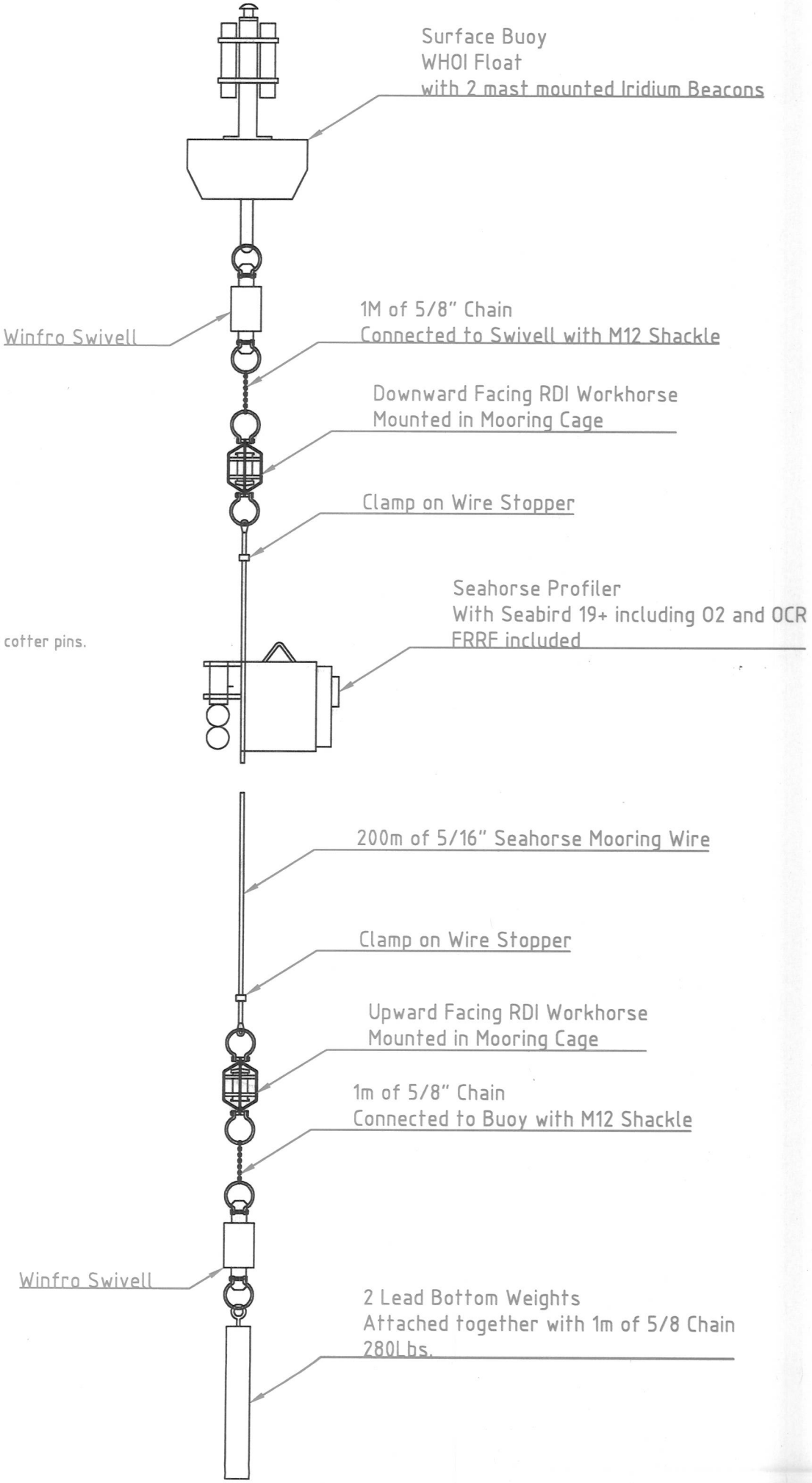


Note:
All connections are made with M12 Shackles with cotter pins.
All mooring components supplied by BIO

Placement

Mooring No. Ross Sea Deployment #1
Geographic Area: Ross Sea - West Intended Duration 3-4 days
Ship: RVIB N.B Palmer Mission No: NBP12-01 Date: 15 Jan 2012
Weather/Sea Conditions: Cloudy, Wind Speed 5 kts, Sea 0.5 m
Mooring Technician: Randy King Type of Navigation: DGPS
Latitude: -76 43.8'S Longitude: 170° 28.4' E Time of Fix: 0355 *In drifting mode
Main Float: Type: WHOI Markings: Yellow/Blue
Beacon: Type: Iridium I.D. # 620 and 990
Mooring Line: Type: Jacketed Steel Colour: Yellow
Release: Type: N/A S/N: — Release Code: — Frequency —
Sounding:

	LSR	Knudsen(____khz)	Other_____
SV of Recorder	1463 m/s	_____ m/s	_____ m/s
Initial Depth	_____ fms	_____ m	_____ m
Xducer Depth	_____ m	_____ m	_____ m
Initial + xducer	_____ m	_____ m	_____ m
Depth Corrected	_____ m	_____ m	_____ m
	@ SV = _____ m/s	@ SV = _____ m/s	@ SV = _____ m/s

Placement Log Event # NBP1201091

Time (Z)	Instrument	Remarks
0400	Seahorse	Deployment aborted due to accidental release of the bottom weight and ADCP on the deck. The slip release was accidentally pulled dropping part of the ADCP/clump weight on the deck, the wire securing the clump weight failed and the weight dropped in the water. The jacket on the wire was damaged so we had to recover the mooring.

Recovery

Mooring No: Ross Sea Deployment #1
Ship: N.B. Palmer Cruise No: NBP12-01 Date: 15-Jan-2012
Mooring Tech: King
Type of Nav: GPS
Weather Conditions: calm, 0.5m sea
Cancel Notship: Yes____ No ____

Recovery Log

Time(Z)	Instrument	Remarks
		See remarks on deployment sheet.
0450	Sea Horse	Lat -76° 43.9'S
		Lon 170° 28.1°E
		Event # NBP1201097

Performance

Include below if the mooring was successful or not, any corrosion, Guard buoys missing, release operation, partial recovery, mooring not in original position, dragging, any equipment damaged or any other information.

Mooring No: Ross Sea #1

- Incident occurred during the deployment with accidental release of the bottom ADCP (upward-looking) and clump weight on deck. Required emergency recovery of the mooring.

Placement

Mooring No. Ross Sea Mooring #2
Geographic Area: Ross Sea, Antarctica Intended Duration 4 days
Ship: RVIB N.B Palmer Mission No: NBP12-01 Date: 15 Jan 2012
Weather/Sea Conditions: Cloudy, Wind 5-10 kts, seas 0.5 m
Mooring Technician: Randy King Type of Navigation: GPS
Latitude: -76° 43.9' S Longitude: 170° 28.1' E Time of Fix: 0852 * In drifting mode.
Main Float: Type: WHOI Markings: Yellow/Blue
Beacon: Type: Iridium I.D. # 620 + 990 (two beacons)
Mooring Line: Type: Jacketed steel Colour: Yellow.
Release: Type: — S/N: — Release Code: — Frequency —
Sounding:

	LSR	Knudsen(____khz)	Other_____
SV of Recorder	1463 m/s	_____ m/s	_____ m/s
Initial Depth	_____ fms	_____ m	_____ m
Xducer Depth	_____ m	_____ m	_____ m
Initial + xducer	_____ m	_____ m	_____ m
Depth Corrected	_____ m	_____ m	_____ m
	@ SV = _____ m/s	@ SV = _____ m/s	@ SV = _____ m/s

Placement Log

Event # NBP1201098

Time (Z)	Instrument	Remarks
0852	Seatorse	Mooring deployed with
		two inline 300 kHz ~~**~~ inline
		ADCPs. Seatorse package
		includes SBE 19plus CTD
		with SBE43 oxygen sensor
		and Wetlabs Wetstar
		fluorometer. ~~RDI~~ Package
		also include Satlantic
		OCR 504 and Chelsea
		FRRF.
		Down-looking ADCP S/N 9184
		Up-looking ADCP S/N 14074

Recovery

Mooring No: Ross Sea #2
Ship: N.B. Palmer Cruise No: NBP12-01 Date: 19 Jan 2012
Mooring Tech: Randy King
Type of Nav: GPS
Weather Conditions: Wind 25 Kts, Cloudy
Cancel Notship: Yes____ No N/A

