

# Quarterly Report for the Period Ended 30 September 2013

<b>Name:</b>	Byron Energy Limited
<b>ASX code:</b>	BYE
<b>Shares on issue:</b>	128.1 million
<b>Quoted shares:</b>	108.6 million
<b>Options on issue (unquoted):</b>	37.3 million
<b>Cash at 30 September 2013:</b>	\$US 13.2 million
<b>Market Capitalisation at [\$0.79]:</b>	\$A101.2 million

## Highlights

- As reported in the June 2013 quarterly activity report, permitting of the proposed Byron Energy SM6 #1 well ("SM6 #1") commenced during the June quarter. The Exploration Plan, a key step in the permitting process, was submitted to the Bureau of Ocean Energy Management ("BOEM") in early June. Byron's Exploration Plan was "Deemed Submitted" by BOEM on 18 September 2013. BOEM now has a maximum 180 days to approve the Exploration Plan. Byron currently expects to drill SM6 #1 in the March quarter 2014, subject to rig availability and final regulatory approval. Subsequent to the end of the September quarter Byron executed a drilling contract with Spartan Offshore Drilling for a jack up rig which will be available to spud the SM6 #1 well after 1 March 2014.

- South Marsh Island Block 6 ("SMI 6") is prospective for oil and gas with extensive Anisotropic Reverse Time Migration ("ARTM") seismic interpretation. Byron has independently assessed gross proved, probable and possible reserves of 6.6 MMbbls of oil and 14.1 Bcf of gas (5.4 MMbbls of oil and 11.4 Bcf of gas, net to Byron) on SMI 6.
- On 8 August 2013, Byron announced that it has entered into an agreement with FairfieldNodal to license 3D seismic data over two of Byron's salt dome projects where the company holds a 100% working interest in a total of five (5) exploration leases. Additionally, Fairfield will process one of the projects through ARTM which will allow the complex salt dome to be mapped in a detailed manner.
- Byron had a cash balance of \$US 13.2 million at 30 September 2013, of which \$US 11.3 million is denominated in \$US and the balance in \$A.

### Directors

Doug Battersby (Non-Executive Chairman)  
 Maynard Smith (Chief Executive Officer)  
 Prent Kallenberger (Chief Operating Officer)  
 Charles Sands (Non-Executive Director)  
 Paul Young (Non-Executive Director)

### Company Secretary and Chief Financial Officer

Nick Filipovic

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# Quarterly Report for the Period Ended 30 September 2013 (Cont.)

## Corporate

In September 2013, 83,800 unlisted options were exercised at \$A0.50 with the resulting shares now quoted on the ASX.

At 30 September, 2013 Byron's issued capital comprised:-

	Total issued	Quoted	Unquoted	Escrowed*
Shares (ASX:BYE)	128,053,647	108,603,129	19,450,518	19,450,518
Options	37,296,284	Nil	37,296,284	13,687,083

\*escrowed until 30 May 2015.

## Project Update

### South Marsh Island Block 6

Byron's primary area of focus in 2013/14 is South Marsh Island Block 6 ("SMI 6"), located offshore Louisiana, 216 kilometres ("km") southwest of New Orleans in approximately 17 metres ("m") of water. Byron owns a 100% working interest and an 81.25% net revenue interest in the block.

### Drilling opportunities

SMI 6 is located on the western flank of a large piercement salt dome. The face of the salt dome dips to the east forming an overhang, which most likely prevented the accurate seismic imaging of the prospect with older seismic datasets.

SMI 6 is productive from discrete, hydrocarbon-bearing, sandstone reservoirs, which are primarily trapped in three-way structural closures bound either by salt or stratigraphic thinning on its updip edge. These reservoirs are Pliocene to Upper Miocene age sands from 2,184m to 3,094m, total vertical depth.

SMI 6 is ready for drilling with a number of shallow and deep potential drilling targets identified.

There are four proved undeveloped attic reserve drill opportunities: two in the south fault block for the F-20, F-30, G-20, H-30, H-40 and H-50 Sands; in the central fault block for the I-5 Sand; and in the north fault block for the F-30, H-40, H-50 and I-10 Sands.

There is a probable incremental reserve opportunity in the south fault block associated with the G-20 Sand.

There are two possible reserve drill opportunities: in the south fault block for the F-10, F-40, F-45, I-5 and I-10 Sands; and in the north fault block for the I-10 Sand.

