

INVESTOR PRESENTATION

July 2021



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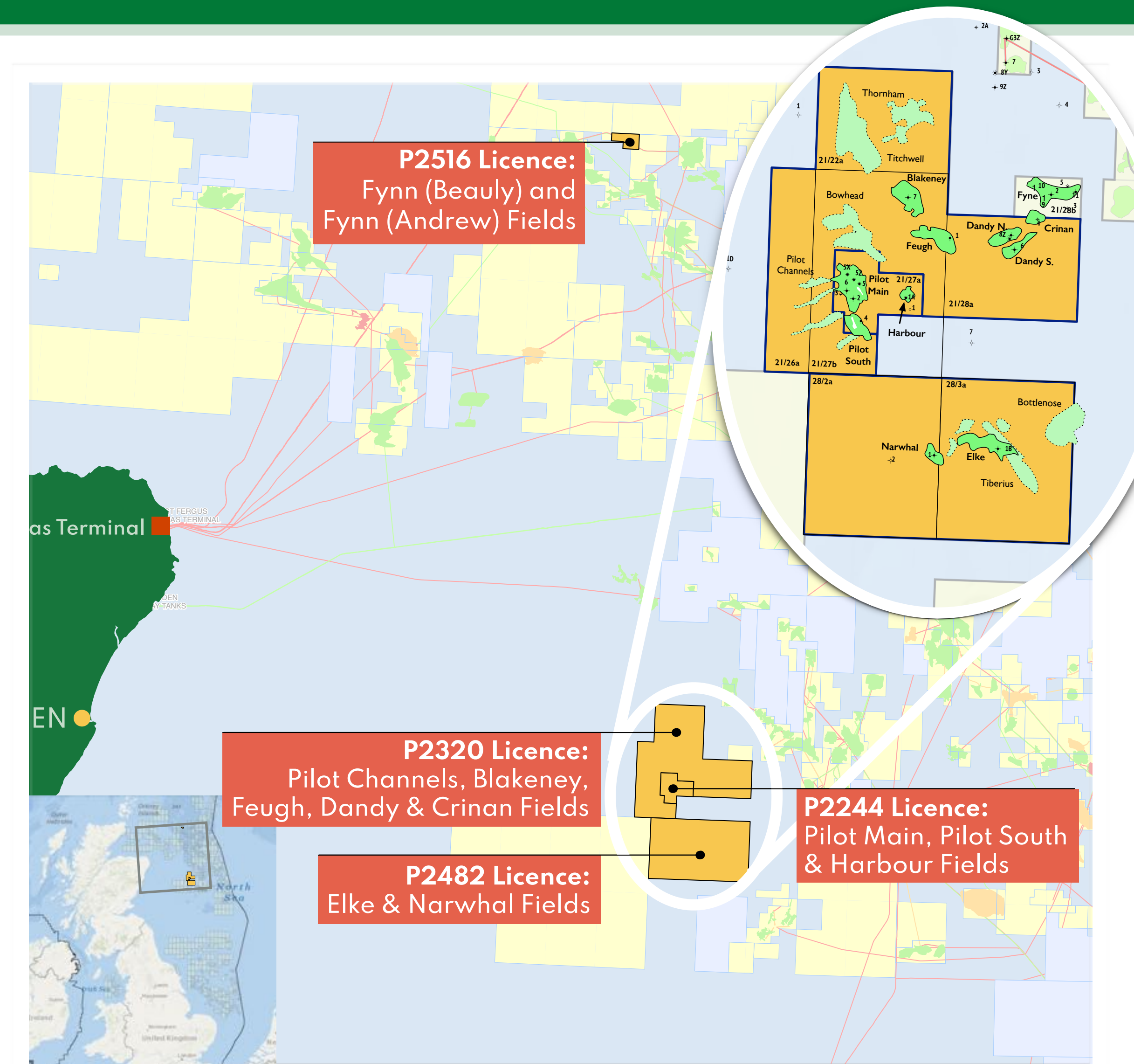
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- Substantial audited reserve: 79 MMbbl 2P (proven & probable)
- Pilot field is well appraised and development ready, project NPV₁₀ \$640m at \$60/bbl, NPV₁₀ breakeven of c. \$39/bbl, based on a low salinity polymer flood, using an FPSO & two WHPs
- 78 MMbbl of contingent resources in Elke, Narwhal & Blakeney with an NPV₁₀ at \$60/bbl of \$458m
- Low risk exploration on licensed acreage
 - Bowhead prospect, a Pilot lookalike, 43 MMbbl with appraisal style risks (49% geological chance of success)
- OGA supportive of low emission development plan
- Initial funding received from Shell Trading in 2019
- Development farm-out and contractor alliances will be pursued



Steve Brown
CEO



Alan Hume
CFO



Greg Harding
Technical
Director



Maurice Bamford
Exploration &
Geoscience Mgr



David Puckett
EOR Specialist



Christian Wilms
Non-Executive
Director



Joe Darby
Non-Executive
Chairman



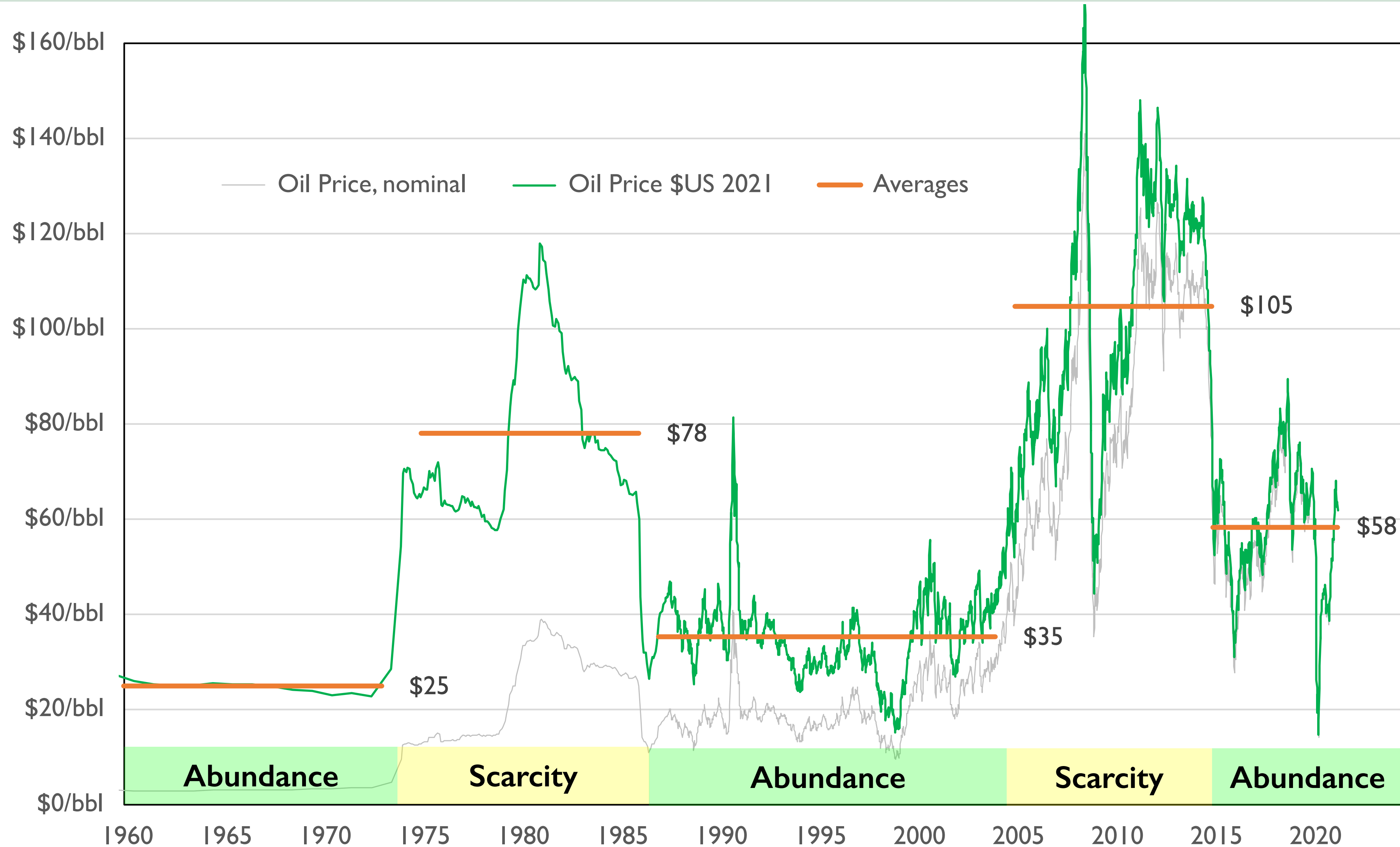
Tim Feather
Non-Executive
Director



- Experienced team & strong board with track record in industry and markets
- CEO led pre-project team for Harding field, BP's first North Sea viscous oil project, and helped design and manage the Andrew field contractor Alliance



