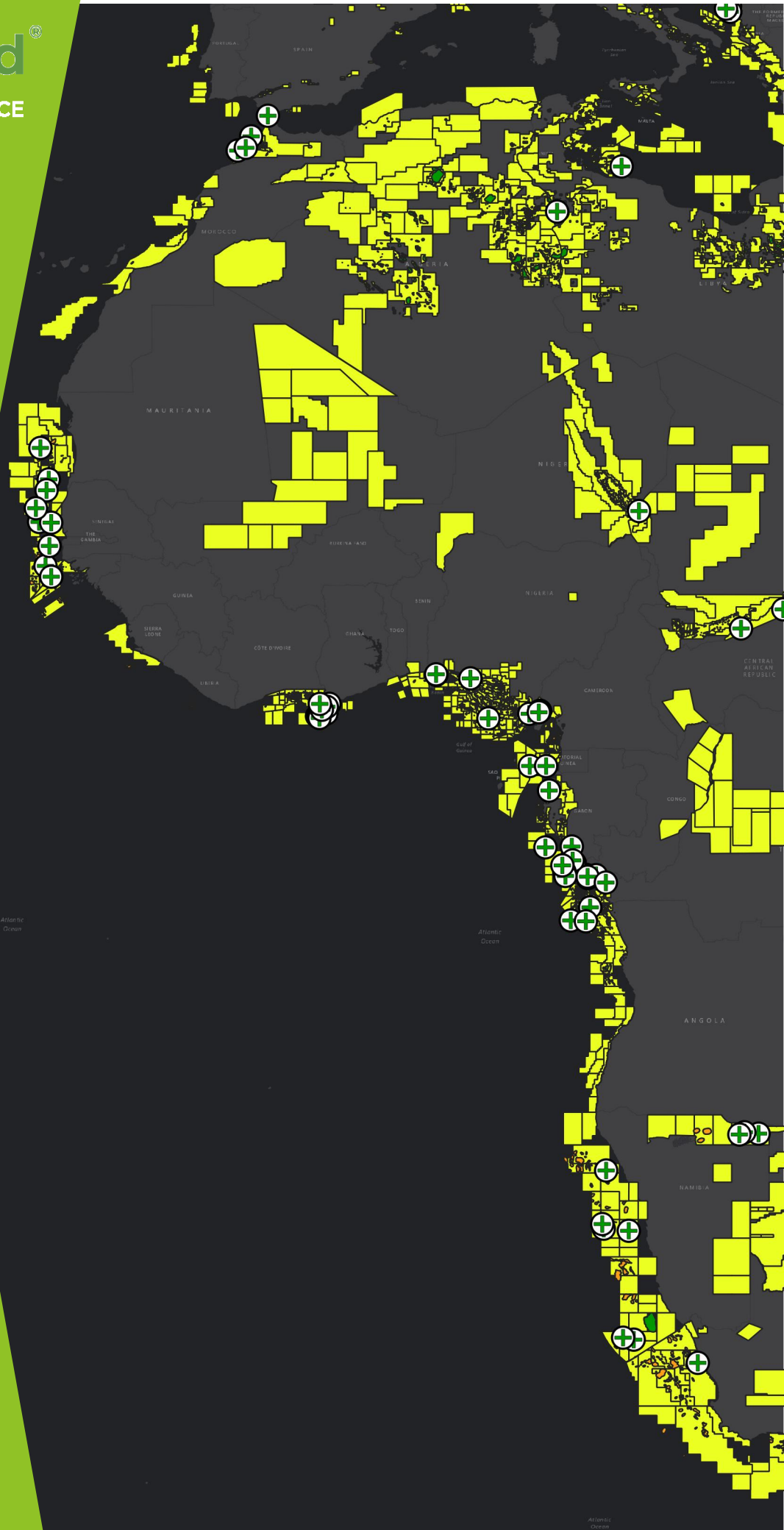




MapStand[®]
LOCATION INTELLIGENCE

MapStand Monthly Mashup



November 2020

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Introduction

Welcome to the November edition of the MapStand Monthly Mashup!

This month we have a bumper edition of news from across the globe, featuring updates on drilling successes (and failures), key farm-outs and updates from the renewables sector including a summary of the UK Government's 10 point plan for a green revolution.

Following news of several successful Covid-19 vaccine trials, we have seen a much welcomed boost in oil prices as the markets begin to see light at the end of the tunnel and a return to some sort of normality in 2021. How far prices rise remains to be seen with predictions ranging from a below \$50 average to reaching \$65 in 2021. One thing for certain is that companies will maintain tight controls on CAPEX and OPEX throughout next year.

One of the early sufferers of cost cutting and budget controls can be costly data subscriptions. Here is where MapStand can step in! MapStand offers a free web-hosted platform that allows anyone to view geotagged E&P news and data through a laptop, mobile or tablet. With our commercial DaaS (data as a service) offering through our Enterprise and Hub subscriptions, individuals and companies can get increased value as they can access our E&P data through APIs, stream layers directly into their own GIS environment and combine it with their own data to undertake further analysis at a significantly reduced cost to traditional vendors.

To find out more about MapStand and how our commercial offerings can help you and your organization, please do not hesitate to get in touch.

support@mapstand.com.

Francis Cram
CEO
MapStand

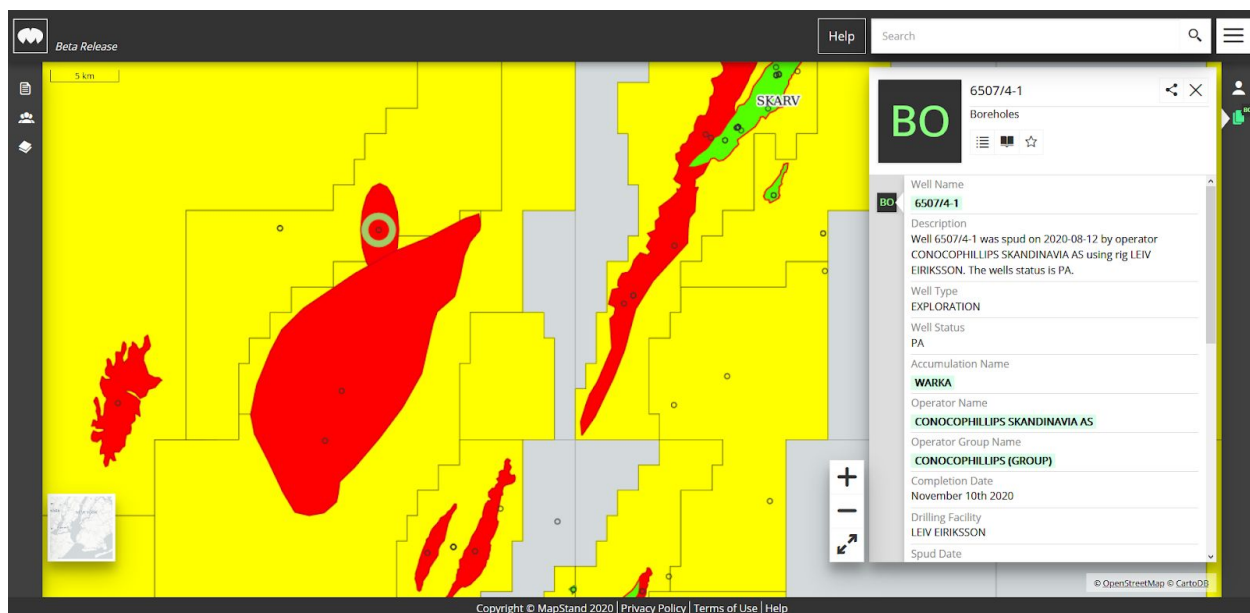
Europe

Warka Discovery

ConocoPhillips Skandinavia AS alongside partner PGNiG Upstream Norway AS announced a significant gas condensate discovery at the Warka prospect, located in PL1009. The discovery well (6507/4-1) was drilled using the Leiv Eiriksson to a total depth of 4960 meters and encountered a 27-metre gas column in sandstone layers in the Lange Formation, with moderate but uncertain reservoir quality. Preliminary estimates place the size of the discovery between 50 and 190 million barrels of recoverable oil equivalent.

