

MISSISSIPPI GEOLOGICAL SOCIETY

eBULLETIN

Volume 69

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January 2021



LOOKING AT OLD LOGS IN NEW WAYS

Rick Aldred SPE Virtual Lecturer

RICK ERICKSEN

September 30, 1948 — December 22, 2020

CHRISTMAS STAR

Dr. David T. Dockery, RPG, Office of Geology

OIL PATCH QUIZ

Steve Walkinshaw, Vision Exploration



www.missgeo.com



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PRESIDENT'S LETTER

David Snodgrass, MSOGB



MGS Members,

I hope that everyone had a wonderful holiday season and is ready for 2021 !

It is with great sadness that I announce the death of Rick Ericksen. He passed away peacefully on December 22, 2020 in Ridgeland, MS from complications of brain cancer. Rick was deeply involved and worked tirelessly to help pass the Registered Professional Geologists Practice Act of 1997 that enacted legislation requiring the registration of geologists practicing within Mississippi. He was the Board's first registrant as well as its first Executive Director, retiring recently in 2015. Rick also served as the President of the Mississippi Geological Society from 1998-1999. Rick was a personal friend of mine, friends with many members within the Mississippi Geological Society and beyond. He will be missed.

As previously mentioned, due to the ongoing Covid-19 pandemic the MGS will continue postponing our monthly luncheons at the River Hills Country Club until further notice. Please stay tuned. For now, take care.

Sincerely,

David H. Snodgrass



JANUARY SPEAKER

Don't miss this LIVE SPE Virtual Distinguished Lecturer!

Looking at Old Logs in New Ways: Re-evaluating Low Resistivity Intervals in Mature Fields to Identify By-Passed Pay

Rick Aldred

12:30 PM

Wednesday, January 13, 2021

Mississippi Section

[REGISTER HERE](#)

**An Extra 45 Minutes Can Provide
a World of Knowledge**



[Distinguished Lecturer Events](#) [Attendee Evaluation Form](#)



BOLAND SCHOLARSHIP WATCH

Faculty & Students,

This Mississippi Geological Society along with the Boland Scholarship Fund would like to remind you that we want to honor the most outstanding overall students for the 2020-2021 year.

Each year, the Boland Scholarship awards 1 student from each institution a check that rewards students for their hard work and dedication to the Geosciences and their community.

We look forward to a great year and hope to see you at our monthly meetings.

Best Regards,

Matt Caton
Editor



THE UNIVERSITY OF
SOUTHERN
MISSISSIPPI

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COLLEGE



RICK ERICKSEN

1948 — 2020



Rick was a dedicated geologist in Mississippi and was a long time member of the Mississippi Geological Society.

He is the former Executive Director of the MS State Board of Registered Professional Geologists having served on that Board as its first President. He is a past President of the Division of Professional Affairs of the AAPG and Board of certification. He was a member of the AAPG's DEG and EMD, and AEG.

He also served on the MS Mineral Research Institutes Advisory Board, the MS Waste Water and MS Water Resources Council, the MS Remote Sensing, GIS Council and President of the ASBOG Foundation.

Rick held licenses/registrations/certifications as a RPG, Professional Geoscientist and CPG AAPG.

Rick began his career in oil and gas exploration with Chevron and other companies as an employee and consultant. In 1991 he went to work for the MS Office of Geology and was involved in oil, gas and NORM Research until 2000 when he accepted the position as the Executive Director of the MS Board of Registered Professional Geologists.

Rick also had more than 60 professional publications and abstracts dealing with oil and gas research, exploration and production.



