

# Moored Station Log

(fill out log with black ball point pen only)

ARRAY NAME AND NO. KESs #8 MOORED STATION NO. 1160  
(2005-2006)

## Launch (anchor over)

Date (day-mon-yr) 12-JUNE-2005 Time 0939 UTC

Latitude (N/S, deg-min) 34° 49.8033' Longitude (E/W, deg-min) 144° 59.9502'

Deployed by Worrilow/Hogg Recorder/Observer Sookan Moon

Ship and Cruise No. REvelle ZHNG 07RR Intended Duration 1 yr

Depth Recorder Reading \_\_\_\_\_ m Correction Source \_\_\_\_\_

Depth Correction \_\_\_\_\_ m

Corrected Water Depth 5830 m Magnetic Variation (E/W) \_\_\_\_\_

Argos Platform ID No. 27330 Additional Argos Info on pages 2 and 3

## Surveyed Anchor Position

Lat (N/S) \_\_\_\_\_ Long. (E/W) \_\_\_\_\_

## Acoustic Release Model

Release No. 26354 / 28085 Tested to 3000 m

Receiver No. \_\_\_\_\_ Release Command 343/217/347756

Enable 341512 / 366666 Disable 341554 / 366734

Interrogate Freq. 11 Reply Freq. 12

## Recovery (release fired)

Date (day-mon-yr) 22 MAY 06 Time 1900 UTC

Latitude (N/S, deg-min) 34 50.21 Longitude (E/W, deg-min) 144 59.60

Recovered by S. Worrilow Recorder/Observer S. Waterman

Ship and Cruise No. RV Melville MGLN 07 Actual duration 344 days

Distance from actual waterline to buoy deck \_\_\_\_\_ m

Moored Station Number KESS 8 2005-2006

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
1		<del>3/4" 5 PHERS</del>		3:57				2021	2246 lbs buoy energy
2		ALGOS	27330	3:57				2021	
3	5	3/4" CANN <del>NOTHER CM</del>	1395	3:57				2021	
4		<del>3/4" CANN</del>		3:57				2029	
5		3T Swivel		3:57				2029	
6		Profiler stop		3:57				2118	
7		Profiler	109	4:34				2118	
8	1225	1/4 WR		5:07				2037	4009-3
9		Profiler stop		5:02				2118	
10		3T Swivel		5:07				2118	
11	10	1/4 WR		5:12				2125	4143-73
12	6	17" GB		5:18				2125	
13	1.8	VACM	107	5:18				2127	sponge out sponges in 2131
14	10	1/4" WR		5:25				2132	4143-80
15	.5	AANDERMA	161	5:25				2132	
16	424	1/4 WR		5:40				2136	4009-58
17	50	1/4 WR		5:52				2148	4143-114
18	6	17" GB		5:54				2152	
19	10	1/4 WR		5:58				2156	4143-67
20	.5	AANDERMA	371	5:58				2156	
21	500	1/4 WR		6:15				2159	4009-36
22	500	1/4 WR		6:34				2214	4009-37

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
23	373	1/4 WR		6:48				2226	4143-57
24	100	1/4 WR		7:02				2237	4009-86
25	8	17" GB		7:02				2240	
26	10	1/4" WR		7:02				2245	4009-82
27	.5	AANDERMAN	153	7:07				2245	
28	500	1/4 WR		7:08				2247	4009-33
29	500	1/4 WR		7:46				2258	4009-34 REVISE FROM MESSING'S BOOT PUSHED UP
30	390	1/4 WR		8:01				2311	4113-50
31	50	1/4 WR		8:12				2323	4143-113
32	25	1/4 WR		8:17				2324	4009-107
33	16	17" GB		8:17				2326	1 ball imploded noted on recovery
34	10	1/4 WR		8:25				2331	4009-107 4009-84
35	.5	AANDERMAN	158	8:33				2331	4009-84
36	3	3/8 CHAIN		8:33				2331	
37	.5	Publ Releasers	20354 23025	8:34				2331	
38	5	1/2 CHAIN		8:34				—	
39	500	1/4 WR		8:55				—	4009-10
40	200	1/4 WR		9:05				—	4113-55
41	50	1/4" WR		9:16				—	4143-63
42	25	1/4" WR		9:19				—	4143-117
43	10	1/4" WR		9:27				—	4143-66
44	20M	nylon		9:38				—	
45	5m	chain		9:38				—	

3700lb Anchor

# Moored Station Log

(fill out log with black ball point pen only)

ARRAY NAME AND NO. K5-2005 MOORED STATION NO. 1159  
(KES5 2005-2006)

## Launch (anchor over)

Date (day-mon-yr) 9 JUNE 2005 Time 0902 UTC  
Latitude (N/S, deg-min) 34° 01.9505' Longitude (E/W, deg-min) 145° 30.327'  
Deployed by SCOTT WORRILLOW Recorder/Observer SOOKMI MOON  
Ship and Cruise No. REVELLE ZHNG 07RR Intended Duration 1 YR  
Depth Recorder Reading \_\_\_\_\_ m Correction Source \_\_\_\_\_  
Depth Correction \_\_\_\_\_ m \_\_\_\_\_  
Corrected Water Depth 5836 m Magnetic Variation (E/W) \_\_\_\_\_  
Argos Platform ID No. 5661 Additional Argos Info on pages 2 and 3

## Surveyed Anchor Position

Lat (N/S) \_\_\_\_\_ Long. (E/W) \_\_\_\_\_

## Acoustic Release Model

Release No. 17961 / 23846 Tested to TA / 3000 m  
Receiver No. \_\_\_\_\_ Release Command 623341 / 635006  
Enable 601206 / 657514 Disable 601163 / 657571  
Interrogate Freq. 11 Reply Freq. 12

## Recovery (release fired)

Date (day-mon-yr) 23 MAY Time 0515 UTC  
Latitude (N/S, deg-min) 34° 02.504 Longitude (E/W, deg-min) 145° 30.062  
Recovered by S. Worrillow Recorder/Observer S. Waterman  
Ship and Cruise No. RV Melville MGL NØ3 Actual duration 348 days  
Distance from actual waterline to buoy deck \_\_\_\_\_ m

Moored Station Number KESS 2005 - 2006

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
1		64" Sponges	SW 012	3:30				06:34	2.545 lbs of buoyancy upon recovery, holes on sphere rusted and weak (pulled off by hand)
2		ADCP	SW <del>1035</del>	3:30				06:34	
3		Argos	RTT 5661	3:30				06:34	
4	5	3/4" chain		3:30				06:34	
5		Profiler Stop		3:30				06:36	
6		Profiler #102		4:13				07:24	Profiler initially at top step, slipped down wire as hauled in 4143-5
7	12.25	1/4" WR		4:34				07:24	
8		Profiler Stop		4:34				07:24	
9		3T Swivel		4:34				07:28	
10	10	1/4" WR		4:38				07:28	4143-98
11		6 1" Glass balls		4:42				07:30	
12		VLEM #141		4:42				07:33	sponge out 4:40 sponge in 4:43
13	4.80	1/4" WR		5:06				07:38	4143-35
14		6 1" Glass balls		5:06				07:53	
15	10	1/4" WR		5:10				07:58	4143-91
16		Anchor chain #339		5:10				07:58	
17	500	1/4" WR		5:29				08:01	4143-16
18	500	1/4" WR		5:48				08:15	4143-24
19	4.74	1/4" WR 424 50		6:02				08:28	4009-61
20		8 1" Glass balls		6:13				08:40	upon recovery - 116 50m + 10m wire terminations wrapped around chain of glass balls
21	10	1/4" WR		6:16				08:47	4143-77
22		Anchor chain #157		6:20				08:43	- upon recovery, wires tangled; CM recovered before glass balls

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
23	500	1/4" WR		6:38				0852	4143-15
24	500	1/4" WR		6:57				0903	4143-20
25	465	1/4" WR	415 50	7:13 7:23				0915	4009-64 4143-15
26		16 17" Glass balls		7:27				0925	2 glass balls imploded
27	10	1/4" WR		7:31				0928	
28		Anderson chart # 103		7:31				0932	4143-79
29	3	3/8" Chain		7:31				0932	
30		Ball releases # 17961 # 23846		7:37				0932	
31	5	3/8" Chain		7:37				—	
32	500	1/4" WR		7:55				—	4143-111
33	277	1/4" WR		8:56				—	4143-52
34	210	1/4" WR		8:57				—	4143-81
35	20m	Nylon		9:01				—	
36	2100lb	5m 1/2" Fastrop Chain Anchor		9:02				—	
37									
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39									
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45									

# Moored Station Log

(fill out log with black ball point pen only)

ARRAY NAME AND NO. K4 2005 MOORED STATION NO. 1158  
(KES 4 2004-2005)

## Launch (anchor over)

Date (day-mon-yr) 07-JUNE-2005 Time 1632 UTC

Latitude (N/S, deg-min) 34° 50.9162' Longitude (E/W, deg-min) 146° 00.9591'

Deployed by WORRILLOW Recorder/Observer M. CRONIN

Ship and Cruise No. REVELLE ZHANG07RR Intended Duration 1 YR

Depth Recorder Reading \_\_\_\_\_ m Correction Source \_\_\_\_\_

Depth Correction \_\_\_\_\_ m

Corrected Water Depth <sup>5965?</sup> 5653 m Magnetic Variation (E/W) \_\_\_\_\_

Argos Platform ID No. 27331 Additional Argos Info on pages 2 and 3

## Surveyed Anchor Position

Lat (N/S) \_\_\_\_\_ Long. (E/W) \_\_\_\_\_

## Acoustic Release Model

Release No. 28288 / 28093 Tested to 3000 / 3000 m

Receiver No. \_\_\_\_\_ Release Command 353567 / 350154

Enable 374514 / 367674 Disable 374552 / 367726

Interrogate Freq. // Reply Freq. 12

## Recovery (release fired)

Date (day-mon-yr) 27 MAY 06 Time 0420 UTC

Latitude (N/S, deg-min) 34 51.04 Longitude (E/W, deg-min) 145 59.91

Recovered by S. WorriLOW Recorder/Observer S. Waterman

Ship and Cruise No. RV Melville MGLN03 Actual duration 349 days

Distance from actual waterline to buoy deck \_\_\_\_\_ m

Moored Station Number KESS 4 2005-2006

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
1		64" SPHERE	016	10:54	STRABE # 038 NO WATER			06:06	2566 lbs buoyancy
2		AOC P	1468	10:54				06:06	
3		AR Gas	27331	10:54				06:06	
4	5	3/4 C HAIN		10:54				06:06	
5		BT SWIRL		10:54				06:15	
6		Profile stop		10:54				07:01	
7	1225	1/4" WR		12:12				06:19	4143-4
8		Profile	101	11:36				07:01	
9		Profile stop		12:09				07:01	
10		BT SWIRL		12:12				07:04	
11	10	1/4" WR		12:15				07:08	4143-96
12	6	17" GB		12:20				07:08	
13	1.8	UACM	118	12:20				07:10	sponge on 12:17 sponges in 07:16
14	480	1/4" WR		12:52				07:16	4143-34
15	6	17" GB		12:52				07:31	10m 4143-94
16	500	1/4" WR	AA 367	12:56				07:36	500m 4143-28
17	500	1/4" WR		13:21				07:37	4143-19
18	500	1/4" WR		13:43				07:53	4009-60
19	500	1/4" WR		14:13				08:06	upon recover
20	8	17" GB		14:15				08:18	4143-64 wire from bob
21	10	1/4" WR		14:19				08:22	snagged on 50 in wire terminal
22	5	AAOERAA	152	14:19				08:28	4143-85 wires heeled

Item No.	Length (m)	Item	Inst. No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
23	500	1/4 WR		14:43				0832	4143 - 12
24	500	1/4 WR		15:02				0841	4143 - 32
25	4.5	1/4 WR		15:21				0836	4009 - 65 on recovery termination ←
26	50	1/4 WR		15:32				0848	4143 - 57 on board be
27	16	17" G.B		15:38				0854	that → 500 + 50 d/t wire snag
28	10	1/4 WR		15:43				0855	4143 - 70 on board
29	1	<del>Handover</del> Anchor Chain	155	15:43				0856	
30	3	3/8 CHAIN		15:48				0856	
31	.5	D.A.C. Release	28093 28288	15:48				0856	
32	5	3/8 CHAIN		15:49				—	
33	500	1/4 WR		16:07				—	4143 - 7
34	4.24	1/4 WR		16:23				—	4009 - 57
35	20	Nylon		16:32				—	
36	5M	Chain		16:32				—	
37	3700lb	Anchor		16:32				—	
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44									
45									

