

Instructions for usage of the Wilson M. Laird Core & Sample Library

Last updated: 2/6/2023

CORE SELECTION

- Core library users are responsible to select their own samples and sample intervals prior to their arrival. Ideally, sample selection is made prior to making a core lab reservation, in part to know how much table space needs to be allotted.
- Core and drill cutting sample records can be searched and sorted from the Premium Subscription Services -> <https://www.dmr.nd.gov/oilgas/subscription-service.asp>. The “Core Search” function includes options of searching and sorting samples by geologic age, location, and sample type.
- Be as specific as possible on depth interval(s) of interest within a given core/well as well as core type(s) to be viewed and/or sampled.
- If sampling is a planned component of the core library visit, share the details of your planned sampling prior to your visit. This will allow core library staff to review planned sampling with the available sample material.



Pictured above: examples of whole core (WC) (left) and curator set (CS)/thin slab core (middle and right). When selecting cores for sampling purposes, try to select either whole core (WC) or large slab (LS). Limited sampling may be allowed on some rocker sets (RS) but never allowing on curator set (CS) cores due to the limited amount of core material.

LAB RESERVATIONS

- All core library lab and table space require reservations prior to viewing and/or sampling cores. Last minute reservations are allowed based upon available lab and table space, but not guaranteed. Periodically, all the main floor labs of the core library are filled with pre-scheduled visitors and unavailable for last minute scheduling.
- Email and/or call Kent Hollands , or another available staff member (listed below), for core library reservations and submitting core and/or drill cutting sample lists.

Kent Hollands
Core Library Technician
Email: khollands@nd.gov
Office: 701- 777-2857

Timothy Nesheim
Acting Core Library Manager
Email: tonesheim@nd.gov
Office: 701- 777-2460

Jonathan LaBonte
Core Library Technician
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Office: 701- 777-2286

CORE LIBRARY – ONSITE VISIT

- Upon arrival, check in with core library staff located on the 2nd floor offices of core library building. Core library staff will direct you to your allotted lab/table space and requested sample(s). Also, core library staff will be available for any questions and/or requests.
- Core Library users are responsible for moving their core from the pallets to the tables as well as re-taping and re-stacking the core boxes on the pallets. However, for core library users/visitors with physical limitations, core library staff can assist with moving samples between pallets and lab tables.



Pictured above: geologist moving curator set core boxes from pallets to tables within core viewing/sampling lab.

- The core library front doors are open during normal business hours, 8am-12pm and 1pm-5pm (locked 12pm-1pm), Monday through Friday except for holiday and weather-related building closures.

End of core usage steps:

1. If core boxes have corresponding box lids, return the box lids to the correct corresponding core boxes.
2. If core boxes were initially taped shut, re-tape the core boxes as they initially were.
3. Restack core boxes on pallet the way they were taken off, which typically includes A) deepest core interval on the bottom and shallowest on top, and B) alternate core box layers to perpendicular (90 degrees) to one another.
4. If you have any questions about retaping and/or restacking core samples, please check with core library staff.
5. Let core library staff know that you are completely finished with core sample(s).



Pictured above: standard (3-foot) core boxes containing either large slab (LS) and/or whole rock (WC) samples. Standard core boxes are generally stacked on pallets with the followed guidelines, as stated above: 1) the deepest most core boxes on the bottom to shallowest on top, 2) sets of 8 boxes per row with 90-degree alternating orientation for each row, and 3) a maximum of 6 rows per pallet. This is the most common core box type and stacking pattern.



Pictured above: curator set (CS) core boxes that cannot be stacked with alternating orientation, and therefore are stacked side by side. This is a less common core box type and stacking pattern.

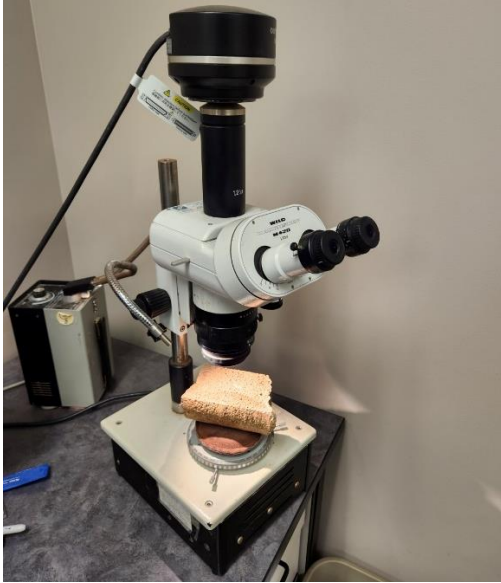
Additional Notes for Visitors:

- Any and all sampling must be pre-approved by core library staff prior to sample collection. Core library staff have the authority to limit, adjust, and/or deny any and all core sampling.
- Core library staff are not responsible for sample collection, other than for using rock saw to cut samples (e.g. thin sections). Please note that the core library facility does not have any core plugging capabilities.
- The thin section inventory is available to be viewed and examined onsite. Approximately 20,000 thin sections are able for viewing at the core library.



Pictured above: thin section microscope with attached camera (left) and inventory (right)

- Warehouse (core storage area) is off limits to users unless accompanied or otherwise directed by core library staff.
- Staff geologists at the core library are available for questions and discussions regarding the sample inventory and the geology of North Dakota.
- Free WiFi is available onsite at the core library through “StageNet Guest,” which does not require a password.
- The 2nd floor breakroom (northeast corner of building) is available for visitors to use, which includes a full-sized refrigerator and microwave. Also, the 1st floor conference room can be available upon request.
- Diluted HCl acid is available upon request. Please note that some cores (e.g. CS, Curator Set cores) are off limits to HCl acid application. Also, please spray/wash core samples after applying HCl to preserve the core for future users.
- Stereoscopes with and without cameras are available onsite at the core library and available for visitors to utilize.



Pictured Left: stereoscope with attached camera available to utilize by visiting professionals and students at the core library.

- A core gamma ray machine is located onsite that is operated by core library staff. Requests for core gamma ray can be made before, during, and after a core library visit/appointment to Jonathan LaBonte (see contact information above).



Pictured above: core gamma ray machine at the Wilson M. Laird Core & Sample Library. Upon request, a core library technician is available to run core samples through the core gamma ray machine and generate spectral core gamma ray curves.

- Additional equipment and supplies available to core library users include: yard sticks/rulers, HCl acid, scales, sample envelopes, stereoscopes, Wifi, microscopes, rock hammers, additional lighting, chisels, cuttings/sample tray, hand lens, and spray bottles.