

Submitted on **February 26, 2008**

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1. HEALY Cruise: **HLY-08-02/Ashjian- NSF/29Mar08-06May08**
2. Cruise dates: **Start: March 29, 2008 End: May 06, 2008**
(Determined by the Cruise Number)

Chief Scientist Contact Information

3. Your Name: **Carin Ashjian**
4. Affiliation: **Woods Hole Oceanographic Institution**
5. Funding Agency: **National Science Foundation**
6. Grant Number: **ARC-0732382**
7. Full Address: **MS #33 WHOI Woods Hole, MA 02543**
8. Phone Number: **508-289-3457**
9. Email Address: **cashjian at whoi dot edu**
10. Fax Number: **508-457-2134**

Equipment Onload

11 Date and Time to Start Loading in Seattle: **2/26/2008**

12. Special Requirements for Loading or in-port logistics: **Yes**
(eg single piece heavier than 5 Tons or a portable van)

12b. If yes, Please list point of contact for in port logistics: **Ev Sherr**

13. Cargo List:

There are 12 major PI groups, many with subsets. I am trying to collect information on their cargo but they also will all enter information into the shipping trackign system.

Additional File(s) Uploaded for Cargo List: 1

Filename	File Size
CargoList.xls	20992 bytes

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14. Give a brief description of the area of operations and type of work to be done and science objective:

No response

Operational Plan Description

15. Operational plan: Cruise Tracks and Station Locations.

Please provide as complete a description as possible. Include with this plan, or separately, a complete list of stations with ID, Latitude, Longitude, depth and other information such as type of sampling/operations as appropriate. Use the text box below or upload separate documents as needed.

15a. Upload a cruise track file (jpeg, pdf, gif, etc) here (required):

Cruise Track Uploaded: [StationsOnly_1_27.jpg](#)

15b. Upload additional files as needed:

Additional File(s) Uploaded for Operational Plan: 1

Filename	File Size
BriefItin1_30_08.xls	46592 bytes

Operational Plan Description

Please see attached files.

Will the vessel be operating within 200 miles of a foreign country? **Yes**

If yes, Please list them here:

Russia

16. Will you be contacting Native communities to inform them of your intended icebreaker research activities? **Yes**

If yes, please list the native communities and contacts:

Gambell: Merlin Koonooka, Alaska Eskimo Whaling Commissioner Branson Tunigian, General Manager, IRA Council Savoonga: George Noongwook, Alaska Eskimo Whaling Commissioner Kenneth Kingeekuk, IRA Vice President Eskimo Whaling Commission: Vera Metcalf

17. Will Marine Mammal Protection Act, NEPA or Endangered Species Act consultation or permitting be required? **No**

18a. Cruise Plan and Description of Operations:

Provide as much detail as possible about the type of operations and sampling to be conducted, daily schedule and hours of operation, type of equipment to be used and any other information that will help us prepare for this cruise. Use additional pages or send corrected drafts as necessary. If this is a multi-investigator cruise, please include a list of Co-PI's who will be submitting operational science plans:

Please see attached files.

18b. Upload additional files as needed:

Additional File(s) Uploaded for Description of Operation: 1

Filename	File Size
SamplingOperations.doc	79872 bytes

19. If your cruise involves any of the following, please check below:
(Items marked * Require advance approval.)

Items	Check
Multiple PI or Institution Cruise:	No
24 hour science operations (Night Work?):	No
Personnel Deployed on Ice:	No
Hazardous Materials:	No
Radioactive Isotopes:	No *
Stable Isotopes:	No *
Gasoline to run science equipment:	No
Explosive Devices:	No
Fire Arms:	No *
Flammable Gases:	No

Portable air compressors: **No**
If yes, please indicate the power requirements: **No response**

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20. Diving Operations: **No**

Number of Dives:
Purpose:
Will members of the science party be diving:
Are you requesting USCG diver support:

21. Small Boat Operations: **Yes**

Use of science party small boats: **No**
Use of USCG small boats: **Yes**
Number of deployments expected: **10-15**
Purpose: **Deploy/retrieve floating sediment traps at 5-6 locations (traps will be pulled to Healy and retrieved using block off of stern aft frame). Retrieve ice deployed equipment Personnel transfer if no helicopters Access to ice (Gradinger) PIs: Rolf Gradinger, Brad Moran**
Range in miles from the ship: **1 mile**
Payload size and weight: **350# max for sediment traps**
Gasoline for science equipment: **Gradinger will bring**

