

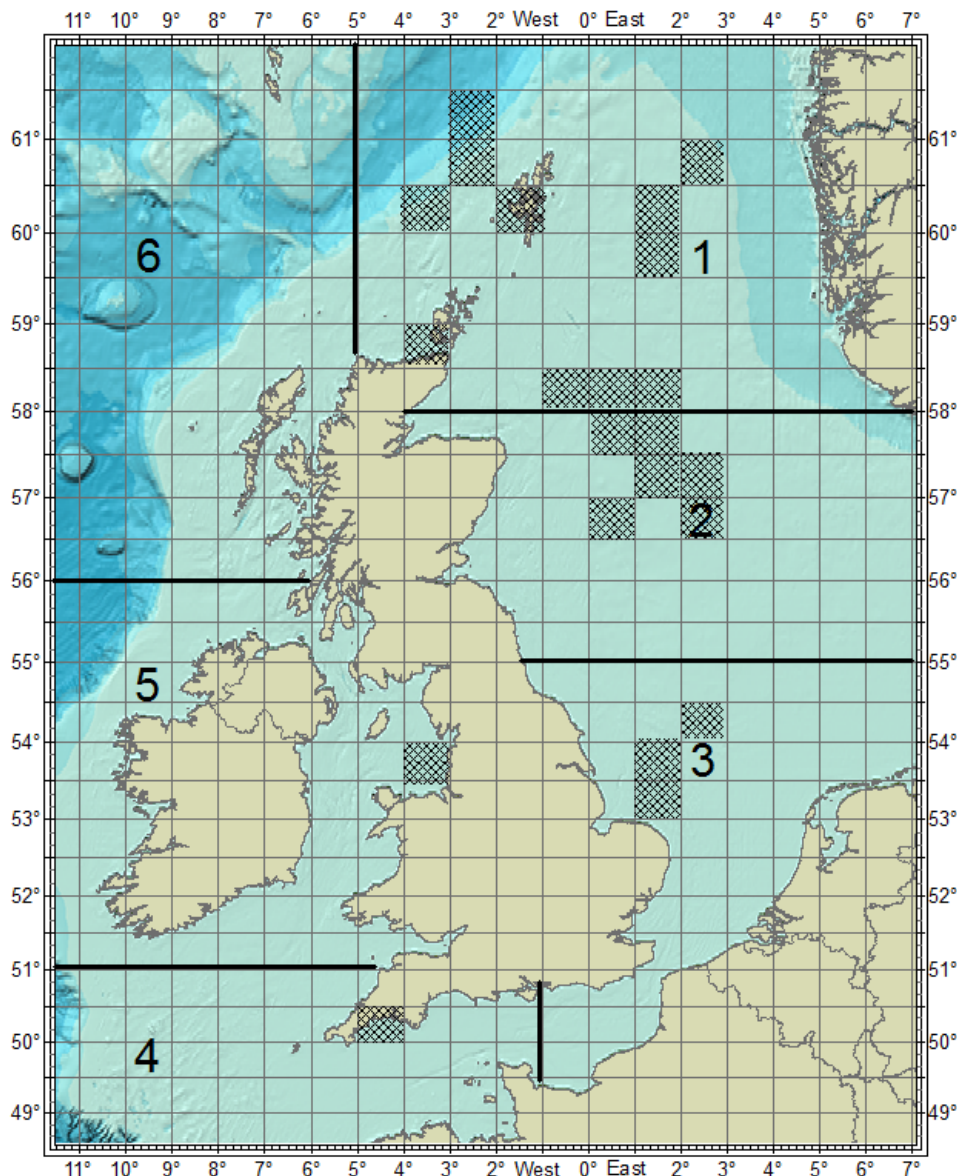
The Kingfisher Bulletin

Offshore News

OIL AND GAS

22 FEBRUARY 2018 | ISSUE 04

Shaded blocks indicate activity.



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STAY UPTO DATE - ALWAYS ENSURE YOU HAVE THE LATEST KINGFISHER BULLETIN AND OFFSHORE FISHING PLOTTER DATA ON-BOARD.

Support

The Kingfisher Bulletin is provided by the Kingfisher Information Service of Seafish, to promote awareness of offshore hazards to fishermen, new structures and zones and conflicting offshore operations. Support for publication of oil and gas industry information in this Bulletin is part of the project 'Fishing Safely in Changing European Waters 2016-2019' promoted by FLTC Services Ltd. The European Union through the European Maritime and Fisheries Fund and the Scottish Government have awarded substantial grants towards the costs of the project.



For further information, please visit: www.fishsafe.eu/en/contact-us/funding

Information

Information contained within the Kingfisher Bulletin comes from a variety of sources, although is in the majority, supplied directly to Kingfisher from the offshore operating industry, or government licensing authorities.

Coordinates within the Kingfisher Bulletin are converted into World Geodetic System 1984 (WGS84) and displayed as degrees, minutes and decimal minutes, to three decimal places (ddd°mm.mmm'). Route or boundary coordinates may be simplified for ease of use.

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Notice To Fishermen

First Published: 25 January 2018 | Latest Update: 25 January 2018

FishSAFE Information – FSIv35 Now Available



The latest release of FSI data is now being distributed to fishermen and is available to download [here](#).

FishSAFE v35 contains the positions of many new oil & gas structures and is available for the following fishing plotter systems: Sodena, Maxsea, Olex, Penta, SIS MicroPlot, Transas Navifisher, Litton FishMaster, TMPlanner Quodfish, Trax and also your FishSAFE Unit.

For further information: Kingfisher Information, using the details at the foot of this page.

Notice to Fishermen

First Published: 22 February 2018 | Latest Update: 22 February 2018

Fishing Hazard – Installation of CAN-ductor



The Normand Vision will wait for a suitable weather window, possibly 21st earliest and then move to the location below to install a subsea structure.

