

26 May 2022

ASX RELEASE

SM58 G5 Well Logs Hydrocarbon Pay and Preparing to Run Casing

- **81 feet of True Vertical Thickness pay has been logged in the SM58 G5 well**
 - **11 feet of TVT pay in the secondary I2 Sand**
 - **23 feet of TVT pay in the secondary K4/B65 Sand**
 - **47 feet of TVT pay in the secondary L2 Sand**
- **The primary N2 Sand has not been reached yet**
- **Following a failure of the transmission for the rig's top drive, current operations are preparing to run 7" casing to preserve the pay sands for completion**
- **Drilling operations to evaluate the N2 Sand will begin once casing is run and rig repairs are complete - 600 feet of drilling remain to reach total depth**
- **First production from the G3 and G5 wells is expected in July 2022**

Byron Energy Limited (Byron or the Company) (ASX: BYE) is pleased to provide the following update on the Company's 100% owned and operated South Marsh Island 58 G3 (G3) and South Marsh Island 58 G5 (G5) drilling program at its South Marsh Island 58 G Platform.

SM58 G5 Results to Date

The Enterprise Offshore Drilling (EOD) 264 jack-up rig arrived at Byron's 100% owned South Marsh Island 58 G Platform at 0830 hours on 18 April 2022 (USCDT) to drill the G3 and G5 wells. Byron is batch drilling these wells to increase efficiency and cost savings. Since arriving on location, the G3 well was drilled to total depth on 13 May 2022 and production casing was run across the productive J and K4 sands.

As of 1800 hours on 24 May 22 (USCDT), the G5 has been drilled to a depth of 9,650 feet Measured Depth (MD)/7,672 feet True Vertical Depth (TVD). At that depth, during a planned, routine hole cleaning operation, the top drive transmission on the EOD 264 suffered a complete failure. Because the drill pipe cannot be rotated without a top drive, the drill string and Log While Drilling (LWD) tools have been pulled to surface and the decision to run 7" production casing has been made to preserve the hydrocarbon sands logged to date. Currently, operations are focussed on running and cementing casing before the top drive is replaced which can take 3 - 4 days. Once the top drive has been replaced, Byron will drill ahead to test the primary N2 Sand. The G5 is expected to reach a final total depth of 10,240 feet MD/ 8,196 feet TVD.

The G5 well, drilling the Smoked Trout prospect, has penetrated two of the three pre-drill objectives and logged hydrocarbon (most likely oil based on mudlog and LWD responses) in one of those objectives, the K4 Sand. Another secondary target, the J Sand, was found to be pinched-out with no sand in the G5 well. However, hydrocarbons were logged in two other sands, the I2 Sand (most likely gas), and more importantly, the L2 Sand (most likely oil).

For personal use only

The secondary K4 Sand logged 23 feet TVT net pay. Pre-drill gross 1P reserves of 275,000 barrels of oil (mbo) (net 230 mmbo) were provided by Byron's third-party reserve estimator, Collarini Associates (Collarini) as disclosed in the ASX release of 1 February 2022 for the K4 Sand. Collarini predicted 30 feet TVT net pay at the G5 location as a basis for these reserves. The G5 logged very clean K4 sand which is connected to oil downdip as an attic accumulation to previous K4 Sand production. K4 Sand production rates are estimated to fall in the range of 400 to 500 barrels of oil per day (bopd) depending on reservoir drawdown across the perforations. Long term stability of the initial rate will depend on the ultimate strength of the aquifer support. The Company will complete the K4 Sand after producing the downhole L2 and N2 sands using modern frac pack sand control techniques.

The G5 also logged 47 feet TVT hydrocarbon (most likely oil) in the L2 Sand. Correlation of this sand with older wells and Byron's 3D seismic data indicates the L2 Sand in the G5 is part of the Steelhead South prospect. As previously mapped, the L2 Sand was not expected to be well developed in the G5, but in fact, the L2 Sand is a clean, high-quality sand. The G5 L2 Sand penetration is part of a large accumulation of oil that is further proved by two other wells down-dip, but never produced.

Collarini ascribed 291 mbo to the L2 Sand in the Steelhead South prospect and used 15 feet TVT of oil at that location for that assessment. This result in the G5 has substantially increased both the area and volume of the Steelhead South L2 Sand prospect and is a very positive outcome in the G5 well. The oil logged in the L2 Sand was the driving factor in deciding to run casing prior to replacing the top drive. Historical production rates from the L2 Sand in the area range from 700 to 1000 bopd, depending on reservoir drawdown across the perforations. Long term stability of the initial rate will depend on the ultimate strength of the aquifer support. The Company will complete the L2 Sand using modern frac pack sand control techniques.

The thin pay in the I2 Sand will be a future through tubing completion in the G5 well. The I2 Sand is expected to be a modest gas producer many years in the future and lies updip to old I2 Sand production.

