

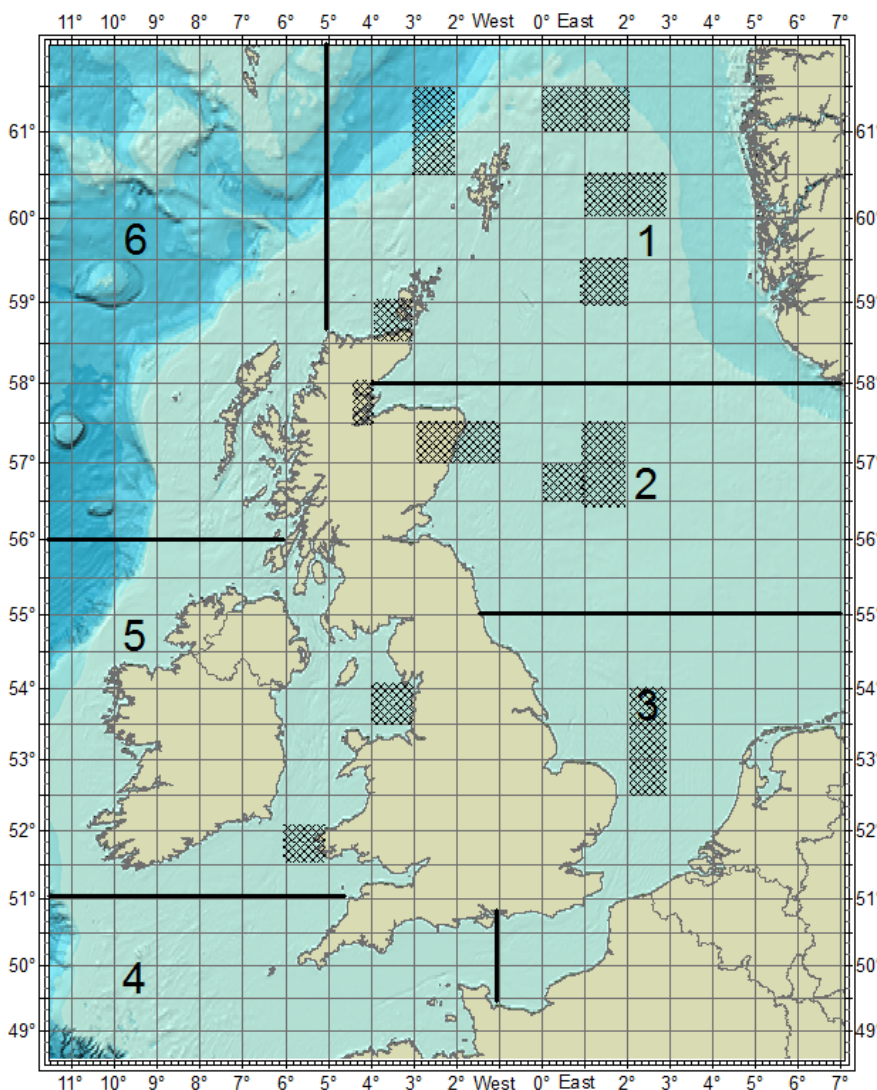
# Kingfisher Bulletin

## Offshore News

Oil & Gas

06 April 2017 | Issue 07

Shaded blocks indicate activity.



What's inside?

### **New Hazards** (p.3)

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3. Deployment of Buoys

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1. N/A

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1. Seabed Activity

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1. N/A

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1. Rig List
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## Support

The Kingfisher Bulletin is provided by the Kingfisher Information Service of Seafish, to promote the awareness of offshore hazards to fishing, new structures and zones and conflicting offshore operations. Support for the production of oil & gas industry information is received from FLTC Services Ltd and The Scottish Government.



## 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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## New Hazards

Area 1		Hazard List			
Hazard Type	Position	Issue Date	Contact Details	Map	
Exposed end of cut pipeline	60°00.063'N 001°23.757'E	14 Feb 2017	<a href="mailto:nick.strachan@uk.bp.com">nick.strachan@uk.bp.com</a>		

Area 2		Hazard List			
Hazard Type	Position	Issue Date	Contact Details	Map	
Debris consists of 4-5 Large tyres with mud / cement connected by wire	57°46.170'N 00°53.090'E	06 April 2017	<a href="mailto:bbennett@oil&amp;gasuk.co.uk">bbennett@oil&amp;gasuk.co.uk</a>		
Installation of Rock Berm 22.5m and a height of 2.8m	57°24.661'N 01°35.731'W to 57°24.675'N 01°39.073'W	23 Mar 2017	<a href="mailto:nick.strachan@uk.bp.com">nick.strachan@uk.bp.com</a>		

Area 3		Hazard List			
Hazard Type	Position	Issue Date	Contact Details	Map	
Potential Snags protruding 3.5 metres off the sea bed, which include pipeline infrastructure and two x 30" diameter conductor guides	52°54.245'N 02°35.915'E	06 April 2017	<a href="mailto:billy.sandiford@petrofac.com">billy.sandiford@petrofac.com</a>		

**The Hazard List is a collection of potential fishing hazards supplied to Kingfisher from across all offshore industries. Potential hazards will be listed for 6 months.**

## Fishing Hazard – Exposed end of cut pipeline



The southern end of the decommissioned and rockdumped PL147 10" Gas Pipeline has become exposed and has the potential to provide a snagging hazard.

Position: 61°00.063'N 001°23.757'E



For further information: Nick Strachan, BP Tel: +44(0)1224 955089 email: [nick.strachan@uk.bp.com](mailto:nick.strachan@uk.bp.com)

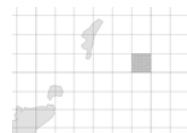
## Seabed Activity

First Published: 06 April 2017 | Latest Update: 06 April 2017

## Mariner – Pipeline Works UKCS 9/11a

Please be advised of the following installation works that will take place in the Mariner field.

Activity	Vessel & Call Sign	Position	Date / Duration	Comments
Mariner segment 10 well	Noble Lloyd Noble D5EM7	59°35.308'N 01°03.363'E	June/July 48 days	The Noble Lloyd Noble jack-up drilling unit will move away from its current position alongside the Mariner PDQ platform jacket to drill this appraisal well elsewhere in the field area.
Mariner segment 9 well	Transocean Spitsbergen V7ZS8	59°34.483'N 01°08.109'E	June/July 40 days	The Transocean Spitsbergen is an semi-submersible drilling unit and will be anchored at this location to drill an exploration well. Anchors will be pre-laid.
Mariner PDQ platform topsides heavy-lift	Saipem S7000 C6NO5	59°35.308'N 01°03.363'E	June/July 30 days	There will be 5 heavy transport vessels in addition to the heavy-lift vessel: 1) Forte, callsign PBAN; 2) Fjord, PHDZ; 3) Mighty Servant 3, PBBS; 4) Mighty Servant 1, PJVZ; 5) Trustee, PJIZ.
Mariner PDQ topsides hook-up and commissioning	Noble Lloyd Noble D5EM7 Prosafe Boreas 9V9903	59°35.308'N 01°03.363'E	July 2017 365 days	The Noble Lloyd Noble and Prosafe Boreas will provide accommodation for personnel for the hook-up and commissioning operations. Both facilities will be positioned within the existing safety zone of the Mariner PDQ platform and will in addition have safety zones of their own.



