

28 September 2021

ASX Release

Byron Energy Net Reserves and Resources at 30 June 2021

- **Proved Reserves (1P): 8.7 Mmbbl of oil and 55.1 Bcf of gas, net to Byron**
- **Proved and Probable Reserves (2P): 14.1 Mmbbl of oil and 97.5 Bcf of gas**
- **Proved, Probable and Possible Reserves (3P): 22.7 Mmbbl of oil and 123.3 Bcf of gas**
- **Prospective Resources: 33.3 Mmbbl of oil and 572.2 Bcf of gas, net to Byron**
- **Annual Production of 1.92 Mmboe gross, 1.15 Mmboe net to Byron with a field level cash opex of less than US\$5.50/boe**

Byron Energy Limited (Byron or the Company) (ASX: BYE) is pleased to provide a summary of the independently assessed estimates of reserves and resources for the Company's projects in the shallow waters of the Gulf of Mexico. The report covers Byron's leases around the South Marsh (SM) 73 salt dome comprising SM71, SM58, SM 57/60/69 and Eugene Island Block 62/63/76/77 (EI77).

The independently assessed reserves and resources estimates were prepared by Collarini Associates ("Collarini"), based in Houston, Texas, USA.

The combined remaining reserves and prospective resources, net to Byron, are as follows:

Byron Energy Limited - Reserves and Resources			
Gulf of Mexico, Offshore Louisiana, USA			
Remaining as at 30 June 2021 (Net to Byron)	Oil Mbbbl	Gas MMcf	Mboe (6:1)
Reserves (developed and undeveloped)			
Proved (1P)	8,715	55,063	17,893
Probable Reserves	5,427	42,406	12,495
Proved and Probable (2P)	14,142	97,469	30,388
Possible Reserves	8,606	25,853	12,916
Proved, Probable & Possible (3P)	22,748	123,322	43,304
Total Prospective Resources Best Estimate (unrisked)	33,341	572,198	128,707

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

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

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

2021 Highlights include:

Reserve Additions/Revisions:

- 1 July 2020 to 30 June 2021 companywide annual production of 1,020 MBO and 5.4 Bcfg (gross) or 454 MBO and 4.2 Bcfg (net to Byron), from the Byron operated SM71 and SM58 fields and the SM58 E1 well.
- Byron's companywide field level cash opex averaged less than US\$5.50 / boe during the year.
- At Byron Operated SM71 Field the replacement of approximately 128% of the Company's annual production of 900 Mbo and 0.9 Bcfg (gross) in the Proved Developed Producing category.
- The reallocation from Probable and Possible to Proved Producing (PDP) reserves of approximately 530 Mboe (net to Byron) which is the result of a SM71 D5 Reservoir bulk volume increase based on the continued water-free oil production and stable performance from the reservoir in the SM 71 F1 and F3 wells. This performance has further confirmed the accuracy of the seismic data in this area.
- The addition of 560 Mbo of total Proved reserves at SM58 area due to the addition of G2ST J Proved Developed Behind Pipe, and the addition of Proved Undeveloped reserves in the following plays, Silver Trout Upper O1, Smoked Trout N2 & K4, and Steelhead South L2.
- Reduction of the SM58 Cutthroat G1 Incremental Probable oil reserves of 2.2Mmbo and 2.9Bcfg, and Incremental Possible oil reserves of 1.8Mmbo and 2.3Bcfg (net to Byron) was due to the reclassification of these G1 Upper O oil reserves to Prospective Resources due to performance indicating separate reservoir containers and the necessity for a future well or sidetrack to access such reserves.

Prospective Resource Additions/Revisions:

- The addition and/or reclassification of 6.0 MMbo and 17.7 Bcfg of Prospective Resources at SM58 (net to Byron) attributable to the addition of the following new plays: Rainbow Trout K4, Tiger Trout K6 & L2, River Trout L2, Silver Trout Upper O2 & Lower O, Steelhead South O, Smoked Trout South N2 & O, and Cutthroat Oil Upper O.

Portfolio Additions/Revisions:

- Byron has elected not to drill SM59 in recognition of near-term lease expiry, economic considerations, and rig availability making drilling unlikely. This portfolio adjustment equates to a decrease of 62.8 Bcfg and 16.3 Mmbo net to Byron in Prospective Resources.

