Prospectivity of the Slyne Basin

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Petroleum Exploration Licence 1/06 (Frontier), Atlantic Ireland

Why Explore Ireland Atlantic?
Geological Factors

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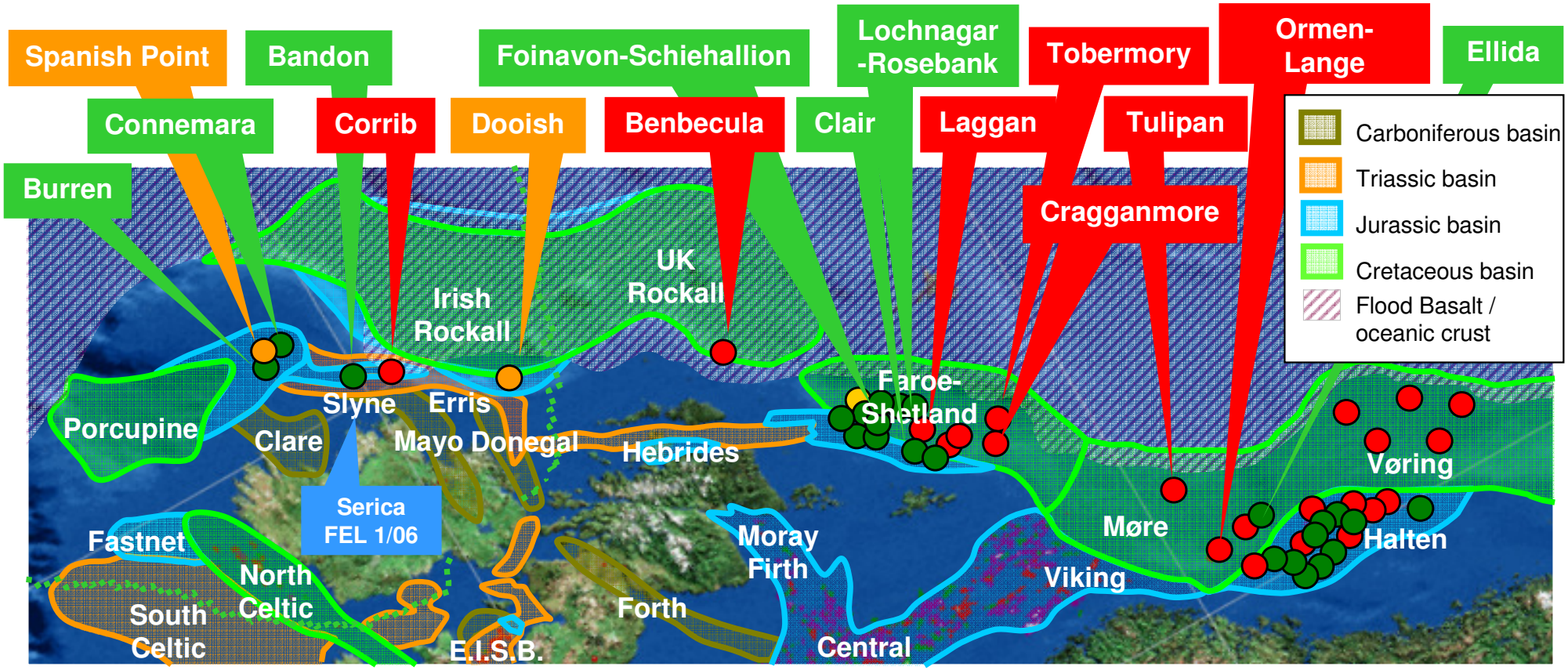
- Shared geology with UK, Faroe & Norwegian Atlantic margins
- Numerous rifted basins
- More than one proven play

- Six oil and gas fields / discoveries
- Numerous reservoirs & seals
- Several proven source rocks
- Many large undrilled structures



oil, condensate, gas discovery / field

Irish Atlantic Margin
Licence Activity 2013 to date

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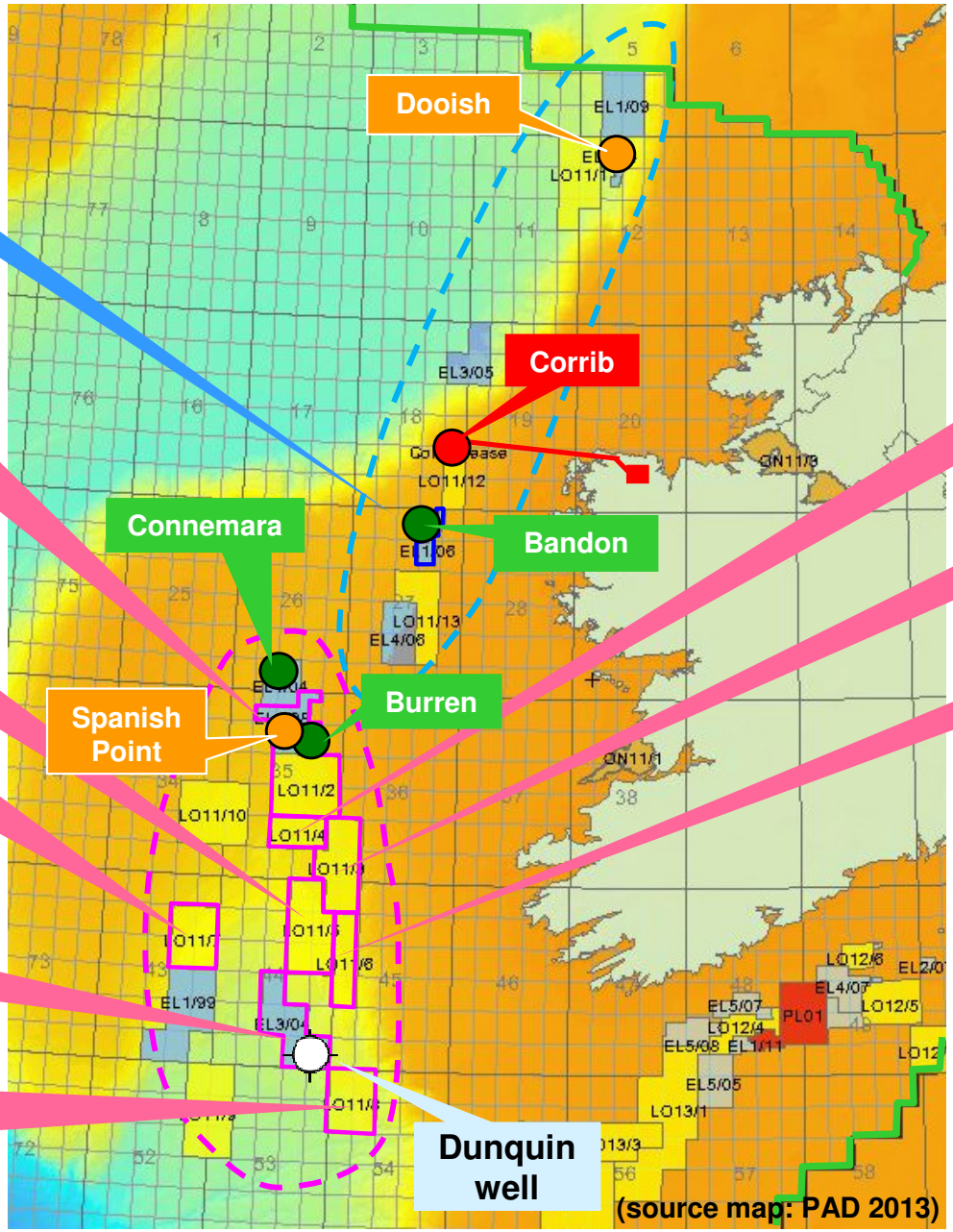


Serica FEL 1/06

Cairn farm-in to Chrysaor licences FEL 2/04, FEL 4/08 & LO 11/2

Kosmos farm-in to Antrim licence LO 11/5 (converted to EL 1/13; July 2013)

Kosmos farm-in to Europa licence LO 11/7 (converted to FEL 2/13, July 2013)

Atlantic farm-in to ExxonMobil & Sosina (Dunquin)

Kosmos farm-in to Europa licence LO 11/8 (converted to EL 3/13; July 2013)

- Oil discovery
- Condensate discovery
- Gas Field

Woodside farm-in to Petrel licence LO 11/4

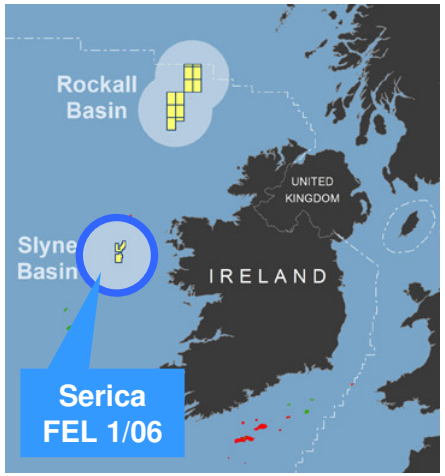
Woodside farm-in to Bluestack licence LO 11/3

