

# ORCADIAN PORTFOLIO

February 2026

ORCADIAN  
ENERGY

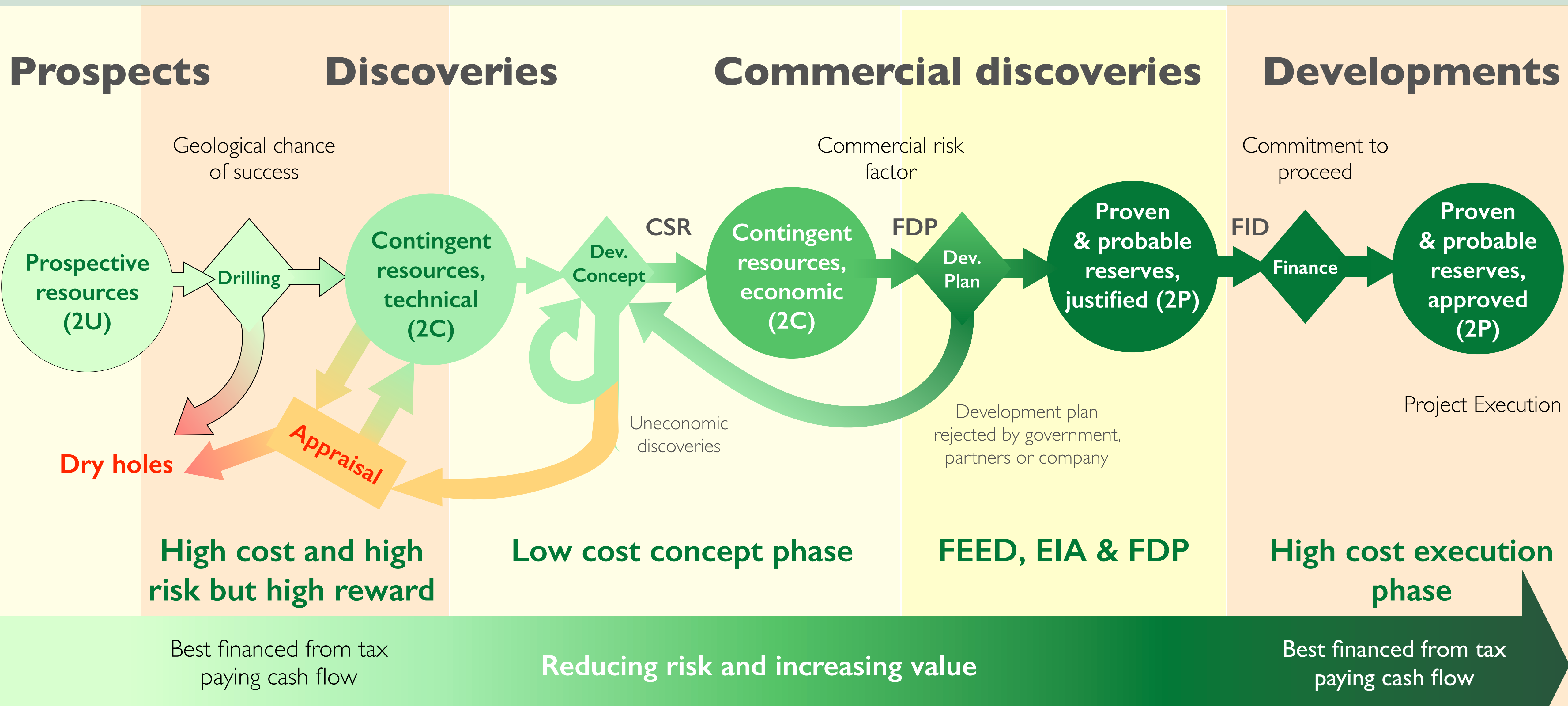


- **Licence discoveries**
  - Build the portfolio by licensing discoveries or making low cost acquisitions
  - Prefer a fully appraised field that cries out for innovation, to a great exploration prospect (but don't ignore excellent prospects)
- **Preference is for fields with great rocks, and to innovate around tricky fluids**
  - All the discoveries with great rocks and easy fluids have gone or are too small
  - Viscous oil, sour oil, high inerts and low pressure gas
- **Target post-transition hydrocarbons**
  - Gas, preferably Gas-to-Wire with CCS
  - Heavy oils with potential to create more than combustion products



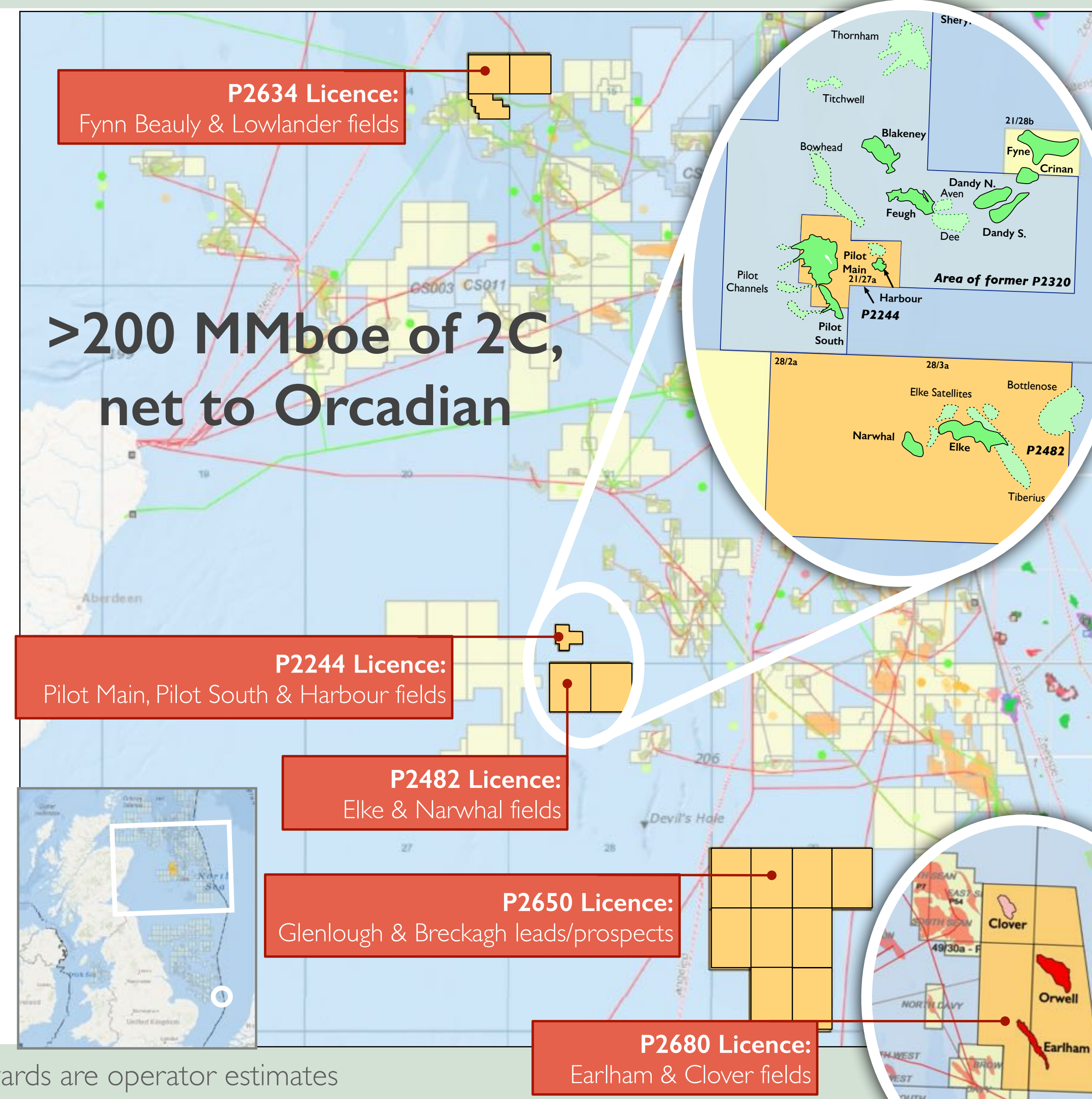
**Net Zero at lowest cost**

# Orcadian's core capability: transforming resources into reserves



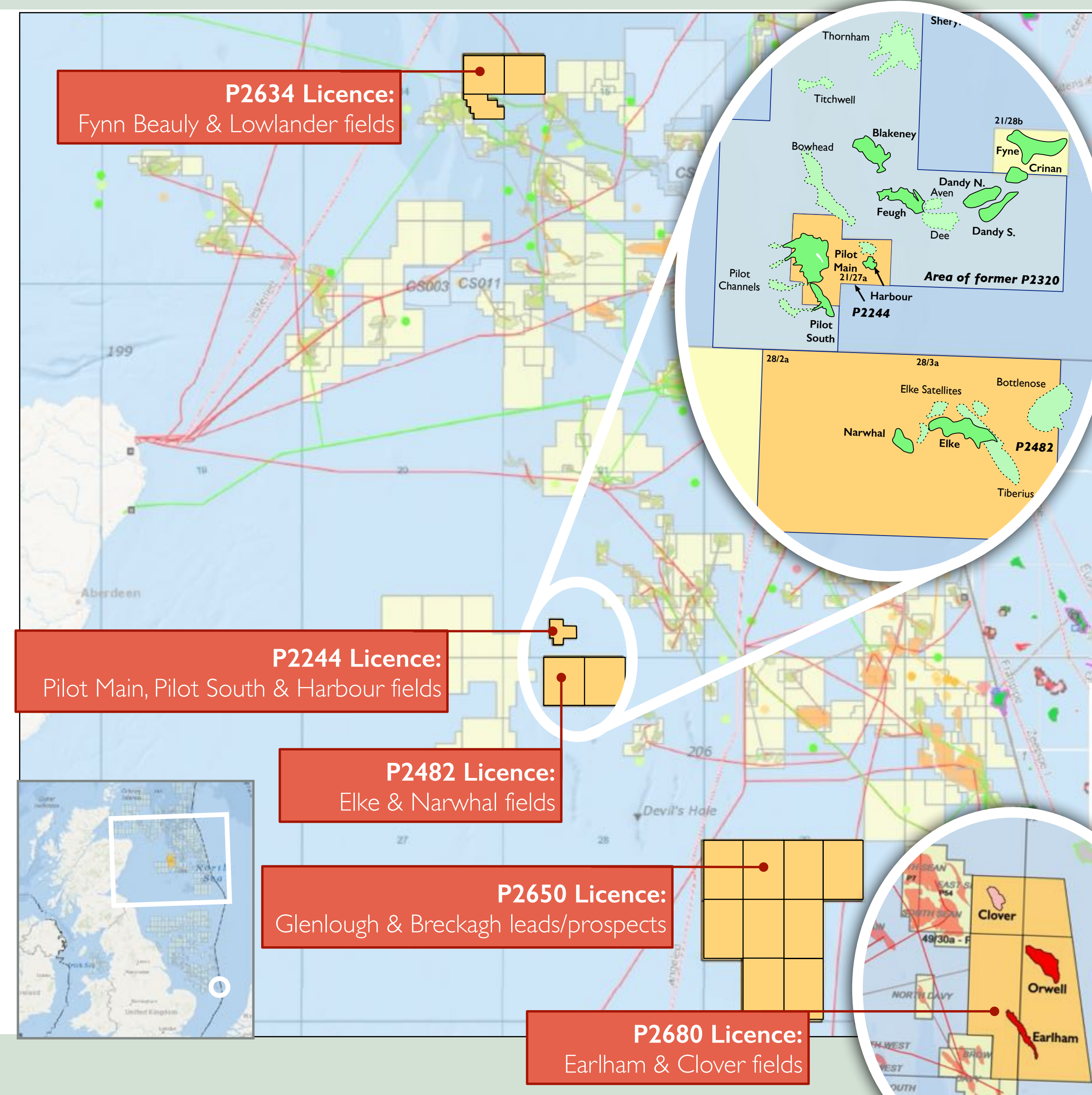
# Orcadian North Sea licence portfolio

- **Orcadian's 18.75% share in the Pilot field development carried by Ping Petroleum UK plc until first offload of production**
  - Pilot oilfield had a substantial audited reserve: 79 MMbbl 2P reserves (Sproule)
  - Post farm-out 13.6 MMbbl 2C net to Orcadian (net of royalty and carry repayment; also reclassified to be consistent with Ping)
- **Earlham & Clover (100%)**
  - An appraised, high CO<sub>2</sub> discovery with 114 bcf of sales gas (Earlham), a compelling prospect with 153 bcf of prospective resources (Clover), a c. 30bcf redevelopment opportunity in Orwell
- **Fynn and Lowlander (50%)**
  - Fynn is a viscous oil discovery with nearly 300 MMbbls recoverable
  - Lowlander is a well appraised sour oil discovery with resources in the low to mid twenties
- **Elke and Narwhal (100%)**
  - 53 MMbbl of contingent resources, Elke satellite exploration and appraisal targets contain over 50 MMbbl with high chance of success
- **Mid North Sea High (50%)**
  - Shallow gas prospects with c. 269 bcf prospective resource of gas in two high-graded prospects