ConocoPhillips Skandinavia AS is operator of PL1009 (65%) alongside PGNiG Upstream Norway AS (35%).

Following completion of the well, the Leiv Eiriksson will continue operations for Cononco, drilling exploration well 6507/5-10 S (Slagugle) in PL891. ConocoPhillips Skandinavia AS is operator with 80% working interest alongside Pandion Energy AS 20%.

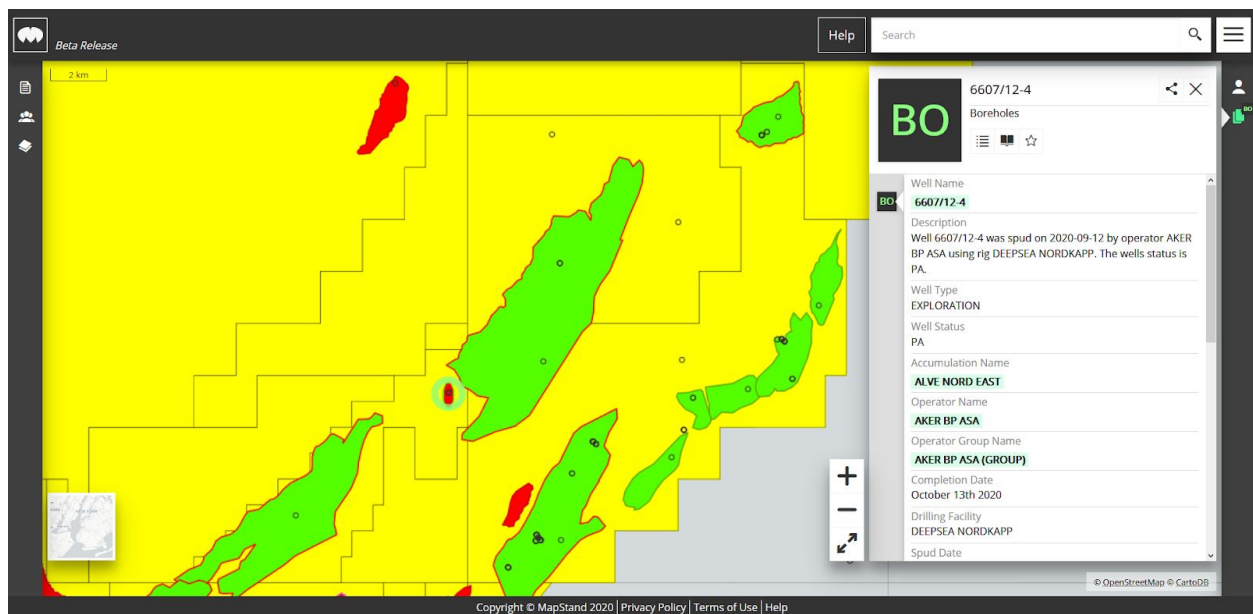


Minor Oil Discovery - Norway

Aker BP and its partner PGNiG Upstream Norway AS announced a minor gas and oil discovery (Alve Nord East) to the north east of the Alve Nord discovery in PL127C.

Exploration well 6607/12-4, drilled using the Deepsea Nordkapp, encountered an 80m gas column in the Garn, Not and Ile Formations, 45 metres of which in sandstone layers with poor reservoir quality. In the secondary exploration target, the well encountered oil in three reservoir zones in the Lange Formation. Initial estimates put the discovered gas volumes between 0.5–1 bcm alongside a further 6–17Mmboe oil.

Aker BP holds an 88.08% interest in PL127C alongside PGNiG Upstream Norway AS (11.92%).



Lundins Polmak well is dry

Lundin Energy's 7221/4-1 exploration well, drilled to test the Polmak prospect across PL609 and PL1027 has failed to find hydrocarbons

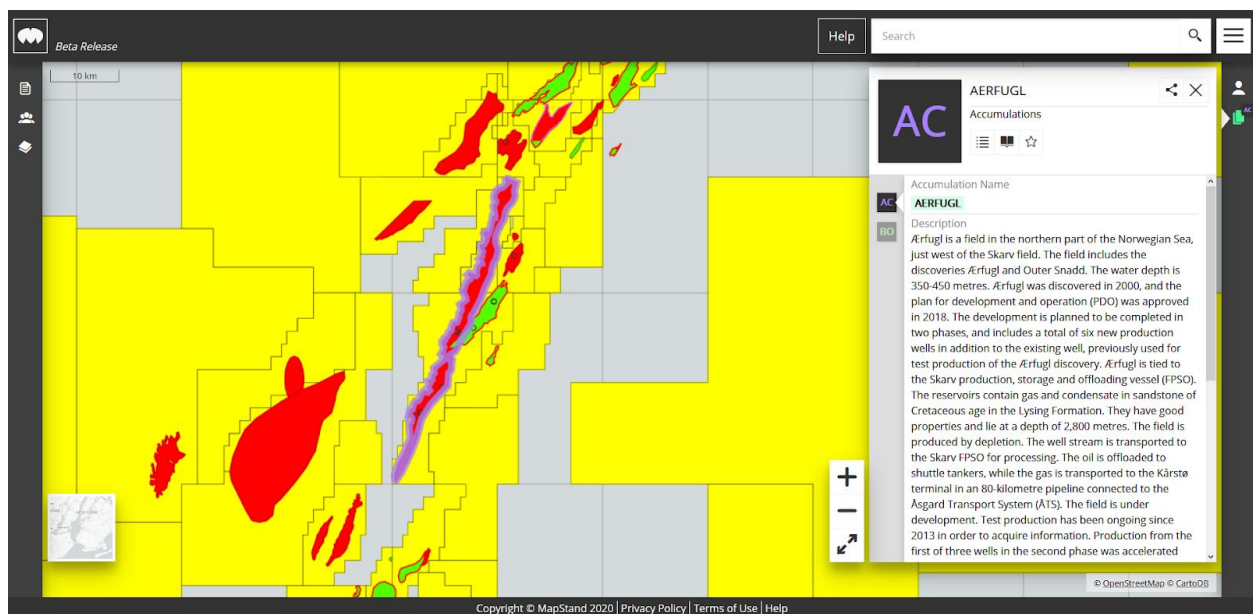
The wells primary objective was to prove hydrocarbons in the Triassic Kobbe formation. Despite the well encountering indications of hydrocarbons in a 9-meter interval in poor quality reservoir in the targeted formation the well was classified as dry.



Ærfugl field production increase

Aker BP has commenced production from the Ærfugl gas and condensate field. The first development phase consists of three wells tied back to the Skarv FPSO and this will be followed up with a further three wells as part of the second development phase.