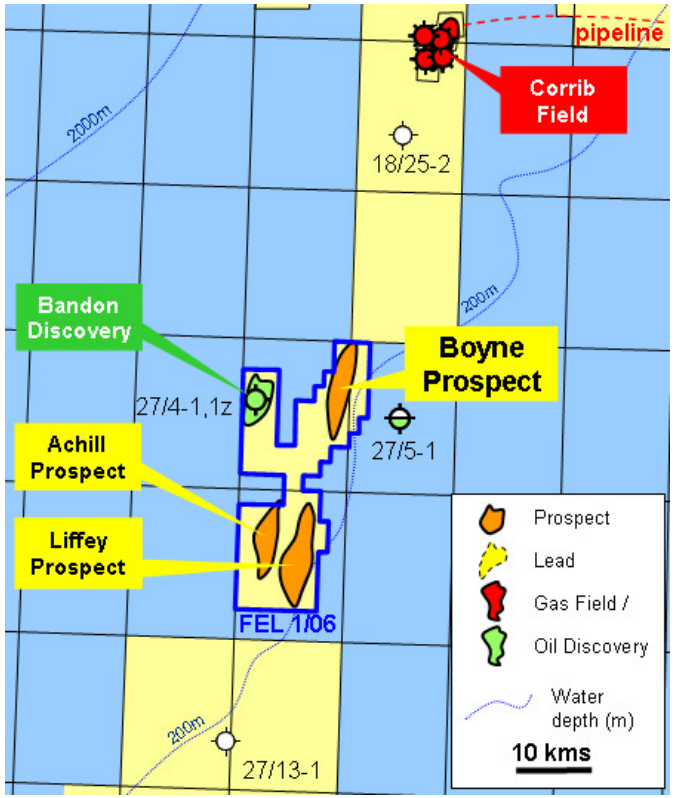
Woodside farm-in to Petrel licence LO 11/6

- Recent activity focused on un-proven parts of Porcupine Basin
- West African geological analogues and key players
- Proven plays further north receiving little attention to date

Petroleum Exploration Licence 1/06 (Frontier)

Summary





- Low risk exploration, Slyne Basin, west of Ireland
- FEL 1/06 operated by Serica (50%) in partnership with RWE
- Water depth ~200m
- Proven oil on block (27/4-1,1z Bandon Oil Discovery, Lower Jurassic)
- Nearby commercial gas field (Corrib)
- Excellent quality Lower Jurassic and Triassic reservoir sandstones
- Boyne, Liffey & Achill prospects clearly defined on 3D seismic data
- Exploration upside in the event of success

Slyne Basin Petroleum System
Two Proven Plays

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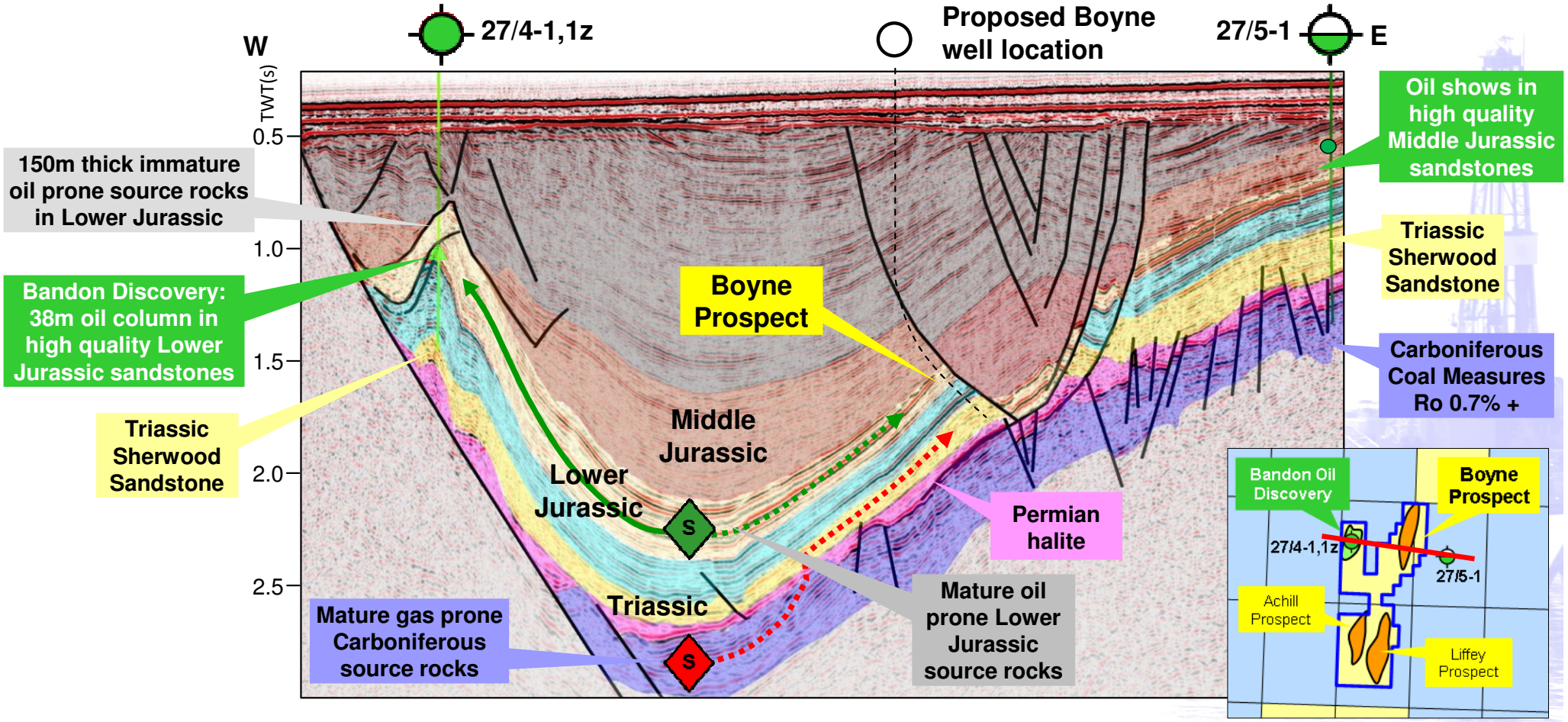

- Lower Jurassic reservoirs sourced by up-dip oil migration from source kitchen
- Concept proven by the Bandon Oil Discovery 27/4-1,1z
- Triassic reservoirs sourced by Carboniferous coals, via windows in Permian halite
- Concept proven by the Corrib Field 40 kms to north

27/4-1, 1z Bandon Oil Discovery
Lower Jurassic Reservoir & Oil

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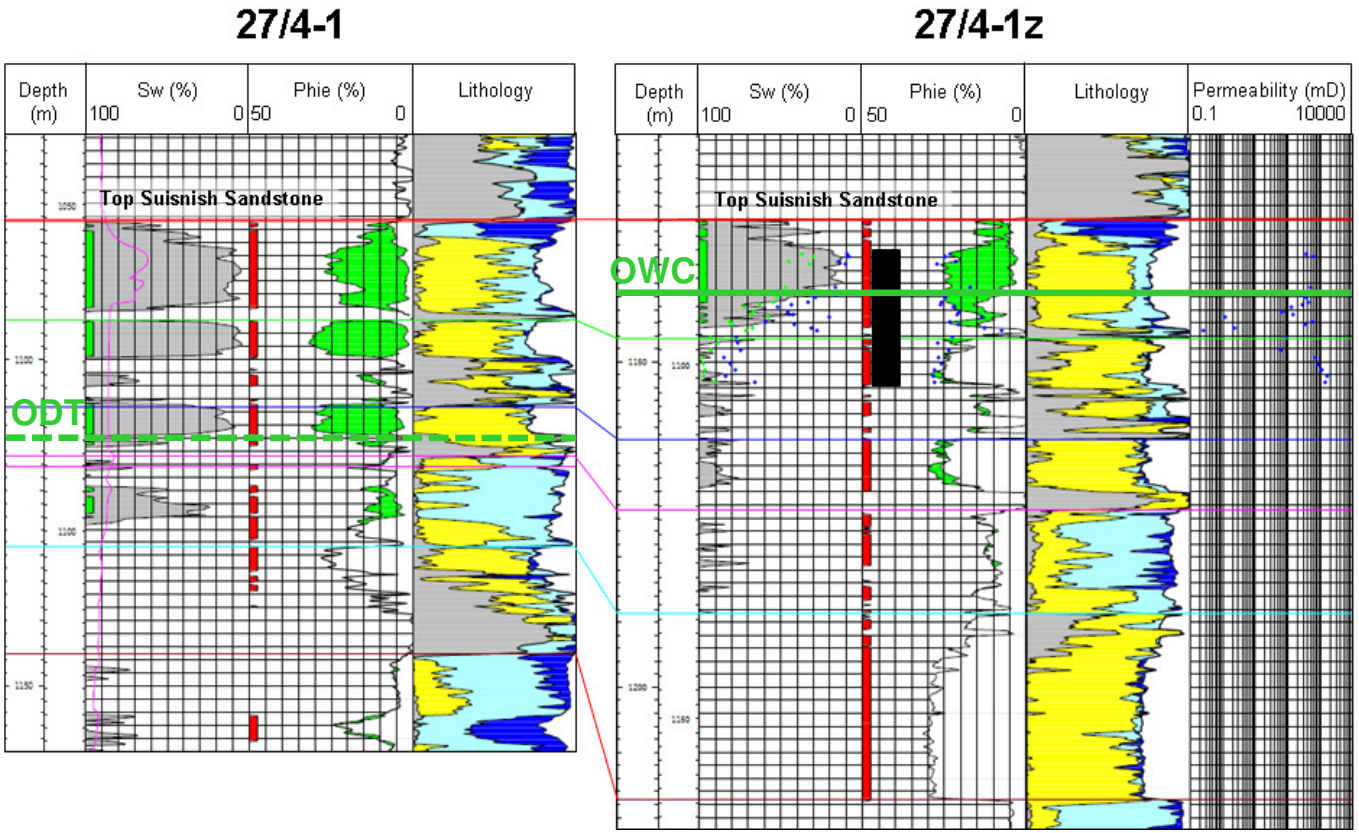

