

Europa's Acreage Position in Ireland



FEL 4/19

Europa 100%
Site survey approval expected
Q2 2020

FEL 3/19

Europa 100%
New acquisition from DNO

LO 16/19

Europa 30%, Cairn 70% op
Relinquished. Already
removed from DCCAE map.

FEL 2/13

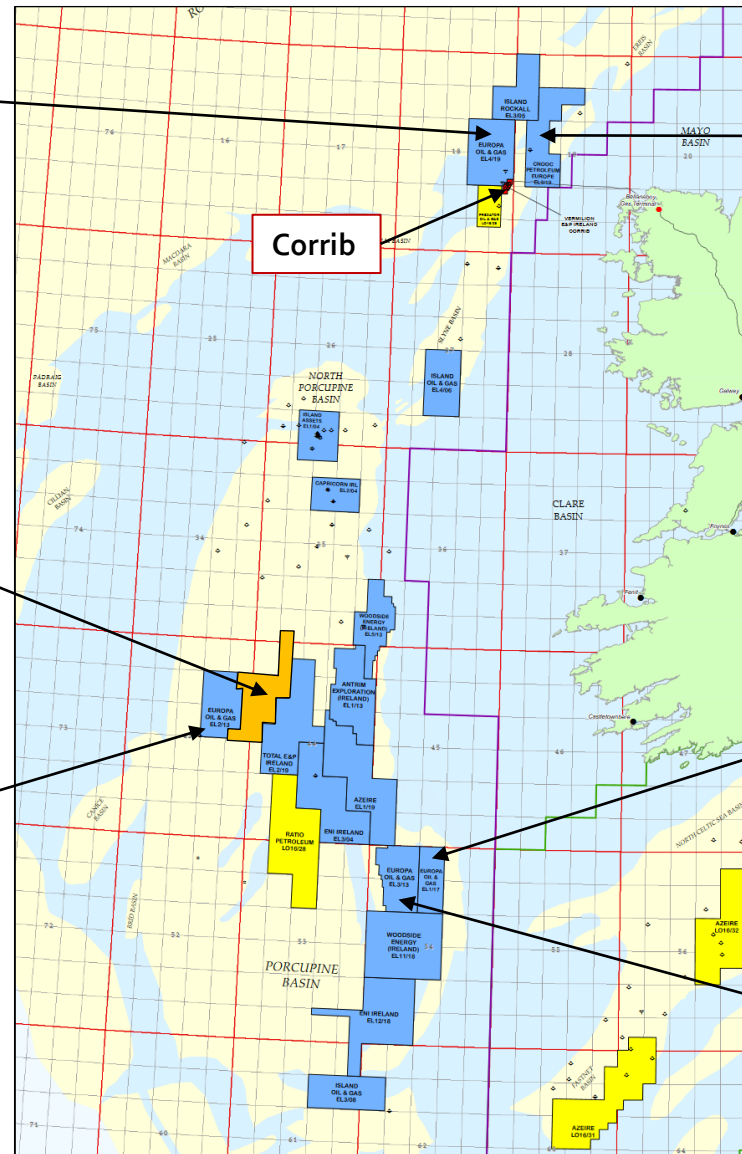
Europa 100%
Application made for
relinquishment.

FEL 1/17

Europa 100%
Application made for merger with
FEL 1/17 with a two year extension
to Phase 1 of the licence

FEL 3/13

Europa 100%
Application made for merger with
FEL 3/13 with a two year extension
to Phase 1 of the licence, with part
relinquishment



Offshore Ireland Petroleum Exploration & Development
Concession Map 31st March 2020 (DCCAE)

Irish Exploration Portfolio: Top Prospects



Licence	Prospect	Play	Gross Prospective Resources bscf ~				Equity	Net Prospective Resources bscf ~			
			Un-risked					Un-risked			
			Low	Best	High	Mean		Low	Best	High	Mean
FEL 4/19	Inishkea	Triassic gas	244	968	3606	1528	100%	244	968	3606	1528
FEL 3/19	The Edge ^{##}	Triassic Gas	39	330	2807	1185	100%	39	330	2807	1185
Total						2713					2713

