

Welcome and Introduction Adam Borushek, Principal Reservoir Engineer RISC Advisory

SPE Seminar: Introduction to E&P The Geological Society, London 28 November 2019

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HSE briefing Alarms, Evacuation Route, Muster Point



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- Do not collect your belongings from the cloakroom.
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About the SPE



The Society of Petroleum Engineers (SPE) is a not-for-profit professional association of more than 160,000 members, who are engaged in energy resources development and production.

The **SPE** is a key resource for technical knowledge related to oil and gas exploration and production, and provides services through publications, events, training courses and online resources at www.spe.org
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Linkedin: SPE London; SPE London YP

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Today's Agenda



	Topic	Speaker
09:00 - 09:10	Introduction	Adam Borushek, RISC Advisory
09:10 - 09:50	Geology & Geophysics	Ahmed Selem, AMS Consultancy
09:50 - 10:30	Drilling & Petrophysics	Stewart McGregor, Merlin ERDC
10:30 - 10:50	Morning Break	
10:50 - 11:30	Reservoir Engineering and Petroleum Reserves	Adam Borushek, RISC Advisory
11:30 - 12:10	Facilities & Production Engineering	Roberto Cirilo, Imperial College London
12:10 - 13:00	Lunch	
13:00 - 13:40	Economics & Commercial	Lamé Verre, Halliburton
13:40 - 14:20	Upstream Deals	Rebecca Jones, Hurricane Energy
14:20 - 15:00	Managing E&P projects	Tim Bass, First Alpha Energy Capital
15:00 - 15:20	Afternoon Break	
15:20 - 16:00	Safety & Environment	Geof Boyd, Esanda Engineering
16:00 - 16:40	Global Context	Miles Cudmore, Cudmore Oil & Gas Consulting
5pm	Finish	

Oil and Gas E&P Life Cycle



- The life cycle for an oil or gas field is likely to be decades long
- Each of the following stages must be completed

Exploration Appraisal Development Production Abandonment • Drilling and Testing Drilling • Flow Wells • Remove and Restore • Seismic • Sell Hydrocarbons Regional Investment Construction Geoscience Decision • Return on Production Drilling **Facilities** Investment

- E&P requires integrated, highly skilled, multi-disciplinary teams
- The main disciplines involved are represented by the speakers here today.

E&P in the Oil and Gas Industry



Exploration and Production does not cover the entire industry Today we cover the 'Upstream' section only



Exploration & Production

Finding and Extraction

Transportation & Refining/Processing

Creating a product

Distribution & Retail Sale

Sale to end users

A Note on Unit Conventions



For historical reasons the upstream industry uses a mix of SI, Imperial and Oilfield units.

- Liquid rates: Barrels per day (bopd, bwpd)
- Liquid volumes: Million stock tank barrels (MMstb)
- Gas rates: Million standard cubic feet per day (MMscf/d)
- Gas Volumes: Billion standard cubic feet (Bscf)

Depending on the context you can see cm, inches, feet, meters, km and miles.

Let's Clear Up Some Common Misconceptions (1/3)



Oil and gas are not found in large underground caves



Image: http://www.mysanantonio.com/lifestyle/travel-outdoors/article/Natural-Bridge-Caverns-hosting-tour-of-aquifer-7959402.php

Let's Clear Up Some Common Misconceptions (2/3)



Oil gushing from a drilling rig would be an environmental, safety and corporate disaster



Let's Clear Up Some Common Misconceptions (3/3)



- If oil and gas are found under your property, you do not own it - the UK government does
- Unlike in USA



 $http://www.cotswoldlife.co.uk/out-about/events/remembering_farming_hero_joe_henson_1_4262529$



http://www.npr.org/sections/pictureshow/2009/03/american_farmer.html

Introduction to Exploration & Production



- Presentations (pdf) are available via the Eventbrite email link
 - or ask us for it on a USB stick
- Please fill in the feedback form.
- Business cards for each speaker will be on the front desk
- Twitter: @SPE_London
- Linkedin: 'SPE London Section'
- Meet each other, meet the speakers, ask questions.

Enjoy the day!