CURRENT PRICES

Crude Oil WTI (NYM \$/bbl) Front Month

+ WATCHLIST

☀️ OPEN

Last Updated: Jan 12, 2021 at 11:05 a.m. EST - Delayed quote

\$ **53.03**

SETTLEMENT PRICE 01/11/2021

\$52.25

▲ 0.78 1.49%



Natural Gas Continuous Contract

+ WATCHLIST

☀️ OPEN

Last Updated: Jan 12, 2021 at 11:06 a.m. EST - Delayed quote

\$ **2.796**

SETTLEMENT PRICE 01/11/2021

\$2.703

▲ 0.093 3.44%





MONTHLY POST

Dr. David T. Dockery III RPG

2020 CHRISTMAS STAR

David T. Dockery III, RPG

Many, including myself, have watched Jupiter and Saturn hang close together in the evening sky not far above the western horizon. We have seen this site through the months of November and December, perhaps not knowing that a conjunction was about to happen that would not be matched until March 15, 2080. According to *EarthSky*, Jupiter-Saturn conjunctions happen every 20 years, the last being in 2000. The 2020 conjunction is called the “great conjunction” and is the closest conjunction of these planets since 1623 and the closest observable one since 1226! I photographed an almost equilateral triangular conjunction of Saturn, Jupiter, and the moon on November 22, 2020, as shown in the picture (Figure 1) below at left. The picture was taken with the zoom lens of my dinky compact camera, while trying to hold it still on a fence post at my country home. The picture below at right was taken on December 21, the day these planets appeared, from earth’s perspective, to be the closest together. In these pictures, Saturn is a faint dot.