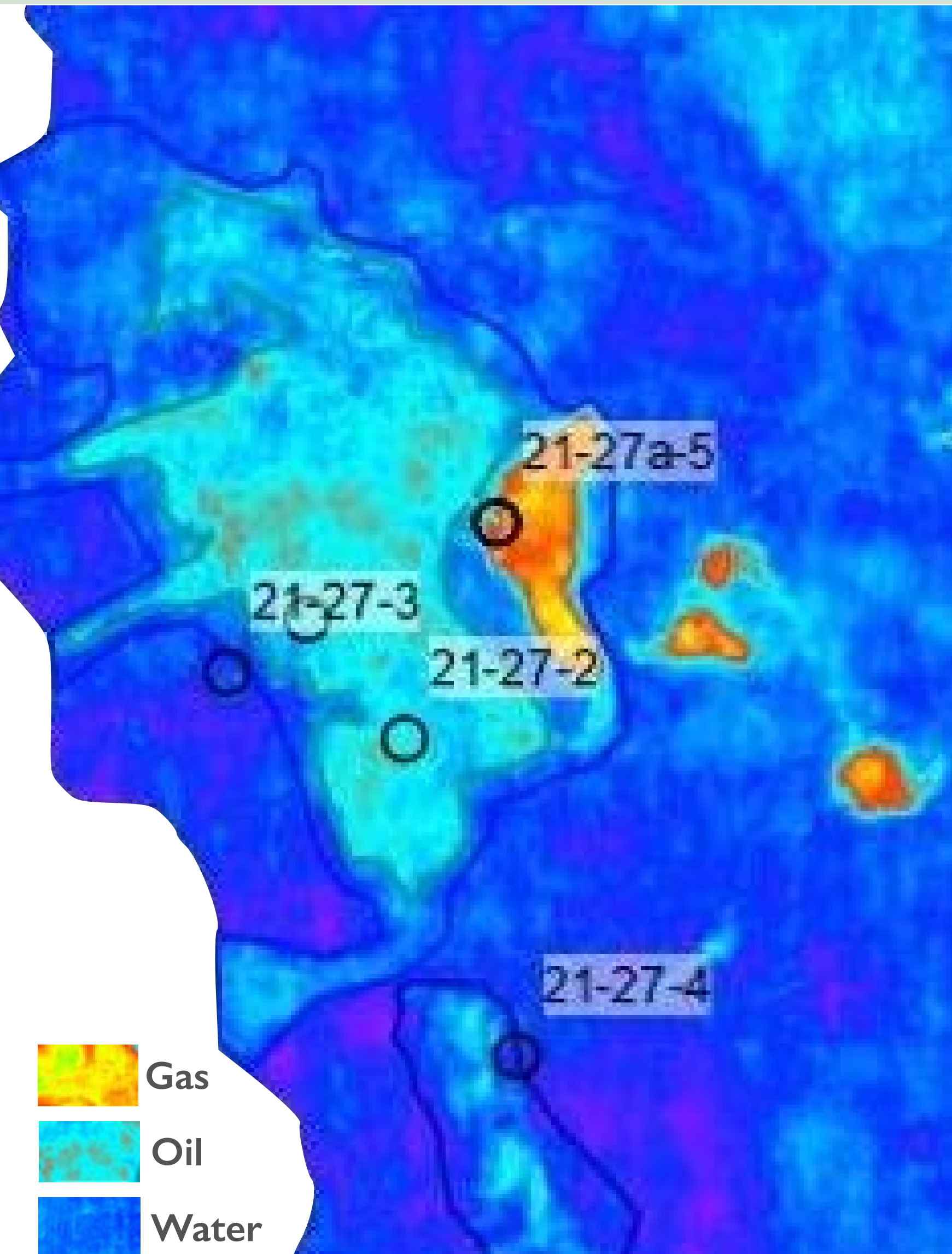
# Orcadian North Sea licences

- **Viscous Oil:**
  - **Western Platform**
    - **Pilot - P2244 (18.75% carried interest)**
    - Elke & Narwhal - P2482 (100%)
  - **Outer Moray Firth**
    - Fynn Beaully - P2634 (50%)
- **Sour light oil:**
  - Lowlander - P2634 (50%)
- **Gas:**
  - **Southern North Sea**
    - Earlham & Clover - P2680 (100%)
  - **Mid North Sea High**
    - P2650 (50%)

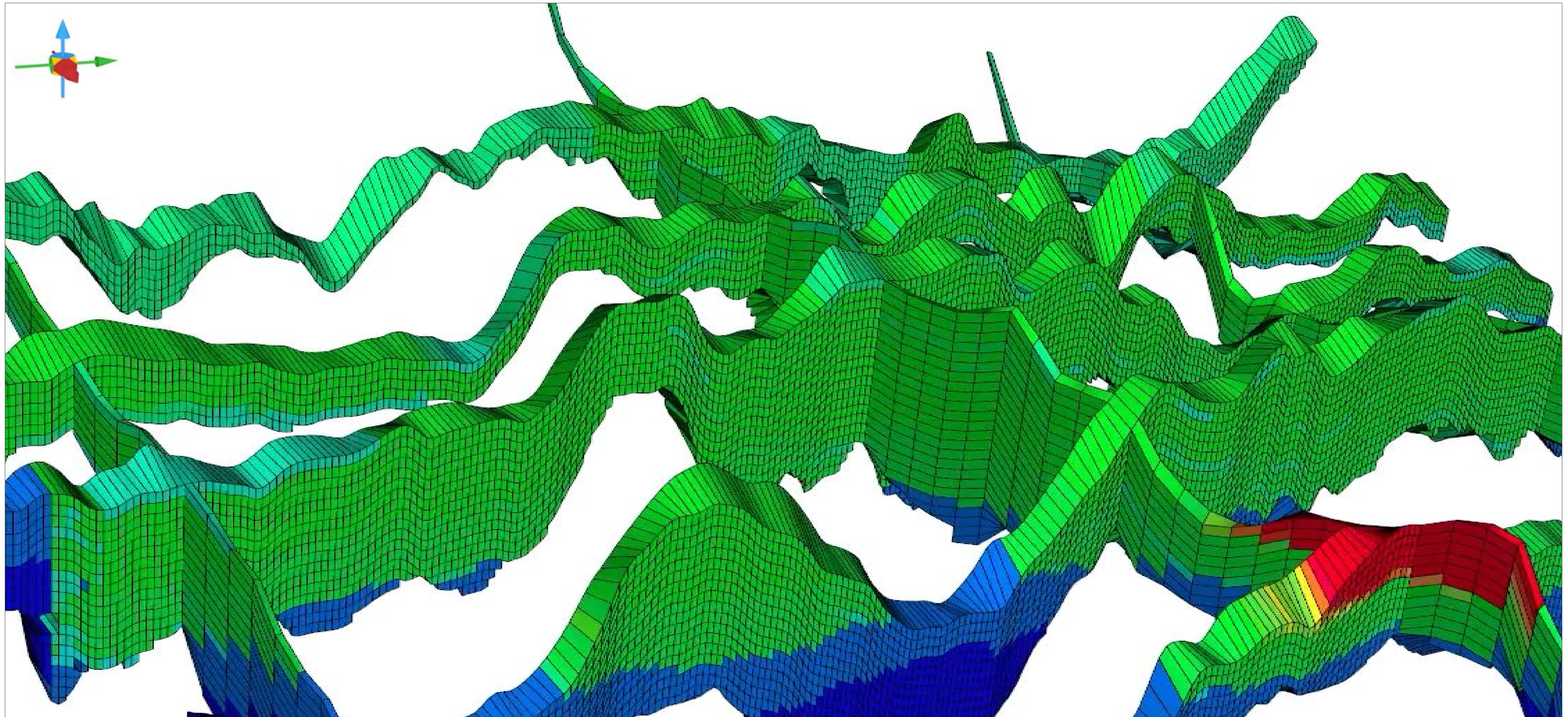


Pilot	Parameter	Units
Oil water contact	2724	feet
Oil column	>100	feet
Gross sand thickness	50-60	feet
Net to gross ratio	0.95	fraction
Porosity	0.34	fraction
Water saturation	< 0.10	fraction
Permeability	2 to 8	Darcies
Oil gravity	12° - 17°	API
Oil viscosity	c. 400	cP
Gas-Oil ratio	80	scf/bbl
Reservoir Temp.	31	°C
Salinity	72,000	ppm

- Pilot Main discovered by Fina in 1989, fields appraised by five wells, plus two sidetracks/horizontals, Pilot South discovered in 1990; two 3D surveys
- Six wells were cored, three wells were tested including a relatively short horizontal well that tested at rates over 1,800 bopd
- Oil in place of 263 MMbbls; polymer flood delivers **recovery factor of c. 40% in developed area** (2P gross: 78.8 MMbbls)
- **Ithaca has enjoyed “consistent success [applying polymer flood] across the Captain field”**



# Pilot Main polymer model Viewed from ESE



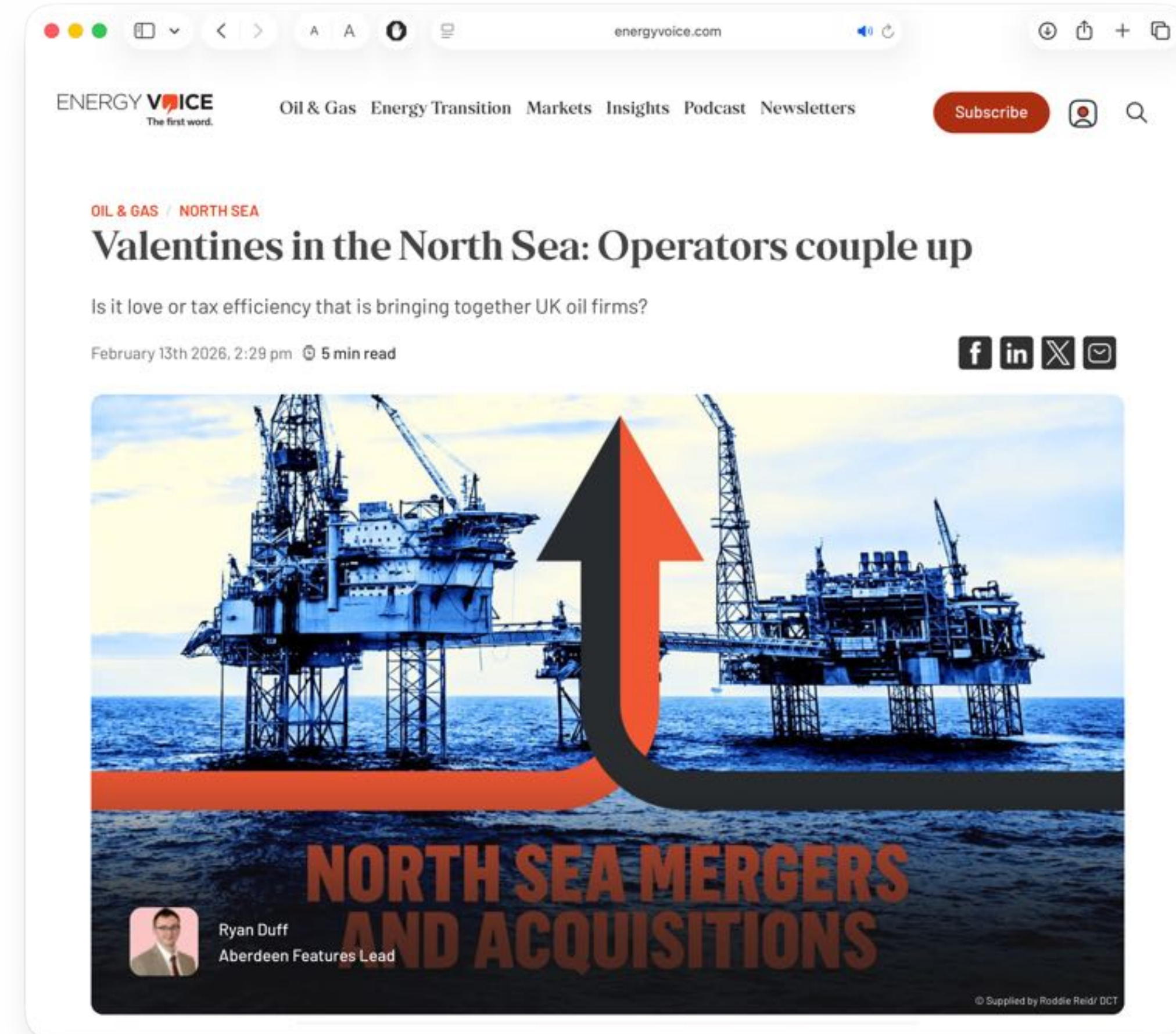
5ft layers, typical cell 262'(80m) into page by 66'(20m)