COVID-19 and oil and gas prices

The 2021 Reserves and Resources report is based on higher near-term oil and gas price assumptions compared to 2020. The lower prior year prices were attributable to the initial spread of the COVID-19 pandemic and its negative impact on the global demand for oil and natural gas. The increase in domestic vaccination programs have helped reduce the spread of COVID-19 in 2021, which has contributed to an improvement in the economy and higher realised oil and gas prices in 2021.

Oil prices used in this report represent July 12, 2021 NYMEX West Texas Intermediate (WTI) Strip prices through 2023 and Reuters consensus for 2024, starting on July 1, 2021, of \$72.98 per barrel, with a final price of \$60.00 per barrel on January 1, 2024, and held constant thereafter.

Gas prices used in this report represent a Henry Hub base July 12, 2021 NYMEX Strip prices through 2023 and Reuters consensus for 2024, starting on July 1, 2021, of \$3.411 per MMBtu, declining to \$2.750 per MMBtu on January 1, 2024, then held constant thereafter.

The table below shows the base prices used in 2021 compared to 2020.

Base Prices (nominal) year-end June	2022	2023	2024	2025	2026+
Oil WTI US\$/bbl 2021	69.57	63.07	59.75	60.00	60.00
Oil WTI US\$/bbl 2020	(47.44)	(54.21)	(58.57)	(60.51)	(60.51)
Natural gas US\$/mmbtu 2021	3.48	2.97	2.75	2.75	2.75
Natural gas US\$/mmbtu 2020	(2.60)	(2.60)	(2.65)	(2.67)	(2.67)

These prices were then adjusted to account for oil and gas transportation cost, basis difference, Light Louisiana Sweet (LLS) vs WTI oil gravity.

Further details on reserves and resources are included in appendices A, B, C and D.

Commenting on the 2021 reserves and prospective resources report Mr. Maynard Smith, CEO, said:

"We are very pleased to release our annual Collarini reserves and resources report for 2020, following recent commencement of first production from our SM58 project."

"We are very pleased to release our annual Collarini reserves and resources report for 2021. The addition of reserves associated with multiple future development/exploration wells in the SM58 area more than positively offset the reduction associated with the SM58 G1 O Sand reservoir partitioning and the G2ST performance. Byron's consistently low cost field level opex, currently at less than US\$5.50 / boe, is a testament to the accomplishments and efficiency of the team and the quality of the producing assets. We look forward to the ongoing drilling of the future well program and continuing to move these assets into production."

Authorised by: 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 and state 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.

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Project Summary

Reserve Summary

Companywide Proved and Probable Reserves (2P net to Byron) as at 30 June 2021 were 14.1 Mmbo of oil and 97.5 Bcf of gas 30.4 Mmboe, compared to 17.5 Mmbo of oil and 105.3 Bcf of gas, 35.0 Mmboe, as at 30 June 2020.

SM71, SM58 and SM58E1 represent 57% of Byron's 2P net reserves, in barrels of oil equivalent, as at 30 June 2021 with EI77 representing the balance. The SM71, SM58 and SM58E1/SM69E fields are producing projects with 2P developed and undeveloped reserves. EI 77 project reserves are undeveloped to date.

Project Summary - South Marsh Island 71

Byron owns and operates South Marsh Island block 71, (SM71) a lease in the South Marsh Island Block 73 (SM73) field. Byron owns a 50% Working Interest (WI) and a 40.625% Net Revenue Interest (NRI) in the block. 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.

Water depth in the area is approximately 137 feet.

Oil and gas production from the Byron operated SM71 F platform began on 23 March 2018 from three wells, F1, F2 and F3. Production from the F4 well, successfully drilled and completed in March 2020, commenced production in in mid-March 2020 until it was shut in September 2020. The F4 well will be recompleted up hole in late 2021 pending workboat availability.

The F1 and F3 wells are producing in the primary D5 Sand reservoir and the F2 well is producing from the B55 Sand.

As of 30 June 2021, the SM71 F facility has produced approximately 3.3 million barrels of oil ("Mmbo") (gross) since initial production began. The facility has also produced approximately 4.5 billion cubic feet of gas (Bcfg) (gross). The SM71 lease ranks number 3 in annual production of all Gulf of Mexico currently 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 over 3.2 Mmbo.

