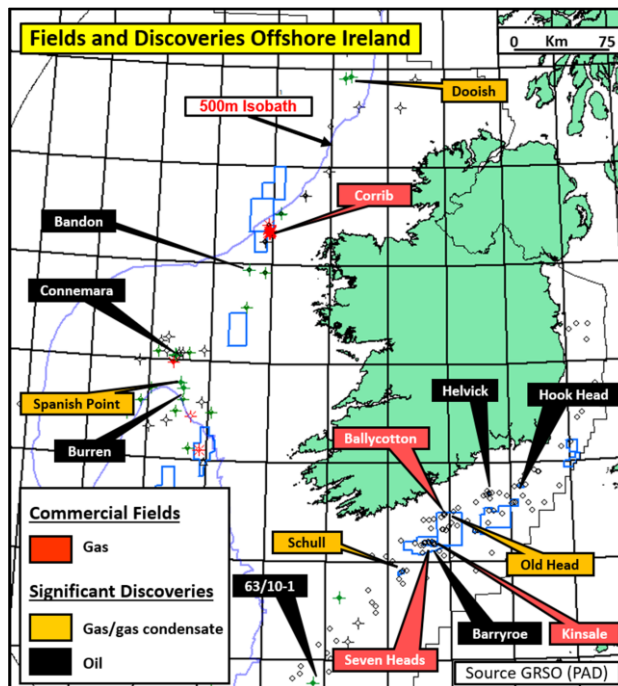
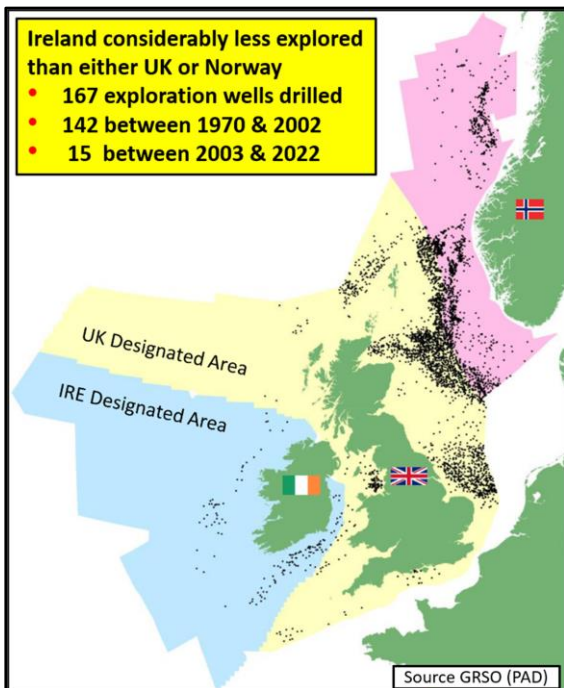


Europa Oil & Gas – Ireland Overview



LEO VARADKAR (Taoiseach)

21 March 2023

“Our view [Irish Government] is that we will continue to need to use natural gas, perhaps for decades.”

“It makes sense to see natural gas as a transition fuel.”

“For so long as we are using natural gas as a transitional fuel, it makes sense to use it rather than to import it.”

“More emissions arise from bringing gas in from other parts of the world than from using our own gas if we have it.”

MACRO-ENVIRONMENT

- 1/3 of Ireland’s overall energy needs, and over half its electricity, is derived from gas
- Corrib gas field provides about 30% of Ireland’s annual natural gas requirement with a world-class low emission profile
- Obvious shortfall of domestically produced gas in Ireland as Corrib production declines year on year
- Irish fiscal terms remain globally competitive

EMISSIONS

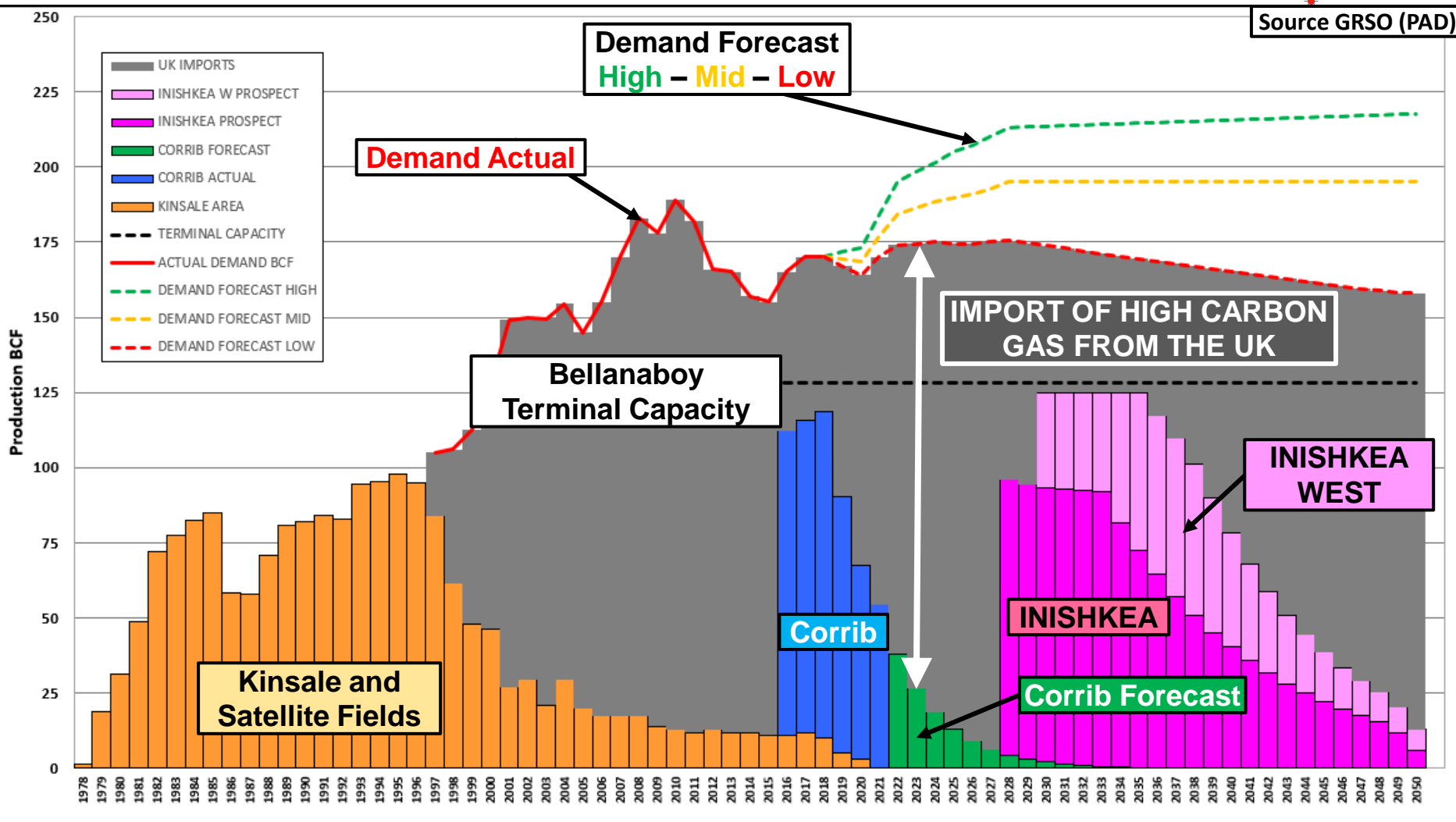
- Average emissions intensity for Corrib gas is 5kg CO₂e/boe
- For Inishkea, emissions intensity is 2.8kg CO₂e/boe
- Average imported emissions intensity
 - Gas from UK is 36kg CO₂e/boe
 - LNG from the USA would be 145kg CO₂e/boe
- Production from Inishkea would reduce Ireland’s absolute emissions by over 50%