The G3 and G5 well results will be reflected in the Company's June 30, 2022, reserves report, expected to be released in late August/early September 2022.

To put the results of the G5 thus far in the regional context of the South Marsh Island 73 Field area, it is interesting to look at historical averages for both the K4 and L2 Sands. The K4/B65 sand has produced 12.3 mmbo from 19 wells in the field with an average TVT of 34 feet. The average K4/B65 Sand completion has produced 647 mbo with a range of 152 mbo to 1,700 mbo. The L2 Sand (also called the C10 Sand) has produced a total of 4.5 mmbo from 17 wells in the field with an average TVT net pay of 25 feet. The average L2 Sand completion has produced 267 mbo with a range of 17 mbo to 689 mbo.

The presence of the L2 Sand in the G5 well could lead to an acceleration well if the primary N2 Sand is present as expected. Production from the N2 Sand would push the uphole recompletion of the L2 Sand out several years and with current commodity prices, it may make economic sense to bring the L2 Sand production forward.

Go-Forward Plans

Once casing has been run and cemented, EOD will completely replace the top drive, an operation that may take 3 or 4 days. During that time, Byron will prepare to drill out of casing and evaluate the primary objective of the Smoked Trout prospect, the N2 Sand. Only 600 feet of drilling remains to reach total depth. If successful, a 5" liner will be run to total depth to allow production from the N2 Sand if it is hydrocarbon bearing.

Concurrently, Byron's completion engineers are finishing up completion designs for the G3 and the G5 wells. Completion operations will begin as soon as the G5 drilling operations are over. First production from both wells is expected in July 2022 after some topside work is finished on the SM58 platform and the wells are tied into the production system.

Further operational updates will be provided as the project progresses.

SM71 F4 and F2 Recompletion

Byron has been informed by the owner of the lift boat needed to recomplete the South Marsh Island Block 71 F4 and F2 wells that the liftboat has been delayed until late June due to an expanded program by the current operator. Further details on the SM71 F2 and F4 recompletions can be found in the Company's March Quarterly Activities and Cashflow Report, released to the ASX on 28 April 2022.

Byron's CEO Maynard Smith said:

"The presence of the L2 Sand in the G5 well is very good news. Steelhead South was one of our top oil prospects and while we hoped the L2 might be present in the G5, we did not expect the quality and thickness of the L2 oil that was logged. Additionally, the K4 Sand is better developed in the G5 than anticipated and will provide a straw into the downdip K4 Sand accumulation in the future.

The top drive failure was very disappointing as the EOD 264 had been performing well. We have had virtually no downtime caused by the rig during this program and to be so close to total depth and have this happen is frustrating. But running casing here preserves the L2 and K4 Sands and allows us to reach the N2 Sand with only a modest increase in cost. Our engineering team and vendors have done a tremendous job adjusting the program to get ready to run the casing.

The current two well program at SM58 can already be considered a success and we look forward to the increased cashflow to Byron once these wells are on line in July."

Authorised by: The Board of Directors

South Marsh Island 58 - Ownership		Working Interest	Net Revenue Interest
Byron Energy Inc. (Operator)	* Surface to -13,639 subsea TVD	100.00%	83.33%
Byron Energy Inc.	Below -13,639 subsea TVD	50.00%	41.67%
Byron Energy Inc.	** All production from the SM58 E1 wellbore in the S1/2 SE 1/4 of the SE1/4 to a depth of 7,490 TVD	53.00%	44.16%

* SM58 G1, G2 and Future G Platform Wells

** SM58 E1 Well

For Further Information Contact:

Maynard Smith
Chief Executive Officer
+61 3 8610 6583

Peter Love
Investor Relations
+61 7 3121 5674

For personal use only

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.

Disclaimers

Forward looking statements

Statements in this document which reflect management's expectations relating to, among other things, production estimates, target dates, Byron's expected drilling program and the ability to fund exploration and development are forward-looking statements, and can generally be identified by words such as "will", "expects", "intends", "believes", "estimates", "anticipates" or similar expressions. In addition, any statements that refer to expectations, projections or other characterizations of future events or circumstances are forward-looking statements and may contain forward-looking information and financial outlook information. Statements relating to "reserves" are deemed to be forward-looking statements as they involve the implied assessment, based on certain estimates and assumptions that some or all of the reserves described can be profitably produced in the future. These statements are not historical facts but instead represent management's expectations, estimates and projections regarding future events.

All of the forward-looking information in this document is expressly qualified by these cautionary statements. Forward-looking information contained herein is made as of the date of this document and Byron disclaims any obligation to update any forward-looking information, whether as a result of new information, future events or results or otherwise, except as required by law. In relation to details of the forward looking drilling program, management advises that this is subject to change as conditions warrant, and we can provide no assurances that drilling rigs will be available.