



17 October 2019

ASX Release

Byron Energy SM58 Updated Prospective Resources

- **SM58 Prospective Resources increased by 10.7 Mmbo and 14.0 Bcf (net to Byron)**
- **Cutthroat and Steelhead Lower O Sands now included in the Company Prospective Resources following completion of drilling of SM58 011 BP01 well**
- **The first new development well to be drilled off the future G platform will be designed to test and produce from this Lower O section**

Byron Energy Limited (“Byron or the Company”) (ASX: **BYE**) is pleased to provide an update of its 2019 independent resources estimate for the Company’s South Marsh Island 58 (SM58) project in the shallow waters of the Gulf of Mexico.

On 30 September 2019, Byron announced that the SM58 011 BP01 well had reached a final total depth of 11,179 feet Measured Depth (“MD”) while testing the Company’s Cutthroat Prospect on South Marsh Island Block 58 in the U.S. Gulf of Mexico. At total depth, the well was still drilling in high quality oil shows in the Lower O Sand, but due to hole conditions, electric logs could not be acquired. However, mud log data and mud gas isotube data indicates the well penetrated approximately 180 feet True Vertical Thickness (“TVT”) of potential oil column in the Lower O Sand from 10,900 feet MD to total depth. Byron’s 3D Reverse Time Migration (“RTM”) seismic data indicates another 75 to 100 feet of sand could be present at the location. Due to the lack of electric log data, a true pay count is not available for the well. However, the Company’s third-party reserve engineers, Collarini Associates (“Collarini”), based in Houston, Texas, USA, have provided an estimate of the Prospective Resource for the Lower O Sand penetrated by the SM58 011 BP01 well utilizing all available mud log and mud gas isotube data.

An additional Lower O Sand prospect is included in the update. This North Cutthroat Lower O Sand prospect is based on a high-quality seismic amplitude that lies upthrown to the main Lower O Sand prospect at Cutthroat. This prospect will be further evaluated following the drilling of the G2 well. The North Cutthroat Lower O Sand prospect has net to Byron a Prospective Resource of 2,624 Mbo of oil and 3.2 Bcf of gas.

Collarini has ascribed a Prospective Resource to the Lower O Sand and an adjacent fault block immediately north of the Cutthroat Prospect – see attached [Illustration 1](#). Collarini’s Prospective Reserves for the Lower O Sand on SM58 are shown in the table below.

Byron Energy Limited SM58 Prospective Resources (net to Byron)				
Gulf of Mexico, offshore Louisiana, USA				
	Gross		Net	
	Oil Mbbbl	Gas MMcf	Oil Mbbbl	Gas MMcf
Byron SM58 Lower O Sand Only Best Estimate Unrisked - <i>(ASX release 17 October 2019)</i>				
Cutthroat Prospect Area Only - SM58 011 BP01 Lower O Sand Resources to Amplitude Limit <i>(Seismic amplitude limit estimated at -10600 ssvd)</i>	9,689	12,253	8,074	10,211
SM58 North Cutthroat (Lower O Sand) Lower O Sand - Undrilled Fault Block	3,149	4,519	2,624	3,766
Total Lower O Sand Total Prospective Reserves	12,838	16,772	10,698	13,977

Prospective Resource - The estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbon.

On 19 September 2019, the Company released its 2019 annual independent reserves and resource report prepared by Collarini. That report contained Prospective Resources for Dolly Vardon, an Upper O Sand prospect on located SM58. With the inclusion of the Lower O Sand from the Cutthroat area discussed above, Byron's Prospective Resources for the SM58 have increased 2065% since the announcement on 19 September. The following table contains all current Prospective Resources for SM58.

Byron Energy Limited SM58 Prospective Resources (net to Byron)				
Gulf of Mexico, offshore Louisiana, USA				
	Gross		Net	
	Oil Mbbbl	Gas MMcf	Oil Mbbbl	Gas MMcf
Best Estimate Unrisked 30 June 2019				
SM58 Dolly Vardon (Upper O Sand)) <i>(ASX release 19 September 2019)</i>	622	18,565	518	15,471
SM58 Cutthroat/Steelhead (Lower O Sand)	9,689	12,253	8,074	10,211
SM58 North Cutthroat (Lower O Sand)	<u>3,149</u>	<u>4,519</u>	<u>2,624</u>	<u>3,766</u>
<i>(ASX release 17 October 2019)</i>	12,838	16,772	10,698	13,977
SM58 Total Prospective Resources (ASX release 17 October 2019)	13,460	35,337	11,216	29,448
SM58 Total Prospective Resources (ASX Release 19 Sept 2019)	622	18,565	518	15,471
Change	12,838	16,772	10,698	13,977
% Change	2064.0%	90.3%	2065.3%	90.3%

Commenting on the SM58 prospective resources update, Byron's CEO, Maynard Smith, said:

"We are very pleased to provide an updated Collarini Prospective Resources report for SM58, detailing significant increases in prospective resources, particularly in oil, which has increased by 2065%. In addition to the 301' TVT pay encountered in the Upper O Sand, the lower O mudlog results represents a substantial and exciting target which will be evaluated in the G2 well. This updated report certainly emphasizes the significance of this project to Byron".