Europa Oil & Gas

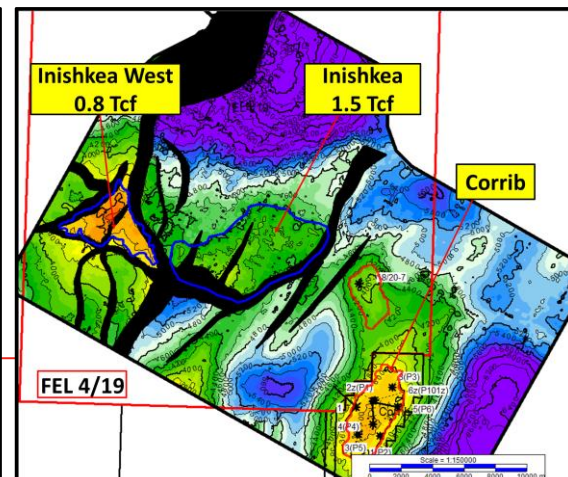
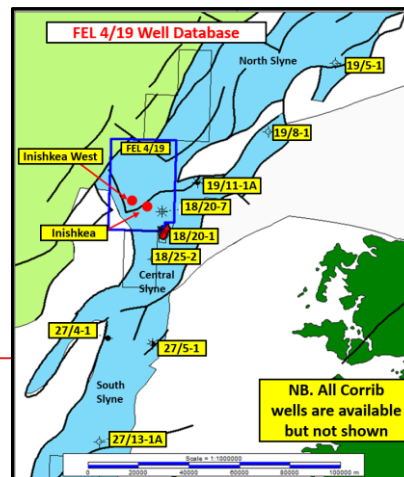
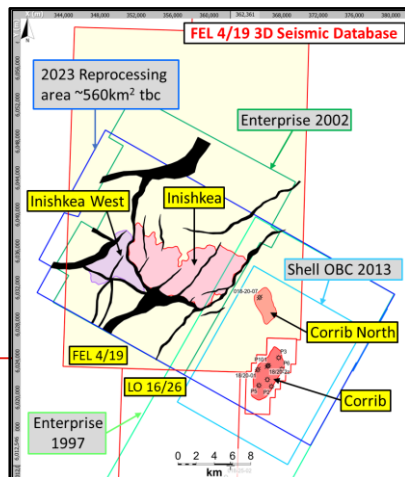
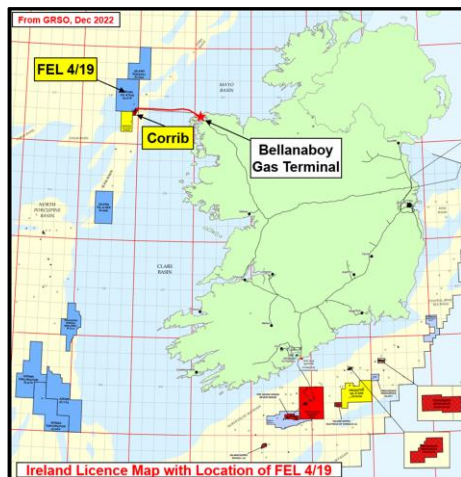
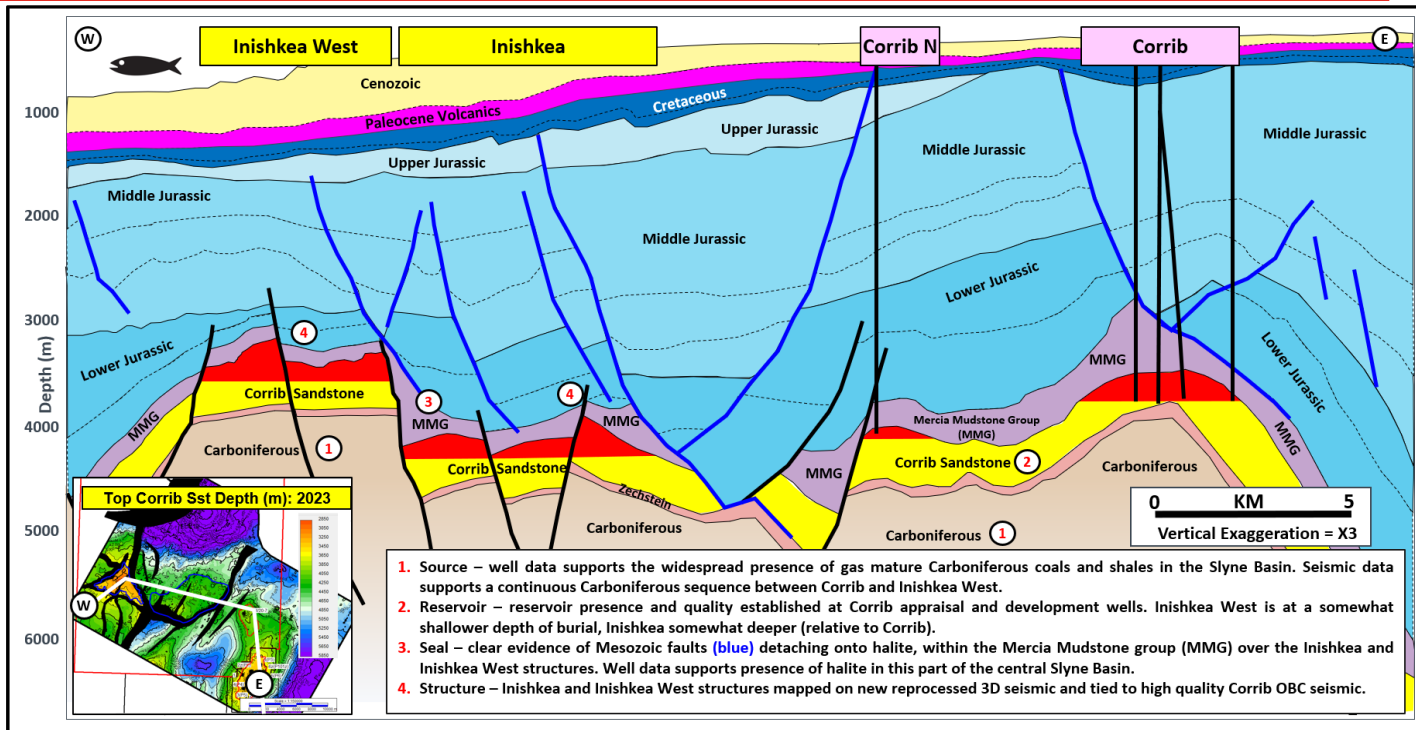
Ireland's Annual Gas Supply & Demand