# Moored Station Log

(fill out log with black ball point pen only)

ARRAY NAME AND NO. KESS 1 - 2005 MOORED STATION NO. 1157

## Launch (anchor over)

Date (day-mon-yr) 06 - JUNE - 2005 Time 1646 UTC

Latitude (N/S, deg-min) 37° 04.2195 Longitude (E/W, deg-min) 147° 22.7482

Deployed by WORRILOW Recorder/Observer M. Strick

Ship and Cruise No. REVELLE ZNNG07RR Intended Duration 1 yr

Depth Recorder Reading \_\_\_\_\_ m Correction Source \_\_\_\_\_

Depth Correction \_\_\_\_\_ m \_\_\_\_\_

Corrected Water Depth 5643 m Magnetic Variation (E/W) \_\_\_\_\_

Argos Platform ID No. 5662 Additional Argos Info on pages 2 and 3

## Surveyed Anchor Position

Lat (N/S) \_\_\_\_\_ Long. (E/W) \_\_\_\_\_

Acoustic Release Model 8242 X5

Release No. 28038 / 26467 Tested to ~~300~~ TA / TA m

Receiver No. \_\_\_\_\_ Release Command 347661 / 344041

Enable 366377 / 356242 Disable 366433 / 356310

Interrogate Freq. 11 Reply Freq. 12

## Recovery (release fired)

Date (day-mon-yr) 19 MAY 06 Time 2058 UTC

Latitude (N/S, deg-min) 37 04.57 N Longitude (E/W, deg-min) 147 22.86 E

Recovered by WORRILOW Recorder/Observer S Waterman

Ship and Cruise No. Melville MGLN03 Actual duration 347 days

Distance from actual waterline to buoy deck \_\_\_\_\_ m

Moored Station Number KES61-2005-2006

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
1		6111 Synthetic Sponges	SU 14	11:48	Storage SU 3137			22:32	2605 lbs buoyancy 2 broken
2		ADC P	SU 5091	11:48				22:32	
3		ARCS	PT 5662	11:48	Magnet OFF			22:32	
4	5	3/4" Chain		11:48				22:32	
5		3T Sumped		11:48				22:32	On recovery: MP 01
6		Profiler Stop		11:48				<del>22:47</del> 23:51	bottom end cap off and hanging; connections exposed
7		Profiler	117	12:33				23:51	
8	125	1/4" W.R.	4143-2	13:14				22:48	
9		Profiler Stop		13:14				23:51	
10		3T Sumped		13:19				23:51	
11	10	1/4" W.R.	4143-83	13:22				23:58	
12		6171 Glass Fibres		13:22				23:58	
13		<del>1/4" W.R.</del>						—	
14	430	1/4" W.R.	4143-33	13:42				0004	
15	25	1/4" W.R.						—	on recovery:
16		6171 Glass		13:44				0024	wire leading to 16 glass balls snagged on
17	10	1/8" W.R.	4143-95	13:44				0082	top glass ball in this chain
18		Aculemnom	SU 309	13:51				0036	wire on eye in vertical high tension
19	300	1/4" W.R.	4143-18	14:12				0044	
20	500	1/4" W.R.	4143-26	14:13	ONS SIDE 4143-2V ON W. SIDE 4143-27			0058	
21	474	1/4" W.R.	4143-44	14:54				0111	on recovery: again wire leading to 16 glass balls snagged
22	8	171 Glass Fibres		14:54				0125	on glass balls in this chain

on recovery: again wire leading to 16 glass balls snagged on glass balls in this chain

- sphere in broken ball

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
23	<del>40</del>	<del>1/4" WR</del>	DELETED	FROM	MEASURE				
24	500	1/4" WR	4143.27	15:12				0135	snag of wire above de-fouled
25	500	1/4" WR	4143.23	15:32				0148	
26	465	1/4" WR	4143.46	15:56				0200	
27		16 17" Glass float		15:56				0212	3 imploded glass balls on this chain noted on recovery
28	10	1/4" WR	443-322	16:04	4143.93			0216	
29		Bandera CA	50 348	16:05				0216	
30	3	3/8" chain		16:05				0218	
31		And release	50 28038 50 26467	16:08				—	
32	5	3/8" chain		16:08				—	
33	500	1/4" WR	4143.30	16:28				—	
34	100	1/4" WR	4143.106	16:39				—	
35	20	3/4" Nylon		16:42				—	
36	5M	TRAWLEX COMMAND		16:46				—	
37		DOUBLE MAKE ANCHOR		16:49	W/DAN FORTIN - 3900 lbs.			—	
38									
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44									
45									

14  
5

# Moored Station Log

(fill out log with black ball point pen only)

ARRAY NAME AND NO. KEYS 2-05 MOORED STATION NO. 1156

## Launch (anchor over)

Date (day-mon-yr) 5-JUNE-2005 Time 04:55 UTC

Latitude (N/S, deg-min) 36° 21.696 Longitude (E/W, deg-min) 146° 51.057

Deployed by WorriLOW/Duan Recorder/Observer M. STRICK

Ship and Cruise No. RV Reselle ZHANG07RR Intended Duration 1 yr

Depth Recorder Reading \_\_\_\_\_ m Correction Source \_\_\_\_\_

Depth Correction \_\_\_\_\_ m

Corrected Water Depth 5645 m Magnetic Variation (E/W) \_\_\_\_\_

Argos Platform ID No. 5627 Additional Argos Info on pages 2 and 3

## Surveyed Anchor Position

Lat (N/S) \_\_\_\_\_ Long. (E/W) \_\_\_\_\_

Acoustic Release Model 8242 X5

Release No. SN 28039:347710  
SN 30288:253013 Tested to ~~3~~ turned around m

Receiver No. \_\_\_\_\_ Release Command \_\_\_\_\_

Enable SN 28039:366475 (CHA) 366504 (CHB)  
SN 30288:256454 (CHA) - (CHB) Disable SN 28039:366527  
SN 30288:256477

Interrogate Freq. SN 28039:11 kHz (CHA) 9 kHz (CHB)  
SN 30288:11 kHz (CHA) - (CHB) Reply Freq. SN 28039:12 kHz (CHA) 11 kHz (CHB)  
SN 30288:12 kHz (CHB) - (CHB)

## Recovery (release fired)

Date (day-mon-yr) 20 MAY 06 Time 19 58 UTC

Latitude (N/S, deg-min) 36 21.60 Longitude (E/W, deg-min) 146 51.458

Recovered by S. WorriLOW Recorder/Observer S. Waterman

Ship and Cruise No. Melville MGLN03 Actual duration 349 days

Distance from actual waterline to buoy deck \_\_\_\_\_ m

# Moored Station Number KESS 2 - 2005 - 2006

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
1		64" Synthetic Spheres		JUNE 4, 2005 2340 <del>2320</del>	SEE NOTES RE: BAD TAGLINE BALLS			2142	
2		AREOS & STRABE	5627	<del>2340</del>	MAGNET OUT 2333Z			2142	
3	5m	3/4" MOORING CHAIN		2340 <del>2320</del>				2142	
4	25m	1/4" WR		2341				2210	
5	10m	1/4" WR	4143-100	2350				2216	
6	2m	ADCP (PMEL) IN CAGE	SN 461 TR 11156	2350	loaner from PMEL (KESS 7 during 2004)			2219	
7		3T Swivel		2350				2222	
8		Profiler Stop		2350				2324	
9		Profiler	119	JUNE 5, 2005 0029				2324	
10	1225	1/4" WR	4009-6	0055				2230	
11		Profiler Stop		0055				2324	
12		3T Swivel		0055				2324	
13	10m	1/4" WR	4143-122	0105				2332	
14	6	17" G-Balls on 3/8" chain		0105				2332	
15		VACM	163	0105	0103 SPONGES OUT 2340 SPONGES IN			2334	2340 SPONGES IN
16	415m	1/4" WR	4009-67	0135				2340	
17	25m	1/4" WR	4009-142	0135				2352	
18	6	17" G-Balls on 3/8" chain		0140				2356	
19	10m	1/4" WR	4143-102	0140				0003	
20		Aanderaa Current Meter	370	0140				0005	
21	500m	1/4" WR	4143-22	0200	2 LAYS ON AT VERT			0009	
22	500m	1/4" WR	4143-24	0225				0022	

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
23	4.77	1/4" WR	4143-43	02:48	2005			0037	
24	8	1 7/8" B-Balls 3/8" Chain		02:50				0053	
25	10m	1/4" WR	4143-88	02:52				0054	
26		Anderson Current	154	02:55				0056	loop of wire from further down snagged
27	500	1/4" WR	4143-17	03:15				0103	on glass ball chain wire + loop hauled in together
28	500	1/4" WR	4143-25	03:35				0112	
29	465	1/4" WR	4143-49	04:00				0107	termination @ 500m + 465 m on board
30	16	1 7/8" Glass Balls 3/8" Chain		04:00				0121	before termination @ 500m + 500m d/t loop in wire
31	10m	1/4" WR	4143-76	04:10				0127	loop on board @ 0115
32		Anderson Current Meter	148	04:10				0127	
33	3m	3/8" Mooring Chain		04:10				0127	1 glass ball imploded
34		Dual Acoustic Release	30298 28039	04:10	1 1/2" Trawlax dualing Chain			0127	
35	5m	3/8" Mooring Chain		04:10				—	
36	500m	1/4" WR	4143-14	04:40				—	
37	79m	1/4" WR	4143-56	04:49				—	
38	10m	1/4" WR	4143-86	04:55				—	
39	20m	3/4" Columbia Plated		04:55				—	
40	5m	1/2" Trawlax Chain		04:55				—	
41		Double Mate Anchor of Dumbbells	3700 165	04:55				—	
42									
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# Moored Station Log

(fill out log with black ball point pen only)

ARRAY NAME AND NO. K3 MOORED STATION NO. 1155  
(KE 55 3 2004-2005)

## Launch (anchor over)

Date (day-mon-yr) 4-JUNE-2005 Time 0351 UTC

Latitude (N/S, deg-min) 35 32.755 N Longitude (E/W, deg-min) 146 24.787

Deployed by Scott WorriLOW / James DUNN Recorder/Observer MEGHAN CRONIN

Ship and Cruise No. R/V Reville ZHNG07RR Intended Duration \_\_\_\_\_

Depth Recorder Reading \_\_\_\_\_ m Correction Source \_\_\_\_\_

Depth Correction \_\_\_\_\_ m \_\_\_\_\_

Corrected Water Depth 5885 m Magnetic Variation (E/W) \_\_\_\_\_

Argos Platform ID No. 23668 Additional Argos Info on pages 2 and 3

Surveyed Anchor Position

*Sphere under @*  
35 33.45  
146 27.55

Lat (N/S) \_\_\_\_\_ Long. (E/W) \_\_\_\_\_

## Acoustic Release Model

Release No. SN 26356:343251 Tested to TA / TA m  
SN 26358:343303

Receiver No. \_\_\_\_\_ Release Command 26356:343251

Enable SN 26356 CHA:341701 CHB:341722 Disable SN 26356:341747  
SN 26358:CHA-355044 CHB:355067 SN 26358:355116