In house prospective resources (oil)											
Licence	Prospect	Play	Gross Prospective Resources mmboe*				Equity	Net Prospective Resources mmboe*			
			Un-risked					Un-risked			
			Low	Best	High	Mean		Low	Best	High	Mean
FEL 3/13	Beckett	Cretaceous Fan	111	758	4229	1719	100%	111	758	4229	1719
FEL 3/13	Shaw ⁺	Cretaceous Fan	20	196	1726	747	100%	20	196	1726	747
FEL 3/13	Wilde	Cretaceous Fan	45	241	1082	462	100%	45	241	1082	462
FEL 1/17	Ervine	Pre-rift	63	159	363	192	100%	63	159	363	192
FEL 1/17	Edgeworth	Pre-rift	49	156	476	225	100%	49	156	476	225
FEL 1/17	Egerton	Syn-rift	59	148	301	167	100%	59	148	301	167
FEL 1/17	PR3	Pre-rift	27	168	833	345	100%	27	168	833	345

However, due to the significant uncertainties in the available geological information, there is a possibility of gas charge.

⁺prospect extends outside licence, volumes are on-licence

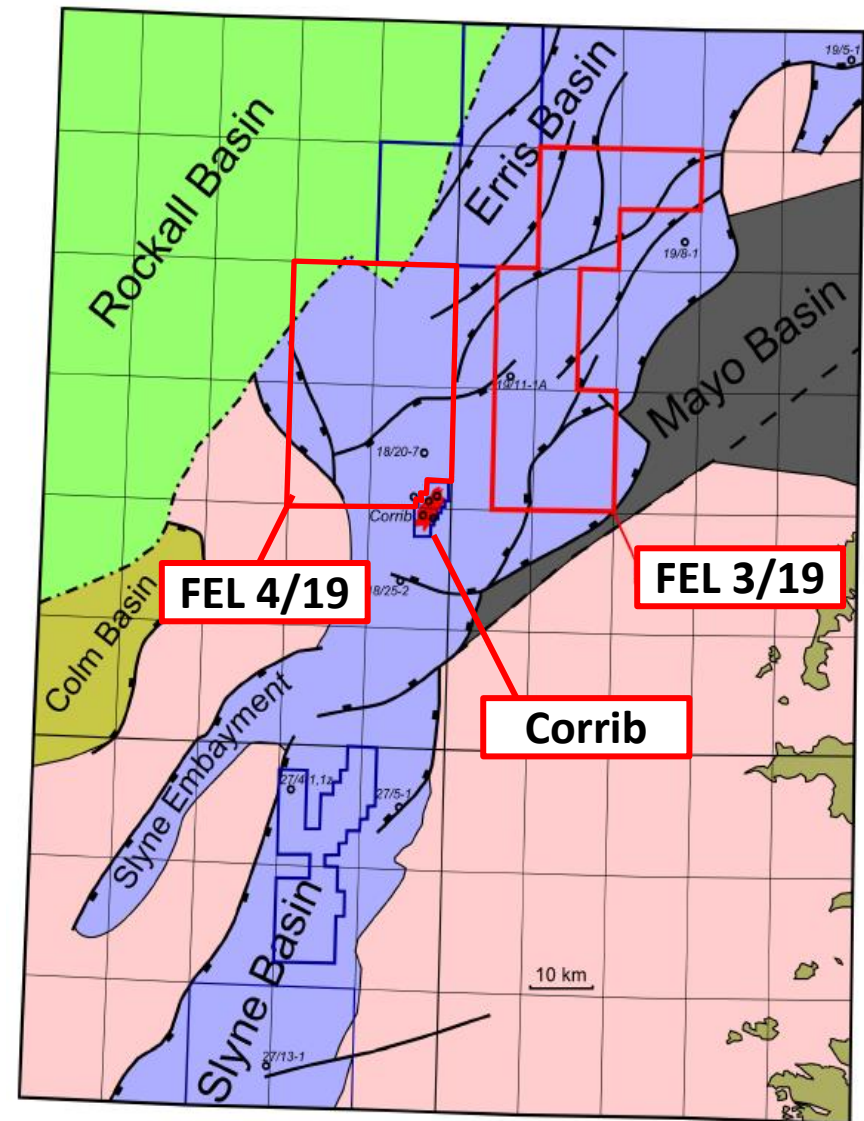
~ billion standard cubic feet

Subject to regulatory approval. After Lawson & Hawkes, Atlantic Ireland, 2016.