60°49.084'N 04°09.953'W

The CAN-ductor is a specially designed cylindrical suction anchor, containing an integrated continuous 36" x 30" x 26" conductor pipe. The outer structure is anticipated to have a diameter of approximately 6 m and a surface area of 28.3 m2. It will be brought to the Cambo well location and installed by the Normand Vision possibly 21st February 2018, a high capacity construction support vessel (CSV).



For further information: Gavin Kerr, AGR, Tel: +44 1224 629 000 email: Gavin.kerr@agr.com

Notice to Fishermen

First Published: 05 February 2018 | Latest Update: 05 February 2018

Abandoned Wellhead – Plugged and Abandoned

Please be advised that the following wells have been abandoned please remove for the January 2018 Yellow Card

Structure	Operator	Position
16/28a-18	BP Exploration	58°05.053'N 001°34.587'E
14/19-15	Repsol Sinopec Resources UK Ltd	58°25.962'N 000°18.833'W
14/19a-19	Repsol Sinopec Resources UK Ltd	58°25.549'N 000°16.306'W
15/17-23	Repsol Sinopec Resources UK Ltd	58°24.938'N 000°18.750'E

For further information: Marcelle Wynter, Oil & Gas Authority, Tel: 0300 067 1616 email: Marcelle.wynter@ogauthority.co.uk

Notice to Fishermen

First Published: 11 January 2018 | Latest Update: 11 January 2018

Fishing Hazard – Laggan / Tormore Pipelines – Orka Voe



One 8in pipeline and one 6in umbilical from Laggan and Tormore fields are currently exposed in the nearshore section close to landfall. The exposed sections are in the following area:

60° 29.319' N 1° 15.213' W
 60° 29.304' N 1° 15.108' W
 60° 28.993' N 1° 15.281' W
 60° 29.007' N 1° 15.386' W

Where water depth is between 20 and 35m. Fishing activities shall be avoided in this area, as there is potential for snagging.



For further information: David Colliard, Total E&P UK Limited, Tel: 01224 298172 email: david.colliard@total.com

Notice to Fishermen

First Published: 15 June 2017 | Latest Update: 15 June 2017

Abandoned Wellhead – Plugged and Abandoned

Please be advised that the abandoned wellhead below, No overtrawlability trial done yet, rough ground may be experienced.

Structure	Operator	Position
3/30-7	Total	60°03.710'N 001°59.140'E



For further information: David Colliard, Total E&P UK Limited, Tel: 01224 298172 email: david.colliard@total.com

Seabed Activity

First Published: 24 March 2016 | Latest Update: 05 September 2017

Martin Linge Project – NOCS Blocks 30/4 & 30/7a

Total Norway have activities solely within the Norwegian Sector for the Martin Linge Project which are included here for information.

A steel jacket (topsides to be installed summer 2017) at the following locations: 60°30.34' N 02°00.79' E and 60°29.87' N 02°04.42' E. From 15th July 2016 Total Norway have a new 500m radius safety zone at the submerged STL buoy prior to the arrival of a floating storage vessel (FSO) planned to arrive Q4 2017 centred on the following location: 60° 29.87' N 02° 04.42' E. A guard vessel will be present in the area until the FSO arrives in late 2017.



For further information: David Colliard, Total E&P UK Limited, Tel: 01224 298172 email: david.colliard@total.com

Seabed Activity

First Published: 22 February 2018 | Latest Update: 22 February 2018

Pelican Field Programme – Well Abandoning

TAQA Bratani is conducting well abandonment and drilling operations on a number of wells within the Pelican field.

Operations will be conducted by the Paragon MSS1 semi-submersible drilling rig, with operations expected to commence on March 1st and last for over a year. The rig will be anchored in a central location (61°02'00.705"N 1°07'45.057"E) and then skidded between wells as required.

The Paragon MSS1 is located in the Pelican field UKCS Block 211/26a, as per the details below.



Well Number	Location	Start / Finish	Description of Work
PU-p14	61°02.022'N 001°07.700'E	01/03/18 – 28/06/2018	Abandon wellbore and drill sidetrack well. Run Xmas tree
PU-p16S1	61°02.046'N 001°07.724'E	28/06/18 – 24/08/2018	Reservoir Abandonment. Remove existing Xmas tree
PU-P15 & PU-P15S1	61°02.037'N 001°07.719'E	24/08/18 – 10/10/2018	Reservoir Abandonment. Remove existing Xmas tree
PU-P11	61°02.026'N 001°07.766'E	10/10/18 – 09/11/2018	Reservoir Abandonment. Remove existing Xmas tree
PU-P21	61°01.997'N 001°07.729'E	09/11/18 – 08/12/2018	Reservoir Abandonment. Remove existing Xmas tree
PU-P10BS2	61°01.984'N 001°07.740'E	08/12/18 – 28/01/2019	Reservoir Abandonment. Remove existing Xmas tree
PU-P12	61°02.017'N 001°07.760'E	28/01/19 – 26/02/2019	Reservoir Abandonment. Remove existing Xmas tree

For further information: Peter Mayo, TAQA Bratani, Tel: 01224 275556, email: Peter.Mayo@taqaglobal.com

Edradour / Glenlivet Field Development – Construction Activities

Please note that TEPUK have three new permanent subsea 500m safety zones which came into effect 14 July 2015 at Edradour & Glenlivet, and 3 July 2017 at Edradour PLEM location.



Attention is drawn that FishSAFE units currently display a 200m radius zone (as opposed to the statutory 500m radius Safety Zone in force) as Hazard area centred on Edradour PLEM. Fishermen are therefore kindly requested to avoid this area.

All construction works have now been completed.