For the year ended 30 June 2021, Byron share of net revenue after royalties, oil and gas transportation charges and other customary price adjustments from SM71 was US\$ 18.8 million while cash operating costs (lease operating expenses and insurance) were US\$2.4 million, or based on Byron's net production of 366 Mbo and 0.36 Bcfg a unit operating cost of approximately \$5.52 per BOE, demonstrating Byron's continued operating efficiency and the project's strong cash generating capacity.

At 30 June 2021, Collarini assessed the SM71 proved remaining reserves at 2.2 Mmbo and 1.4 Bcfg, or 2.4 Mmboe, net to Byron.

Remaining 2P reserves as of 30 June 2021, net to Byron, after adjustments and revisions including reduction for actual production to 30 June 2021, are 3.3 Mmbo and 2.4 Bcfg, or 3.7 Mmboe (4.6 Mmboe in June 2020).

The reallocation from Probable and Possible reserves to Proved Producing (PDP) reserves of approximately 530 Mboe (net to Byron) is the result of a SM71 D5 Reservoir bulk volume increase based on the continued water-free oil production and stable performance from the reservoir in the SM 71 F1 and F3 wells. This performance has further confirmed the accuracy of the seismic data in this area. The Proved Producing reservoir limit was moved further downdip, from F3 LKO to ½ distance between F3 LKO and the seismic amplitude limit resulting in an increase in Proved Producing reserves via a transfer of these Probable and Possible reserves to PDP.

Byron Energy Limited - Reserves and Resources South Marsh Island 71 (WI 50%)

Remaining 30 June 2021	Gross		Net to Byron		
	Oil Mbbbl	Gas MMcf	Oil Mbbbl	Gas MMcf	Mboe (6:1)
Reserves (developed and undeveloped)					
Proved (1P)	5,312	3,402	2,173	1,390	2,405
Probable Reserves	2,734	2,381	1,128	977	1,291
Proved and Probable (2P)	8,046	5,783	3,301	2,367	3,696
Possible Reserves	2,634	1,905	1,078	778	1,208
Proved, Probable & Possible (3P)	10,680	7,688	4,379	3,145	4,904
Total Prospective Resources					
Best Estimate (unrisked)	2,406	48,948	977	19,885	4,291

Further details on SM 71 reserves and resources are included in appendices A, B and C. Appendix D contains additional notes on the SM 71 reserves and resources statement.

SM58

Byron holds all the operator's rights, title, and interest in and to the SM58 Lease Block to a depth of 13,639 feet subsea with 100% WI and 83.33% NRI. Below 13,639 feet subsea, Byron has a 50% WI (41.67% NRI) under a pre-existing exploration agreement. To date, all identified drilling opportunities on the SM58 lease are above 13,639 feet subsea.

Water depth in the area is approximately 132 feet.

Gas and oil production from the Byron Energy SM58 G platform was initiated on 7 September 2020 when the SM58 G1 well was opened to sales.

As of 30 June 2021, the SM58 G facility has produced approximately 4.6 Bcf and 86,000 barrels of oil and condensate (gross) from two wells since initial production began. The SM58 lease ranks number 5 of all currently active gas producing leases on the US Gulf of Mexico shelf with the SM58 G1 ranked as the number 5 active gas producing well.

The SM58 G1 well produces from the Upper O Sand and as of 30 June 2021 has produced a gross total of approximately 4.0 Bcfg, 44,000 barrels of consistent 56.5-degree gravity condensate and no formation water.

For the year ended 30 June 2021, Byron's share of net revenue from SM58 after royalties, oil and gas transportation charges and other customary price adjustments was US\$ 14.5 million while cash operating costs (lease operating expenses and insurance) were US\$3.4 million, or based on Byron's net production of 72 Mbo and 3.8 Bcfg a unit cash operating cost of approximately \$4.80 per BOE

Gas and oil production from the G1 well has continued to follow a natural and predictable pressure decline. Based on performance to date, the production from O Sand in the G1 appears not to be connected to Byron's Steelhead Prospect and the two areas must be separated by stratigraphic boundaries in the O Sand.

The SM58 G2ST well was tied into the SM58 G Platform and the O Sand was opened to production on 29 October 2020 and has now produced approximately 0.64 Bcfg and 42,000 barrels of oil with an estimated 9,600 barrels of formation water.

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SM 58 (Cont.)