22. Helicopter Operations: **Yes**

Passenger Transports: **Yes**
Cargo Transports: **Yes**
Payload size and weight: **No response**
Maximum hours/flight: **No response**
Average hours/day: **No response**
Number of flights: **No response**
Total flight hours: **No response**
Installation of sensors on Helicopter: **No response**
Describe flight operations: **Helicopter will be used to retrieve ice-tethered sediment traps (Gradinger) and work by PMEL. Also, a trip may be made to Gambell to talk about our science with the whaling community there. A personnel transfer of 2 people also may occur at Gambell. Helicopter also may be used to exchange personnel at St. Paul Island (or boat, CG's call). Gradinger and Cokolet are coordinating regarding payload etc. for helo.**
Range in miles from the ship: **No response**
Average track miles for each sortie: **No response**

23. Deployment or Recovery of Moorings: **No response**

Provide the Lat/Long/Depth of each mooring:
Mooring Worksheet:
Number of Moorings to deploy:
Number of Moorings to recover:
Min Depth:
Max Depth:

24. Total Number of People in Your Party

(include NSF provided support personnel such as LDEO and Scripps; do not include helicopter personnel):

**No
response****25. Current Crew List** [Download XLS file \(HLY0802CrewlistFormatted.xls\)](#)

	Name	Institution	Position	Phone/Email	Sex	Date On	Date Off	Foreign Nat.	Nationality
1	Carin Ashjian	Woods Hole Oceanographic Institution	Chief Scientist	508-289-3457 cashjian at whoi dot edu	F	27-Mar-08	6-May-08	No	USA
2	Robert Campbell	University of Rhode Island	Scientist	401-874-6692 campbell at gso dot uri dot edu	M	27-Mar-08	6-May-08	No	USA
3	Philip Alatalo	Woods Hole Oceanographic Institution	Technician	508-289-2980 palatalo at whoi dot edu	M	27-Mar-08	6-May-08	No	USA
4	Evelyn Sherr	COAS- Oregon State University	Scientist	541-737-4369 sherre at coas dot oregonstate dot edu	F	27-Mar-08	6-May-08	No	USA
5	Celia Ross	COAS- Oregon State University	Technician	541-737-4369 celiaross at hotmail dot com	F	27-Mar-08	6-May-08	No	USA
6	Evelyn Lessard	University of Washington	Co-Chief Scientist	206-543-8795 elessard at u dot washington dot edu	F	27-Mar-08	6-May-08	No	USA
7	Megan Bernhardt	University of Washington	Scientist	206-543-9658 megdawg at u dot washington dot edu	F	27-Mar-08	6-May-08	No	USA
8	Tracy Shaw	Hatfield Marine Center, NOAA	Scientist	541-867-0306 tracy dot shaw at noaa dot gov	F	27-Mar-08	6-May-08	No	USA
9	Rachel L. Pleuthner	University of Maryland	Technician	716-517-5927 pleuthne at cbl dot umces dot edu	F	27-Mar-08	6-May-08	No	USA
10	Rodger Harvey	University of Maryland	Scientist	410-326-7206 harvey at cbl dot umces dot edu	M	27-Mar-08	6-May-08	No	USA
11	Alexei Pinchuk	University of Alaska	Scientist	907-224-4313 ftaip1 at uaf dot edu	M	27-Mar-08	6-May-08	Yes	Russia
12	Ed Davis	University of Tennessee	Technician	865-974-6160 edavis8 at utk dot edu	M	13-Mar-08	6-May-08	No	USA
13	Boris Sirenko	University of Tennessee	Scientist	865-974-2592 marine at zin dot ru	M	13-Mar-08	6-May-08	Yes	Russia
14	Maria Prokopenko	University of Southern California	Postdoctoral Fellow	323-630-4968 prokopen at usc dot edu	F	27-Mar-08	6-May-08	Yes	Russian
15	Jonathan Whitefield	BIOS	Technician	441-297-1880 x706 jonathan dot whitefield at bios dot edu	M	27-Mar-08	6-May-08	Yes	UK
16	John Casey	BIOS	Technician	441-297-1880 x731 john dot casey at bios dot edu	M	27-Mar-08	6-May-08	No	USA
17	Roger Kelly	URI-GSO	Technician	401-874-6273 rokelly at gso dot uri dot edu	M	27-Mar-08	6-May-08	No	USA
18	Nanch Kachel	U. Wash/JISAO	Technician/Hydro Team Leader	206-525-6746 nancy dot kachel at noaa dot gov	F	27-Mar-08	20-Apr-08	No	USA
19	David Kachel	NOAA-PMEL	Technician	206-526-6195 dave dot kachel at noaa dot gov	M	27-Mar-08	20-Apr-08	No	USA
20	Carol Ladd	NOAA-PMEL	Technician	206-526-6024 carol dot ladd at noaa dot gov	F	27-Mar-08	20-Apr-08	No	USA
21	Calvin Mordy	Contractor Aquatic Solutions	Scientist	206-526-6870 Calvin dot W dot Mordy at noaa dot gov	M	27-Mar-08	20-Apr-08	No	USA
22	Jeremy Malczyk	U. Wash/JISAO	Technician	206-526-4424 Jeremy dot Malczyk at noaa dot gov	M	27-Mar-08	20-Apr-08	No	USA