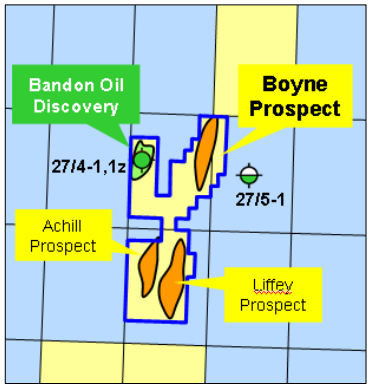

- 27/4-1,1z drilled by Serica in 2009
- 38m gross oil column in Lower Jurassic sandstones
- Oil-water contact 1091 mSS
- Triassic sandstone moderate quality but water
- Well sidetracked to obtain core & MDT oil samples
- 16 °API oil; biodegraded due to shallow depth
- Proven 12 mmbo in-place
- <u>27/4-1,1z has proven a new oil play</u>

Boyne, Liffey & Achill Prospects
Top Lower Jurassic & Top Sherwood Sandstone

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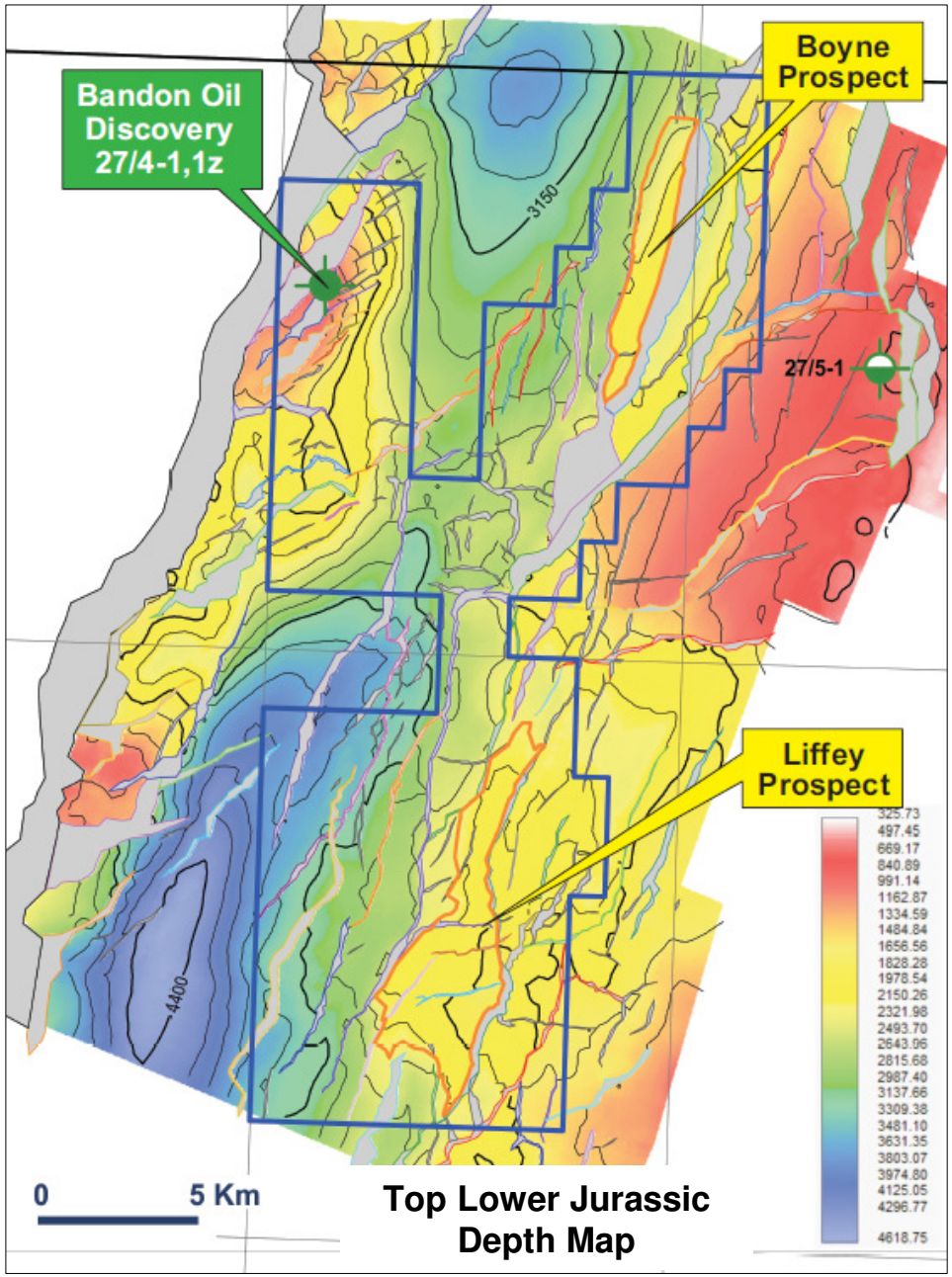
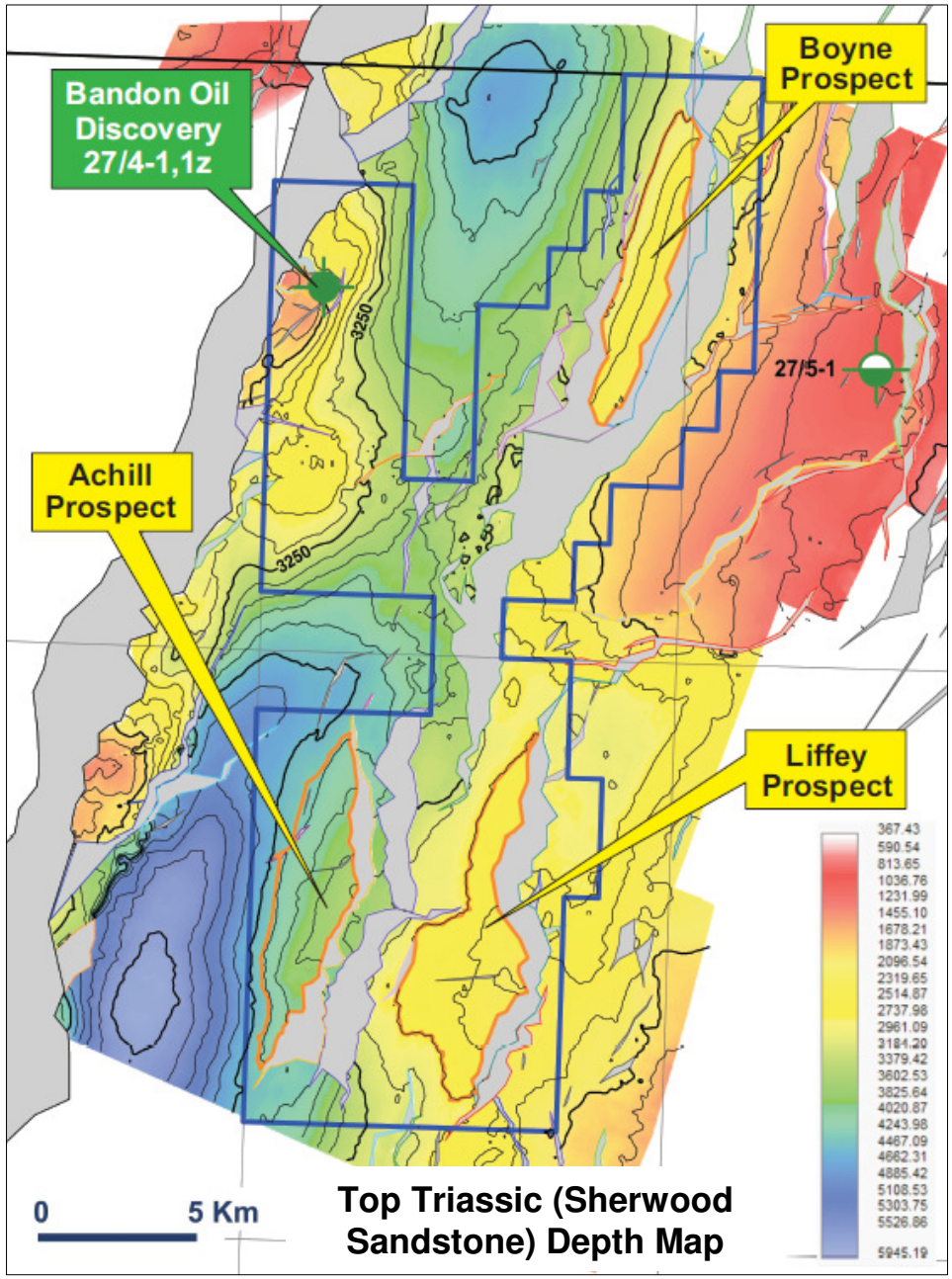