The G2 well performance was negatively impacted by mechanical and reservoir issues. During wireline operations in August, paraffin was discovered shallow in the well. The paraffin was cut and a bottom hole pressure was acquired which came in higher than expected and consistent with the effects attributable of paraffin. The gaslift was redesigned and the well is performing better with an increase in total liquids and oil rate. Eventually, the G2 will be recompleted uphole, in the J Sand interval above the current O Sand completion with through tubing completion methods which can be performed without a drilling rig. The J Sand was assigned gross proved behind pipe reserves of 0.25 Mmbo and 0.21 Bcfg in the G2 well by the Company's third party reserve engineers in the 30 June 2021 year end reserve report.

As of 30 June 2021 Collarini has assigned proved reserves (net to Byron) of 5.2 Mmmbbl and 20.5 Bcf. This represents an addition of 488 Mbo of Proved reserves at SM58 which are due to addition of G2ST J Proved Developed Behind Pipe, and Proved Undeveloped in the following plays, Silver Trout Upper O1, Smoked Trout N2 & K4, and Steelhead South L2.

As of 30 June 2021 Collarini has assigned 2P reserves (net to Byron) of 8.3 Mmmbbl and 26.3 Bcf to SM58. In comparison, 2P reserves (net to Byron) as at 30 June 2020 were 10.9 Mmmbbl and 33.4 Bcf. The reduction in 2P reserves is primarily due to the transfer of G1 Upper O 2P oil reserves and the removal of G2ST O Sand Lobe 2 2P oil reserves.

Reduction of the SM58 Cutthroat G1 Incremental Probable oil reserves of 2.2 Mmbo and 2.9 Bcfg, and Incremental Possible oil reserves of 1.8 Mmbo and 2.3 Bcfg (net to Byron) was due to the reclassification of these G1 Upper O oil reserves to Prospective Resources due to performance indicating separate reservoir containers and the necessity for a future well or sidetrack to access such reserves. Other additions to 2P reserves include the G2ST J ProbBP, Smoked Trout N2, K4, & J ProbUD's, and Steelhead South L2 ProbUD reserves.

Collarini has also assigned 4.9 Mmmbbo and 6.4 Bcfg (net to Byron) in possible reserves and aggregate net Prospective Resources of 18.3 Mmmbbo and 47.1 Bcfg to SM58.

The table below shows Collarini's estimate of reserves and prospective resources for SM58 (on a gross and net basis) with all reserve and resources for the section above 13,639 ft true vertical depth.

Byron Energy Limited - Reserves and Resources					
South Marsh Island 58 (WI 100%)					
Remaining 30 June 2021	Gross		Net to Byron		
	Oil Mbbbl	Gas MMcf	Oil Mbbbl	Gas MMcf	Mboe (6:1)
Reserves (developed and undeveloped)					
Proved (1P)	6,204	24,561	5,170	20,467	8,581
Probable Reserves	3,766	6,981	3,138	5,817	4,108
Proved and Probable (2P)	9,970	31,542	8,308	26,284	12,689
Possible Reserves	5,875	7,643	4,896	6,369	5,958
Proved, Probable & Possible (3P)	15,845	39,185	13,204	32,653	18,647
Total Prospective Resources					
Best Estimate (unrisked)	21,902	56,532	18,251	47,108	26,102

SM 58, E1 wellbore and SM69 E Platform

Byron owns a 53% WI and a 44.17% NRI in the joint area reservoirs from the surface to a depth of 7,490 feet TVD, located in the S1/2 of the SE1/4 of the SE1/4 of SM58, as well as a 53% working interest in the SM 69 E platform. Ankor Energy, LLC (ANKOR) is the designated operator of this portion of the block to facilitate the surface operatorship of the jointly owned SM 58 E1 well and E platform which is located in the NE corner of the SM 69 block. Byron also holds a farm-in right under the Joint Exploration Agreement (JEA) with ANKOR group which provides for the drilling of a SM 69 #E-2 exploration well with Byron owning a 100% WI less a 3.0% overriding royalty interest ("ORRI"), converting to a 6% ORRI after payout.

The SM58 E1 was recompleted during the March 2021 quarter, by sliding a sleeve covering the existing perforations in the K4 Sand and opening those across the K Sand (B55 Sand), a completion which also benefits from sand control. Because the wellbore completion work was already in place, the cost of recompletion was less than US\$60,000 net to Byron. In addition to increased oil production, the elimination of water production from the E1 well and the associated reduction in production handling fees due to water has saved Byron significant operating costs and improved operating income at the field.