- Ping 81.25%, Orcadian 18.75%
- Orcadian interest carried until first delivery of crude from Pilot
  - P2244 licence costs all paid by Ping
  - Orcadian revenue interest reduced to 10% until Ping paid back
- Orcadian and Ping both pay a 1% royalty on their share of production to TGS
- Orcadian will be paid \$3m on Pilot FDP approval
- Likely that Ping will bring in a partner as looks to fund the whole project

# Oil and gas price mechanism unlocks future investment in the UK oil and gas sector

- Treasury has fixed successor to the Energy Profits Levy
  - EPL had become an unfair tax which reduced tax paying companies profit share to 22%
  - Will likely stay in place until 1 Q 2030 (current government has no fiscal flexibility or political will to help the oil and gas industry)
  - Project spend can reduce a tax paying company's by 40% (big driver behind the spate of upstream mergers)
- Oil and gas price mechanism is fair
  - Only kicks in above \$90/bbl or 90 p/therm
  - Project economic tests for company boards will only ever pay 40% tax



- **Viscous Oil:**

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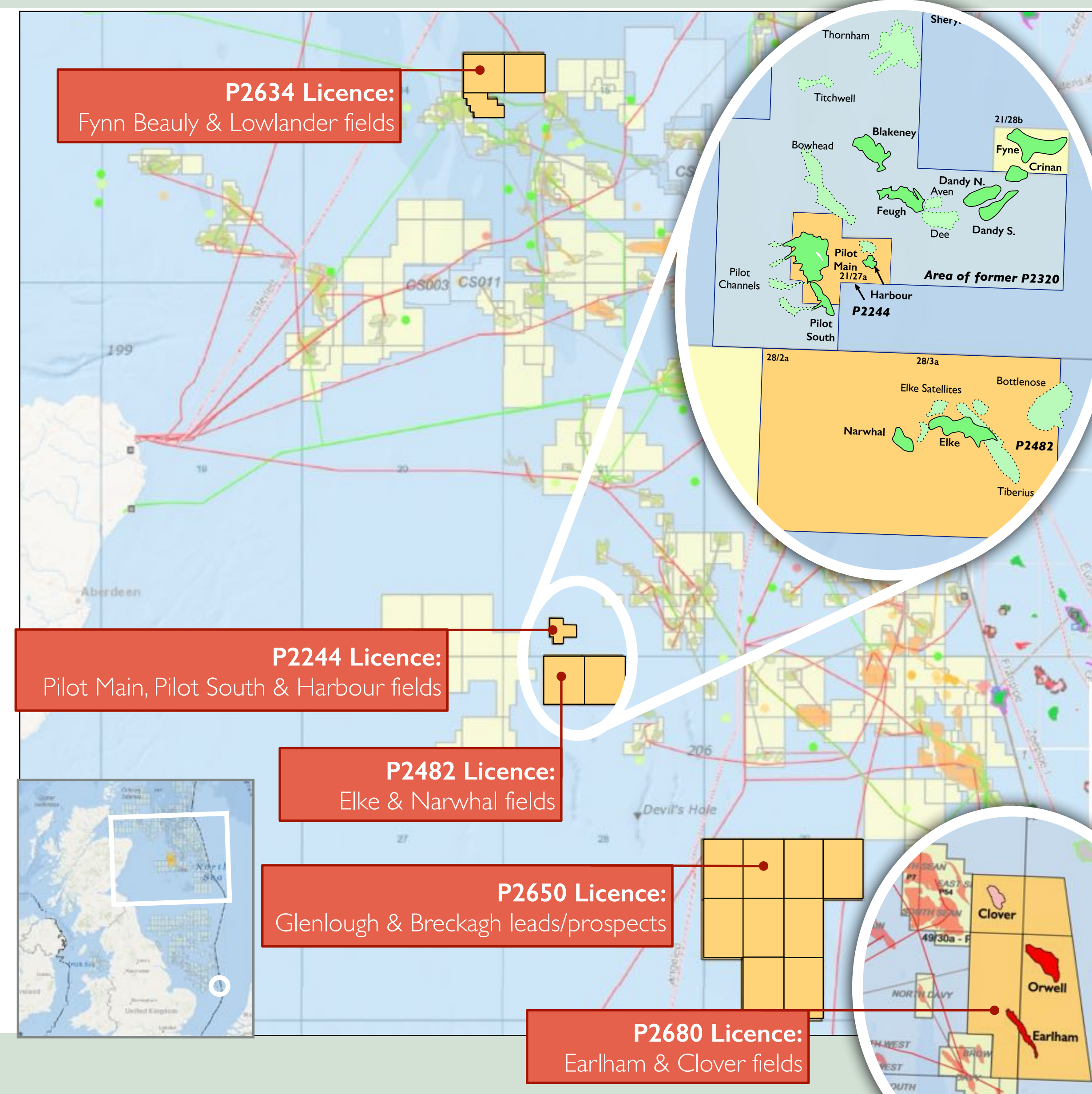
- **Gas:**

- **Southern North Sea**

- Earlham & Clover - P2680 (100%)

- **Mid North Sea High**

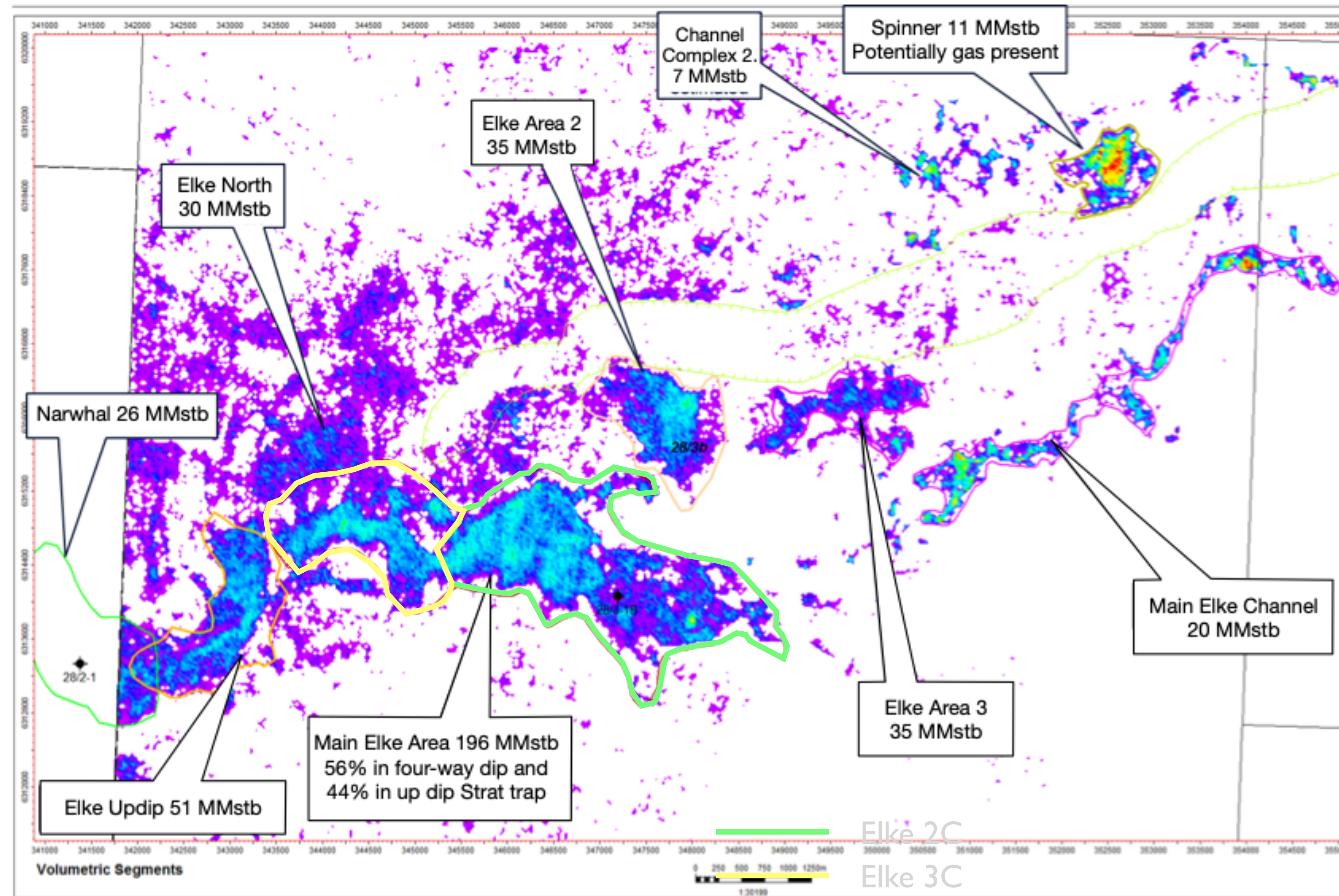
- P2650 (50%)



