Key Wells to Watch in 2019

APPEX Global 2019

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Westwood Global Energy
6th March 2019

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Agenda

- Five year high-impact exploration performance and 2019 lookahead
- Hits and misses and key wells to watch in 2019

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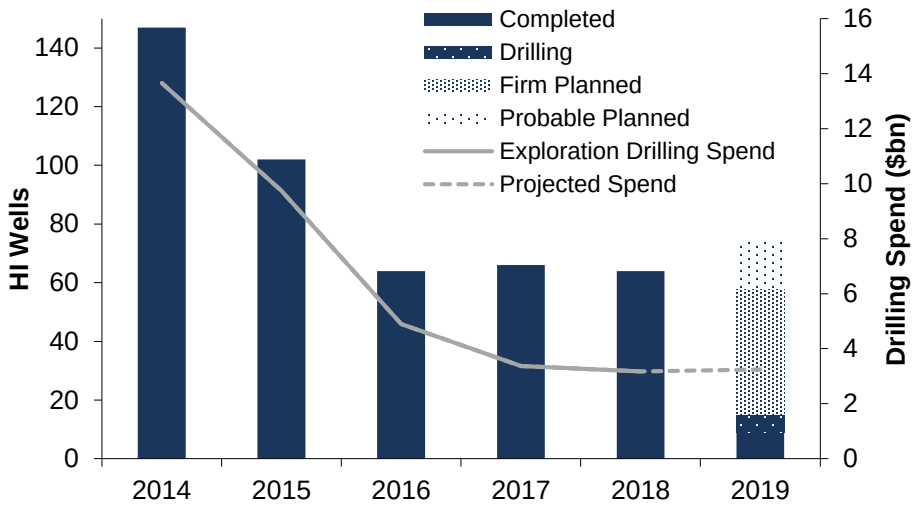
2014-2019 High-Impact Exploration



- 2018 HI drilling activity in line with 2017 levels (which were 7% up on 2016 levels)
- 2019 HI drilling programme still fluid – Westwood expect base case of 55 wells, with ~15 further possible
- Drilling spend expected to be marginally higher (<5%)

Westwood defines high-impact exploration wells as >100mmbbls oil or >1tcf gas pre-drill

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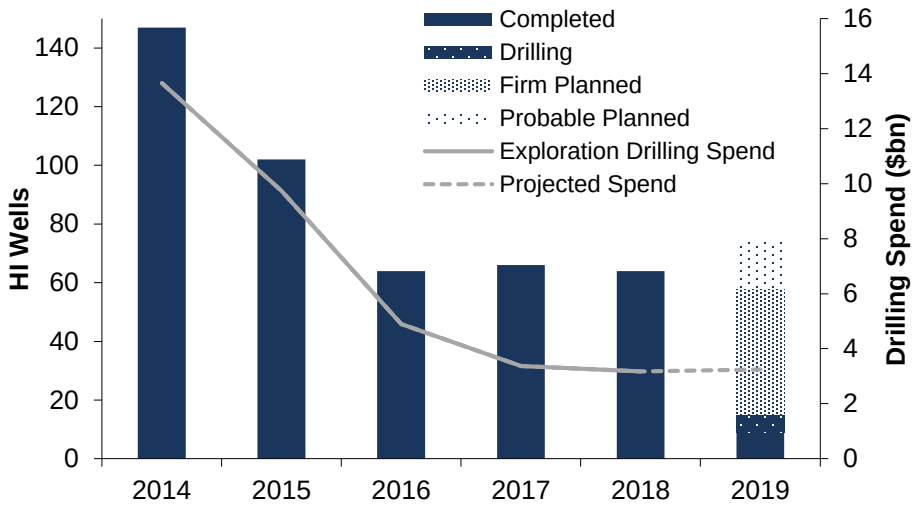
2014-2019 High-Impact Exploration



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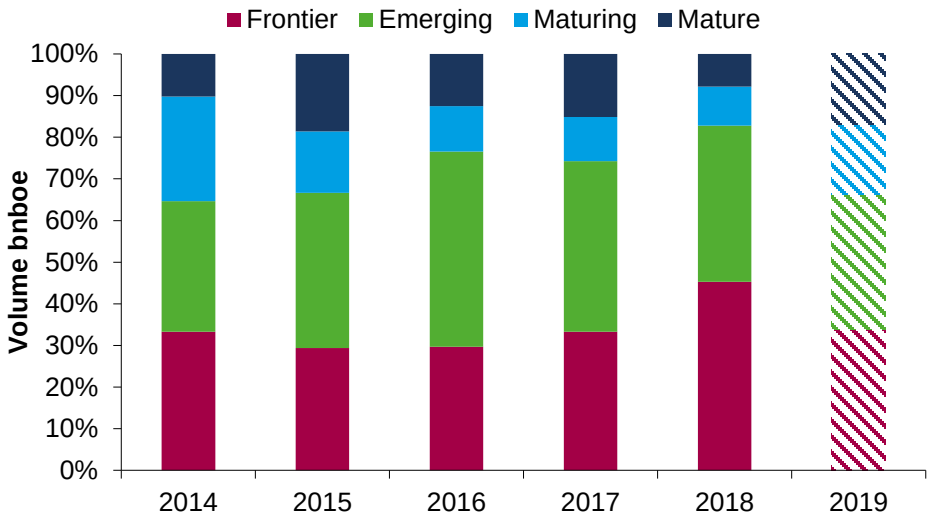

- Increase in proportion of high-impact wells targeting frontier plays (from 28% in 2016 to 44% in 2018), but 2019 expected to see a return of HI wells in mature plays

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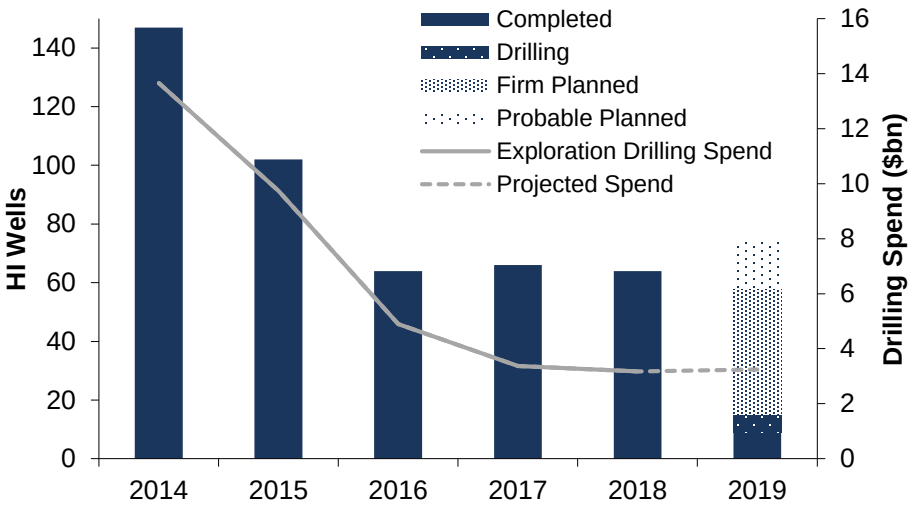
2014-2019 High-Impact Exploration



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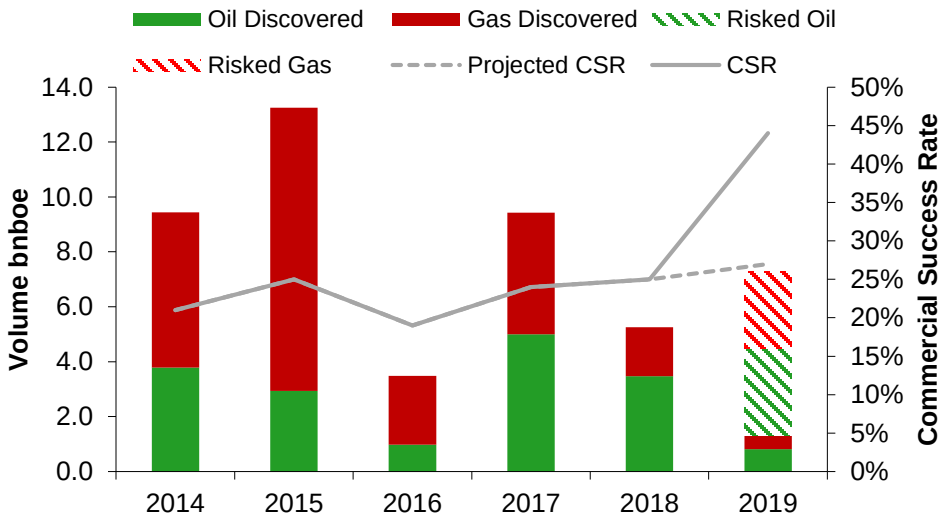

- HI exploration success rates at 27% in 2018 – a 5-year high
- Overall volumes discovered greater than 2016, and oil volumes similar to 2017
- Very positive start to 2019 HI exploration
- 2019 volumes split almost 50:50 gas and oil-pre drill.