An Offshore Development Area has been approved that covers all the above locations. The ODA is bounded by the coordinates (59° 37.00' N 01° 00.00' E), (59° 37.00' N 01° 10.00' E), (59° 33.50' N 01° 10.00' E), (59° 33.50' N 01° 00.00' E).

For further information: Ray Wells, Statoil (UK) Ltd, Tel:07771 918018, email: [rawe@statoil.com](mailto:rawe@statoil.com) or Remi Arne Larsen, Statoil (Production) Limited, tel: 07889 807954, email: [remi@statoil.com](mailto:remi@statoil.com)

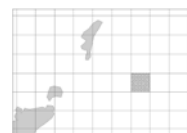
## Seabed Activity

First Published: 06 April 2017 | Latest Update: 06 April 2017

## Jock Scott – Notification of Works UKCS 9/27

Please be advised of the following drilling activities that will take place

Activity	Vessel & Call Sign	Position	Date / Duration	Comments
Jock Scott well	Transocean Spitsbergen V7ZS8	59°01.250'N 01°21.160'E	July/Aug 28 days	The Transocean Spitsbergen is an semi-submersible drilling unit and will be anchored at this location to drill an exploration well. Anchors will be pre-laid.



For further information: Ray Wells, Statoil (UK) Ltd, Tel:07771 918018, email: [rawe@statoil.com](mailto:rawe@statoil.com) or Remi Arne Larsen, Statoil (Production) Limited, tel: 07889 807954, email: [remi@statoil.com](mailto:remi@statoil.com)

## Western Isles – Development

Dana are planning to wet store the upper sections of the mooring lines as part of the Western Isles Project Development.



Each mooring line consists of a pile and bottom section of anchor chain, which is in place at present. Dana plan to install the upper sections on each of the 12 lines by installing clump weights, buoys, fibre rope and the upper chain section as part of the wet storage. The earliest start date for operations to commence is 5th April 2017.

The entire wet storage operations are expected to take 37 days prior to the FPSO arriving on location late May/ early June for hook up. The Skandi Skansen will undertake the proposed operations. The co-ordinates for the proposed operations are listed below.

These co-ordinates do not include the existing pile and bottom chain section, they only covered the start and end of the new chain/ fibre rope.

Mooring	Start	End
Mooring Line 1	61°12.763'N 000°43.826'E	61°12.868'N 000°45.211'E
Mooring Line 2	61°12.787'N 000°43.819'E	61°12.869'N 000°45.209'E
Mooring Line 3	61°12.904'N 000°43.810'E	61°12.868'N 000°45.209'E
Mooring Line 4	61°12.929'N 000°43.814'E	61°12.870'N 000°45.211'E
Mooring Line 5	61°13.523'N 000°45.609'E	61°12.872'N 000°45.224'E
Mooring Line 6	61°13.516'N 000°45.656'E	61°12.872'N 000°45.226'E
Mooring Line 7	61°13.469'N 000°45.882'E	<b>To Be Confirmed</b>
Mooring Line 8	61°13.457'N 000°45.926'E	61°12.871'N 000°45.226'E
Mooring Line 9	61°12.305'N 000°46.005'E	61°12.867'N 000°45.227'E
Mooring Line 10	61°12.292'N 000°45.965'E	61°12.866'N 000°45.224'E
Mooring Line 11	61°12.238'N 000°45.746'E	61°12.866'N 000°45.227'E
Mooring Line 12	61°12.230'N 000°45.700'E	61°12.865'N 000°45.225'E

For further information: Nicola Bannigan, Dana Petroleum Ltd, Tel: +44 1224 616170 email: [Nicola.bannigan@dana-petroleum.com](mailto:Nicola.bannigan@dana-petroleum.com)

## Seabed Activity

First Published: 23 February 2017 | Latest Update: 06 April 2017

## Pelican Field Programme – Well Abandoning

TAQA Bratani is conducting well intervention operations on both the 211/26a-P15 (PU-p10) and 211/26a-P14 (PU-P19) subsea wells in the Pelican field. Remedial work using coiled tubing will be attempted on PU-p10, to reinstate it as an active producer. If unsuccessful, the well will be abandoned. No remedial work will be undertaken on PU-p19 before abandoning. If both wells are abandoned, this would consist of recovering both xmas trees. The wellheads and flowbases will remain on the seabed, their removal will not form part of these abandonment operations. Permanent abandonment cement plugs, in line with the O&GUK guidelines, will be set and tested.



Operations will be conducted by the Awilco WilPhoenix semi-submersible drilling rig, which had been due to commence on the 1st March 2017 on PU-p10. The rig will remain on the well, and skid across to PU-p19, scheduled to occur in April. The field period may be prolonged until the 31st May 2017, dependent on weather conditions or operational factors.

The WilPhoenix is located in the Pelican field UKCS Block 211/26a, as per the details below. Anchor spread coordinates see

Well Number	Location	Start / Finish	Description of Work
PU-p10	61°01.984'N 001°07.740'E	21/03/17 – 08/04/2017	Remedial work involving coiled tubing.
PU-p19	61°02.034'N 001°07.773'E	08/04/17 – 31/05/2017	Recover the xmas tree and abandon the well.

Anchor List.

For further information: Mike McMahon, TAQA Bratani, Tel:+44 1224 275557, email: [Mike.McMahon@taqaqlobal.com](mailto:Mike.McMahon@taqaqlobal.com)

**Balmoral Late Life Project** – Pipeline Flushing

Premier Oil UK Limited wish to advise that commencing on 30.04.17, for a period of approximately 30 days.

It is undertaking subsea works in the Balmoral Area (blocks 16/21a and 16/21b). The work will be undertaken using the Seven Osprey (DSV) and will consist of a number of pipelines being flushed, disconnected and laid down on the seabed.

The majority of this work will be carried out within HSE recognised 500m Safety Zones, but some of it falls outwith this classification. Details are as follows:

**Primary Locations within Safety Zones:**

Location	Safety Zones	Coordinates
Balmoral Manifold Template	(Balmoral FPV 500m Safety Zone)	58°13.727'N 001°06.427'E
Well 16/21b-29	(SI 1997/735)	58°15.127'N 001°03.323'E
Well 16/21a-7z	(SI 1997/735)	58°14.660'N 001°06.202'E
Well 16/21a-16	(SI 1997/735)	58°13.675'N 001°08.867'E
Well 16/21b-14	(SI 1997/735)	58°13.570'N 001°03.557'E
Well 16/21b-4a	(SI 1997/735)	58°12.622'N 001°10.458'E
Well 16/21a-26	(SI 1999/547)	58°10.695'N 001°01.045'E
Well 16/21a-27	(SI 1999/547)	58°10.308'N 001°04.168'E
Well 16/21a-17z	(SI 1999/547)	58°10.318'N 001°02.347'E
Well 16/21a-2	(SI 1999/2206)	58°13.970'N 001°07.953'E
South East Stirling Wellhead	(SI 2004/343)	58°12.770'N 001°09.595'E

**Primary Locations outwith Safety Zones:**

Location	Coordinates	Details
Well 16/21a10z	58°12.965'N 001°07.042'E	Located within the original
Well 16/21a-11	58°14.677'N 001°04.127'E	Balmoral Development area

For further information: Jane Birkett-Hodson, Tel: +44 (0)1224 615972 Email: [jbirkett-hodson@PREMIER-OIL.com](mailto:jbirkett-hodson@PREMIER-OIL.com)

## Oseberg Field – Installation Activities

Statoil will in the period from April to October 2017 perform marine activities in the area Oseberg Field Center, Tune/ Delta1, Vestflanken G4 and Delta O/ Delta P templates.

