2021 Williston Basin Core Workshop

North Dakota Geological Survey

Wilson M. Laird Core and Sample Library
Grand Forks, North Dakota
August 9-10 & 12-13

Dear Williston Basin geologists and engineers,

The North Dakota Geological Survey (NDGS) would like to invite petroleum geologists and engineers to our 2021 Williston Basin Core Workshop event this coming August. This event will be held in Grand Forks, North Dakota at the Wilson M. Laird Core and Sample Library. Two separate, two-day core workshop sessions (which cover the same material) will be offered on August 9-10 (Monday-Tuesday) and August 12-13 (Thursday-Friday). Each session will provide a walk-through of core samples and relevant geologic information for units including the Bakken, Three Forks, Inyan Kara, and Deadwood Formations as well as the numerous productive subintervals of the Mississippian Madison Group. The purpose of this event is to better familiarize new geologists to the stratigraphy and geology of the Williston Basin as well as to further support continued exploration and development.

On August 11th, the Wednesday in between the two core workshop sessions, a full one-day introduction to core logging course will be led by Bob Lindsay. This one-day training course will provide participants with a hands-on, step-by-step approach to the basics of logging core. Attendees of either core workshop session will be able to attend this training for an extra fee of $100/person.

The Wilson Laird Core and Sample Library (core library) was recently renovated and expanded in 2016. Over 475,000 feet (91 miles) of core, which has come primarily from oil and gas wells drilled across North Dakota during the past ~100 years, is stored and accessible at this facility. Several labs were added during the renovation/expansion enabling multiple groups to utilize the facility simultaneously. Usage of the labs and core access is free of charge, ideally with a lab reservation booked in advance.

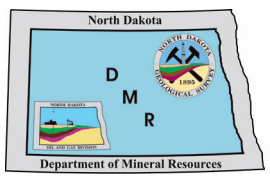
Registration for this event is $300/person. Please contact for reduced government, academic, and student registration rates. Registration proceeds will go towards providing lunch and refreshments for registrants during the workshop and covering travel costs for guest presenters (non-NDGS staff). Registrants will need to make their own travel arrangements (flights and hotels). Refunds will be available in full by request through July 16th, and afterwards will be reviewed on a case-by-case basis (Covid related cancellations will be granted in full).

We hope that you will be able to join us this coming fall. Feel free to contact with any comments or questions!

Registration Link -> *https://www.eventbrite.com/e/williston-basin-core-workshop-2021-tickets-157865839977*

Sincerely,

Timothy Nesheim
Subsurface Geologist/Head of Subsurface Section
North Dakota Geological Survey
Wilson M. Laird Core and Sample Library
2835 Campus Rd.
Grand Forks, ND 58202-8156
(701) 777-2460
tonesheim@nd.gov



2021 NDGS Core Workshop Schedule

August 9-13

Full-Week Schedule

August 9-10 - Core Workshop Session #1

August 11 - Introduction into Core Logging led by Bob Lindsay (9am-4pm, includes lunch)

August 12-13 - Core Workshop Session #2

Day #1 (August 9th and 12th)

- 8:30-9:45 – **Inyan Kara Formation Sequence Stratigraphy:** *J. Bader*
- 9:45-10:00 *coffee break*
- 10:00-12:00 – **Regional Stratigraphy and Sedimentology of the Middle Bakken:** *J. Hohman*
- 12:00 -1:00 *Lunch (provided with registration)*
- 1:00 -2:45 – **Bakken-Three Forks Reservoir & Production Trends - NW North Dakota:** *R. Brinkerhoff*
- 2:45-3:00 *coffee break*
- 3:00-4:30 – **Regional Facies Architecture of the Middle Three Forks Formation:** *T. Nesheim*

Day #2 (August 10th and 13th)

- 8:30-9:30 – **"Classic" Madison Reservoirs along east flank of basin:** *B. Lindsay*
- 9:30-10:30 – **Mission Canyon Reservoirs, Little Knife Field & a CO2 Pilot Project:** *B. Lindsay*
- 10:30-10:45 *coffee break*
- 10:15-12:15 – **Frobisher & Alida Members (Mission Canyon Fm.), SE Saskatchewan:** *A. Pollard*
- 12:15-1:15 *Lunch (provided with registration)*
- 1:15-3:15 – **Madison Reservoirs (Frobisher-Alida & Tilston Intervals) of W North Dakota:** *D. Petty*
- 3:15-3:30 *coffee break*
- 3:30-4:30 – **Deadwood Formation - North Dakota:** *A. Sarnoski (confirmed as of July 1st)*

