



Sixteenth Annual Reserves Conference slated for mid-September

The 16th Annual Ryder Scott Reserves Conference, originally scheduled for Sept. 17, will be a streaming webinar via the Zoom video platform. Organizers are deciding on the best date or dates for the virtual webinar, and have plans to stick with a mid-September go-live.

How to stream webinar

For those who want to sign up, the process is as follows:

In July, Ryder Scott will send "Save the Date" announcements via email to past attendees or to those requesting more information. Those who want invitations, but are not registered, should send business-card information to RSCConfHouston@ryderscott.com. Please put "Invite" in the subject line.

Organizers plan to send invitations through Zoom/Outlook in July or August.

Additionally, those wanting an invitation can register and view details on the Ryder Scott website page at

<https://www.ryderscott.com/2020-reserves-conference-webinar/>.

For users who have not downloaded Zoom, the web-browser client will automatically do that when joining the webinar. Zoom is browser independent.

Plans are to stream each prerecorded video feed on a schedule followed by a live Q&A between the speaker and audience. Ryder Scott also plans to post on-demand presentations afterward.

Licensed petroleum engineers at the webinar will receive CEUs (Continuing Education Units) required annually to maintain licensing through continuing education.

The ethics presentation qualifies as a one-hour credit needed to fulfill the annual requirement of most states for licensed engineers. (See summary of the planned presentation later in this article.)

Please see Sixteenth Annual Reserves Conference on page 2

TABLE OF CONTENTS:

Sixteenth Annual Reserves Conference slated for mid-September..	1	OTC paper: Private equity, third-party infrastructure will grow GOM.....	8
The day oil went to minus \$37 and some change.....	4	World liquid fuels production and consumption balance.....	10
Industry bracing for mid-year impairments, reserves writedowns..	5	Ryder Scott Promotions.....	10
Reserves-based lending survey shows "deep pessimism," says Haynes and Boone.....	7		

Sixteenth Annual Reserves Conference – Cont. from page 1

Covid-19 forces venue change, lineup still strong

Organizers decided to hold a virtual conference because of concerns about spreading the Covid-19 virus in a large crowd in September. They also anticipated the potential for restrictions on large gatherings by local and state authorities, because of Covid-19.

Meeting rooms at the downtown Houston Hyatt Regency hotel for the events have been at full-seating capacities. Recent conferences drew more than 375 attendees per event, and represented the largest single gatherings of reserves evaluators, a rather select group.

Reserves evaluations require analysis of subsurface geology and engineering by reservoir specialists.

"The event began more than 16 years ago, so over time, speakers and attendees have become a 'community' that gathers in Houston every fall," said **Dean Rietz**, CEO at Ryder Scott.

Organizers expect to exceed prior attendance numbers this year with the virtual conference.

The webinar makes it possible to lift all limits on audience attendance. Past conferences, for the most part, were by invitation, because of the selective audience appeal. Besides reserves evaluators, others regularly attend, including oil and gas executives and allied professionals in law, finance, accounting, academia and government.

"While attendees will miss the full day of hotel amenities and informal conversations among colleagues, the quality of the speakers and presentations will be at the same high level as in the past," said **Ali Porbandarwala**, conference chairman.

"Unfortunately, this is a more impersonal way to hold a conference. Social distancing is the new normal, and still may be weeks or months from now."

Virtual conferences are most cost effective. "This year, we expect many of our friends and clients across the globe to attend the first time, because there will be no travel time or expenses," said Rietz.

Lineup Highlights

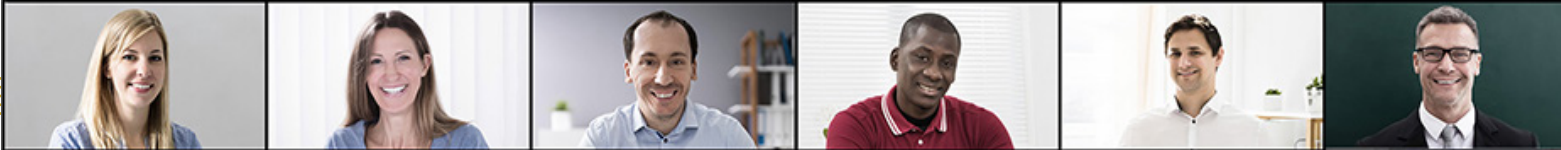
The planned lineup includes speakers and presentations 60 to 70 days out from the event. Speakers and agenda may change closer to the event dates. Updates will be posted at <https://www.ryderscott.com/2020-reserves-conference-webinar/>



and sent through emails.

No reserves conference would be complete without **John Lee**, professor at Texas A&M University, former engineering fellow at the U.S. SEC and well-known reserves evaluation expert.

He will present, "How Can We Take Possible Well Interference into Account in Production Forecasting?" He will focus on new research and quicker evalu-



ation methods to improve analyses of well interference, infills and "parent-child" issues in unconventional plays.

"Typical well-production profiles have failed to take well interference into account," said Lee. "That results in overestimates of future production."

Rigorous reservoir simulation, including coupling of geomechanical and flow models, will produce reliable forecasts, he added. However, those methods are too time consuming



and expensive for routine application.

Dan DiLuzio, a reserves consultant at Chevron Corp., will present, "PRMS: Maintaining the Global Standard and Addressing Key Concerns." He will present an early history of petroleum resources definitions and why they were needed more than 100 years ago. He will trace their evolution, including the involvement of SPE beginning in 1962.

The most recent revision of the reserves evaluation standards was two years ago. They were ratified by sister societies WPC, AAPG, SPEE, SEG, SPWLA and EAGE.

"The PRMS is recognized as the globally referenced language of reserves and resources evaluations," said Diluzio.