Recovery Log

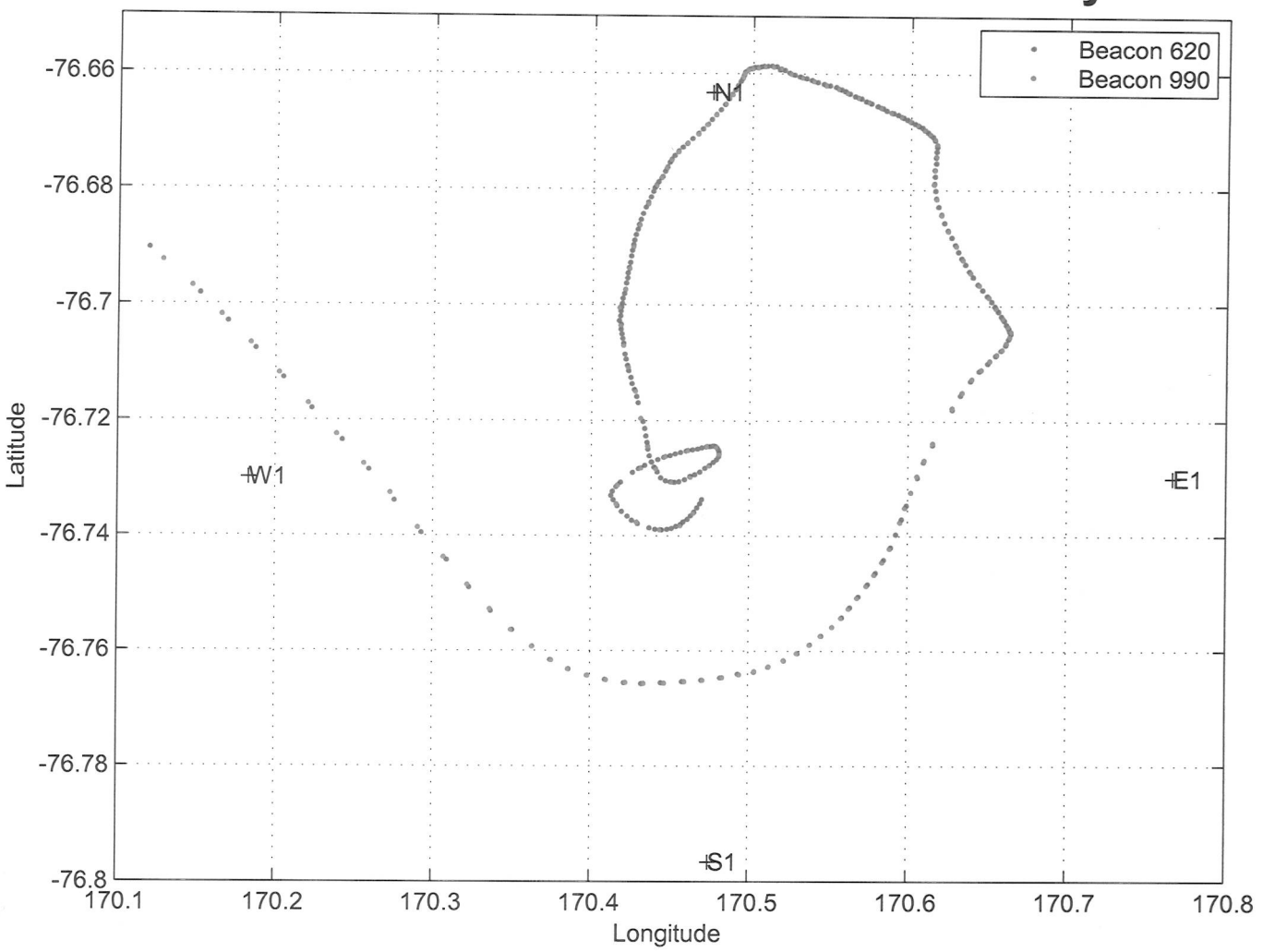
Time(Z)	Instrument	Remarks
~~1510~~	Buoy + Top ADCP	- out of water at 0010 UTC
~~1520~~		
0030	UTC	
	Seahorse	and bottom ADCP out of water
0040		- All secure on deck.
		76° 42.1' S
		170° 05.7' E
		0055 UTC - Downlooking ADCP on
		0100 UTC - Seahorse clamp cycled.
		but FRRF did not flash
		0105 UTC - Uplooking ADCP on.
		It appears there was no FRRF
		data collected on this deployment