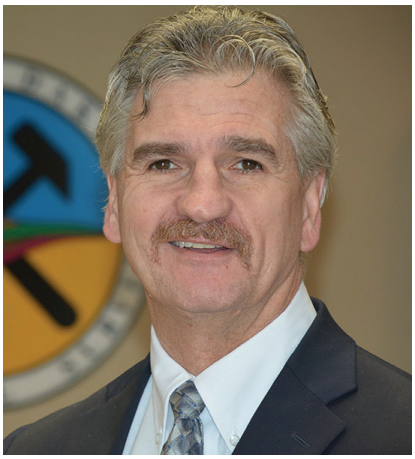
**PENDING INVITATION - John Lake presentation on the Deadwood Formation of Saskatchewan*

NORTH DAKOTA GEOLOGICAL SURVEY 1895

North Dakota D M R Department of Mineral Resources

Core Workshop Instructors

(Listed in alphabetical order)



Jeff Bader

Jeff Bader has been a geologist for over 40 years and is a Professional Geologist in Wyoming and Utah. He has a BA in Geology from the University of Colorado and a MS in Petroleum Geology from San Jose State University. He spent the first 8 years of his career at the USGS, Branch of Petroleum Geology. He then was a consultant for more than 20 years and for the last 6 years has served with the North Dakota Geological Survey where he is presently Director of the Wilson M. Laird Core and Sample Library. His research interests center on cratonic origins/development and resulting influences on the Phanerozoic tectonic, structural, stratigraphic, and sedimentological evolution of sedimentary basins. Jeff has authored over 50 publications on these topics, mostly in the Rocky Mountain region.

Presentation Title:

An Evaluation of the Incised Valley Sequence Stratigraphic Model, Inyan Kara Formation, Southwestern North Dakota

The Inyan Kara Formation is the lowermost unit of the Lower Cretaceous Dakota Group. It does not crop out within North Dakota and limited core is available for study, mostly from the northwestern part of the state. However cores were recently taken further southeast related to potential CO2 sequestration opportunities in Oliver and Stark Counties. This workshop examines the Inyan Kara within Stark County from Red Trail Energy, LLC; RTE 10 well (NDIC #37229) and possibly the Minnkota Power Cooperative, Inc.; J-LOC 1 well (NDIC #37380) from Oliver County. Cores and wireline logs were utilized to identify sequence stratigraphic surfaces to evaluate whether the previously presented sequence stratigraphic model is consistent with surfaces encountered in the newly drilled wells to the southeast.

For the previously presented model, the Inyan Kara has been subdivided into two units reflecting the overall Early Cretaceous sea-level rise. The lower half is a “fluvial” dominated, incised valley-fill complex consisting of: 1) initial valley incision during falling stage; 2) filling of the valley during lowstand and early transgression; 3) initial incursion of the seaway with subsequent flooding and development of estuaries during transgression; and 4) progradational marine highstand deposits. Gamma-ray signatures are characterized by a distinct, blocky pattern for thicker, coarser-grained sandstones. Sandstones grade upward into finer-grained, interbedded sandstone, siltstone, and claystone. The same depositional sequence is repeated in the upper Inyan Kara and the lower Skull Creek Formation but is more marginal marine dominated. The model depicts coastline evolution and correlation of sequence stratigraphic surfaces basinward/ landward. It predicts the presence and extent of valley-fill sandstone bodies and may be used to distinguish such bodies on geophysical logs from other coarser-grained units that have less potential as prospective reservoirs. Sandstones of valley-fills have excellent porosity and permeability, and are well connected; whereas, coarser deposits of the estuarine, marginal marine, and interfluve facies are not as well developed.

Core Workshop Instructors (cont.)

Riley Brinkerhoff

Riley has worked in the oil and gas industry for fifteen years with both major international firms and unconventional focused independents and is currently the exploration manager at Wasatch Energy. Working as a technical expert and business development leader, he has used geotechnical data to build business cases for acquisitions and divestments across the Rockies. His specialty with helping quantify technical risk within proposed deals and create strategies to mitigate risk in oil and gas development plans. Key past work includes asset acquisitions and development in the Uinta, Green River, Powder River, and Williston Basins. Major exploration projects include the Bighorn, Wind, Washakie, Alliance, and Green River Basins. He has published several papers related to the Bakken/Three Forks and Uteland Butte plays and on stratigraphic and structural topics within the Uinta Basin. Riley got his bachelors and masters in geology at Brigham Young University and his MBA at the University of Utah. He is currently the president of the Utah Geological Association, past president of the Montana Geological Society and on the board of the AAPG RMS.