Source GRSO (PAD)

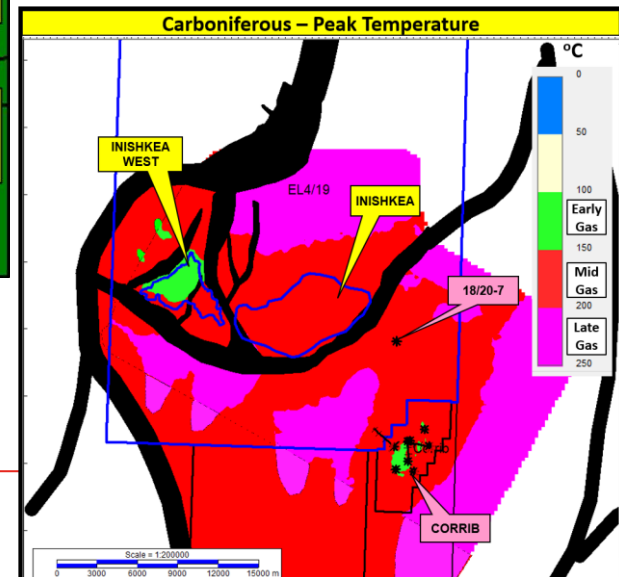
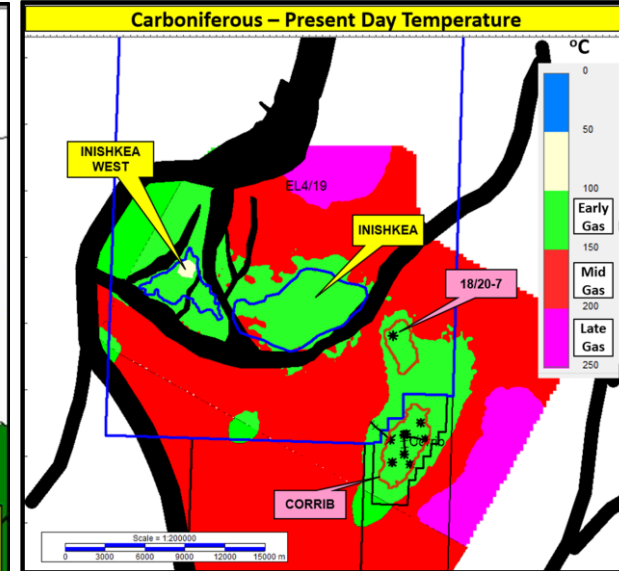
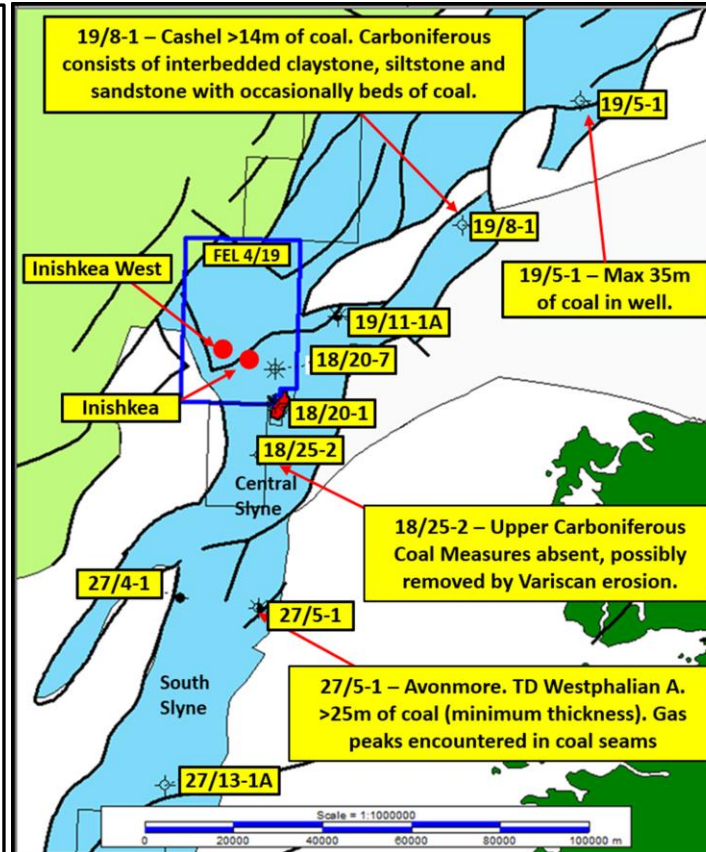