Performance

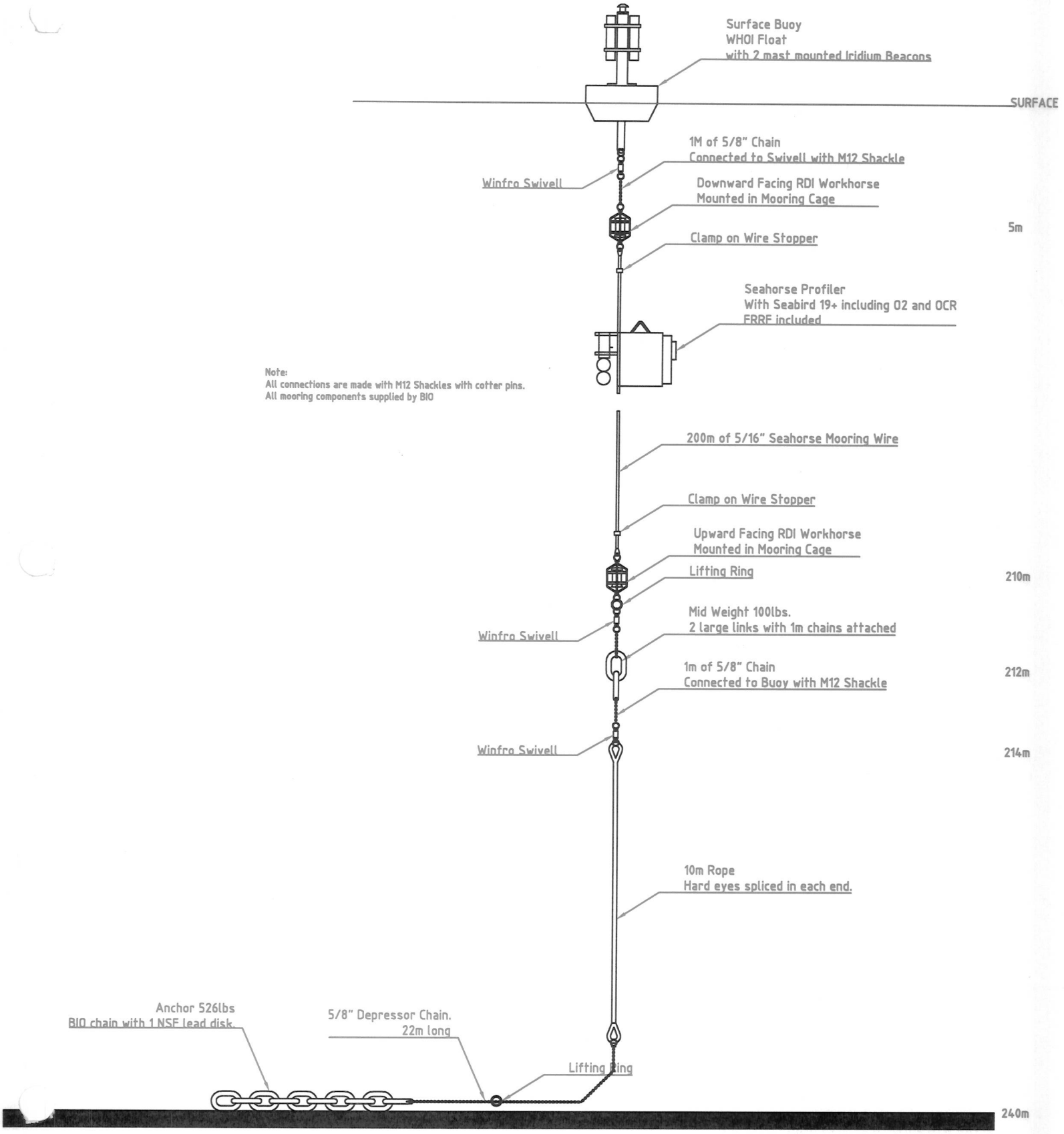
Include below if the mooring was successful or not, any corrosion, Guard buoys missing, release operation, partial recovery, mooring not in original position, dragging, any equipment damaged or any other information.

