PLEASE POST OR CIRCULATE

CARBONATES APPLIED TO HYDROCARBON EXPLORATION AND EXPLOITATION

A Seminar Applicable to Both Unconventional and Conventional Carbonate Plays, as well as to CCS

APRIL 15-19, 2024

WHERE: Hilton University of Houston Hotel, Houston, Texas.

COST: $2850 USD/person **ALSO:** Discounted fee is **$2350 USD/person** for two or more people from the same company.

Unemployed Colleagues/Students: your special discounted fee is $800/person.

Registration deadline is March 15, 2024.

INSTRUCTOR: JEFFREY J. DRAVIS (Consultant - Dravis Interests, Inc., Houston)
www.dravisinterests.com

FOR: Geologists, Geophysicists, Reservoir Engineers, Log Analysts and Managers.

GOAL: After this seminar, each delegate will be able to describe and classify typical carbonate rocks, interpret facies relationships, delineate stratigraphic sequences and correlate facies within them, evaluate reservoir quality in limestones and dolostones, and better understand subsurface carbonate plays and reservoirs. This is an excellent refresher course.

This five-day, in-house seminar introduces participants to established principles of carbonate sedimentology applied to hydrocarbon exploration and development geology. Using a highly acclaimed, hands-on and rock-based approach, each participant learns to describe typical carbonate rocks, delineate facies and sequences, evaluate reservoir quality, relate carbonates to log and seismic expression, better predict play relationships in the subsurface, and construct a time-stratigraphic facies framework essential for both accurate regional correlation of carbonate sequences and zonation of carbonate reservoirs. Lectures are reinforced with exercises and problems keyed to 10 identical sample rock sets, each containing 56 representative samples from around the world. A core problem with logs, based on a real exploration target, further reinforces principles presented in this seminar. A 750+ page notebook, with color copies of all power point slides shown in lectures, accompanies the course, as well as a reference book with color pictures of samples used in various exercises.

HISTORY OF THIS SEMINAR

My flagship seminar has been presented to industry **136** times since 1987, either on a public or private basis. The last seminar was presented in November of 2023. This course is the most popular of all the applied carbonate seminars I teach because of its rock-based and hands-on approach, including the use of a core exercise that ties together many key relationships. It is where many hundreds of geoscientists, engineers and managers gained their first exposure to carbonate geology as it applies to oil and gas exploration and development geology.

For more information, see: www.dravisinterests.com and click on ”Training Seminars.”

INSTRUCTOR'S QUALIFICATIONS

Jeffrey J. Dravis (Ph D) is a technical consultant and instructor in carbonate geology with more than 40 years of worldwide industry and field experience in all aspects of applied modern and ancient carbonate geology. This experience includes 8 years with Exxon Production Research Company where he headed up Exxon's worldwide training efforts in carbonates. Since 1987, he has taught **332** in-house and field seminars.

Past consulting projects (199 in number) include reservoir studies in Texas (Paleozoic & Mesozoic, including the Ellenburger), Devonian of W. Canada and Russia, Jurassic and Cretaceous of Gulf of Mexico, and Cretaceous of Tunisia; and exploration studies in the Jurassic and Cretaceous of the U.S. Gulf Coast, including Jurassic Smackover, Haynesville and Cretaceous James Lime, Edwards, Glen Rose, Austin Chalk, Buda and Eagleford Limestones, Devonian/Mississippian of W. Canada, Permian Wolfcampian of west Texas, Permian of Thailand, Pennsylvanian of Four Corners region, and Mesozoic of western and northern Africa. See the website for details.

SEMINAR FORMAT:

DAY 1: Distinctive Aspects of Carbonates; Non-Skeletal Grains; Skeletal Grains; Sedimentary Structures.

DAY 2: Carbonate Classifications Schemes; Limestone Diagenesis and Porosity Evolution. Dolomitization and Models.

DAY 3: Dolomitization and Porosity Evolution; Porosity Classifications; Attributes of Shallow and Deep-Marine Facies; Facies Models - Platform; Facies Model - Ramp.

DAY 4: Carbonate Depositional Sequences & Cyclicity; Log and Seismic Expression of Carbonates; Core Exercise With Logs.

DAY 5: Carbonate Play Types and Review of Case Studies; Use of Depositional Cyclicity to Zone Carbonate Reservoirs; Carbonate Facies Correlation Exercise.

CALL (713) 819-4444 for more information, or **e-mail:** jdravi@rice.edu

WEBSITE: www.dravisinterests.com **PRIVATE VERSIONS OF THIS SEMINAR ARE ALWAYS AVAILABLE.**

COMMENTS FROM PAST SEMINAR ATTENDEES:

"As anyone who has taught college level courses and short courses knows, a lot of work goes into putting together even a mediocre course. Your course was absolutely superb and the amount of thought, effort, and time you put into it was apparent to even the most casual observer.

Your organization of topics was well thought out, your execution and timing of the lecture material was bang on, and the exercises were an excellent way to emphasize the topic at hand. Whether we were looking at thin section images, hand samples, cores, or well logs, everything came together just as it was intended. When we were stumped, you managed to drag the correct answer out of us with gentle prodding. It's easy to just give the answers when you are the instructor, but it's better to give students the mental and intellectual support they need to work through the thought process to derive the correct answer to the problem. You gave each of us, from the least skilled to the most skilled, that support.