Area	Block	Coordinates
Glenlivet	UKCS 214/30a	61°04.600'N 02°05.010'W
Edradour	UKCS 206/4a	60°56.040'N 02°14.010'W
Edradour PLEM	UKCS 206/4a	60°54.660'N 02°32.260'W
Laggan	UKCS 206/4a	60°56.670'N 02°53.620'W

For further information: David Colliard, Total E&P UK Limited, Tel: 01224 298172 email: david.colliard@total.com

Deployment of Buoys

First Published: 25 January 2018 | Latest Update: 25 January 2018

North and East Coast – Acoustic receiver deployments

Deployment of one Datowell Waverider; a 700mm diameter bright yellow surface buoy with an LED flasher (5 flashes every 20s). Linked to smaller secondary buoy visible at low water.



Located on the eastern coastline of the island of South Harva in a depth of 25m. Moored on the seabed until April 2018

60°01.410'N 001°20.530'W

For further information: Alan Harpin, Scottish Sea Farms Ltd, Tel: +44 (0)7769678195 email: alan.harpin@scottishseafarms.com

Deployment of Buoys

First Published: 11 January 2018 | Latest Update: 11 January 2018

Dunnet Head – ADCP Deployment with surface marker buoys

The Environmental Research Institute is deploying 2 sea bed mounted frames, each with 2 surface marker buoys. Frames will be located approx 700m NE of Dunnet Head lighthouse and approx. 1000m NNE of Dunnet Head Lighthouse.



The locations of each frame are as follows:

58°40.598'N 3°21.993'W
58°40.819'N 3°21.958'W

Each frame will have two surface marker buoys (bright orange). Each marker buoy will be located approx. 100m from the frames central position (One buoy each side).

Each marker buoys will be tethered to a subsurface weight (400 Kg) with 16 mm polypropylene rope.

Vessels are advised to keep within 200m of these positions in order to avoid marker buoys and associated moorings. Frames will remain inplace between January 22nd 2018 – May 22nd 2018

For further information: Jason McIlvenny / Dr Philippe Gleizon, Tel: 01847889000 email: Jason.mcilvenny@uhi.ac.uk philippe.gleizon@uhi.ac.uk

Notice to Fishermen

First Published: 22 February 2018 | Latest Update: 22 February 2018

Fishing Hazard – 15mt Buoy



A 15 mt Buoy from mooring line 3 appears to have Dextron fiber grommets that failed, those grommets two of them were secured to the fiber mooring line in the main mooring system of the rig. A 85 ton shackle can be seen on the bottom end of the buoy.

56°23.735'N 02°15.315'E



The purpose of the buoy was to support the mooring rope above the subsea assets. It has been confirmed that all mooring are still fully in tack and service provider of mooring analysis confirmed that with the buoy not supporting the upper end of the fiber mooring line there should be no contact with any assets.

For further information: G

Notice to Fishermen

First Published: 30 November 2017 | Latest Update: 20 December 2017

Fishing Hazards – CATS Pipeline (Groups of structures)



A number of large structures (up to 6m high and 25m long) are positioned in open water on the Central Area Transmission System(CATS)at a number of the TEEs.

Each individual structure is deemed to be fishing friendly in design, but given the close proximity of the structures at these TEE's, it is recommended that fishermen treat these area's with caution. The individual positions are as follows:

T1 Structure, Andrew Structure, Huntington Structure	57°42.667'N 001°43.466'E
T2 Structure, ETAP Structure, WAGE structure	57°21.983'N 001°28.119'E
T5 Structure, Stella Structure, Banff Structure, Culzean Structure	57°01.752'N 001°12.124'E
T6 Structure, Judy Structure	56°39.793'N 001°12.112'E



For further information: Blair McKay, CATS Pipeline Technical Authority, Tel: +44(0)141 2271453 email: blair.mckay@woodplc.com

Notice to Fishermen

First Published: 05 February 2018 | Latest Update: 05 February 2018

Abandoned Wellhead – Plugged and Abandoned

Please be advised that the following wells have been abandoned please remove for the January 2018 Yellow Card

Structure	Operator	Position
30/13a-9	Repsol Sinopec Resources UK Ltd	56°34.784'N 002°30.267'E
30/01c-9	BP Exploration	56°50.657'N 002°10.019'E
23/16a-4	BP Exploration	57°23.263'N 002°00.865'E

For further information: Marcelle Wynter, Oil & Gas Authority, Tel: 0300 067 1616 email: Marcelle.wynter@ogauthority.co.uk

Notice to Fishermen

First Published: 16 November 2017 | Latest Update: 16 November 2017

Buchan Anchors – Removal

The Buchan Alpha FPV has been removed from its location however, the Safety zones remain in place as the subsea infrastructure is still present.

Please note that the ten Anchors situated the Buchan Alpha installation have been removed and recovered to shore. The anchors were located at the following co-ordinates:

A1: 57°52.707'N	000°03.461'E	C1: 57°55.023'N	000°00.974'E	E1: 57°54.473'N	000°05.019'E
A2: 57°52.457'N	000°01.267'E	C2: 57°55.770'N	000°00.630'E	E2: 57°53.339'N	000°04.479'E
B1: 57°53.084'N	000°00.672'E	D1: 57°55.858'N	000°02.450'E		
B2: 57°53.907'N	000°01.348'E	D2: 57°55.412'N	000°04.155'E		



The anchor cables which connected Buchan Alpha to the anchor locations have also been recovered. However as no trawl trials have been conducted in this area there could be seabed scars at the locations where these wires were present.

