



Oil & Gas
Authority



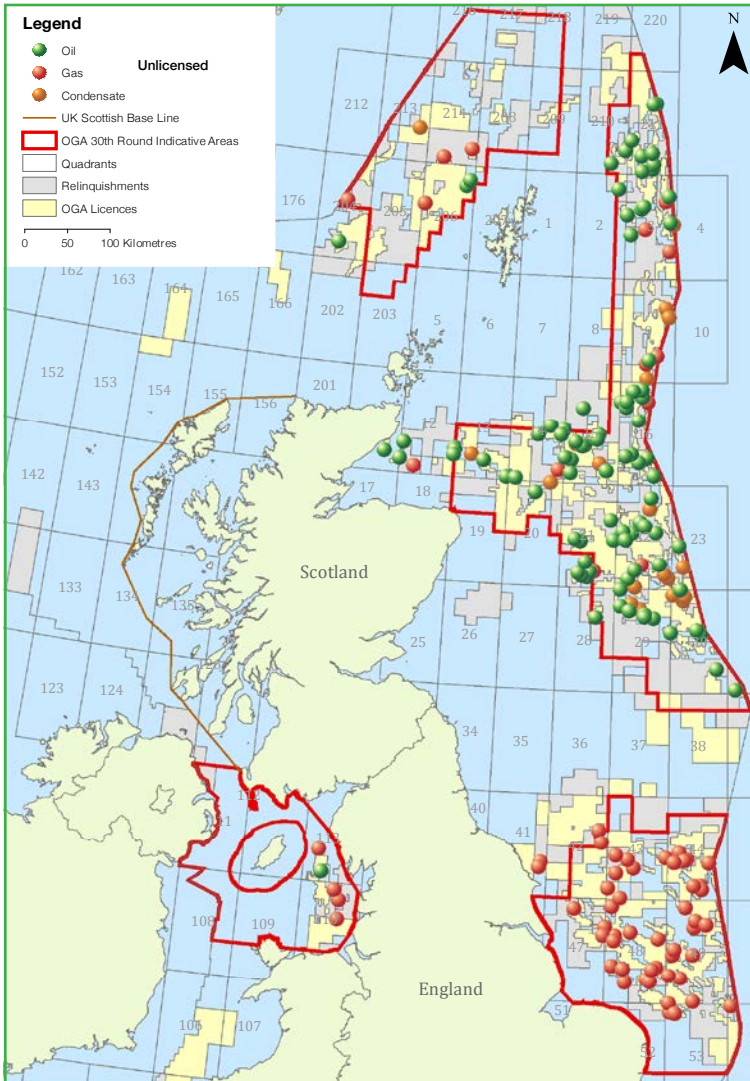
United Kingdom

Undeveloped Discoveries

30th Round Opportunities



Undeveloped Discoveries



There are currently 363 undeveloped discoveries across the UK Continental Shelf with total recoverable resources of 3.4bnboe (P50).

A large number of discoveries (140) are unlicensed and are available as part of the 30th Offshore Licensing Round.

The OGA has released discovery information packs detailing the opportunities in support of license applicants' evaluations.

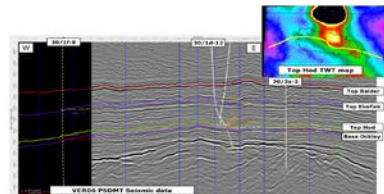
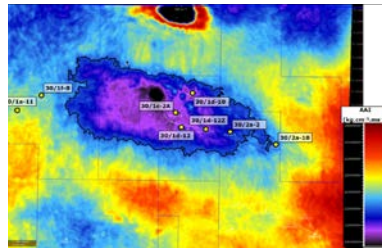
More details are available at: ogauthority.co.uk

All opportunities and associated resource estimates summarised, have been extracted from relinquishment reports that have been published, or that are due to be published prior to the start of the 30th Offshore Licensing Round. Reports are available to download for free at https://itportal.decc.gov.uk/web_files/relinqs/relinqs

Ockley

Ockley gas condensate discovery (30/1c-2A) in broad palaeo-high at intra-Hod level (chalk)

- Characterised by soft amplitude response attributed to elevated porosities that have been preserved through HC emplacement
- Low permeability chalk requiring drilling/ completion/ stimulation solution
- Opportunity for tight gas drilling and completion technologies to be applied
- Play opener for other tight Hod reservoirs in the North Sea
- Potential synergy with Oakwood discovery
- Further details will be published in the P1120/ P1320 relinquishment report



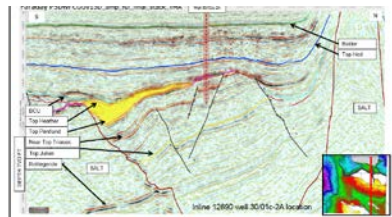
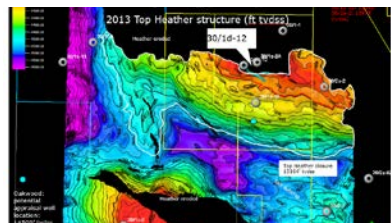
Recoverable resource estimates

Discovery	Low	Mid	High
Ockley (MMboe)	55	99	136

Oakwood

Oakwood gas condensate discovery (30/1d-12) stratigraphic pinch-out in Upper Jurassic (Heather turbidite/Fulmar sands)

- Large volumetric upside if the HWC is deeper than the HDT and if sand quality improves down dip
- Potential synergy with overlying Ockley discovery and other HPHT developments in the area
- Further details will be published in the P1120/ P1320 relinquishment report



