

"We are like a judge confronted by a defendant who declines to answer, and we must determine the truth from the circumstantial evidence."

- Alfred Wegener

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NEW LUNCH VENUE! 2 Midland College 3600 N. Garfield Carrasco Room

PBS-SEPM February Luncheon, Speaker: Dr. Robert Lindsay (Lindsay Consulting LLC), Title: Rock-Based Integrated Reservoir Characterization

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NEW Carbonate Well
Log & Core Data Analysis
Spreadsheet v. 4.0 (\$40)

Rock-Based Integrated Reservoir Characterization Core Workshop and Short Course, Dr. Robert Lindsay; March 15-17 @ C.E.E.D. (\$500); 8am-5pm daily

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PBS-SEPM

NEWSLETTER



January 2017

President's Column

There certainly seems to be an increasing focus on the Permian Basin by the oil and gas industry of late. Rig count has been increasing, several major acquisitions have been announced, and operators and service companies alike are looking at West Texas and Southeast New Mexico with a renewed sense of optimism. As experienced personnel new to the basin and inexperienced hires new to the industry make the Permian Basin and Midland their home, PBS-SEPM has a tremendous opportunity and responsibility to help educate those within our sphere of influence. But for PBS-SEPM to effectively meet these growing educational needs, it requires your help.

How can you help, you ask?

First, spread the word about PBS-SEPM. Pass on to newcomers the names and contact information of the Board members and the society. Forward them our digital Newsletter, or print it out and hand them a copy. Show them the PBS-SEPM publications in your personal library. Direct them to our website so they can learn more about our purpose, our rich heritage, and the resources we have available—such as our Digital Publications on

DVD. Every member can help with this essential step of increasing others' awareness of PBS-SEPM and what it offers.

Second, personally invite new-comers to join PBS-SEPM activities. Encourage those new faces you see to attend our monthly luncheon meetings. Better still, bring them with you to the meetings and introduce them to other geoscience professionals. Hand them a registration form for our upcoming short course on Rock-Based Integrated Reservoir Characterization Core Workshop in March. Ask them to consider participating in our upcoming Young Professional Field Trip in lune.

Third, get involved. PBS-SEPM has thrived for the past 63 years and been an excellent resource to others because of members who not only believed in the mission of the society but personally ensured its success through volunteerism. Some wrote publications or gave luncheon talks. Others presented short courses, taught core workshops, or led field trips. Some served visibly as leaders, while others served quietly in the background on committees. No matter the role, the continued excellence and relevance of PBS-SEPM educational opportunities both then and now requires members' involvement.

So I ask: How will you partner with PBS-SEPM to impact the next generation of geoscientists? How will you join with those who have come before you and carry the torch of PBS-SEPM forward? With elections coming soon, followed by a new Board, new committees, and new opportunities to make a difference, there is never a better time than now to decide your role.

Our next luncheon meeting is on February 21, 2017, in the Carrasco Room of Midland College. As always, I look forward to seeing you at our luncheon meeting, and again encourage you to reach out to your co-workers and professional network and invite them to join you.

Cory L. Hoffman PBS-SEPM President 2016-2017

Web: http://www.pbs-sepm.org E-Mail: info@pbs-sepm.org Phone: (432) 279-1360 Mailing Address: P.O. Box 6054 Midland, TX 79704

Mark Your Calendars! [PBS-SEPM luncheons at Carrasco Room, Midland College]

FEBRUARY 2017

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- 14: Happy Valentine's Day!
- 14: WTGS Luncheon: (11:30am-1pm) Speaker: Dr. Sumit Verma, UTPB, <u>Title</u>: Estimation of TOC and Brittleness Volumes and Correlation with Reservoir Production
- 21: PBS-SEPM Luncheon: (11:30am-1pm) Speaker: Dr.
- Robert Lindsay, Lindsay Consulting, LLC, <u>Title</u>: Rock-based Integrated Reservoir Characterization
- 22: WTGS: Delaware Basin Playmaker Forum

MARCH 2017

- 2: WTGS: Horizontals, Residual Oil, and Core Workshop
- 15-17: PBS-SEPM Short Course
 & Core Workshop: Rock-Based
- Integrated Reservoir Characterization (Dr. Robert Lindsay)
- 21: PBS-SEPM Luncheon: (11:30am-1pm) Speaker: Dr. Susan Nash, TBA

APRIL 2017

• 18: PBS-SEPM Luncheon: (11:30am-1pm) Speaker: Scott Shelley, TBA

PBS-SEPM Luncheon Talk - February 21, 2017

Robert F. Lindsay, Ph.D.