Top Lower Jurassic Depth Map



Top Triassic (Sherwood Sandstone) Depth Map

Boyne Prospect: Trap

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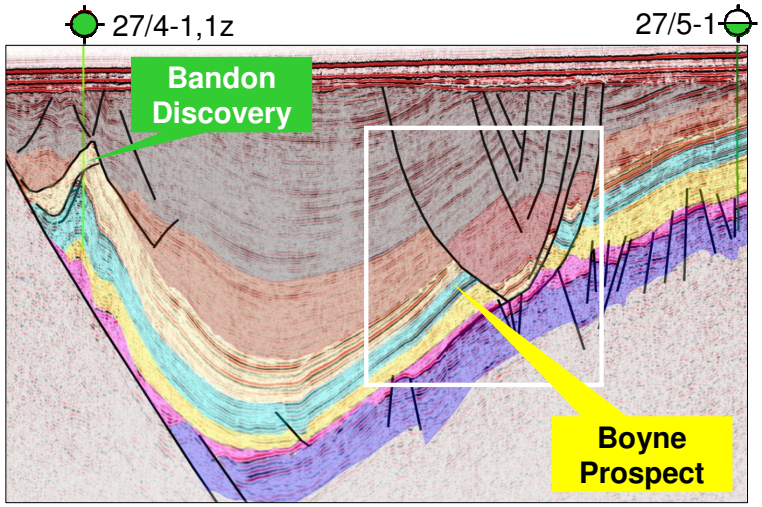
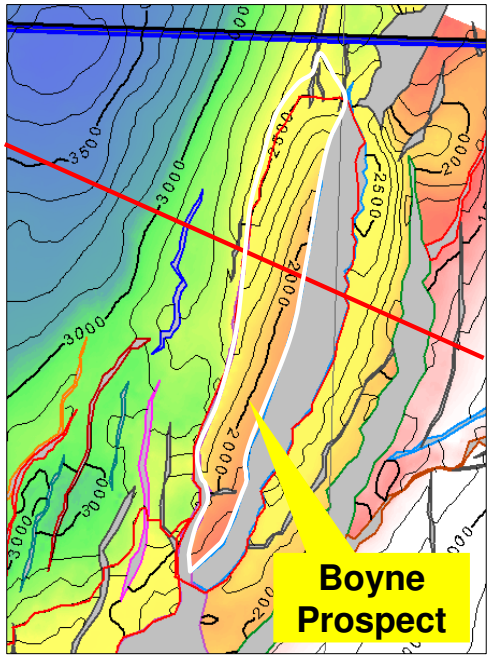
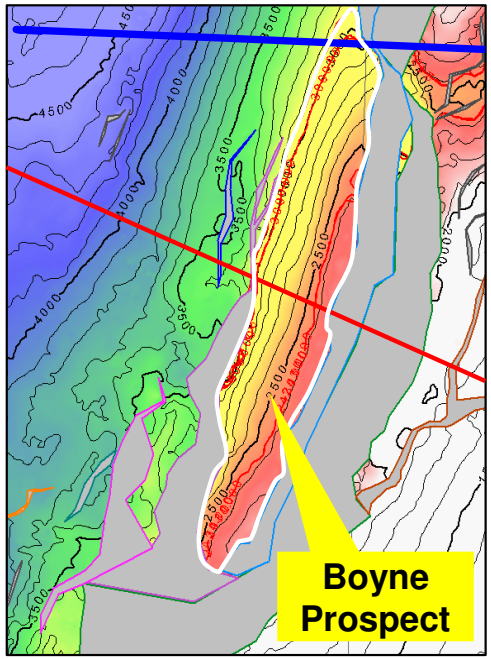
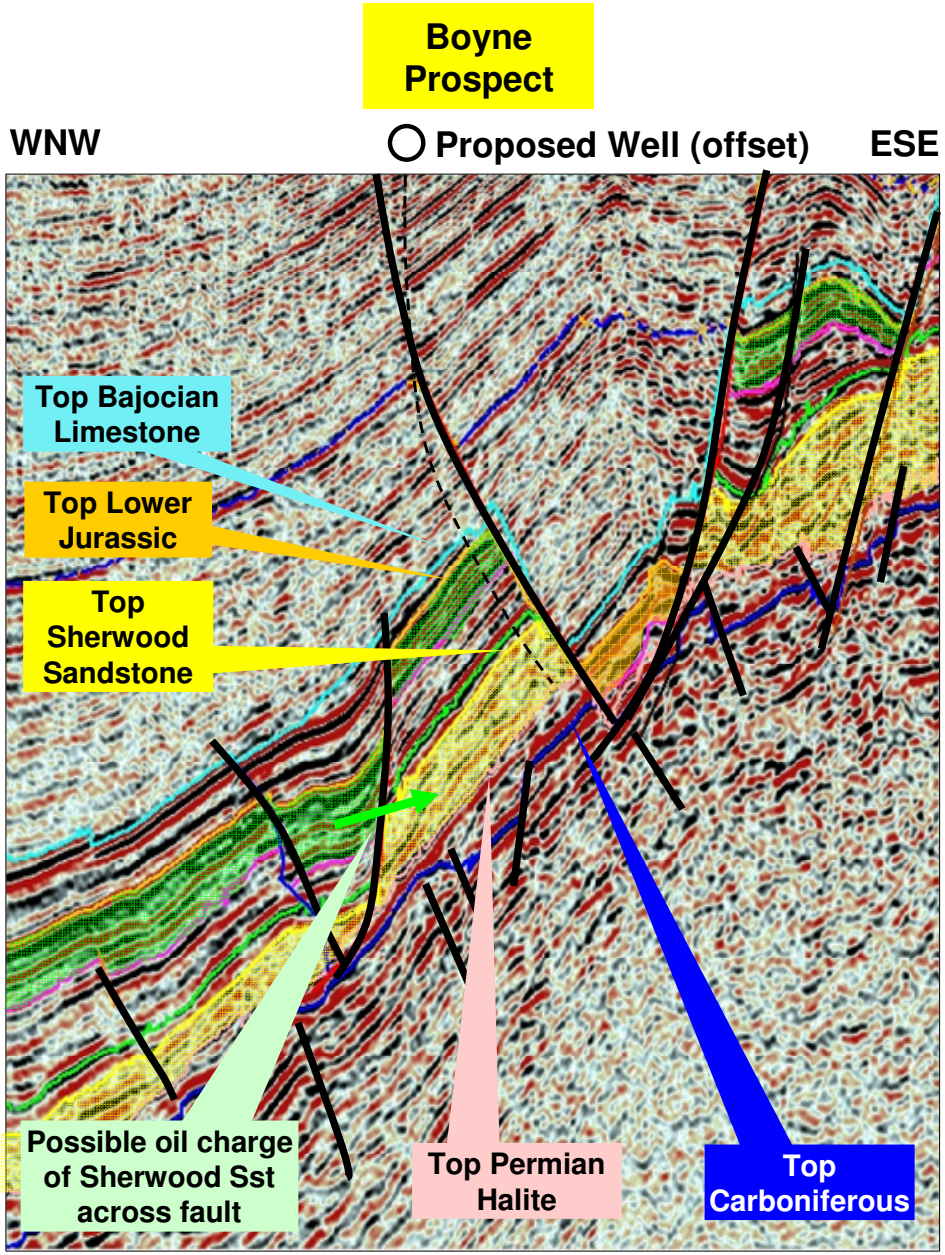