Interrogate Freq. CHA-11 kHz CHB-9 kHz Reply Freq. CHA-12 kHz CHB 11 kHz

## Recovery (release fired)

Date (day-mon-yr) 21 MAR / 06 Time 1857 UTC

Latitude (N/S, deg-min) 35 32 23 Longitude (E/W, deg-min) 146 24.71

Recovered by S. WorriLOW Recorder/Observer S. Waterman

Ship and Cruise No. R/V Melville MGLN03 Actual duration 351 days

Distance from actual waterline to buoy deck \_\_\_\_\_ m

# Moored Station Number

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
1		6 1/2" Synthetic Sinker	015	JUNE 3, 2005 2130				2017	
2		AOC P	1594	2130	FFF 23668			2017	some growth on ADCP transducer
3		ARGOS	PT 23668	2130				2017	
4		3/4" Prod Gun		2130				2017	
5		3T Survival		2130				2025	
6		Profiler Stop		2130				2106	motor spring broken
7		Profiler	110	2206				2106	
8	1225	1/4" Jacobs Tee			Re used from recovered KASS			2027	
9		1/4" wire rope		2230				2106	
10		Profiler Stop		2235				2106	
11	10	1/4" Wire Rope	4009-195	2235				2111	
12		6 17" Glass balls		2246	LAYSAN MATTRESS			2113	
13		VACM	204	2246	2243. ROTORS UNBLOCKED			2116	2117 Rotors blocked.
14	<del>25</del>	<del>1/4" wire rope</del>						---	
15	480	1/4" Wire Rope	4009.039	2246				2119	
16	<del>25</del>	<del>1/4" wire rope</del>						---	
17		6 17" Glass balls		2325				2134	
18	10	1/4" Wire Rope	4143-75	2325				2139	
19		Anderson C.M.	366	2325				2139	
20	<del>25</del>	<del>1/4" wire rope</del>						---	
21	500	1/4" wire rope	4009-19	2347				2142	
22	500	1/4" wire rope	4143-31	JUNE 4, 2005 0015				2155	

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
23	474	1/4" W.R. Rope	4143-42	JUNE 4, 2005 0040				2209	
24		8 17" Glass balls		0040				2230	
25	10	1/4" W.R. Rope	4143-123	0043				2232	
26		Anchorona C.M.	149	0043				2232	
27	500	1/4" W.R.	4143-107	0105				2233	current meter recovered upside down as 10m wire wrapped around 500m wire
28	500	1/4" W.R.	4009-35 ✓	0125				2245	- fouled wires (10m w/ 474 m above + 500 m below) wrapped on winch together
29	465	1/4" W.R.	<del>4143-45</del>	0200				2313	
30		16 17" Glass balls		0200				2318	
31	10	1/4" W.R.	<del>4143-101</del> <del>4009-46</del>	0205				2319	
32		Anchorona C.M.	147	0205				2319	
33	3	7/8" Chain		0205				2319	
34		Dred Releases		0205				—	
35	5	3/8" Chain		0205	STOP FOR LUNAR			—	
36	500	1/4" W.R.	<del>4143-47</del> X	0320				—	
37	219	1/4" W.R.	4143-53	0330	Adjusted from original 228m account for depth change. (219.50783)			—	
38	25m	1/4" W.R.	4009-151 ✓	0342	adjusted from original 10m to account for depth change.			—	
39	20	3/4" Colomex Dreded		0351				—	
40	5	1/2" Traylor Chain		0351				—	
41		3200lb anchor		0351				—	
42								—	
43	50m	1/4" W.R.	4143-59	0385	inserted			—	
44	50m	1/4" W.R.	4143-58	0380	inserted			—	
45									

# Moored Station Log

(fill out log with black ball point pen only)

ARRAY NAME AND NO. KES-6 MOORED STATION NO. 1154  
(2005-2006)

## Launch (anchor over)

Date (day-mon-yr) 31 MAY 2005 Time 0339 UTC  
Latitude (N/S, deg-min) 33° 17.3391' Longitude (E/W, deg-min) 145° 02.6137'  
Deployed by WORRILOW Recorder/Observer MOON (PMEH)  
Ship and Cruise No. REUELLE ZHANG 02RR Intended Duration 1 YR  
Depth Recorder Reading 5722 m Correction Source tech  
Depth Correction tech depth = 5 m  
Corrected Water Depth 5727 m Magnetic Variation (E/W) \_\_\_\_\_  
Argos Platform ID No. 5628 Additional Argos Info on pages 2 and 3

## Surveyed Anchor Position

Lat (N/S) \_\_\_\_\_ Long. (E/W) \_\_\_\_\_

## Acoustic Release Model

Release No. 28086 / 28089 Tested to TA / TA m  
Receiver No. \_\_\_\_\_ Release Command 347775 / 350040 ✓  
Enable 366772 / 367271 Disable 367024 / 367323  
Interrogate Freq. 11 Reply Freq. 12

## Recovery (release fired)

Date (day-mon-yr) 23 MAY 06 Time 2357 UTC  
Latitude (N/S, deg-min) 33 17.17 Longitude (E/W, deg-min) 145 03.53  
Recovered by S. Worriow Recorder/Observer S. Waterman  
Ship and Cruise No. RV Melville MGLN03 Actual duration 357 days  
Distance from actual waterline to buoy deck \_\_\_\_\_ m

5/30 ~ 5/31

Moored Station Number KESS 6 2005-2006

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
1		64" SPHERE	010	21:56	Booyancy 2251			01:52	No light
2		AOSP	1969	21:56				01:52	
3		ARGO	5628	21:56				01:52	
4	5	3/4 CHAIN		21:56				01:58	
5		3T Swivel		21:56				02:02	
6		Profiler stop		21:56				02:03	4143-3 Albatross
7	1225	1/4 WR		23:20				02:38 (profiler)	
8		Profiler	103	22:55				02:42 (swivel)	
9	10	1/4 WR		23:20				02:48 (stopper)	
10	6	17" GB		23:25				02:44	4143-90
11	1.8	UAcM	1178	23:34				02:46	
12	480	1/4 WR		23:59				02:48	sponge out 21:28 sponges in 02:54
13	6	GB's (17")		00:00				02:54	4143-36
14	10	1/4 WR		00:04				03:15	
15	.5	AANDERMAN	0473	00:04				03:18	4143-121
16	500	1/4 WR		00:22				03:18	
17	500	1/4 WR		00:45				03:22	4143-13
18	474	1/4 WR		01:07				03:34	4143-11
19	8	17" GB's		01:09				03:46	4143-41
20	10	1/4 WR		01:14				03:58	
21	.5	AANDERMAN	150	01:14				04:03	4143-89
22	500	1/4 WR		01:37				04:03	
								04:05	4143-110

3T Swivel  
stopper

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
23	500	1/4 WR		01:58				0417	4143-108
24	465	1/4 WR		02:21				0428	4143-47
25	16	17" GR'S		02:27				0438	
26	10	1/4 WR		02:36				0442	4143-72
27	.5	HANDERAW	162	02:36				0442	
28	3	3/8 CHAIN		02:37				0442	
29	.5	AWAL Releases	28086 28089	02:37				0442	
30	5	3/8 CHAIN		02:37					
31	500	1/4 WR		03:00					4143-109
32	50	1/4 WR		03:05	50 m 1/4" WR substituted for 219m for depth adjustment				414362 (50m)
33	50	1/4 WR		03:10	50m 1/4" WR inserted for depth Adj.				4143-61
34	50m	1/4 WR		03:25	50m 1/4" WR inserted for depth Adj.				4143-60
35	25m	1/4 WR		03:29	25m 1/4" WR inserted				4009-118 reused from 2004
36	10m	1/4 WR		03:30	10m 1/4" WR inserted				4143-69
37	20m	Nylon		3:39					
38	5m	1/2" Trawllex		3:39					
39	3700	Anchor w/ Danforce		3:39					
40									
41									
42									
43									
44									
45									

# Moored Station Log

(fill out log with black ball point pen only)

ARRAY NAME AND NO. KESS 7-05 MOORED STATION NO. 1153  
(2005-2006)

## Launch (anchor over)

Date (day-mon-yr) 29 MAY 2005 Time 1319 UTC

Latitude (N/S, deg-min) 32° 24.3384 Longitude (E/W, deg-min) 144° 35.5789

Deployed by WORRILOW Recorder/Observer \_\_\_\_\_

Ship and Cruise No. R/V Melville ZHNG07R12 Intended Duration 1 yr

Depth Recorder Reading \_\_\_\_\_ m Correction Source \_\_\_\_\_

Depth Correction \_\_\_\_\_ m

Corrected Water Depth \_\_\_\_\_ m Magnetic Variation (E/W) \_\_\_\_\_

Argos Platform ID No. 10432 Additional Argos Info on pages 2 and 3

## Surveyed Anchor Position

Lat (N/S) \_\_\_\_\_ Long. (E/W) \_\_\_\_\_

Acoustic Release Model 8242

Release No. 28037 / ~~17967~~ / 26377 (26337) / ~~23846~~ Tested to 3000 / ~~FA~~ / 3000 m

Receiver No. \_\_\_\_\_ Release Command 347642 / 342562

Enable 366240 / 337404 Disable 366312 / 337442

Interrogate Freq. 11 Reply Freq. 12

## Recovery (release fired)

Date (day-mon-yr) 24 MAY 06 Time 2054 UTC

Latitude (N/S, deg-min) 32 23.87 Longitude (E/W, deg-min) 144 35.95

Recovered by S. WorriLOW Recorder/Observer S. Waterman

Ship and Cruise No. RV Melville MELN07R Actual duration 360 days

Distance from actual waterline to buoy deck \_\_\_\_\_ m

u

May 29

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
1		6" SYMMETRIC SPHERE	011	7:26	Buoyancy 2551			MAY 24 2254	
2		AR 905 STROBE	10432	7:26				2254	
3	5	3/4 MOORING CHAIN		✓				2254	
4	30	1/4" WR		✓				2306	4143-65
5	2	ADCP ARPSN 542	11145	7:00	ADCP's TO learner from PMEL in cage (PMEL)			2309	
6		3T SWIVEL						2312	
7		Profile stop		7:28				2314	
8		PROFILER	108	8:28				2356	meter spring broken on recovery
9	1225	1/4" WR		8:55				2314	4143-1
10		PROFILER STOP		8:55				2359	
11		3T SWIVEL		8:55				2359	
12	10	1/4" WR		9:00				MAY 25 0003	4143-118
13	6	17" GB on 3/8 CHAIN		9:04				0003	
14	1.8	VACM	325	9:04	2 sponges out			0006	sponges in @ 0009
15	448	1/4" WR		9:37				0010	(407) 4143-40
16	6	17" GB on 3/8 CHAIN		9:37				0049	ring loose to adjust ship's position to improve wire angle
17	10	1/4" WR		9:42				0052	4143-92
18		ANODIZED CM	379 374	9:42				0052	
19	500	1/4" WR		10:10				0056	4143-8
20	500	1/4" WR		10:36				0111	4143-29
21	474 465	1/4" WR		11:05				0124	4143-112
22	8	17" GB on 3/8 CHAIN		11:06				0137	

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
23	10	1/4" WR		11:10				0142	4143-119
24		HANDERMA CM	128	11:10				0142	
25	500	1/4" WR		11:35				0145	4143-6
26	500	1/4" WR		11:55				0157	4143-10 number and end only
27	465	1/4" WR		12:20				0209	4143-48
28	16	17" GB'S 60 CHAIN		12:23				0222	
29	10	1/4" WR		12:30				0226	4143-99 3 glass balls imploded
30		HANDERMA	143	12:30				0226	
31	3	3/8" MONROE CHAIN		12:30				0226	
32	1	DUAL RAINBOW <del>2001</del>		12:36	w/1/2" TRANSFER PULLEY CHAIN			0226	
33	5	3/8" MC		12:36				—	
34	500	1/4" WR		12:55				—	4143-4
35	218	1/4" WR		13:11				—	4143-54
36	20m	Nylon		13:14				—	
37	5m	1/2" chain		13:20				—	
38	3700	Anchor		13:20				—	
39									
40									
41									
42									
43									
44									
45									

80227  
80228  
80229

# Moored Station Log

PAGE 1

(fill out log with black ball point pen only)

ARRAY NAME AND NO. KESS 7 MOORED STATION NO. 1143

## Launch (anchor over)

Date 15-06-2004 Time 07:47 UTC  
day-mon-year

Latitude 32° 23.9809  N or S Longitude 144° 33.7545  E or W  
deg-min deg-min

Position Source:  GPS, LORAN, SAT. NAV., OTHER GPS

Deployed by: Nelson Hogg; Willie Ostrom Recorder/Observer: Stephanie Waterman

Ship and Cruise No R/V Thompson 168-2 Intended duration: 365 days

Depth Recorder Reading 5725 m Correction Source: Echo Sounding  
Depth Correction 46 m Correction Tables (Table 53)

Corrected Water Depth 5771 m Magnetic Variation: 5.1° E or  W  
Surveyed

Anchor Position: Lat. 32° 23.982'  N or S Long. 144° 33.2007'  E or W

Argos Platform ID No. 10432 Additional Argos Info may be found on pages 2 and 3.