Collarini has assigned 2P reserves (net to Byron) of 0.66 Mmbo and 0.9 Bcfg to the SM58 E1 and future E1 ST wellbores in the S1/2 of the SE1/4 of the SE1/4 of SM58. A total of 2.3 Mmbo and 2.0 Bcfg (net to Byron), same as 30 June 2020), in prospective resources is allocated to Fault Block B and had been assigned by Collarini to the SM69 E2 well drilled in August/ September of 2021 and remained unchanged as of the 30 June, 2021 report.

Byron Energy Limited - Reserves and Resources					
South Marsh Island 58 (WI 53%/NRI 44.165%) & 69 north-east corner (WI 83.33%/NRI 77.33%)					
	Gross		Net to Byron		
Remaining 30 June 2021	Oil Mbbl	Gas MMcf	Oil Mbbl	Gas MMcf	Mboe (6:1)
Reserves (developed and undeveloped)					
Proved (1P)	1,430	2,071	631	915	784
Probable Reserves	56	15	25	7	26
Proved and Probable (2P)	1,486	2,086	656	922	810
Possible Reserves	-	-	-	-	-
Proved, Probable & Possible (3P)	1,486	2,086	656	922	810
Total Prospective Resources					
Best Estimate (unrisked)	2,905	2,540	2,252	1,969	2,580

As announced on 13 September 2021, the Byron operated South Marsh Island 69 E2 well reached total depth of 8,157 feet Measured Depth 7,648 feet True Vertical Depth. The SM69 E2 well logged three productive oil sands, including the primary target K (B55), K4 (B65) and L2(C10) Sands and tested an apparent oil water contact near the seismic amplitude limit in the M6 (D5) Sand, as planned. The three primary targets encountered and logged high-quality oil sands, consistent with pre-drill expectations. Pre-drill Collarini Prospective Resources assigned to these three sands equalled a total of 1,275 Mbo and 1.07 Bcfg Gross, or 1,001 Mbo and 0.83 Bcfg net to Byron. An additional 907 Mbo and 859 Mmcf of pre-drill Gross prospective resources (or 702 Mbo + 667 Mmcf Net) were assigned to the fourth sand encountered in the E2 well with observed sand quality consistent with expectations. An updated Post-drill Collarini reserve assessment will be provided once completion operations and all post drill technical work are completed and production commences, expected in late October to early November 2021.

SM57 and SM60

Byron holds a 100% WI and an 81.25% NRI in SM57 and 100% WI and an 87.5% NRI in SM60. These leases are in close proximity to Byron's newly set SM58 platform and increase Byron's footprint in the South Marsh Island 73 Field.

SM 57 and SM60 carry large prospective resources, as assigned by Collarini. Byron acquired the SM60 lease in 2019 and as a result of extensive mapping has advanced two prospect to drill ready status and determined that prospects previously identified on SM59 extend updip on to SM60, the most likely location for drilling.

Collarini has assessed combined net prospective resources of 3.9 Mmbo and 284.1 Bcf, equivalent to 51.2 Mmboe as at 30 June 2020 to SM 57, 59 and 60.

The tables below show the prospective resources for each SM57, and SM60 on a gross basis and net to Byron.

Byron Energy Limited - Prospective Resources South Marsh Island 57 (WI 100%)					
Remaining 30 June 2021	Gross		Net to Byron		
	Oil Mbbl	Gas MMcf	Oil Mbbl	Gas MMcf	Mboe (6:1)
Total Prospective Resources					
Best Estimate (unrisked)	1,884	92,607	1,531	75,243	14,072

Collarini has assessed net Prospective Resources of 1.5 Mmbo and 75.2 Bcfg, equivalent to 14.1 Mmboe for SM57 as at 30 June 2021.

Byron Energy Limited - Prospective Resources South Marsh Island 60 (WI 100%)					
Remaining 30 June 2021	Gross		Net to Byron		
	Oil Mbbl	Gas MMcf	Oil Mbbl	Gas MMcf	Mboe (6:1)
Total Prospective Resources					
Best Estimate (unrisked)	2,676	238,669	2,341	208,835	37,147

Collarini has assessed net Prospective Resources of 2.3 Mmbo and 208.8 Bcfg, equivalent to 37.1 Mmboe for SM60 as at 30 June 2021. The prospects identified on SM60 are considered drill ready and can be drilled from the same surface location.