# P2482 – Elke, Narwhal & prospective satellites

## Ultra-far amplitudes within the Tay

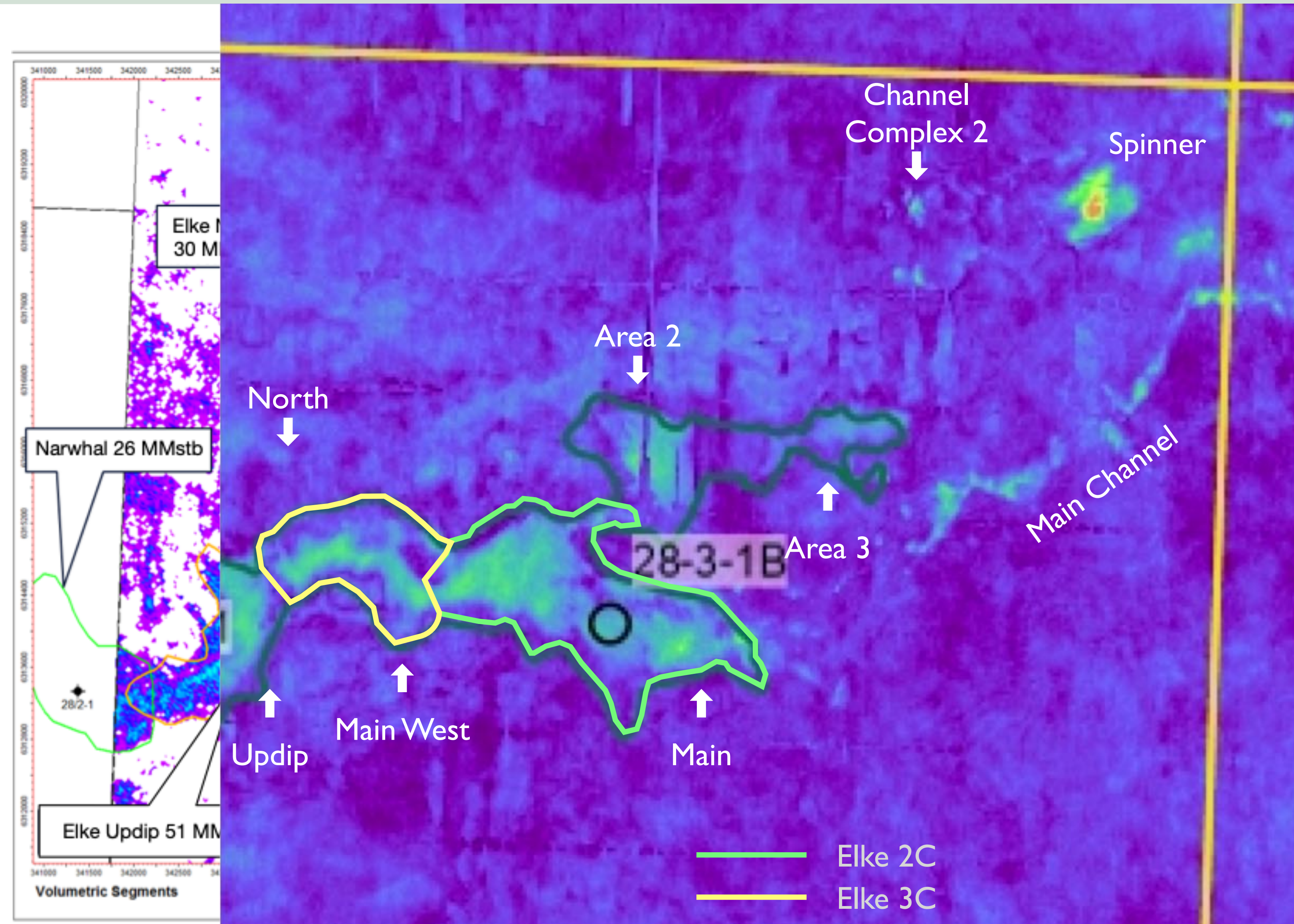
Pool	2C/2U resource	GCoS	rEEI
Narwhal	9.2	100%	
Elke Main	45.5	100%	
Elke Main West	22.8	90%	
Elke Updip	17.5	87%	
Elke Area 2	12.3	64%	
Elke North	10.5	66%	
Elke Area 3	13.3	64%	
Main Elke Channel	7.0	64%	
Spinner	4.0	38%	
Channel Complex 2	3.0	10%	
<b>Total</b>	<b>145.1</b>		



# P2482 – Elke, Narwhal & prospective satellites

## Relative extended elastic impedance in the Tay

Pool	2C/2U resource	GCoS	rEEI
Narwhal	9.2	100%	
Elke Main	45.5	100%	✓
Elke Main West	22.8	90%	✓
Elke Updip	17.5	87%	✓
Elke Area 2	12.3	64%	✓
Elke North	10.5	66%	✗
Elke Area 3	13.3	64%	?
Main Elke Channel	7.0	64%	✓
Spinner	4.0	38%	✓
Channel Complex 2	3.0	10%	?
Total	145.1		
Total rEEI supported	107.3		



- **Viscous Oil:**

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- Sour light oil

- Lowlander - P2634 (50%)

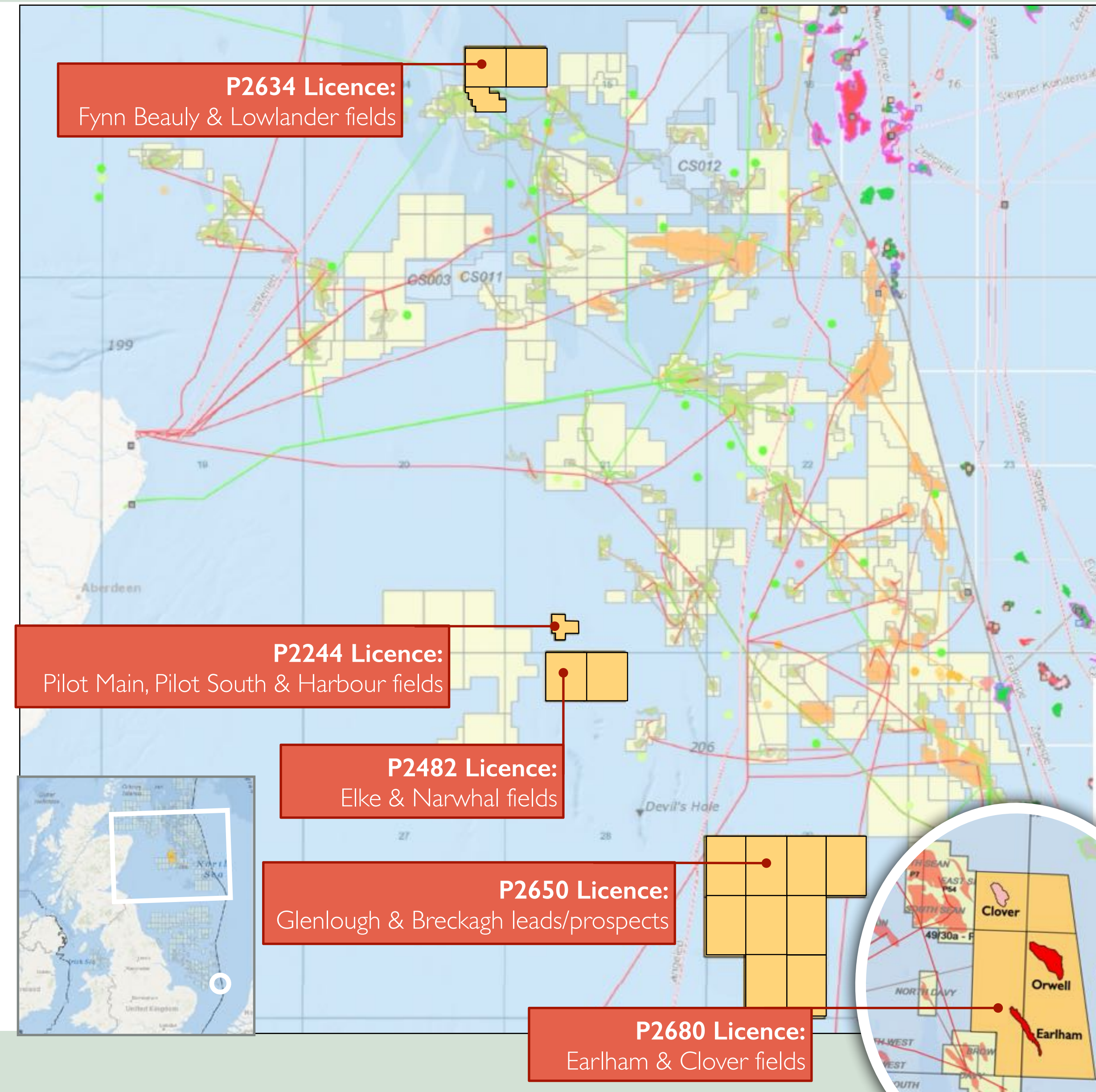
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- **Licence Type:**

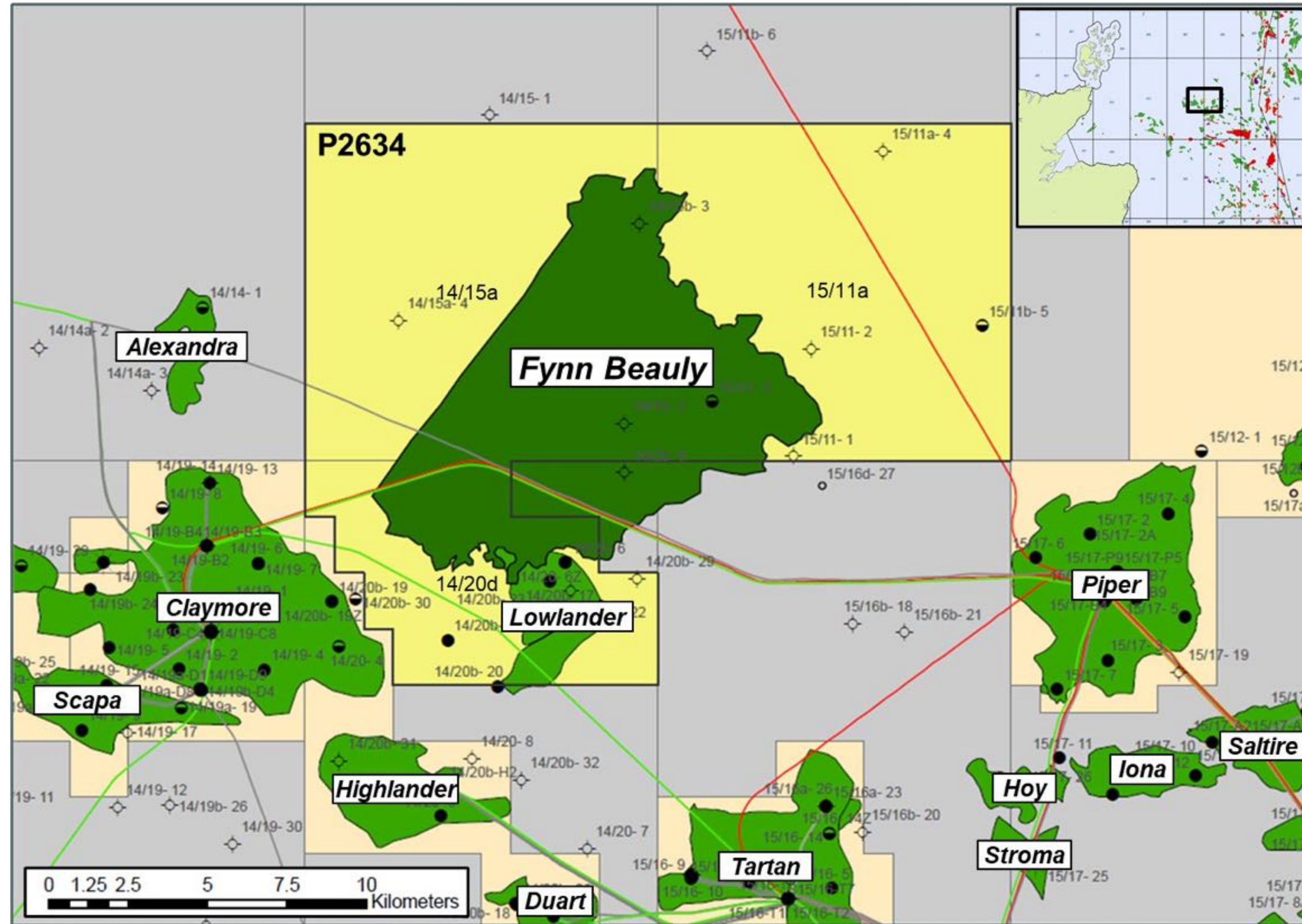
- 33rd Licensing Round award
- 6 Year Innovate: 3-year Phase A & 3-year Phase C