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2019 HI Exploration

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2019 Key wells to watch

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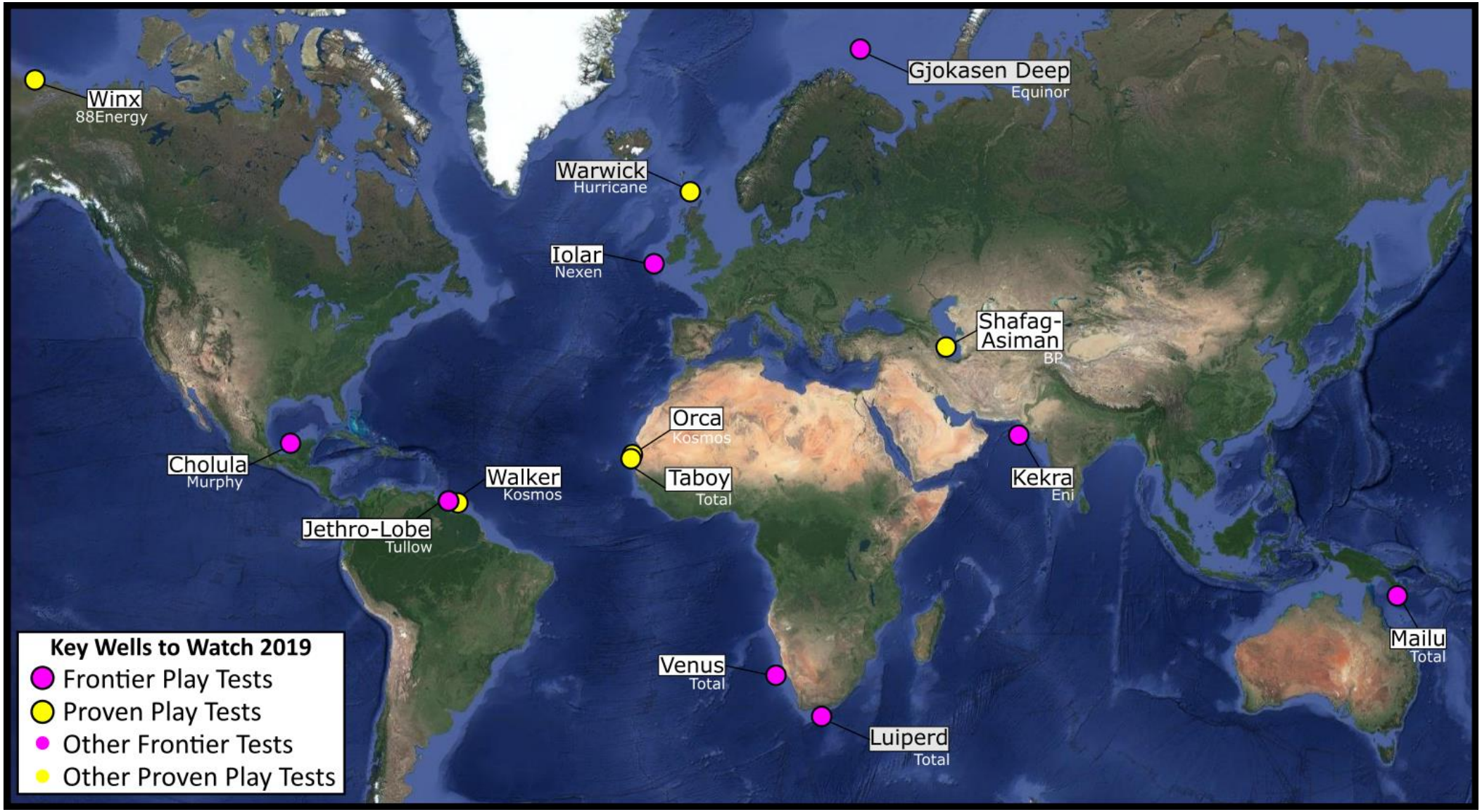

