

Welcome and Introduction Adam Borushek, Principal Reservoir Engineer RISC Advisory

SPE Seminar: Introduction to E&P The Geological Society, London 21 November 2017

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HSE briefing Alarms, Evacuation Route, Muster Point



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- Please assist any disabled person in your area.
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- If sitting at the back, exit through the 3 fire doors at the back of the theatre.
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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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SPE's membership in the Greater London area includes more than 2000 engineers, geoscientists, economists, managers, educators, consultants, etc.

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Today's Agenda



		Topic	Speaker
09:30	09:40	Introduction	Adam Borushek, RISC Advisory
09:40	10:20	Global Context	Miles Cudmore, First Alpha Energy Capital LLP
10:20	11:00	Geology & Geophysics	Michael Ala, Imperial College
11:00	11:20	Morning Break	
11:20	12:00	Drilling & Petrophysics	lain Hutchison, Merlin ERDC
12:00	12:40	Reservoir Engineering & Petroleum Resource Assessment	Adam Borushek, RISC Advisory
12:40	13:30	Lunch	
13:30	14:10	Facilities & Production Engineering	Graham Sheedy, GS Management Consultants
14:10	14:50	Safety & Environment	Lamé Verre, Halliburton
14:50	15:10	Afternoon Break	
15:10	15:50	Economics & Commercial	Geof Boyd, Esanda Engineering
15:50	16:30	Managing E&P projects	Derek Harwood, Upstream Advisors
16:30		Close and networking drinks	All

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

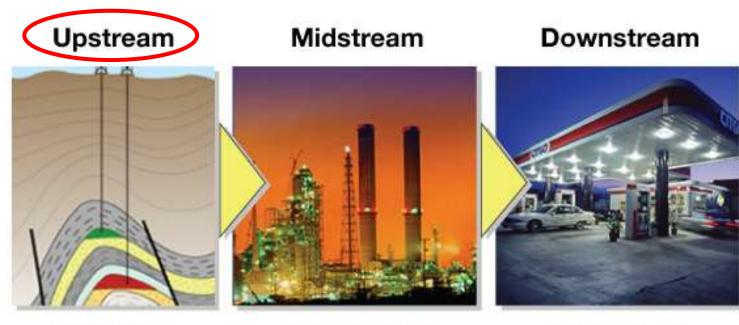
Exploration Appraisal Development Production Abandonment Drilling and Testing Drilling • Flow Wells • Remove and Restore • Seismic Investment Construction • Sell Hydrocarbons Regional Geoscience Decision • Return on Production Drilling **Facilities** Investment

- 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) will be available on SPE London web site
 - www.london.spe.org/
- 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!