"Rock-Based Integrated Reservoir Characterization: How to Describe a Core and How to Build a Sequence Stratigraphic Model"

Lindsay Consulting, LLC & Affiliated Faculty BYU

Tuesday February 21, 2017 - Midland College, Carrasco Room, 11:30 a.m.

Abstract

Dr. Lindsay's talk will serve as an introduction to his 3 day short course March 15-17, and will discuss the techniques used to: 1) describe a core (or outcrop) in detail and 2) build a sequence stratigraphic model from the individual cycle scale to the composite sequence scale (flow unit to reservoir scale). Far from an academic exercise, rock-based integrated reservoir characterization is an essential technique for geologists and engineers to employ in order to better understand conventional reservoirs. This talk and associated short course will only address the first two parts of a five part training course that he developed while at Saudi Aramco that draws upon decades of experience working and describing carbonate reservoirs from the Permian Basin to the Middle East.

"An education isn't how much you have committed to memory, or even how much you know. It's being able to differentiate between what you do know and what you don't."

Biography



Robert (Bob) Lindsay was born and raised in Utah, and served in the U.S. Army Special Forces ("The Green Berets"). Bob received a B.S. Geology from Weber State College (1974), a M.S. Geology from Brigham Young University (1976), and a Ph.D. from the University of Aberdeen (2014). He began his career with Gulf Oil (1976-1985) where he worked production geology, enhanced oil recovery, and applied research. After Gulf Oil was acquired by Chevron, he continued with Chevron in various roles—carbonate petrographer, laboratory supervisor, stratigrapher, and carbonate specialist. In 2002, Bob left Chevron and joined Saudi Aramco where he worked until his retirement in 2015. At Saudi Aramco, he ultimately become a Senior Geological Consultant in their Geological Technical Services Division specializing in carbonate sedimentology and sequence stratigraphy.

Bob has published 104 abstracts and papers, has led multiple field trips, and has a history of service within several geological societies. Some notable areas of service include: Editor for the Oklahoma City Geological Society (1980-82), Co-Chairman and Chairman SEPM Evaporite Research Group (1984-86), AAPG Distinguished Lecturer (1993-94), President PBS-SEPM (1994-95), President WTGS (2000-01), Executive Committee Member Dhahran Geoscience Society (2005-07), and Distinguished Lecturer Dhahran Geoscience Society (2013-14).

"Chance favors the prepared mind."

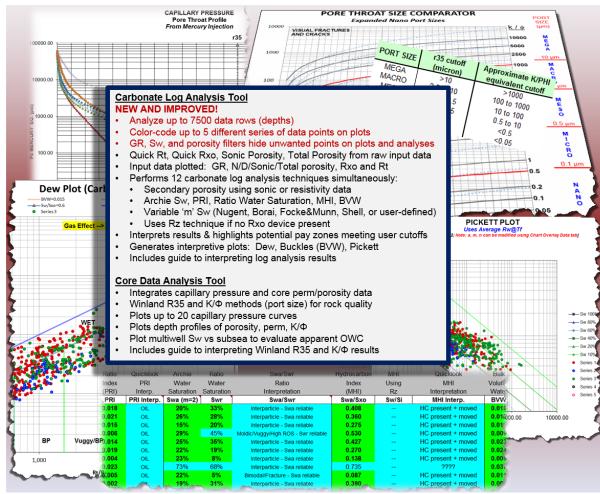
 Louis Pasteur (1822-95)
 French chemist and bacteriologist.



PBS-SEPM Publication Carbonate Log Analysis Spreadsheet v. 4.0 By: Cory L. Hoffman



Designed for Microsoft Office Excel 2013



INTRODUCTORY PRICE: \$40 (all proceeds go directly to PBS-SEPM)

- Get 2 tools for 1 low price spreadsheet includes carbonate log analysis AND core data analysis tools
- Flash drive contains current version (Excel 2013; v. 4.0) and previous version (Excel 2010; v. 3.2) of spreadsheet
- Price includes free upgrades within version class (v. 3, v.4, etc.) for each registered user

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PBS-SEPM CORE WORKSHOP & SHORT COURSE

ROCK-BASED INTEGRATED RESERVOIR CHARACTERIZATION:



Presented By: Dr. Robert F. Lindsay

WHEN: March 15-17, 2017, 8am-5pm Daily WHERE: CEED (1310 FM1788, Midland, TX 79707) COST: \$500 members, \$550 non-members (Limited to 20)