Europa Oil & Gas – Regional Material

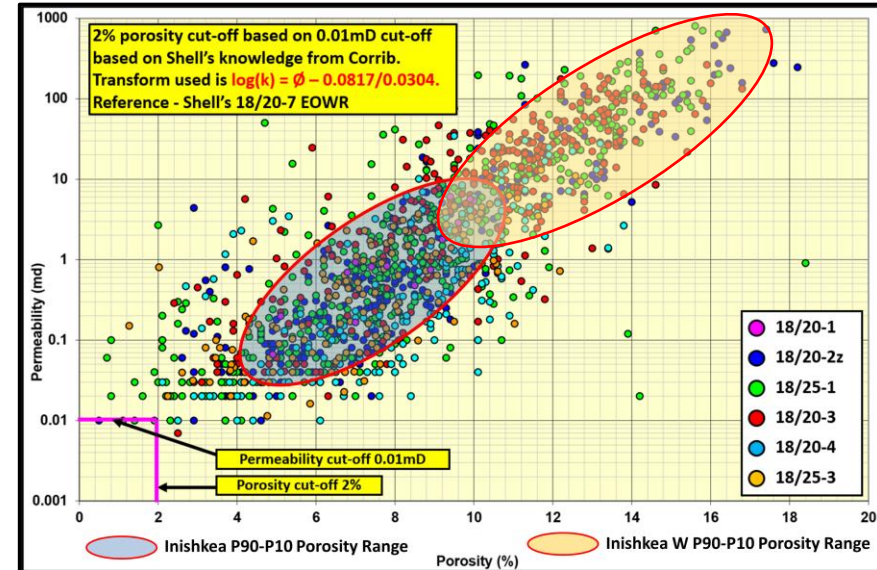
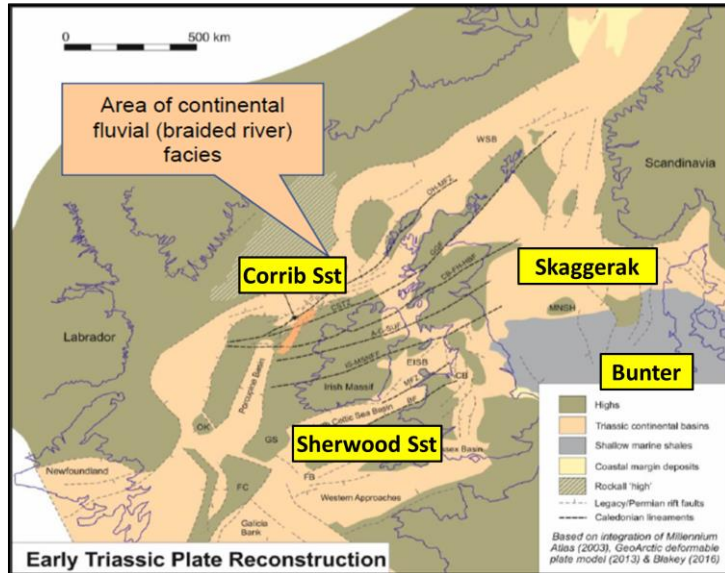


Europa Oil & Gas – Source & Maturity

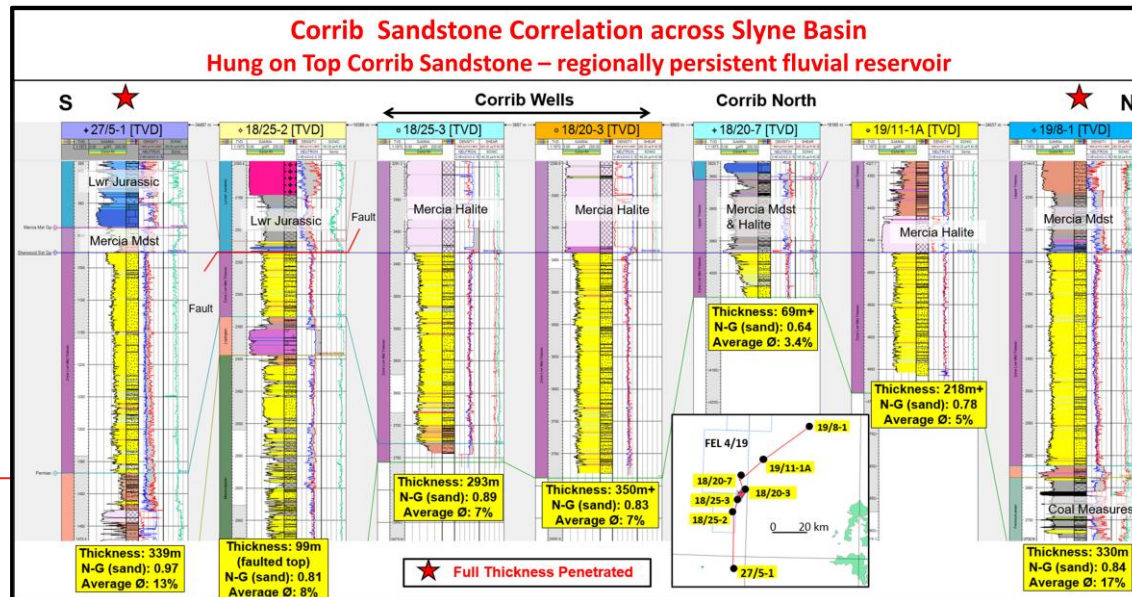
- Dry Gas at Corrib is consistent with mature, gas prone humic coals in the Westphalian Coal measures
- Wells on the flank of the basin have drilled the Carboniferous : 27/5-1, 19/8-1 & 19/5-1 wells
- Also drilled extensively in the East Irish Sea
- Most wells TD in the Carboniferous so the full Carboniferous thickness is unknown
- Based on Southern North Sea wells the coals comprise approximately 3% of the total 1-3km of Coal Measures
- Gas proven in Corrib and Corrib North.
- Chance of maturity of source rocks (coals) present in Inishkea & Inishkea West fetch areas considered to be 100%