- **Partners:**

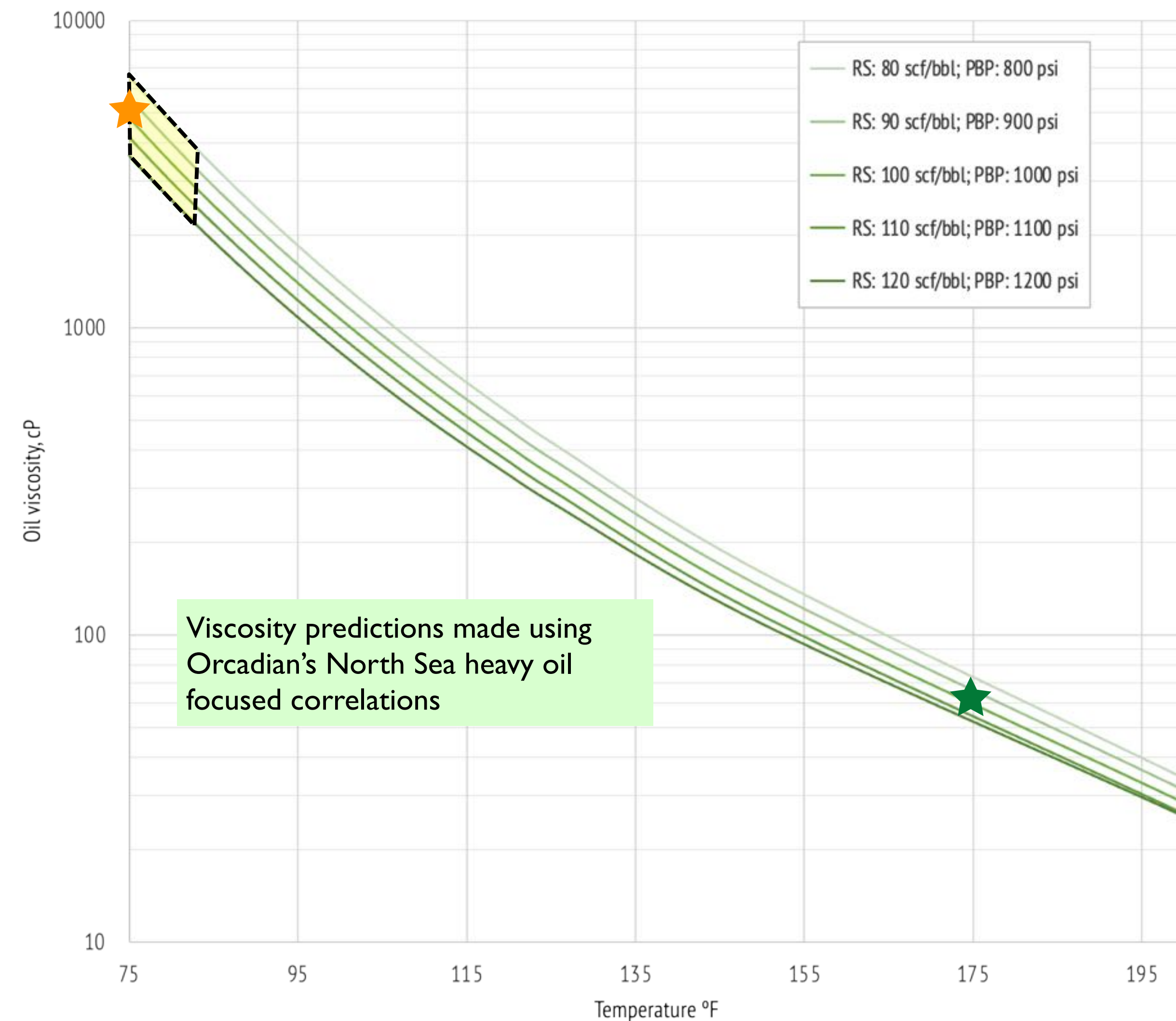
- 50% Serica (Operator, was Parkmead at application)
- 50% OrcaDian Energy

- **Resource potential**

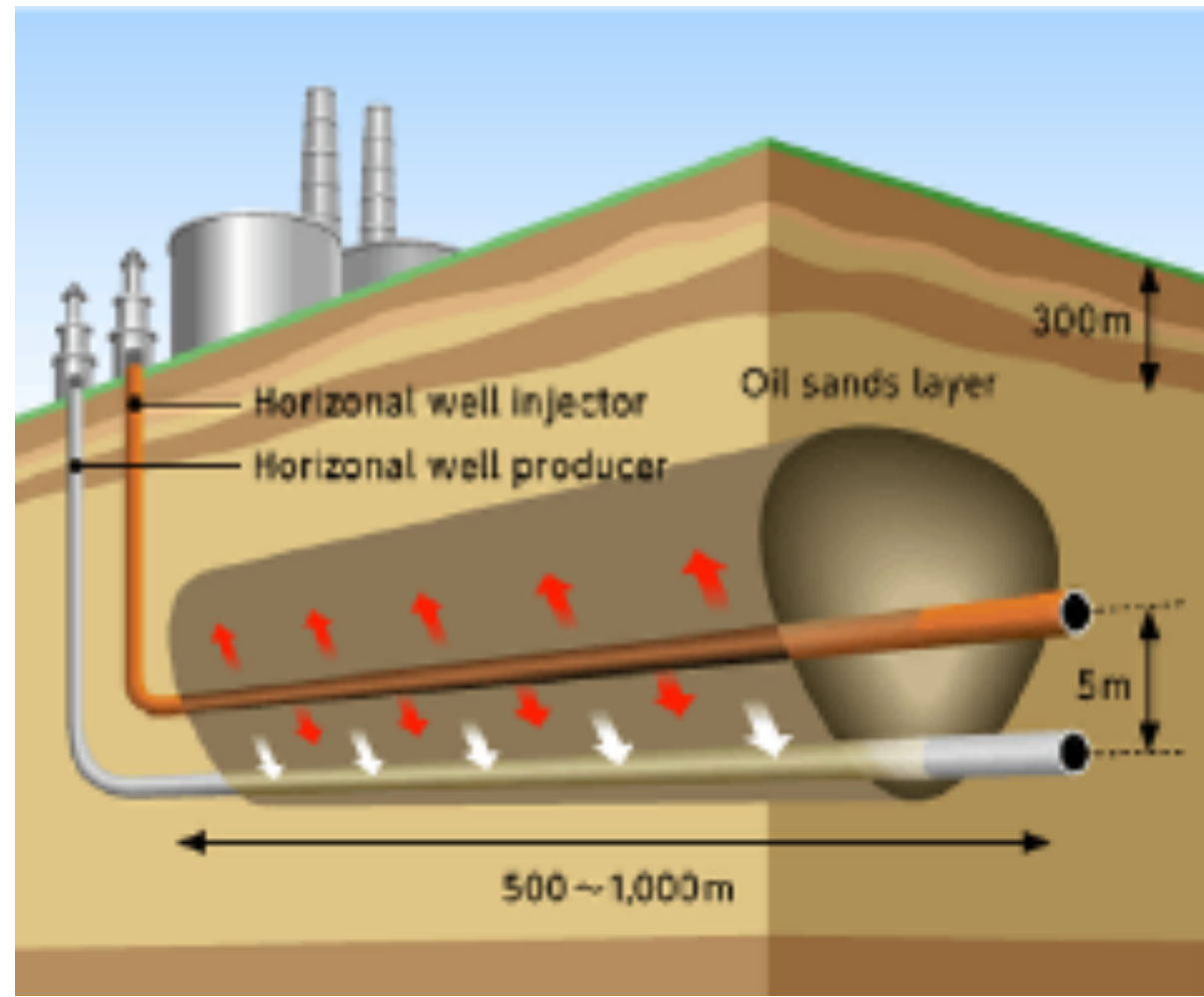
- Fynn Beaully has a recoverable resource potential of 292 MMbbls of heavy viscous oil
- 88% of which is on the P2634 licence
- Lowlander has five exploration and appraisal wells and has a resource that lies in the low to mid-twenties range
- Potential to tieback Lowlander to existing or new infrastructure in the area if a new approach to dealing with H<sub>2</sub>S works



- BP measured dead oil viscosity at 100°F – 4,106 centistokes or 4,089 cP
- Orcadian has a set of custom viscous oil correlations to predict temperature response (Bennison 1998) and how gas content modifies the viscosity (Petrosky & Farshad 1995 and Beggs & Robinson 1975) calibrated on Pilot samples
- Assuming GOR of 100 scf/bbl and bubble point of 1,000 psi Fynn reservoir viscosity at 75°F would be c. 4,800 cP ★
- Increasing oil temperature to 175°F reduces oil viscosity to c. 60 cP ★ (less viscous than Captain)