Mooring No: _____

Iridium Locations on SeaHorse Buoy



S2


Surface Buoy
WHOI Float
with 2 mast mounted Iridium Beacons
SURFACE
1M of 5/8" Chain
Connected to Swivell with M12 Shackle
Winfro Swivell
Downward Facing RDI Workhorse
Mounted in Mooring Cage
5m
Clamp on Wire Stopper
Seahorse Profiler
With Seabird 19+ including O2 and OCR
FRRF included
Note:
All connections are made with M12 Shackles with cotter pins.
All mooring components supplied by BIO
200m of 5/16" Seahorse Mooring Wire
Clamp on Wire Stopper
Upward Facing RDI Workhorse
Mounted in Mooring Cage
Lifting Ring
210m
Mid Weight 100lbs.
2 large links with 1m chains attached
Winfro Swivell
1m of 5/8" Chain
Connected to Buoy with M12 Shackle
212m
Winfro Swivell
214m
10m Rope
Hard eyes spliced in each end.
Anchor 526lbs
BIO chain with 1 NSF lead disk
5/8" Depressor Chain.
22m long
Lifting Ring
240m

Placement

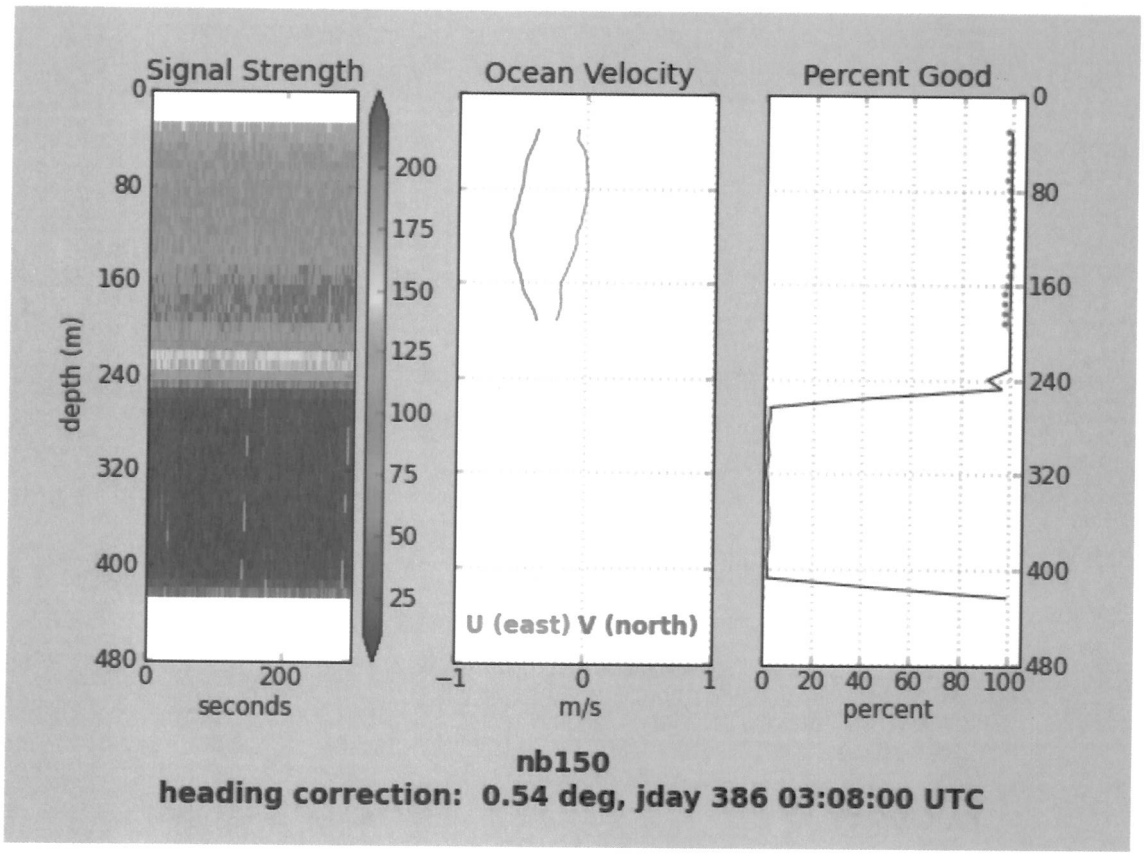
Mooring No. Ross Sea #3
Geographic Area: Ross Bank, Antarctica Intended Duration 10 days
Ship: RVIB Nathaniel B Palmer Mission No: NBP12-01 Date: 21 Jan 2012
Weather/Sea Conditions: 1 m sea,
Mooring Technician: Randy King Type of Navigation: GPS
Latitude: -76 39.6035 Longitude: 179° 15.193° E Time of Fix: 0255 UTC
Main Float: Type: WHOI Markings:
Beacon: Type: Iridium I.D. # 669 + 920 (two WHOI beacons)
Mooring Line: Type: Jacketed steel Colour: yellow
Release: Type: N/A S/N: Release Code: Frequency
Sounding:

	LSR	Knudsen(____khz)	Other_____
SV of Recorder	1463 m/s	_____ m/s	_____ m/s
Initial Depth	_____ fms	_____ m	_____ m
Xducer Depth	_____ m	_____ m	_____ m
Initial + xducer	_____ m	_____ m	_____ m
Depth Corrected	_____ m	_____ m	_____ m
@ SV =	_____ m/s	@ SV = _____ m/s	@ SV = _____ m/s

Placement Log

Time (Z)	Instrument	Remarks
		Instrument Package
		(1) - Seahorse with SBE19plus
		CTD, Wetlabs Wetstar
		fluorometer, SBE43 Oxygen
		sensor, Satlantic OCR504i
		irradiance sensor and
		Chelsea FRRf
		(2) 300kHz Workhorse ADCP
		at top and bottom of
		mooring wire.
0253 UTC		Anchor away
		Sounding (Multibeam) 223m

Down-looking ADCP S/N 9184
Up-looking ADCP S/N 14074



Velocity profile for VM-ADCP at time of Seahorse mooring deployment 21 Jan 2012.

Recovery

Mooring No: Russ Bank, Russ Sea, Antarctica
Ship: RVIB N.B. Palmer Cruise No: NBP12-01 Date: 26 Jan 2012 UTC
Mooring Tech: Randy King
Type of Nav: GPS
Weather Conditions: Winds 20-25 kts, cloudy -5°C
Cancel Notship: Yes ___ No ___ N/A

