/3	10	130	30	~	~		54	R605

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32464	32473
Temp.	6400	6504
Cond.	3309-26	8889

Times	JD/Time
Data on	1916:45
at Surface	1916
Start Down	1916
at Bottom	1918
Start Up	1918
at Surface	1921
Data Off	1923

999.0
Data Location
Floppy Number

Remarks
tape 31:11/36:59

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Sal ~~Cond.~~	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		50		1918	50.21	1.0617	32.5946							
2		40		1918	40.80	1.5243	32.0437		R005 #1					32.06041
3		35		1919	34.60	1.5413	32.0334							
4		30		1919	29.95	1.5328	32.0331							
5		25		1919	24.29	1.5408	32.0322							
6		20		1920	19.68	1.5391	32.0326							
7		15		1920	13.83	1.5384	32.0320							
8		10		1920	8.40	1.5358	32.0321							
9		5		1921	5.69	1.5323	32.0326							
10		Sfc		1921	5.09	1.5354	32.0319							
11														
12														

130

Ship: Surveyor — CHOEX-90/ICE-90 — 54

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
137	72 04.5 N	174 44.6 W	160 Oct 90	2105	-0.4	-1.2	998.5	2-5	0.5	130	24	⌒	⌒	⌒	59	R604

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32465	32471
Temp.	6322	6543
Cond.	3320	68919

Times	JD/Time
Data on	2104
at Surface	2104
Start Down	2104
at Bottom	2105
Start Up	2105
at Surface	2109
Data Off	2111

Data Location
Floppy Number

Remarks: tape 37:09/44:30

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Sal ~~Cond.~~	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		55		2105	53.72	1.8991	32.3943							
2		50		2105	51.53	2.3894	32.3397		R604 #1					32.35094
3		40		2106	40.90	2.1817	32.1485							
4		35		2106	35.12	1.9194	32.0414							
5		30		2107	30.60	1.8478	32.0155							
6		25		2107	25.03	1.8376	32.0096							
7		20		2108	20.40	1.8375	32.0118		R604 #2					32.03026
8		15		2108	14.21	1.8049	31.9960							
9		10		2108	8.97	1.7999	31.9947							
10		5		2109	5.31	1.8031	31.9976							
11		SRC		2109	2.73	1.8005	31.9973							
12														

Ship: Surveyor — CHOEX-90 / ICE-90

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 289 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
138	71 57.22 N	175 29.74 W	16 OCT 90	23 16	-1.0	-2.0	97			156	15				72	R603

CTD Type & SN	SEABIRD		
Press. SN	41681		
Temp. SN	1072		
Cond. SN	748		

Monitor Checks	on Deck:	at Surface:
Press.	32464	32470
Temp.	6516	6470
Cond.	3452	8860

Times	JD/Time
Data on	2314
at Surface	2314
Start Down	2314
at Bottom	2316
Start Up	2316
at Surface	2321
Data Off	2323

Data Location
Floppy Number

Remarks
tape 00:13 / 08:43

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		67		2316	65.46	1.1019	32.7800							
2		50		2317	50.35	1.9481	32.6246		#1					32.64565
3		40		2317	40.06	1.9133	32.1304							
4		35		2318	34.87	1.8782	32.0995							
5		30		2318	30.19	1.7816	32.0660							
6		25		2319	25.21	1.7191	32.0474							
7		20		2319	19.99	1.6415	32.0241							
8		15		2320	15.26	1.4749	31.9553							
9		10		2320	9.92	1.4868	31.9524		#2					31.97353
10		5		2321	5.26	1.4765	31.9525							
11		SFC		2321	2.20	1.4759	31.9542							
12														

1640

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 290 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
139	7149.66N	176 15.09W	17 Oct 90	0058	-1.9	-2.1	96			130	12				44	RS02

CTD Type & SN	SEABIRD
Press. SN	41681
Temp. SN	1072
Cond. SN	748

Monitor Checks	on Deck:	at Surface:
Press.	32464	32469
Temp.	6500	6264
Cond.	3393	8630

Times	JD/Time
Data on	0057
at Surface	0057
Start Down	0057
at Bottom	0058
Start Up	0058
at Surface	0102
Data Off	0104