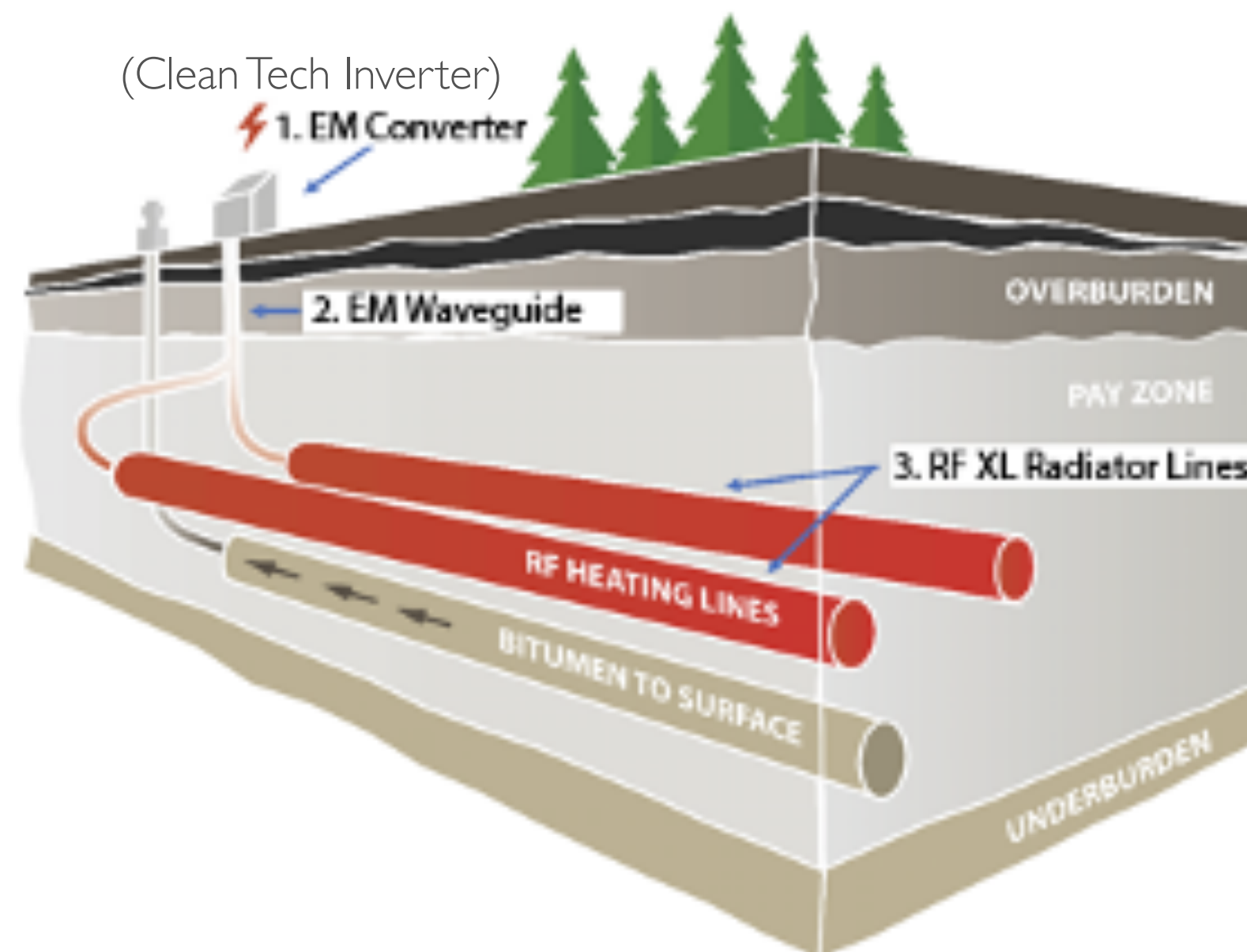


# Emerging technology: Electromagnetic (EM) powered heating from radio frequency (RF) energy



Field scale application of the SAGD process

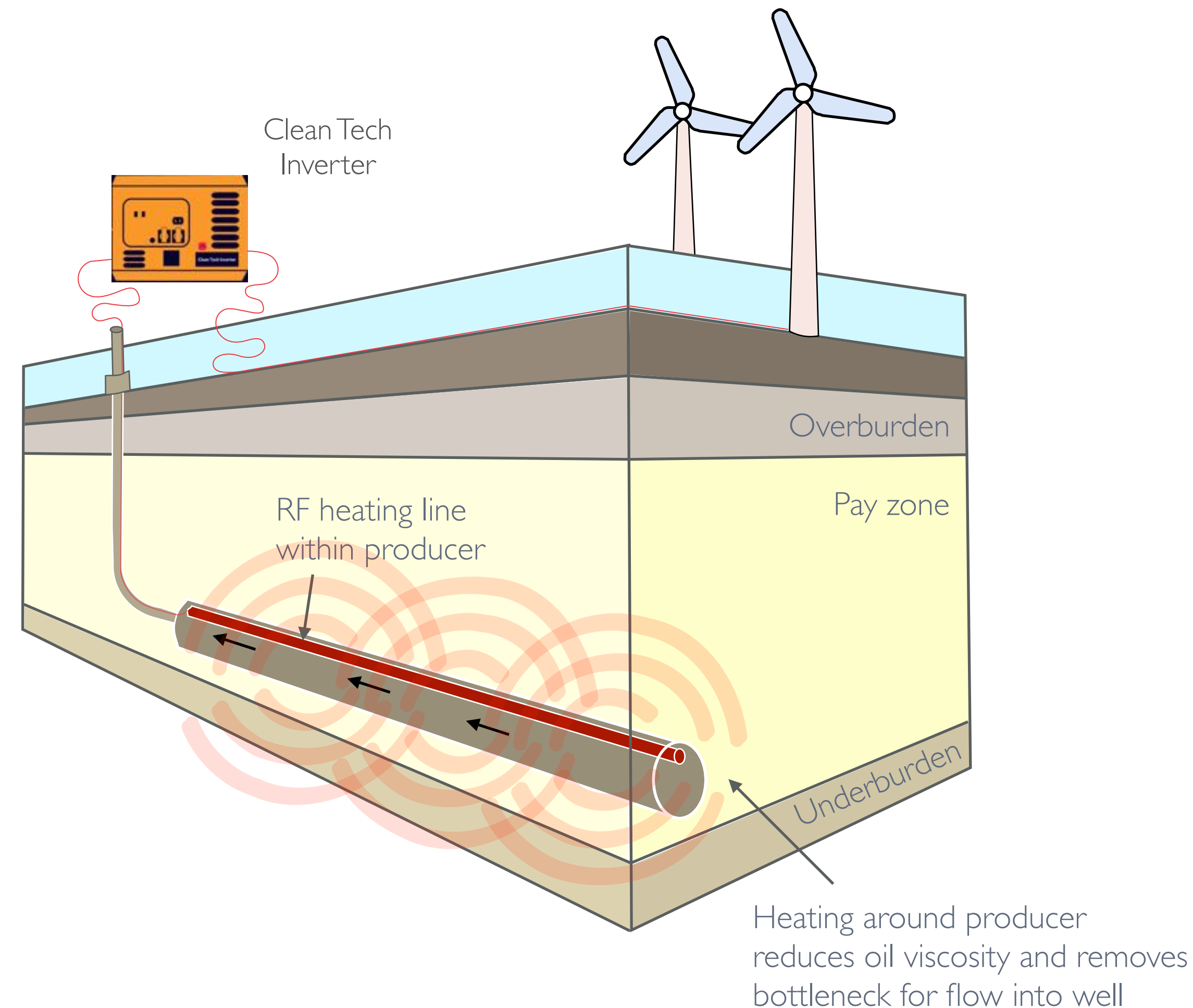
Acceleware RF XL pilot scheme at Marwayne (Canada) to replicate the SAGD process using radio frequency waves



- Technology being developed by Acceleware in onshore Canada with support from oil industry; with heating application for number of other industries being promoted
- **EMPowered Heat** materially reduces energy consumption versus fossil fuel-based and other forms of electrification - cost competitive and low GHG emissions
- Targeted heating - delivers radio frequency (RF) energy directly to H<sub>2</sub>O molecules in pores, improving heating efficiency
- Inverter converts electricity to RF energy at 98% efficiency
- Can heat large volumes of material to temperatures ranging from 40 - 2,000°C
- RF downhole heater at TRL 8 and Clean Tech Inverter (CTI) at TRL 9

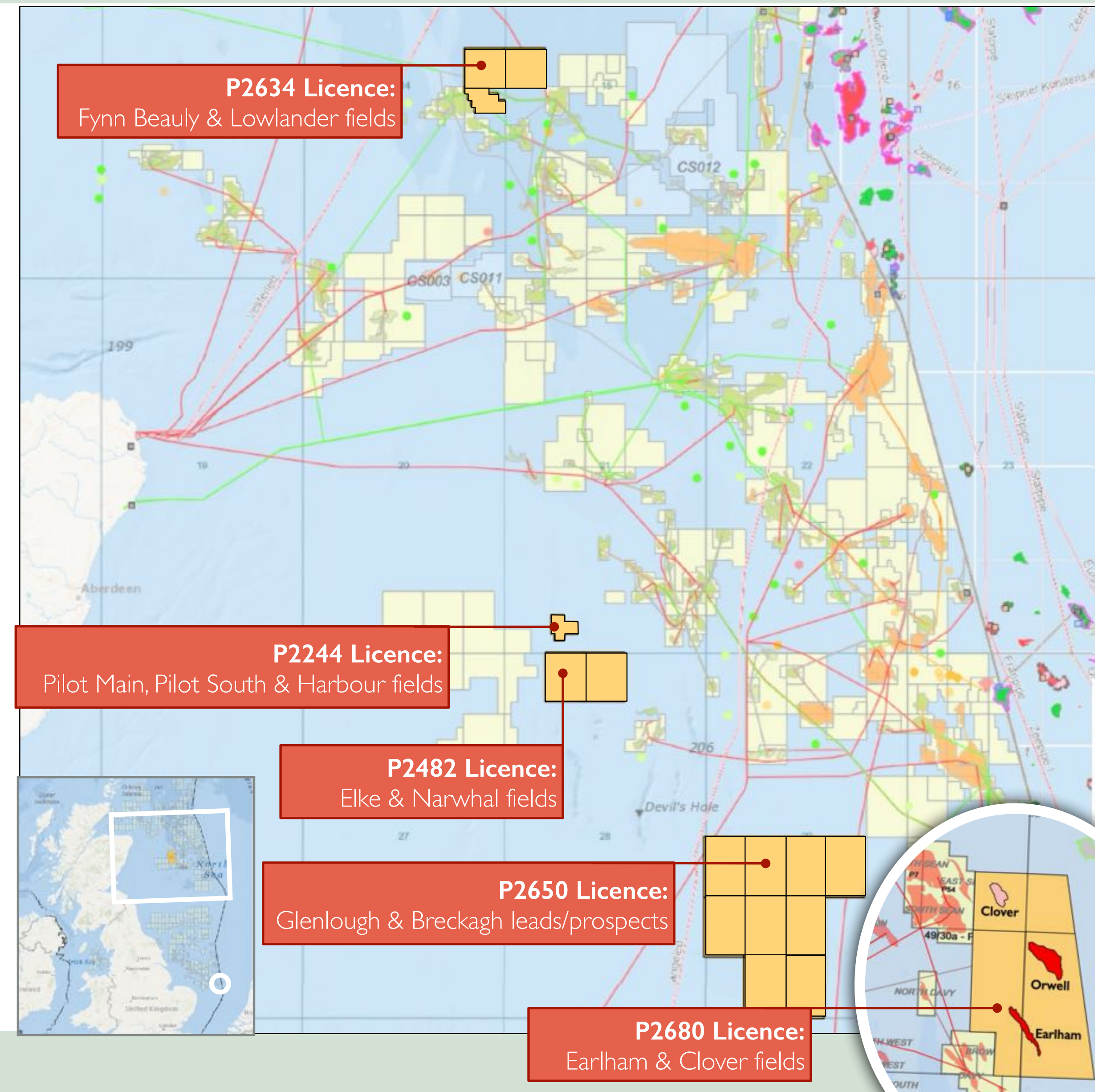
- Acceleware developed EMPowered Heat technology for the oil industry; THOR offers a mechanical alternative
- Marwayne demonstrator project was to replicate SAGD production; at Fynn Beaully need lower temperatures
- Fynn Beaully approach would be to heat immediately around the producers to reduce oil viscosity and remove bottleneck of flow into the well
- Intermittent power supplies can be tolerated
- Requires development, by Acceleware, of an RF heating line that can be placed in the producer
  - Completion design needs careful thought

Illustration of Acceleware RF configuration for Fynn Beaully producer



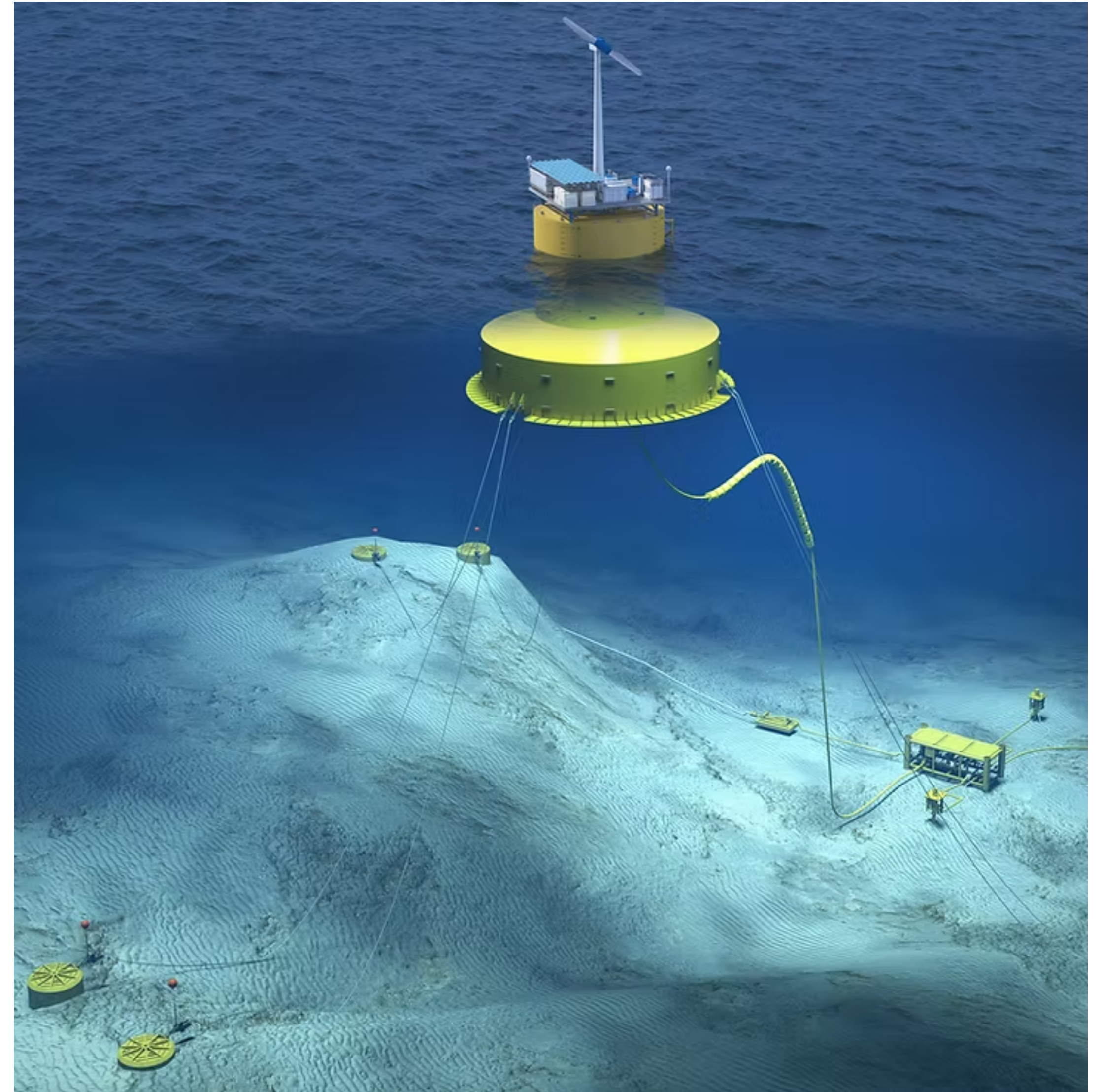
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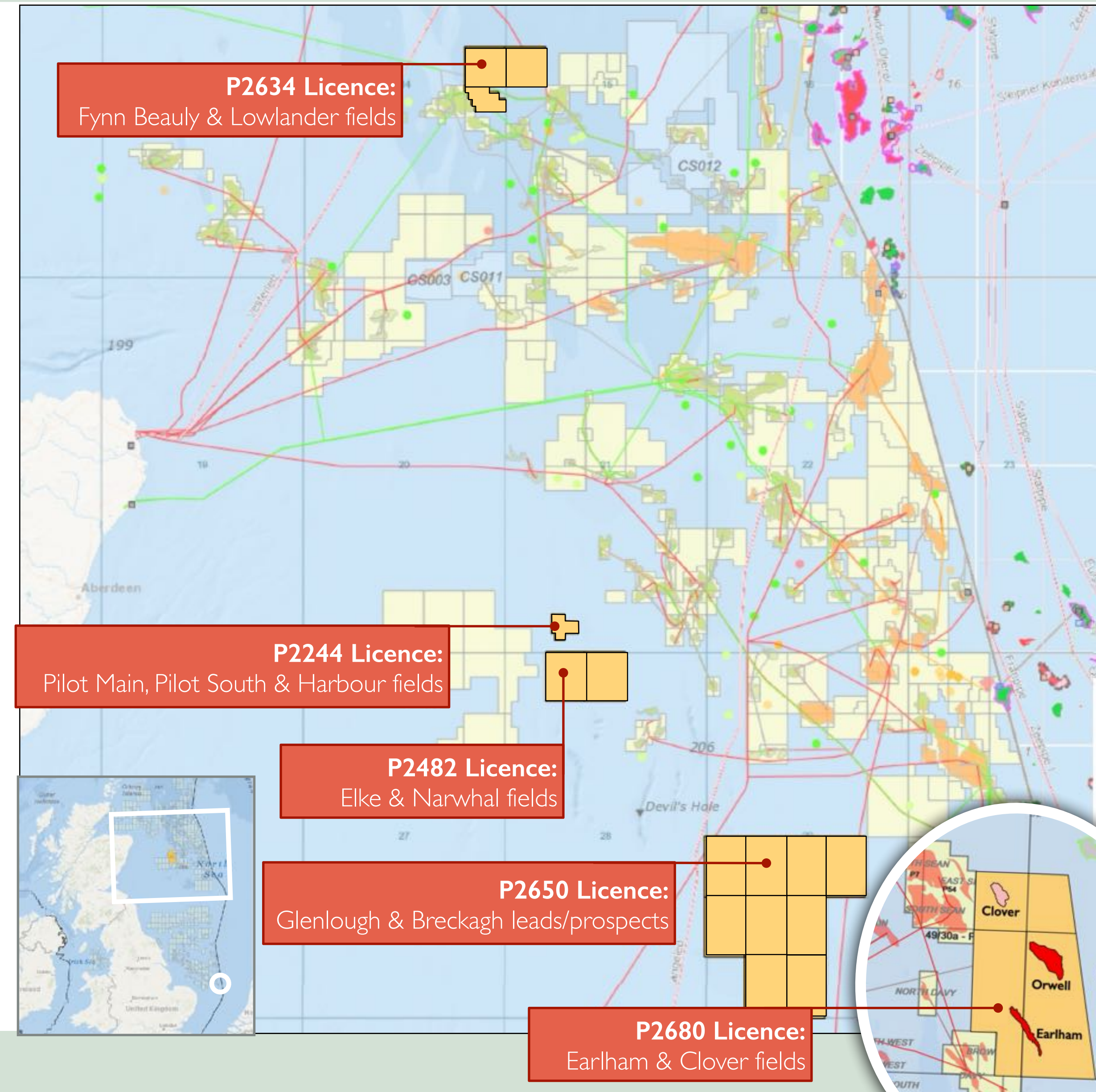