2019 Key wells to watch

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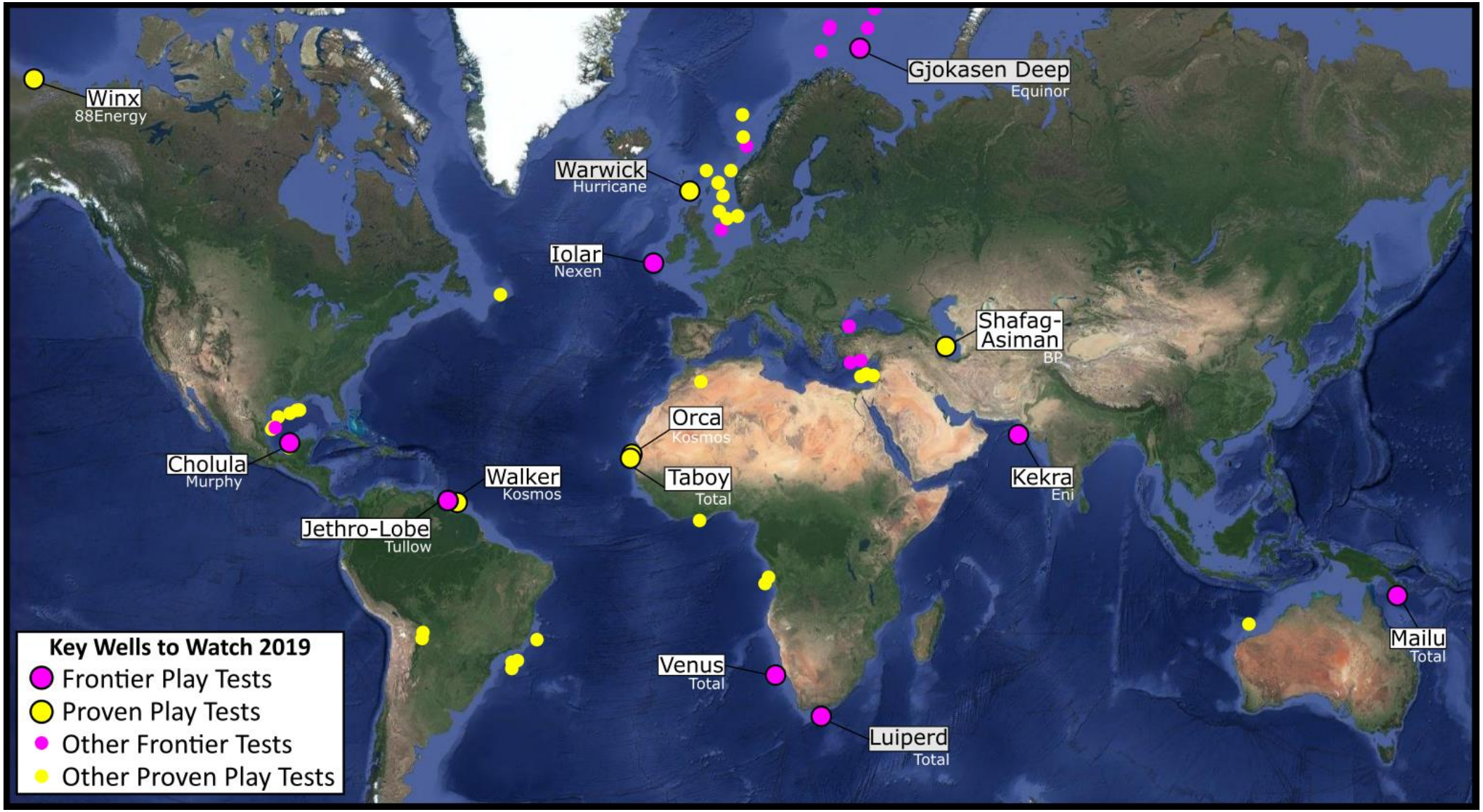
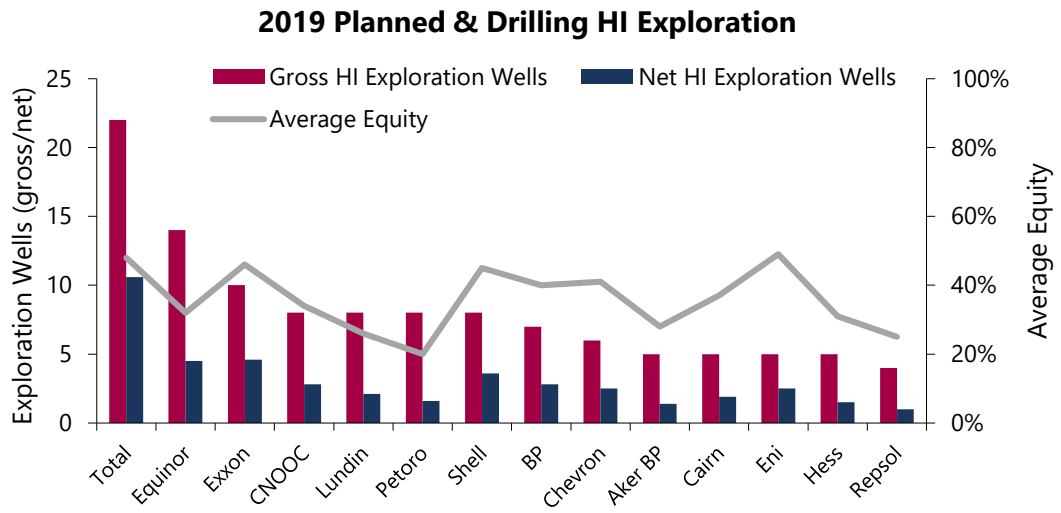
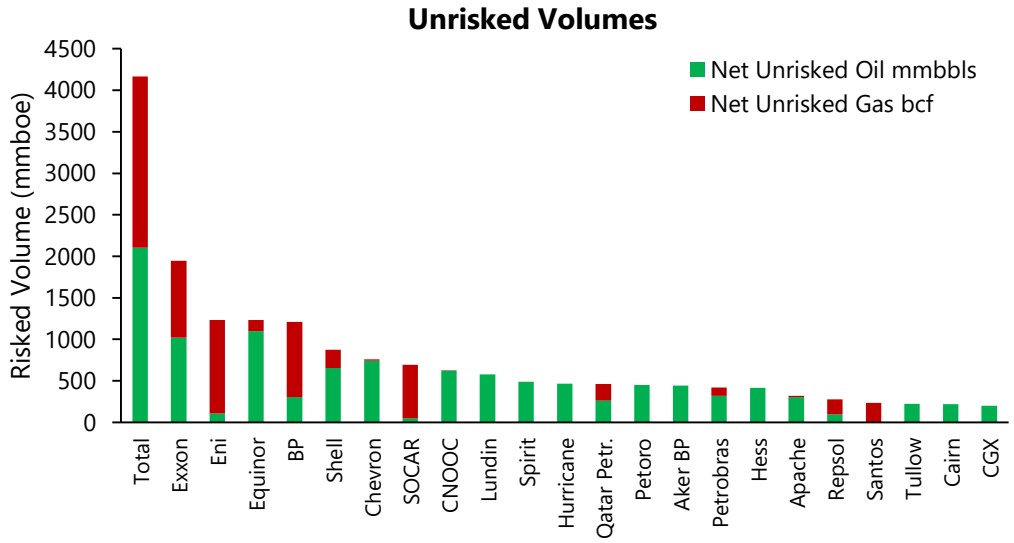
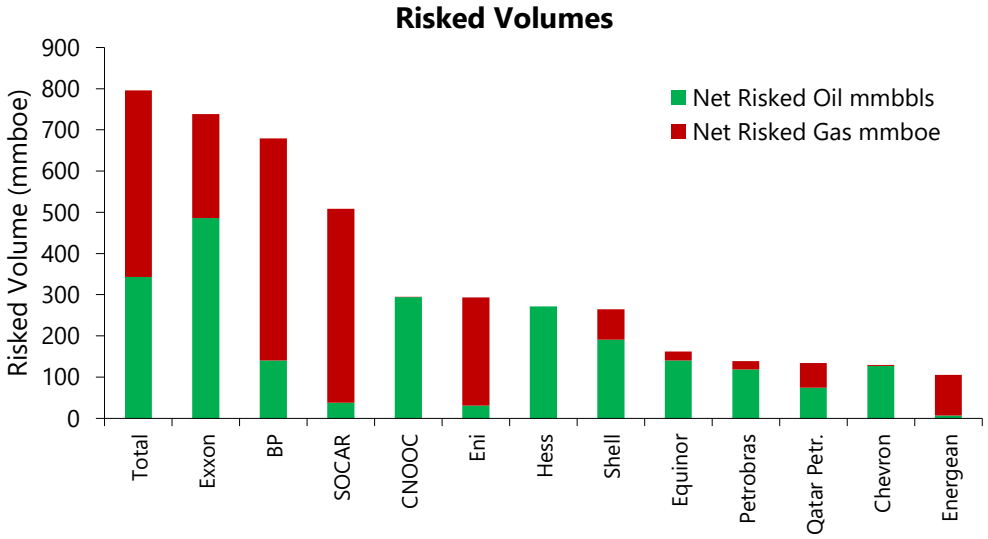


2019 High-Impact Drilling - Companies



- Total projected to be most active HI explorer with equity in >20 wells forecast
- Exxon estimated to be testing greatest risked oil volume (Guyana), and BP testing greatest risked gas volume (Azerbaijan)