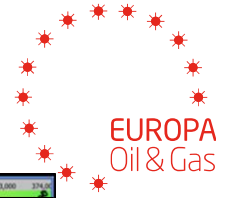
Europa Oil & Gas – Reservoir



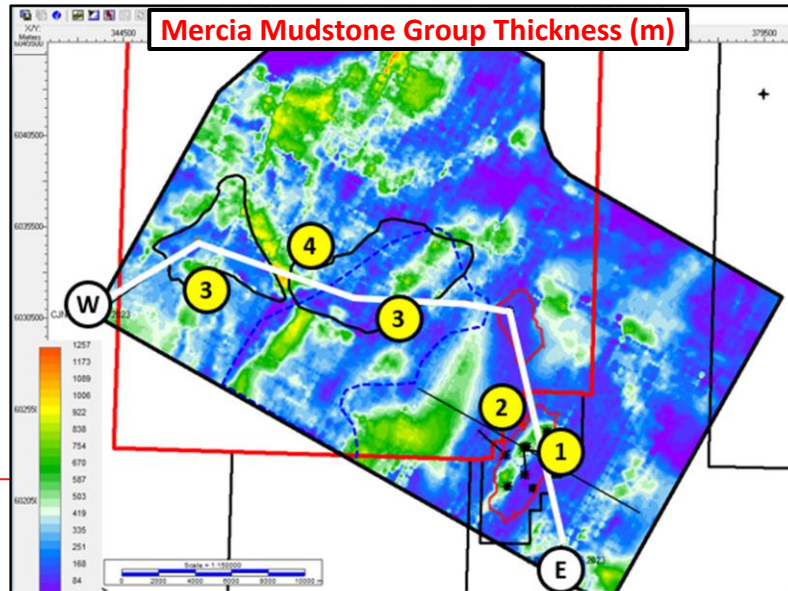
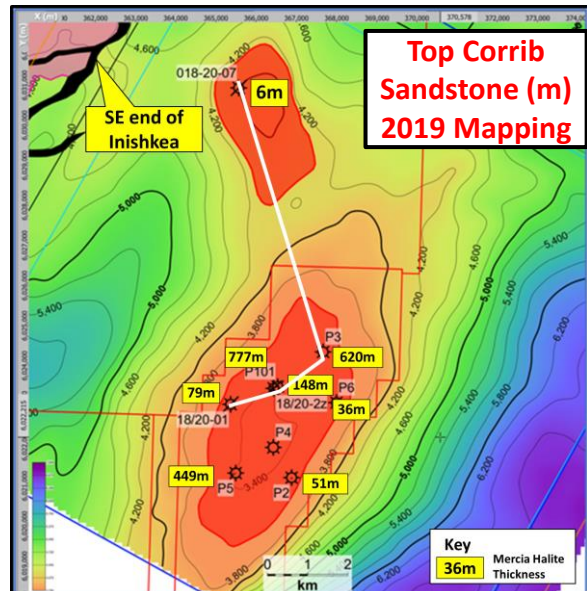
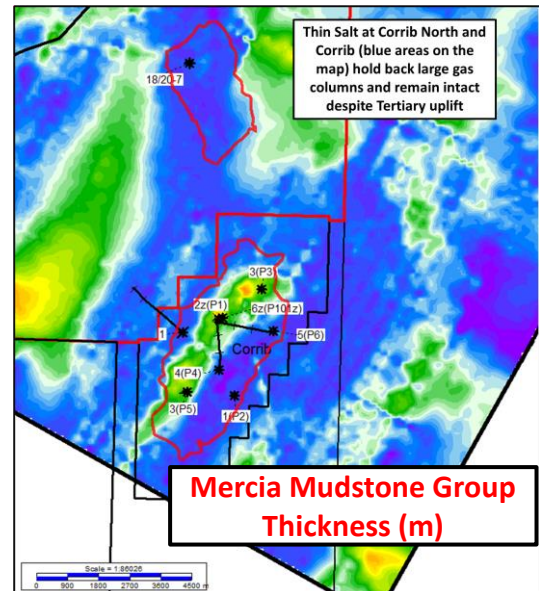
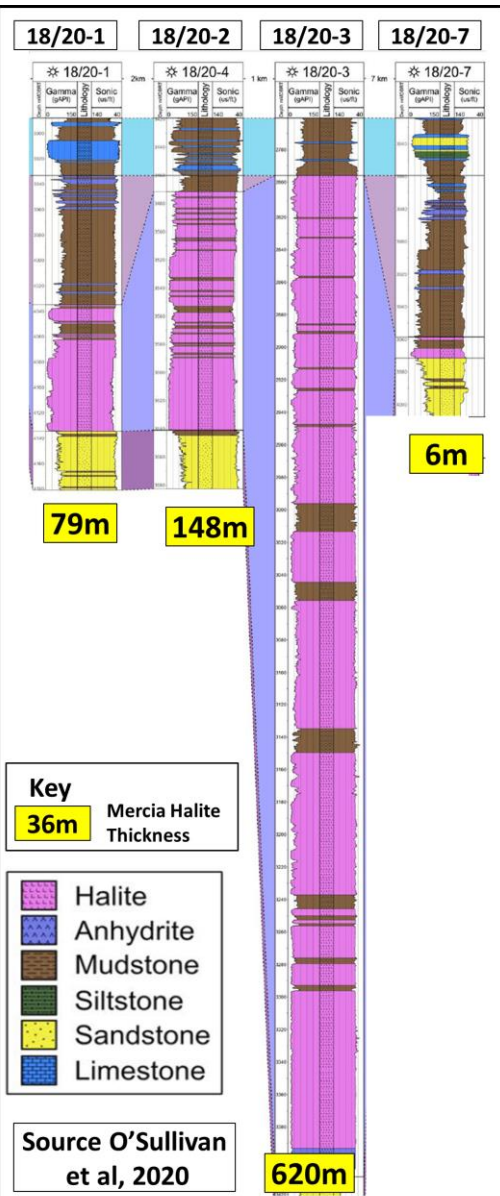
- Corrib Sandstone comprising braided fluvial channels and sand bars
- High net to gross (86% in Corrib) and well connected sand system
- Average Porosity in Corrib is 8.5% up to 18%
- Average K is 15.2mD up to 806mD
- High perm streaks are responsible for high flow rates seen on DSTs and in production