A new unmanned wellhead platform (Oseberg H) will be installed at field approx. 8 km northwest from Oseberg Field Center together with new infrastructure.

A new umbilical will be installed between Oseberg A and Oseberg H. The umbilical will be unprotected from April to end of September. During this period the product will not be trawlable

Two new pipelines will be installed, a production pipeline from Oseberg Field Center to Oseberg H and a gas injection pipeline from Oseberg Field Center to Delta 1/ Tune subsea templates.

The pipelines will be unprotected from May to end of September. During this period the products are not trawlable.

In relation to tie-in of new spools, pipelines and umbilical there will be wet-stored equipment close to Tune/Delta 1, Vestflanken G4, Oseberg H, Template O and P, and Oseberg Field Center. The equipment will not be trawlable during the period from 1 of April to end of September.



Vessel	Activity	Start Finish
Normand Mermaid	Prep work at Tune/delta 1, Vestflanken G4, Oseberg Field center and O/P templates. Rock and covers will be removed from Templates and corresponding spools and pipelines	01/04/17 – 05/05/17
Normand Vision	Installation of umbilical from Oseberg A to Oseberg H. Wet-storage of covers and spools	15/05/17 – 15/06/17
Normand Mermaid	Wet-storage of spools and covers	25/07/17 – 01/08/17
Deep Energy	Installation of production pipeline between Oseberg Field Center and Oseberg H, installation of gas injection pipeline between Oseberg H og Tune/ Delta1	31/05/17 – 31/06/17
Olympic Challenger	Lay support and pigging operation	30/05/17 – 30/06/17
Normand Mermaid	Spool installation and tie-in	20/08/17 – 02/09/17
Normand Vision	Wet-storage of covers and spools at Tune and Oseberg Field Centre	20/08/17 – 25/08/17
Hermod	Installation of unmanned wellhead platform (Oseberg H)	01/07/17 – 30/07/17
TBC	Rock installation	19/08/17 – 20/09/17
TBC	Rock Installation	15/10/17 – 20/10/17

Installation and operations are weather dependent, hence changes to schedule can occur.

Area	Coordinates
Oseberg A	60°29.481'N 02°49.539'E
Delta L	60°28.054'N 02°40.797'E
Delta P	60°27.385'N 02°41.605'E
Delta O	60°23.978'N 02°40.170'E
Vestflanken G4	60°32.226'N 02°41.036'E
Oseberg H	60°32.878'N 02°43.901'E

**For further information:** Precautionary area will be surveilled by Statoil Operasjonssenter; telephone number +47 55 14 32 78 or VHF ch 10

Questions may be directed to Annette Veka, mobile number +47 41 20 23 96.

## Brent Bypass – Vessel Activity

Please note that vessel activity that we have commencing in the Brent Field.

Borealis – 1st April for 7 days – pipelay and structure deployment

Smit barge 2, Buggsy 10, Siem Opal – support for borealis

Subsea Viking – pipeline strength test – 10th April – 6 days

All vessels will be working in the following areas :-



Area	Coordinates
NL-WL PLEM	61°02.046'N 01°41.971'E
Knarr Tee	61°01.251'N 01°41.747'E
NLGP SSIV (5m outside)	61°02.117'N 01°41.093'E
WLGP SSIV	61°02.020'N 01°41.951'E

**For further information:** Victoria Munro. Shell email: [V.Munro@shell.com](mailto:V.Munro@shell.com)

## Seabed Activity

First Published: 21 May 2014 | Latest Update: 06 April 2017

## Edradour / Glenlivet Field Development – Construction Activities

Please note that TEPUK have two new permanent subsea 500m safety zones which came into effect 14 July 2015 at Edradour & Glenlivet.

MV Shalimar II (PD303), Call Sign: MJLF9, is acting as guard vessel part way between Edradour & Edradour PLEM at the following location: 60° 55.39' N 02° 23.73' W

MV Solstice (BF56), Call Sign: ZNOY6, is acting as guard vessel part way between Edradour & Glenlivet at the following location: 61° 00.28' N 02° 09.16' W

The rock dumper MV Nordnes, Call Sign: PHOG, is due in field approx. 8th April, working between locations Edradour PLEM and Edradour, and at Glenlivet location.

The construction vessel MV Far Superior, Call Sign: LATJ7, is due in-field approx. 21st April.  
The construction vessel MV Deep Energy, Call Sign: C6YL2, is due in-field approx. 24th April.  
The construction vessel MV Deep Explorer, Call Sign: C6BZ7, is due in-field approx. 8th May.

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

## Seabed Activity

First Published: 24 March 2016 | Latest Update: 07 March 2017

## Martin Linge Project – NOCS Blocks 30/4 &amp; 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: 13 December 2016 | Latest Update: 09 March 2017

## Rowan Gorilla V jack-up rig move – UKCS Block 3/30

Rowan Gorilla V is currently drilling at Sween at following location with 500m safety zone;

Location	Coordinates
UKCS Block 3/30	60°03.710'N 01°59.130'E



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

## Deployment of Buoys

First Published: 06 April 2017 | Latest Update: 06 April 2017

## East Coast Scotland – Deployment of acoustic loggers



Marine Scotland Science have installed 30 moorings along the east coast of Scotland. The moorings are deployed as part of the ECOMMAS project, and will hold research equipment that records echolocation clicks of dolphins and porpoises.

Moorings deployed between 23 March 2017 – 3 April 2017. The moorings will be removed in November 2017



For further information: Dr Ewan Edwards, Tel: 01224 295617 email: [ewan.edwards@gov.scot](mailto:ewan.edwards@gov.scot) [acoustic@gov.scot](mailto:acoustic@gov.scot)



## Notice to Fishermen

First Published: 06 April 2017 | Latest Update: 06 April 2017

## Fishing Hazard – 4 to 5 Large Tyres



Please be advised that debris has been returned to the seabed after a snagging incident. Debris consists of 4-5 Large tyres with mud / cement connected by wire.

57°46.170'N 00°53.090'E



For further information: Bernie Bennett, Apache, Tel: 01590 643986, email: [bbennett@oil&gasuk.co.uk](mailto:bbennett@oil&gasuk.co.uk)

## Notice to Fishermen

First Published: 23 March 2017 | Latest Update: 23 March 2017

## Fishing Hazard – Installation of rock berm



Proposed installation of a rock berm for the protection of PL721 (Forties Pipeline System -FPS), will commence on the 16th March

Rockdump (covering pipeline PL721) Block:19/17 &19/18 – between the following coordinates:

57°24.661'N 01°35.731'W to 57°24.675'N 01°39.073'W

The maximum dimensions of the rock berm installed at PL721 are a width of 22.5m and a height of 2.8m.