23	Ned Cokelet	NOAA-PMEL	Technician/Hydro Team Leader	206-526-6820 Edward dot D dot Cokelet at noaa dot gov	M	20-Apr-08	6-May-08	No	USA
24	David Strausz	NOAA/NOAA Corp, Lt JG	Technician	206-526-6508 David dot Strausz at noaa dot gov	M	20-Apr-08	6-May-08	No	USA
25	Rolf Sonnerup	University of Washington-JISAO	Scientist	206-526-6748 Rolf dot Sonnerup at noaa dot gov	M	20-Apr-08	6-May-08	No	USA
26	Dylan Righi	University of Washington-JISAO	Technician	206-526-6508 dylan dot righi at noaa dot gov	M	20-Apr-08	6-May-08	No	USA
27	Peter Proctor	University of Washington-JISAO	Technician	206-526-6508 peter dot proctor at noaa dot gov	M	20-Apr-08	6-May-08	No	USA
28	Daniel Naber	University of Alaska Fairbanks	Technician	907-474-7747 naber at ims dot uaf dot edu	M	27-Mar-08	20-Apr-08	Yes	USA
29	Jeremy Mathis	University of Alaska Fairbanks	Scientist	907-474-5926 jmathis at sfos dot uaf dot edu	M	20-Apr-08	6-May-08	No	USA
30	Elizabeth Labunski	U.S. Fish & Wildlife Service	Observer	907-786-3865 elizabeth_labunski at fws dot gov	F	27-Mar-08	6-May-08	No	USA
31	Kathy Kuletz	U.S. Fish & Wildlife Service	Scientist	907-786-3453 kathy_kuletz at fws dot gov	F	20-Apr-08	6-May-08	No	USA
32	Robert Ambrose	U.S. Fish & Wildlife Service	Observer	907-733-1693 ambrose at mtaonline dot net	M	27-Mar-08	20-Apr-08	No	USA
33	Alex De Robertis	NOAA-AFSC	Scientist	206-526-4789 Alex dot DeRobertis at noaa dot gov	M	27-Mar-08	20-Apr-08	No	USA
34	Rolf Gradinger	Univ. of Alaska Fairbanks	Scientist	907-474-7407 rgradinger at ims dot uaf dot edu	M	13-Mar-08	20-Apr-08	Yes	Germany
35	Katrin Iken	Univ. of Alaska Fairbanks	Scientist	907-474-5192 iken at ims dot uaf dot edu	F	13-Mar-08	6-May-08	Yes	Germany
36	Rebecca Neumann	Univ. of Oldenburg, Germany	Technician	907-474-7407 rebecca1509 at gmx dot de	F	13-Mar-08	6-May-08	Yes	Germany
37	Sarah Story Manes	Univ. of Alaska Fairbanks	Student	907-474-7407 story at sfos dot uaf dot edu	F	13-Mar-08	6-May-08	No	USA
38	Steve Roberts	UCAR	Technician	303-497-2637 sroberts at ucar dot edu	M	27-Mar-08	6-May-08	No	USA
39	Tom Bolmer	WHOI	Technician	508-289-2628 tbolmer at whoi dot edu	M	27-Mar-08	6-May-08	No	USA
40	Scott Hiller	Scripps Institution of Oceanography	Technician	858-534-1907 shiller at ucsd dot edu	M	16-Mar-12	6-May-08	No	USA
41	Lynne Butler	University of Rhode Island	Technician	401-965-2143 lbutler at gso dot uri dot edu	F	27-Mar-08	6-May-08	No	USA
42	Paul Walczak	Oregon State University	Technician	NA pwalczak at coas dot oregonstate dot edu	M	27-Mar-08	6-May-08	No	USA
43	Allan Devol	Univ. of Washington	Scientist	207-543-1292 devol at u dot washington dot edu	M	27-Mar-08	6-May-08	No	USA
44	Heather Whitney	Univ. of Washington	Graduate Student	206-543-7512 hwhitney at u dot washington dot edu	F	27-Mar-08	6-May-08	No	USA
45	Ana Aguilar-Islas	Univ. of Alaska Fairbanks	Post-Doc	907-474-1524 aaguilar at iarc dot uaf dot edu	F	27-Mar-08	20-Apr-08	No	USA
46	Rob Rember	Univ. of Alaska Fairbanks	Technician	907-474-1524 rremer at iarc dot uaf dot edu	M	27-Mar-08	20-Apr-08	Yes	Canada
47	Peng Wang	Lamont Doherty Earth Observatory	Graduate Student	845-365-8780 pengwang at ldeo dot columbia dot edu	M	27-Mar-08	6-May-08	Yes	China