## Acoustic Release Information Model: 8202 BACS SN: 17961

Release No. 623341 Tested to 3000 meters

Enable Command: 601201 Disable Command: 601163  
Receiver No. 601201 Release Command 601163

Interrogate Freq. Ch. A: 11 kHz Reply Freq. Ch. A: 12 kHz  
NB. Channel B Transponder Disabled

## Recovery (release fired)

Date \_\_\_\_\_ Time \_\_\_\_\_ UTC  
day-mon-year

Latitude \_\_\_\_\_ N or S Longitude \_\_\_\_\_ E or W  
deg-min deg-min

Position Source: GPS, LORAN, SAT. NAV., OTHER \_\_\_\_\_

Recovered by: \_\_\_\_\_ Recorder/Observer: \_\_\_\_\_

Ship and Cruise No. \_\_\_\_\_ Actual duration: \_\_\_\_\_ days

Distance from actual waterline to buoy deck \_\_\_\_\_ meters

MOORED STATION NUMBER

1143

Item No.	Lgth [m]	Item	Inst No.	Time Over	Notes	Data No.	Calc Dpth	Time Back	Notes
1		64" Syntactic Sphere	SN-011	03:25	buoyancy of foam 255 LB				
2		ARGOS	Platform 10:10432	03:25	magnet removed 03:22				
3		strobe light	SN 1032	03:25	Flashrate: 2 s				
4	25	1/4" Jacketed Wire Rope		03:25	-see Comment ① below				
5	255	1/4" Jacketed Wire Rope		03:37					
6		ADCP	SN 461	03:37	See Comment ② below				
7		BT Swivel		03:25	-placed below the 5m chain above the 25m shot of wire				
8		Profiler Stop		03:37					
9		PROFILER	110	04:03	Scheduled Startup/Reference date/time see comments p. 10				
10	1225	1/4" Jacketed Wire Rope		03:37					
11		Profiler Stop		04:31					
12		BT Swivel		04:34					
13	10	1/4" Jacketed Wire Rope		04:34					
14		5 17" Glass Floats on 3/8" Trawllex chain		04:37	-decreased by 1 from original mooring design				
15		VACM	V-325	04:40	-foam blocks removed: 04:37				
16	10	1/4" Jacketed Wire Rope		04:40	-See comment ③ below				
17	430	1/4" Jacketed Wire Rope		04:42	-terminations w/ 10m top & bottom wrapped and taped				
18	10	1/4" Jacketed Wire Rope		04:58					
19		5 17" Glass Floats on 3/8" Trawllex chain		05:01	-decreased by 1 from original mooring design				
20	10	1/4" Jacketed Wire Rope		05:06					

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4"  
of  
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be  
er:  
1:25

	Date/Time (GMT)	Comments
①	JUN 15 2004 0056	30 m of wire added below sphere to original design as ADCP used for this deployment hangs below the sphere and requires distance between the instrument and the sphere to avoid sphere interference
②	JUN 15 2004 0100	-ADCP from NOAA: RD ADCP SN 461; hangs independently from sphere in a cage 30 m below sphere; Specs 150 kHz; heads at 30°; mounted w/ temperature and pressure sensor TP 11156 w/ sample rate: 10 min to allow verification of head depth after recovery; internal and external battery pack: new battery 3-8-04
③	JUN 15 2004 0110	-25 m shots above and below 430 m shot in original mooring design replaced by 10m shots to compensate for 30m extra wire shot below sphere (above ADCP)

MOORED STATION NUMBER

1143

Item No.	Lgth [m]	Item	Inst No.	Time Over	Notes	Data No.	Calc Dpth	Time Back	Notes
21		Aanderra Current Meter	SN 369	05:06	-6 channel model w/ tilt and backscatter				
22	25	1/4" Jacketed Wire Rope		05:06	-bottom termination taped and wrapped				
23	100	1/4" Jacketed Wire Rope		05:08					
24	1225	1/4" Jacketed Wire Rope		05:11	See Comment ① below				
25	100	1/4" Jacketed Wire Rope		05:51					
26	25	1/4" Jacketed Wire Rope		05:55	-top termination wrapped and taped				
27		6 17" Glass Floats on 3/8" Trawllex Chain		05:58	increased by 2 from original design				
28	10	1/4" Jacketed Wire Rope		05:58					
29		Nortek Current Meter	SN/Head # A6L-1207	06:00	See Comment ② below; comment				
30	25	1/4" Jacketed Wire Rope		06:00	④ p. 10, 3/8" shackle top + bottom				
31	500	1/4" Jacketed Wire Rope		06:03	-bottom termination wrapped and taped ⑥:15-small nic in wire jacket				
32	500	1/4" Jacketed Wire Rope		06:16					
33	415	1/4" Jacketed Wire Rope		06:31					
34	25	1/4" Jacketed Wire Rope		06:45	-top termination wrapped and taped				
35		30 17" Glass Floats on 3/8" Trawllex Chain		06:49	increased by 4 from original mooring design				
36	10	1/4" Jacketed Wire Rope		06:53					
37		Aanderra current Meter	SN 345	06:56	See Comment ③ below				
38	5	3/8" Trawllex Chain w/ 1/2" shackles		06:58	-modified from original design w/ wire availability				
39		SINGLE Acoustic Release	SN 17961	06:59	See Comment ④ on p. 6				
40	5	1/2" Trawllex chain		06:59	-modified from original design w/ wire availability				

Date/Time	100m	100m	Comments
① JUN 15 2004 0125			122.5 m shots recovered from failed mooring KESS1 used in place of 500m, 500m, 424 m shots in original mooring design due to wire shortage; 1225 m shot used with 2 shots of 100m for a total length of 1425m
② JUN 15 2004 0130			-Nortek current meter on board for testing purposes replaces Aanderra current meter in original design due to Aanderra current meter shortage (due to the failure of moorings 1, 4(2)). Specs of current meter: Model: Nortek Aquadopp 6000m Long Symmetric Current Meter; SN/Head # A6L-1207; Head ID: Hardware ID AQD 1395; Frequency: 2 MHz; Firmware Ver. 1.
③ JUN 15 2004 0140			-RCM II SN 345 used is test Aanderra current meter used in 3 tests prior to this deployment; Problems with leakage in the first 2 of 3 tests; DSU reset and instrument switched on at 0000 GMT JUN 15 2004; 6 channel model w/ tilt and backscatter

MOORED STATION NUMBER

1143

Item No.	Lgth [m]	Item	Inst No.	Time Over	Notes	Data No.	Calc Dpth	Time Back	Notes
41	500	1/4" Jacketed Wire Rope		07:01					
42	225	Adjustable Shot 1/4" Jacketed Wire Rope		07:16	shots of 100m, 50m; 25m, 50m				
43		2 17" Glass Floats on 3/8" Trawllex chain		07:40	-addition to original mooring design				
44	20	3/4" Columbia Plaited		07:40	-attached w/ 3/4" shackles as 5/8" shackles have all been used				
45	5	1/2" Trawllex chain		07:47					
46		4500 LB (wet) anchor w/ Danforth		07:47	5/8" shackle; lashing chain used to attach Danforth				
47									
48									
49									
50									
51									
52									
53									
54									
55									
56									
57									
58									
59									
60									

Date/Time	Comments
④ JUN 15 2004 0145	-single large (Model B202 BACS) Acoustic Release used in place of a dual acoustic release as in Mooring design due to shortage of acoustic releases; Note: ch. B transponder disabled

MOORED STATION NUMBER 1143

Date/Time(GMT)	Comments
① 04 JUN 2004 0400 15	RCM II <sup>top most</sup> (Aanderra Current Meter) SN 369 (Item 21) turned on
② 04 JUN 2004 0000	bottom RCM II (Aanderra Current Meter) SN 345 (Item 37) turned on
③ 15 JUN 2004 0000	2 Aanderra Current Meters rescaled by cleaning and regreasing the o-rings; sealing seam w/ self-vulcanizing rubber tape
④ 14 JUN 2004 11:49:24	Nortek current meter turned on; note log file/instrument configuration info recorded by Nelson Hogg; dep ID: KESS71
⑤ 15 JUN 2004	Profiler set: Scheduled Startup: (Profile $\phi$ ): 15 JUN 2004 1500; Reference date and time (Profile 1): 16 JUN 2004 0300;
⑥ 15 JUN 2004 0000	ADCP measures surface current of 1 kt W in the region of deployment
⑦ 15 JUN 2004	Mooring design altered by Steve Jayne both to redistribute buoyancy to prevent mooring failure (as was done for moorings 4(2), 5 and 6) and <del>at</del> due to shortage of equipment: changes are: ① ADCP mounted 30m below sphere and attached w/ 30m of <sup>1/4" jacketed</sup> wire rope; ② 2 uppermost strings of glass balls reduced from 6 floats to 5 floats each; 3rd string of glass balls reduced from 8 floats to 6 floats; lowermost string increased from 16 floats to 20; and extra string of glass floats added above the 20m 3/4" Columbia plaited ③ 500m, 500m, 424 m wire shots between 2000m and 3500m depth replaced with shots of 100m, 1225m, 100m with the 1225 m shot that recovered from failed mooring due to wire shortage ④ 2 25 m shots above and below 430m shot between 1500m and 2000m depth replaced by 2 10m shots to compensate for the additional 30m of wire added between the sphere and the ADCP

KESS1

MOORED STATION NUMBER

1143

Date/Time	Comments
15 JUN 03:24	-ship speed 0.5 kts -current: 1 kt. W
03:37	-after ADCP deployment: wire recovered until ADCP came to the surface; payout resumed at 03:40
03:40	-ship speed increased to 1 kt
03:46	-ship speed increased to 1.5 kts; course 084°T; course made good 090°T; payout speed: 0.5 kt
03:49	-ship speed: 1.5 kt. 8520 m to go to intended drop point -payout speed: 1.5 kt
04:03	-payout halted to mount MP
04:03	-payout resumed; payout speed 1.2 kts.
04:44	-ship speed: 1.5 kts; distance to go: 7000m
05:12	-ship speed 1.5 kts; payout speed 1.1-1.25 kts
06:34	-ship speed: 1.5 kts (thru H <sub>2</sub> O); 1.0 kts. (overground); 4225 m to
	-sphere spotted visually at 171°T - slightly to port of drop site; E1 0900
	dead astern from the bridge
07:24	-payout halted to wind 50m. of additional adjustable shot
07:32	-payout resumed
07:40	-ship's course altered from 084°T to 090°T to straighten wire; speed reduced to 1 kt

# Moored Station Log

(fill out log with black ball point pen only)

ARRAY NAME AND NO. KESS 6 MOORED STATION NO. 1142

## Launch (anchor over)

Date (day-mon-yr) 14-06-2004 Time 08:05 UTC

Latitude (N/S, deg-min) 33° 14.8187 N Longitude (E/W, deg-min) 145° 01.8984 E

Deployed by Nelson Hogg, Willie Ostrom Recorder/Observer Stephanie Waterman

Ship and Cruise No. R/V Thompson 168-2 Intended Duration 1 year

Depth Recorder Reading 5730 m Correction Source Echo Sounding

Depth Correction 42 m Correction Tables (Table 52)

Corrected Water Depth 5772 m Magnetic Variation (E/W) 5.25° W

Argos Platform ID No. 5628 Additional Argos Info on pages 2 and 3

## Surveyed Anchor Position

Lat (N/S) 33° 14.4913 N Long. (E/W) 145° 2.01614 E

Acoustic Release Model 8242 XS

Release No. SN 28086: 347775 Tested to 3000 m  
SN 28089: 350040

Receiver No. \_\_\_\_\_ Release Command \_\_\_\_\_

Enable SN 28086: Ch.A: 366772; Ch.B: 367007 SN 28086: 367024  
SN 28089: Ch.A: 367271; Ch.B: 367300 Disable SN 28089: 367323

Interrogate Freq. Ch.A: 11 kHz; Ch.B 9 kHz Reply Freq. Ch.A: 12 kHz; Ch.B: 11 kHz