An oilfield developer's view of oil prices

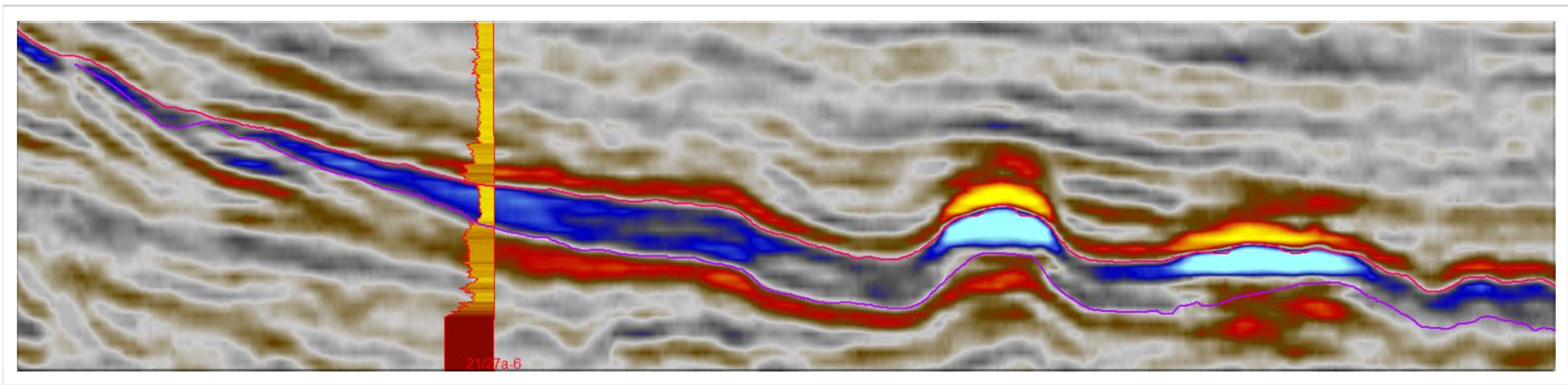
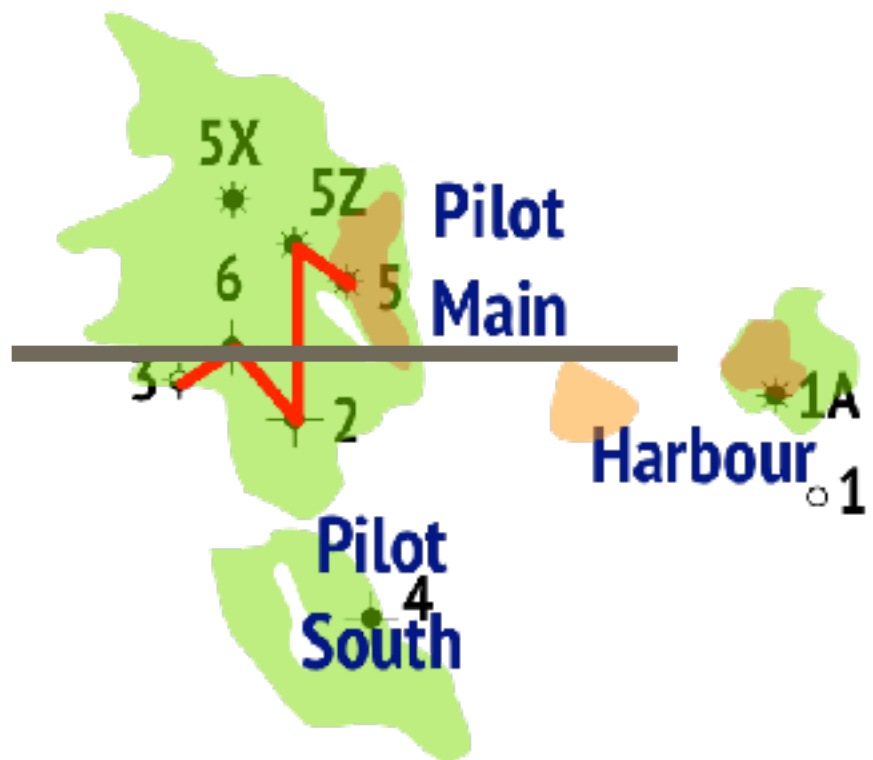


- The average price in times of abundance has risen with the cost of the marginal barrel
- A reasonable forecast for the current period of abundance is c. \$60/bbl
- Underinvestment in the upstream is sowing the seeds of the next period of scarcity

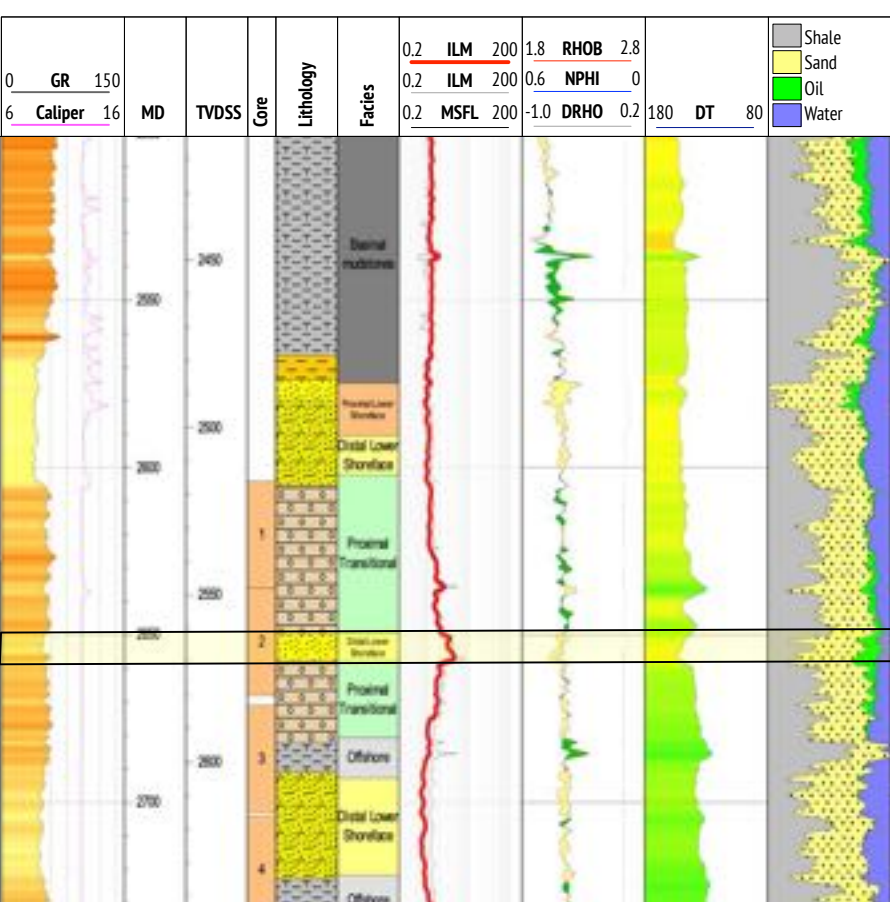
Licence & CPR Summary

Licence and block numbers	Operator or admin.	Orcadian Interest	Status	Term Expiry*	Phase Expiry†	Licence Area (km²)	Discoveries	2P Reserves MMbbl	2C Contingent Resources (On hold) MMbbl	2C Contingent Resources (Technical) MMbbl	2U Prospective Resources (Unrisked) MMbbl
P2244 21/27a	Orcadian	100%	Second Term	30th Nov 2022	n/a	43.2	Pilot Main, Pilot South and Harbour	78.8		13.0	
P2320 21/22a, 21/26a, 21/27b & 21/28a	Orcadian	100%	Initial Term Phase A	14th May 2024	14th May 2022	447.9	Blakeney, Feugh, Dandy & Crinan		25.1	2.2	72.1
P2482 28/2a & 28/3a	Orcadian	100%	Initial Term Phase A	14th July 2027	14th July 2022	361.6	Narwhal & Elke		52.7	2.0	119.3
P2516 14/20g, 15/16g	Parkmead (E&P) Ltd	50%	Initial Term Phase A	30th Nov 2026	30th Nov 2023	19.9	Fynn (Beaully) & Fynn (Andrew)	Not audited			
† P2320, P2482 and P2516 are all drill-or-drop licences, and require a well commitment by May 2022, July 2025 and November 2023 respectively							Total	78.8	77.8	17.2	191.4

* The Directors recognise that it is possible that the conditions for the P2244 licence to continue into the Third Term will not be satisfied by the stated deadline and accordingly a term extension may need to be sought from the OGA. There can be no guarantee that such an extension will be granted but, following dialogue with the OGA, the directors are confident that such an extension will be granted provided that the Company continues to work to satisfy the conditions.



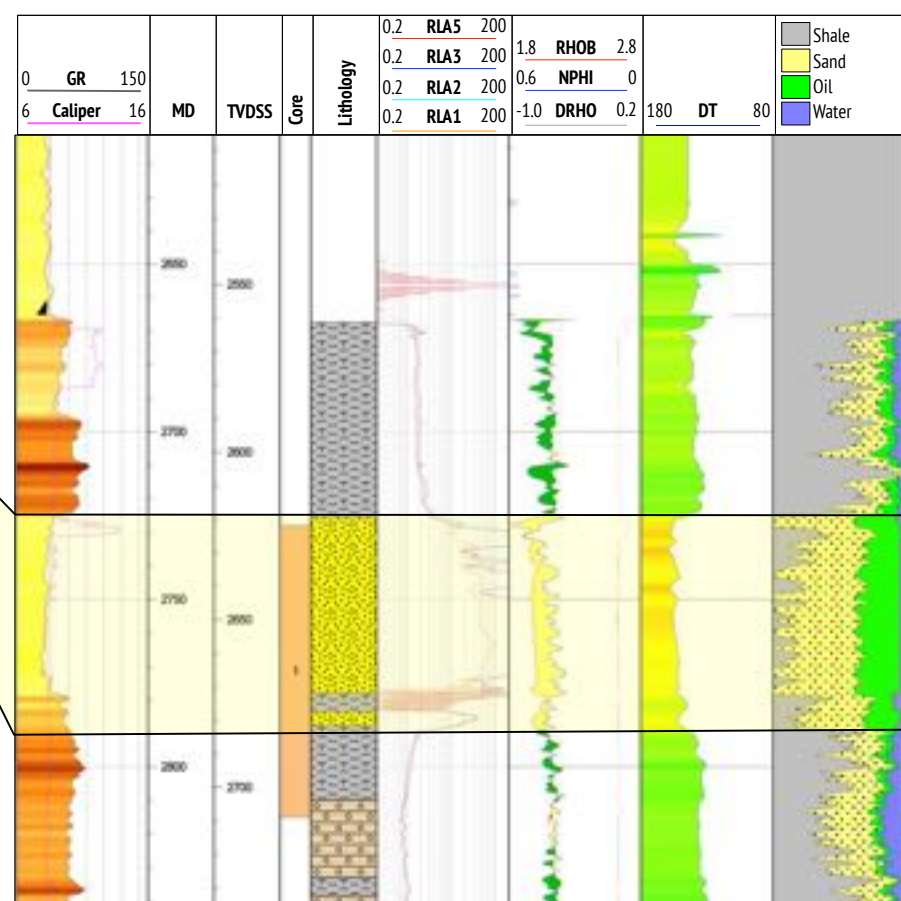
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Logs hung on TVD
OWC figures are TVDSS