48	Kris Swenson	Lamont Doherty Earth Observatory	Technician	845-365-8780 kswenson at Ideo dot columbia dot edu	M	27-Mar-08	6-May-08	No	USA
49	David Shull	Western Washington University	Scientist	360-650-3690 david dot shull at wwu dot edu	M	27-Mar-08	6-May-08	No	USA
50	Emily Davenport	Western Washington University	Graduate Student	360-556-5376 tropicalfishy4 at hotmail dot com	F	27-Mar-08	6-May-08	No	USA
51	Ann Fienup-Riordan	Independent Researcher	Scientist/Media	907-346-2952 riordan at alaska dot net	F	27-Mar-08	12-Apr-08	No	USA
52	Janet Scannell	NCAR	Technician	303-497-1093 anstett at ucar dot edu	F	28-Mar-08	20-Apr-08	No	USA
53	John Allison	NCAR	Technician	303-497-2633 jallison at ucar dot edu	M	20-Apr-08	6-May-08	No	USA
54	Gaelin Rosenwaks	Independent Journalist	Independent Journalist	917-923-4866 gaelin at mac dot com	F	20-Apr-08	6-May-08	No	USA
55	Thomas Litwin	Smith College	Media	413-585-3801 Tlitwin at email dot smith dot edu	M	20-Apr-08	6-May-08	No	USA
56	Donna Van Keuren	Univ. of RI/Consultant	Technician	401-294-3836 dvankeur at gso dot uri dot edu	F	27-Mar-08	6-May-08	No	USA

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26. Please check (X) by equipment needed. If you have questions, or need assistance, please call or email the Marine Science Department or at 206-217-6300. There are two trawl core winches and two oceanographic winches. Healy has spare drums with cable for the oceanographic winches which can only be changed in port.

