

23 February 2021

### ASX Release

## Byron Energy Update: US Debt Financing, Permitting, Production and Interim Reserves Report

- **US Debt Financing initiative progressing as planned**
- **Permits approved to allow the use of all 9 slots on the SM58 G Platform**
- **Byron's overall production remains steady since previous announcement**
- **Byron's company-wide Net Proved Developed Producing Reserves have increased by 157% to 3.23 Mmboe up from 1.26 Mmboe; an increase of approximately 68% on oil and >880% on gas reserves**
- **SM71 Net Proved Reserves now stand at 2.3 Mmbo and 1.4 Bcf up 17.8% and 3.1% respectively from June 30 to December 31, 2020**
- **SM58 Net Proved Reserves are 4.2 Mmbo and 22.6 bcf, Net 2P reserves are 9.6 Mmbo and 30.7 Bcf**

Byron Energy Limited ("Byron or the Company") (ASX: BYE) is pleased to announce that its US debt refinancing initiative, as announced to the ASX on 27 January 2020, is well under way with a number of potential lenders to be approached commencing later this week. As part of the debt refinancing initiative Byron was required to complete a new interim reserve report. This new independently assessed estimate of reserves and resources for the Company's SM58 and SM71 projects, along with an update on permitting and oil and gas production, is provided below.

### Byron South Marsh Island Project Area Permitting Status

As acknowledged in the Company's recent quarterly report lodged with the ASX on 28 January 2021, Byron has spent considerable time pursuing key regulatory permits in the South Marsh Island Project Area. Executive Order 3395 went into effect on 20 January 21 and has had no material effect on the process for permits on existing leases. Byron was granted approval for a revised Development Operations Coordination Document ("DOCD") on 10 February 2021 which allows the use of slots G5 through G9 from the South Marsh 58 G Platform. Byron has submitted DOCD permits for wells on SM57, SM60 and SM70 and each permit is under review by the Bureau of Ocean Energy Management ("BOEM") Gulf of Mexico Region office in New Orleans, Louisiana. Byron has no reason to believe these permits will not be approved in the normal course of the approval process.

To drill any well offshore, an operator must also file an Application for Permit to Drill ("APD") with the Bureau of Safety and Environmental Enforcement ("BSEE"). Byron has filed APD's

for the next phase of drilling at SM69 and SM58. The APD for the SM69 E2 well is fully approved and the APD's for the proposed SM58 G3 and G4 wells have also been filed and are under review. Byron does not anticipate any delays in the approval process and expects approval in the normal course of business.

### **Byron Company Production Update**

Byron last provided an update on production performance and rates from its operated Gulf of Mexico properties on 17 December 20. Since then, production levels have remained consistent except for the SM58 G2ST which has experienced an increase in daily oil rate with a corresponding decrease in the daily gas rate.

#### South Marsh Island Block 71 F Platform

Cumulative oil production from the Byron operated SM71 F Platform now stands at just over 3.0 million barrels of oil (Mmbo) and 3.9 billion cubic feet ("Bcf") of gas in less than three years. The lease is ranked in the top 5 of all Gulf of Mexico active oil producing leases on the US Gulf of Mexico shelf with the SM71 F3 and F1 ranked as the number 1 and number 2 active oil producing wells. The D5 Sand completions in the SM71 F1 and F3 wells have total gross oil production of just over 2.9 million barrels of oil.

As of 21 February 21, gross well test data for the SM71 F1, F2 and F3 wells are as follows. The SM71 F1 well had gross test rates of 0.66 million cubic feet of gas per day ("mmcfcpd") and 830 barrels of oil per day ("bopd") with no water. The SM71 F3 well had a test gross rate of 0.75 mmcfcpd and 1949 bopd with no water. The SM71 F2 well, completed in the B55 Sand had a test rate of 0.250 mmcfcpd and 32 bopd with 2 barrels of water per day ("bwpd").

#### South Marsh Island Block 58 G Platform

As of 21 February 21, gross well test data for the SM58 G1 and G2ST wells are as follows. The SM58 G1 well has a test rate of 14.7 mmcfcpd and 171 barrels of condensate per day ("bcpd") with no water. The SM58 G2ST well had a test rate of 2.2 mmcfcpd and 435 bopd and no water. This is an increase of 233 bopd since the last report on 17 December 20 and the well continues to perform as discussed in that report. The SM58 G2ST oil gravity is 38.8 API.