For further information, please contact:

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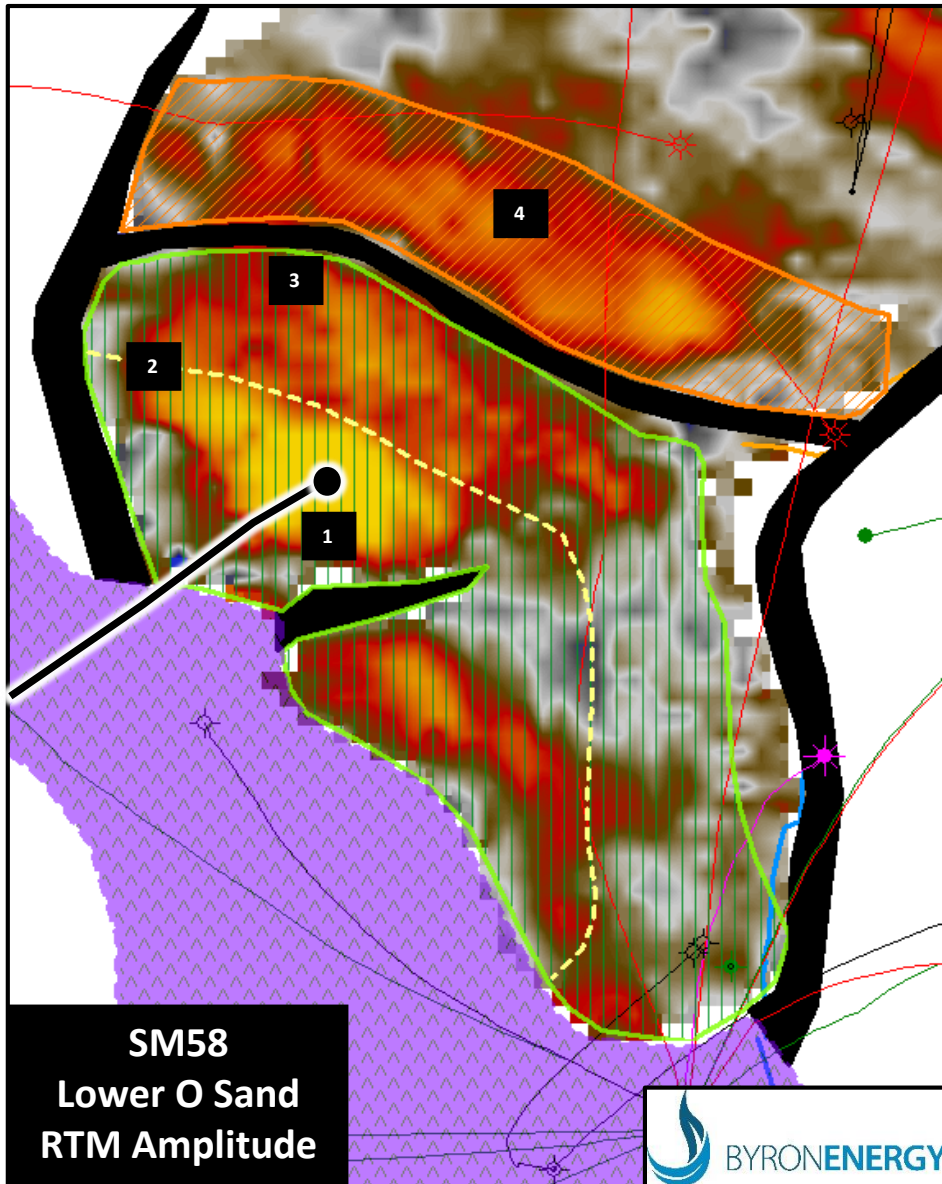
About Byron:

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.

Illustration 1:

SM58 – Cutthroat Prospect

Lower O Sand – RTM Amplitude Extraction



Map Key:

1. Byron SM58 011 BP01 Lower O Sand
2. Contour representing depth of deepest oil show in SM58 011 BP01
3. Cutthroat Prospect Lower O Sand Maximum Amplitude Limit
 - Prospective Resource Calculation Area
 - 9,689 Mbo + 12.2 Bcf – Gross
 - 8,074 Mbo + 10.2 Bcf – Net to Byron
4. North Cutthroat Lower O Sand Prospect
 - Prospective Resource Calculation Area
 - 3,149 Mbo + 4.5 Bcf – Gross
 - 2,624 Mbo + 3.7 Bcf – Net to Byron