	Cables	Instrument(s)	Instrument Wts	Max Depth	A Frame
<input checked="" type="checkbox"/>	.322"conducting cable (12k meters)	CTD	1000 #	3000	<input type="checkbox"/> AFT <input checked="" type="checkbox"/> STBD
<input checked="" type="checkbox"/>	3/8" steel cable (10k meters)	Nets, VPR, Benthic grabs, Sediment Traps	50, 100, 150, 100	500	<input checked="" type="checkbox"/> AFT <input type="checkbox"/> STBD
<input checked="" type="checkbox"/>	.680 coax conducting cable (12k meters)	Multinet, MOCNESS	1500#	100	<input checked="" type="checkbox"/> AFT <input type="checkbox"/> STBD
<input checked="" type="checkbox"/>	9/16" steel cable (14k meters)	MultiCore	500	3000	<input checked="" type="checkbox"/> AFT <input type="checkbox"/> STBD
<input type="checkbox"/>	1/4" steel cable (14k meters)				<input type="checkbox"/> AFT <input type="checkbox"/> STBD
<input type="checkbox"/>	Spare .322 conducting cable (12k meters on spare drum)				<input type="checkbox"/> AFT <input type="checkbox"/> STBD
<input type="checkbox"/>	SeaMac portable winch-Instrument				<input type="checkbox"/> AFT <input type="checkbox"/> STBD

Will you be bringing your own winch and wire? **No**

Describe use, size, and weight & power requirements below:

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27. Crane requirements:

		Anticipated use
<input checked="" type="checkbox"/>	Port Side Fantail Crane (Safe Working Load: 5 tons)	Cargo or personnel /equipment on ice
<input type="checkbox"/>	Starboard Side Fantail Crane (Safe Working Load: 15 tons)	
<input checked="" type="checkbox"/>	04 Deck Cranes (Safe Working Load: 15 tons)	Equipment or Personnel on ice
<input checked="" type="checkbox"/>	Forecastle Crane (Safe Working Load: 3 tons)	Placing empty SW incubators on foredeck

Describe other lifting requirements here: (cranes have limited reach please consult the crane descriptions)

28. Deckspace Requirements:

	[x] Vans	[x] Incubators	[x] Storage
Total Number	3-4	7	1
Type/Size	20' containers	seawater	20' container
Location	2 on bow, 2 on stern	Bow	Bow
Water Req	No response	No FW	
Seawater Req	No response	300 L/min, 10-12 input hoses	
Power Req	Yes	see below	

Describe all other Deckspace requirements here:

Incubator Power:

Campbell: 115 VAC/60 Hz/1.4 amps at full load, single plug; heat tape for 3 hoses, 120 v, 150 Watt, 1.25 amps each or 3.75 amps for all from a single plug (interface at watertight nema box)

Lessard: 115 V/60 Hz, 0.74 amps for each of 2 incubators with 1 plug; heat tape, 2 plugs at 120V, 4 amps

Sherr: 120 V/ 100 watts, 0.7 amps, 1 plug

Sambrotto: 120 V, 0.4 amps, 1 plug

Gradinger: 2 plugs for heat tape, more info to follow

No heat tape for Lomas. List is complete (2/18/08)

Incubator Sizes: Lessard - 2 @ 3'x5' each; Gradinger - 1@2' x 4'; Moran/Lomas - 1 @ 3' x 4'; Sambrotto - 1 @ 3'x6'; Sherr - 1 @ 5'x6'; Campbell - 1 @ 36" x 52"

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29. Science Equipment and Lab Configuration:

CTD - SIO support	
Click here for Healy Station keeping parameters	
[x] SeaBird 911 + CTD/Rosette Use: Dedicated Depth - Min(m): 20 Max(m): 3000 Approximate Number of casts planned: 300	
[x] Redundant Temperature Sensors	[x] Redundant Conductivity Sensors
[x] O2 Sensor	[x] Wet Labs Transmissometer
[x] Chelsea Fluorometer	[x] Altimeter
[] 24-place rosette with 12 Liter internal spring Niskin bottles	[x] 12-place rosette with 30 Liter internal spring Niskin bottles
[x] Biospherical QSP2300 PAR sensor	O-Ring type: [x] Silicone [] Nitrile Buna-N

Expendable Oceanographic Probes (User supplied)	
[] Hull mounted launcher	[] Hand launcher
Number of Launches: No response	
What probes will you be launching? (checked below)	
[] XCTD [] XBT [] Other:	

Science Seawater	
Science Seawater - SIO Support	
[x] AutoSal Salinometer Use: Occasional	[x] Seabird 45 Thermosalinograph Use: Dedicated
[x] Seapoint SCF fluorometer Use: Dedicated	[x] Seabird SBE43 oxygen sensor Use: Dedicated
[x] Turner SCUFA fluorometer Use: Dedicated	[x] Omega Flow meter Use: Dedicated
Incubator Seawater	
[x] Incubator ambient temperature seawater	Flow volume (liters/minute): 315 L/min

Please indicate other seawater requirements:

Ambient Seawater Hose on back deck for washing nets. Non-ambient seawater hose on back deck for cleaning.