Presentation Title:

Bakken-Three Forks Reservoir and Production Trends - Divide County, North Dakota

Beginning in 2011 horizonal drilling began to target the stratigraphic pinch-out of the best dolostones in the first bench of the Three Forks Formation in Divide County in the extreme NW corner of North Dakota. Strangely, it was eventually shown that the best production was from the thinnest Three Forks reservoirs and that the large volumes of oil produced from these wells could not be reconciled to the limited reservoirs mapped in the pinch-out. This presentation uses core-facies mapping from the large dataset of cores available at the ND Core Repository for Divide County to build a comprehensive stratigraphic model to explain Bakken/Three Forks production trends found across the margins of the Williston Basin. This presentation will show data consisting of seismic, reservoir pressure, facies mapping, geochemistry and production data pointing to the existence of a large stratigraphic trap within the Middle Bakken that defines productivity trends in horizontals in both the Three Forks and Middle Bakken. The trap tips out just across the border in Saskatchewan where the lowest water cuts and best production per lateral foot is found and extends down to the Divide-Williams county line, with gradual increasing water cut and decreased well performance. This presentation will show the extents of the trap, its internal character, evidence for its contribution to both Three Forks and Middle Bakken wells, evidence for its uneven depletion, how it fits with the low maturity data and what operators can do improve future infill wells.

Core Workshop Instructors (cont.)

John Hohman

John Hohman is a retired petroleum geologist specializing in sedimentology and stratigraphy with over 25 years of domestic and international industry experience. Following degrees in geology from Murray State University (BS), Colorado State University (MS) and Indiana University (PhD); his career path began with the Exxon family of companies including Esso and ExxonMobil continuing with Phillips and finally with Hess. While at Hess, he was introduced to the fascinating geology of the Bakken-Three Forks petroleum system which he worked the last 6 years before retirement. While at Hess, the regional aspects of the Bakken-Three Forks became a focus both spanning the Williston Basin and extending to basins beyond. This broad-based perspective of the geology has provided key insights that play a huge role in understanding the stratigraphic framework of the Bakken-Three Forks and the distribution of facies within this framework for the Williston and beyond. His learnings continue into retirement as he spends summers studying Bakken-Three Forks outcrops throughout the Rocky Mountains while chasing trout.

Presentation Title:

Regional Stratigraphy and Sedimentology of the Middle Bakken

The Middle Bakken represents a prolific oil producer that is characterized by low porosity (< 12 %), argillaceous, locally sandy, dolomitic/calcareous siltstone. Due to its overall low porosity, subtle variations in grain size as the amounts of argillaceous material and sand content vary in the siltstone play an important role in determining reservoir quality. These grain size variations are dominantly controlled by depositional facies. It is the understanding of these depositional facies and the depositional systems they compose that is critical to understanding and predicting Middle Bakken reservoir quality.

Deposition of the Middle Bakken is interpreted to be comprised of two depositional sequences. Each of these sequences is composed of a succession of three system tracts. These six system tracts represent the depositional systems that govern the distribution of Middle Bakken facies, each with its own unique assemblage of facies and distribution of reservoir-enhancing sand and reservoir-limiting argillaceous material.

For the workshop, a series of cores will be displayed that form a northeast-southwest trending transect across the Williston Basin. They are selected to illustrate the regional complexity of the Middle Bakken depositional systems and provide a direct, side by side, visual comparison of this complexity. Attendees will be able to view the distribution of the sequences and system tracts across the basin along with the variability of the constituent facies that compose these stratigraphic units. Characteristics and distribution of the facies as it relates reservoir quality will be stressed along with the characteristics and identification of the key stratigraphic boundaries.

Core Workshop Instructors (cont.)