For further information: Nick Strachan, BP Tel: +44(0)1224 955089 email: [nick.strachan@uk.bp.com](mailto:nick.strachan@uk.bp.com)

## Seabed Activity

First Published: 06 April 2017 | Latest Update: 06 April 2017

## Buchan Off-Station – Subsea Well Isolation &amp; Disconnection

The Technip operated DSV Deep Arctic is expected to mobilise to the Buchan field to commence this workscope in early May. The work is expected to last 30 days and will involve the following activity:

- De-oiling / flushing of all the template and infield flow lines.
- Isolation testing and disconnection of the Buchan Template trees.
- Isolation testing and disconnection of the Buchan infield trees.
- Isolation testing and disconnection of the Hannay Trees.

Area	Coordinates
Buchan FPF	57°54.330'N 000°01.978'E
Buchan Template	57°54.290'N 000°01.924'E
Hannay Well H2	57°59.907'N 000°07.653'W
Hannay Well H1	57°59.332'N 000°06.372'W
Well B8	57°53.583'N 000°00.791'E
Well B7	57°53.626'N 000°00.730'E

Buchan Off-Station riser disconnection will be performed once the subsea infrastructure has been isolated and disconnected. It is expected that mooring disconnection and removal of Buchan from location will occur in August.

For further information: Richard Lappin, Repsol Sinopec, Tel: +44(1224) 352590 email: [Richard.Lappin@repsolsinopecuk.com](mailto:Richard.Lappin@repsolsinopecuk.com)



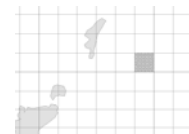
## Seabed Activity

First Published: 06 April 2017 | Latest Update: 06 April 2017

## Kraken Field – Installation of Template DC4

Please note that the Viking Neptune will be in the Kraken field installing the template at DC4 on the 18th of April. The vessel will be working in the following location.

Coordinates  
59°55.891'N 01°14.978'E

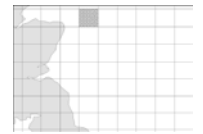


For further information: Victoria Munro, Enquest, email: [Victoria.munro@enquest.com](mailto:Victoria.munro@enquest.com)

## Verbier – Notification of Works UKCS 20/5b

Please be advised of the following drilling activities that will take place

Activity	Vessel & Call Sign	Position	Date / Duration	Comments
Verbier well	Transocean Spitsbergen V7ZS8	57°56.056'N 00°04.273'W	August-October 66 days	The Transocean Spitsbergen is an semi-submersible drilling unit and will be anchored at this location to drill an exploration well. Anchors will be pre-laid.



For further information: Ray Wells, Statoil (UK) Ltd, Tel:07771 918018, email: [rawe@statoil.com](mailto:rawe@statoil.com) or Remi Arne Larsen, Statoil (Production) Limited, tel: 07889 807954, email: [remi@statoil.com](mailto:remi@statoil.com)

## 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

## Seabed Activity

To date, the following have been installed:

- six (6) drilling template structures (elevation 9.2m above seabed) at the drill centres and coordinates listed below;

Structure	Coordinates
2 x drilling template structures at Varadero drill centre Varadero Drilling Template 1: Varadero Drilling Template 2:	56°48.366'N 00°42.258'E 56°48.369'N 00°42.337'E
2 x drilling template structure at Catcher drill centre Catcher Drilling Template 1: Catcher Drilling Template 2:	56°46.277'N 00°46.299'E 56°46.321'N 00°46.296'E
2 x drilling template structure at Burgman drill centre Burgman Drilling Template 1: Burgman Drilling Template 2:	56°44.542'N 00°40.640'E 56°44.566'N 00°40.581'E

Please note; Each drill centre has an approved HSE 500m safety exclusion zone in force.

- Pipeline Bundles:**  
Three (3) x 3.5km pipeline bundles have been installed on the seabed between each Drill Centre and the future FPSO location.
- FPSO Mooring System:**  
Twelve (12) x piled anchors with chain and wire mooring legs (in 3 groups of 4 mooring legs) extending out approximately 1000m from the future Catcher FPSO location (56° 46' 12.44" N and 00° 42' 46.93" E, WGS84), where the mooring lines are connected to a Submerged Turret Production (STP) buoy - top of buoy at approximately 16m water depth.

Please note, the STP buoy has its own approved HSE 500m safety exclusion zone.

- Mid Water Arches and Gravity Base Structures**  
Three (3) x piled gravity base structures attached to 3 x mid-water arches (buoyancy units used to support risers positioned mid-water approximately 30m below sea surface and 80m from the future FPSO location).
- Dynamic Risers & Umbilicals**  
13 x dynamic risers and umbilicals connected to the STP Buoy and running in catenary over the mid-water arch buoys and down to the seabed. The risers and umbilicals then run along the seabed, to Riser Base Towheads that are also within the STP Buoy/Future FPSO location 500m zone.
- Guard Vessel**  
A Scottish Fishermen's Federation guard vessel [MV "Consortium" PD174] is currently monitoring the STP Buoy location.

## Drilling

The ENSCO 100 Drilling Rig is currently on location at the Varadero Drilling Template #1 position (coordinates of Drill Centres above) and will remain at this location until the Spring 2017, when it will move to Burgman Drilling Template #1.

The standby vessel Grampian Deliverance is monitoring the rig's 500m zone throughout drilling operations.

For further information: Steve Quayle, Tel: 01224 914298 email: [squayle@premier-oil.com](mailto:squayle@premier-oil.com)

## Culzean Field Pipelines- Construction Activities

Maersk Oil North Sea UK Limited, Culzean Project, informs mariners hereby that they intend to carry out construction activities with the installation of pipelines within the Culzean Field Development Area (Block 22/25A) and extending into other areas towards the CATS pipeline.



Pipeline	Length	From	To
22" Gas Export Pipeline	52km	Culzean 500m zone 57°11.475'N 001°54.582'E	CATS Pipeline T5 57°01.760'N 001°12.199'E
6"/10" Condensate Pipeline (PL4107) with 4" Fuel Gas (PL4108) piggybacked	3.6km	Culzean 500m zone 57°11.475'N 001°54.582'E	Culzean future FSO 500m zone 57°11.729'N 001°57.662'E

Activity	Vessel & Call sign	Date / Duration
Prelay Survey, Boulder removal & Crossing Construction along the pipelines routings	Normand Oceanic LAXM7	4 March for 21 days
Installation of Drag anchor initiation wires in Culzean 500m zone	Siem Opal LAXM	20 March for 3 days
Installation of Gas Export and Condensate c/w fuel gas pipelines	Seven Borealis C6YG8	15 April for 7 weeks
Rock placement on Condensate pipeline	Simon Stevin LXUB	7 May for 2 weeks
Post lay of Gas Export pipeline	Seven Pacific 2DLM3	2 June for 5 days
Rock placement on Gas Export pipeline	Simon Stevin LXUB	16 June for 4 days
Precommissioning of pipelines	Seven Pacific 2DLM3	18 June for 1 week

For further information: Sietze Akkerman, Tel: +44 (0) 1224 242 461, Email: [sietze.akkerman@maerskoil.com](mailto:sietze.akkerman@maerskoil.com)

## Harrier Well – Drilling Operations

Ithaca Energy advises that development drilling operations on the Harrier Well 30/6a-ML1 will be undertaken from Enasco's self-elevating drilling unit, Enasco 122. The scheduled spud date for the drilling operations is around 1st March 2017. There will be a number of vessels supporting the drilling activities, including an ERRV and PSVs, these vessels have not been named as yet, an update will be provided when they are identified. There will also be a Stimulation Vessel in close proximity to the drill rig during this campaign; this will be the Big Orange XVIII.