Acoustics

<input checked="" type="checkbox"/> SEABEAM 2112 Bottom Mapping Echosounder (Science Party supplies operator) Use: Dedicated	<input checked="" type="checkbox"/> RDI 150 kHz BB ADCP (Science Party supplies operator) Use: Dedicated
<input checked="" type="checkbox"/> RDI 75 kHz BB ADCP (Science Party supplies operator) Use: Dedicated	<input checked="" type="checkbox"/> Knudsen 320B/R Echosounder Use: Dedicated
<input checked="" type="checkbox"/> Benthos pingers Use: Occasional	

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30. Science Equipment and Lab Configuration: (Cont.)

Lab Equipment

<input checked="" type="checkbox"/> DI Water (18 Mega Ohm) liters/day required: avg 133 L/d	<input checked="" type="checkbox"/> -80 °C freezers (2 @ 12 cu ft each) Use: Dedicated
<input checked="" type="checkbox"/> Fume Hood (3 available) Use: Dedicated	<input checked="" type="checkbox"/> Climate Control Chambers 10x9x6' (2) Use: Dedicated
<input checked="" type="checkbox"/> Walk in Freezer/Reefer two @ 13x8x6' Use: Dedicated	<input checked="" type="checkbox"/> Clean/UPS Power (120v, 60Hz, Type 1)
<input checked="" type="checkbox"/> Any Power Sensitive Equipment that you are concerned about Please provide description: HPLC, Mass spectrophotometer	

Meteorological

<input checked="" type="checkbox"/> RM Young 85004 Ultrasonic Wind Sensors	<input checked="" type="checkbox"/> Paroscientific MET3A Temperature, Humidity, Pressure
<input checked="" type="checkbox"/> RM Young 50202 Precipitation guage	<input checked="" type="checkbox"/> Eppley infrared Radiometer Modle PIR
<input checked="" type="checkbox"/> Eppley Spectral Pyranometer Model PSP	<input checked="" type="checkbox"/> Terascan Weather Satellite System
<input checked="" type="checkbox"/> Biospherical QSR-2200 PAR sensor	

Communications

<input checked="" type="checkbox"/> Email Bytes/Day To Ship: 47000 From Ship: 47000	<input checked="" type="checkbox"/> Iridium Phone Mins per day: 10
<input checked="" type="checkbox"/> Data/FTP Bytes/Day To Ship: 8 mB From Ship: >8 mB	<input checked="" type="checkbox"/> INMARSAT Phone Mins per day: 10
<input type="checkbox"/> High latitude satellite connectivity (>73 N) Bytes/Day from the ship:	

Explain other communications concerns and requirements:

There will be at team from EOL creating a field catalog of all of the groups' data (when available!) and the event log while on board. They have a request regarding their computer: "One thing that would really help us is if our catalog laptop computer could have direct access to the Healy internet connection. This would avoid us having to move the files twice and would greatly simplify our task of relaying files back to a field catalog here in Boulder. It would also allow us to automate the mirroring process." Is this possible? For the e-mail estimates, I assumed 10 e-mails at 100 kb per day per person. For the phone, it is tough to figure since I may have to use it quite a bit when we are near St. Lawrence Island and I communicate with the local communities but much less when we are not. So I guessed 10 min/day as an average across the cruise. I have

queried the group regarding any additional need including receiving data on the ship. 2-19-08: 1 investigator needs to send/receive by ftp files several times per cruise, files not larger than 8 mB. 1 investigator needs to send files off 2-3 times per week, some files larger than 8 mB 2-3 times per cruise.

Coring

Jumbo Piston Coring

Use:

Number of cores:

Minimum depth:

Maximum depth:

Gravity Core

Use:

Number of cores:

Minimum depth:

Maximum depth:

Maximum core length:

Multicore

User provided coring equipment

Please provide description:

No response