Robert (Bob) F. Lindsay

Born and raised in Utah (United States)

Served in U.S. Army Special Forces, known by their nick name “The Green Berets”

Graduated from:

Weber State College 1974 – B.Sc. Geology
Brigham Young University 1976 – M.Sc. Geology
University of Aberdeen 2014 – Ph.D. in Geology

Bob has worked for:

1. Gulf Oil, 1976-1985, Production Geology, Enhanced Oil Recovery (Supervisor EOR Geology), and Applied Research
2. Chevron, 1985-2001, Carbonate Petrographer, Laboratory Supervisor, and Stratigrapher
3. ChevronTexaco, 2001-2002, Carbonate Specialist
4. Saudi Aramco, 2002-2015, Geological Specialist, Geological Consultant, Sr. Geological Consultant (Geological Technical Services Division), Carbonate Sedimentology and Sequence Stratigraphy, leading Aramco carbonate field trips and teaching graduate level carbonate sedimentology at King Faud University of Petroleum and Minerals (KFUPM)
5. Lindsay Consulting LLC & Affiliated Professor Brigham Young University, 2015-Present, Consulting on Permian Basin oil fields, leading field trips, teaching graduate level courses, such as: 1) Rock-based Integrated Reservoir Characterization; 2) Modern Carbonate Field Trip to the Bahamas; 3) Petroleum Systems; and 4) short courses

Bob has served as:

1. Editor Oklahoma City Geological Society (1980-1982)
2. Co-chairman and Chairman SEPM Evaporite Research Group (1984-1986)
3. A Distinguished Lecturer (1993-1994) American Association of Petroleum Geologists
4. President Permian Basin Section – SEPM (1994-1995)
5. President West Texas Geological Society (2000-2001)
6. Executive Committee Member – Dhahran Geoscience Society (2005-2007)
7. Distinguished Lecturer (2013-2014) Dhahran Geoscience Society

He has published over 100 abstracts of talks, poster sessions, and papers

Bob spends his retirement time giving back to academia and industry by:

1. Consulting, running field trips, giving talks, and teaching short courses for geological societies, universities, and industry
2. Teaching at Brigham Young University-Provo and Brigham Young University-Idaho

He and his wife Linda have 5 children and 20 grandchildren

Core Workshop Instructors (cont.)

Robert (Bob) F. Lindsay (continued)

Presentation Title:

Mississippian Mission Canyon Carbonate Reservoirs–Bluell, Sherwood, Mohall, and Glenburn Fields Williston Basin, North Dakota

Mississippian Mission Canyon carbonate reservoirs along the eastern margin of the Williston Basin, beneath the State "A" marker, are housed in multiple shoaling-upward carbonate sequences. From top to base these sequences are: Bluell; Sherwood; Mohall; Glenburn; Wayne; Landa; and Tilston.

Bluell, Sherwood, Mohall, and Glenburn strata were the focus of this study. These carbonate strata are composed of intraclast, oolitic-pisolitic-oncolitic packstone/grainstone. Following deposition, they experienced intense subaerial exposure. Reservoir facies were deposited as barrier island/shoreline buildup complexes, with up-dip evaporite strata (shoreward) forming lateral stratigraphic traps. Down-dip and basinward these strata grade into offshore marine deposits. Repetitive basinward shoreline progradation placed lagoonal, tidal flat, and supratidal coastal sabkha evaporites over underlying barrier island/shoreline buildup complexes to form vertical seals.

Away from the eastern margin toward the center of the basin individual sequences of are difficult to recognize, because argillaceous to silt-rich to sandstone markers, which subdivide these stratigraphic intervals disappear.

Presentation Title:

Mississippian Mission Canyon Reservoir–Little Knife Field, Williston Basin

Little Knife field was discovered in January 1977 by the Gulf 1-18 State wildcat. Upon completion the well flowed 480 BOPD of undersaturated sour crude with an API gravity of 41°. Little Knife is isolated within a broad, low-lying, northward plunging anticlinal nose. Structural closure to the west, north, and east was created by the gentle fold, with an up-dip lateral stratigraphic trap and a porous diagenetic trap to the south. Primary recovery mechanism is fluid expansion with a limited edge-water drive.

Surprisingly, the Mission Canyon contains two reservoirs. The upper reservoir is composed of porous and permeable peloid mud-dominated dolopackstone and is regionally correlative to Sherwood and upper Mohall strata. The lower reservoir is composed of porous and permeable, calcareous, skeletal-peloid mud-dominated dolopackstone/dolowackestone and is regionally correlative to Glenburn strata.

Following discovery the Mission Canyon reservoir underwent intense reservoir characterization, followed by a CO_2 minitest in the center of the field. The CO_2 minitest was supported by a cost sharing agreement between Gulf Oil and the U.S. Department of Energy. The Little Knife CO_2 minitest was successfully displaced mobile oil in the lower Mission Canyon reservoir and proved up the concept that secondary and tertiary recovery projects in Madison carbonate reservoirs in the Williston Basin can produce additional hydrocarbons.