South America
Key Region – Suriname-Guyana

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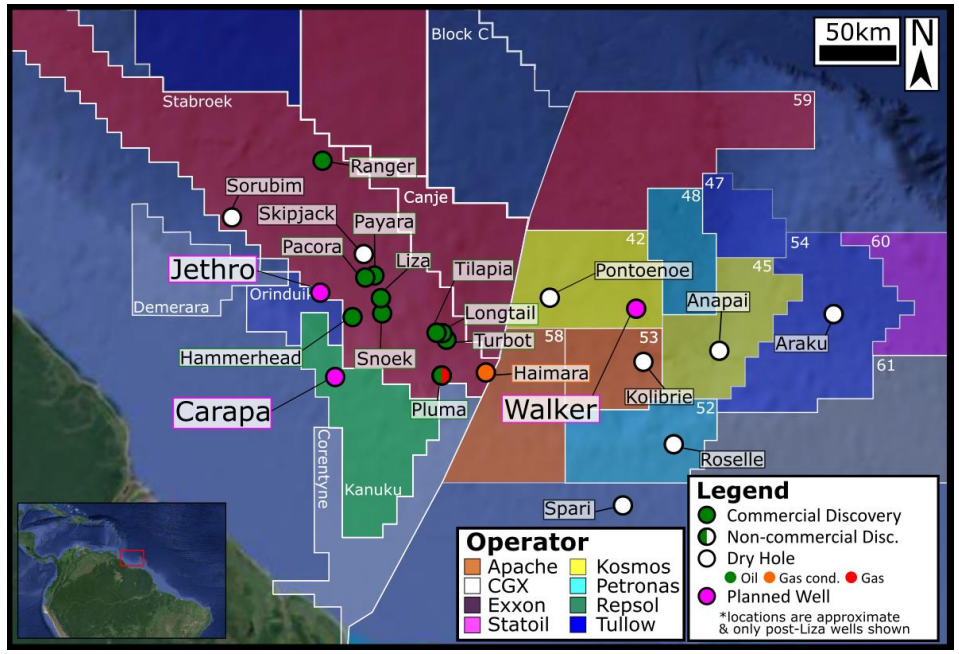
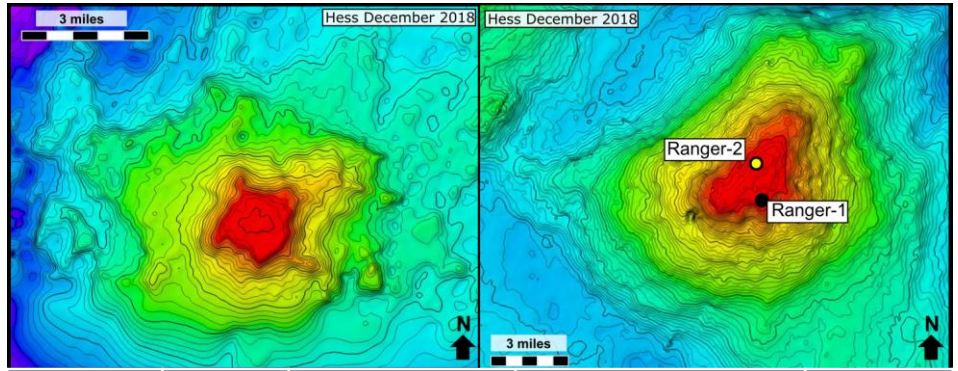
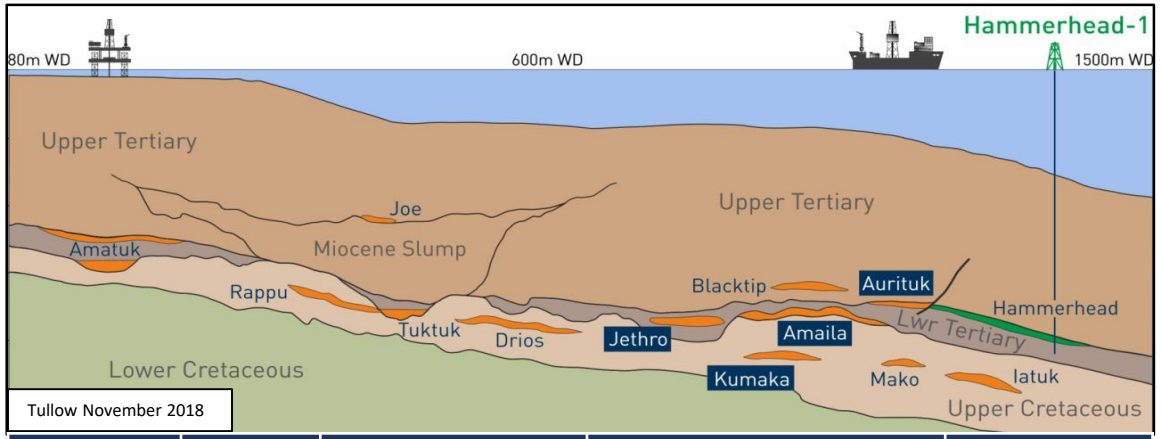
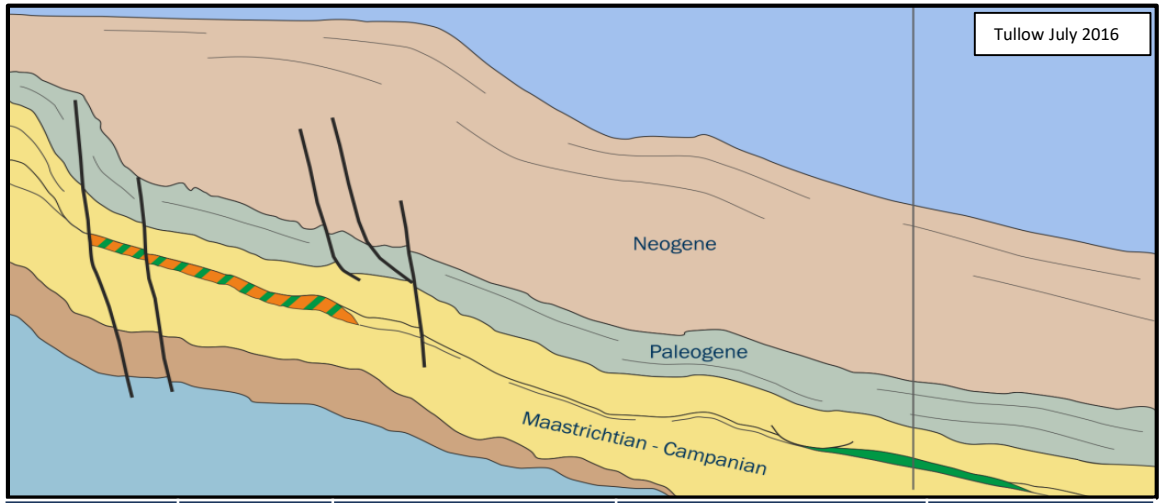




Walker (Suriname)	Kosmos	Emerging; Mesozoic carbonate	First Ranger follow up-another attempt in Suriname	300mmbo (WGE)

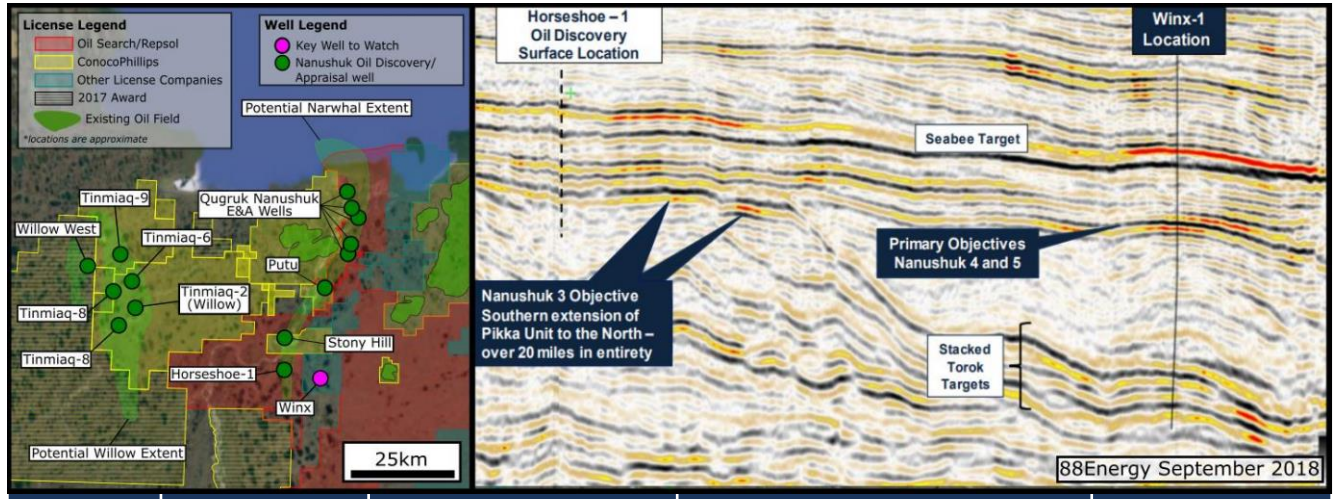


Jethro (Guyana)	Tullow	Frontier; Eocene clastic stratigraphic trap	First well offshore Guyana outside Stabroek block since pre-Liza	>100mmbbls (Tullow)