Europa Oil & Gas – Seal

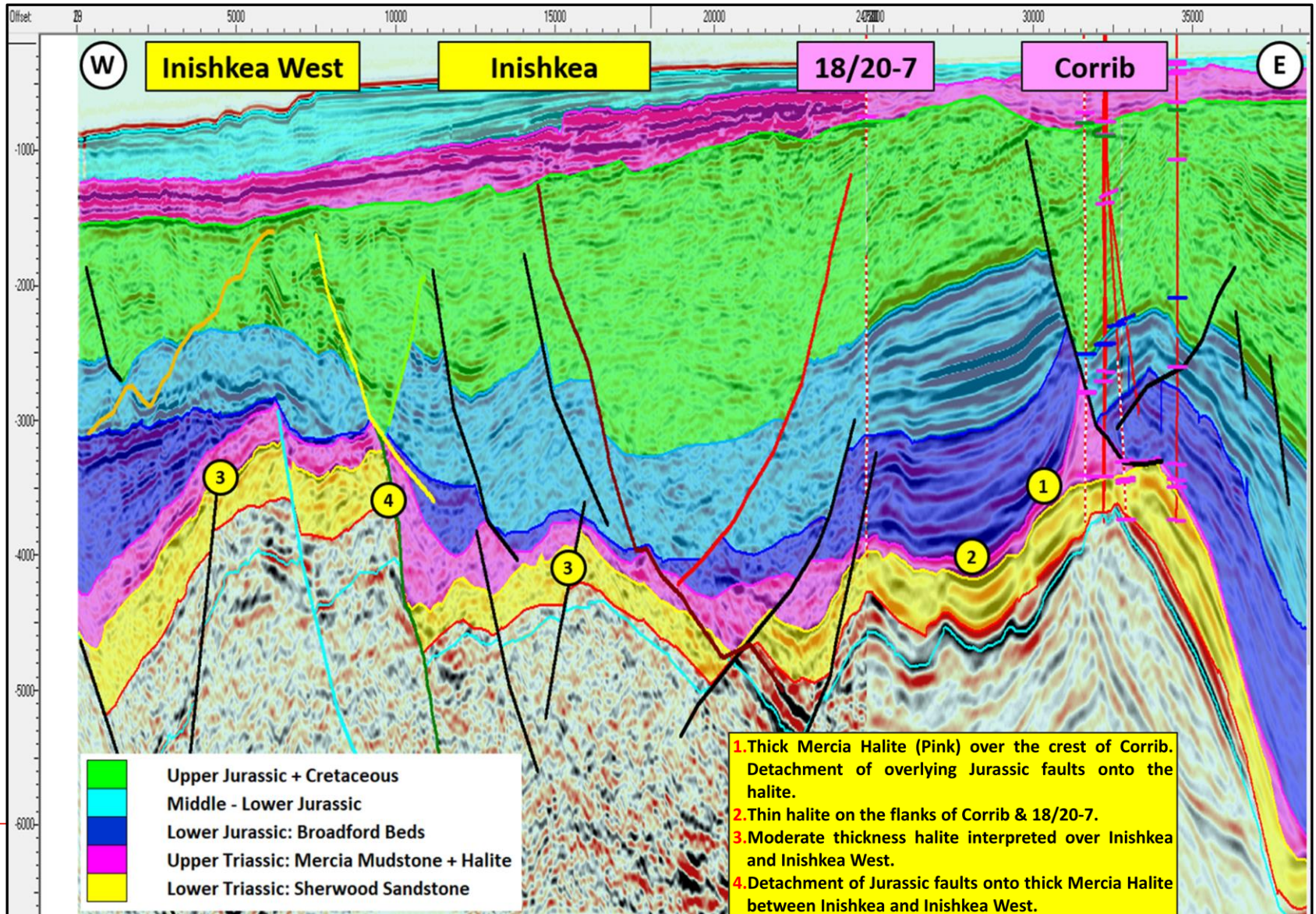


EUROPA
Oil & Gas



1. Thick Mercia Halite (Pink) over the crest of Corrib. Detachment of overlying Jurassic faults onto the halite.
2. Thin halite on the flanks of Corrib & 18/20-7.
3. Moderate thickness halite interpreted over Inishkea and Inishkea West.
4. Detachment of Jurassic faults onto thick Mercia Halite between Inishkea and Inishkea West.

Seismic Line from Inishkea West to Corrib showing Halite Interpretation



Failure Analysis



RISK	KEY
Trap	Trap Presence
Seal	Seal Presence/Effectiveness
Res P	Reservoir Presence
Res Q	Reservoir Quality
SR P	Source Presence
SR Mat	Source Maturity
Mig	Migration

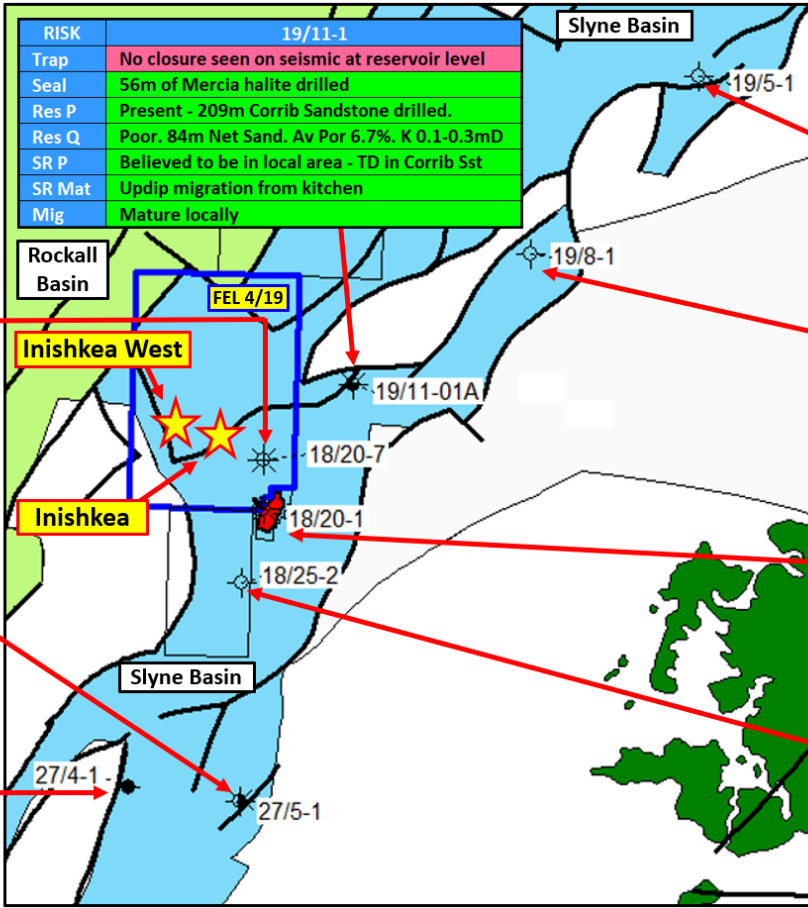
Key:

■	Proven
■	Uncertain
■	Failure

RISK	18/20-7
Trap	Valid - anticlinal closure seen on seismic
Seal	6m of Mercia Halite present
Res P	Present - 73m drilled. TD in formation
Res Q	Poor reservoir. 29.5m Net. Por 3.4%. K 0.036mD
SR P	Carboniferous coals in local area
SR Mat	73m gas column in well
Mig	Carboniferous kitchens mature locally