## Recovery (release fired)

Date (day-mon-yr) \_\_\_\_\_ Time \_\_\_\_\_ UTC

Latitude (N/S, deg-min) \_\_\_\_\_ Longitude (E/W, deg-min) \_\_\_\_\_

Recovered by \_\_\_\_\_ Recorder/Observer \_\_\_\_\_

Ship and Cruise No. \_\_\_\_\_ Actual duration \_\_\_\_\_ days

Distance from actual waterline to buoy deck \_\_\_\_\_ m

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
1		64" Syntactic Sphere	SN-010	04:03	buoyancy of foam: 2251 LB strobe light: SN 20; Flashrate 3s				
2		ADCP	SN 5091	04:03					
3		ARGOS	Platform ID 5628	04:03	magnet removed @ 0300				
4		3/4" Proof Chain		04:03	4:09: ship speed 1.5 Kts (thru H2O) course: 001.6 T				
5		3T Swivel		04:03	4:10: ship speed increased to 1.75 kts; payout speed 1.25 kts				
6		Profiler Stop		04:03					
7		PROFILER	118	04:37	04:30: payout stopped to deploy MP; 04:34 payout resumed				
8	1225	1/4" Jacketed Wire Rope		04:03					
9		Profiler Stop		04:58					
10		3T Swivel		04:58					
11	10	1/4" Jacketed Wire Rope		04:58					
12		5 17" Glass Floats on 3/8" Trawllex Chain		05:01	decreased from 6 in original design				
13		VACM	<del>Y-8138</del> Y-8138	05:05	foam blocks removed @ 05:02 - several hard bangs while being deployed				
14	25	1/4" Jacketed Wire Rope		05:05	bottom termination wrapped and taped				
15	430	1/4" Jacketed Wire Rope		05:09					
16	25	1/4" Jacketed Wire Rope		05:23	top termination taped/wrapped				
17		5 17" Glass Floats on 3/8" Trawllex Chain		05:25	decreased from 6 in original design				
18	10	1/4" Jacketed Wire Rope		05:26					
19	→	Aanderra Current Meter	SN 343	05:31	6 channel model w/ tilt and backscatter				
20	25	1/4" Jacketed Wire Rope		05:31	05:32: ship course altered to 035.8 T; ship speed 1.75 kts				
21	500	1/4" Jacketed Wire Rope		05:33	bottom termination of 25m shot - wrapped and taped				
22	500	1/4" Jacketed Wire Rope		05:47					

Item No.	Depth (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
23	424	1/4" Jacketed Wire Rope		06:00					
24	25	1/4" Jacketed Wire Rope		06:13	- upper termination wrapped and taped				
25		6 17" Glass Floats on 3/8" Trawllex Chain		06:16	- decreased from 8 in original design				
26	10	1/4" Jacketed Wire Rope		06:16					
27		Aanderra Current Meter	SN 162	06:19	4 channel model (no tilt or backscatter)				
28	25	1/4" Jacketed Wire Rope		06:19	- bottom termination wrapped and taped				
29	500	1/4" Jacketed Wire Rope		06:21					
30	500	1/4" Jacketed Wire Rope		06:35	06:38 - ship speed slowed to 1.3 kts				
31	415	1/4" Jacketed Wire Rope		06:50	06:53 - ship's course altered to 0050T, 06:57 ship's speed slowed to 1kt and taped				
32	25	1/4" Jacketed Wire Rope		07:03	- top termination wrapped and taped				
33		19 17" Glass Floats on 3/8 Trawllex chain		07:07	increased from 16 in previous design (less than in KES-12) and KES-5 due to ball shortage				
34	10	1/4" Jacketed Wire Rope		07:09	07:05 ship's course altered to 000 to straighten wire; speed 1kt				
35		Aanderra Current Meter	SN 150	07:14	4 channel model (no tilt or backscatter)				
36	1.5	1/2" Trawllex Chain		07:15	- length of chain reduced from 3m 3/8" chain to shortage				
37		Oval Acoustic Releases	SN 28086 SN 28089	07:23					
38	5	3/8" Trawllex Chain		07:23	- attached w/ 3/4" shackles pinned not welded, top and bottom				
39	500	1/4" Jacketed Wire Rope		07:24	1.5 m 1/2" Trawllex chain above ring of releases				
40	<del>250</del>	Adjustable Shot 1/4" Jacketed Wire Rope		07:40	- 200m shot; <del>50m shot</del> 25m shot				
41	20	3/4" Columbia Plaited		07:56	- buoy spotted at 1725T from bridge				
42	5	1/2" Trawllex Chain		08:05	07:51 - course altered 10° to sbtd to straighten wire; course 3450T				
43		4500 lb (wet) anchor w/ Danforth		08:05	- 5/8" shackles; lashing chain used to attach sh Danforth				
44									
45									

230



# Moored Station Log

(fill out log with black ball point pen only)

1141

ARRAY NAME AND NO. KESS 5 MOORED STATION NO. ~~1140~~

## Launch (anchor over)

Date (day-mon-yr) 13-06-2004 Time 15:40 UTC

Latitude (N/S, deg-min) 34° 02.014 N Longitude (E/W, deg-min) 145° 31.100 E

Deployed by Nelson Hogg; Willie Ostrom Recorder/Observer Stephanie Waterman

Ship and Cruise No. R/V Thompson 168-2 Intended Duration 1 year

Depth Recorder Reading 5787 m Correction Source Echo Sounding

Depth Correction 58-44 m Correction Tables (Table 52)

Corrected Water Depth 5831 m Magnetic Variation (E/W) 5.5° W

Argos Platform ID No. 5661 Additional Argos Info on pages 2 and 3

Surveyed Anchor Position - not available  
- see note p. 8.

Lat (N/S) \_\_\_\_\_ Long. (E/W) \_\_\_\_\_

Acoustic Release Model 8242 XS SN 23844

Release No. 634750 Tested to 3000 m

Receiver No. \_\_\_\_\_ Release Command \_\_\_\_\_

Enable Ch. A: 657302 Ch. B: 657321 Disable 657344

Interrogate Freq. Ch. A: 11 kHz; Ch. B: 9 kHz Reply Freq. Ch. A: 12 kHz; Ch. B: 11 kHz

## Recovery (release fired)

Date (day-mon-yr) \_\_\_\_\_ Time \_\_\_\_\_ UTC

Latitude (N/S, deg-min) \_\_\_\_\_ Longitude (E/W, deg-min) \_\_\_\_\_

Recovered by \_\_\_\_\_ Recorder/Observer \_\_\_\_\_

Ship and Cruise No. \_\_\_\_\_ Actual duration \_\_\_\_\_ days

Distance from actual waterline to buoy deck \_\_\_\_\_ m

Moored Station Number 1141

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
1		64" Synchronous Sphere	SN 012	09:56	09:50 - ship speed 1/2 kt. drn 000 N - buoyancy of foam: 2545 LB Strobe light SN 6431 Flashrate 45				
2		ADCP	1619 - see note p 8	09:56					
3		ARGOS	Platform ID 5661	09:56	- magnet removed ~ 0900				
4		3/4" Proof chain		09:50					
5		3T Swivel		09:50					
6		VACM	V-0109	09:50	foam blocks removed: 09:40 added 19 original design foam blocks sphere float upright 0959: speed thru H2O: 1.5 kts over ground 1.2 kts				
7		Profiler Stop		09:50					
8		PROFILER	109	10:22	10:04: payout speed: 1 kt 10:06: ship speed 1.75 kts (thru H2O) payout speed 1.2 kts				
9	1225	1/4" Jacketed Wire Rope		09:50	10:22: 3.4 soft bumps of MP on deck while deploying 10:28 ship speed 1.75 kts (thru H2O) 1.5 kts over ground				
10		Profiler Stop		10:51					
11		3T Swivel		10:51					
12	10	1/4" Jacketed Wire Rope		10:51					
13		5 17" Glass Floats on Trawlex chain		10:53	- # of floats reduced by J from original design				
14		VACM	V-107	10:56	- foam blocks removed: 10:55				
15	25	1/4" Jacketed Wire Rope		10:56	- lower termination (w/ 49m) wrapped w/ fire hose and taped				
16	430	1/4" Jacketed Wire Rope		11:18	- wrong shot of wire wound (500m not 430m) 11:00 ship speed slowed to 1 kt				
17	25	1/4" Jacketed Wire Rope	top termin wrapped and taped	11:32	1 kt white 500m shot removed and 430m shot wound. Payout resumed 11:18. 11:31 2.5m wire rewound				
18		5 17" Glass Floats on 3/8" Trawlex chain		11:38	# of floats reduced by J from original design				
19	10	1/4" Jacketed Wire Rope		11:39	11:31: ship speed slowed to 1 kt thru H2O				
20		Randero Current Meter	SN 339	11:43	channel model w/ tilt and backscatter				
21	25	1/4" Jacketed Wire Rope		11:48	- both om termination (connection w/ socm shot) wrapped and taped				
22	500	1/4" Jacketed Wire Rope		11:45					

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
23	500	1/4" Jacketed Wire Rope		11:58	12:00 ship speed 1.75 kts payout speed: 1.4 kts				
24	424	1/4" Jacketed Wire Rope		12:11					
25	25	1/4" Jacketed Wire Rope		12:27					
26		6 1/2" Glass Fibers on 3/8" Trawl chain		12:31	decreased by 2 from original design				
27	10	1/4" Jacketed Wire Rope		12:31					
28		Randerra Current Meter	SN 158	12:35	channel model (no filter backscatter)				
29	25	1/4" Jacketed Wire Rope		12:37	lower termination (attached to 500m shot) wrapped and topped				
30	500	1/4" Jacketed Wire Rope		12:51	<del>500 to 415m shot terminations</del>				
31	500	1/4" Jacketed Wire Rope		12:26	13:08 - 500 to 415m shot terminations shackled; question re. whether for 2 shots of 500m have been				
32	415	1/4" Jacketed Wire Rope		13:43	question re. whether for 2 shots of 500m have been				
33	25	1/4" Jacketed top termination Wire Rope & topped + wrapped		13:57	Deployed - <del>500m</del> 500m shot returned to check for 13:27				
34		20 1/2" Glass Fibers on 3/8" Trawl chain		14:01	* increased by 4 from original design				
35	10	1/4" Jacketed Wire Rope		14:06	14:05 - ship's course altered to 005, mooring paid out 245 of 300m				
36	15	Randerra Current Meter	SN 157	14:14	of channel model w/ no filter or backscatter				
37		3/8" Trawl chain		14:18	1.5m of 1/2" Trawl chain used above the release instead of 3m 3/8" chain due to shackle				
38		SINGLE Acoustic Release	SN 23844	14:18	3/8 shackle on bottom				
39	5	3/8" Trawl chain		14:18					
40	500	1/4" Jacketed Wire Rope		14:18	14:19 ship speed reduced to 1 ft. wind increasing				
41	275	Adjustable Shot 1/4" Jacketed Wire Rope		14:53	200m, 50m, 25m shot 14:53 ship speed increased to 15 kts from 0.5 kts.				
42		5 1/2" Glass Fibers on 3/8" Trawl chain			removed from revised design (design other mooring failed). Not enough balls available.				
43	20	3/4" Columbia Plaited		15:33	15:04 tow commenced for 1/2 nm to drop location; ship speed 15 kts.				
44	5	1/2" Trawl chain		15:40					
45		4500 LB (w/ anchor w/ Danforth)		15:40	5/8" shackle (3/8") to lashing chain (3/8") to secure Danforth				

