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ASX Release

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South Marsh Island Project Seismic Reprocessing Update

- **Byron has now received the final version of its cutting edge reprocessed regional RTM seismic data from WesternGeco including Vector Imaging Partitioning (VIP)**
- **This data covers 445 square kilometres encompassing 22 South Marsh Island OCS lease blocks and ties 523 wells which have produced over 138 million barrels of oil and 2.2 trillion cubic feet of gas**
- **Byron has licensed WesternGeco's Petrel software platform to take full advantage of VIP/RTM processing**
- **Using this data and the Petrel software, Byron has already identified a number of new low risk development opportunities and prospects**

Byron Energy Limited ("Byron or the Company") (ASX: BYE) is pleased to provide the following update on the Reverse Time Migration ("RTM") seismic reprocessing project at its South Marsh Island Block 71 ("SM71") Project Area.

On 3 May 2018, Byron announced it had signed an agreement with WesternGeco, a Schlumberger subsidiary, to add additional licensed 3D seismic data to its previously licensed data inventory and to perform new, high effort seismic data processing over the South Marsh Island ("SM71") project area in the Gulf of Mexico. Under the agreement, Byron increased its licensed data coverage to approximately 172 square miles (445 square kilometres) or 22 Outer Continental Shelf ("OCS") lease blocks.

Byron's recent discovery at SM71 serves as the cornerstone of this project. Since 23 March 2018, the Byron operated SM71 F1, F2 and F3 wells have produced 1,000,000 barrels of oil and 1.3 billion cubic feet of gas. Byron's 2016 SM71 discovery was drilled based on Reverse Time Migration ("RTM") data processed by WesternGeco in 2013 that revealed an undrilled pool of hydrocarbons beneath a previously productive area. Byron holds a total of seven leases, a total of 32,937 gross acres (31,430 net acres) within the project area. Historically, 523 wells (including the three producing SM 71 wells operated by Byron) have been drilled within the project area and 259 wells were completed for production. Those 259 producing wells have produced a combined total of 138 million barrels of oil and 2.2 trillion cubic feet of natural gas.

The power of this contiguous dataset is enormous. Byron now can tie all 523 wells drilled in the project area with high quality, consistently processed seismic data. This, in turn, allows the Company to pursue prospects based on analogue producing wells, understand dry holes and trapping styles and then focus its efforts on key stratigraphic horizons across the area. The regional advantage is already apparent at the Byron operated South

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Marsh Island Block 74 ("SM74") lease where the Company is now able to tie the primary 13,500 Sand target in the SM74 Raptor prospect to stratigraphically equivalent productive sands in South Marsh Island Blocks 60,61 and 76 fields (Byron has no interest in these blocks) (refer to attachment 1). Using this dataset, it has been determined that the 13,500 Sand is equivalent to the Tex X sand which is a significant producer not just in the project area, but in the Gulf of Mexico which certainly lowers the risk of the Raptor prospect.

Byron has farmed-out a 30% working interest share of the SM74 prospect to Metgasco Limited ("Metgasco") **(ASX: MEL)** on industry standard terms whereby Metgasco will earn their interest by paying 40% of the $11 million initial well dry hole costs and Byron will pay the remaining 60%. Both companies will then bear their respective working interest costs after the initial well is drilled to total depth. The SM74 D14 well will be operated by Byron and drilled from an adjacent platform allowing a short cycle time to production in the event of success (See Byron's ASX announcement, SM 74 Update, dated 19 Sep 2018 for details).

The 2018 reprocessing project was managed by and paid for solely by Byron and the first set of deliverables arrived in late December 2018. The reprocessing goals were to improve signal to nose ratios through improved pre-processing, perform PreStack Depth Migrations with new algorithms and fold in new well data from the Byron's wells. Included in that work were careful determination of wavelet characteristics to allow more accurate ties to well control. Two new Pre Stack Depth Migrations ("PSDM") were run: a higher frequency RTM and higher quality Kirchhoff migrations. Following that work, WesternGeco will update and refresh the seismic inversion volumes that have also been a key tool in evaluating prospects in the area. Common depth point gathers ("CDP's") will be generated for both PSDM volumes that will allow further investigation of prospects and leads. Each PreStack migration run involved migrating and then stacking 157 million seismic traces. The initial delivery of the new, higher frequency RTM data occurred in late December 2018. The remaining deliverables will arrive in February.

Recent developments in computing power and software design have given rise to a by-product of RTM processing. WesternGeco's Vector Imaging Partitioning ("VIP") is a method of utilizing subsets of the RTM image. These subsets are created by migrating input data in the same manner as a "normal" RTM. However, the input data is partitioned based on azimuth (direction) and offset (distance) from a shot point to a subsurface image point. This allows RTM migrated and stacked images to be created using only the most beneficial offsets and azimuths to enhance signal and decrease noise in a given portion of the overall survey. The result is a greatly improved subsurface image because seismic volumes can be constructed in true dip geometries which is the preferred way to use migrated seismic data. It also allows Byron's earth scientists to see only the noise patterns which can be advantageous in understanding how to track reflectors using signal, not noise. This critical in complex geologic settings with steep dips, like salt domes.