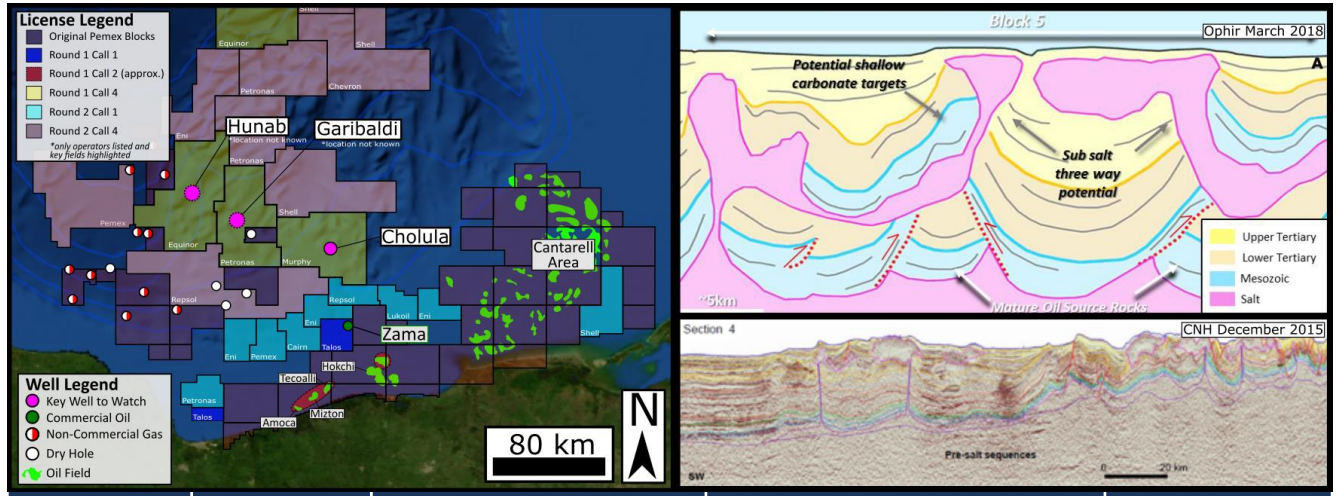


Carapa (Guyana)	Repsol	Frontier; Upper Cretaceous stratigraphic trap	Test of Liza play in new setting	>200mmbbls (Tullow)

North America



Winx (USA)	88Energy	Emerging; Lower Cretaceous Nanushuk in a stratigraphic trap	Another Nanushuk play following recent success at Horseshoe and Willow	400mmbbls (88Energy)



Cholula (Mexico)	Murphy Oil	Frontier; Miocene clastics in combination trap	First non-Pemex DW well drilled in Salina Basin	200mmboe (Murphy)

Africa

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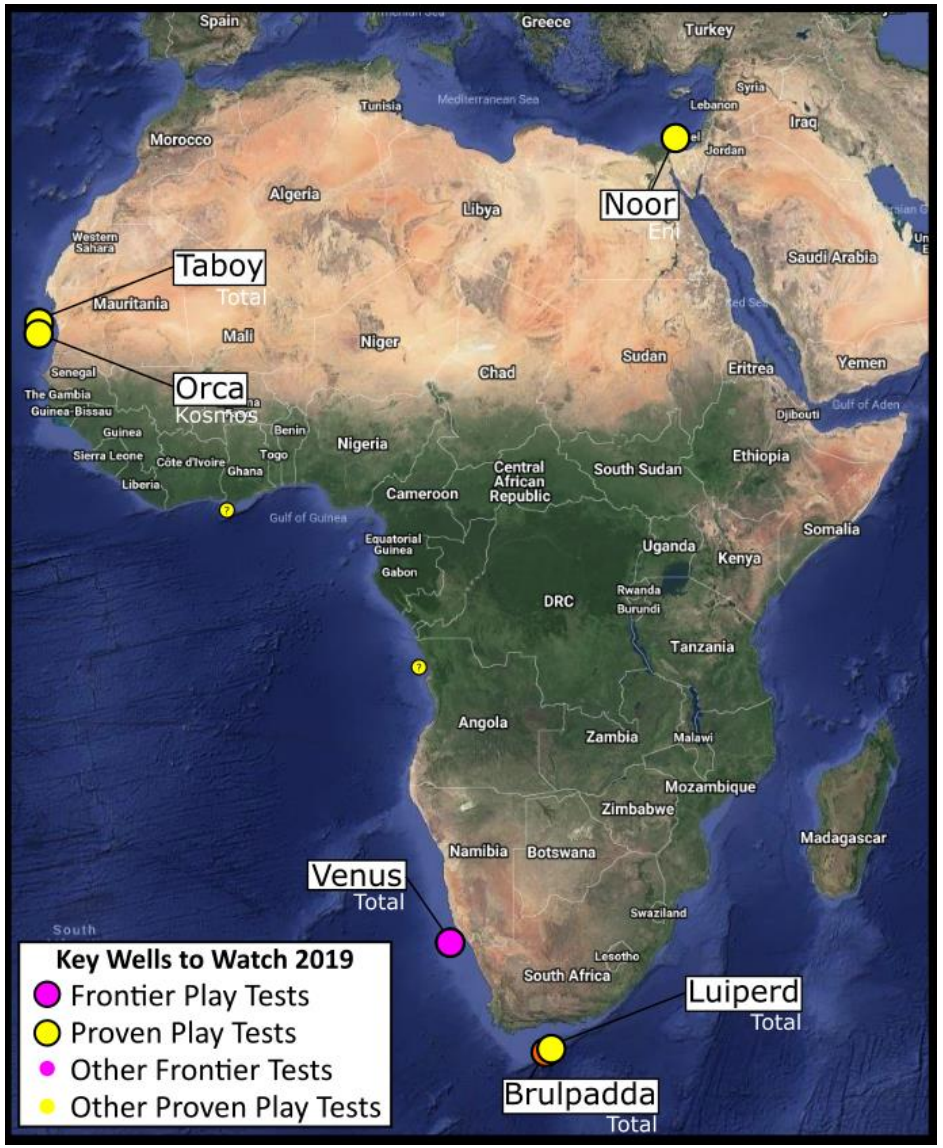
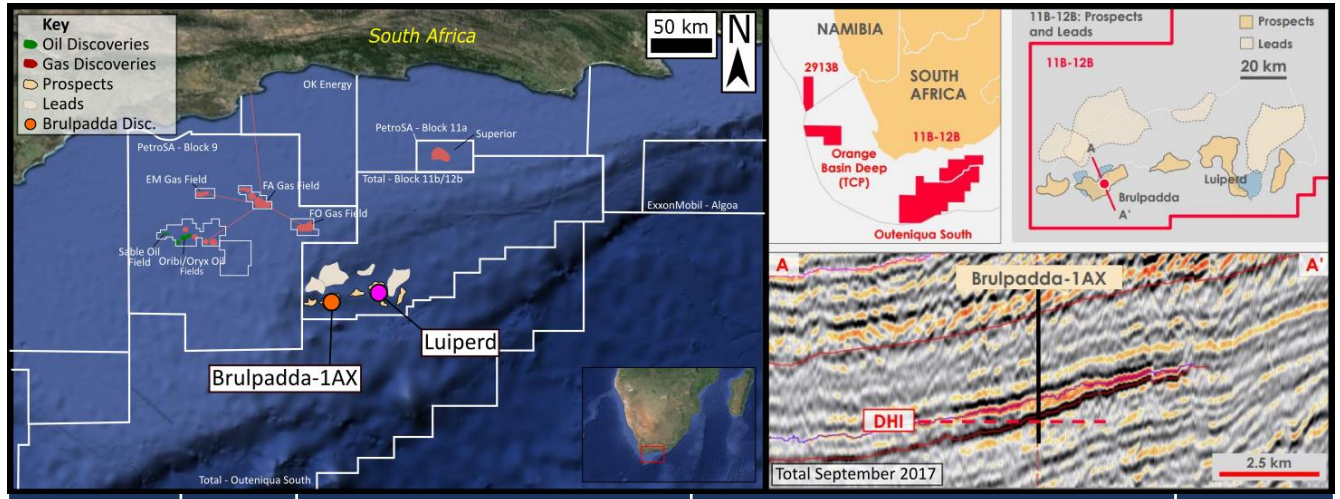
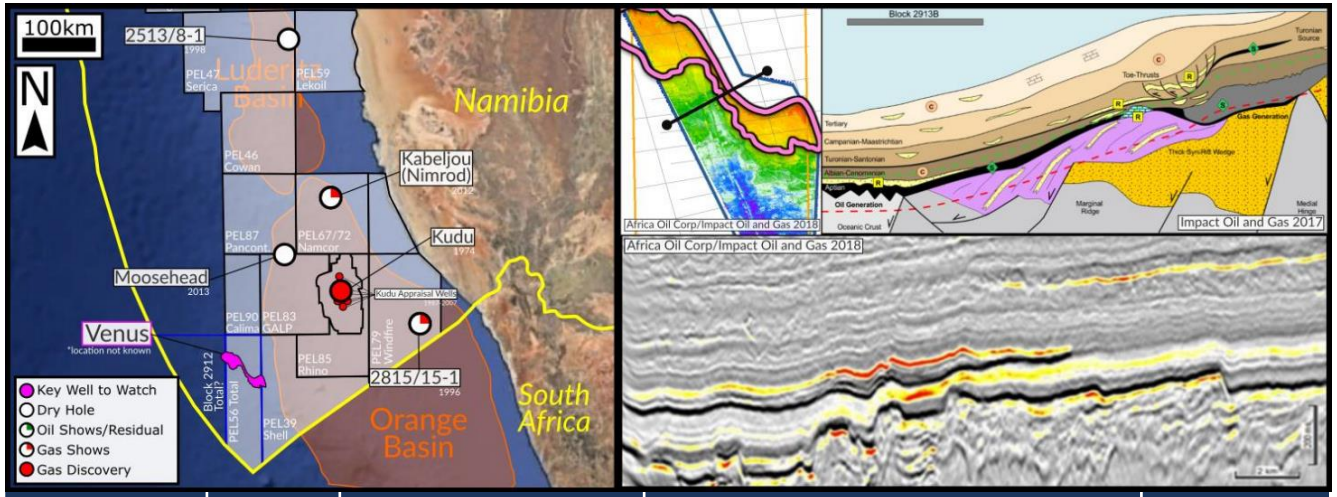