In summary, production levels at both platforms have remained constant and operations have not been affected by the harsh winter weather allowing the Company to receive the benefit of the recent higher than expected gas and oil prices in the month of February. Only the SM71 F2 well is producing very minor amounts of formation water. The other active wells are not producing any formation water.

### **Collarini Interim Reserve Report from December 31 2020**

The December 31 2020 reserves update was focussed on the Company operated producing properties, South Marsh Island Block 71 ("SM71") and South Marsh Island Block 58 ("SM58") to assist with the refinancing initiative, as announced to the ASX on 27 January 2021. The revised reserves and resources for SM71 and SM58 are disclosed below. There been no material changes in the reserves and/or prospective resources for the Company's other properties, as reported to the ASX on 10 September 2020.

The Company released its 30 June 2020 reserves and resources on 10 September 2020. Following commencement of production from SM58 during the six months ended 31 December 2020 Byron has updated its reserves and resources effective 31 December 2020 to reflect changes to SM58 and SM71 since the release of the 30 June 2020 report. The independently assessed reserves and resources estimates were prepared by Collarini Associates (“Collarini”), based in Houston, Texas, USA.

Combined reserves and resources as of 31 December 2020 for all Byron leases are captured in the following table:

<b>Byron Energy Limited - Total Reserves and Resources</b>				
<b>Gulf of Mexico, Offshore Louisiana, USA</b>				
<b>Remaining as at 31 Dec. 2020</b>	<b>Gross</b>		<b>Net</b>	
	<b>Oil Mmmbbl</b>	<b>Gas Bcf</b>	<b>Oil Mmmbbl</b>	<b>Gas Bcf</b>
<b>Reserves (developed and undeveloped)</b>				
<b>Proved (1P)</b>	<b>13,073</b>	<b>69,666</b>	<b>7,932</b>	<b>57,273</b>
Probable Reserves	10,533	52,815	7,663	44,677
<b>Proved and Probable (2P)</b>	<b>23,606</b>	<b>122,481</b>	<b>15,595</b>	<b>101,950</b>
Possible Reserves	12,877	32,817	9,737	27,416
<b>Proved, Probable &amp; Possible (3P)</b>	<b>36,483</b>	<b>155,298</b>	<b>25,332</b>	<b>129,366</b>
<b>Total Prospective Resources</b>				
<b>Best Estimate (unrisked)</b>	<b>49,890</b>	<b>753,350</b>	<b>40,425</b>	<b>623,583</b>

Proved (1P) reserves include Net Proved Developed Producing Reserves (“PDP”) of 1.9 Mmbo and 8.2 Bcf. PDP reserves increased by approximately 68% on oil and >880% on gas reserves from 30 June 2020 or 157% in barrels of oil equivalent terms to 3.23 Mmboe up from 1.26 Mmboe.

**Reserves** - The aggregate 1P may be a very conservative estimate and the aggregate 3P may be a very optimistic estimate due to the portfolio effects of arithmetic summation.

**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.

**Conversion to boe** - using a ratio of 6,000 cubic feet of natural gas to one barrel of oil – 6:1 conversion ratio is based on an energy equivalency conversion method and does not represent value equivalency

## Project Summary - South Marsh Island 71

Byron owns the SM71 lease in the South Marsh Island Block 73 (“SM73”) field. Byron is the designated Operator of SM71 and owns a 50% Working Interest (“WI”) and a 40.625% Net Revenue Interest (“NRI”) in the block, with Otto Energy Limited (“Otto”) group holding an equivalent WI and NRI in the block. As Otto did not participate in the drilling of the SM71 F4 well Byron is entitled to 100% WI/81.25% NRI in SM 71 F4 well, until payout.

For the six months ended 31 December 2020, Byron’s share of net revenue from SM71 was approximately US\$8.2 million before transportation costs while cash operating costs (lease operating expenses and insurance) were US\$1.4 million.

Collarini has assigned 2P reserves (net to Byron) of 3.5 Mmmbbl and 2.4 Bcf to SM71. Collarini has also assigned 1.1 Mmmbbl and 0.8 Billion cubic feet (“Bcf”), net to Byron, in possible reserves in SM71 as shown in the table below.