Data Location
Floppy Number

Remarks TAPE START 08:53 END 15:06

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		39		0058	40.09	-0.8244	33.0144							
2		35		0059	34.65	1.0768	31.8909		#1					31.94248
3		30		0059	30.04	1.1517	31.8879							
4		25		0100	25.57	1.9014	31.9143							
5		20		0100	19.81	1.3022	31.7795							
6		15		0101	15.00	0.9413	31.6666		#2					31.67511
7		10		0101	10.18	0.4997	31.4564							
8		5		0102	5.45	-0.1790	31.2415							
9		SFC		0102	2.80	-0.5884	31.0955							
10														
11														
12														

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 290 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
140	71 42.27N	177 00.58W	17 OCT 90	0235	-1.7	-2.0	96			105	14				28	R6Ø1B

CTD Type & SN	SEABIRD	Monitor Checks on Deck:		at Surface:	Times	JD/Time	Data Location Floppy Number	Remarks
Press. SN	41681	Press.	32464	32468	Data on	0235		TAPE
Temp. SN	1072	Temp.	6520	6084	at Surface	0235		START 15:16
Cond. SN	748	Cond.	3440	8222	Start Down	0235		END 19:33
					at Bottom	0235		
					Start Up	0235		
					at Surface	0238		
					Data Off	0240		

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		23		0235	21.55	-0.6925	30.0746							
2		20		0236	20.08	-0.6851	29.9688							
3		15		0236	15.07	-0.6481	29.8316		#1					29.74321
4		10		0237	10.34	-1.4387	29.6098							
5		5		0237	5.15	-1.5219	28.4987		HA					
6		SFC		0238	2.42	-1.5284	28.4426							
7														
8														
9														
10														
11														
12														

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 290 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
141	71 35.65 N	177 36.95 W	17 OCT 90	0430	-2.1	-2.5				110	06				23	R601A

CTD Type & SN	SEABIRD
Press. SN	41681
Temp. SN	1072
Cond. SN	748

Monitor Checks	on Deck:	at Surface:
Press.	32465	32473
Temp.	6258	6081
Cond.	3800	8178

Times	JD/Time
Data on	0428
at Surface	0428
Start Down	0428
at Bottom	0430
Start Up	0430
at Surface	0432
Data Off	0434

Data Location
Floppy Number

Remarks
TAPE
START 19:43
END 24:58

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		18		0430	18.82	-0.8101	29.5446							ICE ON WATER MADE ENTRY AND EXIT FROM WATER
2		15		0431	15.03	-0.9551	29.0918							DIFFICULT
3		10		0431	9.99	-1.5156	28.3322							
4		5		0432	4.88	-1.5267	28.3204		#1					28.34218
5		SFC		0432	2.45	-1.5258	28.3208							
6														
7														
8														
9														
10														
11														
12														

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33

Ship: Surveyor — CHOEX-90 / ICE-90

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
142	70 42.1	178 35.3 E	170 Oct 90	1648	-3.2	-3.9	995	5	75	302	9	~	~		38	JE05

CTD Type & SN	SEABIRD
Press. SN	41681
Temp. SN	1072
Cond. SN	748

Monitor Checks	on Deck:	at Surface:
Press.	32465	32470
Temp.	6261 ↓	6170
Cond.	3713 ↕	8448

Times	JD/Time
Data on	1648
at Surface	1648
Start Down	1648
at Bottom	1648:50
Start Up	1649
at Surface	1651
Data Off	1653

Data Location
Floppy Number

Remarks TAPE START 25:08
END 29:35

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	~~Cond.~~ Sal	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		30		1648	31.43	0.2488	32.7751		JE05 #1					Prob not good geod 32.33841
2		25		1649	25.23	0.2958	30.7042							
3		20		1649	19.94	0.5876	31.7709							
4		15		1650	14.60	-0.7858	30.7581							
5		10		1650	10.44	-0.9121	30.4999							
6		5		1651	5.61	-0.8556	30.3517							
7		Sfc		1651	2.16	-0.8479	30.3536							
8														
9														
10														
11														
12														

Ship: Surveyor

CHOEX-90 // ICE-90

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Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
143	70 29.9 N	172 29.6 E	170 02 90		-2.6	-2.8	996	4	10+	300	16	7			48	JE04

CTD Type & SN	SEABIRD
Press. SN	41681
Temp. SN	1072
Cond. SN	748

Monitor Checks	on Deck:	at Surface:
Press.	32465	32470
Temp.	5974	6229
Cond.	3187	8481

Times	JD/Time
Data on	1816
at Surface	1816
Start Down	1816
at Bottom	1817
Start Up	1817
at Surface	1820
Data Off	1822