Presentation Title:

How to Describe a Core

Acquisition of a core is an expensive and time-consuming effort. A core is a precise commodity to have in reservoir characterization. Besides acquisition of petrophysical data, such as porosity, permeability, fluid saturations, etc., there is additional information that can be acquired by a high-quality core description. This step-by-step procedure of How To Describe A Core has evolved over years of core description. It is presented as a road map of how to begin, build, and finish a high-quality core description.

Core Workshop Instructors (cont.)

Timothy Nesheim

Timothy Nesheim is a subsurface geologist with the North Dakota Geological Survey (NDGS), where he also serves as Head of the Subsurface Section. During his early years at the NDGS, Timothy focused on wireline log and core-based investigative efforts in the Pennsylvanian (to Late Mississippian) Tyler Formation. He was able to successfully map and characterize two distinct sets of petroleum source beds in the unit which had been previously undocumented. He has also spent substantial amounts of research time on the stratigraphy and various petroleum geology related aspects of the Ordovician section of the Williston Basin, including: the Winnipeg Group, Red River Formation, and Stony Mountain-Stonewall Formations. During the past few years, Timothy has been logging cores of the Three Forks Formation in preparation to potentially formalize a stratigraphic nomenclature for the unit.

Presentation Title:

Facies Architecture and Reservoir Trends of the Middle Three Forks (2nd bench): Bakken-Three Forks Petroleum System, US Williston Basin

The middle Three Forks Formation (middle Three Forks) emerged as a horizontal reservoir target within the Bakken-Three Forks play beginning in 2012-13. Approximately 300 horizontal wells have been drilled and completed in the middle Three Fork (2nd bench) to date, the majority of which were drilled during the last several years within a $50-60 per barrel price environment. Cumulative production from the unit totals over 57 million barrels of oil and 120 billion cubic feet of gas to date, with daily production averaging between 33,000 and 50,000 BOPD during 2018-19.

The Three Forks Formation (Three Forks) was deposited in the Late Devonian within interpreted settings ranging from a peritidal shallow marine environment to a continental, playa lake or sabkha type setting. During Three Forks deposition, western North Dakota (study area – Williston Basin) connected to the open ocean through the Elk Point Basin, a paleogeographic feature that extended northwest through southern Saskatchewan and central Alberta.

The primary facies comprising the middle Three Forks include: 1) pink-tan, ripple to planar-laminated, silty dolostone, intercalated in part with green claystone; 2) pink-tan and green to red, dolostone clast-supported to matrix-supported conglomerate; and 3) red to green, poorly to non-laminated, silty to sandy, mudstone. A typical middle Three Forks section includes 9-12 m (30-40 ft) of ripple-laminated, silty dolostone interbedded with clast- to matrix-supported conglomerate overlain by 3.5-4.5 m (12-15 ft) of interbedded silty-sandy mudstone facies and matrix-supported conglomerate.

A regional lithofacies trend occurs within the lower two-thirds of the middle Three Forks (reservoir target). The net thickness of the laminated dolostone facies increases towards the northwest, the direction of the Elk Point Basin's open ocean connection, while decreasing southeast. Meanwhile, the net thickness of the silty-sandy mudstone displays an inverse trend increasing towards the southeast, away from the Elk Point Basin trend, and decreasing northwest. Dolostone clast-supported to matrix-supported conglomerate becomes most prevalent intermediate of these two trends, within the area of primarily drilling and completion activity for the middle Three Forks. The lithofacies trends described above spatially correlate with regional trends in both oil saturations and well production results, and therefore could be used to guide future exploration and development in the middle Three Forks.

Core Workshop Instructors (cont.)

David M. Petty

David Petty has 39 years of industry experience related to reservoir characterization studies, prospect generation, development geology and wellsite operations in the Williston basin, Permian basin, Michigan basin, Tunisia and Egypt. This includes Williston basin work for Tenneco Oil Company (1979-1986), American Exploration (1994-1996), Belco Energy (1998-2001) and Hess Corporation (2006-2016). All of his research has focused on the Williston basin, with an emphasis on the Madison Group geology. Current research projects include Bakken stratigraphic geometry, Madison sequence stratigraphy and Williston basin hydrodynamics studies.