EI 77

Byron acquired Eugene Island blocks 62, 63, 76 and 77 (EI 77), at Gulf of Mexico OCS Lease Sale 250 held in March 2018 in New Orleans, Louisiana. Byron holds a 100% WI and an 87.5% NRI in EI 177.

E77 has produced 362 billion cubic feet of gas and 6.5 million barrels of oil from sands trapped by the Eugene Island 77 salt dome. Initial production from the field began in 1957. There is no production on these blocks currently.

In 2017 and 2018 Byron undertook a detailed year-long reservoir analysis which resulted in the identification of a number of low risk development opportunities which are updip from previously productive reservoirs. On the basis of this work, Byron acquired EI 62/63/76/77 at the OCS Lease Sale 250.

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EI77 (Cont.)

Discussion with several drilling contractors for drilling of EI 77 commenced during the December 2018 quarter but were delayed until after mid-2021, with SM58 projects brought forward ahead of the EI77 field wells. Byron has identified at least two active GOM rigs capable of mobilizing into and drilling in these shallow waters although timing will be dictated by rig availability.

Collarini has assigned 1P net reserves of 0.7 Mmbl and 32.3 Bcfg, 2P net reserves of 1.9 Mmbl and 67.9 Bcfg, and 3P net reserves of 4.5Mmbl and 86.6 Bcf to EI77. Collarini has also assigned aggregate net prospective resources of 8.0 Mmbl and 219.2 Bcf to EI77.

The table below shows Collarini's estimate of 1P, 2P, and 3P reserves and prospective resources for EI 77 on a gross and net basis.

Byron Energy Limited - Reserves and Resources					
Eugene Island 77 (WI100%)					
Remaining 30 June 2021	Gross		Net to Byron		
	Oil Mbl	Gas MMcf	Oil Mbl	Gas MMcf	Mboe (6:1)
Reserves (undeveloped)					
Proved (1P)	847	36,905	741	32,291	6,123
Probable Reserves	1,298	40,691	1,136	35,605	7,070
Proved and Probable (2P)	2,145	77,596	1,877	67,896	13,193
Possible Reserves	3,008	21,378	2,632	18,706	5,750
Proved, Probable & Possible (3P)	5,153	98,974	4,509	86,602	18,943
Total Prospective Resources					
Best Estimate (unrisked)	9,130	250,466	7,989	219,158	44,515

Glossary

Bbl = barrels
 Bcf = billion cubic feet
 Bcfg = billion cubic feet of gas
 Boe = barrels of oil equivalent
 Bopd = barrels of oil per day
 Btu = British Thermal Units
 mcfg = thousand cubic of gas
 mmcf = million cubic feet of gas
 mcfgpd = thousand cubic feet of gas per day
 mmcf = million cubic feet
 Mbo/Mmbl = thousand barrels of oil
 Mmbo/Mmbl = 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

Appendix A - Oil and Gas Properties as at 30 June 2021

As at 30 June 2021, Byron's portfolio of properties, all in the shallow waters of the Gulf of Mexico, USA comprised:-

Properties	Operator	Interest WI/NRI* (%)	Lease Expiry Date	Area (Km ²)
South Marsh Island Block 71	Byron	50.00/40.625	Production	12.16
South Marsh Island Block 57	Byron	100.00/81.25	June 2022	21.98
South Marsh Island Block 59	Byron	100.00/81.25	June 2022	20.23
South Marsh Island Block 60	Byron	100.00/87.50	June 2024	20.23
South Marsh Island Block 58 (Excl. E1 well)	Byron	100.00/83.33**	Production	20.23
South Marsh Island Block 58 (E1 well in S ½ of SE ¼ of SE ¼ and associated production infrastructure in NE ¼ of NE ¼ of SM69)	Ankor	53.00/44.16667		
South Marsh Island Block 69 (north-east quarter of the north-east quarter)	Byron	100.00 / 77.33-80.33	Production	1.3
South Marsh Island Block 66	Byron	100.00/87.50	December 2025	20.23
South Marsh Island Block 70	Byron	100.00/87.50	July 2023	22.13
Eugene Island Block 62	Byron	100.00/87.50	June 2023	20.23
Eugene Island Block 63	Byron	100.00/87.50	June 2023	20.23
Eugene Island Block 76	Byron	100.00/87.50	June 2023	20.23
Eugene Island Block 77	Byron	100.00/87.50	June 2023	20.23
Main Pass Block 293	Byron	100.00/87.50	October 2023	18.46
Main Pass Block 305	Byron	100.00/87.50	October 2023	20.23
Main Pass Block 306	Byron	100.00/87.50	October 2023	20.23