Data Location: 995.9
Floppy Number

Remarks: TAPE
start 29:35
end

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		43		1817	43.15	-0.7171	33.0093		SE04 #1					32.90027
2		40		1817	39.78	-0.7175	33.0082							
3		35		1818	34.00	-0.7128	33.0018							
4		30		1818	29.87	-0.0576	32.5866							
5		25		1818	24.84	-0.9170	30.4642							
6		20		1819	19.67	-0.3984	30.2692							
7		15		1819	14.63	-0.3940	30.2665							
8		10		1819	9.44	-0.3968	30.2666		SE04 #2					30.28840
9		5		1820	4.50	-0.3998	30.2670							
10		5R		1820	2.09	-0.3916	30.2670							
11														
12														

Ship: Surveyor

CHOEX-90 / ICE-90

42

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
144	70 18.0 N	178 24.1 E	170 Oct 90	1957	-3.0	-3.6	995.3	1	10	287	16	—	—		47	JE03

CTD Type & SN	SEABIRD		
Press. SN	41681		
Temp. SN	1072		
Cond. SN	748		

Monitor Checks	on Deck:	at Surface:
Press.	32463	32470
Temp.	6175 ↓	6178
Cond.	3275 ↓	8452

Times	JD/Time
Data on	1956
at Surface	1956
Start Down	1956
at Bottom	1957
Start Up	1957
at Surface	2000
Data Off	2002

Data Location
Floppy Number

Remarks
tape 35:05/

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	~~Cond.~~ Sal	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		45		1957	43.75	-0.7961	33.1201		JE03					
2		40		1957	39.90	-0.7962	331194							
3		35		1957	34.93	-0.7830	33.0661		5603 #1					33.09667
4		30		1958	30.16	-0.7812	33.0641							
5		25		1958	24.68	-0.1779	32.3660							
6		20		1959	19.41	-0.6101	30.4141							
7		15		1959	14.76	-0.7298	30.3784							
8		10		1959	10.00	-0.7272	30.3729		5603 #2					30.39682
9		5		2000	4.82	-0.7465	30.3723							
10		SFC		2000	2.26	-0.7393	30.3723							
11														
12														

Ship: Surveyor

ICE

42

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
145	70 05.7 N	178 05.9 E	17 Oct 90	2147	-6.5	—	98	-	10+	260	17	—	—		47	JE02

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32464	32468
Temp.	left on pump till last min	6084
Cond.		8379

Times	JD/Time
Data on	2146
at Surface	2146
Start Down	2146
at Bottom	2147
Start Up	2147
at Surface	2150
Data Off	2152

Data Location: 99.79
Floppy Number

Remarks: tape 00:13 05:04

In thin new ice

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	~~Cond.~~ Sal	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		42		2147	41.02	-0.7545	33.0524		JE02 #1					32.63732 not poss / not entered
2		35		2147	35.01	-0.6278	32.8456							
3		30		2147	29.66	-0.3101	32.4014							
4		25		2148	25.13	0.1990	32.0599							
5		20		2148	19.72	-0.4778	31.5924							
6		15		2148	14.61	-1.2540	30.6462							
7		10		2149	9.97	-1.4438	30.4082							
8		5		2149	5.06	-1.4598	30.3970		JE02 #2					30.42313
9		Sfc		2150	1.70	-1.2587	30.3935							
10														
11														
12														

Ship: Surveyor

ICE

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = 291 Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
146	69 59.50 N	178 40.20 W	18 Oct 90	00 01	-5.5		98			265	22				47	JE01

CTD Type & SN: SEABIRD
Press. SN: 4168
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32464	32468
Temp.	6330	6126
Cond.	3475	8392

Times	JD/Time
Data on	0000
at Surface	0000
Start Down	0000
at Bottom	0001
Start Up	0001
at Surface	0005
Data Off	0007

Data Location
Floppy Number

Remarks
tape 05:10/11:35

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		42		0001	42.14	-0.6629	33.0815							
2		40		0001	39.91	-0.6674	33.0780		#1					33.10307
3		35		0002	35.02	-0.6744	33.0660							
4		30		0002	29.81	-0.3213	32.8220							
5		25		0003	25.69	0.5649	31.9616							
6		20		0003	19.91	-0.8361	30.3834							
7		15		0004	14.69	-0.9692	30.3180							
8		10		0004	10.05	-1.0356	30.2948							
9		5		0005	5.15	-1.0197	30.2932		#2					30.31772
10		SFC		0005	1.85	-1.0052	30.2932							
11														
12														

Ship: Surveyor

CHOEX-90 / ICE-90

52

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
147	69 42.0 N	176 00.7 W	180ct90	0845	-3.8	-4.2	998	2-3	10	310	20	~		57	BK0X1