RISK	27/5-1
Trap	No closure on seismic
Seal	No halite
Res P	Gross thickness 402m.
Res Q	V good. N:G 65%. Av Por 22.7%
SR P	>25m of coals drilled. Gas peaks in coals.
SR Mat	>25m of coals drilled. Gas peaks in coals.
Mig	Not mature in well

RISK	27/4-1
Trap	Trap deeper than mapped. Dubious closure.
Seal	Halite absent. Large throw on fault.
Res P	Present - 127m drilled. TD in Formation
Res Q	Good. N:G 72%. Av Porosity 13.3%
SR P	Carboniferous coals in local area (27/5-1 well)
SR Mat	Probable from downdip kitchen
Mig	Probable in downdip kitchen



RISK	19/11-1
Trap	No closure seen on seismic at reservoir level
Seal	56m of Mercia halite drilled
Res P	Present - 209m Corrib Sandstone drilled.
Res Q	Poor. 84m Net Sand. Av Por 6.7%. K 0.1-0.3mD
SR P	Believed to be in local area - TD in Corrib Sst
SR Mat	Uppdip migration from kitchen
Mig	Mature locally

RISK	19/5-1
Trap	Valid structure
Seal	No Mercia Mudstone Group. No halite
Res P	Present - 254m Gross Corrib Sandstone
Res Q	Very good. 164m Net. Por - 16-21%
SR P	Carboniferous Coals drilled with gas shows
SR Mat	No gas generated
Mig	Carboniferous immature and thin. No Gas Shows

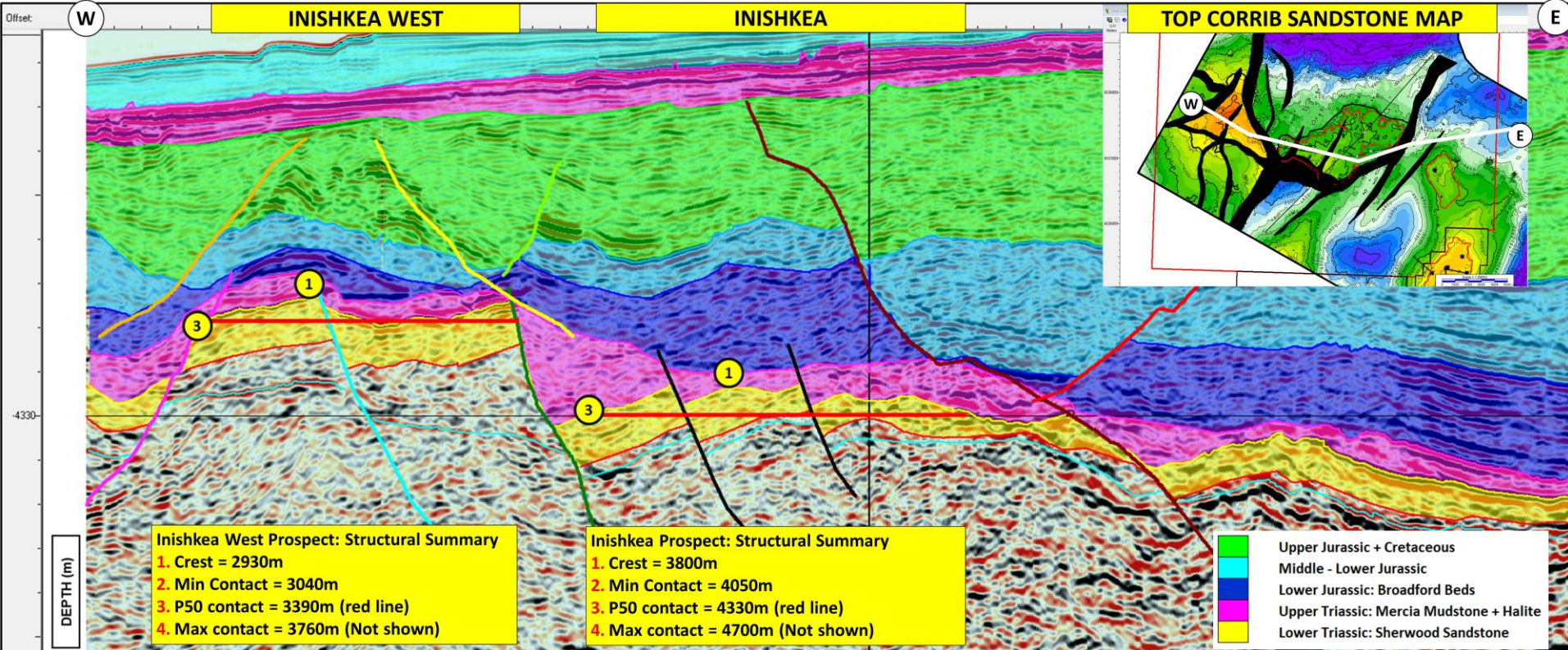
RISK	19/8-1
Trap	No closure seen on seismic at reservoir level
Seal	7m of Mercia halite present
Res P	330m Gross Corrib Sandstone
Res Q	V good. 95% N:G, Av Por 16.5%. K 293-338mD
SR P	Good. 14m of coals drilled (not full section)
SR Mat	Possible but longer distance migration required
Mig	Unlikely locally. Mature more regionally.

RISK	Corrib
Trap	Valid - anticlinal closure seen on seismic
Seal	Significant thickness of Mercia halite present
Res P	Thickness up to 350m+
Res Q	Good. N:G >80%. K up to 800mD in places
SR P	Not drilled locally but present in offset wells
SR Mat	1 TCF gas field
Mig	Ringed by mature Carboniferous kitchens