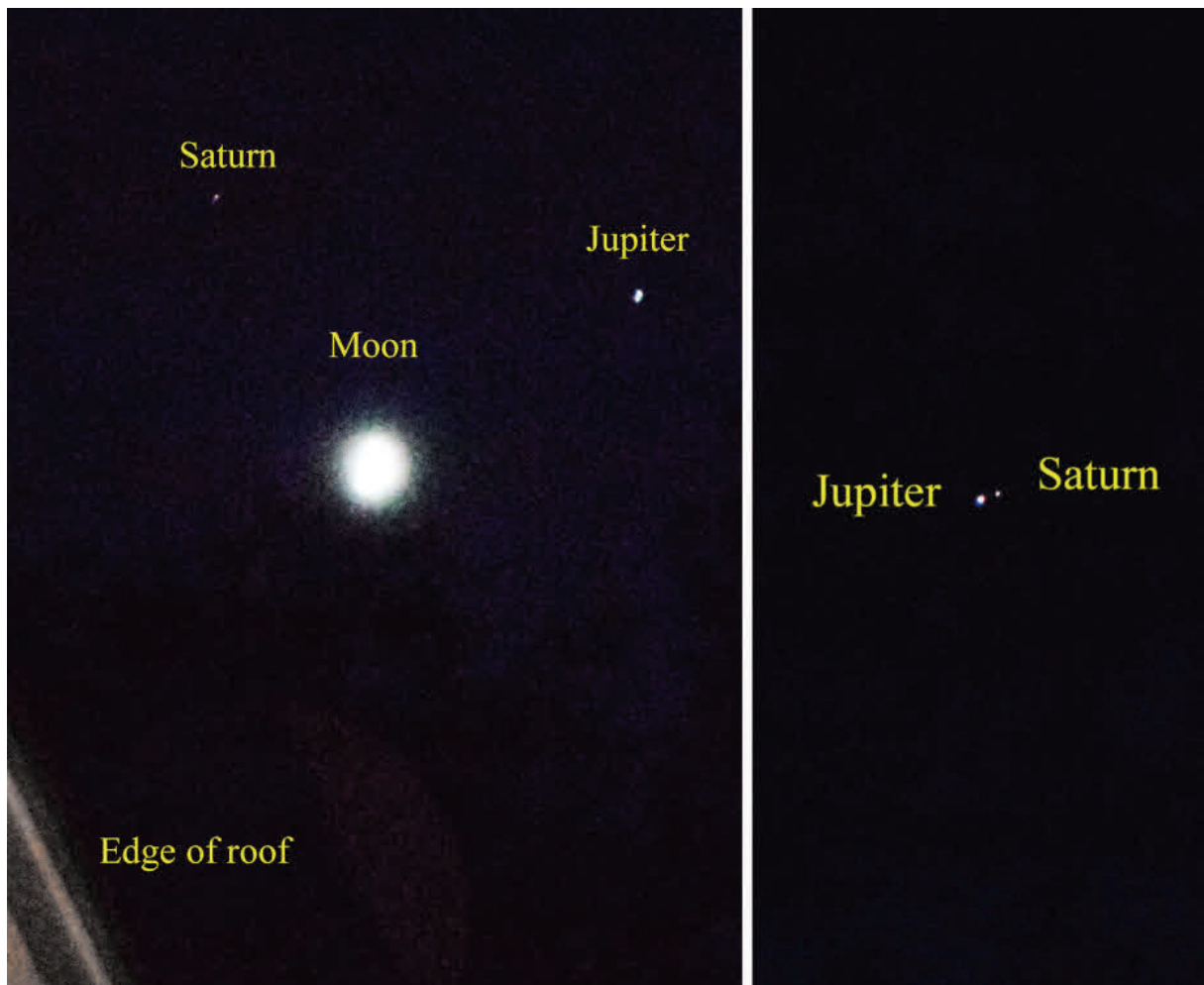


Figure 1



MONTHLY POST

Dr. David T. Dockery III RPG

The pictures below (Figure 2) were taken with telescopes. The one at top was taken by Zolt Levay in Bloomington, Indiana. He said: The weather cooperated (mostly) tonight so I got a chance to photograph the great Jupiter/Saturn conjunction at their closest. The photo shows all four Galilean moons of Jupiter, the two brightest moons of Saturn, and three background stars [cropped in this image]. This photo is a composite of several frames at different exposures to capture the planets and the moons. It was pretty windy though so the camera was being moved around enough that the photos aren't quite as sharp as they could be, but there is a bit of detail in the planets. The picture was taken with a Kikon D850, Celestron C5 (1250mm, f/10), iOptron CEM25P drive; exposures: 1/25 second, ISO 320, 1 second, ISO 1250, 2 seconds, ISO 3200. The picture at bottom was taken by Michael Teoh at the Heng Ee Observatory in Penang, Malaysia. It is not a composite of multiple exposures, so the moons of Jupiter and Venus are not visible, but the details of the planet are much better.



Conjunction of Jupiter and Saturn

Separation = 6' 22.7"