Luiperd (South Africa)	Total	Emerging; Basin floor Lower Cretaceous Albian sands in a combination trap	Probable follow up of Brulpadda discovery, one of 4 follow up prospects totaling >1bnboe potential	>500mmboe (Westwood)



Venus (Namibia)	Total	Frontier; Aptian basin-floor fan in counter-regional strat. trap	Extremely large prospect in sparsely explored Cretaceous system – a new play test in Namibia	'multi-bnbbl' (AOC)

Central Europe - Asia

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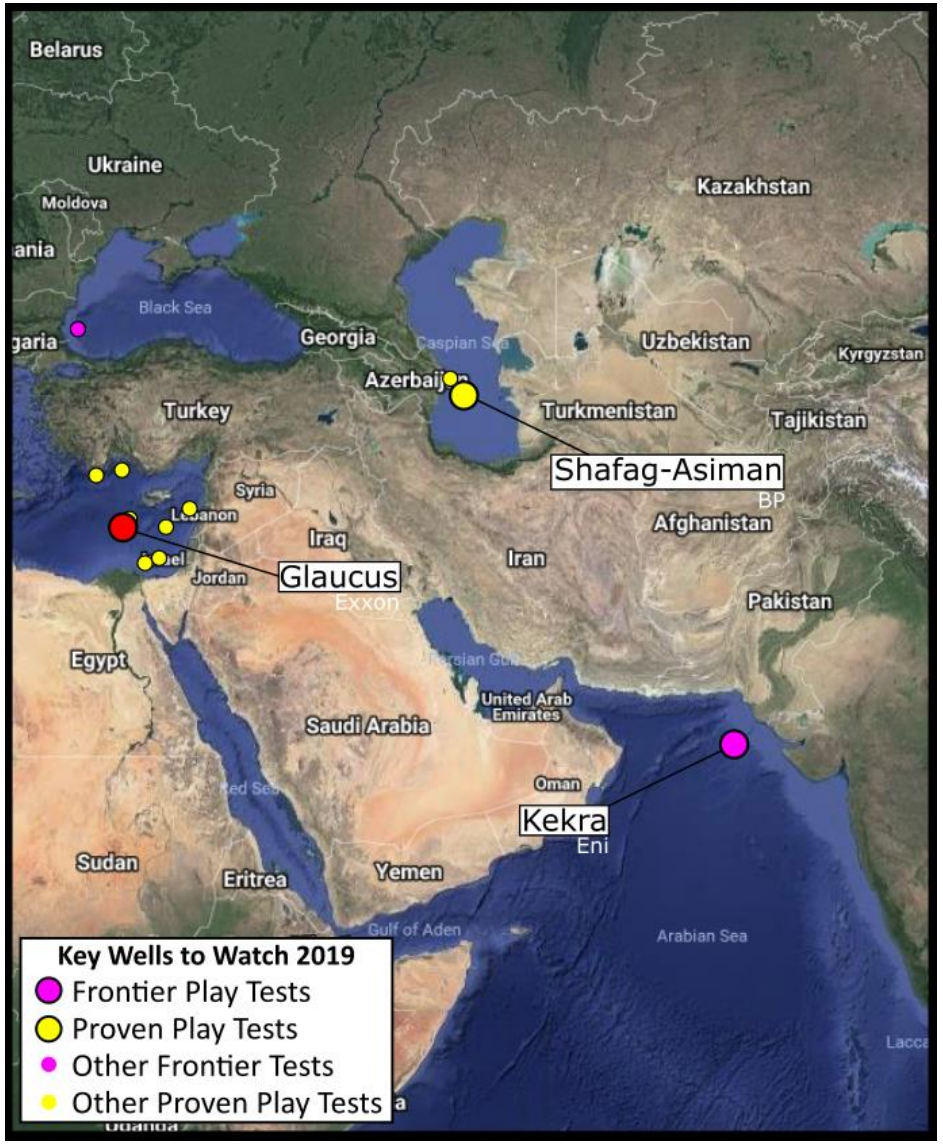
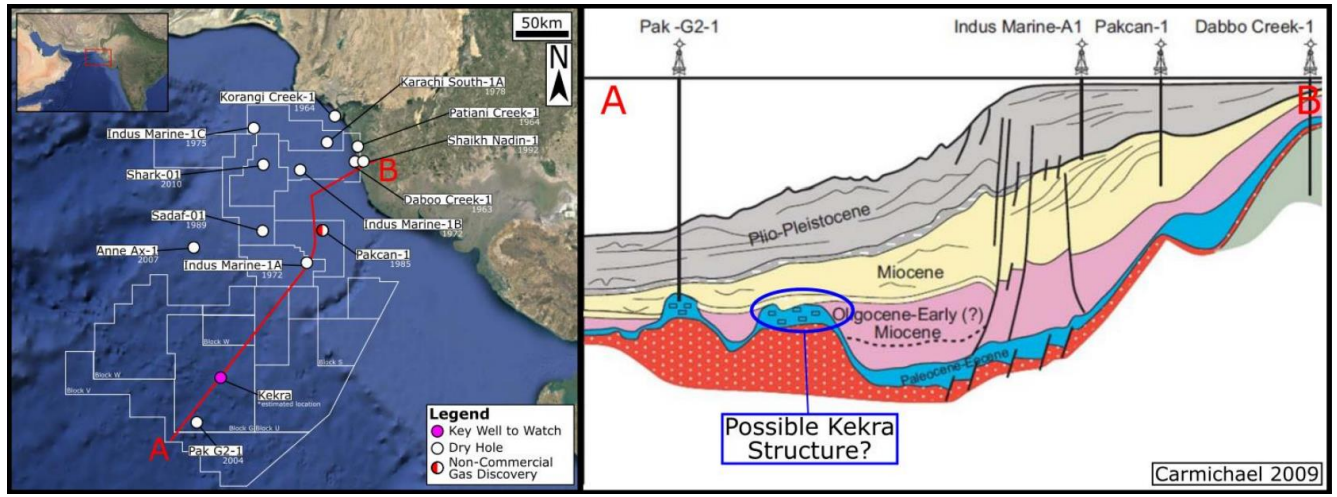
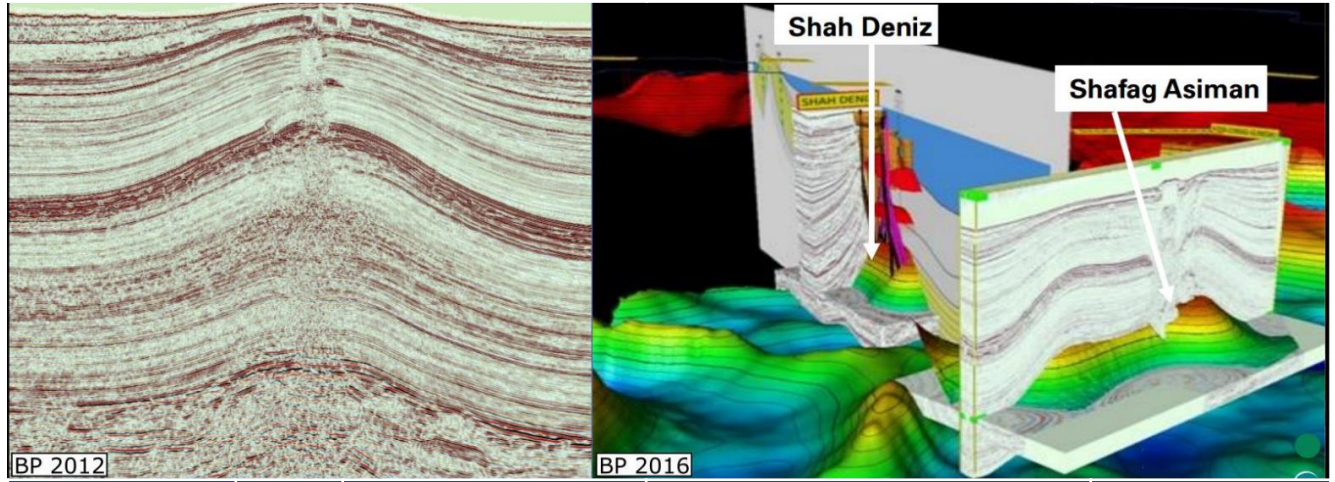