There are also four exploratory opportunities: in the south fault block for the 12,300 feet ("ft"), 13,900 ft and 15,000 ft Sands; in the central fault block for the 12,300 ft, 13,900 ft, 14,500 ft and 15,000 ft Sands; and two in the north fault block for the F-30, F-40, H-30, H-40, H-50, 12,300 ft, 13,900 ft and 15,000 ft Sands.

### **Proposed SM6 #1 Well**

Byron's initial focus at SMI 6 is the South West Prospect where it is proposing to drill the SM6 #1 well in the south west corner of a major salt dome. Byron plans to drill this well in the March quarter of 2014, subject to obtaining all relevant regulatory approvals and rig availability.

The South West Prospect is estimated to contain gross proved, probable and possible reserves of 3.8 MMbbls of oil and 10.8 Bcf of gas (3.1 MMbbls of oil and 8.8 Bcf of gas net to Byron) in the un-pressured (shallow) sands. Additional gross prospective resources of 0.3 MMbbls of oil and 10.5 Bcf of gas are estimated in the deeper pressured section (0.2 MMbbls of oil and 8.6 Bcf of gas net to Byron). The SM6#1 well will be drilled to only test the un-pressured (shallow) section. The deep section is to be tested with another well at a future date.

### **Exploration Plan and Application for Permit to Drill**

During the June 2013 quarter, Byron submitted an Exploration Plan ("EP") for SMI 6 to BOEM, an important first step in obtaining a drilling permit. On 18 September 2013 BOEM advised Byron that its EP was Deemed Submitted by BOEM, meaning that Byron had provided sufficient information for the BOEM to begin its review. Once BOEM has deemed the EP as submitted BOEM then has a maximum of 180 days from 18 September 2013 to approve Byron's EP. Byron's regulatory consultants have indicated this approval time is currently taking about 90 days with BOEM.

Once the EP is approved by the BOEM and the coastal zone management review is completed by the state, an Application for Permit to Drill ("APD") will be submitted by Byron to the Bureau of Safety and Environmental Enforcement ("BSEE"). BSEE will then review the APD to examine the fitness of the drilling unit, mud program, casing program and cement program, amongst other things. Once BSEE is satisfied with Byron's APD it would grant Byron a permit to drill SM6 #1.

During the September 2013 quarter, Byron progressed discussions with Spartan Offshore Drilling ("Spartan"), a drilling contractor in the GOM, to utilize a jack-up drilling rig for the SM6 #1 well. As a result, in mid-October, Byron entered into an agreement with Spartan whereby Spartan has agreed to furnish a rig no earlier than 1 March, 2014, unless otherwise agreed, to spud the SM6 #1 well. The exact spud date is dependent on when the rig is released from its previous drilling commitments and final regulatory approval.

During the September 2013 quarter Byron also:-

- (a) secured the remaining bonds required by the BOEM as part of the EP approval process;
- (b) received the BSEE approval for Byron's Oil Spill Response Plan; and
- (c) initiated discussions with construction and marine contractors and subsequent to the end of the September quarter entered into an agreement with Twin Brothers Marine for construction of a caisson at SMI 6.

### **Salt Dome Projects**

As reported in the June 2013 quarterly report, Byron has now acquired acreage on a total of seven salt domes including SMI 6.

On 8 August 2013, Byron announced that it has entered into an agreement with FairfieldNodal to license 3D seismic data over two of Byron's salt dome projects where the company holds a 100% working interest in a total of five (5) exploration leases. Additionally, FairfieldNodal will process one of the projects through ARTM which will allow the complex salt dome to be mapped in a detailed manner. These two dome projects are in addition to South Marsh Island Block 6 which will be drilled on the basis of ARTM seismic previously acquired from FairfieldNodal by Byron. The "conventional" 3D seismic data over the first two salt dome projects, Eugene Island ("EI") 190, 191 and 210 and South Marsh Island ("SMI") 70 and 71 has been delivered. Under the agreement, the ARTM data for EI 190, 191 and 210 will be completed early in 2014.

### **Salt Dome Projects (Cont.)**

The FairfieldNodal agreement was the first step towards Byron acquiring ARTM 3D data over its salt dome projects. During the September 2013 quarter, Byron commenced discussions with seismic processing companies with the aim of licensing conventional and ARTM data over its remaining five salt dome projects, comprising nine leases, within the next 24 months. Byron is one of the early adopters of ARTM in the shallow (<400 ft) water section of the Gulf of Mexico.