Drilling Rig/Ship	Installation / Well No	Position	Start / Finish
Enasco 122	Harrier Well 30/6a-ML1	56°43.564'N 002°05.327'E	01/03/17

For further information: Keith Stewart Tel: 01224 652184 Email: [kstewart@ithacaenergy.com](mailto:kstewart@ithacaenergy.com)

## Central North Sea – Deployment of Datawell Waverider Buoy

Please be advised that a Datawell DWR is being deployed on behalf of RWS in the Netherlands.

The buoy is a standard Datawell Directional Waverider Buoy, 90cm in diameter, fitted with passive radar reflector and a 5 x 20sec yellow flashing light. The watch circle will be approximately 100m

This is approximately 1,500m south-west of the Haewene Brim FPSO, operated by Bluewater, for Shell U.K. Ltd.

57°09.344'N 002°16.206'E



For further information: Jon Upton, Shell UK Ltd, Tel: 44(0)1224 888329 email: [jupton@shell.com](mailto:jupton@shell.com)

## Methil, Firth of Forth – Overwater Geotechnical Investigation

2B Energy has contracted Fugro Geoservices Ltd to conduct an overwater Geotechnical Investigation offshore of Methil, Firth of Forth Scotland. All works will be completed from the Fugro Geoservices Jack-up Barge (JUB) SKATE 3E. The work is in 2 areas, both 1400m offshore.



Vessels should keep well clear of the jack-up barge at all times (minimum of 250m clearance from barge). Crew transfers will take place several times per day between Methil Port and the site using the RHIB Oyster 2. The jacup will also be supported by supply boat Forth boxer or similar which will come out approximately once per week.

Site 1 56°09.875'N 03°00.177'W  
Site 2 56°09.515'N 03°00.987'W

For further information: Marc Murray, 2B Energy Ltd, Tel: +44(0) 1383 662163 email: [marc.murray@2benergy.com](mailto:marc.murray@2benergy.com)

## Deployment of Buoys

First Published: 06 April 2017 | Latest Update: 06 April 2017

## Aberdeen – Deployment of wave measurement buoy

Partrac will deploy one wave measurement buoy, one guard buoy and one seabed frame approx. 12 nm south east of Aberdeen.



Deployed from 27th March. This will remain in place for 6 -12 months.

57°00.203'N 001°51.825'W

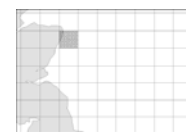
For further information: Partrac, Tel: 0141 202 0644 email: [info@partrac.com](mailto:info@partrac.com)

## Deployment of Buoys

First Published: 23 February 2017 | Latest Update: 23 February 2017

## Aberdeen Harbour – Moored Scientific Equipment

Marine Scotland Science have installed 35 moorings in an arc around the mouth of the River Dee in Aberdeen, on the East coast of Scotland, from the mouth of the River Don to Cove Bay.



The moorings hold research equipment that support hydrophone receivers that log the presence of salmon smolts tagged with acoustic ID tag transmitters migrating from the River Dee. Below a table with the as laid locations of these moorings. Deployed on 15<sup>th</sup> February 2017. The moorings will be removed by the 30th of August 2017.

All of the moorings will have no surface markers and will be located on the seabed, 33 will extend vertically no more than 2 metres, the remaining 2 (No 35 & 36) will have riser lines with scientific instruments at depths greater than 12m (LAT). All will be acoustically released and the entire mooring will be recovered.

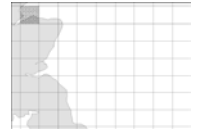
All enquiries should be made to the Marine Scotland marine mammal acoustics mailbox ([acoustics@scotland.gsi.gov.uk](mailto:acoustics@scotland.gsi.gov.uk)).

Number	Coordinates	Depth	Number	Coordinates	Depth
2	57°10.693'N 002°03.994'W	-4	20	57°08.273'N 001°59.999'W	-40
3	57°10.689'N 002°03.617'W	-7	21	57°08.072'N 002°00.063'W	-40
4	57°10.549'N 002°03.274'W	-10	22	57°07.874'N 002°00.162'W	-40
5	57°10.485'N 002°02.918'W	-12	23	57°07.681'N 002°00.298'W	-40
6	57°10.435'N 002°02.548'W	-14	24	57°07.498'N 002°00.464'W	-38
7	57°10.359'N 002°02.205'W	-17	25	57°07.324'N 002°00.662'W	-40
8	57°10.260'N 002°01.876'W	-20	26	57°07.160'N 002°00.888'W	-40
9	57°10.141'N 002°01.564'W	-23	27	57°07.010'N 002°01.144'W	-37
10	57°10.125'N 002°01.247'W	-26	28	57°06.875'N 002°01.423'W	-33
11	57°09.981'N 002°00.984'W	-28	29	57°06.752'N 002°01.725'W	-34
12	57°09.820'N 002°00.742'W	-30	30	57°06.646'N 002°02.048'W	-33
13	57°09.651'N 002°00.531'W	-32	31	57°06.556'N 002°02.387'W	-30
14	57°09.470'N 002°00.356'W	-34	32	57°06.485'N 002°02.741'W	-27
15	57°09.281'N 002°00.210'W	-35	33	57°06.436'N 002°03.105'W	-24
16	57°09.086'N 002°00.094'W	-36	34	57°06.400'N 002°03.476'W	-22
17	57°08.884'N 002°00.019'W	-37	35	57°06.822'N 002°01.450'W	-33
18	57°08.681'N 001°59.977'W	-38	36	57°09.550'N 002°00.354'W	-33
19	57°08.476'N 001°59.972'W	-39			

For further information: Robert Main, Marine Scotland Science, Tel: +44(0)1224 295687 email: [Robert.Main@gov.scot](mailto:Robert.Main@gov.scot)

**Aberdeen Harbour – Moored Scientific Equipment**

**Marine Scotland Science has install up to 7 of the intended 19 Acoustic receivers off Burghead on the East coast of Scotland. No more will be installed.**



The moorings hold research equipment that support hydrophone receivers that log the presence of salmon smolts tagged with acoustic ID tag transmitters migrating from the River Conon. Below are a map and a table with the as laid locations of these moorings.

These moorings were deployed on the 29<sup>th</sup> May. The moorings will be removed by the 30th of August 2017.

The moorings have no surface markers and will be located on the seabed, extending vertically no more than 4 metres. They will be recovered by ROV.

All enquiries should be made to the Marine Scotland marine mammal acoustics mailbox ([acoustics@scotland.gsi.gov.uk](mailto:acoustics@scotland.gsi.gov.uk)).