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32469	32476
Temp.	6600↓	6483
Cond.	34301	8897

on pump until last second

Times	JD/Time
Data on	0844
at Surface	0844
Start Down	0844
at Bottom	0845
Start Up	0845
at Surface	0847
Data Off	0849

Data Location: 998.1
Floppy Number

Remarks: tape 11:35/16:12

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	~~Cond.~~ Sal	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		52			52.72	0.6664	32.8068							
2		25			25.06	1.6175	32.2817		Buoy #1					32.31049
3		Sfc			2.29	1.4922	32.2185		Buoy #2					32.24752
4														
5														
6														
7														
8														
9														
10														
11														
12														

Ship: Surveyor

CHOEX-90/ ICE-90

46

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
148	65 58.0 N	169 41.0 W	190 Oct 90	1052	0.8	0.4	911	6-8	8-10	030	26	~	~		51	RRADY

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32465	32472
Temp.	6647	6305
Cond.	3159	8804

Times	JD/Time
Data on	10 51
at Surface	1051
Start Down	1051
at Bottom	1052
Start Up	1052
at Surface	1056
Data Off	1058

Data Location: 991.0
Floppy Number

Remarks: TAPE 16:12 / 21:48

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		42		1052	42.92	0.1290	32.6908							
2		35		1053	34.53	0.1290	32.6829		RRA01 #1					32.71401
3		30		1053	30.02	0.1253	32.6862							
4		25		1054	24.04	0.1200	32.6783							
5		20		1054	20.51	0.1188	32.6790							
6		15		1055	15.38	0.1188	32.6797							
7		10		1055	10.16	0.1167	32.6798							
8		5		1055	5.51	0.1267	32.6776							
9		Sfc		1056	3.53	0.1442	32.6797							
10														
11														
12														

245

Ship: Surveyor — ICE

48

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
149	65 56.0 N	169 29.4 W	190 Oct 90	11 52	0.0	-0.3	916	8	0	22	28	~	~		53	RRA02

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32465	32473
Temp.	6401 ↓	6349
Cond.	3205 ↓	8835

Times — JD/Time
Data on: 1150:40
at Surface:
Start Down:
at Bottom:
Start Up:
at Surface:
Data Off:

Data Location: 991.2
Floppy Number:

Remarks: tape 21:56/27:56

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	~~Cond.~~ Sal.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		45		1152	45.49	0.8036	32.8733		RRA02 #1					32.90307
2		40		1152	37.61	0.8039	32.8717							
3		35		1153	35.36	0.7904	32.8564							
4		30		1153	30.78	0.7224	32.8056							
5		25		1154	25.97	0.6414	32.7591							
6		20		1154	20.83	0.6177	32.7437							
7		15		1155	15.68	0.5667	32.7069							
8		10		1155	10.21	0.5230	32.6791							
9		5		1156	4.34	0.4977	32.6629							
10		Sfc		1156	1.87	0.4912	32.6572							
11														
12														

Hanuyama print

Ship: Surveyor — CHOEX-90 / ICE-90 — 44

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
150	65 54.1 N	169 17.6 W	190 Oct 90	1255	-1.0	-1.0	991.2	6	4-6	027	30	–	)	(	49	RRA03

CTD Type & SN	SEABIRD
Press. SN	41681
Temp. SN	1072
Cond. SN	748

Monitor Checks	on Deck:	at Surface:
Press.	32465	32472
Temp.	6356	6294
Cond.	3236	8752

Times	JD/Time
Data on	12:54:21
at Surface	1254
Start Down	1254
at Bottom	1255
Start Up	1255
at Surface	1
Data Off	

Data Location
Floppy Number

Remarks
tape 28:05/33:22

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		42			43	-.2738	32.3705							Spiked to >50m at bottom → ?
2		35			36	-.1508	32.3619							
3		30			29	-.0513	32.3318							Pushed reset too soon – no mark file
4		25			25	-.0221	32.3221							Data from AUG file
5		20			20	0.0228	32.3064							
6		15			13	0.0644	32.2931							
7		10			9	0.0465	32.2982		12RA03 #1					32.32571 don't Use
8		5			4	0.0354	32.3013							
9		Sfc			3	0.0330	32.3020							
10														
11														
12														

540

Ship: Surveyor — CHOEX-90 / ICE-90 — 43

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
151	65 51.8 N	169 07.6 W	19 Oct 90		-1.0	-1.0	916	4-6		032	29				48	RRA04

