

2024 RCRL CORE WORKSHOP
JUNE 3-6, 2024, BEG-HRC CORE FACILITY
11611 W. LITTLE YORK, HOUSTON, TX 77041

Who and What: The RCRL Carbonate Research Team is excited to announce a comprehensive core workshop focused on Mesozoic age reservoirs with an emphasis on the Gulf of Mexico basin and comparative analysis with global occurrences of similar age systems from the Middle East and South Atlantic. This workshop will delve into the interplay of core-log-seismic-based stratigraphic architecture, structural configuration, and facies-pore type distributions that are critical to GOM production from Jurassic and Cretaceous reservoirs from Central Mexico and Texas to Florida.

Where and When: This event will take place at the BEG-HRC Facility in Houston, from June 3 to 6, 2024.

Why: The Mesozoic carbonate reservoir systems across the Gulf of Mexico offer a complete spectrum of reservoir occurrences from slope, reefal, and shelf settings. These reservoirs have a combination of structurally simple to complex heterogeneities and mild to extensive diagenetic overprints. GOM production varies across key formations and each play is impacted by the stratigraphic architecture and facies distribution. The reservoir elements are influenced by structural and stratigraphic configuration, diagenetic history, as well as the interplay of paleoclimate and oceanic-anoxic events (OAEs) with carbonate factories and resultant sediment types. Few if any systems globally display the spectrum of reservoir settings and rich data types available from the Gulf of Mexico. This workshop will allow experts to gain new insights into overlooked opportunities and newer team members a rare opportunity to see a comprehensive section of carbonate units and reservoir types across the GOM spanning from SW Texas to Florida and Jurassic through upper Cretaceous.

The workshop is designed to showcase specific intervals each day, focusing on a different reservoir age, region, and/or setting, including:

- Jurassic/Lower Cretaceous reservoirs of Central-Eastern GOM, including the Upper Jurassic Smackover-Buckner Fms., Lower Cretaceous Calvin and Winn Fms., and Albian Sunniland Field of Florida.
- Lower Cretaceous Aptian-Albian Cow Creek/James Lime, and Pettet/Sligo Fms/Glen Rose examples with emphasis on various grainstone complexes, Texas segment of GOM both east and west of the San Marcos Arch
- Albian Edwards-Georgetown Fm reservoirs along the Stuart City margin and Maverick Basin; and presentations on subsurface outcrop equivalents in Mexico (El Doctor and Poza Rica)
- Cenomanian to Maastrichtian reservoirs, featuring the Buda, Austin Chalk, Eagle Ford and other deep-water chalk facies reservoirs with cores from the Maverick Basin and Brookeland Field.

Lectures will draw from analogous reservoir examples from the Middle East and the South Atlantic for comparison of facies and diagenetic styles.

This promises to be an enriching experience for professionals seeking a comprehensive understanding of Mesozoic age reservoirs in the Gulf of Mexico basin and will provide context to exploration and production strategies globally.

Day 1, June 3 – Smackover, Knowles

8:30 - **Janson** and **Kerans** – Presentation: Overview of Mesozoic and Themes, Approach of Workshop

9:15 - **Loucks** – Presentation: Upper Jurassic Smackover Section in the Jay Field, Northwest Florida

9:45 - **Loucks** – Jay Field Smackover Core

- Ruby Kent 34-2 core

10:30 - *Break*

10:40 – **Loucks** – Presentation: Overview of Upper Jurassic Smackover Geology in Northeast Texas

11:00 - **Loucks** – Northeast Texas Smackover Cores:

- Shell No. 1 Ahern
- Superior No. 1 Cecil

12:00 - *Lunch Catered – Rudy's*

1:00 - **Janson** – Presentation: Overview of Seismic Expression of Smackover Formation

1:45 - **Janson** – Selections of cores from Smackover Formation from Dorcheat-Macedonia, Magnolia and/or Chalybeat Spring fields in Southern Arkansas:

- Crystal Lewis A-1 (Dorcheat-Macedonia)
- Pettet B Unit 1 (Chalybeat Spring)
- Arco Baker #2 (Magnolia)

3:15 - **Janson** and **Loucks**– Presentation: Valanginnian Reef Knowles Limestone: A core and seismic perspective

3:45 – **Janson** – Updip lagoonal core (Shell Ross Neil #1) and reef buildup core (Shell Adoue #2)