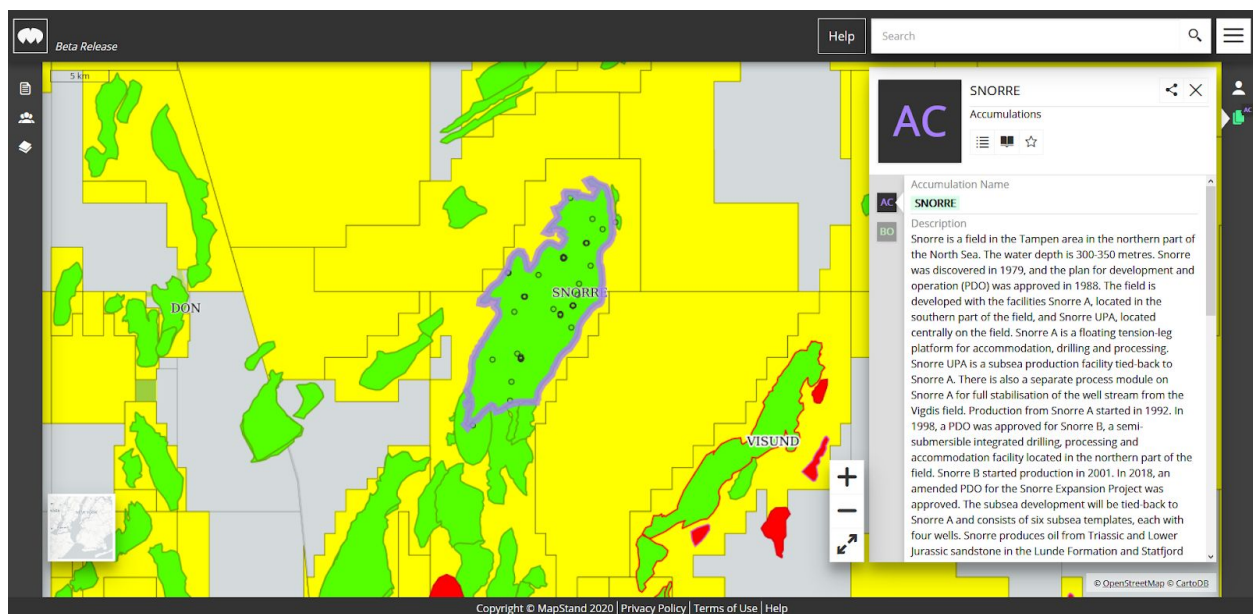
Aker BP is operator (23.9%) alongside partners Equinor (36.1%), Wintershall Dea (28.1%), and PGNiG (11.91%).



Snorre development expansion

Equinor, alongside its partners, have received approval for expansion of its Snorre field development plan. The expansion consists of six subsea templates, which will be tied into the Snorre A platform and will see 24 new wells (13 production and 11 VAG (water-alternating gas injectors) drilled.

Recoverable reserves have been calculated at ~195 Mmboe which is roughly twice the oil reserves in the Gina Krog field.



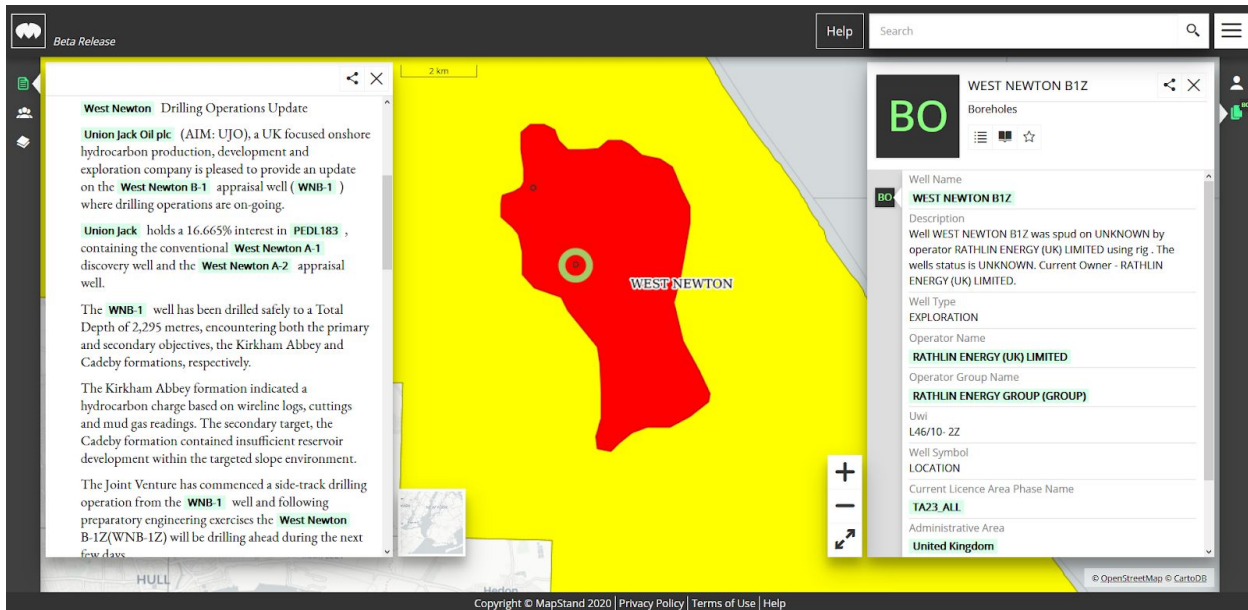
West Newton Update

Union Jack Oil has provided an update on the West Newton B-1 appraisal well which was drilled to a TD of 2295m, encountering both the primary and secondary objectives, the Kirkham Abbey and Cadeby formations, respectively.

The Kirkham Abbey formation indicated a hydrocarbon charge based on wireline logs, cuttings and mud gas readings. The secondary target, the Cadeby formation contained insufficient reservoir development within the targeted slope environment.

The operator (Rathlin Energy) has commenced a side-track drilling operation (West Newton B-1Z) from the West Newton B-1 well. The objective of the WNB-1Z side-track well is to further appraise the Kirkham Abbey formation

PEDL183 contains the conventional West Newton A-1 discovery well and the West Newton A-2 appraisal well and is operated by Rathlin Energy (66.67%) alongside partners Union Jack Oil (16.665%) and Reabold Resources (16.665%).



West Newton Drilling Operations Update

Union Jack Oil plc (AIM: UJO), a UK focused onshore hydrocarbon production, development and exploration company is pleased to provide an update on the **West Newton B-1** appraisal well (**WNB-1**) where drilling operations are on-going.

Union Jack holds a 16.665% interest in **PEDL183** , containing the conventional **West Newton A-1** discovery well and the **West Newton A-2** appraisal well.

The **WNB-1** well has been drilled safely to a Total Depth of 2,295 metres, encountering both the primary and secondary objectives, the Kirkham Abbey and Cadeby formations, respectively.

The Kirkham Abbey formation indicated a hydrocarbon charge based on wireline logs, cuttings and mud gas readings. The secondary target, the Cadeby formation contained insufficient reservoir development within the targeted slope environment.

The Joint Venture has commenced a side-track drilling operation from the **WNB-1** well and following preparatory engineering exercises the **West Newton B-1Z**(WNB-1Z) will be drilling ahead during the next few days.

WEST NEWTON B1Z

BO Boreholes

Well Name
WEST NEWTON B1Z

Description
Well WEST NEWTON B1Z was spud on UNKNOWN by operator RATHLIN ENERGY (UK) LIMITED using rig . The wells status is UNKNOWN. Current Owner - RATHLIN ENERGY (UK) LIMITED.