Number	Coordinates
11	57°43.638'N 003°32.603'W
12	57°43.482'N 003°32.319'W
13	57°43.329'N 003°32.035'W
14	57°43.175'N 003°31.754'W
15	57°43.027'N 003°31.468'W
16	57°42.870'N 003°31.184'W
17	57°42.717'N 003°30.905'W

*For further information: Robert Main, Marine Scotland Science, Tel: +44(0)1224 295687 email: [Robert.Main@gov.scot](mailto:Robert.Main@gov.scot)*

## Notice to Fishermen

First Published: 06 April 2017 | Latest Update: 06 April 2017

## Fishing Hazard – Horne &amp; Wren Decommissioning



Recently removed the H&W platform, which means the 500M installation exclusion zone has ceased. Having successfully removed the installation, it means there are a number of potential snags left on and protruding to a maximum of 3.5 metres off the sea bed, which include pipeline infrastructure and two x 30" diameter conductor guides. In parallel, we have applied to the HSE, for a subsea safety exclusion zone for the location to ensure that sea goers are not able to access the area. This approval is expected within the next two to three months.



52°54.245'N 02°35.915'E

It is intended to remove the hazards in the next few months and return the sea bed to be over-trawlable

*For further information: Billy Sandiford, Petrofac EPS, Tel +44 (0)1493 416533 email [billy.sandiford@petrofac.com](mailto:billy.sandiford@petrofac.com)*

## Deployment of Buoys

First Published: 23 February 2017 | Latest Update: 15 March 2017

## Sean Romeo and Sean Papa – Mooring Buoy Deployment

Please be advised that the mooring buoy installation has now been completed and the vessel has left the location.

Location Name	Coordinates
Sean Romeo	53°12.150'N 002°51.133'E
Sean Papa	53°11.083'N 002°49.017'E



*For further information: Linda Murray, Orange-Nassau Energie UK Ltd Tel: 01603 567239 email: [linda.murray@onebv.com](mailto:linda.murray@onebv.com)*

## Seabed Activity

First Published: 23 February 2017 | Latest Update: 06 April 2017

## Liverpool Bay – Drilling Operations

Petrofac drilling operations

Drilling Rig/Ship	Installation / Well No	Position	Start / Finish	Duration
Irish Sea Pioneer	Douglas Field 110/13D	53°32.232'N 003°34.619'W	04/04/17	16 Days
Irish Sea Pioneer	Hamilton Field 110/13H	53°33.958'N 003°27.270'W	08/04/17	50 Days



**For further information:** Alec Townley, Petrofac, Tel: +44 1352 842353 [alec.townley@petrofac.com](mailto:alec.townley@petrofac.com)

## Deployment of Buoys

First Published: 09 March 2017 | Latest Update: 09 March 2017

## West Pembrokeshire – Waverider Buoy

Please be advised that Recording oceanographic equipment will be moored in the vicinity of:

## Coordinates

51°50.600'N 005°50.200'W

There will be a Waverider Buoy and a yellow, Class 2 Guard Buoy carrying radar reflectors at the site. Both buoys are fitted with a yellow light exhibiting the sequence FI Y (5) 20s.



**For further information:** Cefas, Tel: +44(0)1502 562244 [www.cefas.defra.gov.uk/wavenet](http://www.cefas.defra.gov.uk/wavenet).

**Area 1 Rig List**

**Latest Update: 03 April 2017**

MOVEMENT	RIG	POSITION	MOVEMENT	RIG	POSITION
<b>New</b>	Paul B Loyd Jr	58°12.10'N 01°25.70'E		Deepsea Aberdeen	60°20.00'N 04°06.00'W
	Blackford Dolphin	58°18.10'N 01°42.40'E		Maersk Intrepid	60°30.30'N 02°00.80'E
	Maersk Integrator	58°34.30'N 01°41.80'E		Safe Scandinavia	60°41.90'N 02°55.90'E
	Deepsea Atlantic	58°47.10'N 02°35.80'E	<b>New</b>	Songa Endurance	60°42.60'N 03°26.30'E
	Island Innovator	58°50.30'N 02°11.80'E		Songa Equinox	60°49.80'N 03°34.20'E
	Rowan Viking	58°50.60'N 02°14.90'E		COSL Promoter	60°52.50'N 03°29.60'E
	Maersk Interceptor	58°55.30'N 02°11.80'E	<b>New</b>	Wilphoenix	61°02.00'N 01°07.70'E
<b>New</b>	Ocean Patriot	59°26.90'N 01°37.20'E		West Elara	61°02.30'N 02°20.30'E
	Transocean Arctic	59°29.70'N 01°57.90'E	<b>New</b>	West Phoenix	61°04.63'N 02°05.28'W
	Noble Lloyd Noble	59°35.40'N 01°03.40'E		Scarabeo 5	61°08.00'N 03°32.00'E
<b>New</b>	Transocean Leader	59°56.90'N 01°15.80'E	<b>New</b>	Deepsea Stavabger	64°56.80'N 06°57.30'E
	Rowan Gorilla 5	60°03.71'N 01°59.13'E			

**Area 2 Rig List**

**Latest Update: 03 April 2017**

MOVEMENT	RIG	POSITION	MOVEMENT	RIG	POSITION
	Maersk Resilient	55°31.80'N 05°00.50'E	<b>New</b>	EnSCO 122	56°43.60'N 02°05.20'E
	Noble Sam Turner	55°38.40'N 04°53.10'E		EnSCO 100	56°48.40'N 00°42.30'E
<b>New</b>	EnSCO 71	55°42.90'N 04°44.90'E		GSF Galaxy 1	57°00.69'N 01°50.32'E
	Maersk Guardian	55°43.30'N 04°48.00'E		Prospector 5	57°00.73'N 01°50.41'E
	EnSCO 121	55°52.90'N 04°14.00'E		Noble Hans Deul	57°01.90'N 01°57.30'E
	Maersk Gallant	56°21.50'N 02°18.80'E		Maersk Highlander	57°11.70'N 01°54.80'E
	Maersk Innovator	56°22.60'N 03°15.50'E	<b>New</b>	Stena Spey	57°17.40'N 01°22.40'E
	Ocean Valiant	56°23.70'N 02°15.30'E		Noble Regina Allen	57°27.00'N 01°23.20'E

**Area 3 Rig List**

**Latest Update: 03 April 2017**

MOVEMENT	RIG	POSITION	MOVEMENT	RIG	POSITION
	Seafox 4	53°03.20'N 02°11.30'E	<b>New</b>	Paragon B391	53°32.50'N 02°00.50'E
	590021	53°14.00'N 03°14.50'E	<b>New</b>	GMS Endeavour 6102	53°42.70'N 03°30.80'E
	Atlantic Amsterdam	53°15.30'N 00°52.00'E		EnSCO 101	53°49.10'N 04°30.90'E
	EnSCO 92	53°19.40'N 02°14.20'E		Rowan Gorilla VII	54°03.30'N 01°02.10'E
	EnSCO 72	53°23.60'N 04°12.10'E		Seafox 2	54°04.40'N 00°54.90'E
<b>New</b>	Seajacks Leviathan	53°26.80'N 02°19.19'E		EnSCO 80	54°36.00'N 02°11.80'E
	Paragon Prospector	53°28.40'N 04°29.50'E		Seafox 7	54°36.00'N 02°11.80'E

**Area 5 Rig List**

**Latest Update: 03 April 2017**

MOVEMENT	RIG	POSITION	MOVEMENT	RIG	POSITION
	Irish Sea Pioneer	53°38.80'N 03°28.60'W			

**Rig Move**

First Published: 23 March 2017 | **Latest Update: 23 March 2017**

**Galaxy I jack-up rig move – Invergordon / Comarty Firth**

Please note that in April the Galaxy I jack-up rig will leave the Elgin A Wellhead Platform in the Central North Sea and be towed to and installed at the following location. Please avoid this operation.