Byron Energy Limited - Reserves and Resources South Marsh Island 71				
Remaining 31 December 2020	Gross		Net to Byron	
	Oil Mbbbl	Gas MMcf	Oil Mbbbl	Gas MMcf
<b>Reserves</b>				
<b>Proved (1P)</b>	<b>5,738</b>	<b>3,384</b>	<b>2,346</b>	<b>1,383</b>
Probable Reserves	2,722	2,387	1,124	979
<b>Proved and Probable (2P)</b>	<b>8,460</b>	<b>5,771</b>	<b>3,470</b>	<b>2,362</b>
Possible Reserves	2,638	1,932	1,079	789
<b>Proved, Probable &amp; Possible (3P)</b>	<b>11,098</b>	<b>7,703</b>	<b>4,549</b>	<b>3,151</b>
<b>Total Prospective Resources</b>				
<b>Best Estimate (unrisked)</b>	<b>2,405</b>	<b>48,948</b>	<b>977</b>	<b>19,885</b>

SM71 1P net reserves as of 31 December 2020 increased by 17.8% for oil and 3.1 % for gas compared to 1P reserves as of 30 June 2020 due to better-than-expected production performance of the D5 sand (F1 and F3 wells) for six months ended 31 December 2020.

SM71 2P net reserves as of 31 December 2020 decreased by 14.8% for oil and 19.4% for gas compared to 2P reserves as of 30 June 2020. The increase in D5 proved reserves for six months ended 31 December 2020 was more than offset by reallocations and volumetric updates of D5 probable reserves.

Additional information and details on Byron’s SM71 asset can be found in the ASX release made on 17 December 20.

## Project Summary - South Marsh Island 58

Byron owns the SM58 lease in the SM73 field. Byron is the designated Operator of SM58 and owns a 100% WI and a 83.33% NRI in the block. Initial production from the SM58 G platform began in September of 2020

From September 2020 when production at SM58 began to 31 December 2020, Byron's share of net revenue from SM58 was approximately US\$ 6.0 million before transportation costs while cash operating costs (lease operating expenses and insurance) were US\$ 1.4million.

As of 31 December 2020, the SM58 G facility has produced approximately 2.3 Bcf of gas and 32 thousand barrels of oil (gross) since initial production began in September 2020.

Collarini has assigned 2P reserves (net to Byron) of 9.6 Mmbl of oil and 30.7 Bcf of gas to SM58. Collarini has also assigned 6.0 Mmbl and 8.0 Bcf (net to Byron) in possible reserves in SM58 as shown in the table below.

Byron Energy Limited - Reserves and Resources South Marsh Island 58 (WI 100%)				
	Gross		Net to Byron	
December 31, 2020	Oil Mmbl	Gas MMcf	Oil Mmbl	Gas MMcf
<b>Reserves (undeveloped)</b>				
<b>Proved (1P)</b>	5,059	27,129	4,216	22,607
Probable Reserves	6,450	9,668	5,375	8,056
<b>Proved and Probable (2P)</b>	<b>11,510</b>	<b>36,797</b>	<b>9,591</b>	<b>30,663</b>
Possible Reserves	7,242	9,548	6,035	7,956
<b>Proved, Probable &amp; Possible (3P)</b>	<b>18,752</b>	<b>46,345</b>	<b>15,626</b>	<b>38,619</b>
<b>Total Prospective Resources Best Estimate (unrisked)</b>	<b>10,854</b>	<b>42,287</b>	<b>9,045</b>	<b>35,238</b>

SM58 2P net reserves as of 31 December 2020 decreased by 11.6% for oil and 8.1% for gas due to production, with SM58 G1 well commencing production in September 2020 and SM58 G2ST well starting production in November 2020, and re-classification of SM58 probable reserves to the possible category. SM58 3P net reserves as of 31 December 2020 increased by 5.7% for oil and 0.5% for gas due to re-classification of SM58 probable reserves to the possible category partly offset by production for the period.

SM58 prospective resources as of 31 December 2020 were 26.1% lower for oil and 19.9% higher for gas compared to prospective resources as of 30 June 2020 due to removal of Lower O Sand prospective oil resources following the result of the G2 well drilled in September 2020 and a change in the oil to gas ratio having regard to the SM58 G1 well and SM58 G2ST well oil and gas ratios.

Additional information and details on Byron's SM58 asset can be found in the ASX release made on 17 December 20.