For further information: Joe Leask, Repsol Sinopec Resources UK Limited, T: +44 (1224) 501003 | M: +44 (7769) 113638

Culzean Field – CATS T5



Please be aware that following recent Culzean Field Development installation operations, there are now four large structures positioned within 75m of each other in open water at the CATS T5 pipeline location in close proximity to the Culzean PLEM with the following coordinates: 57°01.742'N 001°12.190'E

Each individual structure is deemed to be fishing friendly in design, but given the close proximity of the four structures, it is recommended that fishermen treat this area with caution. The individual positions are as follows:

Banff PLEM structure (15m x 10m x 3.7m)	57°01.734'N 001°12.154'E
CATS T5 structure (20.5m x 11m x 4.6m)	57°01.752'N 001°12.124'E
Culzean PLEM structure (24.9m x 21.9m x 5.6m)	57°01.763'N 001°12.193'E
Stella PLEM structure (17.6m x 13.4m x 3.9m)	57°01.741'N 001°12.190'E



For further information: Sietze Akkerman, Tel: +44 (0) 1224 242461, Email: sietze.akkerman@maerskoil.com

Seabed Activity

First Published: 12 January 2017 | Latest Update: 25 January 2018

Catcher Area – Development Project

Subsea construction activities on behalf of Premier Oil UK Limited on the Catcher Area Development (including the Catcher, Burgman and Varadero fields) located in block 28/9a of the UKCS 56°46.200'N 000°42.783'E

The FPSO BW Catcher is now in position and connected to the Submerged Turret Production Buoy and Moorings (turret centre 56°46.207'N and 00°42.765'E). The ERRV / Standby Vessel VOS Famous is monitoring the Catcher Area developments 500m safety zone throughout operations.



Three (3) x 3.5km pipeline bundles have been installed on the seabed between the FPSO location and Drill Centres locations;

Structure	Coordinates
Catcher Drill Centre	56°46.298'N 00°46.277'E
Varadero Drill Centre	56°48.356'N 00°42.300'E
Burgman Drill Centre	56°44.567'N 00°40.623'E

The FPSO and each drill centre has an approved HSE 500m safety exclusion zone in force.

Subsea Activity

No Subsea activity planned for the next period

Spoil deposit

There is a spoil deposit adjacent to the Curlew Deep Gas Diverter structure, 6.0m diameter and 2.5m high, located at 56°43.495'N & 01°42.944'E

Drilling

The ENSCO 100 drilling rig is currently located at the Catcher Drilling Template 2 (56°46.321'N & 00°46.296'E) through to the end of Q1 2018. The ERRV / Standby Vessel VOS Famous is monitoring the drill rig's 500m safety zone throughout drilling operations.

For further information: Steve Quayle, Tel: 01224 914298 email: squayle@premier-oil.com

Notice to Fishermen

First Published: 11 January 2018 | Latest Update: 11 January 2018

Fishing Hazard – Pipeline Span Hewett Field PL1173



Please note that a pipeline freespan has been identified during routine subsea inspection survey on the southern North Sea Hewett Field PL1173 pipeline, with the following details:

Length 25.5m Height 0.82m 53°06.662'N 001°44.180'E to 53°06.654'N 001°44.198'E

Stabilisation works due to commence on the 9th January 2018. Location of Deposit

53°06.668'N 001°44.165'E to 53°06.647'N 001°44.213'E

Duration: 10 days Weather dependent. Arrival into the field 9th January 2018

For further information: John Entwistle Tel: 020 7344 6342 John.Entwistle@eni.com



Notice to Fishermen

First Published: 30 November 2017 | Latest Update: 30 November 2017

Abandoned Wellhead – Abandoned Wellhead Campaign

Please note that a well abandonment campaign will be undertaken from the 23rd October 2017 to the 30th November 2017.

The well abandonment activity will be undertaken at the following suspended wells:-

Structure	Operator	Position	Status
48/15b-10	Centrica	53°37.500'N 001°52.038'E	
48/10a-15y	Centrica	53°40.722'N 001°58.641'E	
44/28a-6	Centrica	54°06.297'N 002°34.104'E	Update
110/03b-6A	Centrica	53°56.153'N 003°27.042'W	Complete

Work is now complete on 44/28a-6

A seabed survey was carried out at the well location. While doing the seabed survey the sonar was set up for 80 meters. The ROV also carried out a 360° sonar sweep at 80 meter range. The sweep was done at the 4 cardinal points of the compass from the wellheads.

No oilfield related debris was observed within the survey area.

For further information: Alastair Cattnach Tel +44 (0)1224 452360, Email: alastair.cattnach@intermoor.com



Seabed Activity

First Published: 25 January 2018 | Latest Update: 05 February 2018

Guinevere Platform – Decommissioning Works

It is anticipated that once decommissioning related research work has been completed at the Guinevere Platform on the 8 February 2018.

The vessel Seafox 1 will be departing the 500m zone of the Guinevere Platform: 53°24.892'N 001°16.420' E) and relocating to within the 500m zone of the West Sole Platform: 53°42.213' N 01°09.039'E to carry out works.

Please could you issue a navigation warning and inform vessels as appropriate.

For further information: Julie Summerell, Perenco, Tel: +44 (0)160377 1095 email: jsummerell@uk.perenco.com

Notice to Fishermen

First Published: 14 December 2017 | Latest Update: 14 December 2017

Fishing Hazard – Replica Mines

 Map Link

Please be advised that Replica Mines SADAF 02 Mine Shape

Position50°17.301'N 004°15.983'W
50°17.897'N 004°15.100'W43m water with a 20m Tether
39m of water with a 20m Tether

For further information: Warrant Officer Robert Montgomery RN, [Tel:01752 555433](tel:01752555433) email: Robert.Montgomery685@mod.uk

Douglas Field – Drilling Operations

Please be informed that the Irish Sea Pioneer is currently scheduled to be in the Douglas Field from 5 February 2018 for approximately 150 days.