Well Type
EXPLORATION

Operator Name
RATHLIN ENERGY (UK) LIMITED

Operator Group Name
RATHLIN ENERGY GROUP (GROUP)

Uwi
L46/10- 2Z

Well Symbol
LOCATION

Current Licence Area Phase Name
TA23.ALL

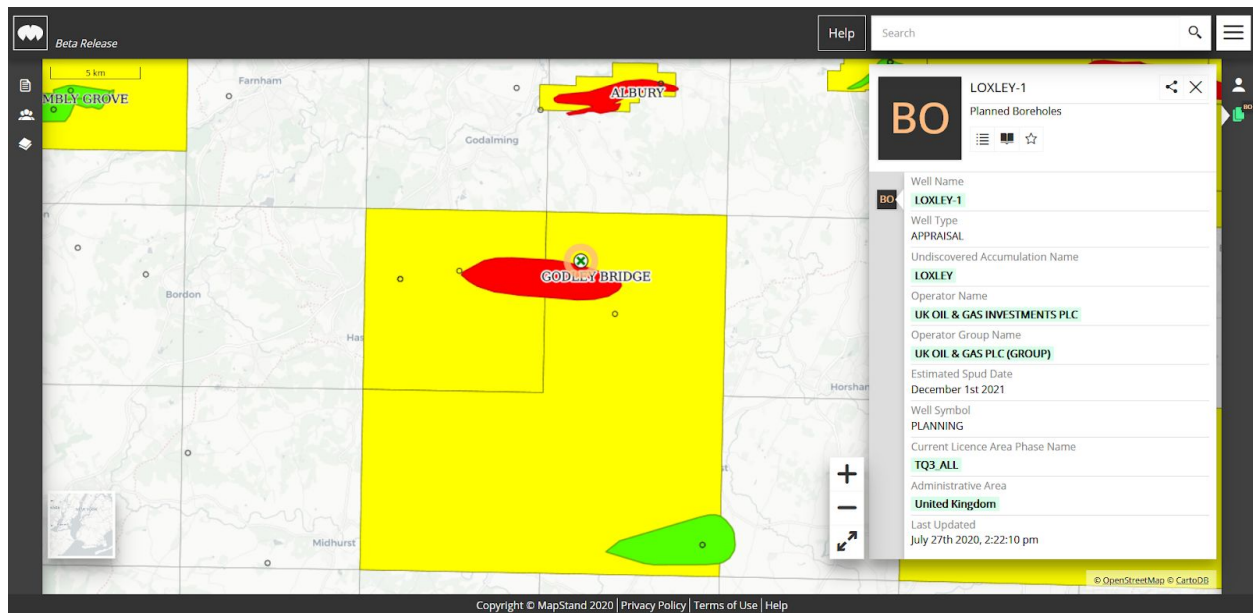
Administrative Area
United Kingdom

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UKOG Loxley planning denied

On the 27th November, Surrey County Council rejected planning consent for UK Oil & Gas (UKOG) Loxley-1/1z Portland gas appraisal project.

Located within PEDL234 (UKOG 100%), the Loxley-1 well was planned to appraise the Portland gas accumulation that was discovered by Conoco's 1982 Godley Bridge-1 well.



Barryroe Farmout Completes

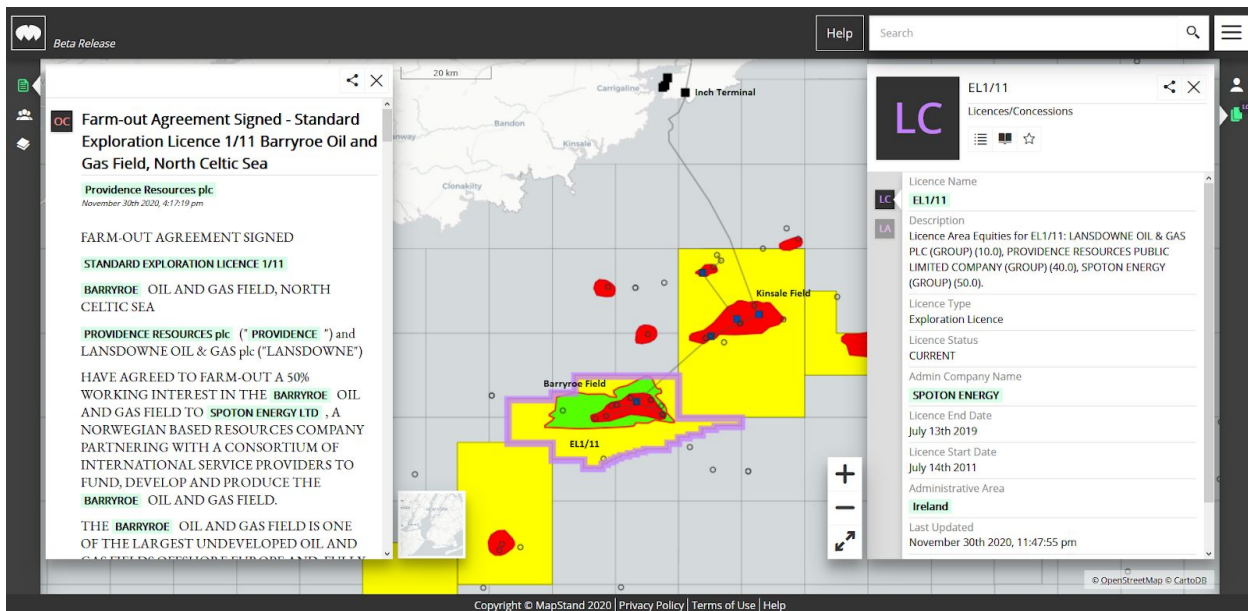
Providence Resources PLC alongside partner Lansdowne Oil and Gas has announced that it has agreed terms with Spoton Energy to farm-out a 50% working interest in EL 1/11. The license contains Barryroe, one of Europe's largest undeveloped offshore fields.

As part of the deal Spoton, alongside a consortium of 6 leading oil and gas field service providers (Schlumberger, Aker Solutions, AGR, Maersk Drilling, Keppel FELS Ltd and Aibel), will fund the early development programme and full field development of Barryroe.

On completion of the deal, Spoton will become operator of EL 1/11 (50%) alongside Exola DAC (40%) and Lansdowne Celtic Sea Limited (10%).

Development of Barryroe will be a major boost to the Irish economy and provide a secure future energy source to support the energy transition as existing gas fields are depleted and decommissioned.

One interesting note is the potential for a CCS project alongside Barryroe development, utilizing the depleted Kinsale gas field, currently being decommissioned by consortium member AGR. Such a project could allow for the development of Barryroe whilst supporting a carbon neutral Ireland by 2050.



Farm-out Agreement Signed - Standard Exploration Licence 1/11 Barryroe Oil and Gas Field, North Celtic Sea

Providence Resources plc
November 30th 2020, 8:17:19 pm

FARM-OUT AGREEMENT SIGNED

STANDARD EXPLORATION LICENCE 1/11

BARRYROE OIL AND GAS FIELD, NORTH CELTIC SEA

PROVIDENCE RESOURCES plc ("PROVIDENCE") and **LANSDOWNE OIL & GAS plc** ("LANSDOWNE") HAVE AGREED TO FARM-OUT A 50% WORKING INTEREST IN THE **BARRYROE** OIL AND GAS FIELD TO **SPOTON ENERGY LTD**, A NORWEGIAN BASED RESOURCES COMPANY PARTNERING WITH A CONSORTIUM OF INTERNATIONAL SERVICE PROVIDERS TO FUND, DEVELOP AND PRODUCE THE **BARRYROE** OIL AND GAS FIELD.