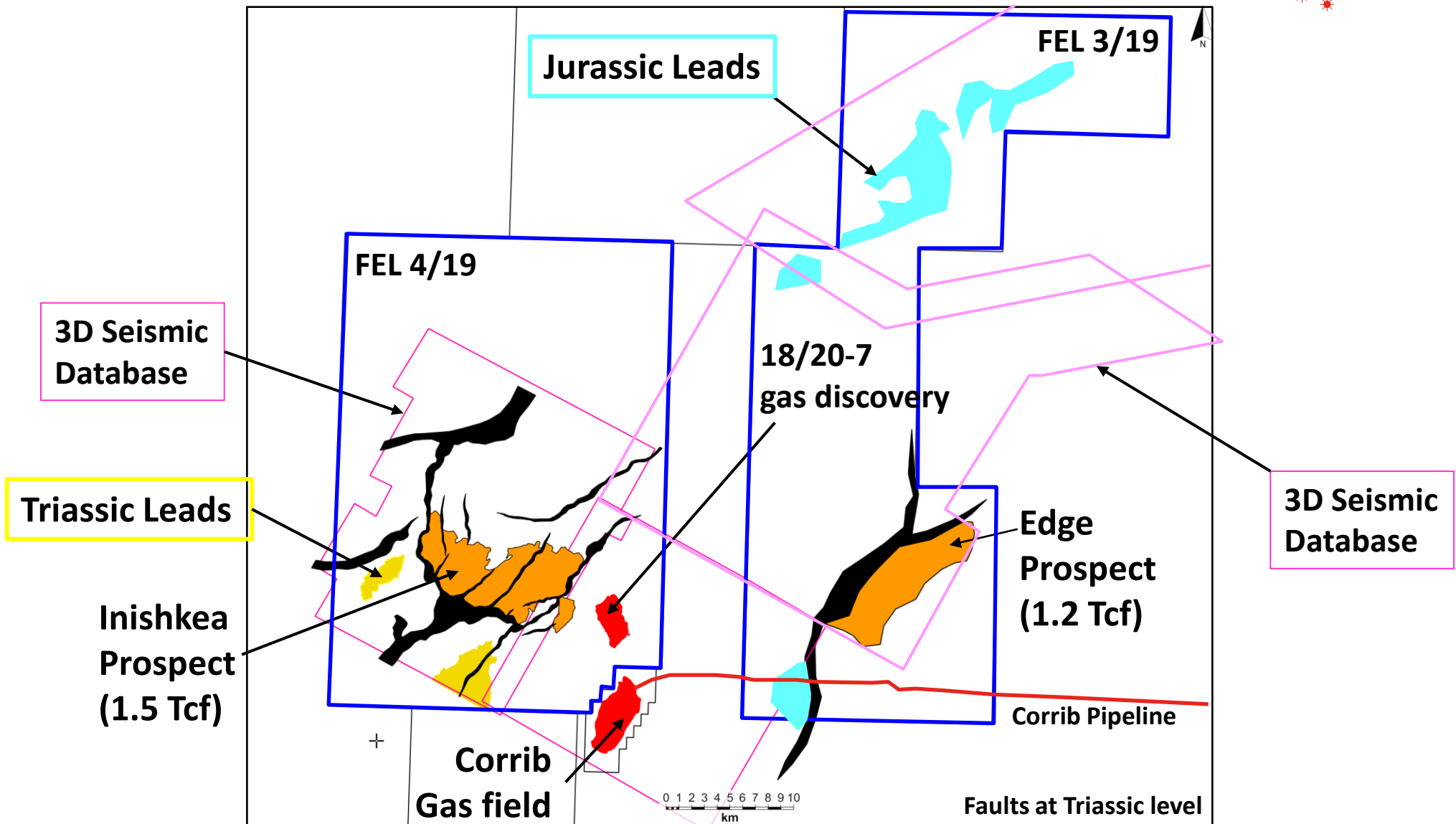
New Acquisition – FEL 3/19

FEL 3/19

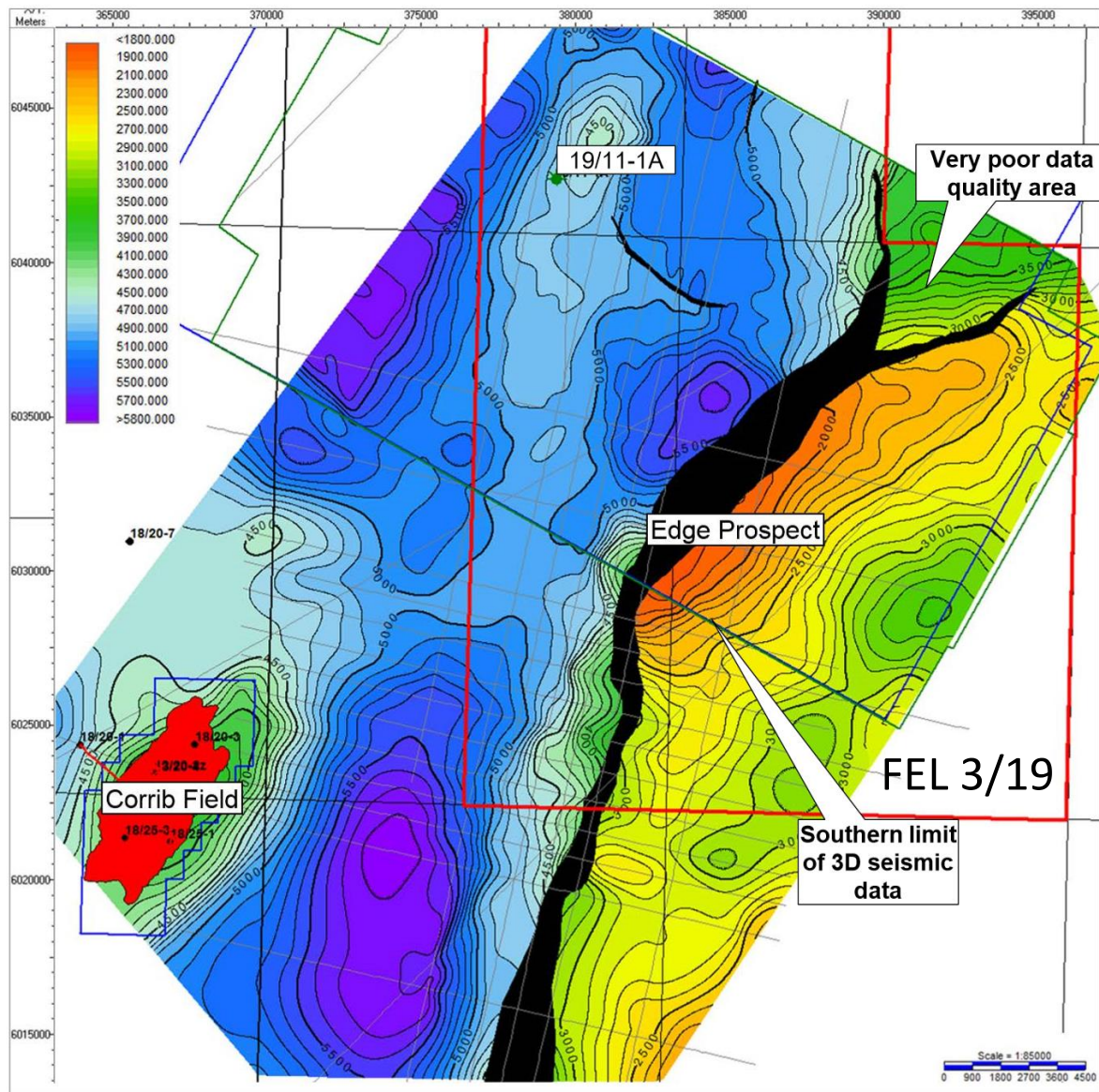
- ❑ Originally LO 16/23 – 960 km² awarded in 2015 Atlantic Margin Round to Faroe Petroleum
- ❑ Converted to FEL 3/19 on 1st July 2019 for a 3-year initial term.
- ❑ *Europa 100% interest holder and Operator
- ❑ All work commitments on FEL 3/19 have been fulfilled
- ❑ Located 18 km from Corrib Gas field, Corrib pipeline passes through FEL 3/19
- ❑ Proven Corrib Sandstone play type, with Mercia Mudstone top seal and Carboniferous source.
- ❑ Edge Prospect is a large rotated fault block, 55km² in area, located in shallow water depths (c. 275m)
- ❑ ~1.2 TCF mean unrisked prospective resources.
- ❑ Dip closed part of prospect entirely covered by 3D seismic recently re-processed with significant uplift
- ❑ Edge prospect is drill ready