Glossary

Bbl = barrels
Bcf = billion cubic feet
Boe = barrels of oil equivalent
Bopd = barrels of oil per day
Btu = British Thermal Units
mcf = thousand cubic feet of gas
mcfpd = thousand cubic feet of gas per day
mmcf = million cubic feet
Mbbbl = thousand barrels of oil
MMbbbl = million barrels of oil
Mboe = thousand barrels of oil equivalent
MMboe = million barrels of oil equivalent
Mcf = thousand cubic feet
MMcf = million cubic feet
mmbtu = million British Thermal Units

Notes to the Resources Statement

Reserves and Resources Governance

Byron's reserves and resources estimates are generally compiled annually. Byron engages Collarini and Associates, a qualified external petroleum engineering consultant, to conduct an independent assessment of the Company's reserves. Collarini and Associates is an independent petroleum engineering consulting firm that has been providing petroleum consulting services in the USA for more than fifteen years. Collarini and Associates does not have any financial interest or own any shares in the Company. The fees paid to Collarini and Associates are not contingent on the reserves outcome of the reserves report.

Competent Persons Statement

The information in this report that relates to oil and gas reserves and resources was compiled by technical employees of independent consultants Collarini and Associates, under the supervision of Mr Mitch Reece BSc PE. Mr Reece is the President of Collarini and Associates and is a registered professional engineer in the State of Texas and a member of the Society of Petroleum Evaluation Engineers (SPEE), Society of Petroleum Engineers (SPE), and American Petroleum Institute (API). The reserves and resources included in this report have been prepared using definitions and guidelines consistent with the 2007 Society of Petroleum Engineers (SPE)/World Petroleum Council (WPC)/American Association of Petroleum Geologists (AAPG)/Society of Petroleum Evaluation Engineers (SPEE) Petroleum Resources Management System (PRMS). The reserves and resources information reported in this Statement are based on, and fairly represents, information and supporting documentation prepared by, or under the supervision of, Mr Reece. Mr Reece is qualified in accordance with the requirements of ASX Listing Rule 5.41 and consents to the inclusion of the information in this report of the matters based on this information in the form and context in which it appears.

Prospective Resources Cautionary Statement

The estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons

Forward Looking Statements

This document may contain forward-looking information. Forward-looking information is generally identifiable by the terminology used, such as "expect", "believe", "estimate", "should", "anticipate" and "potential" or other similar wording. Forward-looking information in this document includes, but is not limited to, references to: well drilling programs and drilling plans, estimates of potentially recoverable resources, and information on future production and project start-ups. By their very nature, the forward-looking statements contained in this document require Byron and its management to make assumptions that may not materialise or that may not be accurate. Although Byron believes its expectations reflected in these statements are reasonable, such statements involve risks and uncertainties, and no assurance can be given that actual results will be consistent with these forward-looking statements.

ASX Reserves and Resources Reporting Notes

- (i) *The prospective resources information in this document is effective as at 30 June, 2019 (Listing Rule (LR) 5.25.1)*
- (ii) *The prospective resources information in this document has been estimated and is classified in accordance with SPE-PRMS (Society of Petroleum Engineers - Petroleum Resources Management System) (LR 5.25.2)*
- (iii) *The prospective resources information in this document is reported according to the Company's economic interest in each of the prospective resources net of royalties (LR 5.25.5)*
- (iv) *The prospective resources information in this document has been estimated and prepared using the deterministic method (LR 5.25.6)*
- (v) *The prospective resources information in this document has been estimated using a 6:1 BOE conversion ratio for gas to oil; 6:1 conversion ratio is based on an energy equivalency conversion method and does not represent value equivalency (LR 5.25.7)*
- (vi) *The prospective resources information in this document has been estimated on the basis that products are sold on the spot market with delivery at the sales point on the production facilities (LR 5.26.5)*
- (vii) *Prospective resources are reported on a best estimate basis (LR 5.28.1)*
- (viii) *For prospective resources, the estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons (LR 5.28.2)*
- (ix) *All of Byron's prospective resources are located in the shallow waters of the Gulf of Mexico, offshore Louisiana.*

Additional Prospective Resources information for SM58

SM 58	
<p>LR 5.36. – Material changes to prospective resources since they were previously reported</p>	<p>On 19 September 2019, the Company released its 2019 annual independent reserves and resource report prepared by Collarini Associates ("Collarini"), based in Houston, Texas, USA. In respect to SM58, that release included prospective resources for SM58 Dolly Vardon prospect only (in the Upper O Sand) of 622 Mbbls of oil and 18.6 Bcf of gas (gross) and 518 Mbbls of oil and 15.5 Bcf of gas (net to Byron).</p> <p>The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements in respect to SM 74 and that all the material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.</p> <p>Since the release of the 19 September report reserves and resources report, Byron has completed the drilling of the Company operated SM58 011 BP01 well. Based on the results of this well, Collarini has updated the overall prospective resources for SM58 to include the Lower O Sand in the Cutthroat/Steelhead Prospect. Consequently, the overall prospective resources for SM 58 have increased to 10,698 Mbbl of oil and 14.0 Bcf of gas net to Byron.</p>