Drilling Rig/Ship	Installation / Well No	Position	Start / Finish	Duration
Irish Sea Pioneer	Douglas Field (110/13D)	53°32.234'N 003°34.781'W	15/01/2018	30 Days

For further information: Alec Townley, Petrofac, Email: alec.townley@petrofac.com, T: +44 1352 842353

Area 1 Rig List

Latest Update: 19 February 2018

MOVEMENT	RIG	POSITION	MOVEMENT	RIG	POSITION
	Ensco 80	58°08.90'N 03°01.20'W		Deepsea Aberdeen	60°19.90'N 04°06.30'W
	Maersk Intrepid	58°25.10'N 01°42.90'E		Deepsea Atlantic	60°28.20'N 02°36.10'W
	Maersk Integrator	58°34.30'N 01°41.80'E		Safe Scandinavia	60°41.90'N 02°55.90'E
	COSL Innovator	58°40.20'N 02°14.20'E		COSL Promoter	60°47.10'N 03°33.30'E
	Rowan Viking	58°50.60'N 02°14.90'E		Songa Equinox	60°48.30'N 03°33.20'E
	Transocean Arctic	59°21.00'N 01°49.70'E		Songa Endurance	60°52.60'N 03°29.60'E
	Wilphenix	59°29.50'N 01°33.40'E		West Elara	61°02.30'N 02°20.30'E
	Maersk Gallant	59°34.90'N 01°39.40'E		Transocean 712	61°19.40'N 01°32.10'E
	Safe Boreas	59°35.20'N 01°03.20'E		Songa Enabler	61°25.30'N 03°49.70'E
	Noble Lloyd Noble	59°35.40'N 01°03.40'E		Deepsea Stavanger	64°56.80'N 06°57.30'E

Area 2 Rig List

Latest Update: 19 February 2018

MOVEMENT	RIG	POSITION	MOVEMENT	RIG	POSITION
	Noble Sam Turner	55°32.30'N 05°01.90'E		Ensco 100	56°46.40'N 00°46.40'E
	Maersk Resilient	55°34.80'N 04°45.40'E		Rowan Gorilla V	56°58.02'N 01°52.19'E
	Maersk Guardian	55°43.30'N 04°48.10'E		Maersk Interceptor	56°58.90'N 02°57.50'E
	Maersk Innovator	56°22.60'N 03°15.50'E		Maersk Highlander	57°11.70'N 01°54.80'E
	Ocean Valiant	56°23.70'N 02°15.30'E		Paul Loyd Jnr	57°17.40'N 01°22.40'E
	Ensco 120	56°43.50'N 02°12.50'E		Stena Spey	57°17.80'N 01°21.90'E

Area 3 Rig List

Latest Update: 19 February 2018

MOVEMENT	RIG	POSITION	MOVEMENT	RIG	POSITION
	Seafox 4	53°13.10'N 03°55.10'E		Seafox 1	53°24.90'N 01°16.40'E
	590021	53°14.00'N 03°14.50'E	New	Ensco 72	53°29.50'N 04°11.80'E
	Ensco 122	53°14.40'N 04°05.00'E	New	Prospector 1	53°40.00'N 06°17.70'E
	Ensco 92	53°23.20'N 02°08.90'E		Maersk Resolve	54°20.60'N 02°51.90'E
	Ensco 101	53°24.30'N 04°12.00'E		Ensco 121	54°35.70'N 00°26.00'E

Area 5 Rig List

Latest Update: 19 February 2018

MOVEMENT	RIG	POSITION	MOVEMENT	RIG	POSITION
	Irish Sea Pioneer	53°32.20'N 03°34.80'W		GMS Endurance	53°51.80'N 03°37.10'W

Rig anchors may extend over one mile from rig positions; anchor buoys are not always deployed. There may be additional structures called anchor pennants, deployed up to 200 metres from each anchor. In the interests of safety and to avoid fishing gear damage, fishing close to, or within anchor patterns, should be avoided. Fishermen may contact the installation or the ERRV (standby vessel) for positions of the anchors.

Area 1

Anchor List

Latest Update: 25 November 2017

Transocean Leader – At Kraken Drill Centre #4



Anchor No.	Anchor Position	Laydown Pennant s		Anchor Position	Laydown Pennant s
Rig	59°55.894'N 01°14.982'E				
1	59°54.290'N 01°11.580'E	59°54.380'N 01°11.500'E	5	59°52.760'N 01°12.810'E	59°52.680'N 01°12.870'E
2	59°54.310'N 01°12.690'E	59°54.400'N 01°12.740'E	6	59°52.740'N 01°11.590'E	59°52.660'N 01°11.540'E
3	59°54.760'N 01°13.790'E	59°53.790'N 01°13.980'E	7	59°53.200'N 01°10.670'E	59°53.170'N 01°10.520'E
4	59°53.210'N 01°13.700'E	59°53.170'N 01°13.880'E	8	59°53.820'N 01°10.660'E	59°53.850'N 01°10.510'E

Deepsea Aberdeen – As Laid at Schiehallion West Drill Centre

Anchor No.	Position	Anchor No.	Position	Anchor No.	Position
Rig	60°19.884'N 004°06.252'W	3	60°21.342'N 004°07.506'W	6	60°20.424'N 004°01.944'W
1	60°20.346'N 004°09.216'W	4	60°21.126'N 004°04.926'W	7	60°17.814'N 004°04.458'W
2	60°20.454'N 004°09.234'W	5	60°20.424'N 004°03.684'W	8	60°18.414'N 004°06.318'W