THE **BARRYROE** OIL AND GAS FIELD IS ONE OF THE LARGEST UNDEVELOPED OIL AND GAS FIELDS OFFSHORE EUROPE AND IS

EL1/11

Licences/Concessions

LC **EL1/11**

LA

Licence Name

EL1/11

Description

Licence Area Equities for EL1/11: LANSDOWNE OIL & GAS PLC (GROUP) (10.0), PROVIDENCE RESOURCES PUBLIC LIMITED COMPANY (GROUP) (40.0), SPOTON ENERGY (GROUP) (50.0).

Licence Type

Exploration Licence

Licence Status

CURRENT

Admin Company Name

SPOTON ENERGY

Licence End Date

July 13th 2019

Licence Start Date

July 14th 2011

Administrative Area

Ireland

Last Updated

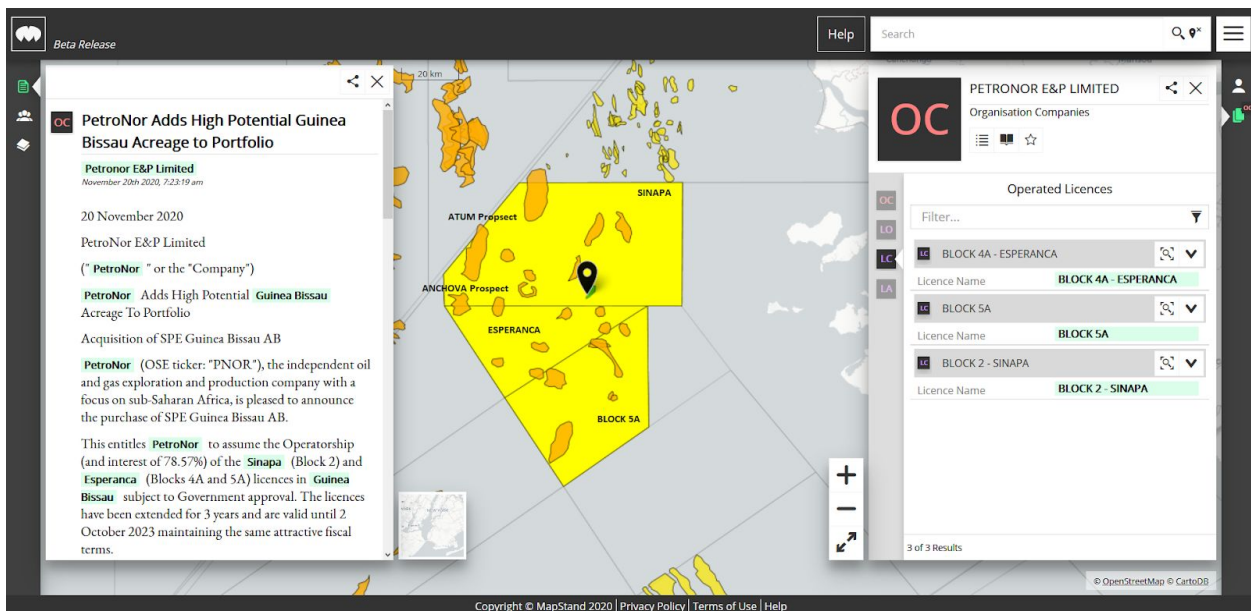
November 30th 2020, 11:47:55 pm

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Africa

PetroNor Farm-in to Guinea-Bissau

PetroNor has announced that it has entered into an agreement to purchase SPE Guinea Bissau AB (a Svenska AB subsidiary). Through this, PetroNor will become operator of the Sinapa (Block 2) and Esperanca (Block 4A and 5A) licences (78.57%) alongside partner Far Limited (21.435). The blocks contain the Atum and Anchova prospects which have a combined P50 recoverable prospective resource of 568 Mmboe alongside the Sinapa discovery, a shallow water salt-related feature with contingent resources of 13.4mmbbls.

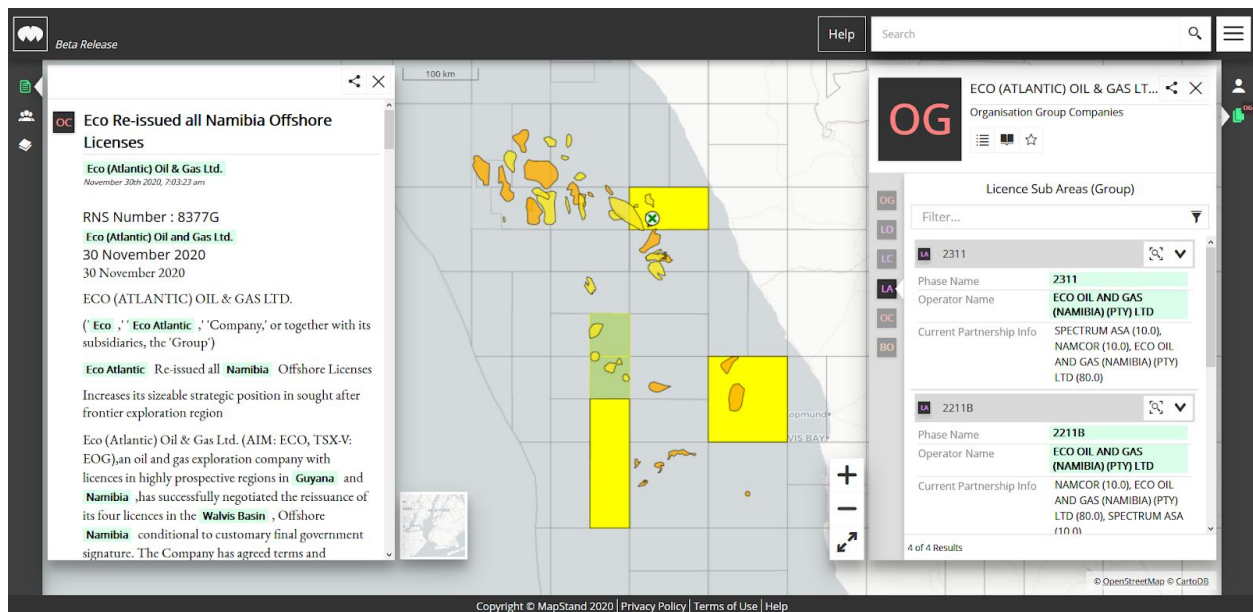


The screenshot displays the MapStand interface with a map of Guinea-Bissau. The map highlights several oil blocks: ATUM Prospect, ANCHOVA Prospect, SINAPA, ESPERANCA, and BLOCK 5A. A news article on the left titled "PetroNor Adds High Potential Guinea Bissau Acreage to Portfolio" details the acquisition of SPE Guinea Bissau AB by PetroNor E&P Limited. The article mentions that PetroNor will become the operator of the Sinapa (Block 2) and Esperanca (Blocks 4A and 5A) licences, which are valid until 2 October 2023. On the right, a sidebar shows the "Organisation Companies" section for PETRONOR E&P LIMITED, listing three operated licences: BLOCK 4A - ESPERANCA, BLOCK 5A, and BLOCK 2 - SINAPA. The interface includes a search bar, a help button, and a copyright notice at the bottom: "Copyright © MapStand 2020 | Privacy Policy | Terms of Use | Help".

EcoAtlantic Namibia Licence Extension

Eco Atlantic Oil & Gas Ltd has successfully negotiated the reissue of four licences, each with a new 10-year life cycle, in the Walvis Basin, offshore Namibia.