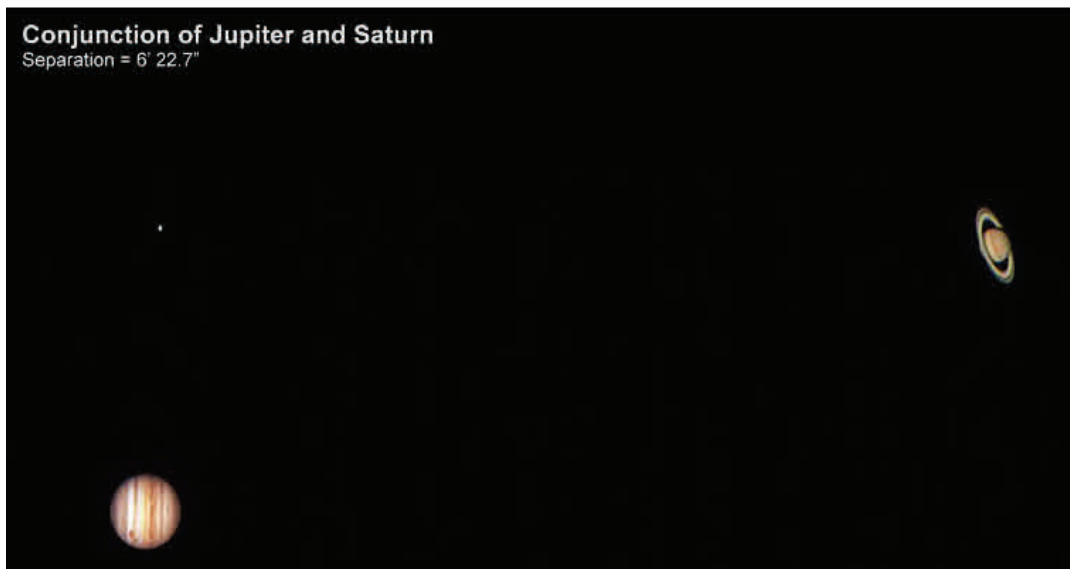


Figure 2



GEOLOGY POST

ARTICLES, PAPERS or NEWS?

ATTENTION!!!!!! Industry, Professors and Students:

I am adding a dedicated section that includes more content from the industry and our schools.

Submissions can include anything from professional papers, thesis abstracts, job opportunities to pictures. Anything!!!!

If you have any information or news you would like to share with the Society **PLEASE** email them to the MGS Editor at:

mcaton13@yahoo.com

Thanks & Regards,

Matt Caton
Editor



MONTHLY QUIZ

Steve Walkinshaw

OIL PATCH QUIZ

Oil patch quiz time. Were it not for the coring of a key interval in its discovery well, a certain field ("J") would not have been discovered ~14 years ago. LWD and core gamma ray curves indicated a very shaley interval; instead, the core was essentially 100% sand and saturated with oil.

This discovery (and several others that followed) was made in a "mature" area. Where optimal, reservoir porosity and permeability is phenomenal: as high as 30% and 12 darcies. Production has exceeded 90,000 BOPD.

It appears oil migrated into these traps less than 1.6 Ma. Biodegradation has impacted oil above 6,430 feet.

Questions...

Part 1: What field ("J") am I referring to?

Part 2: In what country?

Part 3: What adjacent discoveries were (a) "I" (b) "K" and (c) "L"?

Part 4: What is the age of the field "J" reservoir?

Part 5: What's the lithology and age of its topseal as shown in "B" and "E"?

Part 6: The fields shown are atop or on the flank of the large basement uplift "M". What's its name?

Part 7: What is the source of the oil that charged field "J"?

Part 8: What caused the upward structural movement believed associated with the biodegradation of the oil in the area?

Bonus:

Part 9: What producing province did the discovery of "J" revitalize?