- Designed for unmanned operations, can carry up to a 5,000 ton topside
- Successful demonstrator project completed in 2025, supported by Petronas



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# P2680 Licence summary

## Earlham proven resource

- **Earlham**

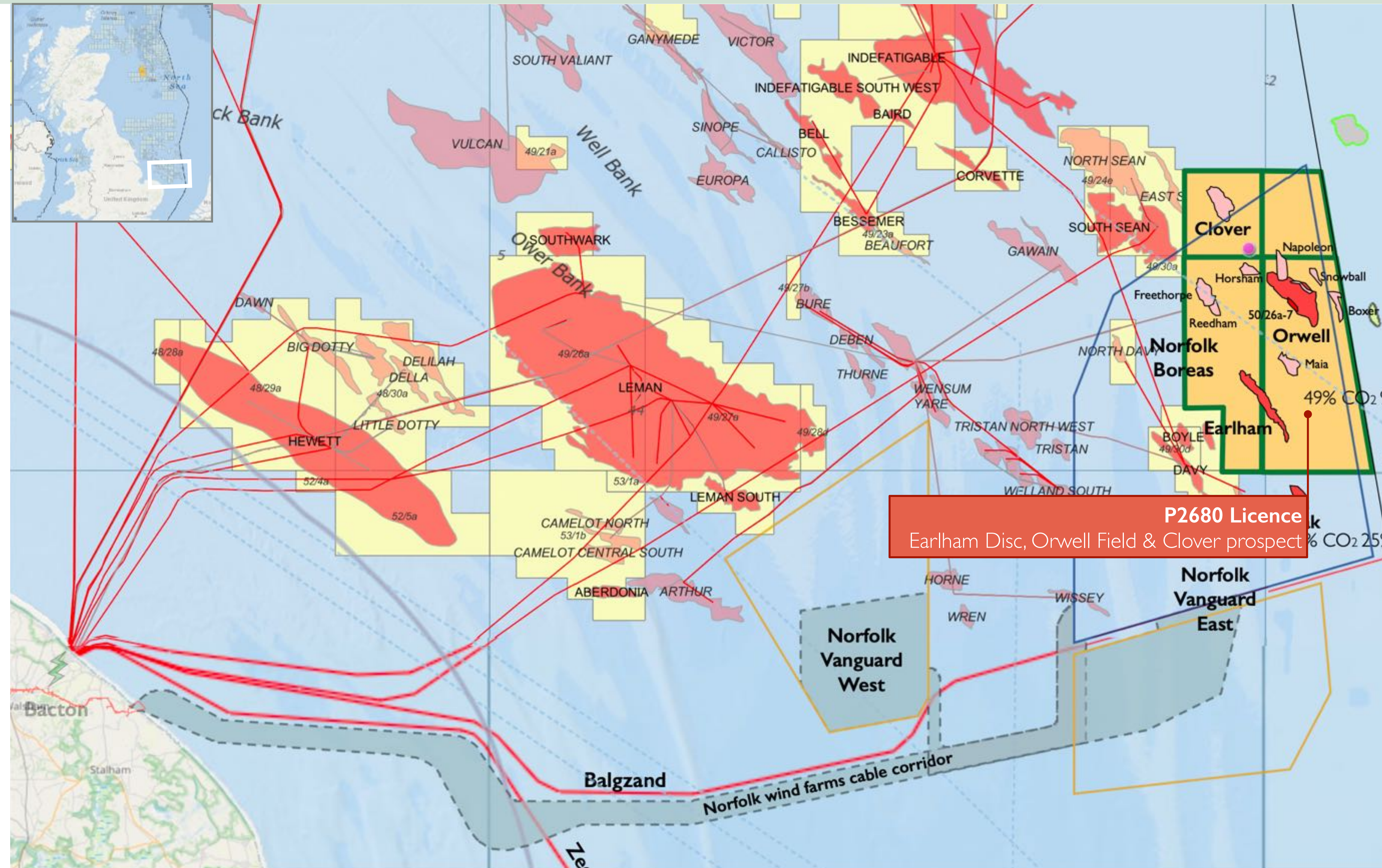
- A high CO<sub>2</sub> discovery with 114 bcf of sales gas
- High permeability Leman sands, no fracturing required

- **Orwell**

- a 30 bcf redevelopment project
- previously produced c. 300 bcf but shut in when the Thames complex was decommissioned

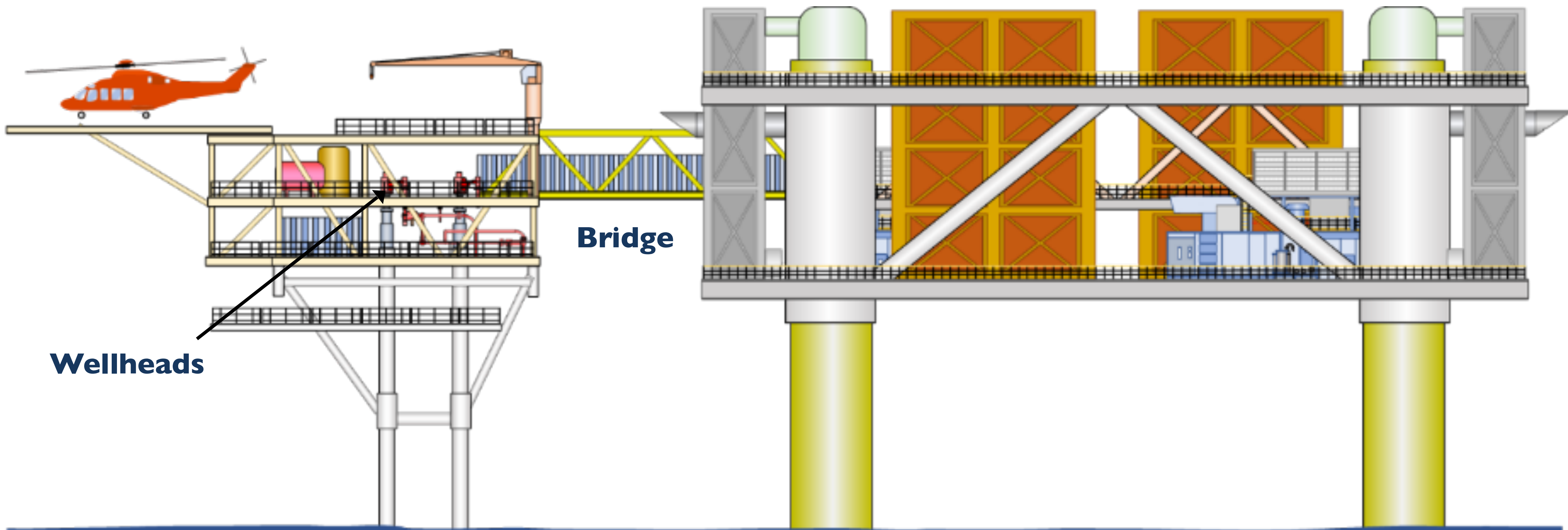
- **Clover**

- a compelling prospect with 153 bcf of prospective resources
- Bunter sand project analogous to Orwell



\* Resource estimates based upon Orcadian management 33rd Round licence application to NSTA.