Licence	Licence Area	Operator	Partners
PEL 0030 - Cooper	2021A	Eco Atlantic (54.3%)	Azinam (30.7%) NAMCOR (10%), Local Namibian Partners (5%)
PEL 0033 - Sharon	2213	Eco Atlantic (56.7%)	Azinam (28.3%) NAMCOR (10%), Local Namibian Partners (5%)
PEL 0034 - Guy	2211A and 2111B	Azinam (37.8%)	Eco Atlantic (47.2%) NAMCOR (10%), Local Namibian Partners (5%)
PEL 0050 - Tamar	2311A and 2211B	Eco Atlantic (85%)	NAMCOR (10%), Local Namibian Partners (5%)

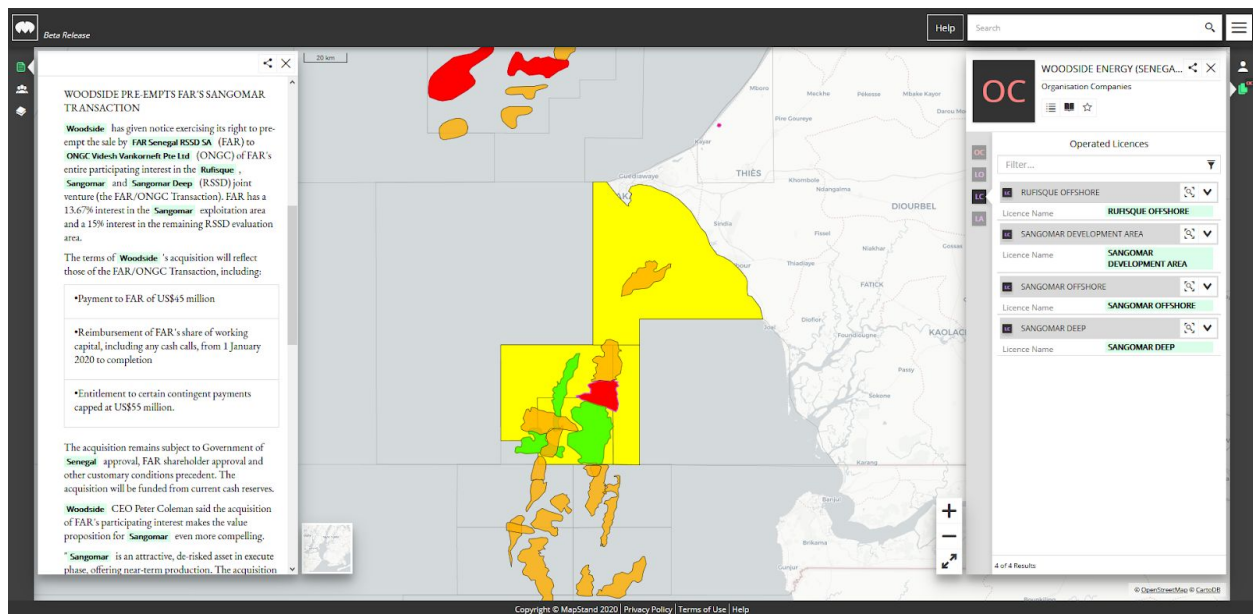


Woodside increases share in Senegal licences

Woodside has preempted FAR Senegal's deal with ONGC Videsh to farm-out its share of the Sangomar and Rufisque licences, offshore Senegal and agreed terms with FAR to acquire their interest in the region under the same terms as ONGC has agreed.

This deal, subject to government approval will see Woodside take a 90% stake in the Sangomar Development area alongside an 82% stake in the remaining licences.

Woodside plans to commence development drilling in 2021, targeting first oil in 2023.



India

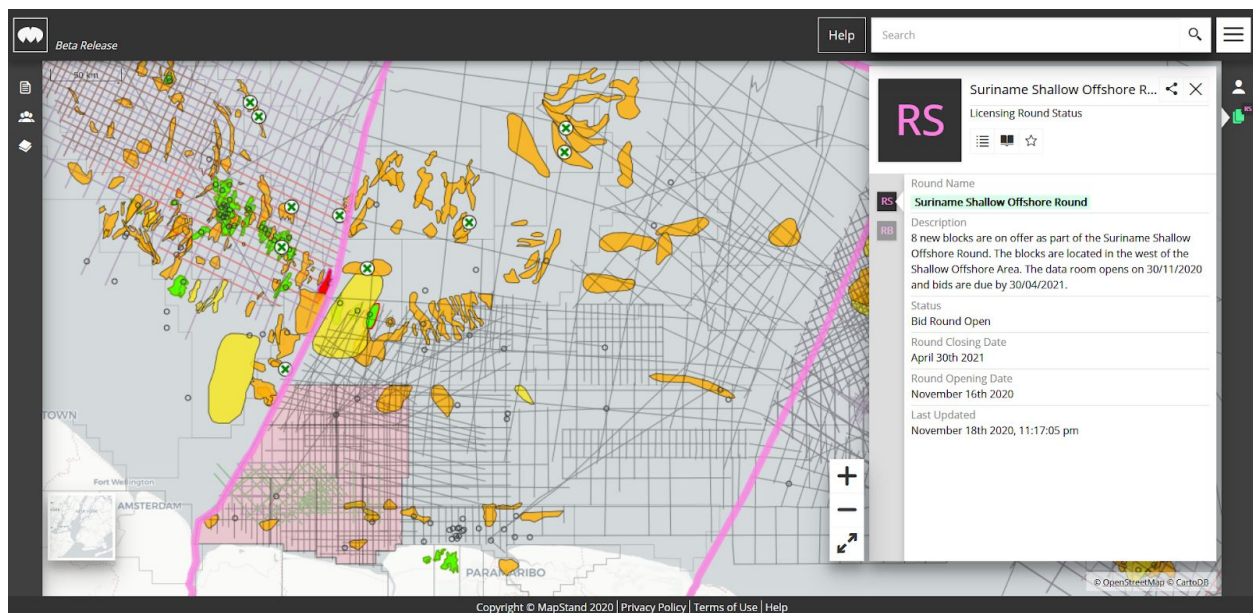
Oil India Discovery

Oil India Limited has announced a hydrocarbon discovery with the Dinjan-1 well in the Tinsukia licence. The well encountered multiple sands in Kopili, Narpuh and Lakadong + Therria formations with a total net pay of about 10 m. Oil India noted that this discovery will open up new areas for further oil & gas exploration in Assam.

Latin America

Suriname shallow water licence round launched

Staatsolie have announced eight new blocks on offer as part of the Shallow Offshore licence round. The blocks are located in the western Shallow Offshore area, south of the recent deepwater discoveries made in Block 58 (Maka, Kwaskwasi and Sapakara) and northwest of the onshore producing fields. The virtual data rooms launched on 30th November 2020 whilst bidding closes on 30th April 2021.