Moored Station Number

1141

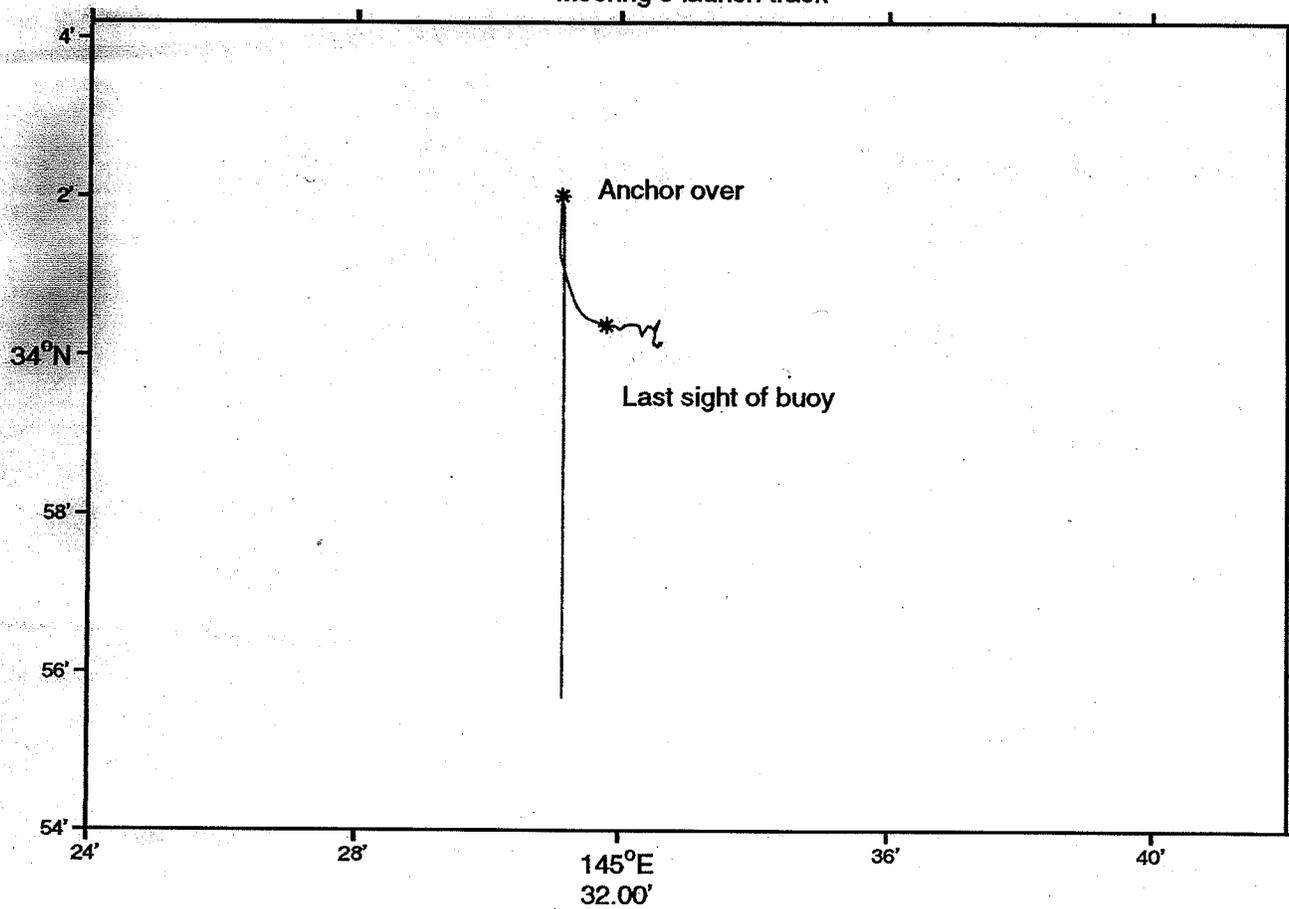
Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
91									
92									
93									
94									
95									
96									
97									
98									
99									

Date/Time (GMT)

Comments

04-06-2004 04:00	RCM IIs (Aanderra Current Meters) turned on								
13-06-2004 09:00	RCM IIs rescaled by cleaning/regreasing the o-ring and sealing w/self-vulcanizing tape to prevent potential leakage								
13-06-2004 09:00	Profiler set: scheduled start-up: JUN 14 2004 0600GMT reference date and time: JUN 14 2004 0600GMT								
12-06-2004	- original mooring design altered after failure of moorings KESS I, KESS 4(2) & glass balls moved from strings higher up in the mooring and added to lower most string: additional 5 meer glass balls added above the Columbia plated in KESS 4(2) NOT added this time due to a shortage of glass balls: - terminations of 25 m shots with longer shots wrapped and taped as in KESS 4(2) - single acoustic release used in this deployment to conserve remaining acoustic releases (currently 4 abandoned on the bottom) and to reduce the weight of the anchor end of the mooring - difficulty talking to the single acoustic release believed because of the acoustic properties of the HAO; release enabled and then disabled but survey of anchor position not possible								
13-06-2004 17:00									
14-06-2004 10:00	- SN of ADCP unknown; inferred from ADCPs already deployed and Gintai's record of the SNs of the loaned Japanese ADCPs that SN = 1619								

Mooring 5 launch track



# Moored Station Log

(fill out log with black ball point pen only)

ARRAY NAME AND NO. KESS 4(2) MOORED STATION NO. 1140

## Launch (anchor over)

Date (day-mon-yr) 12-06-2004 Time 21:12 UTC

Latitude (N/S, deg-min) 35° 10.7125 N Longitude (E/W, deg-min) 146° 12.716 E

Deployed by Nelson Hogg, Willie Ostrom Recorder/Observer Stephanie Waterman

Ship and Cruise No. R/V Thompson 168-2 Intended Duration 1 year

Depth Recorder Reading 5901 m Correction Source Echo Sounding

Depth Correction 49 m Correction Tables (Table 5<sup>2</sup>)

Corrected Water Depth 5950 m Magnetic Variation (E/W) 5<sup>3</sup>/<sub>4</sub>° W

Argos Platform ID No. 5662 Additional Argos Info on pages 2 and 3

## Surveyed Anchor Position

Lat (N/S) 35° 10.7195' Long. (E/W) 146° 12.6898'

Acoustic Release Model 8242 XS

Release No. SN 26467: 344041  
SN 28038: 347661 Tested to 3000 m

Receiver No. Ch A Release Command \_\_\_\_\_

Enable SN 26467: 356242 Ch B: 356261  
SN 28038: Ch A: 366377 Ch B: 366410 Disable SN 26467: 356310  
SN 28038: 366433

Interrogate Freq. Ch A: 11 kHz; Ch B: 9 kHz Reply Freq. Ch A: 12 kHz; Ch B: 11 kHz

## Recovery (release fired)

Date (day-mon-yr) \_\_\_\_\_ Time \_\_\_\_\_ UTC

Latitude (N/S, deg-min) \_\_\_\_\_ Longitude (E/W, deg-min) \_\_\_\_\_

Recovered by \_\_\_\_\_ Recorder/Observer \_\_\_\_\_

Ship and Cruise No. \_\_\_\_\_ Actual duration \_\_\_\_\_ days

Distance from actual waterline to buoy deck \_\_\_\_\_ m

Moored Station Number

1140

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
1		64" Syntactic Sphere	SN-014	16:45	Buoyancy of Foam: 2605 lbs strobe light: SN: 1813 Flashrate: 45				
2		A D C P	SN 1622	16:45					
3		AR G O S	Platform ID 5662	16:45	magnet removed at 14:40				
4		3/4" Proofchain		16:41					
5		3T Swivel		16:41					
6		V A C M	V-0141P	16:41	- foam blocks removed: 1637 - added to original design to make sphere float upright				
7		Profiler Stop		16:41					
8		P R O F I L E R	107	17:15					
9	1225	1/4" Jacketed Wire Rope		17:41	- shackles taped at bottom of VACM: top of 1225 m shot				
10		Profiler Stop		17:39	- before NP deployment: ship speed (thru HEC) 1.5 kts - for hump deployment: ship speed 15 kts; wire stopped; after NP deployment				
11		3T Swivel		17:39	- on 9/8 - report of Churnin: ship speed 15 kts at 17:41 - ship slowed to 1.5 kts at 17:42 - 17:44 of termination wire stopped - 3T Swivel / 1225 m wire spinning rapidly as deployed - high frequency wire? - ship turned to port 100 - mooring foam blocks removed: streaming NE				
12	10	1/4" Jacketed Wire Rope		17:39	- the Transom V 3 X 3 X 1 on attachment - Profiler termination wrapped w/ VACM 130 shot				
13		5 17" Glass Floats		17:45	- fire hose + electrical tape - 17:55 - ship speed 2 kts (TW) - 17:55 - ship speed 1.5 kts - stop termination attachment w/ 430 m wire paid w/ fire hose + tape				
14		V A C M	V-118	17:50	- on 3/8 Trawlex Chain - 18:08 ship slowed to 1.5 kts				
15	25	1/4" Jacketed Wire Rope		17:50	- 6 channel model w/ tilt and backscatter (=instrument J)				
16	430	1/4" Jacketed Wire Rope		17:53	- recovered from mooring J) - 18:05 ship speed increased to 4 kts. - bottom termination of 25 m (attached to 500 m) humped				
17	25	1/4" Jacketed Wire Rope		18:06					
18		5 17" Glass Floats		18:10					
19	10	1/4" Jacketed Wire Rope		18:11					
20		Rouderfo Current Meter	SN 367	18:14					
21	25	1/4" Jacketed Wire Rope		18:14					
22	500	1/4" Jacketed Wire Rope		18:16					

1818-Payout speed 1.5 kts  
Ship speed: 2 kts (thru HEC)

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
23	500	1/4" Jacketed Wire Rope		08:28					
24	424	1/4" Jacketed Wire Rope		18:41	-18:44 ship speed 1.0 kts (Anchored) payout speed 1.2 kts				
25	25	1/4" Jacketed Wire Rope		18:52	-18:52 ship's heading altered (070°) for moving to stream 19 kts - ship speed slowed to 1.5 kts, investigated on 3/8 Trawlax Chain - decreased by 2 from original design				
26		6 17" Glass Floats		18:59					
27	10	1/4" Jacketed Wire Rope		18:59					
28		Aanderaa Current Meter	SN 152	19:02	-4 channel model (no 111 or backscatter)				
29	25	1/4" Jacketed Wire Rope		19:02	-bottom termination wrapped 19:02 ship's speed increased to 2 kts				
30	500	1/4" Jacketed Wire Rope		19:04	19:15 ship speed reduced to 1.5 kts				
31	500	1/4" Jacketed Wire Rope		19:18	-payout speed 1 kts 19:19 ship speed slowed to 1.2 kts				
32	415	1/4" Jacketed Wire Rope		19:32	-buoy visible from pilot house at 2450 True - 19:20 19:35 change of course from 090°T to 078°T to reduce wire top termination wrapped and topped				
33	25	1/4" Jacketed Wire Rope		19:47	on 3/8 Trawlax Chain -increased by 4 from original design				
34		30 17" Glass Floats		19:52					
35	10	1/4" Jacketed Wire Rope		19:54	-19:51 ship's course				
36		Aanderaa Current Meter	SN 155	20:00	-4 channel model (no 111 or backscatter)				
37	3	3/8" Trawlax Chain		20:05	-taken from Danforth anchor lashing chain now to be used on Danforth				
38		Dual Acoustic Releases	SN 26467 SN 28098	20:05	3/4" snackle on top 3/4" snackle on bottom				
39	5	3/8" Trawlax Chain		20:05	20:07 ship's course adjusted to 090°T, 20:12 ship's course altered to 095°T				
40	500	1/4" Jacketed Wire Rope		20:06	20:14 ship's course altered to 095°T				
41	400	Adjustable Shot 1/4" Jacketed Wire Rope		20:47	20:22 wire stopped to wind adjust to bite shot - ship speed 1 kts 20:25 final course adjustment to 016°				
42	20	3/4" Columbia Plaited		21:09	@ 20:42, 2nd shot deployed @ 20:34 new addition to original design				
43	5	1/4" Jacketed Wire Rope	5 1/4" Glass Floats	21:08					
44	5	1/2" Trawlax Chain		21:12					
45		4500 LB (w/shot) anchor w/ Danforth		21:12	5/8" Shackle Danforth attached w/ lashing				

chain (3/8" Trawlax Chain) used for 3 m shot  
 01:09 course adjusted to 070°T, ship speed 1 kts  
 01:56 course adjusted to 070°T to straighten wire angle off sk  
 01:09 course adjusted to 070°T, ship speed 1 kts

MB  
 Floater  
 above  
 Columbian  
 plaited

Moored Station Number 1140

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
91									
92									
93									
94									
95									
96									
97									
98									
99									

Date/Time (GMT)