Coloured
Inversion

21/27a-6

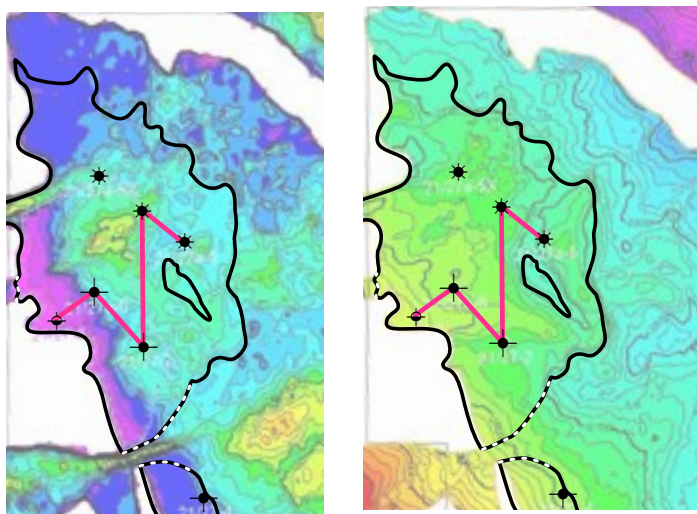


Brine < Oil <<
Gas

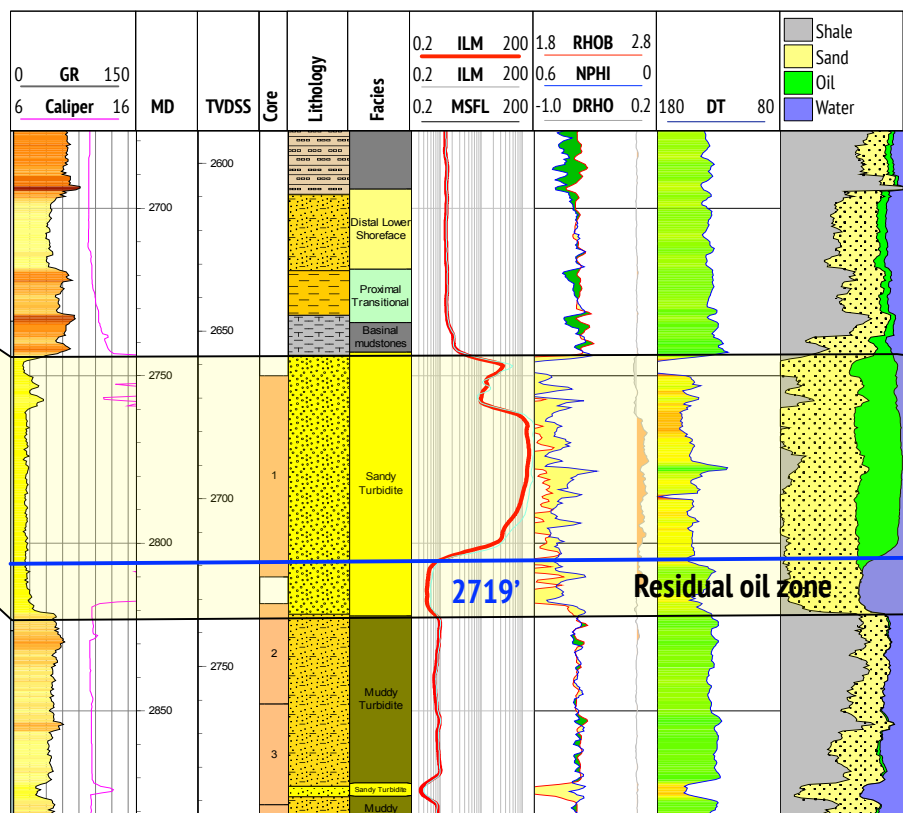
Class II AVO - increased amplitude on Fars

Isochore

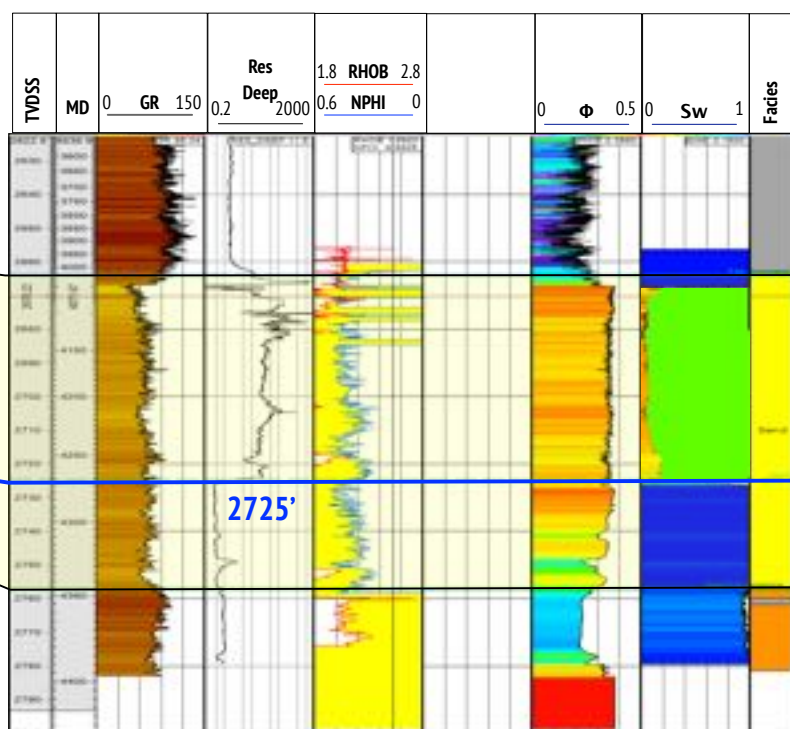
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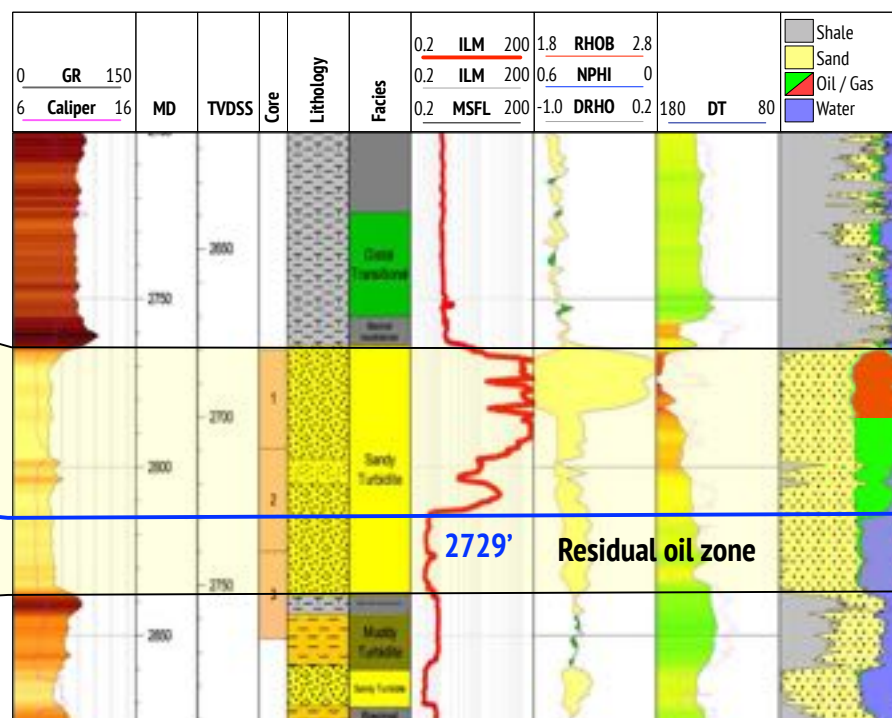
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21/27a-5Z