Top Lower Jurassic Depth Map

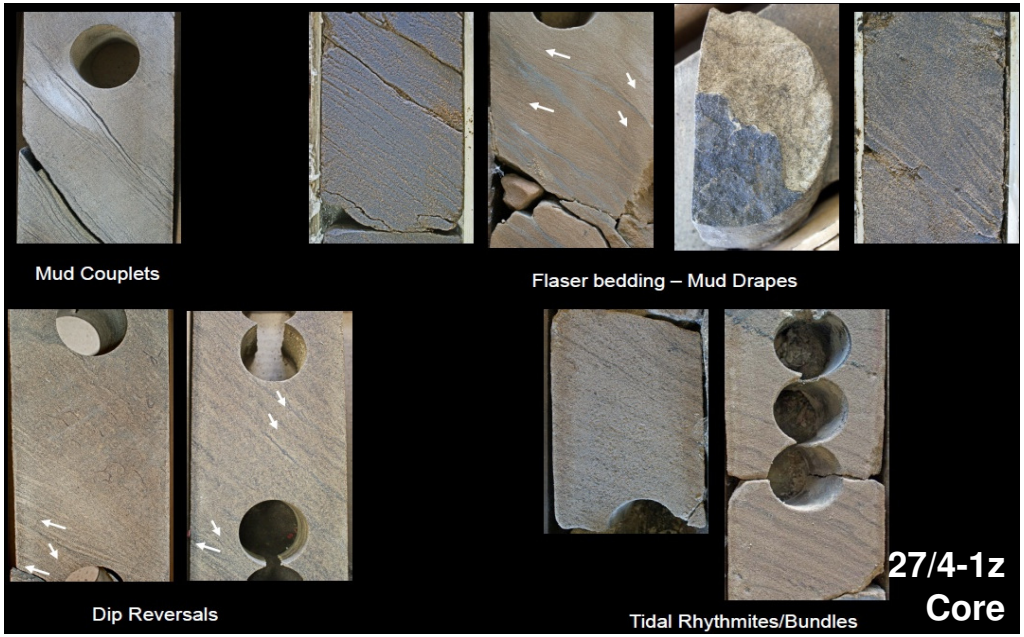


Top Triassic Sherwood Sandstone Depth Map

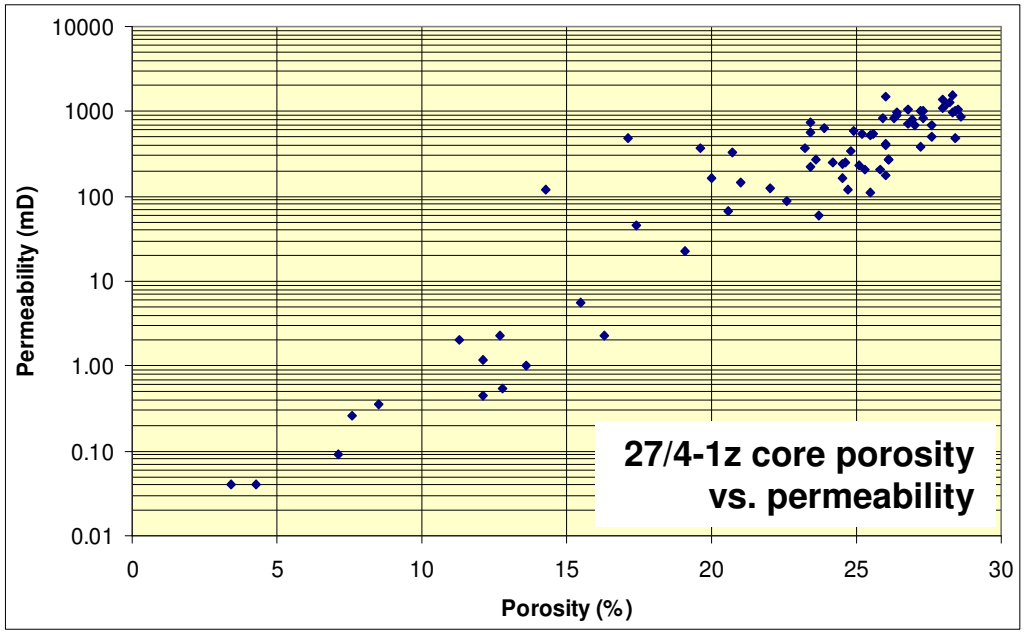


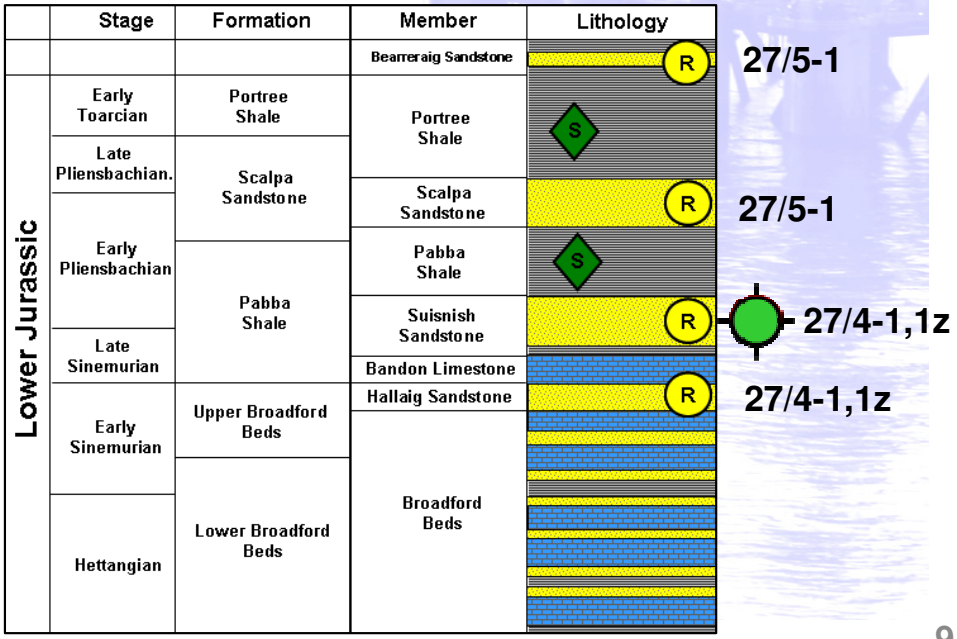


Lower Jurassic Reservoir



- Lower Jurassic “Suisnish Sandstone”
- 27/4-,1,1z reservoir: estuarine to shallow marine sandstones
- Excellent core porosity and permeability
- Nearby well 27/5-1 encountered similar, slightly younger “Scalpa Sandstone”





Triassic Reservoir

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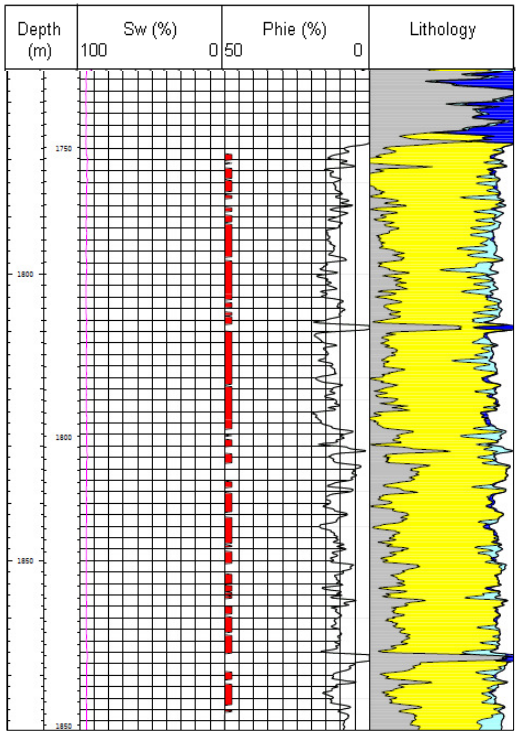
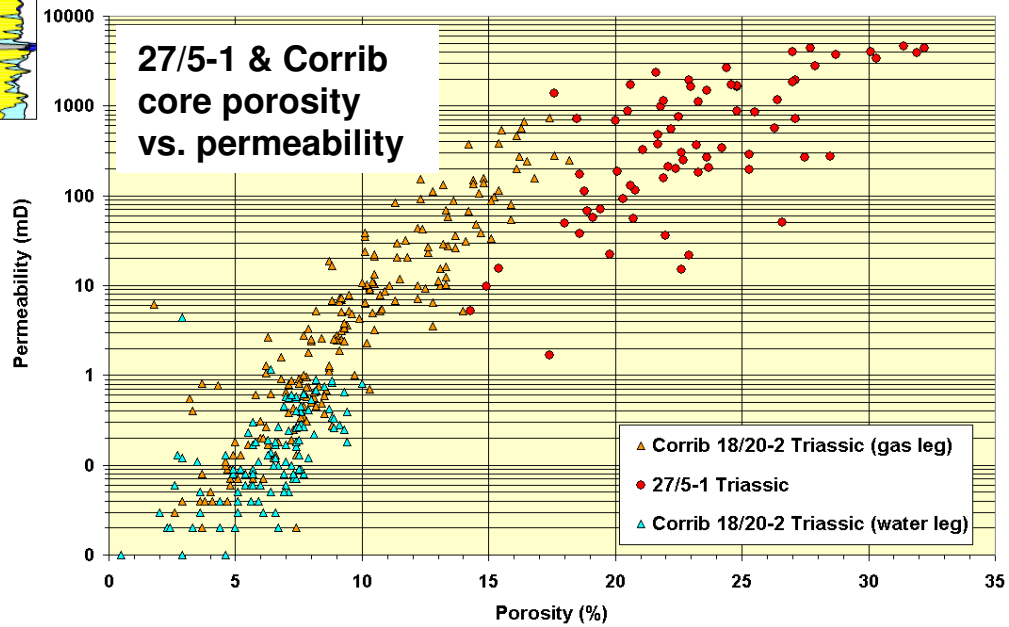
27/4-1

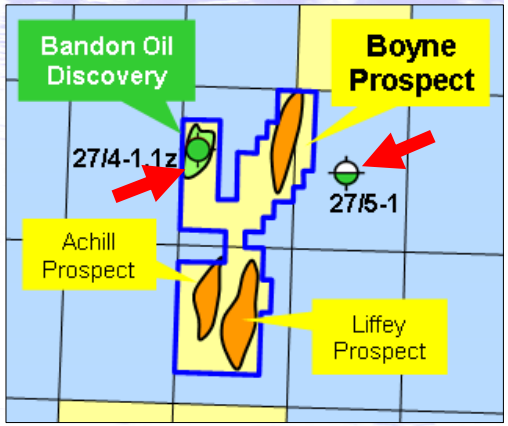


27/5-1 Core

- Triassic "Sherwood Sandstone" Formation
- 27/4-1 modest reservoir quality, comparable to the Corrib Field
- Nearby well 27/5-1 had excellent reservoir quality continental sandstones, again similar to Corrib

- 27/4-1 average porosity 13%;
- 27/5-1 average porosity (core) 23%





Lower Jurassic Source Rock

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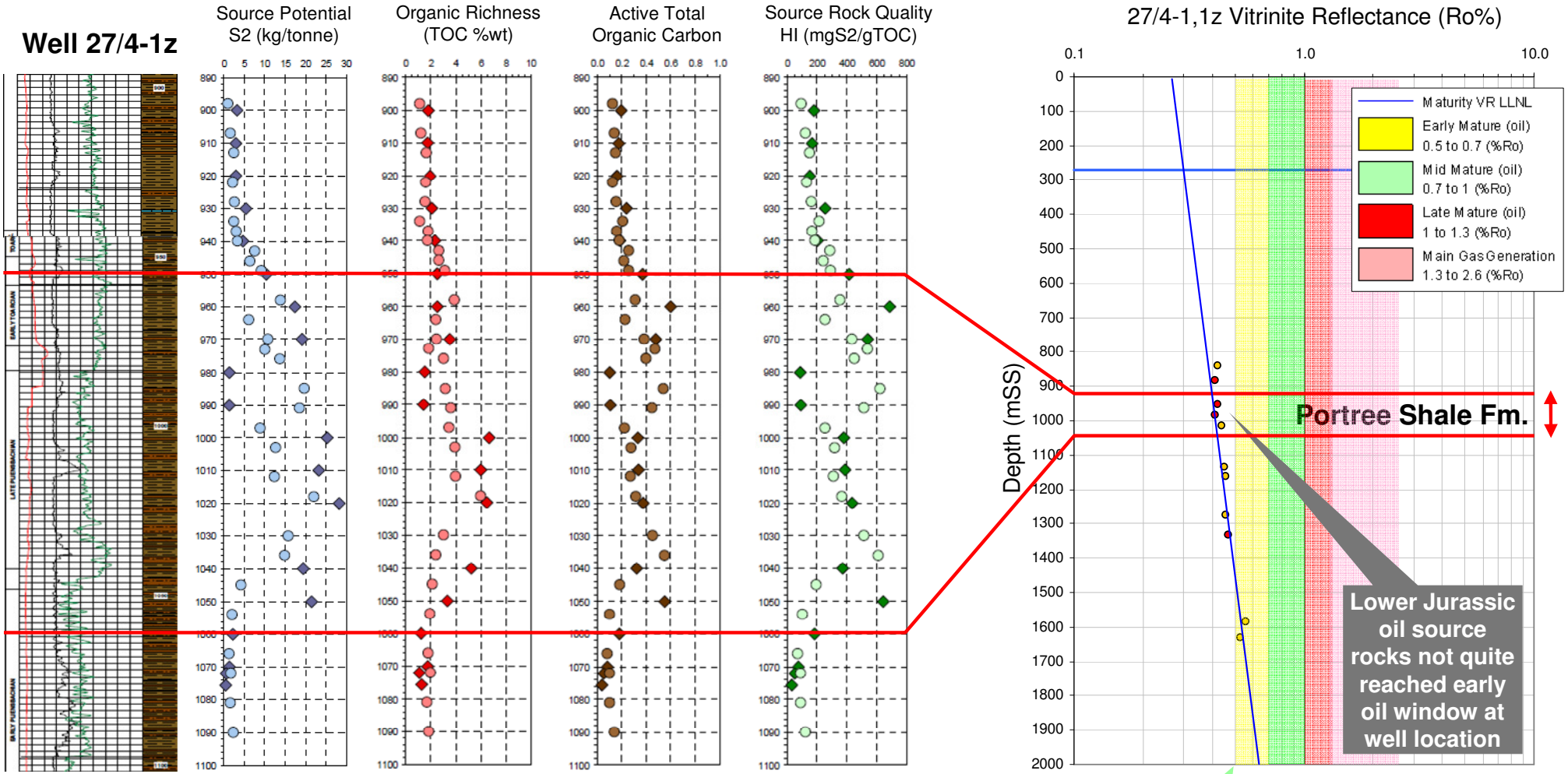