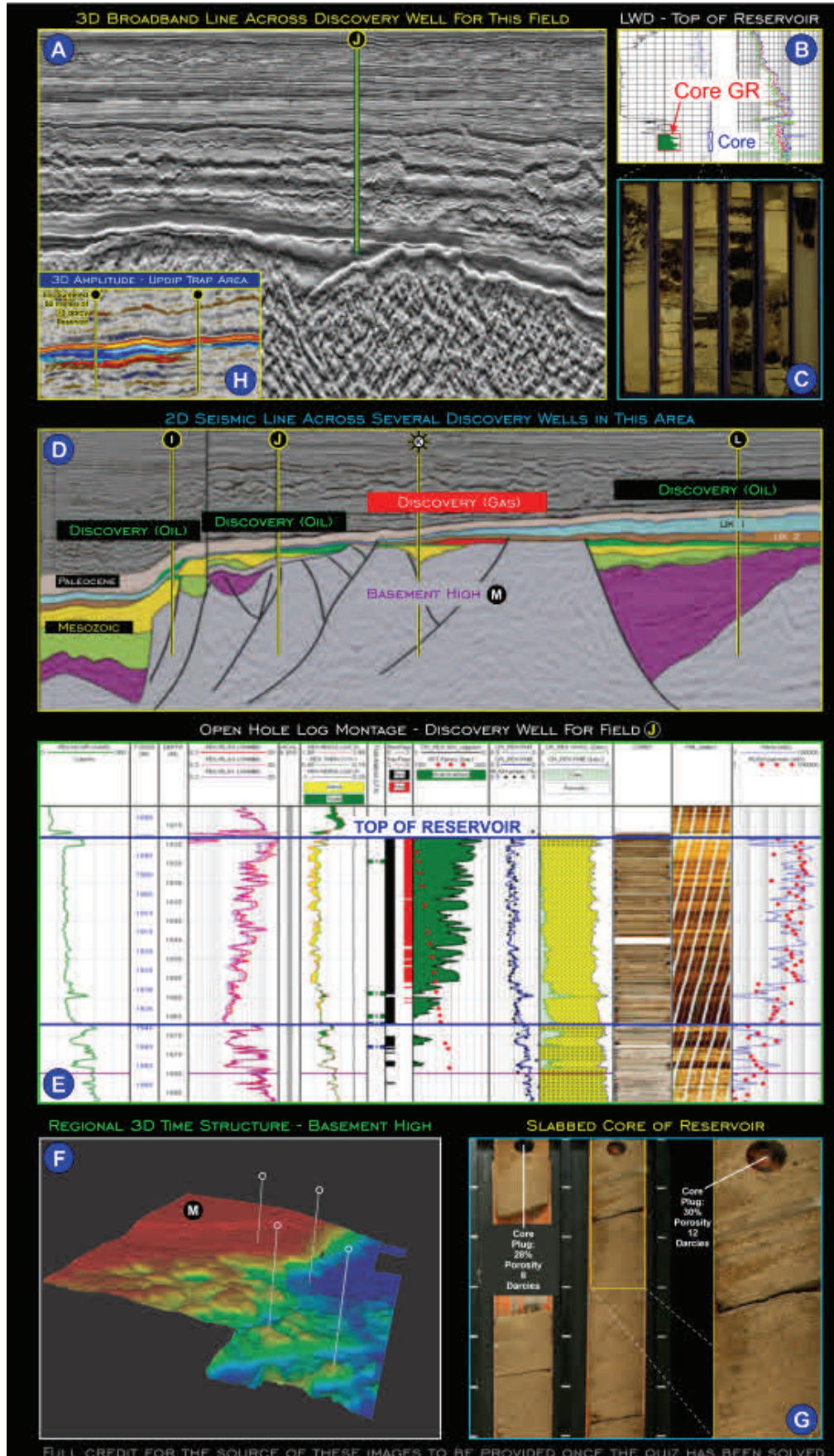
Part 10: What company generated prospect "J"?

Answers at end of Bulletin



MONTHLY QUIZ

Steve Walkinshaw



GEO LINK POST

USGS TAPESTRY OF TIME AND TERRAIN <http://tapestry.usgs.gov> The CCGS is donating to all of the 5th and 6th grade schools in the Coastal Bend. Check it out—it is a spectacular map. You might want a framed one for your own office. The one in my office has glass and a metal frame, and it cost \$400 and it does not look as good as the ones we are giving to the schools. Call Owen 510-6224 if you want one for your office for \$150. Duncan, Mike, Chris, Dave, Bob Randy, Seb., Kevin, Ken, Craig, Patrick, Robert.

FREE TEXAS TOPO'S <http://www.tnris.state.tx.us/digital.htm> these are TIFF files from your state government that can be downloaded and printed. You can add them to SMT by converting them first in Globalmapper. Other digital data as well.

FREE NATIONAL TOPO'S [http://store.usgs.gov/b2c_usgs/b2c/start/\(xcm=r3standardpitrex_prd\)/.do](http://store.usgs.gov/b2c_usgs/b2c/start/(xcm=r3standardpitrex_prd)/.do) go to this webpage and look on the extreme right side to the box titled TOPO MAPS DOWNLOAD TOPO MAPS FREE.

<http://www.geographynetwork.com/> Go here and try their top 5 map services. My favorite is 'USGS Elevation Date.' Zoom in on your favorite places and see great shaded relief images. One of my favorites is the Great Sand Dunes National Park in south central Colorado. Nice Dunes.