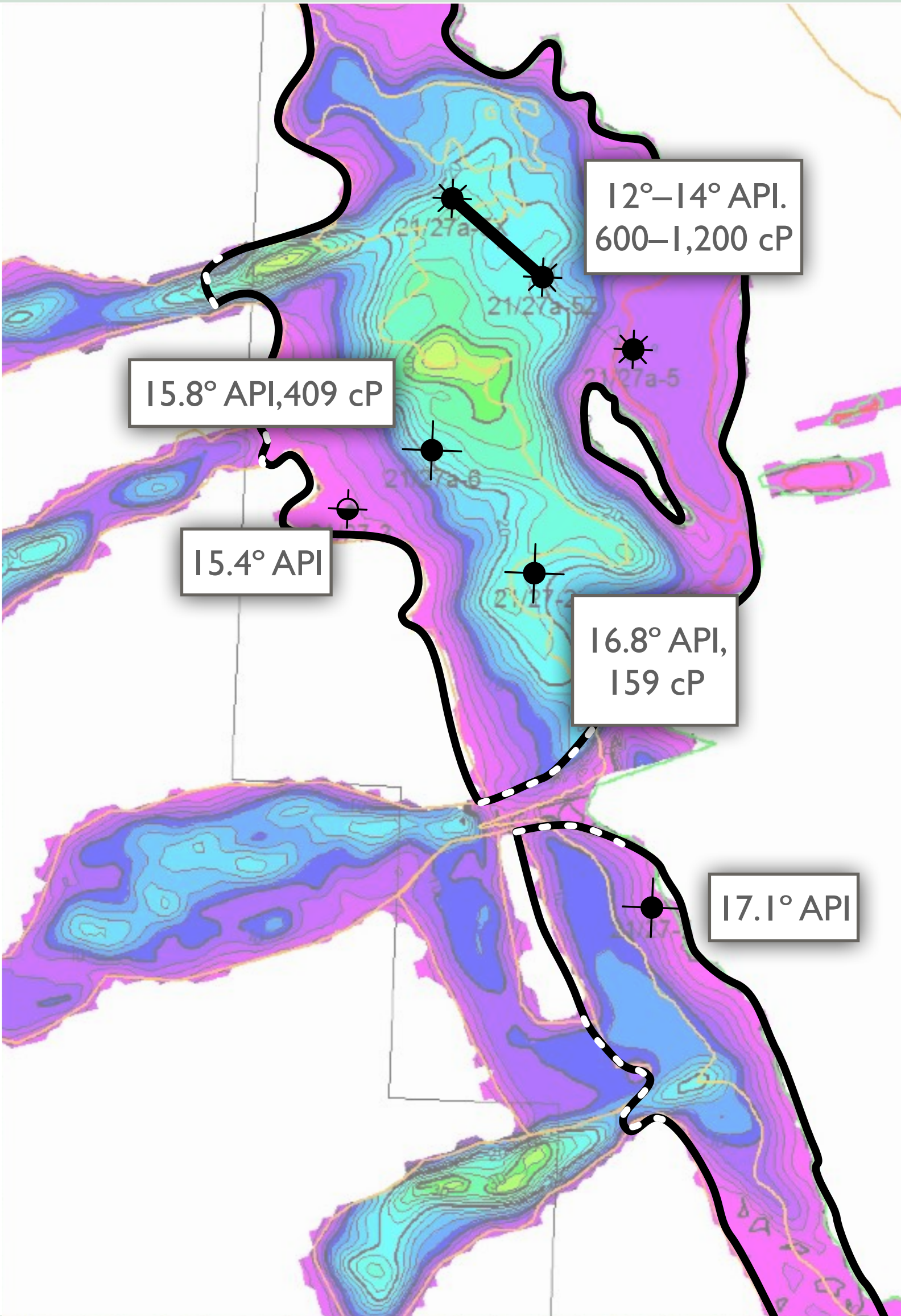


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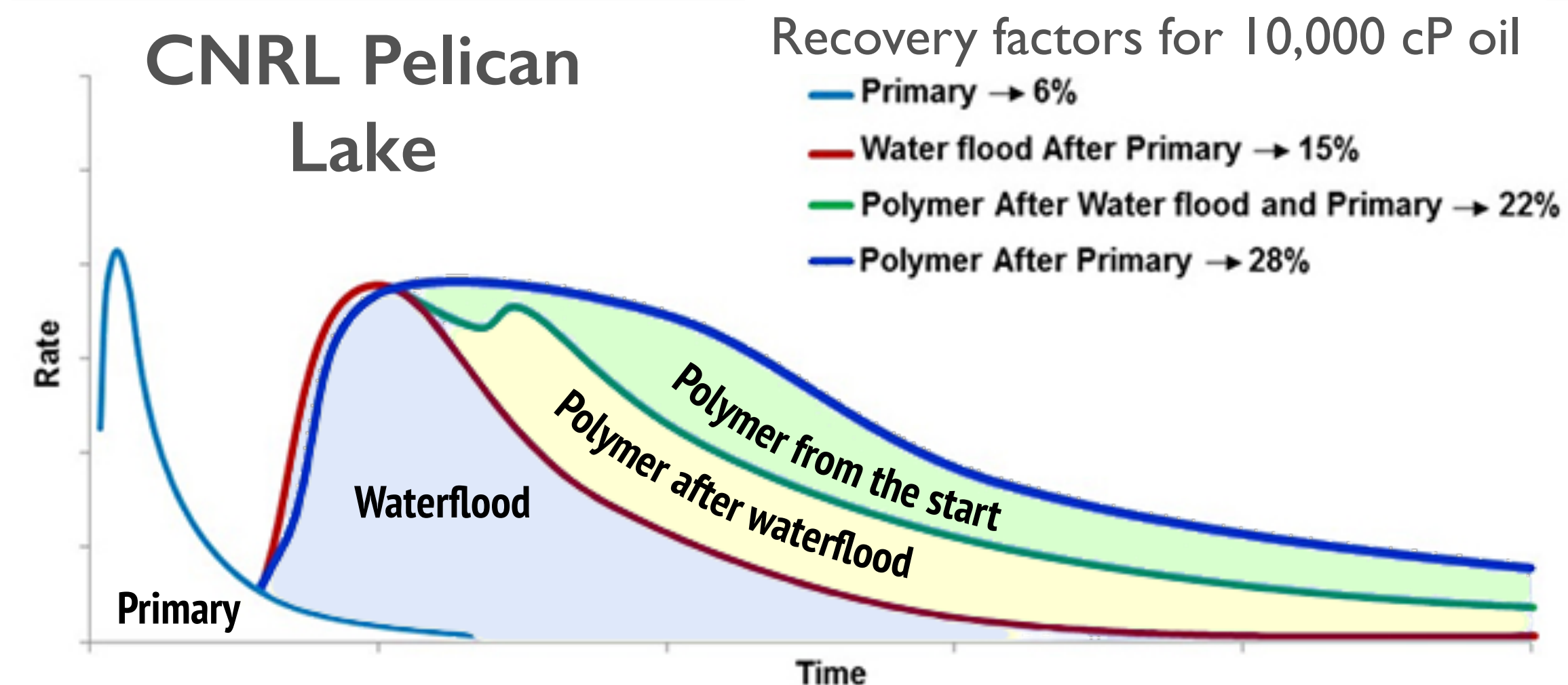
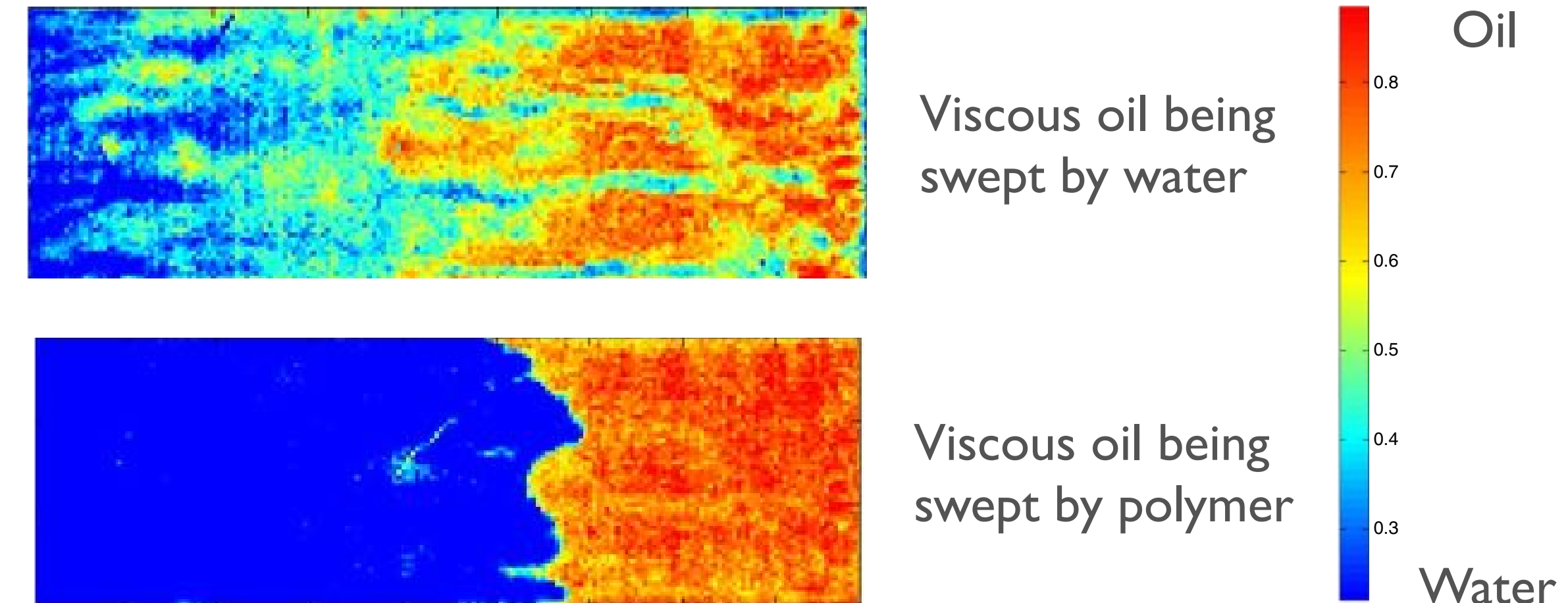