In order to take full advantage of VIP processing, Byron has now licensed three Petrel geophysical software "seats" along with improved hardware. Petrel is marketed and supported by Schlumberger. Petrel software modules licensed by Byron allow the creation of seismic images based on selected VIP data using any combination of offset and azimuth necessary to illuminate the subsurface most clearly. These images are created "on the fly" within Petrel and have already proven to be extremely powerful in illuminating prospect areas within Byron's SM71 Project area. The software also allows the investigation of geobodies that will be critical to the detailed stratigraphic nature of Byron's work in the SM71 Project are and the Gulf of Mexico. Byron has always believed in gaining every technical advantage possible and licensing the Petrel software is another example of this strategy and although the transition to Petrel is an arduous one, Byron believes it will put us one more step ahead of other Gulf of Mexico players.

VIP technology has already been applied by Byron in confirming and adjusting the target points for the upcoming SM74 Raptor Prospect well (refer to attachment 2). The accompanying slides show how VIP's can greatly improve the subsurface images within the SM71 Project Area, specifically at the upcoming SM74 Raptor prospect.

Byron has catalogued numerous prospects and leads within the reprocessed dataset. The company will continue to evaluate those opportunities as the final reprocessing products are delivered. Byron's future drilling plans within the project area will be based on the overall ranking of those prospects to maximize the return on investment.

CEO Comment:

Maynard V. Smith, Byron CEO, had this say about the SM71 Reprocessing project:

"Already, we are seeing the benefits of this new, improved and expanded database. In the very short period of time we have had this data it has revealed a number of exciting new opportunities within the South Marsh Island project area. Being able to tie every well in such a highly productive area of the Gulf of Mexico with accurately processed, high quality seismic data and take advantage of VIP technology will be fundamental to the growth of Byron. Interpretation of this data will be ongoing for many years and will provide the foundation for Byron's continued strategy of using the latest technology to de-risk our portfolio of opportunities and increase our chance of success."

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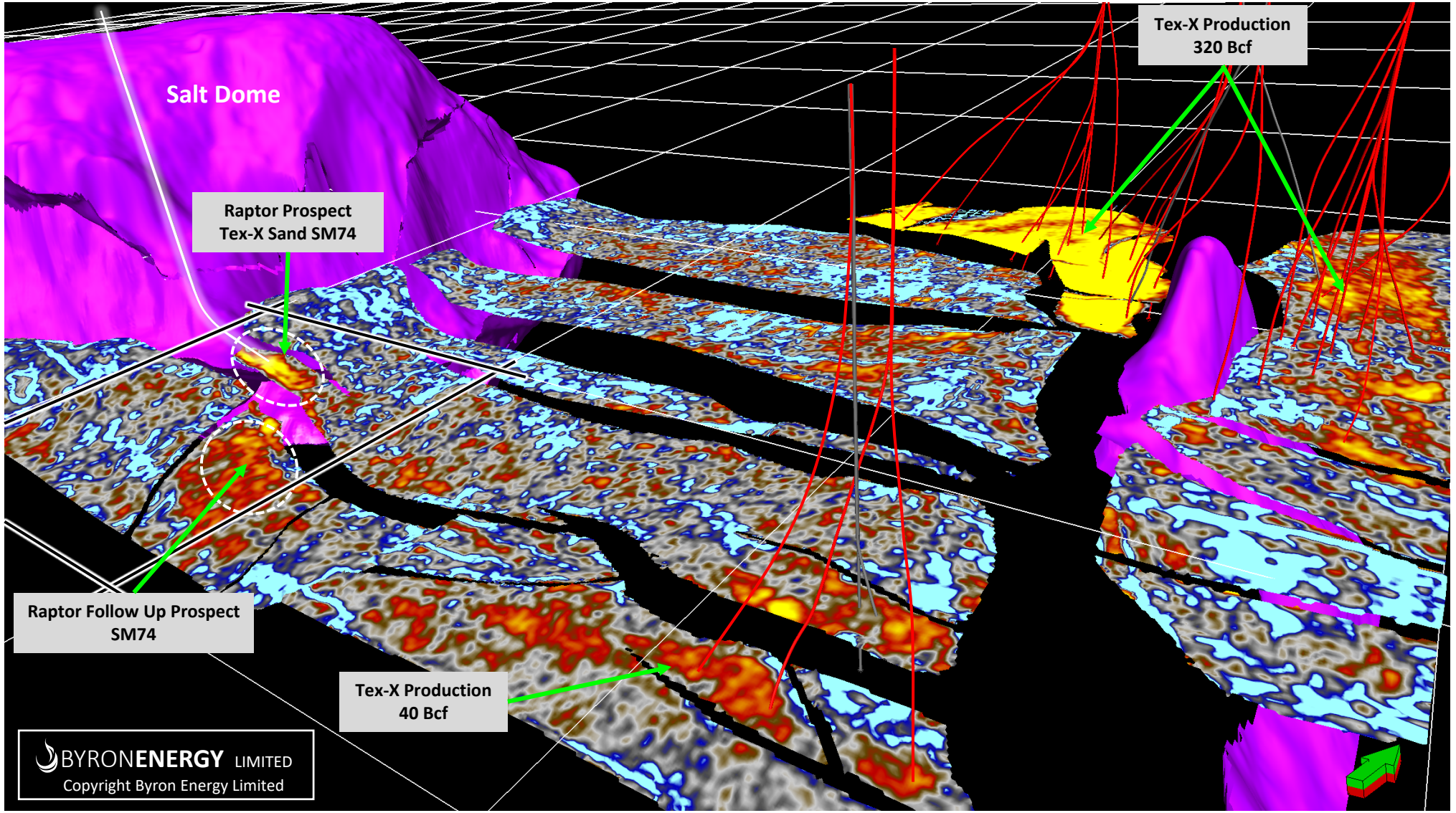
About Byron:

Byron Energy Limited ("Byron or the Company') **(ASX: BYE**) is an independent oil and natural gas exploration and production company, headquartered in Australia, with operations in the shallow water offshore Louisiana in the Gulf of Mexico. The Company has grown through exploration and development and currently has working interests in a portfolio of leases in federal and state waters. Byron's experienced management team has a proven record of accomplishment of advancing high quality oil and gas projects from exploration to production in the shallow water in the Gulf of Mexico. For more information on Byron please visit the Company's website at www.byronenergy.com.au.

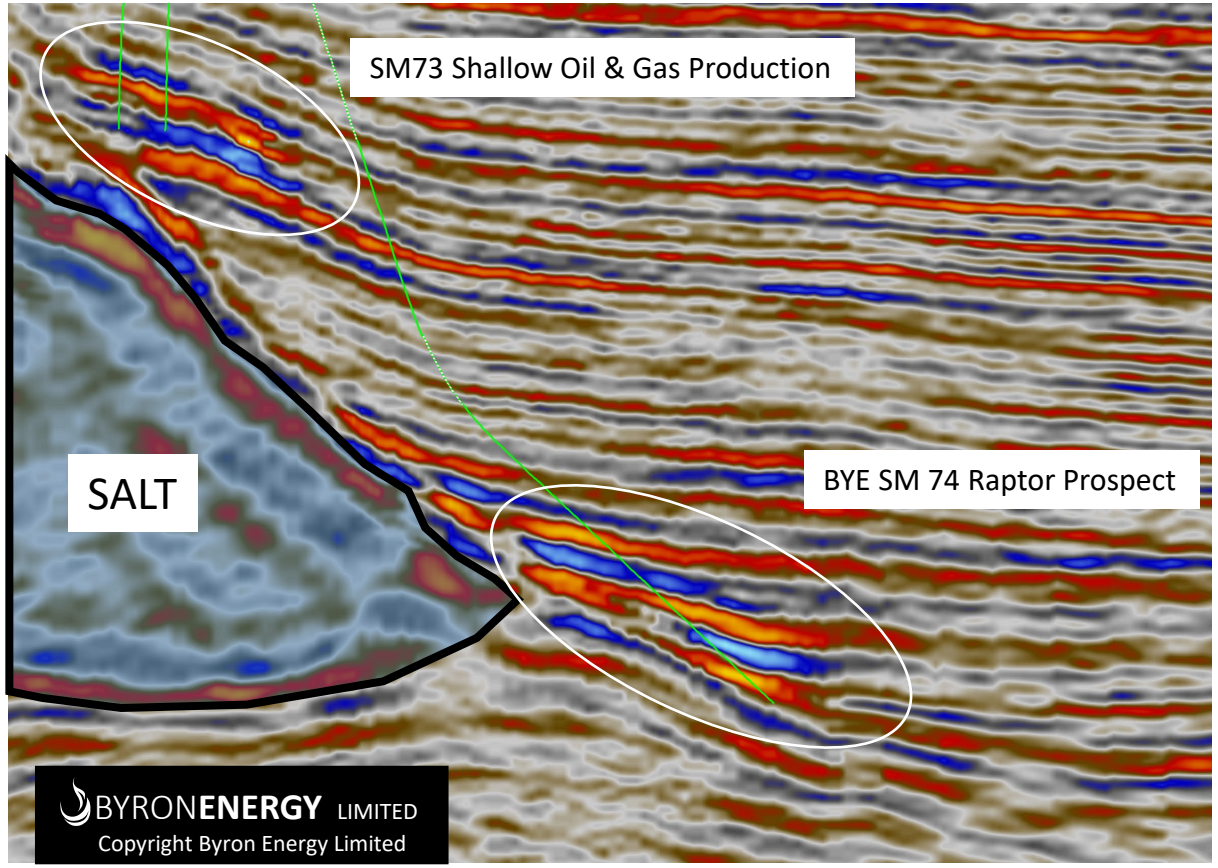
Attachment 1

Regional Perspective View - 2019 RTM Amplitude Extraction (NLS) Version



Attachment 2

2013 Version RTM Data



2019 RTM VIP 300 degree Data