* Working Interest ("WI") and Net Revenue Interest ("NRI")

** 100.00% WI to a depth of 13,369 ft TVD and 50% WI below 13,639 ft TVD

Appendix B - Additional Information on Remaining Reserves as at 30 June 2021

The following table shows a split of Byron's remaining reserves, as at 30 June 2021, into developed and undeveloped categories by project and by product. All of the projects in this table are located in the shallow water in the Gulf of Mexico, Offshore Louisiana.

Byron Energy Limited - Remaining Reserves - Net to Byron					
30 June 2021	Developed		Undeveloped		Total
	Oil Mbbl	Gas MMcf	Oil Mbbl	Gas MMcf	Mboe (6:1)
SM 71					
Proved (1P)	1,438	978	735	412	2,405
Probable Reserves	509	275	619	702	1,291
Proved and Probable (2P)	1,947	1,253	1,354	1,114	3,696
Possible Reserves	-	-	1,078	778	1,208
Proved, Probable & Possible (3P)	1,947	1,253	2,432	1,892	4,904
SM 58 (100% WI)					
Proved (1P)	243	3,640	4,927	16,827	8,581
Probable Reserves	112	143	3,026	5,674	4,108
Proved and Probable (2P)	355	3,783	7,953	22,501	12,689
Possible Reserves	-	-	4,896	6,369	5,958
Proved, Probable & Possible (3P)	355	3,783	12,849	28,870	18,647
SM 58 E1					
Proved (1P)	163	66	468	849	784
Probable Reserves	25	7	-	-	26
Proved and Probable (2P)	188	73	468	849	810
Possible Reserves	-	-	-	-	-
Proved, Probable & Possible (3P)	188	73	468	849	810
EI 77					
Proved (1P)	-	-	741	32,291	6,123
Probable Reserves	-	-	1,136	35,605	7,070
Proved and Probable (2P)	-	-	1,877	67,896	13,193
Possible Reserves	-	-	2,632	18,706	5,750
Proved, Probable & Possible (3P)	-	-	4,509	86,602	18,943
Total					
Proved (1P)	1,844	4,684	6,871	50,379	17,893
Probable Reserves	646	425	4,781	41,981	12,495
Proved and Probable (2P)	2,490	5,109	11,652	92,360	30,388
Possible Reserves	-	-	8,606	25,853	12,916
Proved, Probable & Possible (3P)	2,490	5,109	20,258	118,213	43,304

Appendix B (cont)

The following table reconciles the movement in Byron's reserves between 30 June 2020 and 30 June 2021.

Byron Energy Limited Reserves (Net to Byron) Gulf of Mexico, offshore Louisiana, USA								
Reserves Reconciliation*	Oil (Mbbbl)				Gas (MMcf)			
	Remain- ing 30/6/20	Produc- tion 2021	Additions Revisions 2021	Remain- ing 30/6/21	Remain- ing 30/6/20	Produc- tion 2021	Additions Revisions 2021	Remain- ing 30/6/21
SM 71 (Developed & undeveloped)								
Proved (1P)	1,992	-366	547	2,173	1,341	-358	407	1,390
Probable Reserves	2,079	0	-951	1,128	1,590	0	-613	977
Proved and Probable (2P)	4,071	-366	-404	3,301	2,931	-358	-206	2,367
Possible Reserves	1,275	0	-197	1,078	963	0	-185	778
Proved, Probable & Poss. (3P)	5,346	-366	-601	4,379	3,894	-358	-391	3,145
SM 58 (100%) (Undeveloped)								
Proved (1P)	4,682	-72	560	5,170	23,884	-3,832	415	20,467
Probable Reserves	6,168	0	-3,030	3,138	9,504	0	-3,687	5,817
Proved and Probable (2P)	10,850	-72	-2,470	8,308	33,388	-3,832	-3,272	26,284
Possible Reserves	3,931	0	965	4,896	5,053	0	1,316	6,369
Proved, Probable & Poss. (3P)	14,781	-72	-1,505	13,204	38,441	-3,832	-1,956	32,653
SM 58 E1/69 (100%) (Developed)								
Proved (1P)	642	-16	5	631	998	-8	-75	915
Probable Reserves	26	0	-1	25	23	0	-16	7
Proved and Probable (2P)	668	-16	4	656	1,021	-8	-91	922
Possible Reserves	0	0	0	0	0	0	0	0
Proved, Probable & Poss. (3P)	668	-16	4	656	1,021	-8	-91	922
E1 77 (Undeveloped)								
Proved (1P)	744	0	-3	741	32,295	0	-4	32,291
Probable Reserves	1,136	0	0	1,136	35,615	0	-10	35,605
Proved and Probable (2P)	1,880	0	-3	1,877	67,910	0	-14	67,896
Possible Reserves	2,626	0	6	2,632	18,691	0	15	18,706
Proved, Probable & Poss. (3P)	4,506	0	3	4,509	86,601	0	1	86,602
Grand Total								
Proved (1P)	8,060	-454	1,109	8,715	58,518	-4,198	743	55,063
Probable Reserves	9,409	0	-3,982	5,427	46,732	0	-4,326	42,406
Proved and Probable (2P)	17,469	-454	-2,873	14,142	105,250	-4,198	-3,583	97,469
Possible Reserves	7,832	0	774	8,606	24,707	0	1,146	25,853
Proved, Probable & Poss. (3P)	25,301	-454	-2,099	22,748	129,957	-4,198	-2,437	123,322