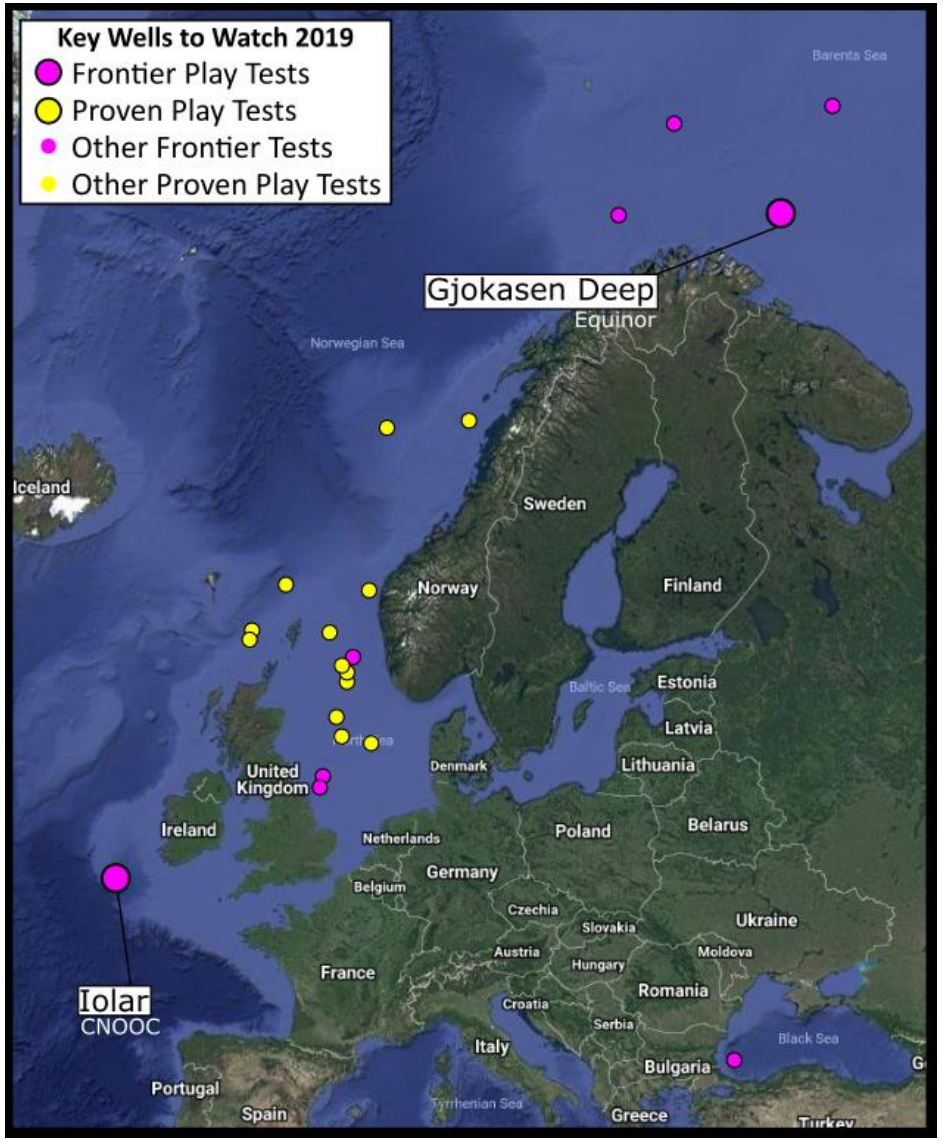


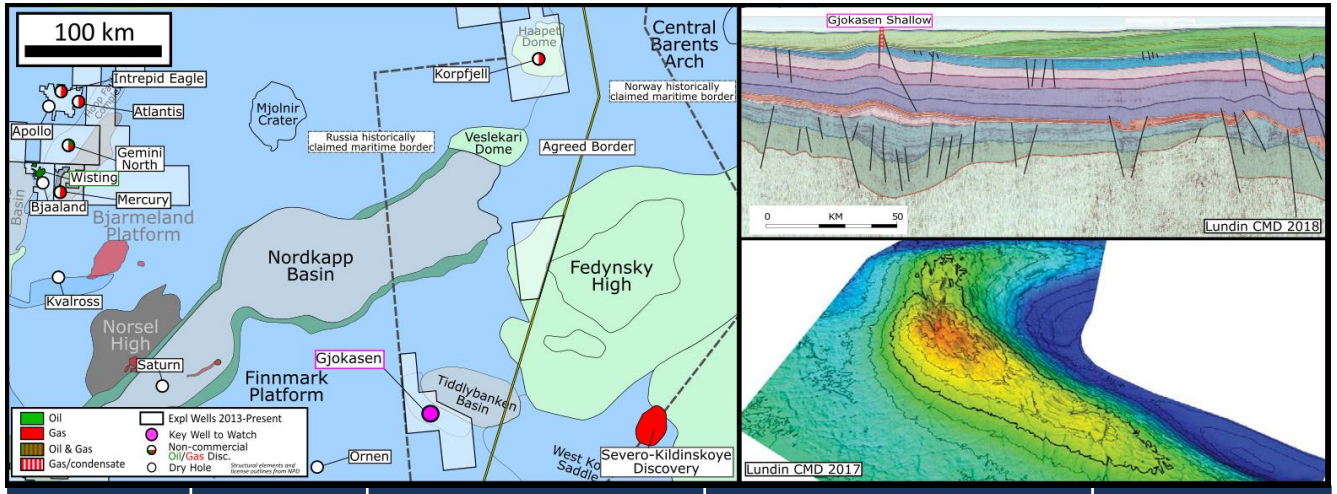
Kekra (Pakistan)	Eni	Frontier; Paleocene-Eocene carbonate build-up	Another Eni frontier carbonate build up – more optimally positioned than 2004 well	>3tcf (Westwood)



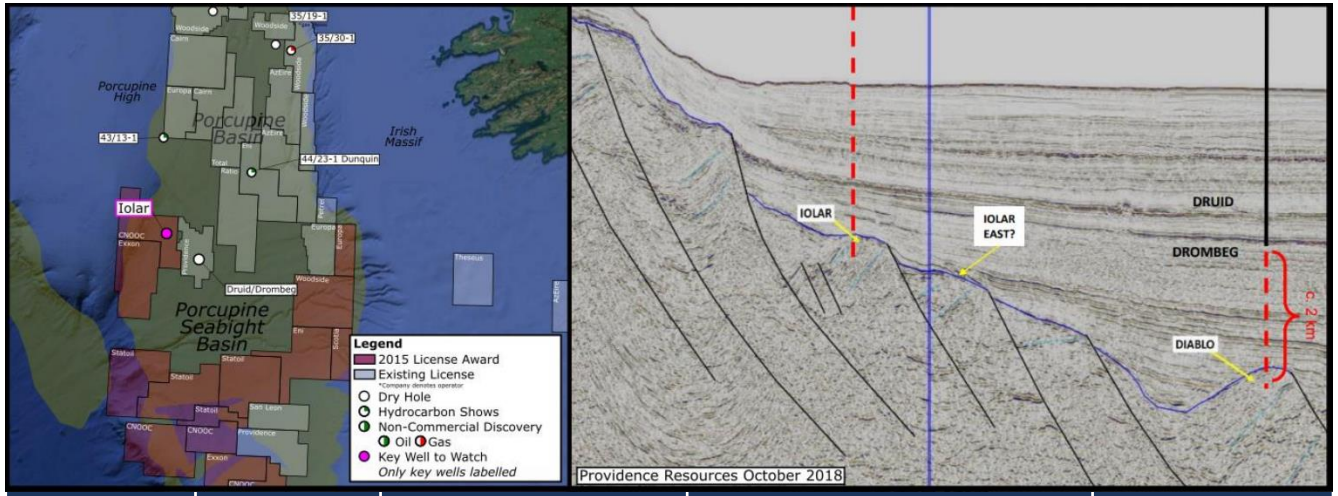
Shafag-Asiman (Azerbaijan)	BP	Mature; Neogene sands in anticlinal structure	First DW test in Azerbaijan since Shah Deniz. Challenging pressure conditions	>15tcf (SOCAR)

Europe