He plans to review the SPE-PRMS fundamentals, including the resources classification framework and project-based approaches.

"We will cover a few commonly encountered issues in resources evaluations with examples to clarify everyday application of the PRMS," said Diluzio, who also plans to discuss hot topics.



Ron Harrell, Ryder Scott chairman emeritus, plans to moderate a panel discussion on CO₂ carbon capture. Scheduled panelists include **Logan Burt**, managing director at Morgan Stanley; **Christine Ehlig-Economides**, professor at the University of Houston and

John Hessenbruch, retired and a former manager of technical resources at Occidental Petroleum Corp.

"Engineers and earth scientists have extensive opportunities to study hundreds, even thousands of unique oil and gas reservoirs. Some may have rock and fluid properties where CO₂ injection offers the likelihood of enhanced oil and gas recovery," said Harrell. "They may offer underground storage, sequestration or aquifer-disposal opportunities as well."

The panel discussion will focus on the operational, financial and research sides of carbon capture in the mid- and downstream sectors. The International Energy Agency estimates that carbon capture/storage and other energy efficiencies will have a greater "impact" on reducing CO₂ than renewables by 2040. Carbon reduction is a major component of the environmental, social governance (ESG) programs.

The discussion also will focus on private equity-funded producers, which are managing investor concerns about carbon emissions. Other challenges include gaining more technical know-how in handling CO₂.

The U.S. Treasury Department released rules on May 25 that guide companies in claiming a 45Q federal tax credit designed to spur investment in carbon capture and sequestration projects. The panel will discuss planning projects to capture and inject sufficient CO₂ to meet federal guidelines.



Jamie Jost, founder and managing shareholder of Jost Energy Law PC will make the ethics presentation, which focuses on oil and gas development that supports ESG criteria in regulations.

Using Colorado as an example, her presentation will explore environmental stewardship in the administrative law context. Included are key components of establishing and maintaining relationships with local governments, ENGOs (environmental non-governmental organizations) and citizen groups.

Jost plans to offer practical considerations for avoiding conflicts of interest.



Sandeep Khurana, head advisor of upstream and midstream integrated services at Ryder Scott, will make a presentation on deepwater-development enablers. He will outline the process of "promoting" oil and gas volumes from contingent resources to reserves.

"The presentation will cover best practices, cost-reduction strategies, new technologies and creative commercial solutions that have made deepwater profitable and sustainable in this wildly fluctuating, rather depressed commodity pricing environment," he said.

Khurana will provide attendees with insights in evaluation, assessment and development planning to generate value in deepwater. The presentation will cover industry best practices in development planning, cost-reduction strategies, new technologies and trends and creative commercial arrangements in deepwater infrastructure financing. See article, "OTC paper: Private equity, third-party infrastructure will grow GOM," on Page 8.



Dan Olds, managing senior vice president at Ryder Scott, will present, "Practical Applications of Total Recoverable Resources (TRR)."

TRR, a new term in the 2018 SPE-PRMS, are those quantities of petroleum producible by using current technology and industry practices.

TRRs indicate oil and gas recovery potential

regardless of commercial considerations. TRRs are reported on projects, groups of projects or geographically, for instance, by basin.

Olds said, "TRR is a way to show the expected maximum volume associated with a particular projection. The term was meant to clearly convey that the projection has not been truncated by an economic limit."

"TRR was intended to be an acceptable substitute for the often-heard, but always incorrect term, 'technical reserves,'" added Olds.



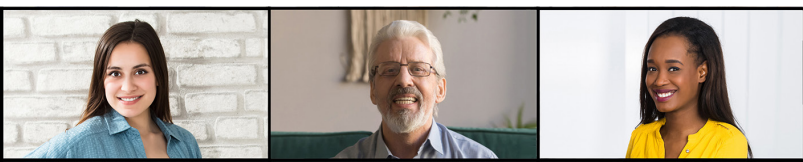
Lehi Woodrome, vice president at Ryder Scott, will present the "Supply and Demand Imbalance Leading into Oil Price Volatility." He said, "With storage capacities at recent highs, rig counts falling, and investors wary about the future of oil and gas, how long will it be before the demand returns and supply remains limited? Will price volatility be our new normal? "

Full Lineup

The following speakers and titles for all presentations at the webinar are as follows:

- **Dan DiLuzio**, reserves consultant at Chevron Corp., "PRMS: Maintaining the Global Standard and Addressing Key Concerns"
- **Jamie Jost**, managing shareholder at Jost Energy Law PC, "Ethics – Environmental, Societal, Governance"
- **Sandeep Khurana**, head advisor upstream and midstream integrated services at Ryder Scott, "Deepwater Development Enablers – Promoting From Contingent to Reserves"
- **John Lee**, professor at Texas A&M University, "How Can We Take Possible Well Interference into Account in Production Forecasting?"
- **Dan Olds**, managing senior vice president at Ryder Scott, "Practical Applications of Total Recoverable Resources"
- **Miles Palke**, managing senior vice president at Ryder Scott, "Latest Themes in SEC Comment Letters – What to Expect"
- **Sal Patoli**, managing director at Energy Group of Societe Generale Group, "Capital Solutions – Where Do We Go From Here?"
- **Lehi Woodrome**, vice president at Ryder Scott, "The Supply and Demand Imbalance Leading Into Oil Price Volatility"

Please see Sixteenth Annual Reserves Conference on page 10



Sixteenth Annual Reserves Conference – Cont. from page 3



Herman Acuna, executive vice president at Ryder Scott, will make a presentation on “Greenhouse Gas (GHG) Management at an unspecified date after the live webinar.” Acuna plans to discuss GHG initiatives in the United States, Canada, Europe and world-wide. Ryder Scott is planning to make his presentation the first on-demand one.