Comments

04-06-2004	0400	RCM-11s (Bondero Current Meters) turned on - see note 12-06-2004							
12-06-2004		RCM-11s reset by cleaning/regreasing o-ring and self-volcanizing tape to prevent potential leakage							
12-06-2004		Profiler Set: Reference date and time: Scheduled start-up: 13 JUN 2004 0300 Reference date and time: 13 JUN 2004 1500							
12-06-2004		- original mooring design altered to redistribute buoyancy in attempts to slow anchor in its descent and prevent wire failure due to excessive tensile loads. - 4 glass balls moved from strings higher up on the mooring to lower-most string; - 5 m shot of 1/4" jacketed wire rope below the Columbia plated removed - also deployment will be done w/ ship steaming downstream (w/ the current) as opposed to stemming the current upstream as in previous KESS 4 deployment to potentially reduce initial loads on the wire when the anchor is dropped - in addition terminations between 25 m and longer shots of wire wrapped with fire hose and taped w/ electrical tape to prevent longer shots of wire potentially being cut by the shot - channel RCM-11 reset after its recovery from mooring 1: exact time on time unknown; approximately 0300 GMT 12-06-2004							
12-06-2004	18:40	- strong wind and current during deployment: 26-25 kts wind NW up to 3 kts current at times; high tension on wire during deployment esp. near the end; wind + current resulted in mooring line being set to stbd. behind the ship							

# Moored Station Log

(fill out log with black ball point pen only)

ARRAY NAME AND NO. KESS 4 MOORED STATION NO. 1139

## Launch (anchor over)

Date (day-mon-yr) 10-06-2004 Time 09:33 UTC  
Latitude (N/S, deg-min) 34°47.105 N Longitude (E/W, deg-min) 145°54.4778  
Deployed by Nelson Hogg, Willie Ostrom Recorder/Observer Stephanie Waterman  
Ship and Cruise No. R/V Thompson 168-2 Intended Duration 1 year  
Depth Recorder Reading 5895  
5914 m Correction Source Echo Sounding  
Depth Correction 49  
5914 50 m Correction Tables (Table 52)  
Corrected Water Depth 5944  
5964 m Magnetic Variation (E/W) 5.5° W  
Argos Platform ID No. 5662 Additional Argos Info on pages 2 and 3

## Surveyed Anchor Position

Lat (N/S) 34° 46.8583' N Long. (E/W) 145° 55.1504' E

Acoustic Release Model 8242 XS

Release No. SN 26338: 342600  
SN 26355: 343234 Tested to 3000 m

Receiver No. \_\_\_\_\_ Release Command \_\_\_\_\_  
SN 26338: Ch. A: 337510; Ch. B: 337533 SN 26338: 337556  
Enable SN 26355: Ch. A: 341615; Ch. B: 341636 Disable SN 26355: 341653

Interrogate Freq. Ch. A: 11 kHz; Ch. B: 9 kHz Reply Freq. Ch. A: 12 kHz; Ch. B: 11 kHz

## Recovery (release fired)

Date (day-mon-yr) \_\_\_\_\_ Time \_\_\_\_\_ UTC  
Latitude (N/S, deg-min) \_\_\_\_\_ Longitude (E/W, deg-min) \_\_\_\_\_  
Recovered by \_\_\_\_\_ Recorder/Observer \_\_\_\_\_  
Ship and Cruise No. \_\_\_\_\_ Actual duration \_\_\_\_\_ days  
Distance from actual waterline to buoy deck \_\_\_\_\_ m

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
1		64" Syntactic Sphere	SN - 014	01:55	buoyancy of foam: 3605 LB strobe light: SN: 1813 Flashrate 4S			10:06:2004 23:41	
2		ADCP	SN 1622	01:55				23:41	
3		ARGOS	Platform ID 5662	01:55	magnet removed: 01:50			23:41	
4		3/4" Prof Chain		01:55				23:41	
5		3T Swivel		01:52				11-06-2004 00:00	
6		VACM Profiler Stop	0141-P	01:52	unblocked @ 01:49			00:00	blocked @ 00:04
7		PROFILER	107	02:27				00:42	
8	1225	1/4" Jacketed Wire Rope		01:55				00:05	
9		Profiler Stop		02:45				00:42	
10		3T Swivel		02:48				00:42	
11	10	1/4" Jacketed Wire Rope		02:48				00:43	
12		6 17" Glass Floats		02:51	on 3/8 Trawllex chain			00:46	
13		VACM	V-118	02:55	foam blocks removed: 02:53			00:48	blocked @ 00:50
14	25	1/4" Jacketed Wire Rope		02:55				00:51	
15	430	1/4" Jacketed Wire Rope		02:57				00:52	01:09 - bitter end retrieved appears to be straight but faint writing on end of fiber #4009 - 53, length of recover shot: ~ 424m.
16	25	1/4" Jacketed Wire Rope		03:08					
17		6 17" Glass Floats		03:14	on 3/8 Trawllex chain				
18	10	1/4" Jacketed Wire Rope		03:14					
19		Aonderra Current Meter	SN 371	03:18	6 channel model w/ tilt and backscatter				
20	25	1/4" Jacketed Wire Rope		03:18					
21	500	1/4" Jacketed Wire Rope		03:21					
22	500	1/4" Jacketed Wire Rope		03:38					

Item No.	Depth	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
23	424	1/4" Jacketed Wire Rope		03:56					
24	35	1/4" Jacketed Wire Rope		04:12					
25		8 17" Glass Floats		04:15	on 3/8 Trawllex Chain				
26	10	1/4" Jacketed Wire Rope		04:15					
27		Aanderra Current Meter	SN 153	04:18	1/4 channel model (no tilt or backscatter)				
28	35	1/4" Jacketed Wire Rope		04:18					
29	500	1/4" Jacketed Wire Rope		04:19					
30	500	1/4" Jacketed Wire Rope		04:33					
31	415	1/4" Jacketed Wire Rope		04:48					
32	35	1/4" Jacketed Wire Rope		05:01					
33		16 17" Glass Floats		05:05	on 3/8 Trawllex Chain				
34	10	1/4" Jacketed Wire Rope		05:06					
35		Aanderra Current Meter	SN 161	05:10	1/4 channel model (no tilt or backscatter)				
36	3	3/8" Trawllex Chain		05:15					
37		Dual Acoustic Releases	SN 26338 SN 26355	05:15	3/4" shackle on top; 7/8" shackle on bottom				
38	5	3/8" Trawllex Chain		05:15	3/4"				
39	500	1/4" Jacketed Wire Rope		05:15					
40	415	Adjustable Shot 1/4" Jacketed Wire Rope		05:57	shots of 200 m; 200 m				
41	20	3/4" Columbig Plaited		09:23	10 m; 5 m				
42	5	1/4" Jacketed Wire Rope		09:25					
43	5	1/2" Trawllex Chain		09:33					
44		4500 LB (wst) anchor w/ Danforth		09:33	5/8" shackle				
45									

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
91									
92									
93									
94									
95									
96									
97									
98									
99									

Date/Time Comments

04-06-2004	04:00	RCM-11s (Banderera Current Meters) turned on							
09-06-2004		Profiler set: scheduled startup: 10 JUN 2004 1500 GMT							
		Reference date and time: 11 JUN 2004: 2100 GMT							
10-06-2004		RCMs-11s to be deployed tested w/ vulcanizing tape sealing							
		the pressure case seam - no further problems w/ leakage							
		data recording							
10-06-2004		as the sphere was <del>dep</del> launched - A frame gauge several large jerks (concerned about current meter underneath)							
10-06-2004	09:20	~ 3.5 hr tow after adjustable shot was deployed to allow ship to drift back to intended position (position was overshoot due to the strong current)							
10-06-2004		- final anchor drop 4900m W of the intended position							
		← sphere reported adrift at							
10-06-2004	23:41	- sphere recovered on deck							
10-06-2004	00:52	- bitter end of failed shot of wire retrieved on deck: clear cut failure perhaps cut by shackle undern... failure occurred at ~ 424m of 430m sh... #4009-5:							

# Moored Station Log

(fill out log with black ball point pen only)

ARRAY NAME AND NO. KESS 3 MOORED STATION NO. 1138

## Launch (anchor over)

Date (day-mon-yr) 09-06-2004 Time 03:20 UTC

Latitude (N/S, deg-min) 35° 32.7035 N Longitude (E/W, deg-min) 146° 25.2839

Deployed by Nelson Hogg; Willie Ostrom Recorder/Observer Stephanie Waterman

Ship and Cruise No. R/V Thompson 168-2 Intended Duration 1 year

Depth Recorder Reading 5890 m Correction Source Echo Sounding

Depth Correction 37 m Correction Tables

Corrected Water Depth 5927 m Magnetic Variation (E/W) 6° W

Argos Platform ID No. 23668 Additional Argos Info on pages 2 and 3

## Surveyed Anchor Position

Lat (N/S) 35° 32.8362' N Long. (E/W) 146° 25.6193' E

Acoustic Release Model 8242 XS

Release No. SN 26356: 343251  
SN 26358: 343303 Tested to 3000 m

Receiver No. \_\_\_\_\_ Release Command \_\_\_\_\_

Enable SN 26356: Ch.A-341701 Ch.B-341722 SN 26356: 341747  
SN 26358: Ch.A-355044 Ch.B-355067 SN 26358: 355116  
355067 Disable

Interrogate Freq. Ch.A-11 kHz; Ch.B-9 kHz Reply Freq. Ch.A-12 kHz; Ch.B-11 kHz

## Recovery (release fired)

Date (day-mon-yr) \_\_\_\_\_ Time \_\_\_\_\_ UTC

Latitude (N/S, deg-min) \_\_\_\_\_ Longitude (E/W, deg-min) \_\_\_\_\_

Recovered by \_\_\_\_\_ Recorder/Observer \_\_\_\_\_

Ship and Cruise No. \_\_\_\_\_ Actual duration \_\_\_\_\_ days

Distance from actual waterline to buoy deck \_\_\_\_\_ m

# Moored Station Number 1138

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
1		64" Syntactic Sphere	SN-015	08-06-04 23:03	buoyancy of foam: 2585 LB strobe light: SN 1296 Flashrate 3s				
2		A DCP	SN 1594	23:03					
3		ARGOS	Platform ID: 23668	23:03	magnet removed: 08-06-04 22:50				
4		3/4" Proof Chain		23:03					
5		3T Swivel		23:03					
6		Profiler Stop		23:03					
7		PROFILER	117	23:33					
8	1225	1/4" Jacketed Wire Rope		23:03					
9		Profiler Stop		23:59					
10		3T Swivel		23:59					
11	10	1/4" Jacketed Wire Rope		23:59					
12		6 17" Glass Floats		09-06-04 00:02	on 3/8 Trawlex chain				
13		V A C M	V-0204	00:06	foam blocks removed: 09-06-04 00:03				
14	25	1/4" Jacketed Wire Rope		00:06					
15	430	1/4" Jacketed Wire Rope		00:08					
16	25	1/4" Jacketed Wire Rope		00:21					
17		6 17" Glass Floats		00:25	on 3/8 Trawlex chain				
18	10	1/4" Jacketed Wire Rope		00:25					
19		Aanderra Current Meter	SN 366	00:27	6 channel model w/tilt and backscatter				
20	25	1/4" Jacketed Wire Rope		00:27					
21	500	1/4" Jacketed Wire Rope		00:29					
22	500	1/4" Jacketed Wire Rope		00:41					

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
23	424	1/4" Jacketed Wire Rope		00:54					
24	25	1/4" Jacketed Wire Rope		01:05					
25		8 17" Glass Floats		01:09	on 3/8 Trawllex Chain				
26	10	1/4" Jacketed Wire Rope		01:12					
27		Aanderraag Wire Rope	SN 149	01:12	-4 channel model (no tilt or backscatter)				
28	25	1/4" Jacketed Wire Rope		01:12					
29	500	1/4" Jacketed Wire Rope		01:13					
30	500	1/4" Jacketed Wire Rope		01:27					
31	415	1/4" Jacketed Wire Rope		01:42					
32	25	1/4" Jacketed Wire Rope		01:55					
33		16 17" Glass Floats		01:59	on 3/8 Trawllex Chain				
34	10	1/4" Jacketed Wire Rope		02:05					
35		Aanderra Current Meter	SN 147	02:05	-4 channel model (no tilt or backscatter)				
36	3	3/8" Trawllex Chain		02:05					
37		Dual Acoustic Releases	SN 26356 SN 26358	02:11	3/4" shackles used on top 7/8" shackle used on bottom				
38	5	3/8" Trawllex Chain		02:11					
39	500	1/4" Jacketed Wire Rope		02:11	shots of lengths: 200m, 100m, 50m, 25m				
40	<del>370</del> 500	Adjustable Shot 1/4" Jacketed Wire Rope		02:55	↓ 10m, 10m,				
41	20	3/4" Columbia Plaited		03:13					
42	5	1/4" Jacketed Wire Rope		03:14					
43	5	1/2" Trawllex Chain		03:20					
44		4500 LB (wet) anchor w/ Danforth		03:20	5/8" shackle used				
45									