- Portree Shale Formation, Well 27/4-1,1z
- Lower Jurassic age
- Excellent oil source rock characteristics; immature at well location

SOURCE ROCKS

Lower Jurassic Portree & Pabba Shale Correlation

Hung on Middle Jurassic Unconformity / Top Bajocian Limestone

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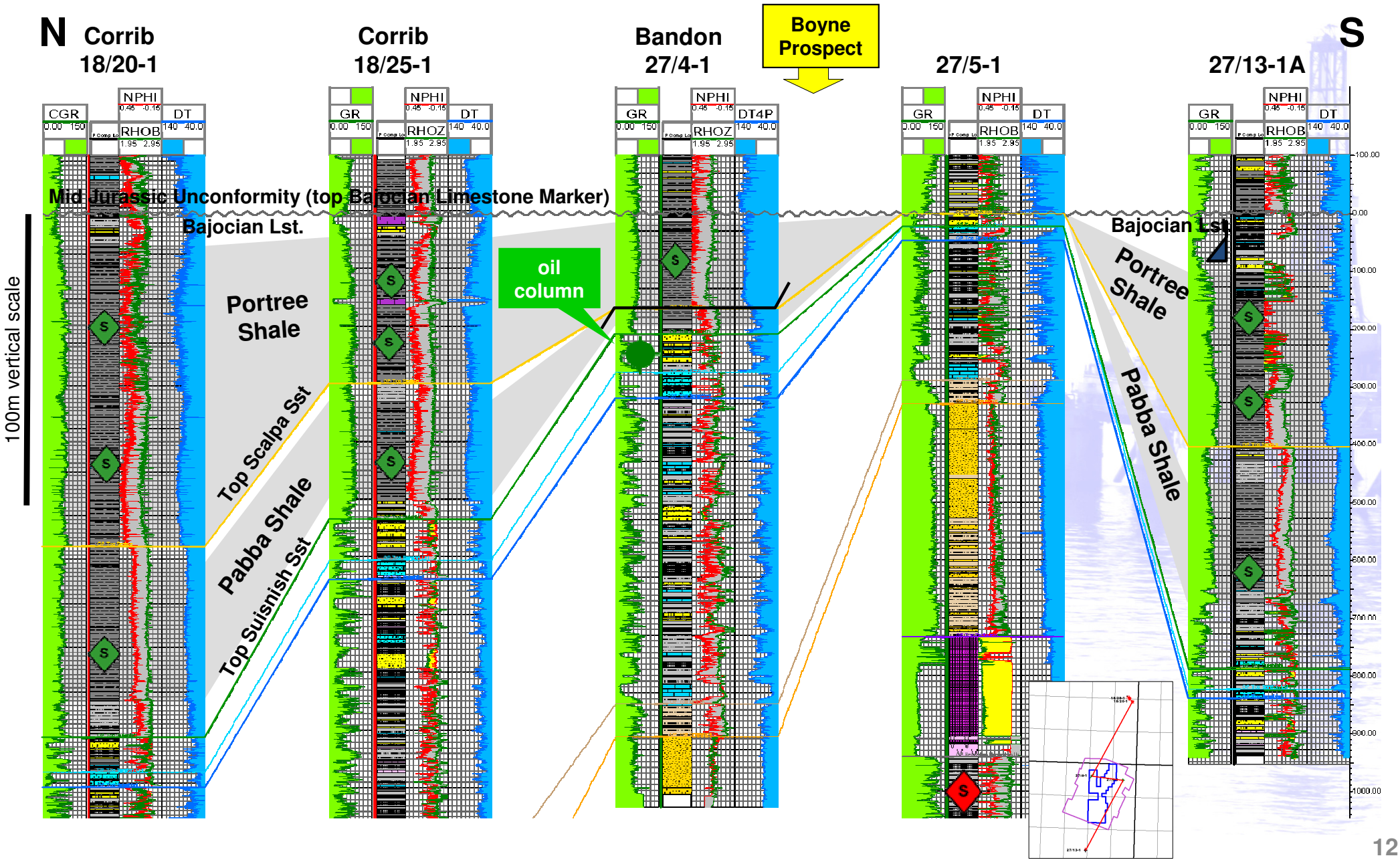

Lower Jurassic Charge

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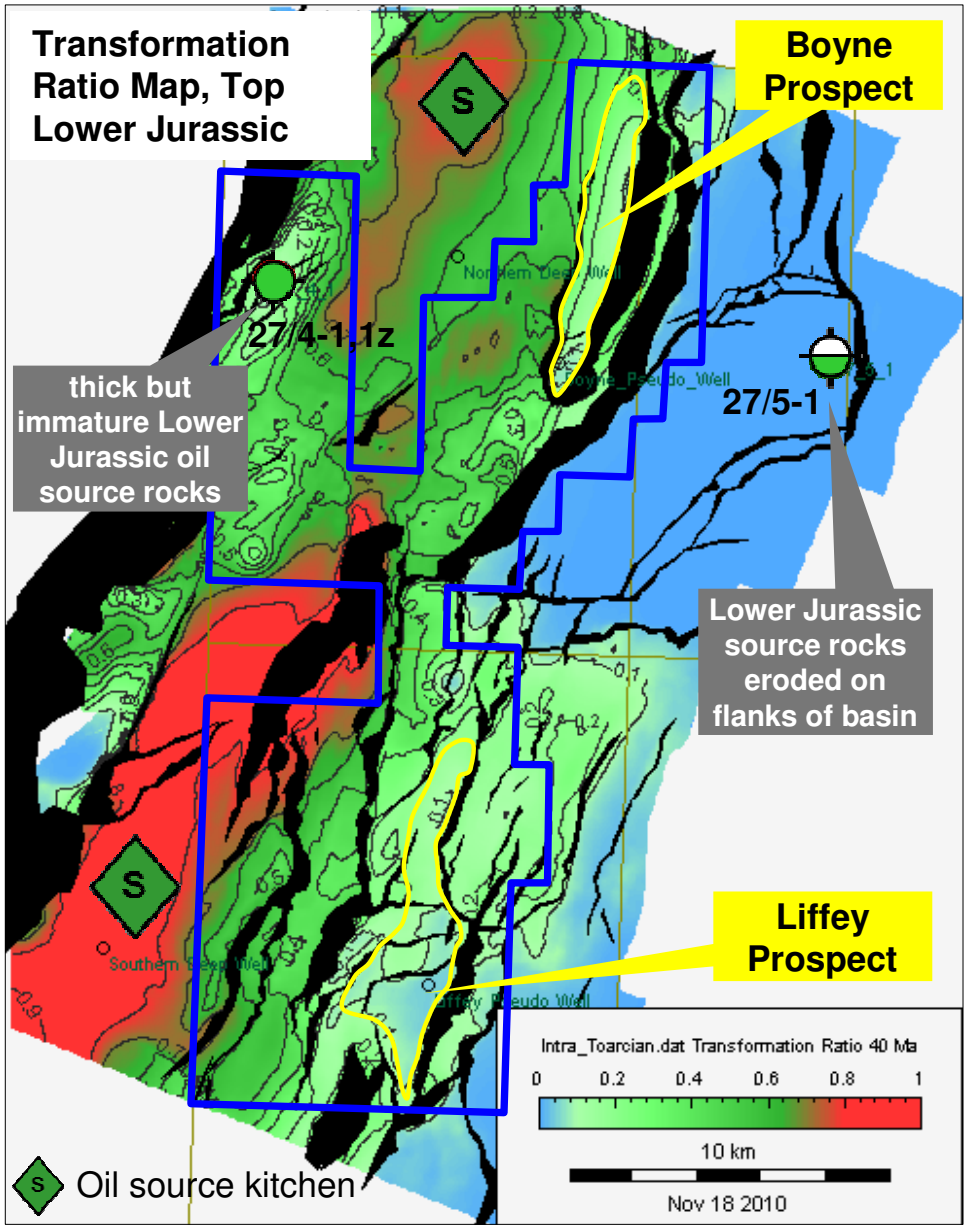