Deepsea Aberdeen – Schiehallion Central Drill Centre

Anchor No.	Anchor Position	Surface Buoy
Well		
2	60°20.646'N 004°04.776'W	60°20.322'N 004°03.600'W
3	60°21.336'N 004°03.102'W	Anchor Laid Down on Seabed
4	60°21.432'N 004°00.948'W	60°20.670'N 004°01.710'W
5	60°20.454'N 003°59.346'W	60°20.280'N 004°00.588'W

Transocean 712 – At Osprey

Anchor No.	Position	Anchor No.	Position	Anchor No.	Position
Rig	61°19.496'N 001°32.716'E	3	61°20.113'N 001°33.270'E	6	61°18.074'N 001°33.551'E
1	61°19.792'N 001°31.340'E	4	61°19.700'N 001°33.985'E	7	61°18.656'N 001°31.970'E
2	61°20.112'N 001°32.162'E	5	61°19.080'N 001°34.219'E	8	61°19.210'N 001°31.331'E

Blackford Dolphin – As Laid Pattern Captain B

Anchor No.	Position	Anchor No.	Position	Anchor No.	Position
Rig	58°18.001'N 01°42.492'W	3	58°18.869'N 01°42.727'W	6	58°17.298'N 01°41.225'W
1	58°18.239'N 01°44.023'W	4	58°18.698'N 01°41.400'W	7	58°17.054'N 01°42.489'W
2	58°18.646'N 01°43.554'W	5	58°17.877'N 01°40.638'W	8	58°17.437'N 01°44.025'W

Glen Lyon – FPSO



Anchor No.	Position	Anchor No.	Position	Anchor No.	Position
Rig	60°21.383'N 04°04.071'W	7	60°20.531'N 04°03.269'W	14	60°21.054'N 04°05.849'W
1	60°21.811'N 04°02.375'W	8	60°20.516'N 04°03.331'W	15	60°21.084'N 04°05.872'W
2	60°21.779'N 04°02.349'W	9	60°20.506'N 04°03.393'W	16	60°22.223'N 04°04.934'W
3	60°21.755'N 04°02.298'W	10	60°20.493'N 04°03.449'W	17	60°22.236'N 04°04.873'W
4	60°21.720'N 04°02.297'W	11	60°20.955'N 04°05.765'W	18	60°22.253'N 04°04.808'W
5	60°21.691'N 04°02.274'W	12	60°20.987'N 04°05.792'W	19	60°22.264'N 04°04.737'W
6	60°20.534'N 04°03.198'W	13	60°21.019'N 04°05.824'W	20	60°22.278'N 04°04.675'W

PBLJ – At Shaw CG Well - Proposed

Anchor No.	Anchor Position	Chain End	Anchor Pennant End
CG Well	57°17.358'N 001°22.275'E		
1	57°18.356'N 001°22.329'E	57°18.140'N 001°22.319'E	57°18.354'N 001°22.510'E
2	57°18.021'N 001°23.123'E	57°17.802'N 001°22.833'E	57°17.964'N 001°23.270'E
6	57°16.717'N 001°21.457'E	57°17.201'N 001°21.912'E	57°16.637'N 001°21.351'E
7	57°17.218'N 001°20.607'E	57°17.263'N 001°21.098'E	57°17.202'N 001°20.428'E
8	57°17.928'N 001°20.466'E	57°17.791'N 001°20.895'E	57°17.925'N 001°20.284'E

Maersk Master – will pre-lay anchors at Bittern B4 (Recovery planned)

Anchor No.	Position	Anchor No.	Position	Anchor No.	Position
Rig	56°55.020'N 001°01.404'E	3	56°55.032'N 001°02.908'E	6	56°54.394'N 001°00.426'E
1	56°55.849'N 001°01.347'E	4	56°54.473'N 001°02.527'E	7	56°54.994'N 000°59.894'E
2	56°55.639'N 001°02.405'E	5	56°54.198'N 001°01.454'E	8	56°55.574'N 001°00.274'E

Ocean Patriot – Proposed At Egret Anchor pattern will have a circa 1600m radius

Anchor No.	Position	Anchor No.	Position	Anchor No.	Position
Rig	57°10.361'N 001°44.677'E	3	57°10.322'N 001°43.477'E	6	57°11.022'N 001°45.349'E
1	57°09.678'N 001°44.625'E	4	57°10.596'N 001°43.567'E	7	57°10.361'N 001°46.110'E
2	57°09.753'N 001°44.133'E	5	57°11.111'N 001°44.773'E	8	57°09.999'N 001°46.187'E

Culzean – Culzean FSO Anchors

Anchor No.	Anchor Position	Chain End		Anchor Position	Chain End
			7	57°11.068'N 001°58.558'E	57°11.143'N 001°58.456'E
1	57°11.723'N 001°56.154'E	57°11.723'N 001°56.325'E	8	57°11.096'N 001°58.621'E	57°11.167'N 001°58.509'E
2	57°11.681'N 001°56.149'E	57°11.685'N 001°56.321'E	9	57°12.444'N 001°58.413'E	57°12.364'N 001°58.326'E
3	57°11.636'N 001°56.153'E	57°11.647'N 001°56.323'E	10	57°12.464'N 001°58.343'E	57°12.381'N 001°58.266'E
4	57°11.594'N 001°56.167'E	57°11.611'N 001°56.336'E	11	57°12.483'N 001°58.271'E	57°12.397'N 001°58.203'E
5	57°11.021'N 001°58.423'E	57°11.103'N 001°58.341'E	12	57°12.500'N 001°58.195'E	57°12.412'N 001°58.138'E
6	57°11.039'N 001°58.495'E	57°11.117'N 001°58.404'E			

Catcher FPSO –

Construction vessels Skandi Skansen and Skandi Neptune working around and extending out approximately 1000m from the future Catcher FPSO