* Small differences are due to rounding.

Appendix B (cont)

Material Changes to Reserves

Oil

Proved and Probable (2P) Reserves

2P oil reserves down year on year mainly due to a reduction in probable reserves at SM58 while SM71 oil production was largely replaced by reallocations from possible reserves.

Possible Reserves

Possible oil reserves up year on year mainly due to revisions of SM58 from probable to possible reserves.

Gas

Proved and Probable (2P) Reserves

2P gas reserves down year on year mainly due to a combination of a reduction in possible reserves at SM58 and gas production at SM58.

Possible Reserves

Possible gas reserves up year on year mainly due to reallocations of SM58 probable reserves to possible.

Appendix C - Prospective Resources as at 30 June 2021

The following table shows Byron's prospective resources as at 30 June 2021 and comparison between 2021 and 2020.

Byron Energy Limited Prospective Resources (net to Byron) Gulf of Mexico, offshore Louisiana, USA			
Best Estimate Unrisked 30 June 2021	Oil MBBL	Gas MMCF	MBOE (6:1)
SM 71	977	19,885	4,291
SM 57	1,531	75,243	14,072
SM 58	18,251	47,108	26,102
SM 58 E1 / SM 69	2,252	1,969	2,580
SM 60	2,341	208,835	37,147
EI 77	7,989	219,158	44,515
Total Prospective Resources (2021)	33,341	572,198	128,707
Total Prospective Resources (2020)	43,612	617,276	146,491

Material Changes to Prospective Resources

- SM 59 removed from prospective resources as not planned to be drilled as of 30 June 2021 (removal of 16.3 Mmbl and 62.8 Bcf (net to Byron); and
- Addition of 6.0 Mmbl and 17.7 Bcf to SM58 primarily reflecting the following additions: Rainbow Trout K4 PR, Tiger Trout K6 & L2 PR's, River Trout L2 PR, Silver Trout Upper O2 PR & Lower O PR, Steelhead South O PR, Smoked Trout South N2 & O PR's, and Cutthroat Oil Upper O PR.

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Appendix D - Notes to Reserves and Resources Statement

Reserves and Resources Governance

Byron's reserves estimates are 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.

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. They 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

Oil prices used in this report represent July 12, 2021 NYMEX West Texas Intermediate (WTI) Strip prices through 2023 and Reuters consensus for 2024, starting on July 1, 2021, of \$72.98 per barrel, with a final price of \$60.00 per barrel on January 1, 2024, and held constant thereafter. Gas prices used in this report represent a Henry Hub base July 15, NYMEX Strip prices through 2023 and Reuters consensus for 2024, starting on July 1, 2021, of \$3.411 per MMBtu, declining to \$2.750 per MMBtu on July 12, 2021, then held constant thereafter. These prices were then adjusted to account for transportation cost, basis difference, Light Louisiana Sweet (LLS) vs WTI oil gravity.

ASX Reserves and Reporting Notes

- (i) The reserves and prospective resources information in this document is effective as at 30 June, 2021 (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.