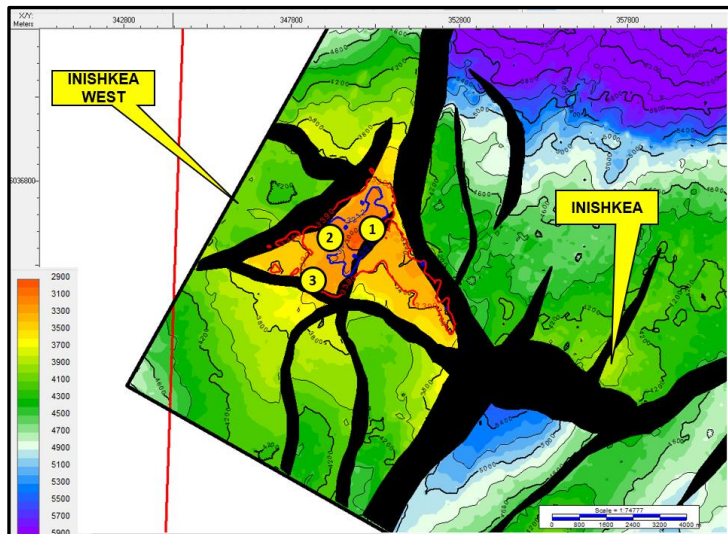
RISK	18/25-2
Trap	Valid - closure seen on seismic
Seal	Mercia Mudstone Group faulted-out. No halite
Res P	Only Lower Corrib Sandstone present
Res Q	Okay
SR P	Coal Measures absent in well
SR Mat	Probable
Mig	Carboniferous mature locally

Key Success Factor: presence of halite seal. Key failure factors: Absence of halite and/or valid trap

Seismic Line through Inishkea West & Inishkea



Inishkea West Prospect



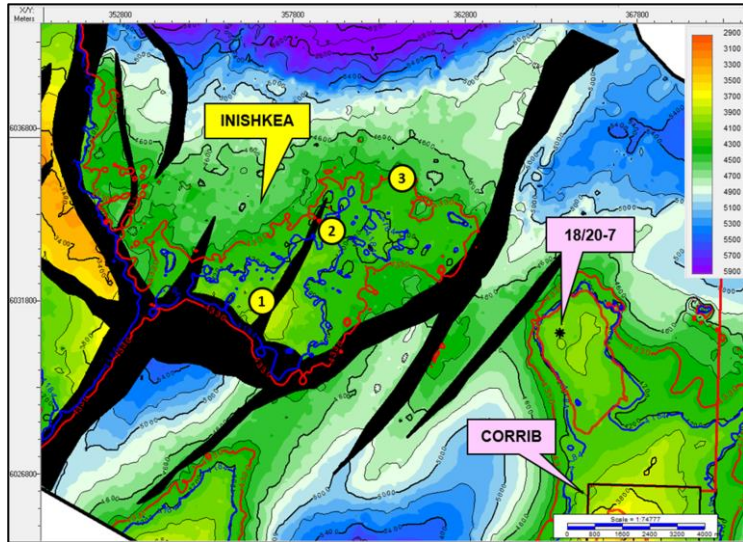
Inishkea West	P99	P90	P50	P10	P1	Distribution Used
GRV million m3	Area-Depth in km ² from grid surface 2940-3760m					NA
Thickness (m)	180	228	275	314	350	Beta
Spill point/Closing Contour (m)	3040	3212	3390	3576	3760	Beta
Area Uncertainty (%)	73	85	100	115	127	Beta
Net to Gross (%)	45	68	86	93	99	Beta
Porosity (%)	9.5	11.4	14.5	18.2	22.0	Beta
Sg (%)	55	65	75	85	95	Beta
GEF (scf/cf)	230	240	250	260	270	Beta
Recovery Factor (%)	55	62	70	78	85	Beta

Inishkea West *	P99	P90	P50	Pmean	P10	P1
GIIP (BCF)	71	205	924	1155	2426	3827
Prospective Resource (BCF)	49	143	644	809	1702	2720

* EOG volumetric analysis

Inishkea West Risk Elements	COS	Evidence
Trap	Green	Well Defined trap
Reservoir Presence	Green	Reservoirs omnipresent across the basin
Reservoir Effectiveness	Green	Relatively shallow present day and at maximum burial
Seal	Orange	Uncertainty on presence of halite top seal
Source Rock Presence	Green	Gas in Corrib & Corrib North Wells
Source Rock Maturity	Green	Fetch area is mature and has expelled large quantities of gas
Migration	Green	Updip migration into prospect (prospect is a regional high)
Overall Chance of Success	~1 in 3	Key Risk = Seal (halite presence)

Inishkea Prospect



Inishkea	P99	P90	P50	P10	P1	Distribution Used
GRV million m3	Area-Depth in km ² from grid surface 3700-3950m					NA
Thickness (m)	180	228	275	314	350	Beta
Spill point/Closing Contour (m)	4050	4184	4330	4512	4700	Beta
Area Uncertainty (%)	73	85	100	115	127	Beta
Net to Gross (%)	45	68	86	93	99	Beta
Porosity (%)	3.0	4.3	6.7	10.5	15.0	Beta
Sg (%)	55	65	75	85	95	Beta
GEF (scf/cf)	270	280	290	300	310	Beta
Recovery Factor (%)	35	50	65	80	95	Beta

Inishkea *	P99	P90	P50	Pmean	P10	P1
GIIP (BCF)	177	500	1805	2257	4489	7847
Prospective Resource (BCF)	113	314	1154	1469	3045	5509

* EOG volumetric analysis

Inishkea Risk Elements	COS	Evidence
Trap	Orange	Trap is moderately well defined
Reservoir Presence	Green	Reservoir omnipresent across the basin
Reservoir Effectiveness	Orange	Some uncertainty reservoir quality despite uplift model
Seal	Orange	Uncertainty on presence of halite top-seal
Source Rock Presence	Green	Gas in Corrb & Corrib North wells
Source Rock Maturity	Green	Fetch area is mature and has expelled large quantities of gas
Migration	Green	Updip Migration into prospect
Overall Chance of Success	1 in 5/1 in 4	Key Risk = Seal (halite presence)/Reservoir/Trap

Opportunity Summary



- Europa Oil & Gas has a 100% operated interest in FEL 4/19 with a material position available
- Europa is seeking a carry on the drilling of the Inishkea or Inishkea West Prospect plus back-costs
- Two low-risk prospects within the same world-class gas play as the Corrib and the Morecambe Bay gas fields
- Two large gas prospects that are in easy tie-back range to the Vermilion operated Corrib field
 - Inishkea: 1.5 TCF (Pmean) – well defined large 3 way fault bounded prospect
 - Inishkea West: 0.8 TCF (Pmean) mapped structural high immediately west of Inishkea
- Stunning economics:
 - Inishkea & Inishkea West have a post-tax NPV₁₀ of \$2.8 billion and \$1.6 billion respectively for the P₅₀ prospective resource cases
 - Minimum economic field size <100BCF
- Increasing Government and Public awareness in Ireland over the security of gas supply.