Day 2, June 4 – Albian-Aptian

8:30 - **Loucks** – Presentation: A Look at the Sligo-Pearsall-Rodessa Section on the Lower Cretaceous South Texas Platform

9:10 - **Kerans** – Presentation: Aptian Composite Sequence and the OAE 1A within the Cow Creek Fm

9:30 - **Loucks** and **Kerans**– Select cores from Aptian/Lower Cretaceous

- Tenneco No. 1 Ney
- Dilley No. 1 Ritchie
- Hamilton Pool

11:00 – **Hattori** – Presentation: The Early Cretaceous Pettet Formation of East Texas: Key Facies, Stacking Patterns, and Reservoir Facies Distribution

- Henderson Clay Barksdale Est. G.U. #2
- ARCO Haskins #1

12:15 – Lunch – On your own

1:00 – **Kerans** and **Loucks** – Presentation: Glen Rose Reef Cores in Texas and Florida

1:45 – **Loucks** and **Kerans** – Maverick Basin patch reefs

- Continental No. 55-1 Chittim
- Prime Energy No. 1-84 La Paloma

3:00 – **Kerans and Loucks** – Sunniland Field, Florida

- Sunniland Alico 31-2

5:00 pm – Happy Hour

Karbach Brewery

2032 Karbach Street

Houston, TX 77092

<https://www.karbachbrewing.com/clown-lounge/>

Day 3, June 5 – Aptian-Albian reefs

8:30 – **Zahm** and **Hattori** – Presentation: Impact of salt on Mesozoic margins and fields

8:50 – **Hattori** – Presentation: Deposition on a halokinetic high: James Limestone reef system of the Fairway Field, East Texas

9:15 - **Hattori** – Fairway Field Cores

- Cities Service Ellis #C-1
- Sun Oil Lloyd A.J. #2
- Sun Oil Miller-Hurt #2

10:30 – **Kerans** – Presentation: Sligo and Stuart City reef and reef margins

- **Zheng and Kerans** - Rachal Foundation #1, Webb County- Stuart City core

12:00 – Lunch catered – Jason’s Deli

12:30 - **Kerans** – Albian stratigraphy, facies and Word Field study

1:10 - **Zahm** – Syndepositional faults and fractures in steep-rimmed margins

1:30 – **Loucks** - Origin and Description of the Micropore Network within the Lower Cretaceous Stuart City Tight-Gas Limestone Reservoir in the Pawnee Field in South Texas

2:00 – **Kerans** and **Zahm** – Pawnee Field, Schroeder No.1 Select Cores Intervals

3:45 – **Loucks and Janson** – Architecture, Lithofacies, and Depositional Processes in the Deep-Water Lower Cretaceous (Albian) Tamabra Formation, Poza Rica Field, Mexico

Day 4, June 6 – Austin Chalk, Buda, EF

8:30 – **Loucks** - Depositional Systems, Lithofacies, and Reservoir Characterization of the Austin Chalk Brookeland and Burr Ferry Fields in East Texas and Western Louisiana

9:00 – **Loucks** - Cores from Austin Chalk in the East Texas Brookeland and Burr Ferry fields

- ARCO No 1 PB American A-187
 - Upper Eagle Ford to lower Austin Chalk (50 ft)
 - Upper Austin Chalk (50 ft)
- Stonegate No. 1 Donner
 - Lower Austin Chalk (50 ft)
 - Upper Austin Chalk into Lower Anacacho (50 ft)

10:15 – **Loucks** - Lithofacies and Nanopore/Fracture Dual Pore Network in the Upper Cretaceous Buda Formation, Dimmit Co., Texas

10:45 – **Loucks** and **Zahm** - Core - Buda Formation in South Texas

- US Enercorp 1H Willerson
 - Del Rio into lower Buda (30 ft)
 - Upper Buda into lower Eagle Ford (70 ft)

11:30 – **Sivil**- Presentation: Geological Characterization and Reservoir Analysis of The Lower Eagle Ford Group In Dewitt County, Texas

- 12:00 –**Sivil** - Eagle Ford Group – DeWitt County, Texas
- Maness Shale to Lower Eagle Ford (10 ft)
 - Lower Eagle Ford to Upper Eagle Ford (135 ft)
 - Upper Eagle Ford to Austin Chalk (30 ft)