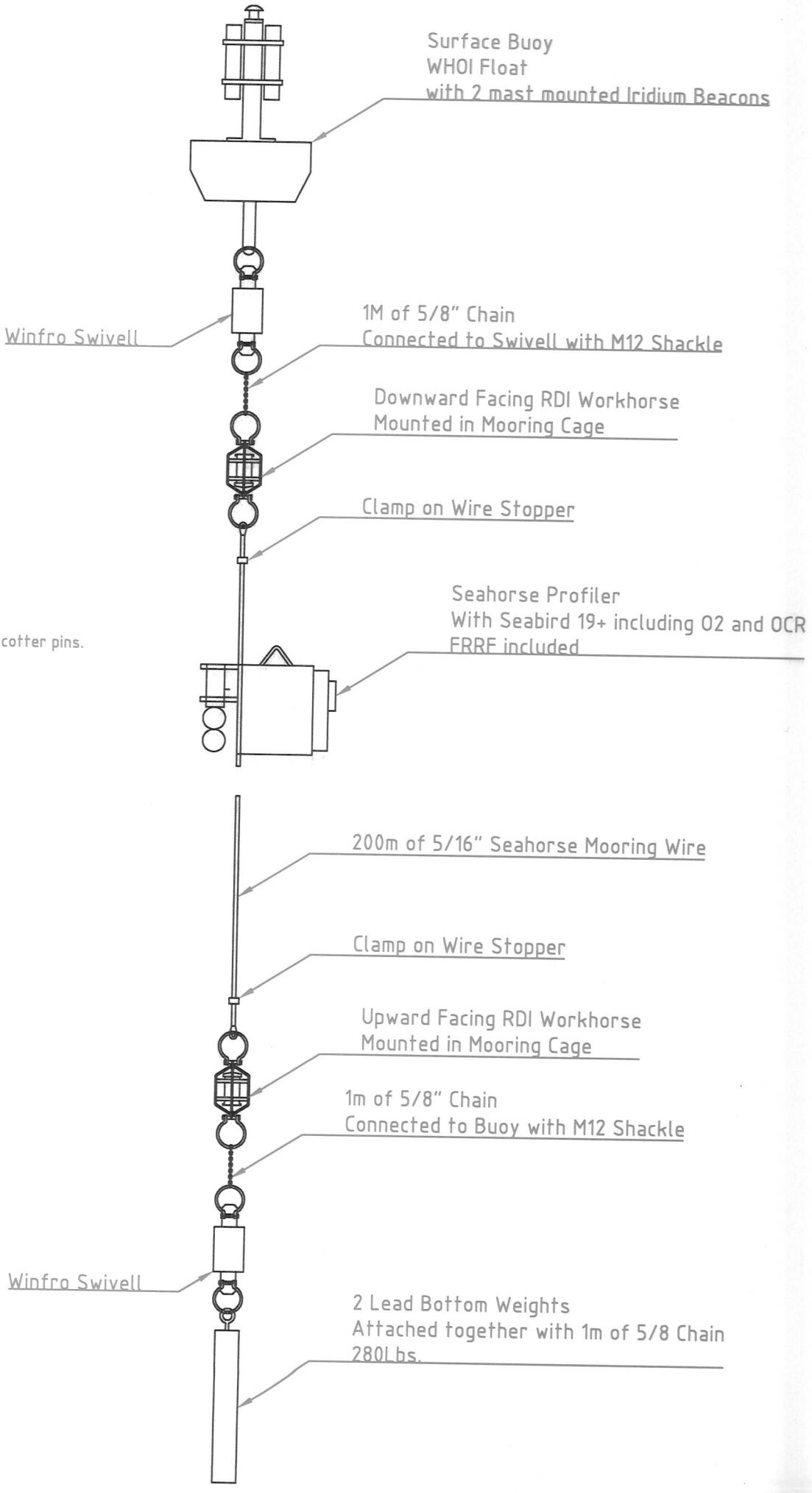
Recovery Log

Time(Z)	Instrument	Remarks
2212 UTC		Mooring recovery completed successfully
26 Jan 2012		

Performance

Include below if the mooring was successful or not, any corrosion, Guard buoys missing, release operation, partial recovery, mooring not in original position, dragging, any equipment damaged or any other information.

Mooring No: _____



Note:
All connections are made with M12 Shackles with cotter pins.
All mooring components supplied by BIO

Placement

Mooring No. Ross Sea Deployment #4
Geographic Area: Western Ross Sea Intended Duration 3 days
Ship: RVIB Nathaniel B. Palmer Mission No: NBP12-01 Date: 1 Feb 2012
Weather/Sea Conditions: Mix sun/cloud, wind 5 kts, 0.5 m sea
Mooring Technician: Randy King Type of Navigation: GPS
Latitude: 76° 46.03' S Longitude: 169° 00.51' E Time of Fix: 0942 UTC
Main Float: Type: WHOI Markings: Yellow/Blue/WHOI Address
Beacon: Type: Xeos Iridium I.D. # 990/600 (WHOI beacons)
Mooring Line: Type: steel jacketed Colour: yellow
Release: Type: N/A S/N: _____ Release Code: _____ Frequency _____
Sounding:

	LSR	Knudsen(____khz)	Other_____
SV of Recorder	1463 m/s	_____ m/s	_____ m/s
Initial Depth	_____ fms	_____ m	_____ m
Xducer Depth	_____ m	_____ m	_____ m
Initial + xducer	_____ m	_____ m	_____ m
Depth Corrected	_____ m	_____ m	_____ m
	@ SV = _____ m/s	@ SV = _____ m/s	@ SV = _____ m/s

Placement Log

Time (Z)	Instrument	Remarks
0942	Deployed	Sea Horse with SBE 19 plus, WetLabs ~~CDOM~~ WetStar fluorometer, SBE43 dissolved oxygen sensor, Satlantic OCR504i, and Chelsea FRRF
		- ADCPs (300 kHz) deployed at top and bottom of the mooring wire.
		- drifting deployment with ~200 lb weight at bottom of the mooring
		~~[illegible]~~
		- Water depth ~800 m

Recovery

Mooring No: Ross Sea Deployment #4
Ship: RVIB N B Palmer Cruise No: NBP12-01 Date: 04 Feb 2012
Mooring Tech: Randy King
Type of Nav: GPS
Weather Conditions: Sunny, -4°C, 15 kts, 1m sea
Cancel Notship: Yes____ No ____ N/A

Recovery Log

Time(Z)	Instrument	Remarks
		lat: -77° 01.52'S
0952	UTC	lon: 168° 58.5'E
04 Feb 2012		
		-SeaHorse mooring recovered
		successfully
0959	UTC	SeaHorse cycled properly on
		bench. FRRF did not
		~~on~~ flash.

Performance

Include below if the mooring was successful or not, any corrosion, Guard buoys missing, release operation, partial recovery, mooring not in original position, dragging, any equipment damaged or any other information.

Mooring No: _____