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks — on Deck / at Surface:
Press. 32465 / 32472
Temp. 6463 / 6463
Cond. 3236 / 8871

Times — JD/Time
Data on: 13 50
at Surface:
Start Down:
at Bottom:
Start Up:
at Surface:
Data Off:

Data Location: 991.3
Floppy Number:

Remarks: tape 33:22 / 39:02

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		42		1351	42.90	0.3654	32.2504		RRA04 #1					32.27932
2		35		1351	35.65	0.4627	32.2378							
3		30		1352	30.55	1.0547	32.1708							
4		25		1352	25.04	1.1422	32.1619							
5		20		1353	20.36	1.2024	32.1545							
6		15		1353	14.34	1.2128	32.1530		RRA04 #2					32.18288
7		10		1354	10.28	1.2099	32.1539							
8		5		1354	5.09	1.2035	32.1536							
9		Sfc		1355	2.12	1.1946	32.1556							
10														
11														
12														

Ship: Surveyor — CHOEX-90/ICE-90

39

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
152	65 45.4 N	168 52.6 W	190 Oct 90	1549	-0.9	-1.0	926	3-5	025	30	—	—			44	RRA05

CTD Type & SN	SEABIRD
Press. SN	41681
Temp. SN	1072
Cond. SN	748

Monitor Checks

	on Deck:	at Surface:
Press.	32464	32470
Temp.	6620 ↓	6456
Cond.	3700 ↓	8864

just off pump

Times	JD/Time
Data on	1548
at Surface	1548
Start Down	1548
at Bottom	1549
Start Up	1549
at Surface	1553
Data Off	1555

Data Location: 991.5
Floppy Number

Remarks: TAPE 39:02 | 45:01

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond.	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		40		1549	40.99	0.5949	32.2066							
2		35		1550	35.38	0.5995	32.2068		RRA05 #1					~~32.16231~~ / 32.23239
3		30		1550	30.36	0.6858	32.1926							
4		25		1551	24.82	0.7250	32.1870							
5		20		1551	20.28	0.8337	32.1592							Reversed
6		15		1552	15.64	0.9606	32.1410							
7		10		1552	10.15	0.9884	32.1347		RRA05 #2					~~32.23239~~ 32.16231
8		5		1553	5.80	1.0106	32.1301							
9		Sfc		1553	1.47	1.0234	32.1273							
10														
11														
12														

Ship: Surveyor — CHOEX-90 / ICE-90 — 50

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
153	65 44.1 N	168 45.5 W	19 Oct 90	1644	-0.8	-0.6	926.5	0	2	230					55	RRA06

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks — on Deck / at Surface:
Press. 32464 / 32470
Temp. 6737 / 6771
Cond. 3639 / 9067

Times	JD/Time
Data on	16:43
at Surface	1643
Start Down	1643
at Bottom	1644
Start Up	1644
at Surface	1648
Data Off	1650

Data Location: 991.5
Floppy Number

Remarks: TAPE: 00:12 / 06:36

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	~~Cond.~~ Sal	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		50		1644	51.66	0.6490	32.1789							
2		40		1645	40.43	0.9316	32.1473		RRA06 #1					32.17769
3		35		1645	35.03	0.9862	32.1391							
4		30		1646	30.15	1.6971	32.0537							
5		25		1646	25.06	1.8104	32.0425							
6		20		1647	19.96	1.9026	32.0289							
7		15		1647	14.08	2.1400	31.9969							
8		10		1648	10.08	2.4627	31.9470							
9		5		1648	5.07	3.1890	31.7610							
10		Sfc		1648	3.05	3.2021	31.7596							
11														
12														

Ship: Surveyor — CHOEX-90 / ICE-90

Consec. Cast #	Latitude Deg.	Latitude Min.	Longitude Deg.	Longitude Min.	Date JD = Day	Mo.	Yr.	Time, GMT Hr.	Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
157																					RRA07

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks — on Deck: / at Surface:
Press. ____ ____
Temp. ____ ____
Cond. ____ ____

Times	JD/Time
Data on	
at Surface	
Start Down	
at Bottom	
Start Up	
at Surface	
Data Off	

Data Location
Floppy Number ____

Remarks
TAPE
30:00 /

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	Cond.	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1														
2														
3														in next year
4														
5														
6														
7														
8														
9														
10														
11														
12														

Ship: Surveyor — CHOEX-90 / ICE-90

50

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
156	65 42.6	168 28.8	200	0236	1.0	0.4	95	7	8	010	20				55	RRA08