Anchor No.	Position	Anchor No.	Position	Anchor No.	Position
STP Buoy @ Future FPSO	56°46.207'N 000°42.782'E				
1	56°46.573'N 000°42.093'E	5	56°46.457'N 000°43.780'E	9	56°45.713'N 000°42.755'E
2	56°46.602'N 000°42.136'E	6	56°46.423'N 000°43.804'E	10	56°45.719'N 000°42.687'E
3	56°46.630'N 000°42.182'E	7	56°46.387'N 000°43.824'E	11	56°45.728'N 000°42.620'E
4	56°46.655'N 000°42.233'E	8	56°46.350'N 000°43.840'E	12	56°45.739'N 000°42.555'E

Company & Vessels	Towed Cable Length & Depth	Area Covered 1 (inc Quod Blocks)	Area Covered 2 (inc Quod Blocks)	Duration
Fugro GB Marine Ltd Fugro Scout 3FYP4		58°01.698'N 001°42.698'E 58°01.701'N 001°43.003'E 58°01.536'N 001°42.704'E 58°01.539'N 001°43.009'E	16	01/03/2018 - 01/04/2018 For 3 Days
MG3 (Survey) UK Ltd MV Poseidon TFJC		61°14.474'N 000°43.133'E 61°11.312'N 000°46.700'E 61°10.283'N 000°42.780'E 61°13.444'N 000°39.209'E		12/02/2018 - 31/05/2018 For 5 Days
Gardline Ltd Ocean Reliance HP6391	1500m 3m	58°47.853'N 001°08.071'E 58°45.783'N 001°12.876'E	16	05/02/2018 - 31/03/2018 For 16 Days
Gardline Geo survey Ltd Ocean Observer GHXX	1200m 3m	58°22.861'N 000°51.280'E 58°22.705'N 000°57.451'E 58°21.448'N 001°04.546'E 58°18.610'N 000°58.378'E	15, 16	22/01/2018 - 30/06/2018 For 10 Days
Schlumberger TBA		60°40.122'N 003°23.830'W	206	01/09/2017 - 30/03/2018 For 1 Day

Area 2 Survey List

Latest Update: 25 January 2018

Company & Vessels	Towed Cable Length & Depth	Area Covered 1 (inc Quod Blocks)	Area Covered 2 (inc Quod Blocks)	Duration
Gardline Geosurvey Kommandor PBQW	1200m 3m	57°08.572'N 001°04.039'E 57°08.665'N 001°10.283'E 57°12.706'N 001°10.083'E 57°12.612'N 001°03.828'E	22	
MG3 (Survey) UK Ltd MV Poseidon TFJC		57°11.070'N 000°51.579'E 57°08.914'N 000°51.529'E 57°08.941'N 000°47.562'E 57°11.096'N 000°47.608'E	21	10/02/2018 - 30/04/2018 For 3 Days
Total E&P UK Ltd TBC	2m 5m	57°00.727'N 001°40.424'E	22	30/11/2017 - 28/02/2018 For 2 Days
Baker Hughes Wireline Olympic Taurus LDXA	2m 4m	57°10.704'N 001°53.811'E	22	01/02/2018 - 31/05/2018 For 2 Days
Fugro Survey Ltd Fugro Venturer C6CG3		57°55.517'N 000°26.941'E 57°55.008'N 000°30.876'E 57°54.746'N 000°30.756'E 57°55.256'N 000°26.822'E 58°00.229'N 000°43.018'E 57°59.466'N 000°45.702'E 57°59.229'N 000°45.462'E 57°59.992'N 000°42.779'E	21, 15	19/01/2018 - 30/04/2018 For 7 Days
MG3 (Survey) UK Ltd MV Poseidon TFJC		57°15.392'N 000°48.488'E 57°21.543'N 000°49.985'E	21	15/02/2018 - 28/02/2018 For 4 Days
Nauttical Petroelum Ltd TBC		57°25.545'N 001°33.573'E 57°25.545'N 001°38.573'E 57°23.295'N 001°38.573'E 57°23.295'N 001°33.573'E	22	17/11/2017 - 28/02/2018 For 14 Days
Gardline Geo Survey Ltd Sea Explorer C6NG6		57°11.145'N 002°13.581'E 57°11.073'N 002°17.549'E 57°08.919'N 002°17.415'E 57°08.990'N 002°13.452'E 57°09.372'N 002°14.789'E 57°09.300'N 002°18.754'E 57°07.685'N 002°18.653'E 57°07.757'N 002°14.691'E	23	10/11/2017 - 31/03/2018 For 10 Days
Gardline Geosurvey Kommandor PBQW	1200m 3m	57°53.967'N 000°59.687'W 57°53.788'N 000°48.813'W 57°46.787'N 000°49.237'W 57°46.965'N 001°00.075'W	20	06/11/2017 - 01/07/2018 For 3 Days

