

Geological Program Sample Request Information Sheet

This document provides information on the provision of samples of well material from the Core Storage and Research Center (CSRC). It is a reference sheet on what types of samples are provided and what to expect when requesting samples.

Available Material at the CSRC

Well material that is available at the CSRC are; conventional core, fluid samples, drill cuttings samples and sidewall core samples. Detailed information on each of these sample types can be found in the sections below.

Overview of Sample Requests and Collection

- Any sample request or slide loan requires an approved Geological Program (Without Fieldwork). The completed form should be sent to the Geological Services Supervisor (dmills@cnlopb.ca) for engagement on the sample availability, following which the signed document can be submitted for approval. The listing of requested well materials should be clearly articulated, as directed on the form and outlined in subsequent sections.
- There is an Application Approval Fee which must be paid prior to approval of the application. The cost recovery fee schedule can be found here: [Geological & Geophysical Formula Fees](#).
- Labour sample fees may apply for sample collection. A list of fees can be found here : [Core Storage and Research Centre - C-NLOER \(cnlopb.ca\)](#). A separate invoice will be issued for these fees.

Conventional Core Sample Requests

- The CSRC stores one half to two thirds slabs of all conventional core that is collected through offshore drilling. These cores are available to sample and information on the types of conventional core samples and sampling is located in the sample collection section of this document.
- Conventional core samples can be provided by the C-NLOER for the creation of thin sections, core plugs etc. Smaller pieces or chips are sometimes provided for biostratigraphy and geochemical analyses. Larger pieces, such as those requested for thin sections, can be cut by C-NLOER Staff. Sample dimensions obtained by C-NLOER Staff are typically 4 cm x 3 cm x 2 cm, and are intended to accommodate the production of a thin section.
- The client should provide a request (core sample depth) for review by C-NLOER staff, who in turn will determine if the sample is viable.
- Samples will be cut from the side or the back of the core (as shown below in Figures 1-3) and where possible in places where pre-existing breaks in the core exist. C-NLOER staff, as a best practice, will avoid cutting large pieces of core in order to obtain a smaller sample and will avoid cutting the core in such a way as to remove a representation of depth or obliterate representative sedimentary structures.

- If core plugs are required, the core must be sent to a local processing company. All sample locations must be approved by the Geological Services Supervisor and clearly marked before the core is sent out for processing. This can be done by marking the box or marking the core with a crayon or pencil. Pictures of the plug sample site and box numbers are also helpful information to aid in sample collection. In order to preserve the integrity of the core, it must be transported by the processing company. C-NLOER staff will prepare the samples for transportation.

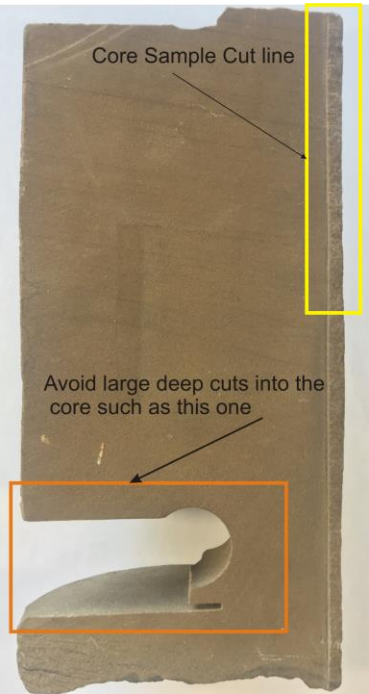


Figure 1: Sample cut from the side of the core



Figure 2: Top view of side sample cut



Figure 3: Top view of a sample cut from the back of the core

Fluid Sample Requests

- The CSRC stores fluid samples (water, oil, condensate) obtained from well testing such as Drill Stem Test (DST), Modular Dynamics Tester (MDT), etc. While fluid samples are available for request, availability is based on the volume of sample available.
- The Core Storage and Research Center does not store pressurized fluid samples.
- Fluid samples are stored in freezers and thus must be removed from the freezer to allow enough time for the sample to reach room temperature to facilitate sampling. Samples are transferred from the main container to small 15 – 30 mls vials. A maximum of 15 – 30 mls of sample will be provided per request. Fluid samples will not be sampled to the point of depletion, 50 – 100 mls is retained for archival purposes.

Cuttings Sample Requests

- Both washed and unwashed cuttings samples are stored at the CSRC. Washed cuttings are primarily used for viewing purposes only. In some cases where multiple samples of washed cuttings exist and if the unwashed cuttings are not available, samples of washed cuttings may be provided. These requests will be assessed on a case by case basis.
- Some unwashed cuttings are sampled more frequently than others and therefore the available sample volumes have been depleted. These samples are not available for sampling. Clients will be advised if samples are not available at the time of the request.
- Unwashed cuttings samples are available from the CSRC for various types of studies as listed in the table below. Unwashed cuttings will not be sampled to depletion; 15 – 20 grams of sample will be retained for archival purposes. Samples are weighed individually using the mechanical balance scale in order to provide the required amount per sample. Samples are placed in clear plastic bags (approximately 7 x 12 cm in size) and clearly marked with the well name and depth using the same units as the original sample. Figure 4 shows an example of a typical bagged unwashed cuttings sample.

- Below are some sample volumes provided for different types of studies:

Study Type	Volume of sample provided (g)	Comments
Geochemical	10-20	
Biostratigraphy	30-40	Depending on how many types of slides will be produced (i.e. palynology, micro-paleontology, and/or nanno fossil).
Fluid Inclusion	20-30	
Provenance Work	Variable	The C NLOPB usually provides a number of samples (approximately 30 – 50 grams every 5 – 10 meters) over the section of the well that is of interest. These samples are then consolidated into the larger samples by the client.



Figure 4: Unwashed cutting sample in clear plastic bag with well name and depth label

Slide Loan Requests

- Slide types available at the CSRC includes Palynology, Micro-Paleontology, Nanno fossil and Petrographic slides curated from approved Geological Programs. Slide loans are available once the privilege period has expired for the relevant Geological Program.
- Slides are loaned on a per box basis; slides are not removed from boxes and loaned on an individual basis.
- Requests for a large number of slides will be fulfilled in sets assembled by well, slide type or some combination of the two determined on a case by case basis. When a request is fulfilled in sets, a set of slides will be released to the requester when the previous set of slides has been returned to the C-NLOER.

- Slides are to be returned to C-NLOER as soon as possible with a maximum loan period of 6 months. In the case where a longer period is required, an extension to that time frame can be granted upon request.

Sidewall Core Requests

- Sidewall core samples are stored at the CSRC after a well is drilled and testing has been completed. Due to the possible testing that may be conducted on the sidewall core, the sample may be depleted before it is submitted to the C-NLOER. Given the potential for lower volumes of material available for sampling and archival purposes, sidewall core sample requests are managed on a case by case basis.
- Where a sizable intact piece of core exists, samples suitable for a thin section will be provided. These samples are cut by C-NLOER staff.
- Where ample sample volumes exist, 5-10 grams will be provided for other types of studies (e.g. Biostratigraphy).

For additional information regarding the sampling of CSRC curated well materials or assistance completing the Geological Program (Without fieldwork) Application, please contact dmills@cnlopb.ca