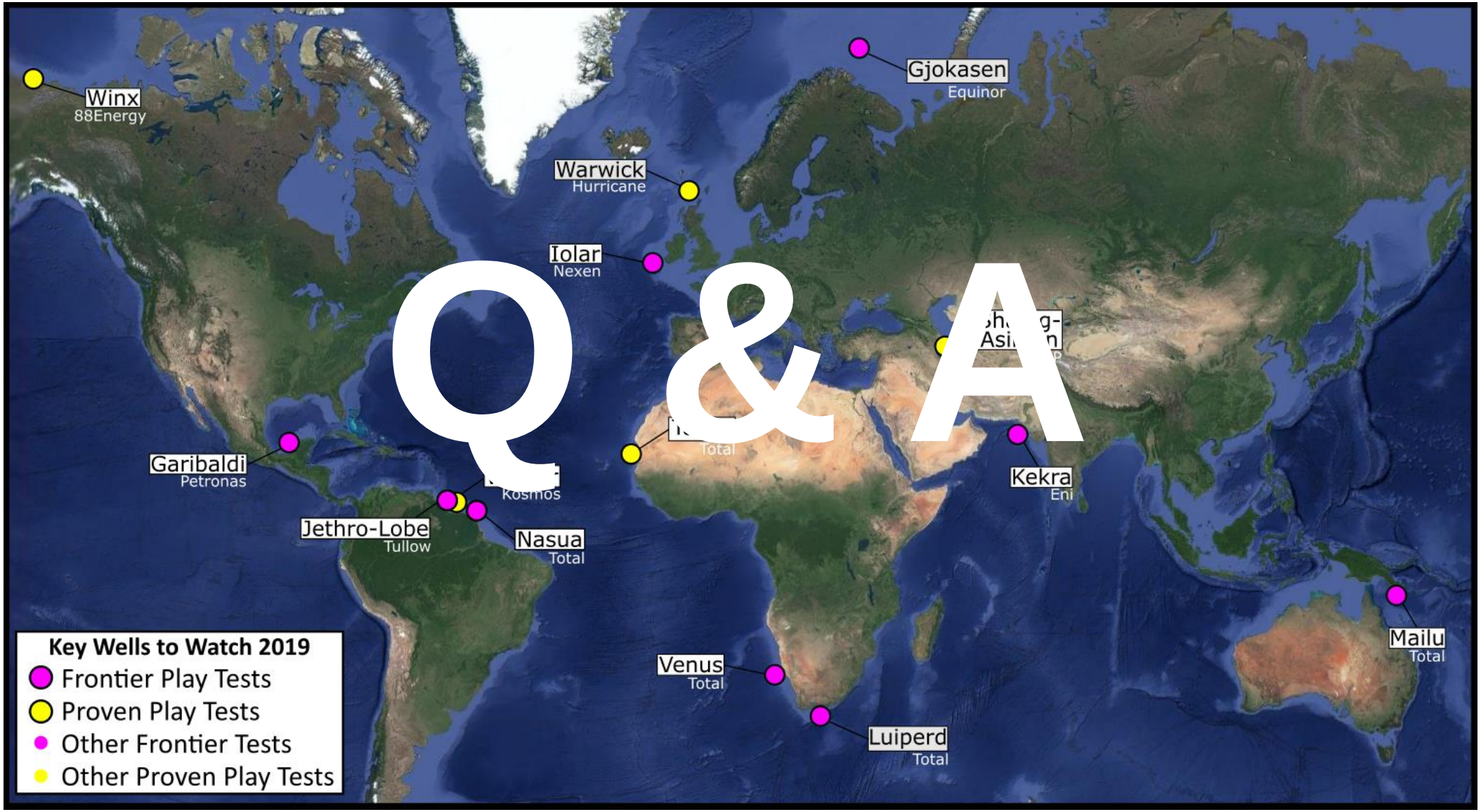




Gjokasen Deep (Norway)	Equinor	Frontier: Triassic and Jurassic clastics in regional 4-way dip closure	Another example of another structure being too big to not drill	428mmboe (Lundin, Deep only)



Iolar (Ireland)	CNOOC	Mid-Jurassic clastics in tilted fault block	Southern Porcupine has disappointed recently – new play being targeted	300mmboe (Westwood)

2019 Key wells to watch

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