**Commenting on the Dec 2020 reserves and prospective resources update Mr. Maynard Smith, CEO, said:**

*"We are very pleased to release our December 31, 2020 Collarini reserves and resources update for our two Byron operated producing projects, SM58 and SM71. Each lease is now generating substantial cash flows for the Company. Additionally, it is good to see that oil rates from the SM58 G2ST are now over 400 bopd and appear to be stabilizing. The increase in Byron's Net PDP and Proved Reserves makes additional debt financing a more likely and appealing option. Receiving our revised DOCD permit for SM58 G was also very welcome. It is a sign that in the Gulf of Mexico, the regulatory agencies are still working to make sure activity on existing leases will continue to take place. Overall, Byron is off to a strong start in 2021."*

*Authorised by: The Board of Directors*

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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 waters. Byron's experienced management team has a proven record of accomplishment and 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](http://www.byronenergy.com.au).

## **Glossary**

1P = Proved Reserves

2P = Proved and Probable Reserves

3P = Proved, Probable and Possible Reserves

Bbl = barrels

Bcf = billion cubic feet

Bopd = barrels of oil per day

Bcpd = barrels of condensate per day

btu = British Thermal Units

mcfg = thousand cubic of gas

mcfgpd = thousand cubic feet of gas per day

Mmcfpd = million cubic feet of gas per day

mcf = thousand cubic feet

mmcf = million cubic feet

mmbtu = million British Thermal Units

Mbo = thousand barrels of oil

Mmbo = million barrels of oil

PDP = Proved Developed Producing

NGL = Natural gas Liquids, such as ethane, propane and butane

Tcf = trillion cubic feet

## **Appendix 1 – Notes to Updated SM58 and SM71 Reserves and Resources**

### **Reserves and Resources Governance**

Byron engages Collarini and Associates, a qualified external petroleum engineering consultant, to conduct an independent assessments 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.

### **Reserves Cautionary Statement**

Oil and gas reserves estimates are expressions of judgment based on knowledge, experience and industry practice. Estimates that were valid when originally calculated may alter significantly when new information or techniques become available. Additionally, by their very nature, reserve and resource estimates are imprecise and depend to some extent on interpretations, which may prove to be inaccurate. As further information becomes available through additional drilling and analysis, the estimates are likely to change. This may result in alterations to development and production plans which may, in turn, adversely impact the Company's operations. Reserves estimates and estimates of future net revenues are, by nature, forward looking statements and subject to the same risks as other forward looking statements.

### **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.

### **Pricing Assumptions**

Nominal oil prices used in this report represent January 15, 2021 NYMEX West Texas Intermediate (WTI) Strip prices through 2023 and Reuters consensus for 2024 and 2025, starting on January 1, 2021, with an oil price of \$51.96 per barrel, with a final price of \$55.00 per barrel on January 1, 2025, and held constant thereafter. Nominal gas prices used in this report represent a Henry Hub 15 January 2021 base NYMEX Strip prices, starting on January 1, 2021, with a gas price of \$2.71 per MMBtu, declining to \$2.56 per MMBtu in January 2024, then \$3.00 per MMBtu on January 1, 2025 and held constant thereafter. These prices were adjusted to account for transportation cost, basis difference, and oil gravity in order to arrive at realised prices.

## **ASX Reserves and Resources Reporting Notes**

- (i) *The reserves and prospective resources information in this document is effective as at 31 December, 2020 (Listing Rule (LR) 5.25.1)*
- (ii) *The reserves and 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 reserves and prospective resources information in this document is reported according to the Company's economic interest in each of the reserves and prospective resource net of royalties (LR 5.25.5)*
- (iv) *The reserves and prospective resources information in this document has been estimated and prepared using the deterministic method (LR 5.25.6)*
- (v) *The reserves and 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 reserves and 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) *The method of aggregation used in calculating estimated reserves was the arithmetic summation by category of reserves. As a result of the arithmetic aggregation of the field totals, the aggregate 1P may be a very conservative estimate and the aggregate 3P may be a very optimistic estimate due to the portfolio effects of arithmetic summation (LR 5.26.7 & 5.26.8)*
- (viii) *Prospective resources are reported on a best estimate basis (LR 5.28.1)*
- (ix) *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)*
- (x) *All of Byron's reserves and prospective resources are located in the shallow waters of the Gulf of Mexico, offshore Louisiana.*