Area 3 Survey List

Latest Update: 22 February 2018

Company & Vessels	Towed Cable Length & Depth	Area Covered 1 (inc Quod Blocks)	Area Covered 2 (inc Quod Blocks)	Duration
GEOXYZ UK Ltd Geo Cean II LXHX		52°54.566'N 002°46.090'E 52°53.380'N 002°46.096'E 52°53.376'N 002°44.135'E 52°54.562'N 002°44.127'E	53	22/02/2018 - 24/04/2018 For 2 Days
Engie E&P Kommandor PBQW		54°38.509'N 002°18.734'E 54°38.524'N 002°21.523'E 54°36.907'N 002°21.548'E 54°36.891'N 002°18.761'E	44	21/02/2018 - 02/05/2018 For 20 Days
Fugro Survey Ltd MV Fugro Meridian		53°22.652'N 002°06.622'E 53°19.055'N 002°05.666'E 53°21.377'N 002°02.317'E 53°14.823'N 002°01.389'E	49	21/02/2018 - 31/03/2018 For 3 Days
GEOXYZ UK Ltd Geo Cean II LXHX		53°09.012'N 003°03.482'E 53°07.780'N 003°03.480'E 53°07.781'N 003°01.412'E 53°09.013'N 003°01.413'E	50	21/02/2018 - 30/04/2018 For 3 Days
Fugro Survey Ltd Fugro Galaxy		53°18.284'N 001°23.087'E 53°15.022'N 002°04.406'E 53°08.026'N 002°08.328'E 52°51.567'N 001°27.430'E	48; 49	13/01/2018 For 12 Weeks
Gardline Geosurvey Ltd Kommandor PBQW		54°36.538'N 002°10.751'E 54°36.541'N 002°12.608'E 54°35.463'N 002°12.629'E 54°35.451'N 002°10.772'E	44	15/12/2017 - 31/01/2018 For 2 Days
Gardline Geo survey Ltd MV Confidante ZQZ15 MV Iverco MCJ03		53°21.480'N 001°11.970'E 53°19.910'N 001°19.360'E 53°03.410'N 001°41.070'E 52°59.430'N 001°26.250'E 53°16.060'N 001°02.100'E		Early February For 4 Weeks
Gardline Geosurvey Ltd MV Vigilant MCJN5		53°07.373'N 002°25.457'E 53°02.649'N 002°34.372'E 53°07.709'N 002°24.135'E 54°04.359'N 000°54.800'E 53°00.265'N 002°53.687'E 53°19.338'N 002°34.372'E 53°03.048'N 002°17.056'E 53°03.223'N 002°13.973'E 52°51.603'N 001°27.733'E	49; 42	20/02/2018 - 10/03/2018 For 10 Days
Eni UK Ltd FPV Mprven MBFQ6		53°08.010'N 001°28.869'E 52°53.236'N 001°28.869'E 52°53.236'N 001°56.018'E 53°08.010'N 001°56.685'E	52; 48	17/02/2018 - 31/05/2018

Company & Vessels	Towed Cable Length & Depth	Area Covered 1 (inc Quod Blocks)		Duration
Titan Environmental Surveys Ltd Titan Discovery 2HCR3	N/A	51° 26.837'N 003° 53.947'W 51° 29.382'N 003° 49.003'W 51° 28.981'N 003° 39.009'W 51° 24.215'N 003° 32.593'W 51° 24.284'N 003° 10.006'W 51° 26.925'N 003° 09.883'W	51° 26.946'N 003° 08.706'W 51° 23.943'N 003° 09.004'W 51° 21.277'N 003° 15.104'W 51° 21.241'N 003° 18.070'W 51° 22.543'N 003° 41.897'W 51° 26.837'N 003° 53.947'W	September 2017 until March 2018
Titan Environmental Surveys Ltd Titan Endeavour 2ELT9	N/A	51° 26.837'N 003° 53.947'W 51° 29.382'N 003° 49.003'W 51° 28.981'N 003° 39.009'W 51° 24.215'N 003° 32.593'W 51° 24.284'N 003° 10.006'W 51° 26.925'N 003° 09.883'W	51° 26.946'N 003° 08.706'W 51° 23.943'N 003° 09.004'W 51° 21.277'N 003° 15.104'W 51° 21.241'N 003° 18.070'W 51° 22.543'N 003° 41.897'W 51° 26.837'N 003° 53.947'W	September 2017 until March 2018
Titan Environmental Surveys Ltd Titan Discovery 2HCR3 Titan Endeavour 2ELT9	N/A	51°35.168'N 03°59.993'W 51°36.221'N 03°59.471'W 51°36.683'N 03°58.184'W 51°36.823'N 03°57.094'W 51°36.869'N 03°55.747'W 51°36.576'N 03°55.702'W 51°36.552'N 03°55.516'W 51°36.524'N 03°55.484'W 51°36.578'N 03°55.403'W 51°36.575'N 03°55.133'W 51°36.811'N 03°54.161'W 51°37.169'N 03°53.605'W 51°37.171'N 03°50.982'W 51°37.364'N 03°50.329'W 51°37.278'N 03°50.263'W 51°37.178'N 03°50.633'W 51°36.989'N 03°50.922'W 51°36.888'N 03°50.943'W	51°35.056'N 03°47.925'W 51°34.025'N 03°47.169'W 51°33.935'N 03°47.489'W 51°33.847'N 03°47.937'W 51°33.857'N 03°48.594'W 51°33.969'N 03°49.077'W 51°34.090'N 03°49.355'W 51°33.472'N 03°51.083'W 51°32.894'N 03°52.225'W 51°33.405'N 03°52.874'W 51°33.805'N 03°52.030'W 51°34.030'N 03°51.544'W 51°34.642'N 03°49.930'W 51°34.852'N 03°49.988'W 51°35.050'N 03°49.984'W 51°35.388'N 03°53.879'W 51°34.812'N 03°54.275'W 51°34.154'N 03°56.914'W 51°35.168'N 03°59.993'W	January 2018 Until End of March 2018
Titan Environmental Surveys Ltd Titan Discovery 2HCR3	N/A	51°35.100'N 004°00.060'E 51°34.080'N 003°56.880'E 51°32.880'N 003°52.200'E 51°34.020'N 003°47.160'E 51°37.320'N 003°50.340'E 51°36.660'N 003°58.140'E		January 2018 Until End of March 2018
Titan Environmental Surveys Ltd Titan Endeavour 2ELT9	N/A	51°35.100'N 004°00.060'E 51°34.080'N 003°56.880'E 51°32.880'N 003°52.200'E 51°34.020'N 003°47.160'E 51°37.320'N 003°50.340'E 51°36.660'N 003°58.140'E		January 2018 Until End of March 2018