# Mobile Offshore Generating Unit (MOGU) Schematic



**Wellheads**

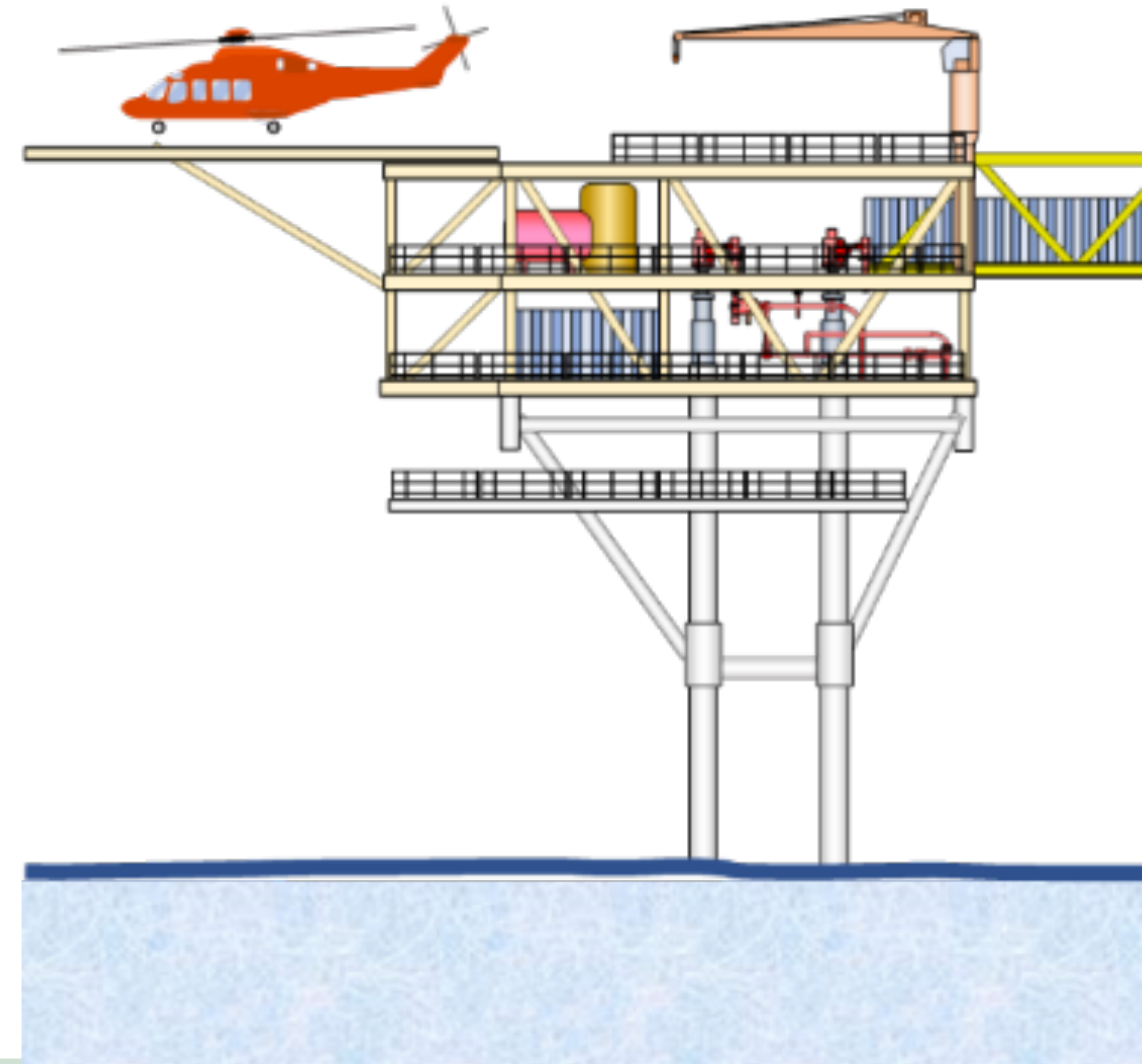
**Bridge**

**Unmanned Gas  
Production Wellhead  
Platform**

**Mobile Offshore Generating  
Unit (MOGU)**

- Earlham Project Scope

- Wellhead platform, two producers, one injector, and potentially a share of the bridge
- Helideck likely on the MOGOU in reality
- Project battery limits: meters downstream of gas production wellheads, and meters upstream of CO<sub>2</sub> injection well
- Outsource design, construction and installation facilities scope to MLCP, retain wells construction scope in Orcadian
- Fixed gas price, indexed to CPI, for unprocessed wellhead gas
- Obligation for Earlham field partners to accept dense phase CO<sub>2</sub>, from Earlham sourced carbon atoms, at necessary injection pressure, at a storage cost to be agreed, (scope of long term monitoring of carbon store to be agreed with NSTA)
- All subject to HMRC, OPRED and NSTA approvals



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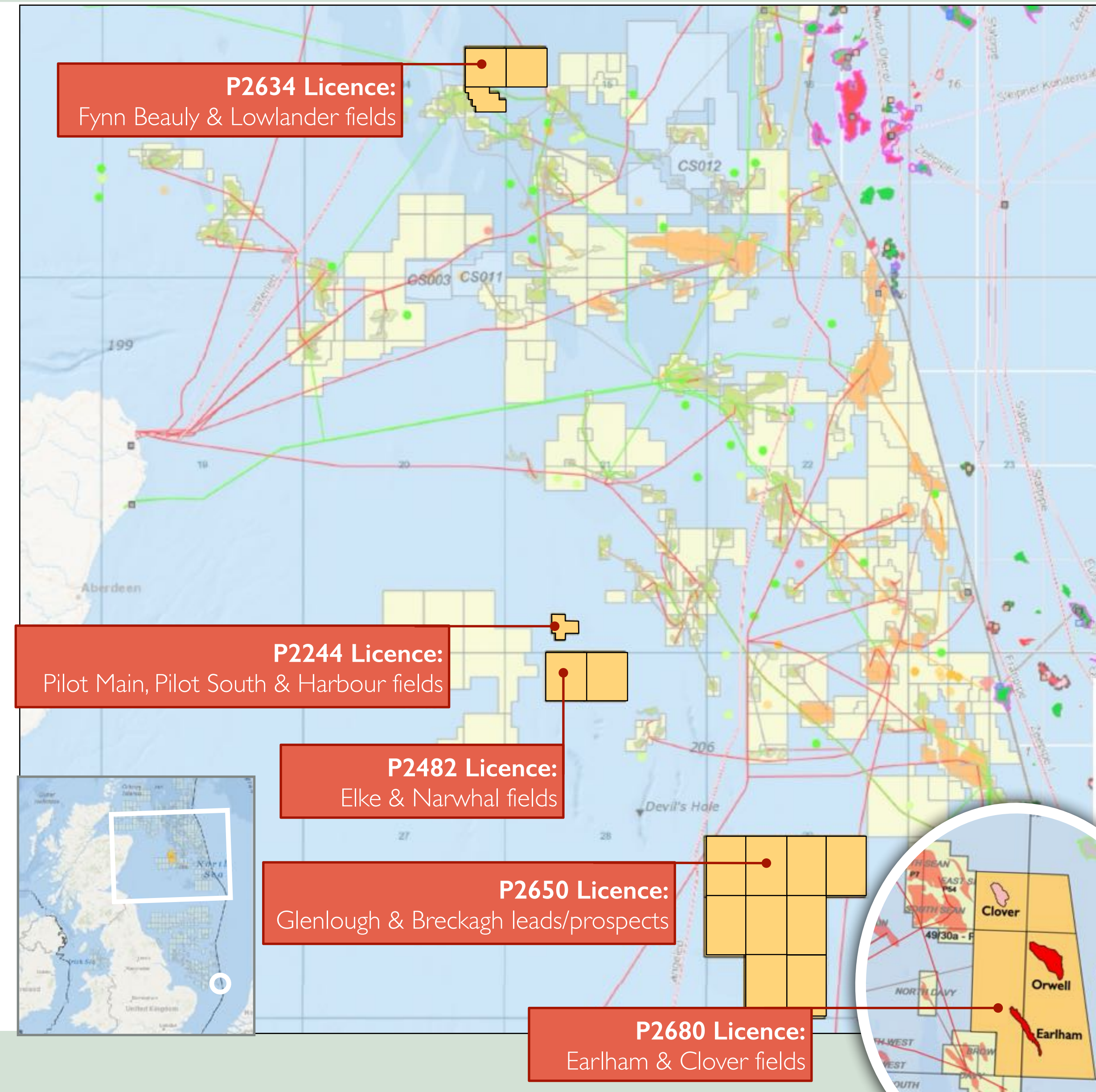
- **Gas:**

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- **Mid North Sea High**

- **P2650 (50%)**



# P2650 Licence Summary

## Two low-cost, low-risk exploration opportunities

### Licence type:

- 6 yr innovate licence: 3 yr Phase A, 2 yrs Phase B, 1 yr Phase C

### Partnership:

- Orcadian Energy 50% (Operator); Triangle Energy (UK) Pty Ltd 50%

### Key opportunities in Quaternary shallow gas:

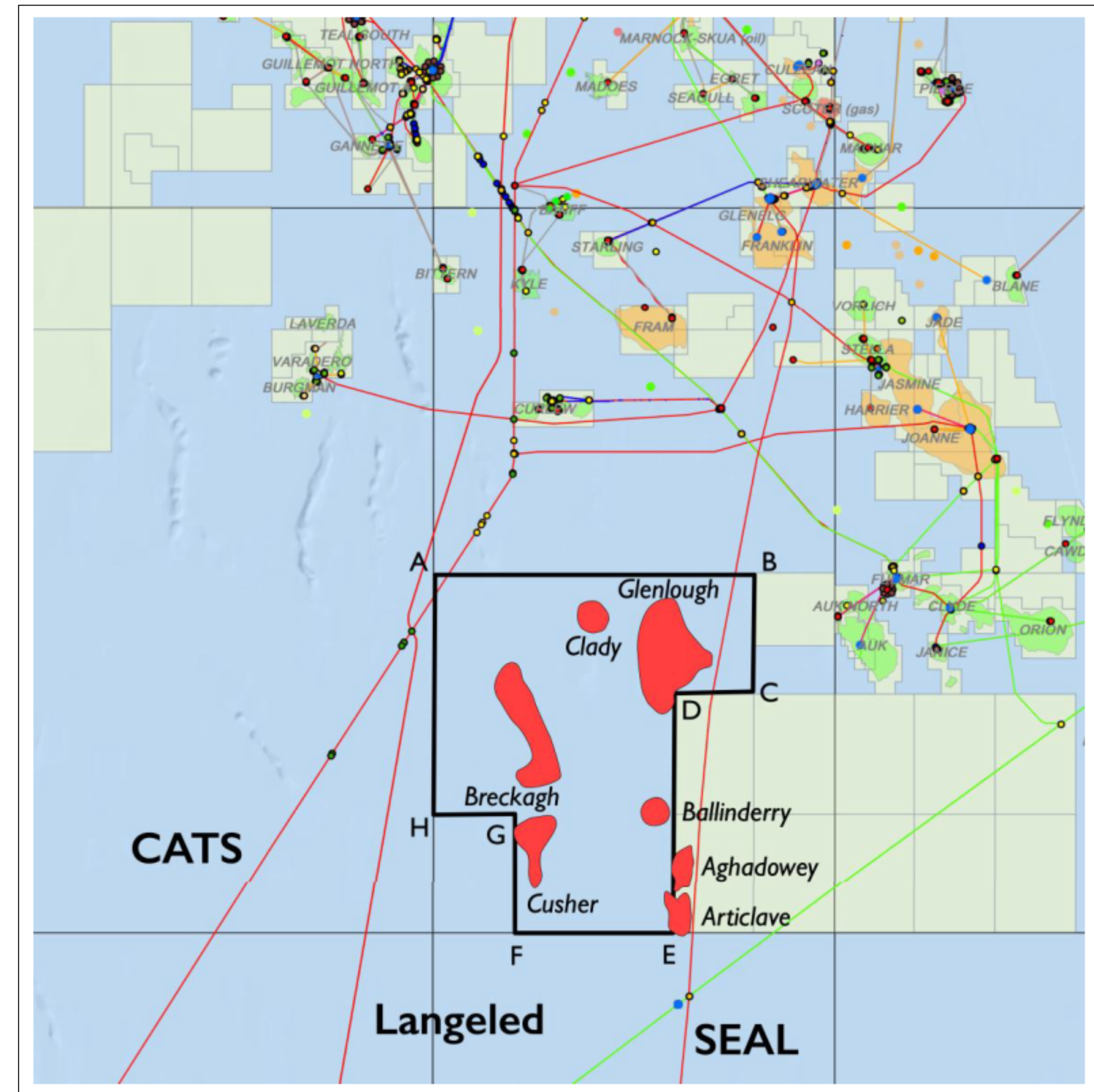
- Glenlough Lead/Prospect – 131 bcf\*
- Breckagh leads/prospects – 138 bcf\*

### Application rationale:

- Orcadian has a focus on shallow hydrocarbon accumulations
- INTOG windfarm infrastructure may present opportunity
- Close to CATS export line tie-in point

### Main risks & uncertainties:

- Gas saturation levels – EM programme can de-risk this
- Reservoir development
- Thickness of gas column – EM can help de-risk
- Development challenges: shallow unconsolidated reservoirs; low pressure gas



\* Resource estimates based upon Orcadian management 33rd Round licence application to NSTA.

- **Founded as Third Oil Limited (and variants) in 2008**
  - Held licence interests across the SNS, mostly with Spirit as operator
  - Drilled 43/13b-7, the Pegasus discovery well in 2014
- **Acquired by Hague & London in 2018**
  - Drilled 43/12a-3 Andromeda N discovery well
- **Parent company, Hague and London Oil plc, entered administration (subsequently liquidation) in 2022**
- **HALO acquired by Orcadian in 2024**
  - 50% assigned to the Independent Power Corporation plc (“IPC”) in 2025
- **Orcadian and IPC paid monies due to NSTA and satisfied an outstanding work programme on an expired licence over the Schooner field**
  - Now in good standing with NSTA but no longer is a licensee