<http://antwrp.gsfc.nasa.gov/apod/astropix.html> Astronomy picture of the day — awesome. I click this page everyday.

<http://www.spacimaging.com/gallery/ioweek/iow.htm> Amazing satellite images. Check out the gallery.

<http://www.ngdc.noaa.gov/seg/topo/globegal.shtml> More great maps to share with kids and students.

www.geo.org Don't forget we have our own web page.

<http://micro.magnet.fsu.edu/primer/java/scienceoptiscu/owersof10/>

<http://asterweb.jpl.nasa.gov/gallery/default.htm> Great satellite images of volcanoes

<http://terra.nasa.gov/gallery/> More here

www.ermapper.com They have a great free downloadable viewer for TIFF and other graphic files called ER Viewer.

www.drillinginfo.com This is an incredible (subscription) well and completion data service for independents. Can be demo'ed for free.

<http://terraserver.com/> Go here to download free aerial photo images that can be plotted under your digital land and well data. Images down to 1 meter resolution, searchable by Lat Long coordinate. Useful for resolving well location questions.

<http://www.fs.fed.us/gpnl/volcanocams/msh/> This is a live cam of Mt. St. Helens refreshed every 5 minutes. At the bottom are old videos of past eruptions in this cycle. It is worth a watch especially now.



MGS HONORARY MEMBERS

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Frederic F. Mellen*

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Richard R. Priddy*

Harry V. Spooner

Stewart W. Welch*

Julius Ridgeway

Dr. David T. Dockery III

*** deceased**

MEMBERSHIP APPLICATION / RENEWAL FORM

MISSISSIPPI GEOLOGICAL SOCIETY

P.O. BOX 422, JACKSON, MISSISSIPPI 39205-0422

2020-2021

Membership year is June through May

New Membership (\$20/yr)_____ Renewal (\$20/yr)_____ Student (FREE)_____ Associate (\$20/yr)_____

Boland Scholarship Fund Donation \$ _____ Total Amount Enclosed \$ _____

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Professional Associations, Certifications, & Licenses: _____

MGS ADVERTISING ORDER FORM

September 2020 – May 2021

I. Bulletin Advertisements:

<u>Size</u>	<u>Rate/Year</u>	<u>Amt. Remitted</u>
Full Page Ad (6" x 8")	\$500	\$ _____
1/2 Page Ad (6" x 4")	\$300	\$ _____
1/4 Page Ad (3" x 4")	\$200	\$ _____
Business Card Ad (1 1/2" x 3")	\$100	\$ _____
Professional Listing (1/2" x 3")	\$ 50	\$ _____

II. Web Page Advertisements (www.missgeo.com):

<u>Type of Web Page Ad</u>	<u>Rate/Year</u>	<u>Amt. Remitted</u>
Front Page Sponsor (Banner Ad – limit of 5)	\$500	\$ _____
Second Page Banner Ad	\$250	\$ _____
Professional Listing/Link	\$100	\$ _____

(Note: Please contact Steve Walkinshaw at (601) 607-3227 or mail@visionexploration.com for details concerning placing your ad on the MGS web site.)

Total Remitted \$ _____

Please make checks payable to the Mississippi Geological Society. If you have any questions, contact Matt Caton at (601) 898-7444 or mcaton@tellusoperating.com