Presentation Title:

A Facies and Flow Unit Approach to Porosity Occurrence in the Madison Reservoirs (Frobisher-Alida and Tilston Intervals) of Western North Dakota

Cores will illustrate the range of porous facies within the Frobisher-Alida and Tilston intervals using the following examples:

1) The Bluell-B1 dolostone flow unit in Elkhorn Ranch field represents a lagoonal facies. Porous stromatolitic dolostone occurs widely in this facies but the best reservoir quality is in a burrowed dolostone subfacies that formed near the center of the lagoon.

2) Rival limestone reservoirs in Indian Hill and Glass Bluff fields represent a bar-island-shoal complex. Interparticle and fenestral porosity occurs in skeletal-oolitic-pisolitic packstone and grainstone.

3) The Sherwood-E dolostone flow unit in Davis Creek field represents a restricted-marine facies. Intercrystal dolomite porosity occurs in burrowed, peloidal mudstone to packstone.

4) The Glenburn-A calcareous dolostone flow unit in TR field represents a low-energy, open-marine facies. Intercrystal dolomite porosity occurs in the matrix of skeletal wackestone and packstone.

5) A middle Frobisher-Alida limestone in northwest North represents a high-energy, open-marine facies. Skeletal grainstone is the dominant lithology. Effective porosity occurs in interparticle pores between crinoid and bryozoan fragments.

6) A lower Tilston limestone flow unit in southwest North Dakota formed in a vast oolitic shoal that extended from North Dakota to Wyoming. Porosity occurs in interparticle pores between ooid grains.

Core Workshop Instructors (cont.)

Alec Pollard

Alexander (Alec) Pollard is a carbonate sedimentologist with several years of industry and academic research based on reservoir characterization of sedimentary rocks. Alec has a B.Sc. (Hons) in Geology from Lake Superior State University (Michigan, USA) and a MSc. in Geology from Queen's University (Ontario, Canada). Mr. Pollard has published and presented a diverse range of carbonate research on rocks of different ages and locations. Alec's current research interests include utilizing sedimentology of Paleozoic and Cenozoic carbonate rocks to enhance resource development for the energy sector. Alec is also passionate about understanding the stresses on modern marine systems and investigating stabilizing solutions. Alec was born and raised in Trinidad and Tobago and is currently based in Canada.

Presentation Title:

Characterization of the Alida and Frobisher Members of the Mission Canyon Formation, from Southeastern Saskatchewan.

The Alida and Frobisher members of the Mission Canyon Formation from the Madison Group, are two distinct bed sets, that have undergone significant resource development for over 80 years. As the Alida and Frobisher Beds became significant producers, several misconceptions with regards to the stratigraphy, deposition and diagenesis of these rocks were established. Many of the misconceptions have led to significant losses, increased risk and reservoir damage. This core workshop will aid in defining the stratigraphy, distinct facies, genetic differences, and reservoir characterization of the Alida and Frobisher Members of the Mission Canyon Formation.

Wilson M. Laird Core and Sample Library

External view of the Wilson M. Laird Core and Sample Library (above

Wilson M. Laird Core and Sample Library was initially built in 1980 on the campus of the University of North Dakota and was recently expanded/renovated in 2015-2016. This building was named for the late Wilson M. Laird, who was the State Geologist from 1941-69 and assisted in the initial development of rules and regulations for oil and gas drilling in North Dakota. Laird's early oil and gas regulations were enacted in the early 1940's, nearly 10 years before the initial discovery of oil in North Dakota. One of Laird's rules required operating companies to submit any and all core samples collected during drilling operations, which has allowed North Dakota to maintain one the most complete core inventories of North America.

To date, the library sample inventory includes over 475,000 feet (91 miles) of core which primarily consists of the numerous oil and gas producing sedimentary formations of the Williston Basin. An expansive inventory of drill cuttings (over 50,000 boxes) from oil and gas wells is also available as well as cores from various mineral test wells. The current facility includes three main labs that are available for usage to visiting professionals as well as several secondary, smaller lab spaces. The numerous lab spaces are meant to allow multiple visitor/groups to utilize the core and sample inventory at the same time. In addition to multiple lab space, the core library also features conference and break rooms that are also accessible to visitors.

The Julie A. LeFever core laboratory is 1,300 square feet (above)

Conference room (above)

Usage of the facility, both lab and core access, is free of charge to visiting professionals. Lab reservations are ideally booked days to weeks (or months) in advance to assure space is available. For additional information or to reserve lab space, please see the contact information below:

https://www.dmr.nd.gov/ndgs/Offices/Core_Library/
Phone: (701) 777-2231

2835 Campus Rd.
Grand Forks, ND 58202-8156