Invergordon anchorage No.11 57°41.050'N 004°03.180'W

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



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: 06 April 2017

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

PBLJ – At Arundel

Anchor No.	Position	Anchor No.	Position	Anchor No.	Position
Rig	58°12.066'N 001°25.656'E	3	58°12.438'N 001°27.396'E	6	58°11.130'N 001°24.978'E
1	58°12.990'N 001°24.948'E	4	58°11.694'N 001°27.396'E	7	58°11.742'N 001°24.108'E
2	58°12.996'N 001°26.358'E	5	58°11.142'N 001°26.358'E	8	58°12.396'N 001°24.120'E

Deepsea Aberdeen – As-Laid At Schiehallion West Drill Centre

Anchor No.	Position	Anchor No.	Position	Anchor No.	Position
Rig	60°19.356'N 004°09.156'W	3	60°21.096'N 004°04.992'W	6	60°17.742'N 004°04.620'W
1	60°20.376'N 004°09.192'W	4	60°20.424'N 004°03.684'W	7	60°18.378'N 004°07.116'W
2	60°21.480'N 004°06.972'W	5	60°19.314'N 004°01.152'W	8	60°19.920'N 004°06.072'W

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

Transocean Leader – At Kraken DC1 9/02b-A1



Anchor No.	Anchor Position	Laydown Pennant s	Anchor Position	Laydown Pennant s
Rig	59°53.510'N 01°12.230'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
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
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
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

Paragon MSS1 – Telford H2 Well



Anchor No.	Anchor Position	Laydown Pennant s	Anchor Position	Laydown Pennant s
Well	58°12.320'N 00°16.720'E			
1	58°12.850'N 00°16.160'E	58°12.930'N 00°16.050'E	7	58°11.760'N 00°17.300'E
2	58°12.940'N 00°16.720'E	58°12.950'N 00°16.580'E	8	58°11.690'N 00°16.720'E
3	58°12.840'N 00°17.270'E	58°12.900'N 00°17.130'E	9	58°11.770'N 00°16.150'E
4	58°12.610'N 00°17.720'E	58°12.680'N 00°17.660'E	10	58°12.020'N 00°15.690'E
5	58°12.320'N 00°17.860'E	58°12.320'N 00°18.000'E	11	58°12.320'N 00°15.500'E
6	58°12.020'N 00°17.760'E	58°11.990'N 00°17.880'E	12	58°12.620'N 00°15.670'E
				58°12.660'N 00°15.550'E

## Stena Spey – As Laid Shaw 22/22a

Anchor No.	Position	Anchor No.	Position	Anchor No.	Position
Rig	57°17.370'N 001°22.301'E	3	57°17.682'N 001°23.703'E	6	57°16.605'N 001°21.726'E
1	57°18.112'N 001°22.006'E	4	57°17.101'N 001°23.574'E	7	57°17.072'N 001°21.038'E
2	57°18.041'N 001°22.792'E	5	57°16.682'N 001°22.814'E	8	57°17.656'N 001°21.030'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

## COSL Rival – Proposed Mooring at Judy30/7a

COSL Rival located adjacent to the East face of the Judy Platform from 19th April for approx 6 months. Moorings are fitted with polyester inserts and subsea buoyancy and represent a significant snagging hazard to fishing vessel activity in the vicinity. Moorings have a circa 2km radius about the location



Anchor No.	Position	Anchor No.	Position	Anchor No.	Position
Alongside	56°41.791'N 002°20.319'E	4	56°42.870'N 002°19.365'E	9	56°42.406'N 002°21.890'E
Standoff	56°41.807'N 002°20.355'E	5	56°42.897'N 002°19.526'E	10	56°41.361'N 002°21.830'E
1	56°40.927'N 002°19.690'E	6	56°42.945'N 002°20.077'E	11	56°41.193'N 002°21.599'E
2	56°41.102'N 002°19.457'E	7	56°42.757'N 002°21.099'E	12	56°41.061'N 002°21.267'E
3	56°41.250'N 002°19.161'E	8	56°42.583'N 002°21.519'E		

Company & Vessels	Towed Cable Length & Depth	Area Covered 1 (inc Quod Blocks)	Area Covered 2 (inc Quod Blocks)	Duration
Gardline Geosurvey Limited Gardline Ocean Reliance HP6391	1200m	57°55.365'N 000°52.420'E 57°57.243'N 000°48.724'E 57°58.997'N 000°51.988'E 58°16.680'N 000°16.990'E 58°16.965'N 000°12.107'E 58°18.076'N 000°12.019'E 58°17.834'N 000°17.294'E 57°59.119'N 000°55.900'E 58°03.898'N 001°08.724'E 58°03.072'N 001°10.351'E	21; 22; 15; 16	24/04/2017 - 30/06/2017 For 16 Days
Gardline Geosurvey TBC	1200m 3m	59°39.639'N 001°39.400'E 59°35.061'N 001°39.582'E 59°35.151'N 001°48.929'E 59°39.729'N 001°48.768'E	9	22/04/2017 - 24/07/2017 For 4 Days
AUTONAUT Monohull		61°00.204'N 003°28.216'W 60°00.384'N 003°23.098'W 60°16.488'N 002°31.943'W 60°43.734'N 004°20.045'W		21/04/2017 - 11/05/2017 For 20 Days
Fugro GM Marine Ltd Fugro Synergy C6XR3		60°11.793'N 003°52.197'W	205	19/04/2017 - 31/05/2017 For 25 Days
FairfieldNodal MV Ocean Pearl C6ZWS GeoWave Commander LAKY6 Shemarah II 9120889		60°49.801'N 002°27.885'W 60°45.540'N 002°19.945'W 60°42.655'N 002°23.219'W 60°41.091'N 002°28.435'W 60°40.426'N 002°28.680'W 60°39.603'N 002°31.145'W 60°39.858'N 002°33.060'W 60°39.504'N 002°36.420'W 60°41.747'N 002°40.768'W	206	15/04/2016 - 30/09/2017 For 100 Days
Total E&P UK Limited TBA	750m 7m	61°10.219'N 002°30.948'W 61°01.536'N 002°19.358'W 60°39.916'N 003°33.227'W 60°48.681'N 003°43.654'W	214, 205, 206	15/04/2017 - 31/08/2017 For 23 Days
Shearwater Polar Duchess - 5BJC3 Polar Express - LAER7 MV Andrea - YJTK5 St John - YJQT9 Ocean Mermaid - C6B18 Sanco Sky - ZDHW8	8100m 12m	63°26.781'N 000°01.721'E 62°15.322'N 001°11.564'E 62°29.409'N 000°14.516'W 63°06.914'N 000°27.443'W	218, 219, 220, 222, 223	15/04/2017 - 15/07/2017 For 90 Days
Fugro Survey Ltd M/V Fugro Meridian C6QR4		58°01.924'N 000°55.685'W 58°01.857'N 000°51.624'W 57°59.703'N 000°51.752'W 57°59.770'N 000°55.809'W	14	15/03/2017 - 31/05/2017 For 3 Days
Total E&P UK Limited TBA	2 m 4m	58°29.464'N 000°33.369'E	15	01/03/2017 - 30/06/2017 For 1 Day