As a bonus, the amount of take home resource material was and is amazing. Not only did we get a reference book of thin section and hand sample images, but you provided each

of us with a travel drive full of references, images, and presentation, plus we also have the 750-page course notebook. You have definitely set a high bar for others who teach industry related classes. ….. I am able to take what I learned in your course and apply it immediately to my work. “

“This class is a comprehensive overview of carbonates and their depositional environments. It gives you the tools you need to explore for hydrocarbons in carbonate rocks.”

"This was one of the best 5-day courses I have taken - learned enough about carbonates that I could start a carbonate project and know where to look for help and what type of preparation I need, and that should help the company.”

“Instructor was very knowledgeable and though-provoking. He appeared thoroughly competent in all aspects of carbonate geology, and possessed a very likable personality and temperament. Works very well with people."

"It (this seminar) will help me as a development geologist to interject regional concepts into my interpretation."

Quality of Instruction: "Excellent. Speaker was very articulate, open to questions and made an effort to walk around, ask questions and give advice during exercises."

"The core and laboratory exercises were based on real exploration examples and were very effective.” Lab Exercises: "Imaginative way to draw it all together."

"This course is especially useful for the siliciclastic-background geologist who is starting out in carbonates."

"Considering that I have never had any training in carbonates..., the course was very well run and organized and I learned a good deal about the subject matter."

"Good all around course directed at petroleum problems and objectives. A good mixture of classical theory, case studies, new findings and practical applications."

" Overall, I really enjoyed the class and gained a great deal from it. I will strongly recommend this course to other engineers."

"It is obvious that Jeff has taught this course many times - excellent command of material and direction for the course. One of the best courses I've attended."

"Enjoyed material and became excited about learning again by your relaxed and excellent teaching style."

"The notebook was well thought out and made the course useful, as I now have a handy reference for different environments that I can draw upon in the future."

"Jeff Dravis has put together the best geologically-oriented course I have taken in my seven years with Conoco. Five stars!

“Having very limited background in carbonates, I now have a solid foundation upon which I can better communicate with geologists in my group.”

“The class shows how previous models may have overlooked potential reservoirs. We might be able to re-evaluate our areas and find new reserves.”

“I work very closely with geologists and geophysicists. When reviewing plays, wells, cores, samples (drilling), this course will definitively help me interact with them much better.”

“Authoritative, well-paced and clear instruction with clear, logical flow and good balance between theory and practical exercises.”

“Overall, an excellent course and I highly recommend it to anyone who is working carbonates…i.e., everyone in the Permian Basin. Jeff is committed to deciphering what the rocks are indicating to build his interpretation, as opposed to having a model that the rock data is forced to fit. Refreshing.

“Understanding depositional systems through the thin sections and hand samples was fantastic.”

The real strength of the course was the hand samples that were keyed to a separate notebook with detailed thin section photomicrographs for each sample. Jeff has a complete understanding of his subject and he made the information useful and the application to the ‘real world’ (?) workable. Jeff did an excellent job of integrating the photomicrographs of the thin sections into the course material, eventually weaving the different aspects of carbonates into a complete picture.

For me, a long-term course benefit is the well-organized voluminous 3-ring binder. Each topic / chapter had a good synopsis of the topic to be covered in that section and a list of key references, followed by copies of all slides used in that section. I believe that the binder will be of long-term benefit as a reference when questions arise over time.”
“Thanks so much for your informative sessions! It was great to shake the cobwebs out and get the brain thinking about carbonates again! I definitely feel more confident I could identify the skeletal and non-skeletal components, identify cementation phases, and relate them to depositional environments, paleogeography, and play types. I appreciated your patience as I created cerebral folds and tried to absorb everything! I’ve already reviewed about 1/4 of the material a second time and feel it’s sinking in. I loved having the combination of learning material, thin sections, thin section photos, rock samples and core!”

“Thank you for such an inspiring course! I have to say it has been one of the best courses I've been, not only for the content but as well because you kept our attention in full mode with the exercises and with the dynamic of your class.”

REFUND POLICY
A full refund, less the nonrefundable registration fee ($300), will be given if written cancellation is received by the registration deadline of March 15, 2024. No refunds will be issued after March 15, 2024. **Substitutions are allowed.**

REGISTRATION FORM

CARBONATES APPLIED TO HYDROCARBON EXPLORATION AND EXPLOITATION
April 15-19, 2024

NAME_____

TITLE (Geologist, Engineer, etc.)_____

YEARS OF EXPERIENCE_____

WORKING CARBONATES NOW?_____ WHERE?_____

WORKED CARBONATES IN THE PAST? _____ WHERE?_____
_____

COMPANY_____

ADDRESS_____

CITY_____STATE _____ZIP_____

E-MAIL_____

BUSINESS PHONE ( )_____

Registration deadline is March 15, 2024.

MAKE CHECKS PAYABLE TO: DRAVIS INTERESTS, INC.
4133 TENNYSON, HOUSTON, TEXAS 77005

MC/VISA/AMEX CREDIT CARD PAYMENT OVER THE PHONE IS POSSIBLE.
BANK WIRE TRANSFER IS ALSO POSSIBLE AND PREFERRED.
CALL/CONTACT J. DRAVIS.