**ICDP SUSTAIN Drilling Project, Surtsey Volcano**

**SUSTAIN Sample Request Form**

**Please return an electronic version of this request form with annotated core information listed in successive pages (see below) to Kristján Jónasson, Lead Core Curator (**[**kristjan@ni.is)**](mailto:kristjan@ni.is)) **with copies to Marie Jackson (m.d.jackson@utah.edu) and Magnús Tumi Guðmundsson (**[**mtg@hi.is.)**](mailto:mtg@hi.is.)) **Descriptions, images and core information for the SUSTAIN core collection as well as electronic versions of this sample request form can be downloaded at the SUSTAIN web site (**[**http://surtsey.icdp-online.org)**](http://surtsey.icdp-online.org))**.**

**The sample request will be given a request number and then approved by the Lead Core Curator at the core repository, after review by the Coordinating PIs and by the Curatorial Advisory Board.**

**By completing this form the investigator(s) agree to the stipulations listed within, and to the policies of the Samples, Distribution, and Obligations agreement. Samples can only be used for the purposes/analyses indicated in this request, and cannot be redistributed. A short report describing the progress with analyses and interpretations must be sent to the SUSTAIN Curatorial Advisory Board every six months after receiving the samples.**

**ICDP/SUSTAIN publishing policy requires that scientists who generated funds for the drilling operations and/or provided on-site core documentation/ archiving must be included as potential co-authors of all publications based on study of the SUSTAIN core. A necessary precondition of receiving core material for investigation is the acceptance of this policy. The investigator requesting samples takes responsibility for sending a draft of the manuscript to the Editorial Advisory Board listed below for approval prior to the submission of the manuscript or abstract to a journal or equivalent.**

1. Date (day, month, year)

2. Please indicate the name and address of the investigator who will receive the shipment. Include the complete street address; deliveries cannot be made to a post-office box. If you are completing the form for a collaborative cluster, such as IceSUSTAIN and SUSTAIN-US, then add the names of the SUSTAIN science team members involved in the collaborative research. Also add the names of additional investigators, such as laboratory assistants, who will be doing analytical work on the samples, but who are not science team members.

|  |  |
| --- | --- |
| INVESTIGATOR 1 |  |
| First name |  |
| Last name |  |
| Organization |  |
| Department |  |
| Street address |  |
| Shipping address (if different) |  |
| City |  |
| Postal Code |  |
| Country |  |
| Phone |  |
| Fax |  |
| Email (required) |  |

SUSTAIN Scientist Team members:

Additional investigators:

3. Summarize the proposed research, including scientific goals and experimental/ analytical approach

4. If this is a supplement to a previous request, provide the date of the previous request and describe the progress of the study, the need for additional samples, and the status of the previous samples (***use <300 words)***

5. Provide an overview of sample preparation and testing procedures.

6. List the types of data you will generate (for example, major/trace element analyses, isotope analyses, X-ray diffraction, microscopy, microbiological studies etc.)

7. Specify the timeline of planned analyses and the date by which data derived from measurements of SUSTAIN samples will be archived and made available online

8. These are the types of samples that are available, upon request.

Vertical Core, Hole B (SE-02A): Sterilized, filtered seawater drilling fluid, well-defined storage procedures;

Vertical Core, Hole C (SE-02B): Sterilized, filtered seawater drilling fluid, well-defined storage procedures;

Angled Core, Hole D (SE-03): Untreated seawater drilling fluid, and occasional attapulgite mud.

Sample types: lapilli tuff, coherent basalt intrusion, dike, unconsolidated tephra, xenoliths (in tuff), and/or other requests

Reference Samples: These are 30 cm samples designated during core processing at an interval spacing of 3-5 meters, that have been investigated by several members of the SUSTAIN science team, with analyses integrated to produce interdisciplinary, collaborative results (see below).

Research Samples: These are core samples needed for a specific research program. They may coincide spatially by ± 3m with samples requested by others, to minimize destruction of the core.

Whole Rock Chemistry At this point no samples have been crushed for further dissemination.

Give a general description of your requests, and add the projected analyses for each sample type:

**Reference Samples [these are recorded on the xlsx form attached with this request)**

*These should be requested in collaboration with a specific member or members of the SUSTAIN science team.*

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**Research Samples**

Core B (SE-02A): List the sample depths for each sample configuration:

As fraction of HQ core round (1/2 round or less) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Gravel or powdered aliquot (N/A)\_\_\_\_\_

As volume (cm3) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

As dry weight (g) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Other requests:

Core C (SE-02B): List the sample depths for each sample configuration:

As fraction of HQ core round (1/2 round or less) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Gravel or powdered aliquot (N/A)\_\_\_\_\_

As volume (cm3) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

As dry weight (g) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Other requests:

Core C (SE-03): List the sample depths for each sample configuration:

As fraction of HQ or NQ core round (1/2 round or less) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Gravel or powdered aliquot (N/A)\_\_\_\_\_

As volume (cm3) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

As dry weight (g) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Other requests:

Reference Samples: Requests must be made through correspondence with the SUSTAIN geographic clusters. Materials may or may not be available depending on the consumption and allocation of sample by SUSTAIN team members

Kristján Jónasson, Iceland,

Kristján Jónasson - NI <Kristjan.Jonasson@ni.is>

Steffen Jorgensen or Wolfgang Bach, Europe,

Steffen Leth Jørgensen <steffen.jorgensen@uib.no>

Wolfgang Bach <wbach@uni-bremen.de>

Marie Jackson, United States of America

Marie Jackson <m.d.jackson@utah.edu>

James D. L. White, New Zealand

James White <james.white@otago.ac.nz>



**To complete the sample request fill in the information for each sample requested using the ICDP Digital Information System (DIS) coordinates in the forms on p. 5.**

9. Describe any specialized sampling or processing techniques that you plan to use, including specialized supplies or equipment required. Note that subsampling of cores by the NI staff is limited to cutting of slabs and drilling mini-cores using water as a lubricating fluid. For unusual sampling requests, the scientist is required to assist in subsampling at the NI or to provide additional funding and/or equipment. ***To best preserve the SUSTAIN core collection, all subsampling of cores will be performed at the core repository at the NI by the lead core curator or by visiting scientists under the supervision and assistance of the lead core curator. Bulk core samples will not be sent to other institutions for further subsampling, slicing, etc.***

10. Please estimate the time required for you to obtain publishable results. We request that you have publishable results ready within 24 months after reception of the samples.

11. Residues of SUSTAIN samples must be returned to the Repository. State what condition the samples will be in when they are returned (for example, thin section, unused residual core, washed, powdered, sieved, other)

If you wish to visit the core repository, please contact the lead core curator to schedule a visit.  
Kristján Jónasson  
Icelandic Institute of Natural History / Náttúrufræðistofnun Íslands  
Urriðaholtsstræti 6-8, P.O. Box 125, IS-212 Garðabær, Iceland  
Tel. [+354 5900500](tel:%2B354%205900500), Email, Kristjan.Jonasson@ni.is

**Sample Requests, identified through the ICDP Digital Information System (DIS)**

1. Date (day, month, year)

2. Investigators

Positions of all requested samples must be identified using (i) ICDP Expedition 5059, Site 1, and hole #, where A is the 1979 core (SE-01), **B** is the vertical hole parallel to the 1979 core (SE-02A), **C** is the second vertical hole parallel to the 1979 core (SE-02B), where the subsurface observatory now resides, and **D** is the angled core (SE-03). (iii) section #, as specified in the DIS, (iv) request # (provided by the core curator), (v) sample ID (also provided by the core curators, example: 3100123), and (vi) amount. Repeat the information in the forms below to include requested information for each sample requested. The sample ID number will be provided by the core curator. Note that requests for 1979 drill core must be managed through Kristján Jónasson and NI on a case-by-case basis.

All requests for samples should be accompanied by an annotated version of the core information file (downloadable from the SUSTAIN web site), on which you have superimposed circles, rectangles or dots directly on the core or box photographs to depict ***as accurately as possible*** the position and size of each sample you are requesting. The annotated core information file name should include the last name of Investigator 1 on p.1 of this form (e.g., xyz\_Sample1.pdf, xyz\_Sample2.pdf, etc.).

Please note that only a small amount of material can be made available from the existing sample sets. Make a request for the smallest possible amount that is required for your studies. This will diminish the possibility of being denied a sample due to a lack of material. If larger samples are required, then complete the request form below, and this will be approved by the Coordinating PIs and Curatorial Advisory Board.

# Smaller Research Samples

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Site-Hole** | **Core**  **(B, C, D)** | **Section** | **Request #** | **Sample ID** | **Sample amount**: length (cm), if solid core slab, or weight (g), if powder  **File name,** annotated core information page | **Special instructions**  (e.g., sample orientation, preparation procedures) |
| 5059-1- |  |  |  |  |  |  |
| 5059-1- |  |  |  |  |  |  |
| 5059-1- |  |  |  |  |  |  |

# Larger Research Samples (whole rounds, as for rock testing experiments, for example)

Positions of all requested samples have to be given using (i) site and hole #, (ii) core #, (iii) section #, (iv) sample interval, (v) box and slot# and (vi) amount. Please enter the smallest possible amount of sample material that you require for your studies. This will diminish the possibility of being denied a sample due to a lack of material.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Site-Hole** | **Core**  **(B, C, D)** | **Section** | **Request #** | **Sample ID** | **Sample amount**: length (cm), if solid core slab, or weight (g), if powder  **File name,** annotated core information page | **Special instructions**  (e.g., sample orientation, preparation procedures) |
| 5059-1- |  |  |  |  |  |  |
| 5059-1- |  |  |  |  |  |  |
| 5059-1- |  |  |  |  |  |  |

**Note** that depths given in the SUSTAIN database are measured depths (MD) relative to the ground surface as determined during drilling operations. These measured depths are for general orientation in sampling context and are not used in sample request.