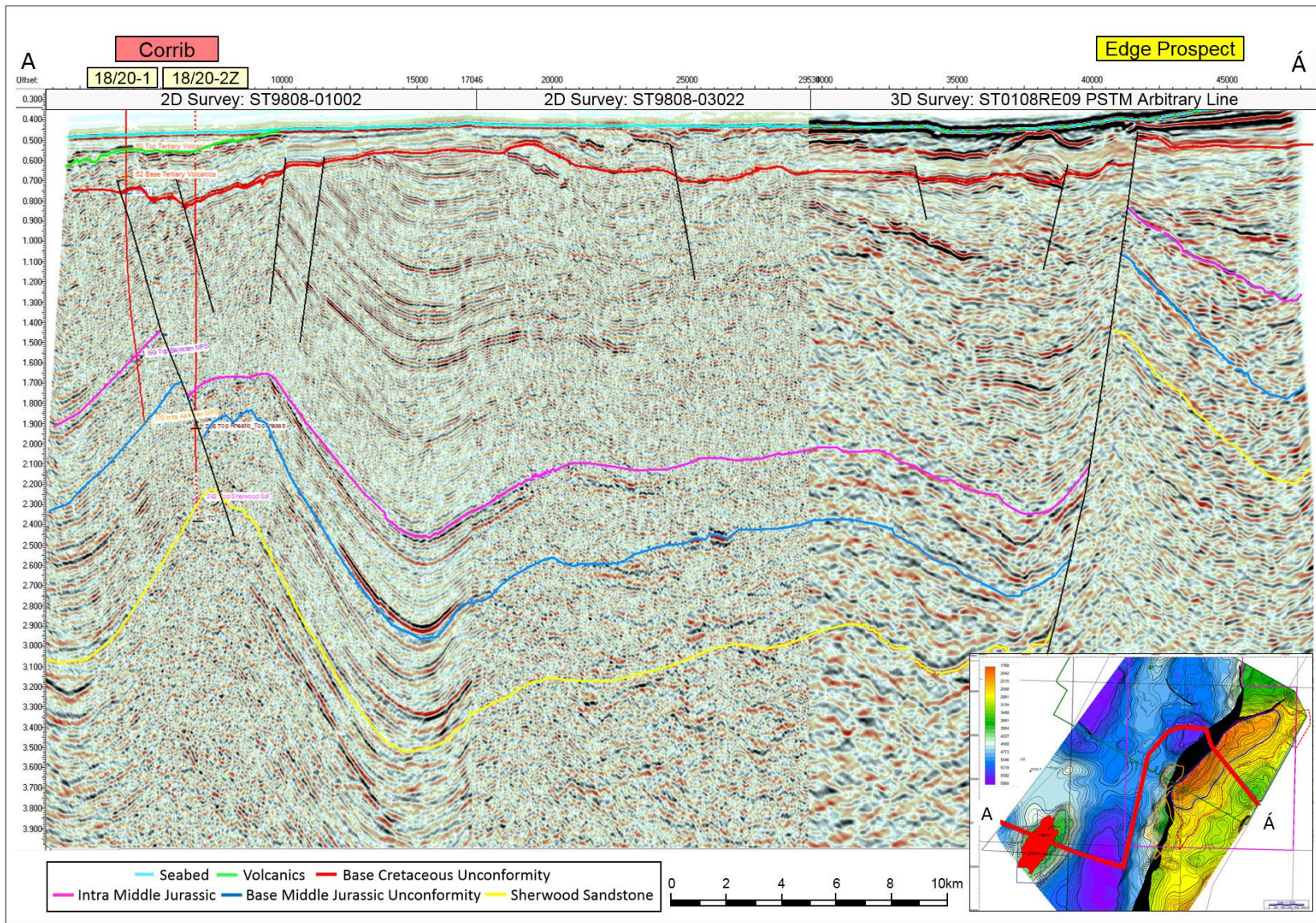
Slyne Basin Core Area – Gas exploration



Corrib Sandstone Depth Map



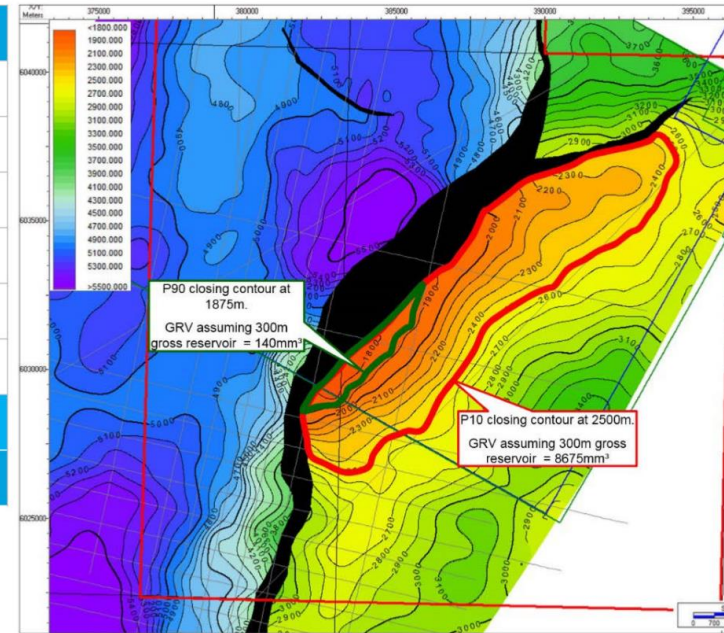
Seismic Line – Corrib to Edge Prospect



After Lawson & Hawkes, LO 16/23, Atlantic Ireland 2016.

Volumes and Risks

Input Parameters	Mean	P90	P50	P10
Gross rock volume (MM m ³)	3519	140	1,102	8,675
Net to Gross (%)	64	39	65	89
Porosity (%)	13	8	13	17
Gas saturation (%)	70	60	70	80
Gas expansion factor (1/Bg)	245	206	245	284
Recovery factor (%)	68	55	69	80
Hydrocarbons in Place (Bcf)	1751	59	494	4,207
Hydrocarbon Reserves (Bcf)	1185	39	330	2,807



- Mean reserves of 1.2 Tcf
- POS of 0.15
- Critical risks on trap definition and seal

After Lawson & Hawkes, LO 16/23, Atlantic Ireland 2016.

Europa – Strategic Focus on Gas



Corrib & Europa's Strategic Position

- ❑ Corrib discovered in 1996 and producing gas since 2015
- ❑ In 2018 Corrib provided 60% of Ireland's gas needs and is expected to decline to 20% by 2025
- ❑ Gas will inevitably be part of Ireland's energy mix for some years to come
- ❑ Europa has two drill-ready, Tcf plus prospects (Inishkea & Edge) close to Corrib and is in a pivotal position to add to Ireland's security of gas supply
- ❑ Europa to relaunch a farmout of its strategic position in the Slyne Basin – FEL 3/19 & 4/19 – in the near future