Pilot	Parameter	Units
Oil water contact	2724	feet
Oil column	>100	feet
Gross sand thickness	50-60	feet
Net to gross ratio	0.95	fraction
Porosity	0.34	fraction
Water saturation	< 0.10	fraction
Permeability	2 to 8	Darcies
Oil gravity	12° - 17°	API
Oil viscosity	c. 400	cP
Gas-Oil ratio	80	scf/bbl
Reservoir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

- Pilot discovered by Fina in 1989
- Fully appraised with 7 wells and modern 3D seismic
- 5 wells were cored, 2 wells were tested including a short horizontal well that produced over 1,800 bopd
- Reserves & Resources:
 - 79 MMbbl of proven & probable reserves
 - 10 MMbbl of technical 2C resources in periphery
 - 29 MMbbl of prospective resources in channels

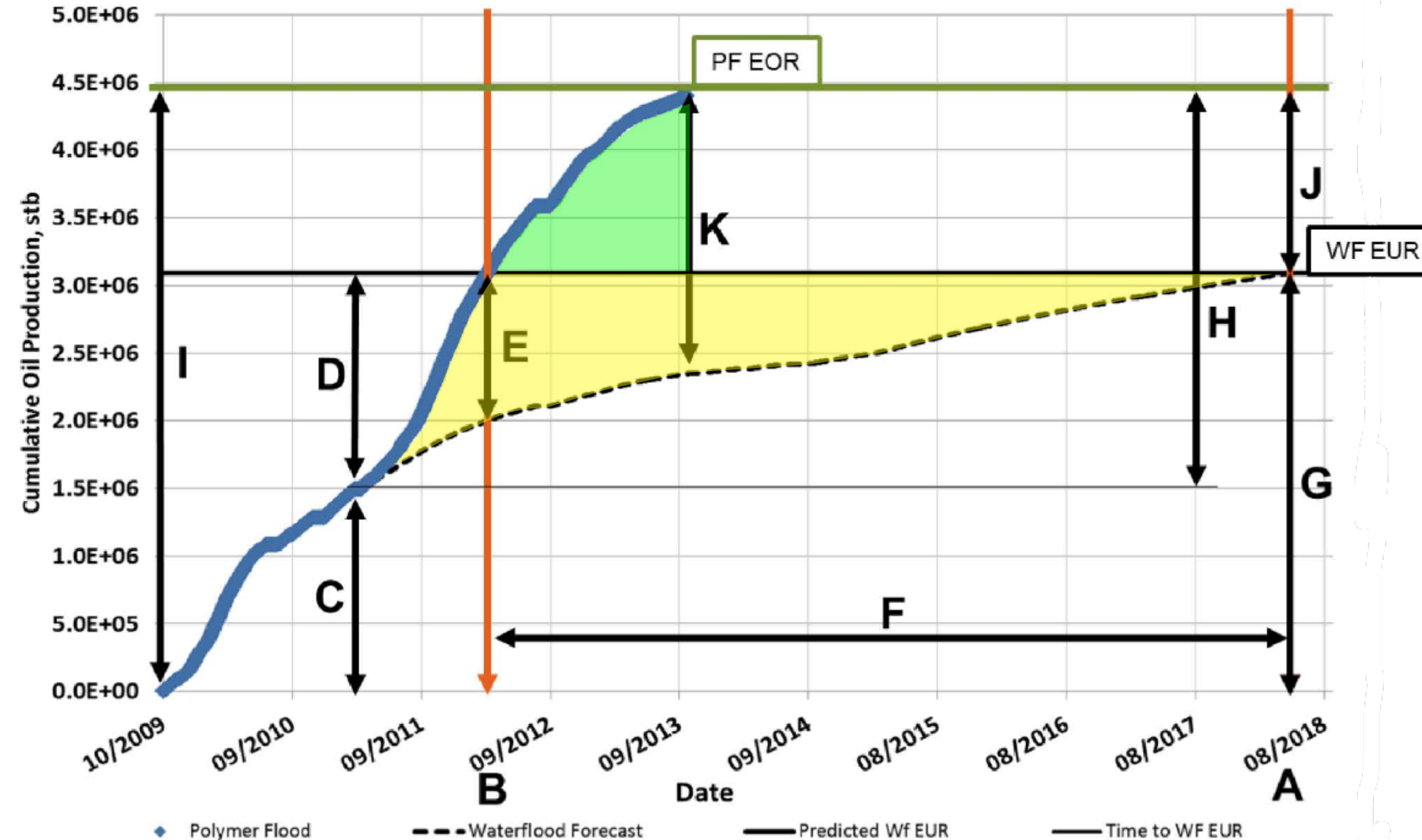


- Polymer flooding proven to deliver positive results with oil viscosities up to c. 5,000 cP
- Proven offshore on Captain field in the Central North Sea by Chevron
 - Ithaca has recently approved Stage 2 of the project
- Well spacing optimisation is key; better when applied early in field life, see Pelican Lake field
- Offshore polymer floods use an emulsion based polymer which simplifies logistics and operations
 - >99% uptime on Captain
- Low salinity water injection can massively reduce polymer costs

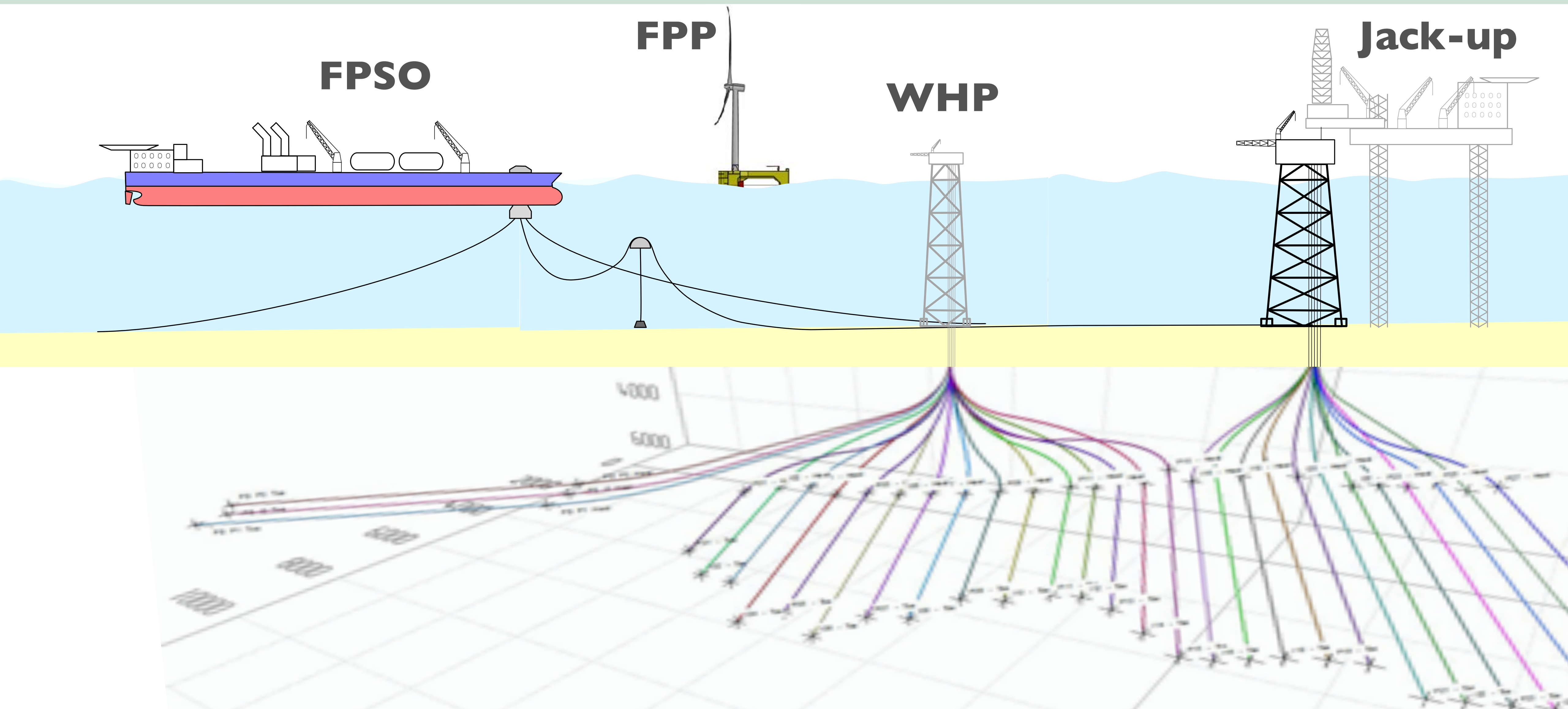


Polymer flooding – Captain field

- Completed in 2013, focused on a well pair in the Southern Upper Captain sand, separated by $\approx 125\text{m}$
- Dramatic acceleration of waterflood reserves
- Significant increment to expected waterflood recovery (16%)
- Excellent analogue to Pilot, much to learn and copy