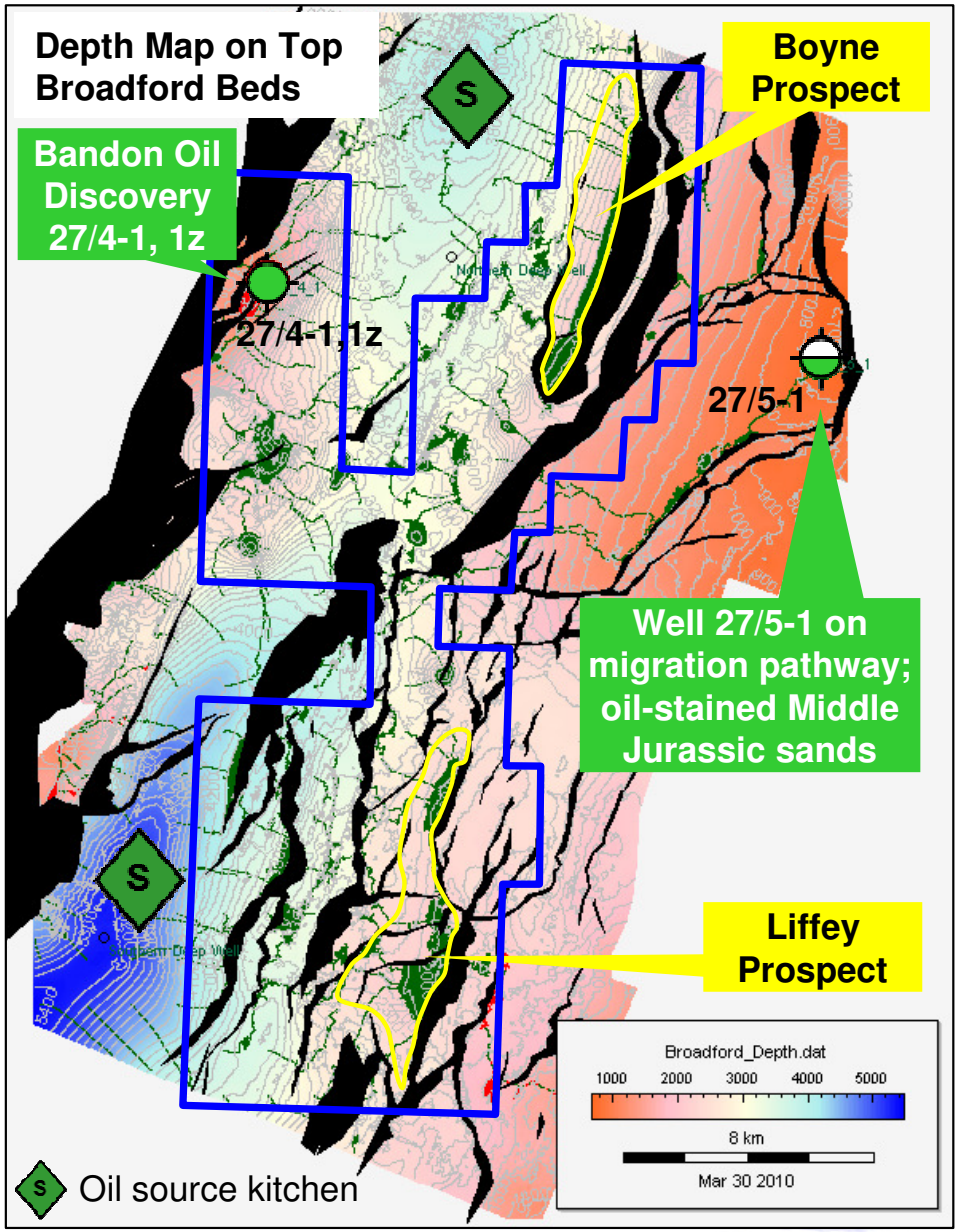

Boyne, Liffey & Achill Prospects
Predicted vs. Actual Oil Gravities

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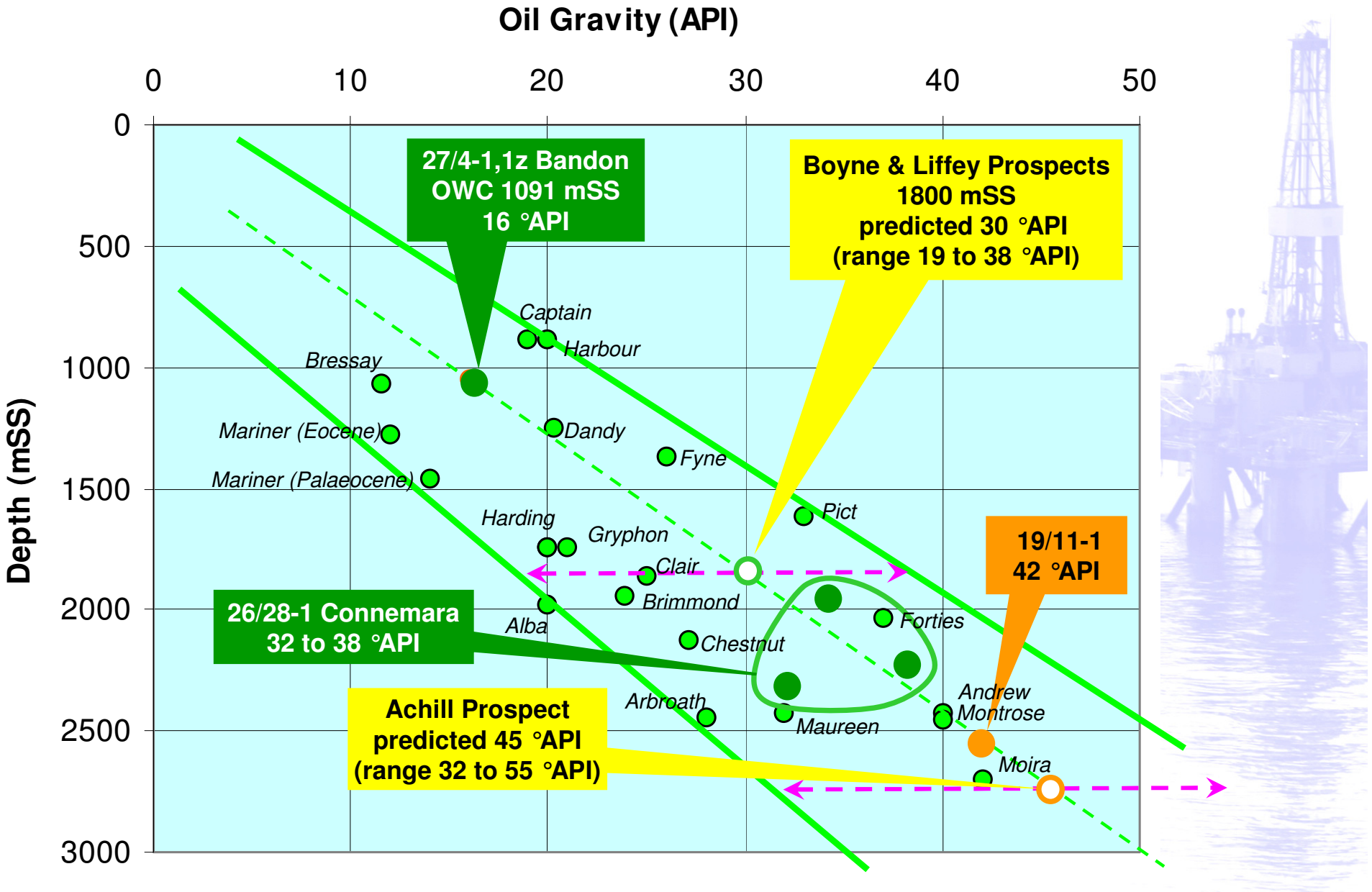