CTD Type & SN	SEABIRD
Press. SN	41681
Temp. SN	1072
Cond. SN	748

Monitor Checks	on Deck:	at Surface:
Press.	32465	32471
Temp.	6814	6964
Cond.	3671	8769

Times	JD/Time
Data on	0234
at Surface	0234
Start Down	0234
at Bottom	0237
Start Up	0237
at Surface	0241
Data Off	0243

Data Location
Floppy Number

Remarks
TAPE
18:36 / 30:00

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Cond. (cal)	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		45		0236	47.61	4.3641	31.4985							
2		40		0237	39.67	4.3290	31.2209							
3		35		0237	35.57	4.3904	31.0960							sal corr # 30.74777 don't use
4		30		0238	29.76	4.3904	31.0950							
5		25		0238	25.63	4.4569	30.6569							?
6		20		0239	19.05	4.7101	29.8395							
7		15		0239	15.16	4.7996	29.6011							
8		10		0240	9.65	4.7346	28.9622							?
9		5		0240	4.66	4.6993	28.0787							sal corr # 28.80012
10		4c		0241	0.20	4.7194	28.0700							NO WATER IN BOTTLE; TRIPPED OUT OF WATER
11														
12														

Ship: Surveyor

CHOEX-90 / ICE-90

47

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
155	654 1.4	168 20.4	200 CHOEX 90	01 46	0.8	-0.2	994	4	6	038	18				52	RRA09

CTD Type & SN: SEABIRD
Press. SN: 41681
Temp. SN: 1072
Cond. SN: 748

Monitor Checks

	on Deck:	at Surface:
Press.	32465	32469
Temp.	7021	6969
Cond.	3370	8754

Times	JD/Time
Data on	01:44
at Surface	01:44
Start Down	01:44
at Bottom	01:46
Start Up	01:46
at Surface	01:51
Data Off	01:53

Data Location
Floppy Number

Remarks
TAPE
10:54 / 18:34

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Press.	Temp.	Sal ~~Cond.~~	Other	Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		—												broken
2		45		01 46	46.44	4.4486	30.9741							
3		40		01 47	39.49	4.6433	30.2104							
4		35		01 48	35.46	4.7314	29.8949							
5		30		01 48	30.40	4.8190	28.8063							
6		25		01 48	24.57	4.7528	28.3466							
7		20		01 49	18.83	4.6676	27.9803							
8		15		01 49	15.03	4.6558	27.9648							w Sal cor 27.99234
9		10		01 50	8.99	4.6457	27.9638							w Sal cor 27.99142
10		5		01 50	5.43	4.6512	27.9643							
11		Sfc		01 51	1.66	4.7343	27.9373							
12														

Ship: Surveyor

CHOEX-90 / **ICE-90**

19

Consec. Cast #	Latitude Deg. Min.	Longitude Deg. Min.	Date JD = Day Mo. Yr.	Time, GMT Hr. Min.	Dry Bulb	Wet Bulb	Bar. mb	S.S.	Vis.	Wind Dir.	Wind Sp.	Cloud	Type	Weath.	Bottom Depth, m	Sta. Name or I.D.
154	654 0.3	168 10.7	20 Oct 90	01 02	0.7	-0.2	994	4/5	6/8	040	22				24	RRA1

CTD Type & SN	SEABIRD		
Press. SN	41681		
Temp. SN	1072		
Cond. SN	748		

Monitor Checks	on Deck:	at Surface:
Press.	32464	32469
Temp.	6571	6902
Cond.	3249	8716.

Times	JD/Time
Data on	01 : 01
at Surface	01 : 01
Start Down	01 : 01
at Bottom	01 : 02
Start Up	01 : 02
at Surface	01 : 04
Data Off	01 : 06

Data Location
Floppy Number

Remarks
tape 06:44 - 10:47

Pos.	Bot. #	Trip Depth	Time at Depth	Time Trip	Monitor Values Press.	Temp.	~~Cond.~~ Sal	Other	Sample Bottle Numbers Sal.	O_2	^{18}O	Nut.	Chl.	Comments
1		20		01 02	19.62	4.4020	28.1483							Sal ~~CORR~~ 28.15569
2		15		01 02	14.44	4.4106	28.1344							
3		10		01 03	10.02	4.2734	28.0065							
4		5		01 03	5.29	4.2611	27.9925							
5		sfc		01 04	1.34	4.2312	27.9805							
6														
7														
8														
9														
10														
11														
12														