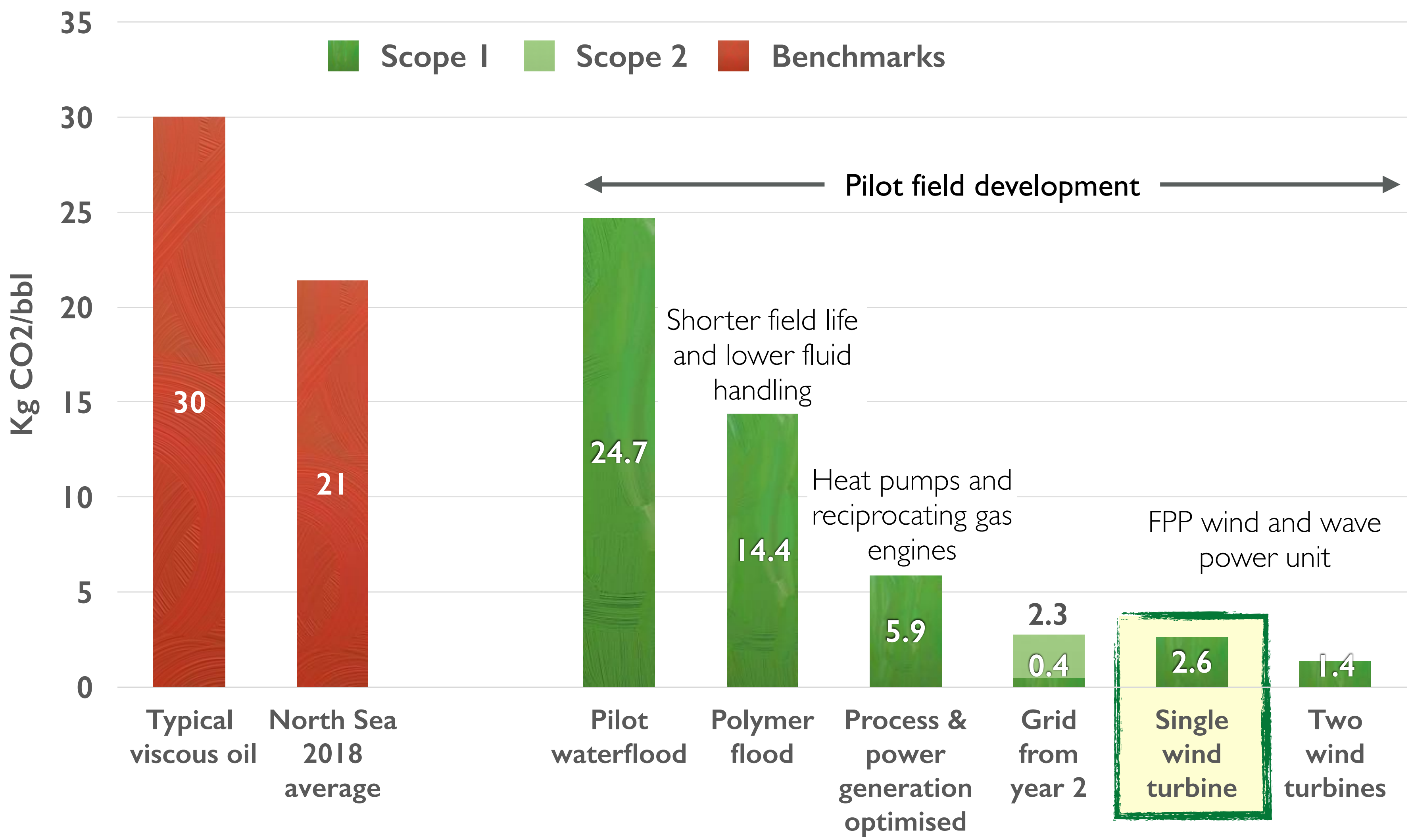
Pilot field development plan



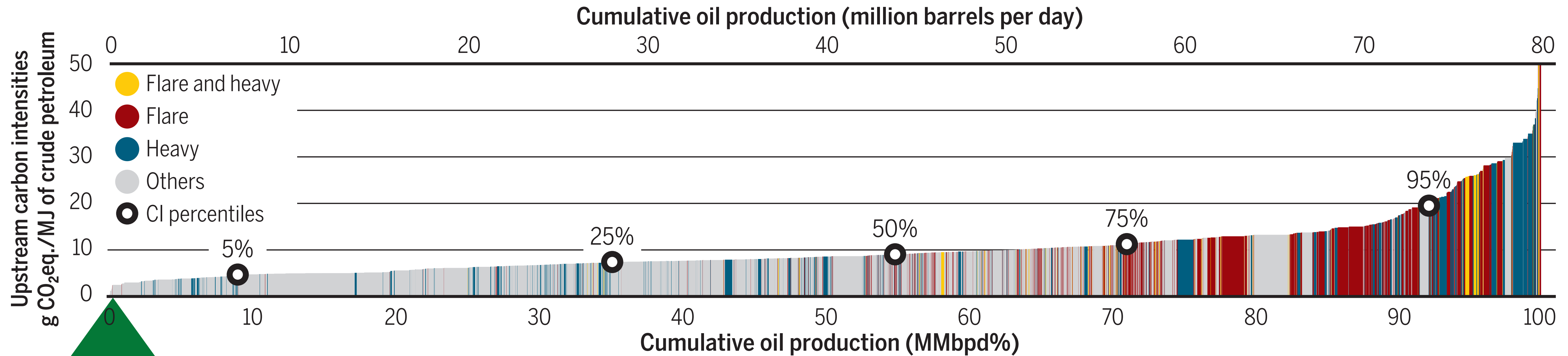
A project delivering on OGA's Net Zero agenda



- Many opportunities to reduce emissions identified
- Integration of aggressive process heat management with high efficiency back-up power generation and electrification has the potential to drive emissions down by over 80%
- Local wind farm power, with highly efficient back-up gas engines, reduces emissions as low as connection to a future grid with half of today's CO₂ intensity