Recoverable resource estimates

Discovery	Low	Mid	High
Oakwood (MMboe)	11.7	36.1	94.1

Talbot

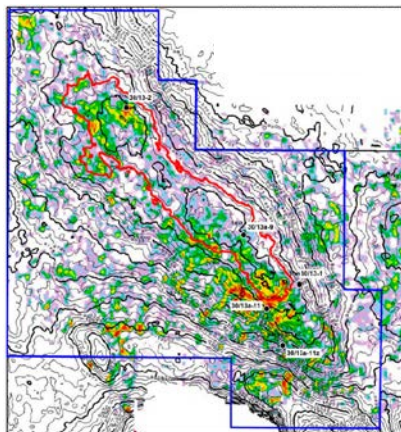
Combination trap in Paleocene Mey Fm turbidite sandstones

- Successfully tested by wells 30/13- 2, 30/13a- 9, 30/13a 11 & 11Z
- Oil-bearing sands identified in AVO inversion seismic products
- Additional upside in underlying Triassic Josephine oil discovery, and in Jurassic prospectivity
- Further details are available in the P.079 relinquishment report

Resource estimates

Discovery/Prospect	P90	P50	P10
Talbot STOIP (MMstb)	32	44	108
Talbot Resources (MMboe)	10	13	37
Josephine STOIP (MMstb)	43	62	89

Lambda Rho map showing predicted fluid distribution, overlaid with depth contours



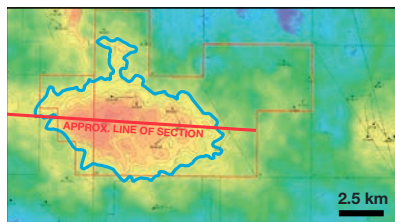
Colour: Lambda*Rho Sum of negative amplitudes in a window 0-24ms below top Mey Sdst

Contours: Depth to top Mey Sdst 25m contour interval 9446ft contour in red

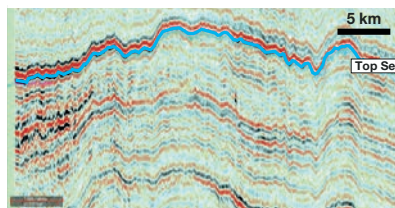
Courageous

Oil & gas discovery (30/2- 1) in fourway dip-closed structure at intra-Forties level

- Broad, low-relief anticline draping a Jurassic graben system
- Forties Fm reservoir comprising distal turbidite fan lobes fed from the north
- Fans are sand prone across the northern and eastern parts of the discovery
- Full coverage on two separate 3D surveys
- Further details will be published in the P.098 relinquishment report



Top reservoir (F7) depth structure map



Example seismic line through Courageous Veritas 2006 PDSM data courtesy of CCG

Recoverable resource estimates

Discovery	P90	P50	P10
Courageous (MMboe)	11.4	18.4	25.2

30th Licensing Round – Technology



image courtesy of Airborne Oil and Gas

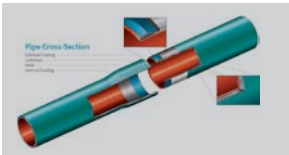


image courtesy of Cortez-Subsea

Technology identified as a key lever to unlocking marginal discoveries through reduced costs and improved hydrocarbon recovery

Initial focus on use of existing technologies not commonly used in UKCS, such as low cost pipelines and mechanical hot taps, that have potential to provide 'early-wins'

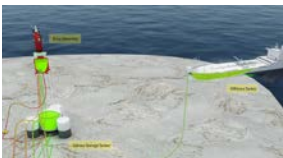


image courtesy of OPB

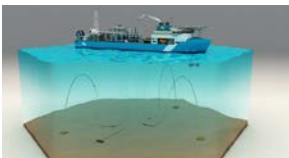


image courtesy of Amplus Energy

Identification of novel technologies to help unlock marginal fields (efficient stand-alone solutions, subsea storage, local hydraulic, chemical and power supply etc.)

Well cost reduction technologies, CAN, ERD, multi-laterals, geo-steering, current focus on de-risking and accelerating uptake

Demand led technology identification through OGA clustering studies and Operator technology plans, tie-back and standalone field development 'competitions' initiated by OGTC with OGA support

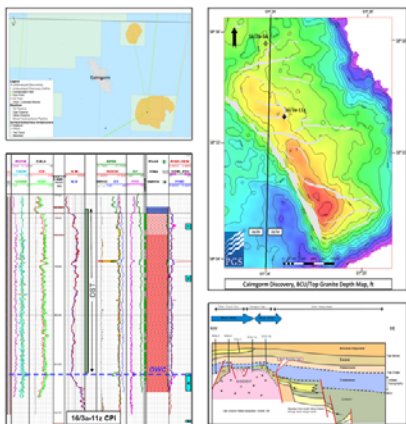
Development efficiencies learning via case studies led by O&G UK

OGA/OGTC 30th Round Technical showcase event planned for August 2017, programme information available at www.theOGTC.com

Data Support

A comprehensive data suite to support the licensing round has been prepared. It includes undeveloped discovery data packs, regional maps, ~ 60 discovery montages and seismic survey information

Cairngorm Discovery



The following information is available for download and to order on media in support of the 30th Round:

Undeveloped discoveries

Data Packs including:

- Wells and seismic information on circa 140 off discoveries
- Individual discovery montages for selected discoveries (circa 60 off)
- Undeveloped discoveries Interactive map

The OGA will also be making available additional supporting information, including:

- Getech's UKCS satellite gravity & Geostrat's CNS Jurassic stratigraphy report
- Joined Well Logs (JDWL) and related curve data
- Regional geological maps and databases for the CNS/MF area

The information can be accessed via the OGA data centre. For details visit:

<https://www.ogauthority.co.uk/data-centre/>



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For further information, please contact us at:
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