# Moored Station Log

(fill out log with black ball point pen only)

ARRAY NAME AND NO. KESS 2 MOORED STATION NO. 1137

## Launch (anchor over)

Date (day-mon-yr) 08-06-2004 Time 03:20 UTC

Latitude (N/S, deg-min) 36° 18.1354 N Longitude (E/W, deg-min) 146° 53.5603 E

Deployed by Nelson Hogg, Willie Ostrom Recorder/Observer Stephanie Waterman

Ship and Cruise No. R/V Thompson 168-2 Intended Duration 1 year

Depth Recorder Reading 5605 m Correction Source Echo Sounding

Depth Correction 27 m Correction Tables

Corrected Water Depth 5632 m Magnetic Variation (E/W) ~~55° + 15' = 6° W~~  
~~7° W~~ 6° W

Argos Platform ID No. 5627 Additional Argos Info on pages 2 and 3

## Surveyed Anchor Position

Lat (N/S) 36° 18.3538 N Long. (E/W) 146° 53.6257 E

## Acoustic Release Model 8242 XS

Release No. SN 28039: 347710 Tested to 3000 m  
SN 30288: 253013

Receiver No. \_\_\_\_\_ Release Command \_\_\_\_\_

Enable SN 28039: 366475 (Ch.A) 366504 (Ch.B) SN 28039: 366527  
SN 30288: 256454 (Ch.A) - (Ch.B) Disable SN 30288: 256477

Interrogate Freq. SN 28039: 11 kHz (Ch.A) 9 kHz (Ch.B) SN 28039: 12 kHz (Ch.A) 11 kHz (Ch.B)  
SN 30288: 11 kHz (Ch.A) - (Ch.B) Reply Freq. SN 30288: 12 kHz (Ch.A) - (Ch.B)

## Recovery (release fired)

Date (day-mon-yr) \_\_\_\_\_ Time \_\_\_\_\_ UTC

Latitude (N/S, deg-min) \_\_\_\_\_ Longitude (E/W, deg-min) \_\_\_\_\_

Recovered by \_\_\_\_\_ Recorder/Observer \_\_\_\_\_

Ship and Cruise No. \_\_\_\_\_ Actual duration \_\_\_\_\_ days

Distance from actual waterline to buoy deck \_\_\_\_\_ m

Moored Station Number

1137

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
1		64" Syntactic Sphere	SN -009	07-06-04 23:15	buoyancy of foam: 2251 strobe light: SN 6425 Flashnote 45				
2		ADCDP	SN 1635	23:15					
3		AR 605	Platform ID 5627	23:15	magnet removed: 23:04				
4	5	3/4" Proof Chain		23:15					
5		3T Swivel		23:15					
6		Profiler Stop		23:15					
7		PROFILER	119	23:37					
8	1225	1/4" Jacketed Wire Rope		23:15					
9		Profiler Stop		08-06-04 00:05					
10		3T Swivel		00:05					
11	10	1/4" Jacketed Wire Rope		00:05					
12		6 17" Glass Float		00:08	on 3/8 Trowlex chain				
13		VACM	VO163-P	00:12	foam blocks removed: 00:08				
14	25	1/4" Jacketed Wire Rope		00:12					
15	430	1/4" Jacketed Wire Rope		00:14					
16	25	1/4" Jacketed Wire Rope		00:25					
17		6 17" Glass Float		00:28	on 3/8 Trowlex chain				
18	10	1/4" Jacketed Wire Rope		00:31					
19		Aanderra Current Meter	SN 370	00:31	6 channel model w/ tilt and backscatter				
20	25	1/4" Jacketed Wire Rope		00:32					
21	500	1/4" Jacketed Wire Rope		00:33					
22	500	1/4" Jacketed Wire Rope		00:45					

Item No.	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
23	1/4" Jacketed Wire Rope	<del>0058</del>	00:58					
24	1/4" Jacketed Wire Rope	<del>0109</del>	01:09					
25	8 17" Glass Float	<del>0113</del>	01:13	- on 3/8 Trawllex chain				
26	1/4" Jacketed Wire Rope	<del>0113</del>	01:13					
27	Aanderra Current Meter	SN 154	01:16	- 4 channel model (no tilt or backscatter)				
28	1/4" Jacketed Wire Rope		01:16					
29	1/4" Jacketed Wire Rope		01:18					
30	1/4" Jacketed Wire Rope		01:32					
30	1/4" Jacketed Wire Rope		01:47					
31	1/4" Jacketed Wire Rope		02:00					
32	16 17" Glass Floats		02:03					
33	1/4" Jacketed Wire Rope		02:05					
34	Aanderra Current Meter	SN 148	02:14	- 4 channel model (no tilt or backscatter)				
35	3/8" Trawllex Chain		02:14					
36	Dual Acoustic Releases	SN 28039 SN 30288	02:14	- 3/4" shackle on top - 7/8" shackle on bottom				
37	3/8" Trawllex Chain		02:14					
38	1/4" Jacketed Wire Rope		02:14					
39	Adjustable Shot 1/4" Jacketed Wire Rope		02:37	3 shots of 25m; 1 shot 10m				
40	3/4" Columbia Pigtails		03:15					
41	1/4" Jacketed Wire Rope		03:20					
42	1/2" Trawllex Chain		03:20					
43	4500 LB (wet) anchor w/ Danforth		03:20	- 5/8" shackle				
44								
45								



# Moored Station Log

(fill out log with black ball point pen only)

ARRAY NAME AND NO. KESS 1 MOORED STATION NO. 1136

## Launch (~~anchor~~ over)

Date (day-mon-yr) 07-06-2004 Time 05:04 UTC  
Latitude (N/S, deg-min) 37°04.01N Longitude (E/W, deg-min) 147°22.87E  
Deployed by Nelson Hogg, Willie Ostrom Recorder/Observer Stephanie Waterman  
Ship and Cruise No. R/V Thompson 168-2 Intended Duration 1 year  
Depth Recorder Reading 5625 m Correction Source Echo Sounding Correction Tables  
Depth Correction 28 m  
Corrected Water Depth 5653 m Magnetic Variation (E/W) 7° W  
Argos Platform ID No. 27331 Additional Argos Info on pages 2 and 3

## Surveyed Anchor Position

Lat (N/S) 37° 4.18643 N Long. (E/W) 147° 22.7157 E

## Acoustic Release Model 8242 XS

Release No. SN 26353: 343175 Tested to 3000 m  
SN 28289: 353605

Receiver No. \_\_\_\_\_ Release Command \_\_\_\_\_

Enable SN 26353: Ch.A: 341406 Ch.B: 341425 SN 26353: 341440  
SN 28289: Ch.A: 374630 Ch.B: 374655 Disable SN 28289: 374676

Interrogate Freq. SN 26353: Ch.A 11 kHz Ch.B: 9 kHz SN 26353 Ch.A 12 kHz Ch.B: 11 kHz  
SN 28289: Ch.A 11 kHz Ch.B: 9 kHz Reply Freq. SN 28289: Ch.A 12 kHz Ch.B: 11 kHz

## Recovery (release fired)

Date (day-mon-yr) \_\_\_\_\_ Time \_\_\_\_\_ UTC

Latitude (N/S, deg-min) \_\_\_\_\_ Longitude (E/W, deg-min) \_\_\_\_\_

Recovered by \_\_\_\_\_ Recorder/Observer \_\_\_\_\_

Ship and Cruise No. \_\_\_\_\_ Actual duration \_\_\_\_\_ days

Distance from actual waterline to buoy deck \_\_\_\_\_ m

Moor Station Number 1136

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
1		64" Syntactic Sphere	SN - 011	00:26	buoyancy foam: 2551 LB. strob light: SN 1032 Flashnote IS			11-06-2004 19:46	
2		ADCP	SN 5091	00:26				19:46	
3		ARGOS	Platform ID 27331	00:26	magnet tape removed: 23:56 06-06-04			19:46	
4	5	3/4" Proof Chain		00:26				19:46	
5		3T Swivel		00:26				20:11	
6		Profiler Stop		00:26				20:11	
7		PROFILER	116	00:47				20:45	
8	1225	1/4" Jacketed Wire Rope		00:26				20:18	
9		Profiler Stop		01:19				20:45	
10		3T Swivel		01:19				20:45	
11	10	1/4" Jacketed Wire Rope		01:19				20:51	
12		6 17" Glass Float		01:23	on 3/8 Trawllex chain			20:52	blocked @ 20:55
13		VACM	V-0109	01:28	foam blocks removed: 01:25			20:52	
14	25	1/4" Jacketed Wire Rope		01:28				20:55	
15	430	1/4" Jacketed Wire Rope		01:30				20:59	
16	25	1/4" Jacketed Wire Rope		01:41				21:13	
17		6 17" Glass Float		01:45	on 3/8 Trawllex Chain			21:14	
18	10	1/4" Jacketed Wire Rope		01:49				21:17	
19		Anderaag Current Meter	SN 367	01:49	6 channel model w/ tilt and backscatter			21:18	dry inside (there was concern over potential leaks) - data retrieved
20	25	1/4" Jacketed Wire Rope		01:49				21:18	card erased - 11-06-2004
21	500	1/4" Jacketed Wire Rope		01:52				21:23	
22	500	1/4" Jacketed Wire Rope		02:06				21:36	21:43 - bitter end of snapped shot retrieved on board. break occurred 450120 m from top shot wire #4009H.

Item No.	Item (m)	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
23	424 1/4" Jacketed Wire Rope		02:20					
24	25 1/4" Jacketed Wire Rope		02:32					
25	8 17" Glass Float		02:35	on 3/8 Trawllex Chain				
26	10 1/4" Jacketed Wire Rope		02:36					
27	Anderaag Current Meter	SN 151	02:40	- 4 channel model (no tilt/backscatter)				
28	25 1/4" Jacketed Wire Rope		02:40					
29	500 1/4" Jacketed Wire Rope		02:42					
30	500 1/4" Jacketed Wire Rope		02:56					
31	415 1/4" Jacketed Wire Rope		03:11					
32	25 1/4" Jacketed Wire Rope		03:25					
33	16 17" Glass Floats		03:29	on 3/8 Trawllex chain				
34	10 1/4" Jacketed Wire Rope		03:32					
35	Anderaag Current Meter	SN 163	03:36	- 4 channel model (no tilt/backscatter)				
36	3 3/8" Trawllex Chain		03:36					
37	Dual Acoustic Releases	SN 26353 SN 28289	03:41	- 3/4" shackle on top - 7/8" shackle on bottom				
38	5 3/8" Trawllex Chain		03:41					
39	500 1/4" Jacketed Wire Rope		03:42					
40	105 Adjustable Shot 1/4" Jacketed Wire Rope		04:16	- 3 shots of lengths: 50, 50 and 5 m. 5m shot attached first				
41	20 3/4" Columbia Plaited		04:52					
42	5 1/4" Jacketed Wire Rope		04:57					
43	5 1/2" Trawllex chain		05:04					
44	4500 LB (wet) anchor w/ Danforth		05:04	w/ 5/8" shackle				
45								

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
91									
92									
93									
94									
95									
96									
97									
98									
99									

Date/Time	Comments
07-06-2004 04:10	black bag/float observed drifting ~100m from cable - appears no lines are dragging - however concern for potential fouling
04-06-2004 04:00	RCM-11s (Aanderra Current Meters) turned on
06-06-2004	Profiler set: scheduled startup: 07 JUN 2004 1500 GMT; Reference date and time: 08 JUN 2004 0000 GMT
<del>11-06-2004</del>	<del>sphere reported on the surface</del>
10-06-2004 19:46	- sphere recovered on board
11-06-2004 21:42	- bitter end of snapped 500m shot of wire recovered on board - break occurred at ~120m from top; wire #4009-15