WHAT'S PROVIDED:

All Supplies (incl. hand lenses), Handouts, **LUNCH**, Snacks & Beverages



REGISTER BY:

March 10, 2017

DESCRIPTION:

This course will provide the participants with a direct and detailed classroom experience in learning the techniques used to: 1) describe a core (or outcrop) in detail, with hands on exercises involving core from the Grayburg Formation in a producing field in the Permian Basin; and 2) build a sequence stratigraphic model from the individual cycle scale to the composite sequence scale (flow unit to reservoir scale). This workshop/short course represents the first two parts of a larger five part course developed by Dr. Robert F. Lindsay that draws upon decades of experience working and describing carbonate reservoirs from the Permian Basin to the Middle East for companies such as Chevron and Saudi Aramco. Lessons learned will help geologists/engineers better understand and characterize conventional reservoirs. The course will answer the following questions and more: "Why is this useful?", "Isn't this an academic exercise?", and most important – "How will my company benefit from this kind of work?"

WHO SHOULD TAKE THE COURSE: Geologists, Geophysicists, and Engineers.

REGISTER: Online @ <u>WWW.PBS-SEPM.ORG</u> or Mail:		
First Name: Last Nam	ie:	
Company: Position:		
Address:		
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PBS-SEPM Publications



PBS-SEPM Symposia And Core Workshops on 3 DVDs



This is your opportunity to have the entire PBS-SEPM publication library (1955 – 2007) at your finger tips. There is a fully searchable Table of Contents—find a topic or author just by typing in the word(s). All publications are in Adobe PDF with all major articles being bookmarked, and all the figures are linked in the text for quick reference. Those areas that are off limits to geologists like the Glass Mountains or Sierra Diablos have been written up in these publications. Numerous out-of-print publications and figures and/or plates not published in the original guidebooks are now available in this library.

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Make checks payable to PBS-SEPM.

Please send registration and payment information: PBS-SEPM, P.O. Box 6054, Midland, TX 79704 For additional information **contact: PBS-SEPM office** (432) 279-1360 or info@pbs-sepm.org.

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"Science is facts; just as houses are made of stone, so is science made of facts; but a pile of stones is not a house, and a collection of facts is not necessarily science."

- Jules Henri Poincaré (1854-1912) French mathematician

Do you have an idea for an interesting luncheon talk? Have a core workshop you'd like to present? Have some suggestions on how PBS-SEPM can better serve the geologic community? Just click on the e-mail above & drop us a note, your PBS-SEPM Executive Board wants to hear from you!

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Your support lifts your corporate name within the Permian Basin.



PBS-SEPM is grateful for the generosity of these fine corporate sponsors!

"No one is useless in this world who lightens the burden of it for someone else"

- Benjamin Franklin

If you are interested in a sponsorship opportunity, please call PBS-SEPM for more details at (432) 279-1360 or e-mail info@pbs-sepm.org.



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"..In reply, I can only plead that a discovery which seems to contradict the general tenor of previous investigations is naturally received with much hesitation."

<u>Charles Lyell,</u> British Lawyer, Geologist, (1797 - 1875) January 2017 Page 7

PBS-SEPM is the Permian Basin Section of SEPM—the Society for Sedimentary Geology. However, you do not need to be a SEPM member or a geologist to join PBS-SEPM.

Our non-profit society relies entirely upon the efforts of dedicated volunteers to serve the geological community—primarily through educational events. These events include monthly luncheon talks, core workshops, annual field trips, and special geological publications. Additionally, we are involved on the college campuses—reaching out to future earth scientists through scholarships, discounted memberships, and offering full-time geology students the ability to participate in professional-grade field trips at little to no cost.

If you would like to join PBS-SEPM, you may visit our updated website (<u>www.pbs-sepm.org</u>) to learn more about us, download or fill out a membership form, and learn how to get involved.

Individual Sponsors of PBS-SEPM (2016-2017)

Individual sponsors are advertised on the PBS-SEPM website and each Newsletter. Cost is \$85/year. If you are interested in a sponsorship opportunity, please call PBS-SEPM for more details at (432) 279-1360 or e-mail info@pbs-sepm.org.

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"Volunteering is an excellent way to provide meaning in your life and help give back to your local community."

Peter Muggeridge

Cover Inset Photo: "Turnip Rock" Marshall Sandstone (Port Austin, MI; Joe Braun Photography)