Gardline Geosurvey Limited MV Vigilant PBNX		60°06.113'N 003°58.565'W 60°03.860'N 003°53.926'W 60°01.542'N 003°58.431'W 60°03.792'N 004°03.069'W	205	27/03/2017 - 14/04/2017 For 14 Days
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## Area 2 Survey List

Latest Update: 06 April 2017

Company & Vessels	Towed Cable Length & Depth	Area Covered 1 (inc Quod Blocks)	Area Covered 2 (inc Quod Blocks)	Duration
PGS Exploration (UK) Ltd Ramform Vanguard 9188714		57°50.484'N 001°11.982'E 58°01.038'N 001°51.440'E 57°54.300'N 001°57.979'E 57°19.459'N 002°15.040'E 57°05.838'N 001°26.734'E	22; 23	01/04/2017 - 30/09/2017 For 84 Days
Fugro Survey Ltd M/V Fugro Meridian C6QR4		56°43.464'N 000°33.369'E 56°50.948'N 002°15.247'E	30	01/04/2016 - 24/04/2017 For 2 Days
Fugro Fugro Meridian C6QR4		57°09.556'N 001°43.240'E 57°11.172'N 001°43.240'E 57°11.131'N 001°46.216'E 57°09.514'N 001°46.139'E	22	15/03/2017 - 31/05/2017 For 3 Days
Subsea 7 Normand Oceanic LAXM7		57°01.742'N 001°12.190'E 57°11.475'N 001°54.582'E	22	03/03/2017 - 31/03/2017 For 28 Days
Gardline Geo Survey MV Kommandor PBQW		56°57.524'N 001°51.119'E 56°58.445'N 001°51.090'E 56°58.461'N 001°52.919'E 56°57.540'N 001°52.946'E	29	24/02/2016 - 30/06/2017 For 3 Days
Repsol Sinopec Resources UK Ltd TBC	1200m 4m	57°29.686'N 001°26.459'E 57°26.023'N 001°26.616'E 57°25.930'N 001°19.324'E 57°29.593'N 001°19.156'E	22	16/02/2016 - 30/06/2017 For 5 Days
Total E&P UK Limited TBA		57°00.695'N 001°50.310'E	22	15/02/2017 - 01/08/2017 For 1 Day
Fugro OSAE GmbH MV Fugro Helmer ZDNM8		56°41.555'N 002°19.404'E 57°11.179'N 002°00.141'E	22; 23; 30	24/04/2017 - 23/06/2017 For 1 Day

## Area 3 Survey List

Latest Update: 06 April 2017

Company & Vessels	Towed Cable Length & Depth	Area Covered 1 (inc Quod Blocks)	Area Covered 2 (inc Quod Blocks)	Duration
Fugro Survey Fugro Meridian C6QR4	3m 600m	54°34.381'N 001°18.744'E 54°33.573'N 001°22.067'E 54°30.056'N 001°17.996'E 54°31.896'N 001°14.674'E	43	13/04/2017 - 15/05/2017 For 7 Days
Bibby Hydromap Bibby Tethra 2EGF8		53°27.974'N 001°54.431'E 53°28.110'N 001°55.570'E 53°27.455'N 001°55.789'E 53°27.319'N 001°54.651'E	48	10/04/2017 - 30/09/2017 For 2 Days
Fugro Engineers BV MV Fugro Bucentaur C6SU4 MV Fugro Pioneer C6BH3		53°13.917'N 002°49.631'E 53°13.509'N 002°50.218'E 53°13.157'N 002°49.538'E 53°13.564'N 002°48.951'E 53°11.720'N 002°51.705'E 53°11.323'N 002°52.311'E 53°10.959'N 002°51.650'E 53°11.356'N 002°51.043'E 53°10.236'N 002°53.744'E 53°10.214'N 002°54.641'E 53°09.676'N 002°54.604'E 53°09.697'N 002°53.708'E	49	13/03/2017 - 01/06/2017 For 7 Days
Bibby Hydromap Bibby Tethra 2EGF8		53°02.191'N 002°13.513'E 53°02.191'N 002°13.523'E 53°01.646'N 002°12.628'E 53°02.186'N 002°12.620'E	49	22/03/2017 - 31/05/2017 For 5 Days
Fugro Engineers B.V		54°14.543'N 002°30.897'E 54°14.546'N 002°31.818'E 54°15.625'N 002°31.805'E 54°15.621'N 002°30.884'E	44	21/02/2017 - 30/04/2017 For 5 Days
Fugro Survey Fugro Galaxy C6YY4	3m 600m	54°29.300'N 001°21.779'E 54°27.193'N 001°25.565'E 53°24.710'N 001°21.502'E 53°26.814'N 001°17.716'E	43	25/01/2017 - 05/04/2017 For 7 Days
Gavin Hulmston TBC		54°03.244'N 001°01.985'E	43	23/01/2017 - 28/05/2017 For 1 Day
Polarcus DMCC Polarcus Asima C6XK6	6000m / 15m	54°04.904'N 001°03.830'E 54°04.838'N 001°47.764'E 53°44.071'N 001°47.648'E 53°43.703'N 000°53.830'E 53°53.904'N 000°53.680'E 53°53.753'N 000°15.779'E 53°59.903'N 000°11.829'E 54°02.803'N 000°14.929'E 54°06.937'N 000°15.528'E 54°14.754'N 000°15.378'E 54°14.921'N 001°03.746'E	42; 43; 47; 48	01/10/2016 - 31/07/2017 For 2 Days
Gardline Geosurvey Ltd Ocean Reliance HP6391	1300m 3m	54°38.347'N 001°45.134'E	43	19/03/2017 - 30/04/2017 For 0.5 Day

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Company & Vessels	Towed Cable Length & Depth	Area Covered 1 (inc Quod Blocks)	Area Covered 2 (inc Quod Blocks)	Duration
Fugro GB Marine Ltd Fugro Seeker 2HCS2		53°52.121'N 003°37.370'W 53°52.126'N 003°36.458'W 53°51.587'N 003°36.450'W 53°51.582'N 003°37.362'W	110	28/03/2017 - 30/04/2017 For 1 Day
Fugro GB Marine Ltd Fugro Seeker 2HCS2		53°56.511'N 003°40.732'W 53°56.514'N 003°40.183'W 53°56.191'N 003°40.178'W 53°56.188'N 003°40.727'W	110	28/03/2017 - 30/04/2017 For 0.5 Day
Fugro GB Marine Ltd Fugro Seeker 2HCS2		53°53.731'N 003°37.738'W 53°53.736'N 003°36.825'W 53°53.197'N 003°36.817'W 53°53.192'N 003°37.729'W	110	28/03/2017 - 30/04/2017 For 1 Day
Fugro GB Marine Ltd Fugro Seeker 2HCS2		53°56.511'N 003°40.732'W 53°56.514'N 003°40.183'W 53°56.191'N 003°40.178'W 53°56.188'N 003°40.727'W	110	28/03/2017 - 30/04/2017 For 1 Day