Global oil production emissions

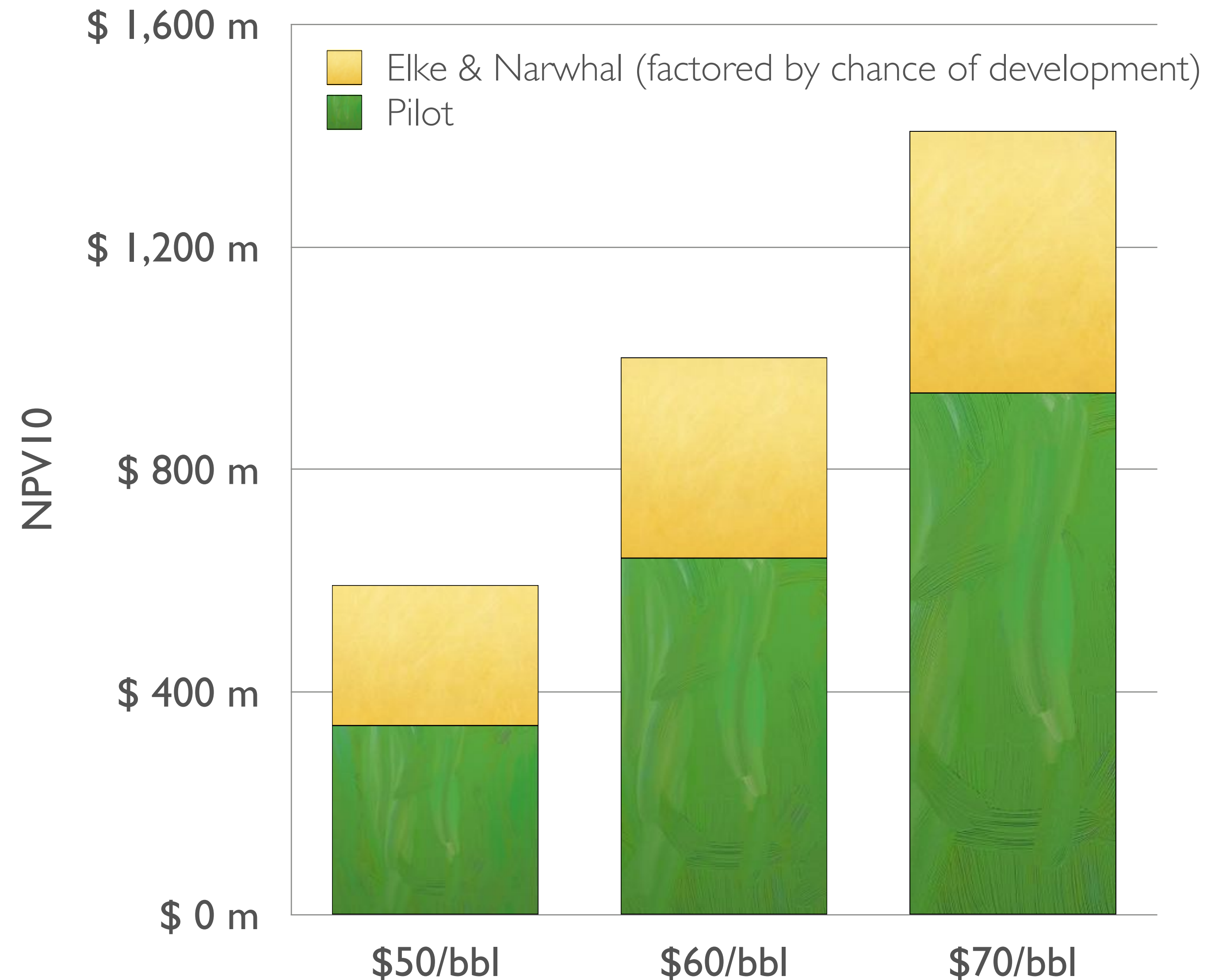


**Pilot emissions
will lie in the
lowest 5% of
global oil
production**

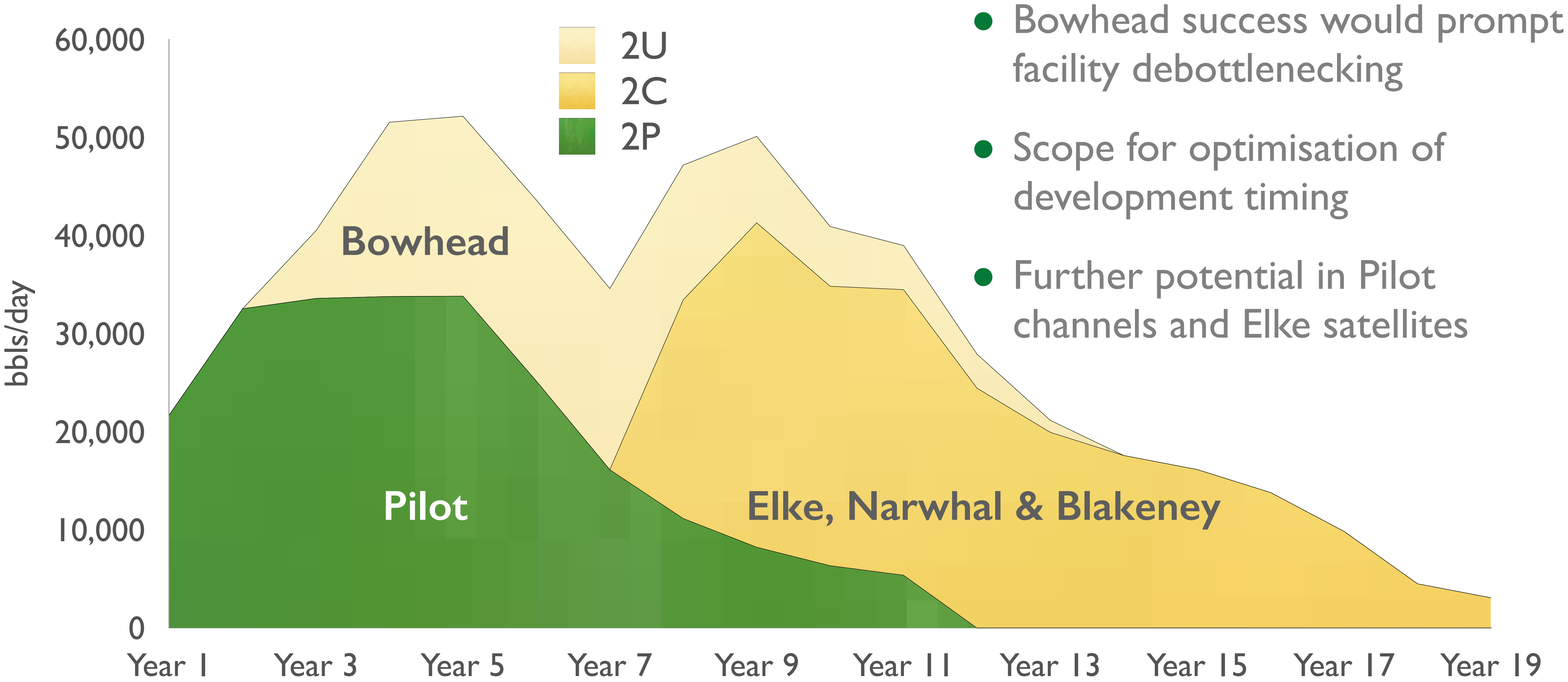
- To be comparable with this Stanford University dataset, we have added:
 - Scope 3 emissions from offshore logistics, oil transportation to the refinery, and polymer production
 - Estimates of emissions during the exploration and development phases (done using the Stanford tool)
- On that basis the comparable emissions are 1.4 gCO₂eq/MJ with a single wind turbine

A highly profitable project

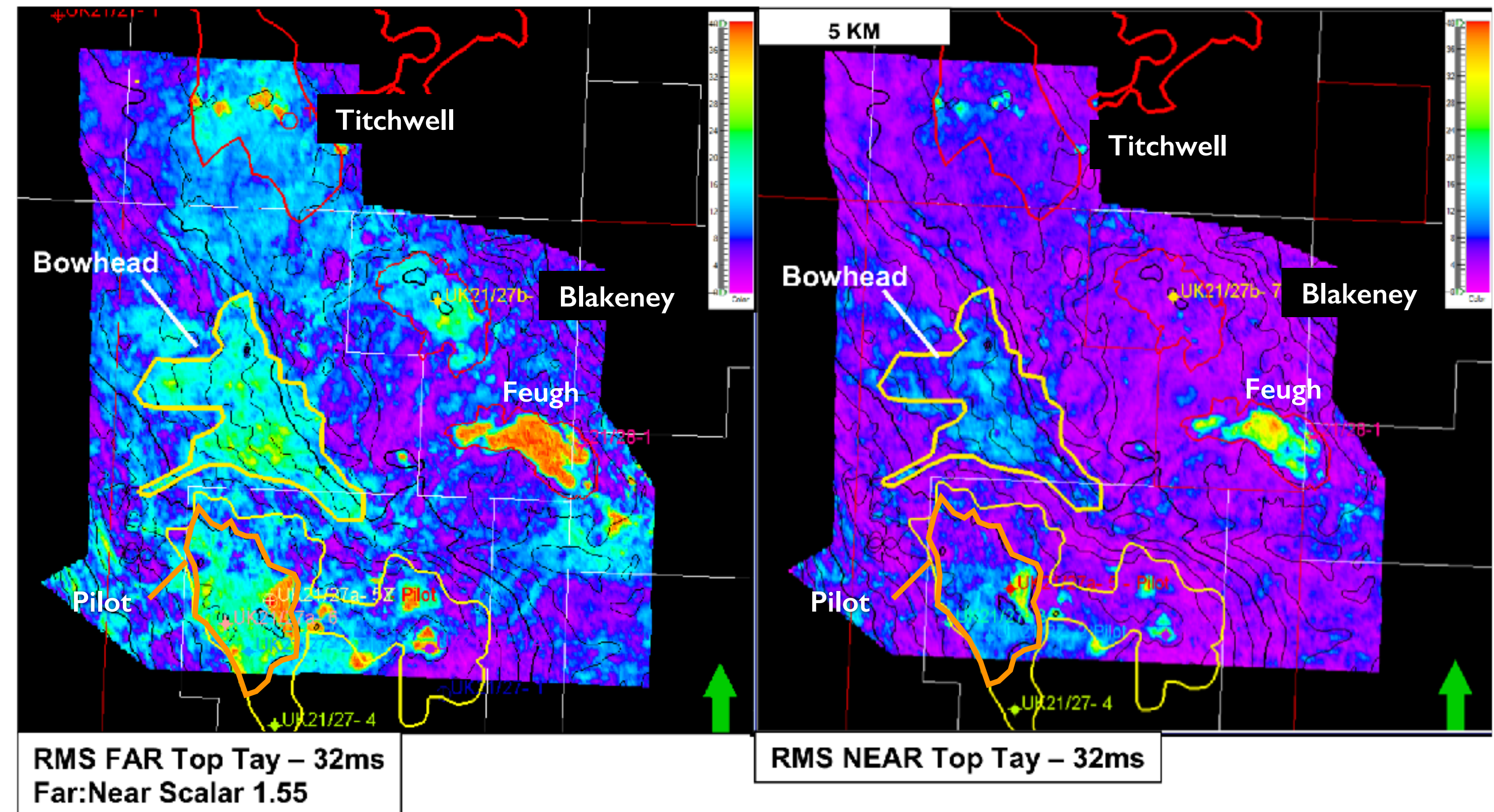
- Pilot low salinity polymer flood is a robust and highly profitable project with a NPV₁₀ breakeven below \$40/bbl
- Next step is to secure development partners (oil company or an alliance of contractors) to deliver a fully financed FDP
- FPSO contract is key to defining equity needs, Crondall Energy hired to secure the best FPSO deal
- Debt capacity is determined by the robustness of the proven reserve
- Equity can come either from industry (via farm-in) or the markets (via an equity raise)
- We will choose the approach which maximises value for shareholders