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1939-1940 Henry N. Toler	1980-1981 Marshall Kern
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1942-1943 Dave C. Harrell	1983- 1984 Charles H. Williams
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1945-1946 J. B. Story	1986-1987 J. R. ""Bob" White
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1947-1948 H. Lee Spyres/Robert D. Sprague	1988-1989 Stanley King
1948-1949 Robert D. Sprague	1989-1990 Stan Galicki
1949-1950 E. T. ""Mike" Monsour	1990-1991 E. James Files, Jr.
1950-1951 J. Tate Clark/ Charles E. Buck	1991-1992 Stephen L. Ingram, Sr.
1951-1952 George W. Field	1992-1993 Michael Noone/Stanley King
1952-1953 James L. Md11in, Jr.	1993-1994 Brian Sims
1953-1954 Wilbur H. Knight	1994-1995 C. W. "Neil" Barnes
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1955-1956 Gilbert A. Talley	1996-1997 Jack S. Moody
1956-1957 Ben Ploch	1997-1998 George B. Vockroth 1957-
1958 Emil Monsour	1998-1999 Rick L. Ericksen
1958-1959 Charles Brown	1999-2000 Stanley King
1959-1960 M. F. Kirby	2000-2001 John C. Marble
1960-1961 Rudy Ewing	2001-2002 Andrew T. Sylte
1961-1962 Xavier M. Franscogna	2002-2003 Aaron Lasker
1962-1963 Robert B. Ross	2003-2004 John G. Cox
1963-1964 William A. Skees /Marvin Oxley	2004-2005 James E. Starnes
1964-1965 James F. Bollman	2005-2006 Todd Hines
1965-1966 Sankey L. Blanton	2006-2007 Bob Schneeflock
1966-1967 Alan Jackson	2007-2008 Tony Stuart
1967-1968 Julius M. Ridgway	2008-2009 Lisa Ivshin
1968-1969 Edward D. Minihan	2009-2010 Joe Johnson
1969-1970 Kevin E. Cahill	2010-2011 Brian Sims
1970-1971 John Lancaster	2011-2012 Stanley King
1971-1972 Larry Boland	2012-2013 Jim Files
1972-1973 Charles Barton	2013-2014 Neil Barnes
1973-1974 Larry Walter	2014-2015 Ezat Heydari
1974-1975 W. E. "Gene" Taylor	2015-2016 Jack Moody
1975-1976 Jerry E. Zoble	2016-2017 Cragin Knox
1976-1977 P. David Cate	2017-2018 David Hancock
1977-1978 Sarah Childress	2018-2019 Dr. David Dockery
1978-1979 Les Aultman	2019-2020 James O. Sparks
1979-1980 Philip R. Reeves	



MONTHLY QUIZ

Steve Walkinshaw

ANSWERS

Part 1: What field ("J") am I referring to? Edvard Grieg

Part 2: In what country? Norway

Part 3: What adjacent discoveries were (a) "I" (b) "K" and (c) "L"? (a) Apollo, (b) Ragnarrock, and (c) Johan Sverdrup

Part 4: What is the age of the field "J" reservoir? (main reservoir) Triassic

Part 5: What's the lithology and age of its topseal as shown in "B" and "E"? Upper Cretaceous chalk

Part 6: The fields shown are atop or on the flank of the large basement uplift "M". What's its name? the Utsira High

Part 7: What is the source of the oil that charged field "J"? the Draupne Formation

Part 8: What caused the upward structural movement believed associated with the biodegradation of the oil in the area? isostatic rebound following the end of Plio-Pleistocene glaciation in the region

Part 9: What producing province did the discovery of "J" revitalize? the Norwegian Continental Shelf

Part 10: What company generated prospect "J"? Lundin Norway

Here are the credits for / sources of the images shown in the montage.

Images "A", "B", "C", "D", "E", "G" and "H": "Unfolding by Holistic Thinking, Giant and Significant Oil Discoveries in a Mature Area: Discovery of Edvard Grieg, Johan Sverdrup and Luno II in the Norwegian North Sea" (Hans Rønnevikand and Arild Jørstad),

Search and Discovery Article #110173 (2014)

Image "F": "Structural evolution of minibasins on the Utsira High, northern North Sea; implications for Jurassic sediment dispersal and reservoir distribution" (Christopher A-L. Jackson, Karla E. Kane and Eirik Larsen), Petroleum Geoscience, Vol. 16, 2010, pp. 105–120