SOURCE ROCKS
Carboniferous Maturity & Migration

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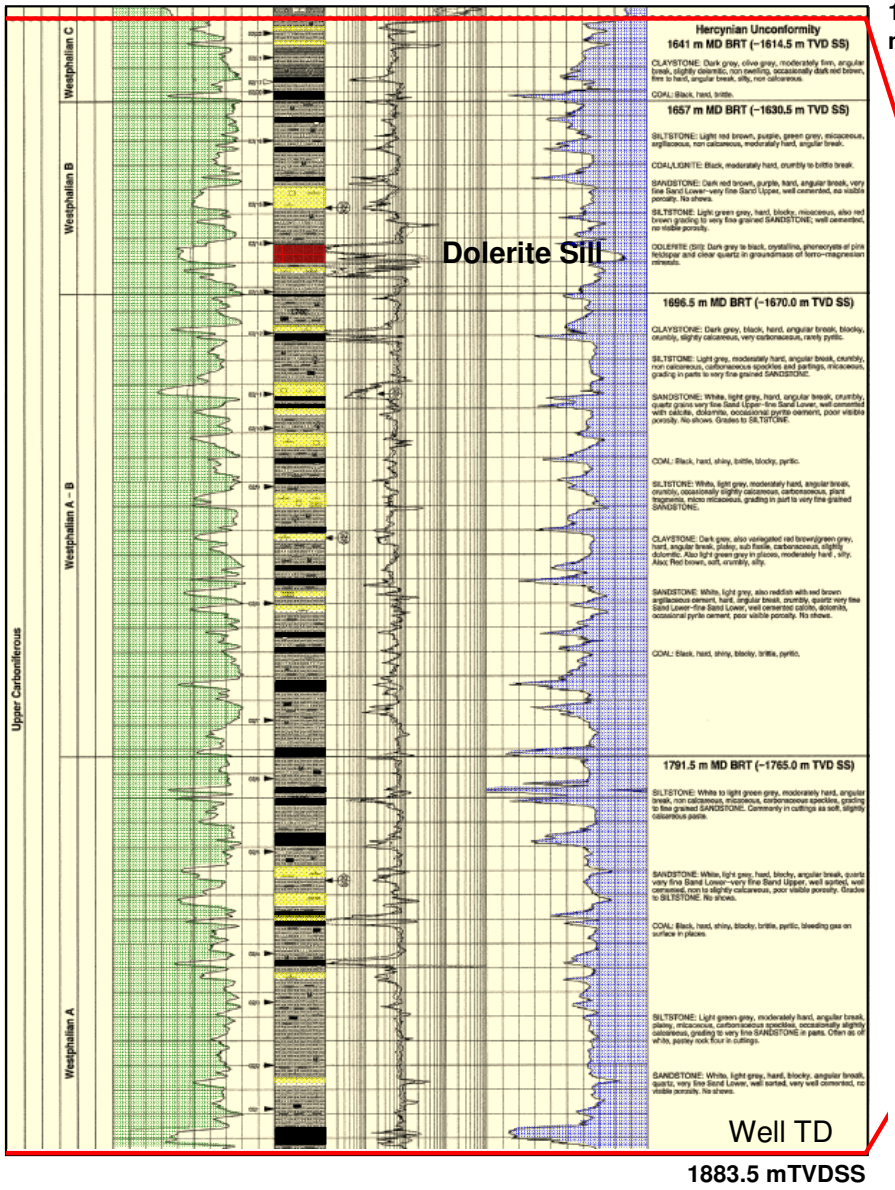
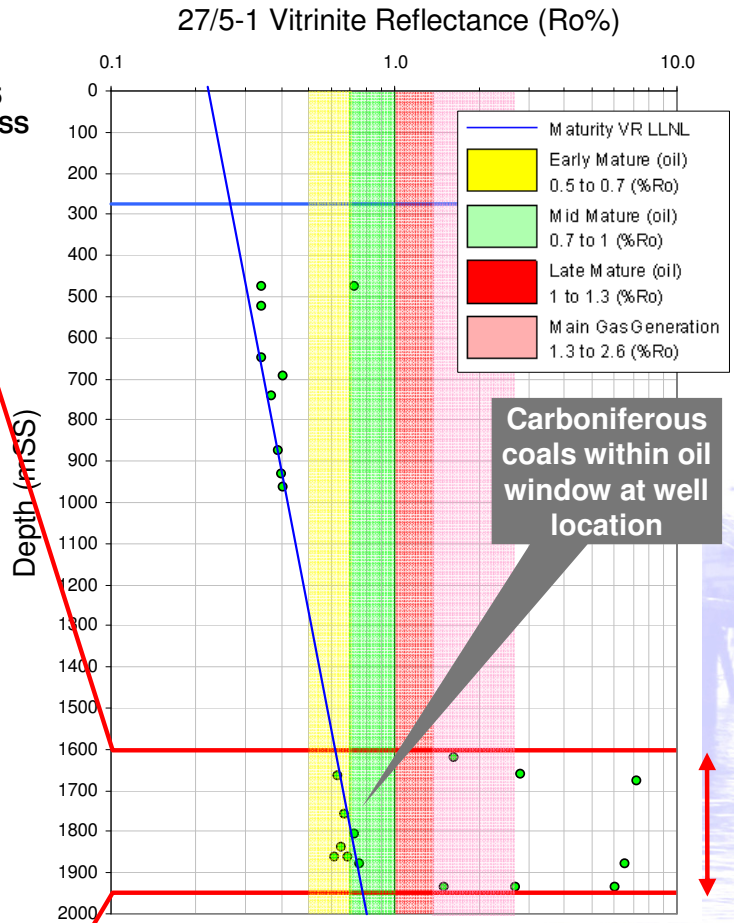
Well 27/5-1

Coal Seam
Sandstone

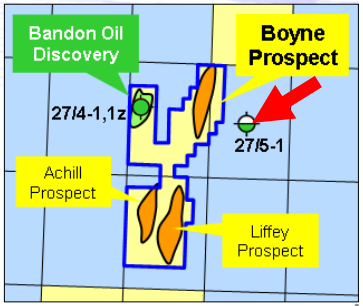
Gamma Ray | Resistivity | Sonic



1614.5 mTVDSS



- Carboniferous coals, 27/5-1
- excellent gas-prone source
- immature at well location



Resource Inventory

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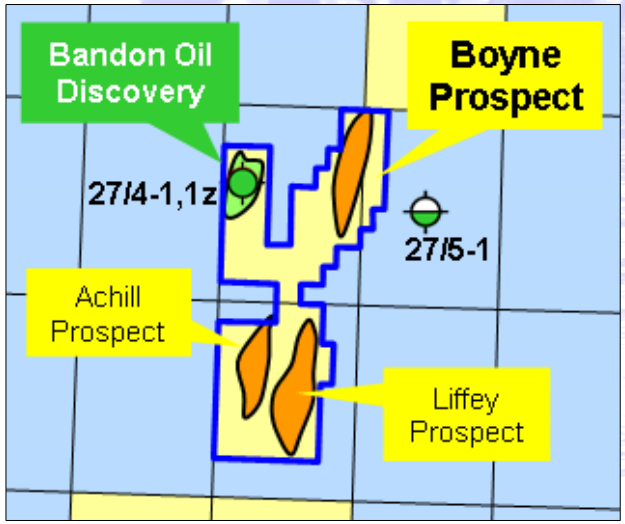
Resources	P_{90}	P_{50}	Mean	P_{10}	Units
Boyne Jurassic	**9**	**31**	**45**	**96**	**mmbo**
***either* Boyne Sherwood**	**8**	**49**	**134**	**312**	**mmbo**
***or* Boyne Sherwood**	**33**	**199**	**513**	**1213**	**bcf**
Liffey Jurassic	6	38	104	245	mmbo
Liffey Sherwood	74	281	473	1059	bcf
Achill Sherwood	58	313	716	1689	bcf

* Resource estimates are based on latest Serica in-house interpretation

- Boyne Prospect is ranked No. 1
- Boyne Prospect has highest chance of success
- Excellent trap definition and simple charge model



FEL 1/06 Opportunity Summary
Summary

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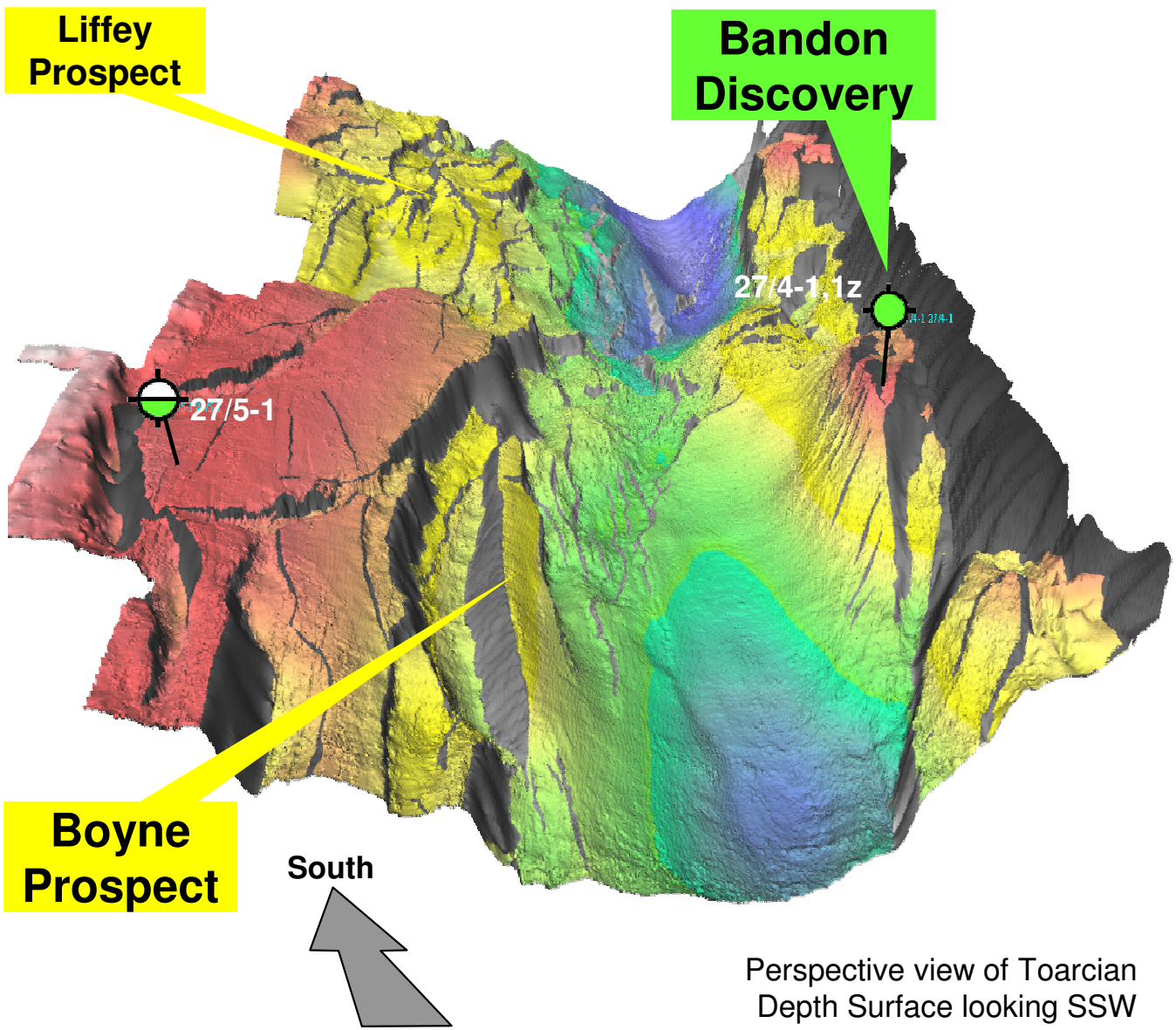

Perspective view of Toarcian Depth Surface looking SSW

- Two proven, low to moderate risk hydrocarbon systems
- Well-defined structural prospects on high-quality 3D seismic data
- Reservoir potential at more than one level
- Boyne Prospect is ready to drill
- Significant equity is available in return for a competitive promote to drill an exploration well
- For more details – please visit the Serica Stand