Potential area production



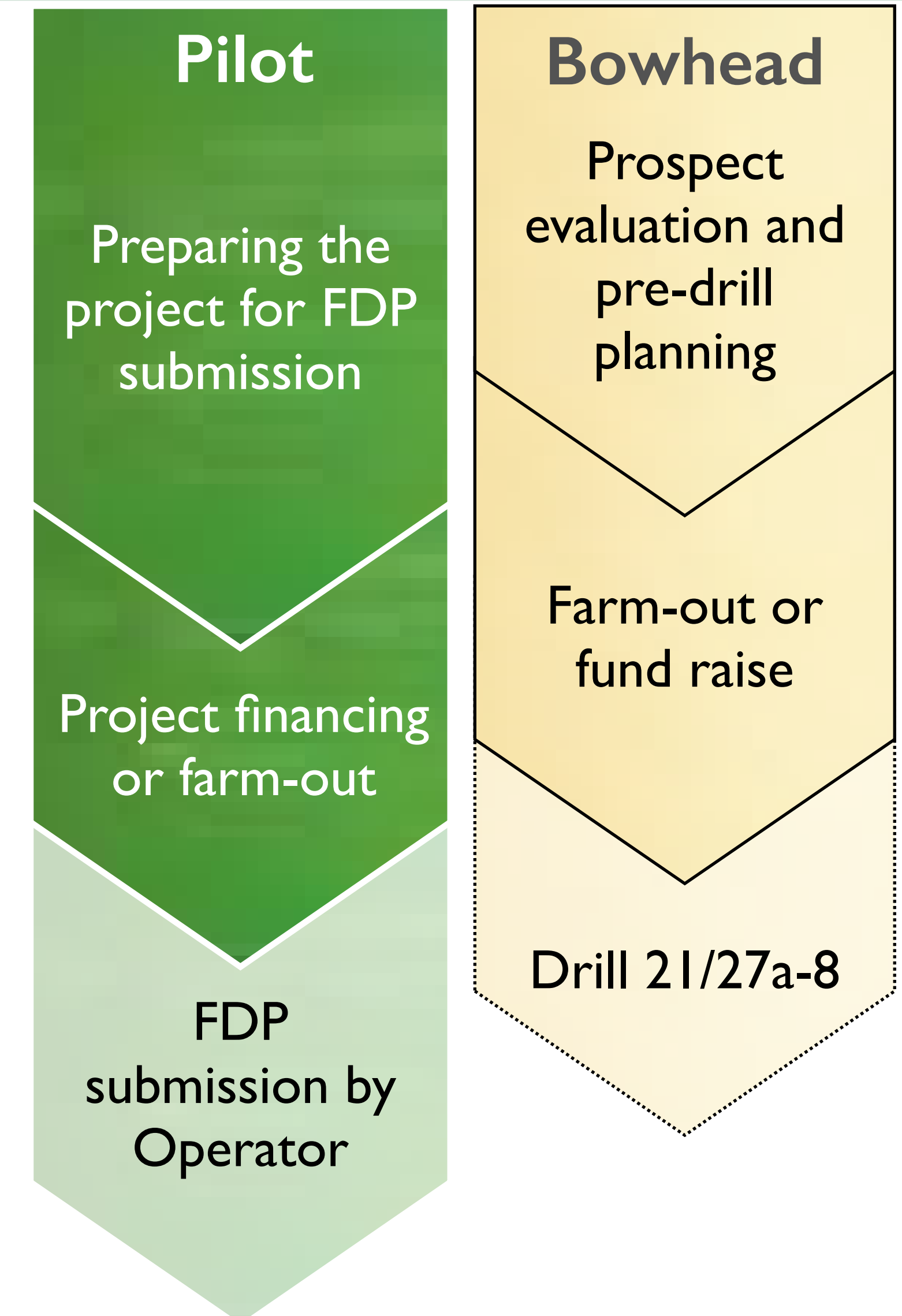
- Pilot look-alike on northern side of salt swell from Pilot which shows up brightly on the top reservoir far stack amplitudes
 - New seismic, which will help derisk the prospect and enable selection of the best well location available, to be purchased with IPO proceeds
- 43 MMbbl prospective resources, 49% geological chance of success
- Orcadian intends to progress the drilling of Bowhead if the new seismic confirms prospectivity
- Funding strategy remains flexible, either farm-out or a secondary raise
- Petrofac estimated well cost c. £8m



- Deliver a high return for investors
- Fully finance the polymer flood project for Pilot, two parallel approaches:
 - Seek oil companies as farm-in partners
 - Structure a contractor alliance to deliver the project with a minimised equity requirement
- Add value through focussed exploration and appraisal
 - Drill low risk prospects close to planned infrastructure which increase project scale
- Progress resources into reserves and onto production
 - Optimise area wide development plan

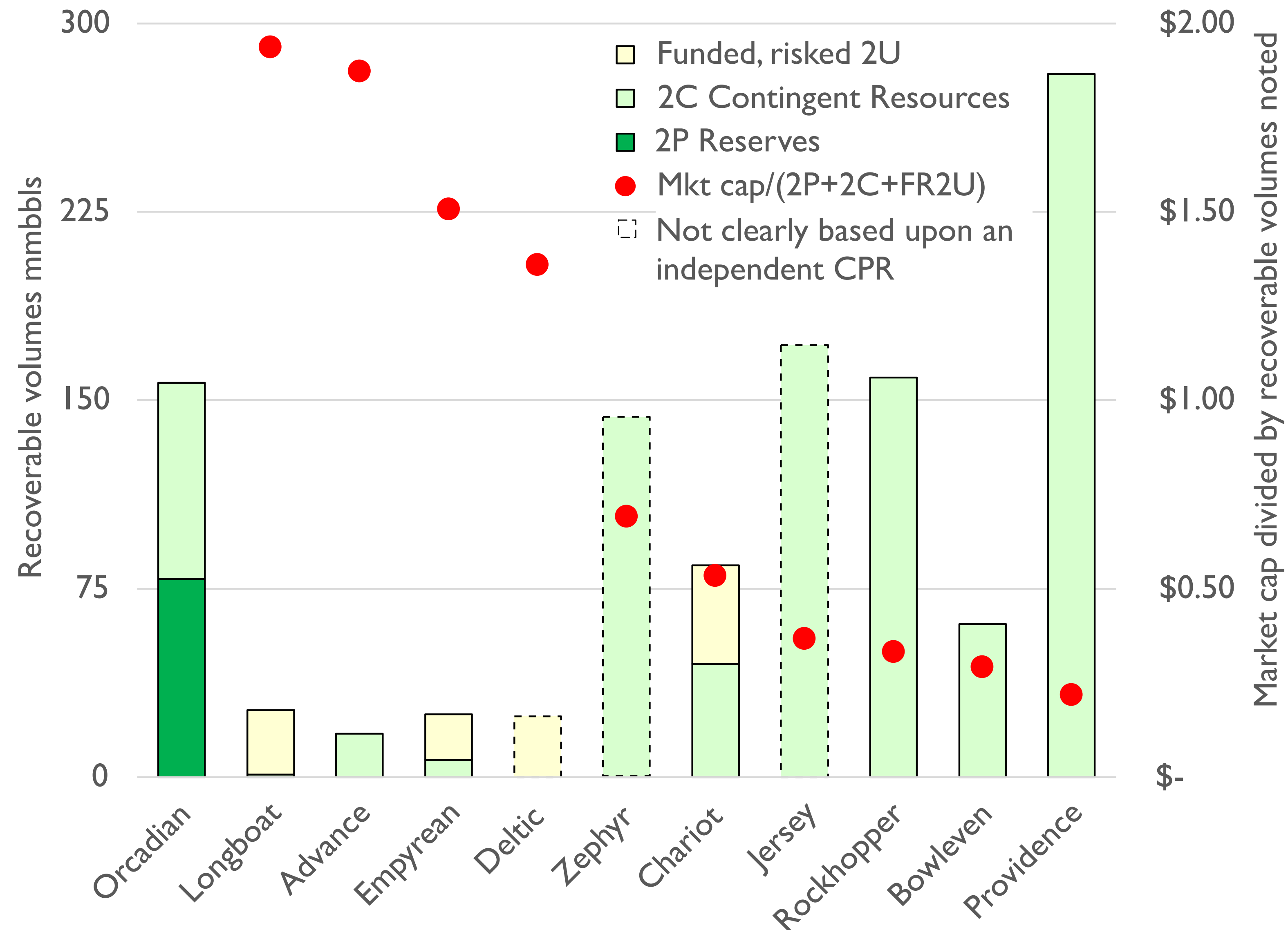


- Completion of concept confirmation work programme leading to OGA endorsement
- Purchase and interpretation of new seismic over Bowhead & Pilot, Pilot field determination
- Vessel selection, including opportunity to redeploy or retool an existing vessel, potentially saving substantial costs;
- Farm-out process to select development partner to be run in parallel with project financing process and contractor engagement
- Commitment to drill the Bowhead exploration well
- Drill Bowhead well
- Environmental baseline survey and ES
- FEED, SCAP, PEP, DSA, FDP, UOA, Design Notice, operator approval etc
- Completion of full project financing package, Final Investment Decision by partners and FDP approval from OGA



Comparable companies value per barrel

- Comparables are non-producing, London listed, oil and gas companies, with clear statements about their resource base
- Red dots are a calculation of the market cap (as at 16/7/21) divided by the sum of the net 2P reserves, 2C contingent resources and funded, risked 2U prospective resources
- Remember 2P is better than 2C, and 2C is better than risked 2U
 - 2U (even when risked) can only become 2C if the exploration well is funded
 - 2C can only become 2P if there is no more appraisal drilling needed and there is a feasible mature development plan which is likely to get financed



Why Orcadian?

- Substantial reserve base with significant exploration and appraisal upside
- Pilot project well advanced
- Core projects with NPV₁₀ of over \$1.0 billion at \$60/bbl and \$1.4 billion at \$70/bbl*
- Multiple paths forward to finance the project
- Highly experienced management team focussed on maximising shareholder return
- Proven capability to identify and secure developable resources at low cost
- Project in line with OGA's Net Zero goals



*Includes Sproule estimate of chance of development

Auditor: PKF Littlejohn	Broker: WH Ireland	Banker: Barclays
15 Westferry Circus London E14 4HD	24 Martin Lane, London EC4R 0DR	Level 25, 1 Churchill Place, London, E14 5HP
Lawyer: Hill Dickinson	Lawyer: TandonHildebrand	Registrar: Neville
The Broadgate Tower, 20 Primrose Street London EC2A 2EW	Labs Atrium, Chalk Farm Rd, London, NW1 8AH	Neville House, Steelpark Road, Halesowen, B62 8HD
Public Relations: Tavistock	Competent Person: Sproule	Registered Office
1 Cornhill, London EC3V 3NR	President Kennedylaan 19 2517 JK Den Haag, The Netherlands	6th Floor 60 Gracechurch Street, London, United Kingdom, EC3V 0HR

Head Office
70 Claremont Road, Surbiton, Surrey, KT6 4RH

Contact Details
email: steve.brown@orcadian.energy telephone: +44 (0) 20 3603 1941 twitter: @orcadian_energy website: https://orcadian.energy

ORCADIAN ENERGY PLC