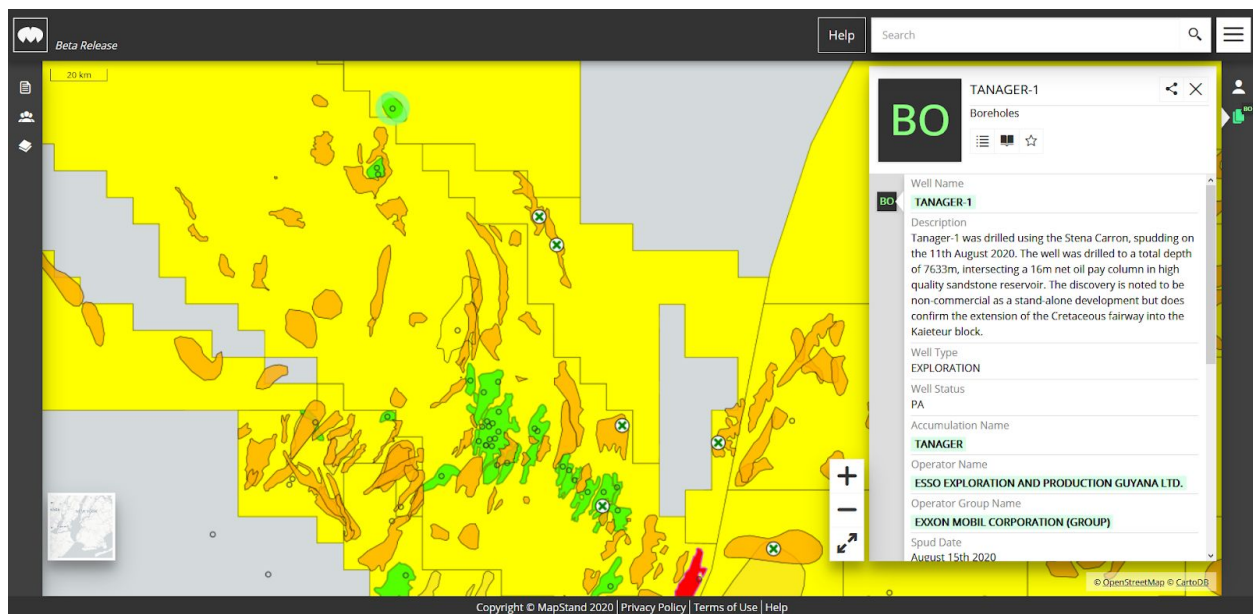
Tanager-1 results disappointing

Ratio Petroleum has announced a non-commercial oil discovery with the Tanager-1 well, Guyana's deepest exploration well to date.

The well was drilled by Esso E&P Guyana using the Stena Carron drillship to a depth of 7633 meters, encountering a 16m oil column in high quality Maastrichtian sands. The oil is noted to be heavier than that at the nearby Liza field and the discovery non-commercial as a standalone project.

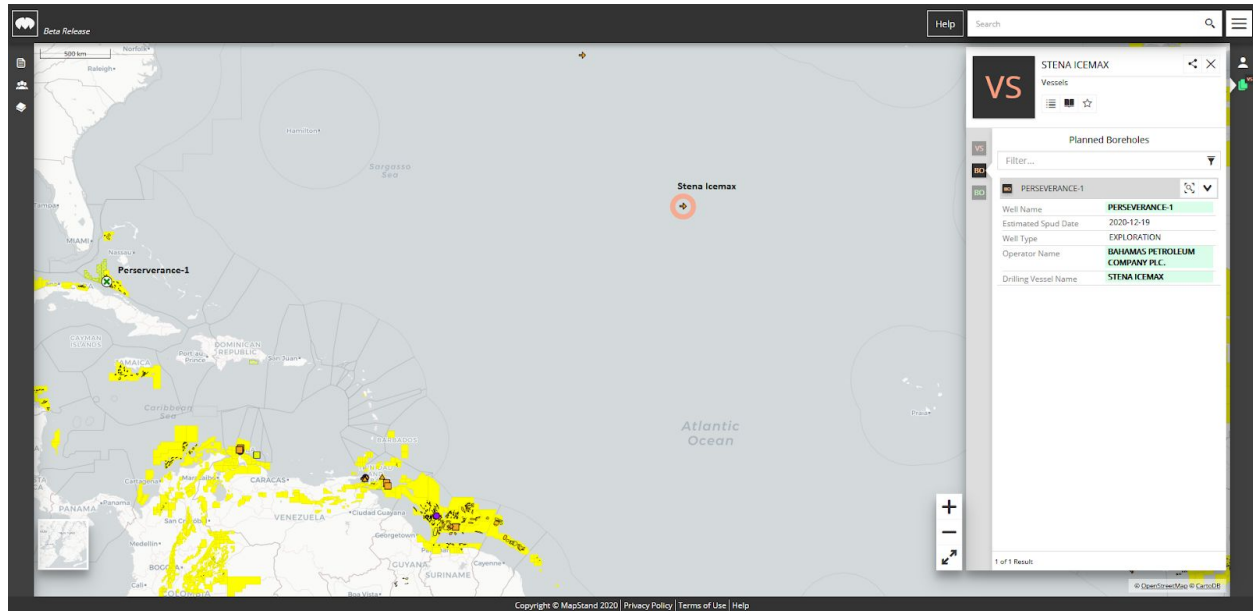
Despite the disappointment, the discovery does confirm an extension of the Cretaceous play from the Stabroek Block into the Kaieteur Block which is operated by Esso E&P Guyana (35%) alongside partners Ratio Guyana (25%), Hess Guyana (25%) and Cataleta Energy (25%).

Esso E&P will be hoping for more success in the neighbouring Calne Block where it will drill the Bulletwood-1 well in late 2020.



Bahamas Petroleum Update

It is set to be an exciting time for Bahamas Petroleum with the Stena IceMax now on route to the Bahamas to spud the Perseverance-1 exploration well. It is expected to arrive in the Bahamas on the 15th December with the well still on track to be spud before the end of 2020 despite increased costs relating to Covid-19.



Alongside this news, the company has released its 2021 work programme which includes:

- Appraisal of the Saffron discovery in February 2021 (Plus up to 7 additional wells on successful appraisal).
- Appraisal of the Weg Naar Zee discovery, Suriname in February 2021 (Plus up to 6 additional wells on successful appraisal).
- Reprocessing of the 3D grid over the South West Peninsula licence, Trinidad in order to high grade prospects with potential for up to 2 exploration wells in late 2021.

BPC also confirmed the signing of the Goudron EPSC with Heritage Petroleum, granting BPC production rights from the Goudron field until 30th June 2020. Goudron currently accounts for 40% of BPC's daily Trinidad and Tobago production.

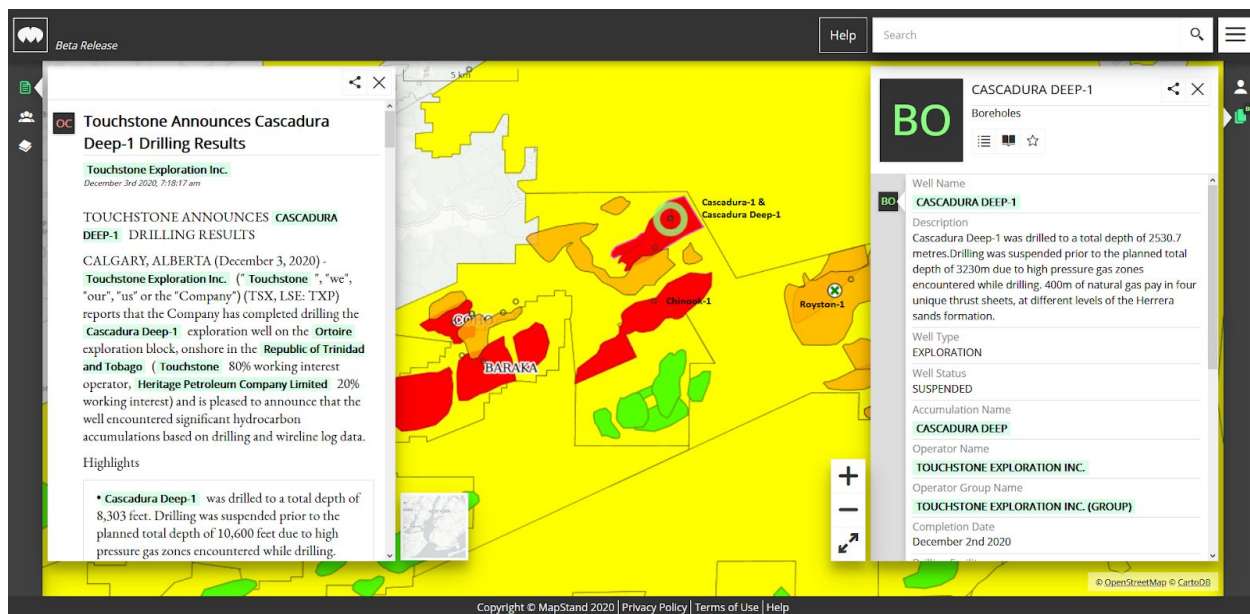
Touchstone Explorations Success continues

Touchstone Explorations' success in the Ortoire Block, Trinidad & Tobago has continued following the announcement of a significant gas discovery with the Cascadura Deep well.

Cascadura Deep-1 spud on 27th October using Well Services Petroleum Ltd. Rig 80 and was designed to test the Herrera sandstones which had proved successful at Chinook and Cascadura.

The well was drilled to a total depth of 2530m where it was suspended, prior to the planned total depth of 3230m, due to high pressure gas zones encountered while drilling. Touchstone has reported that the well encountered 400m of natural gas pay in four unique thrust sheets, at different levels of the Herrera sands formation prior to suspension.

The Cascadura Deep-1 well is the fourth of a 5 well commitment. Touchstone will be hoping for more success with the final well, Royston-1 in the east of the Ortoire Block.



Energy Transition

UK Government's 10 Point Green Revolution

The UK Government has announced a 10 point plan to launch a green revolution in the UK. The plan will see £12 billion of government investment and create up to 250,000 highly-skilled green jobs in the UK by 2030.

1. Offshore wind: Producing enough offshore wind to power every home, quadrupling how much we produce to 40GW by 2030.
2. Hydrogen: Working with industry aiming to generate 5GW of low carbon hydrogen production capacity by 2030 for industry, transport, power and homes, and aiming to develop the first town heated entirely by hydrogen by the end of the decade.
3. Nuclear: Advancing nuclear as a clean energy source, across large scale nuclear and developing the next generation of small and advanced reactors.
4. Electric vehicles: Backing our world-leading car manufacturing bases to accelerate the transition to electric vehicles, and transforming our national infrastructure to better support electric vehicles.
5. Public transport, cycling and walking: Making cycling and walking more attractive ways to travel and investing in zero-emission public transport.
6. Jet Zero and greener maritime: Supporting difficult-to-decarbonise industries to become greener through research projects for zero-emission planes and ships.
7. Homes and public buildings: Making our homes, schools and hospitals greener, warmer and more energy efficient with a target to install 600,000 heat pumps every year by 2028.
8. Carbon capture: Becoming a world-leader in technology to capture and store harmful emissions away from the atmosphere, with a target to remove 10MT of carbon dioxide by 2030, equivalent to all emissions of the industrial Humber today.
9. Nature: Protecting and restoring our natural environment, planting 30,000 hectares of trees every year.
10. Innovation and finance: Developing the cutting-edge technologies needed to reach these new energy ambitions and make tLondon the global centre of green finance.

For more information visit:

<https://www.gov.uk/government/news/pm-outlines-his-ten-point-plan-for-a-green-industrial-revolution-for-250000-jobs>

Chrysaor CO2 Storage Application

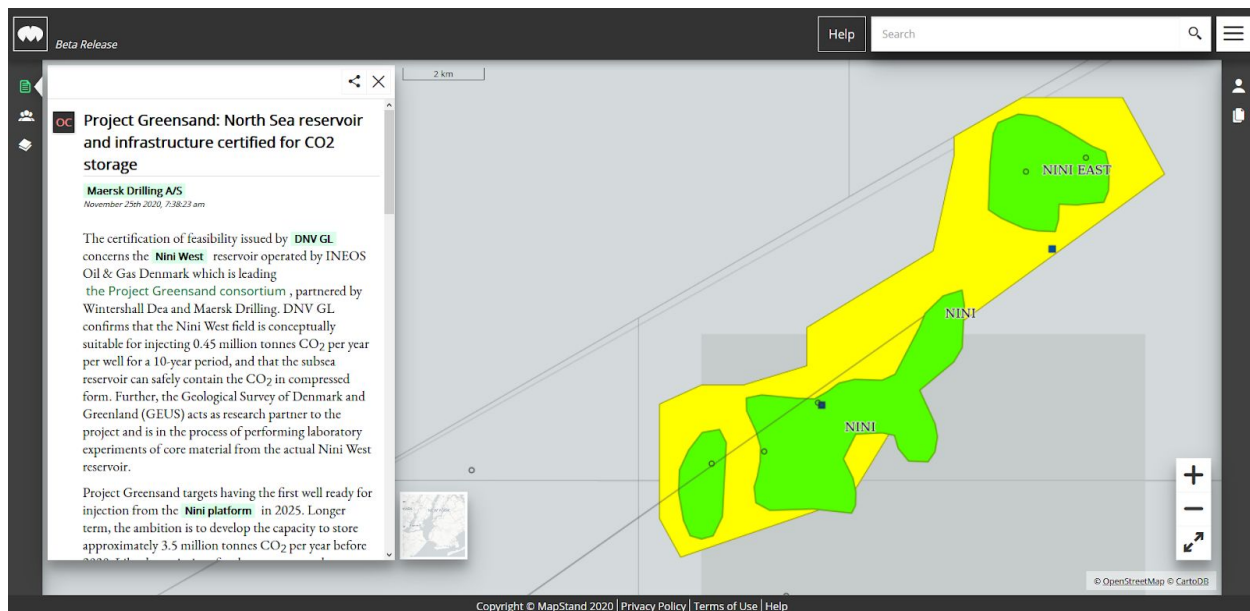
Chrysaor has submitted an application for a CO2 storage licence and alongside this will seek an agreement for a storage lease with the Crown Estate.

The application is in support of the V Net Zero Project which aims to store CO2 from the Immingham cluster in Humberside. The capture, compression and conditioning of the CO2 will be performed by the Humber Zero project which will initially decarbonise 8Mt per annum of CO2 emissions, with the potential to target 30Mt of CO2 emissions from the wider Humber Cluster. Chrysaor is the UK Continental Shelf's biggest oil and gas producer

Project Greensand passes first major hurdle

Project Greensand, Denmark's first CCS project has cleared its first major hurdle with the Nini West reservoir being deemed conceptually suitable for CO2 injection. DNV GL has confirmed that up to 0.45 million tonnes of CO2 per year could be injected over a 10-year period.

Project Greensand, led by INEOS alongside consortium members Wintershall Dea and Maersk Drilling will see the repurposing of the Nini West field for CO2 storage with the aim for first injection in 2025. A major part of the project will be understanding how the repurposing of existing oil wells, alongside other infrastructure including the Nini Platform, can be used to support the project.



Borssele Windfarm progress

Operator Ørsted has today announced that the Borssele I & II windfarm has been fully commissioned.

The offshore windfarm, the largest in the Netherlands and second largest in the world, comprises 94 Siemens Gamesa 8MW turbines and has the capacity to produce 752MW of power, enough for 1 million Dutch households.

In addition, MHI Vestas Offshore Wind and the Blauwwind consortium have announced that all 77 V164-9.5 MW turbines have been installed at the Borssele III/IV site. First power is already being generated from the site with full commissioning expected soon.