ARTM seismic processing is a further refinement of seismic imaging that allows more accurate mapping of steeply dipping stratigraphic beds and complex salt bodies. The ability to map sand bodies within these complex structural environments is the key to exploring for overlooked or unidentified hydrocarbons. All of Byron's salt dome projects have previously produced oil and natural gas. The use of ARTM will provide the groundwork to map potential sub salt and salt flank prospects around those domes. Until very recently the standard use of ARTM has been largely confined to the deep water parts of the Gulf of Mexico (and elsewhere such as offshore Brazil) where sub salt plays occur and the very high drilling and development costs can easily justify the higher cost of ARTM.

### **Other Lease Blocks: SS 180, WD 49, WC 490, WC 472 and GI 95**

In addition to SMI 6, Byron has a 100% working interest in 21 leases, five of which contain either proved, probable or possible reserves. These leases comprise Ship Shoal Block 180 ("SS 180"), West Delta Block 49 ("WD 49"), West Cameron Block 490 ("WC 490"), West Cameron Block 472 ("WC 472") and Grand Isle Block 95 ("GI 95").

SS 180 and WD 49 both contain undeveloped oil and gas reserves. GI 95, acquired at the 2012 Lease Sale, contains large undeveloped gas reserves and prospective resources, exceeding 100 Bcf, net to Byron.

WC 490 and WC 472 each also contain significant undeveloped gas reserves.

There was no activity on these blocks during the September 2013 quarter. While these blocks are considered attractive by Byron, given Byron's initial focus on SMI 6 it is not expected that any of SS 180, WD 49, WC 490 and GI 95 properties would be drilled until sometime in 2014, subject to permitting, farm-out and funding.

### **Competent Person Statement**

*The references to hydrocarbon reserves in this announcement are based on information reviewed and compiled into an Independent Technical Report by Mr Andrew Andrejewskis BSc, GradDip B Admin, FAusIMM (CP), FAIM. This report can be found within the company's replacement prospectus dated 2 April 2013. The reserves estimates are consistent with the definitions of Proved, Probable and Possible hydrocarbon reserves and prospective hydrocarbon resources defined by the Australian Securities Exchange (ASX) Listing Rules. Mr Andrejewskis is a qualified person as defined in ASX Listing Rule 5.11 and has consented to the inclusion of reserves information in this announcement in the form and context in which it appears.*

## Properties

At 30 September 2013, Byron's portfolio of properties in the shallow water of the Gulf of Mexico ("GOM") comprised:-

Properties	Operator	Interest WI/NRI* (%)	Status	Lease Expiry Date	Lease Area (Km2)
South Marsh Island					
Block 6	Byron	100.00/81.25	Exploration	June 2015	20.23
Block 70	Byron	100.00/81.25	Exploration	July 2017	22.13
Block 71	Byron	100.00/81.25	Exploration	July 2017	12.16
Ship Shoal					
Block 180	Byron	100.00/81.25	Exploration	May 2015	20.23
West Delta					
Block 49	Byron	100.00/81.25	Exploration	May 2014	20.23
West Cameron					
Block 490	Byron	100.00/79.25	Exploration	May 2014	20.23
Block 491	Byron	100.00/79.25	Exploration	May 2014	20.23
Block 475	Byron	100.00/79.25	Exploration	January 2015	20.23
Block 469	Byron	100.00/79.25	Exploration	January 2015	20.23
Block 472	Byron	100.00/79.25	Exploration	January 2015	20.23
Block 473	Byron	100.00/79.25	Exploration	January 2015	20.23
Block 263	Byron	100.00/81.25	Exploration	May 2018	20.23
East Cameron					
Block 154	Byron	100.00/81.25	Exploration	July 2017	20.23
Block 155	Byron	100.00/81.25	Exploration	May 2018	20.23
Block 190	Byron	100.00/81.25	Exploration	May 2018	20.23
Eugene Island					
Block 191	Byron	100.00/81.25	Exploration	July 2017	20.23
Block 210	Byron	100.00/81.25	Exploration	July 2017	20.23
Block 63	Byron	100.00/81.25	Exploration	May 2018	20.23
Block 76	Byron	100.00/81.25	Exploration	May 2018	20.23
Block 190	Byron	100.00/81.25	Exploration	July 2018	20.23
Grand Isle					
Block 95	Byron	100.00/79.75	Exploration	September 2017	18.37
Vermilion					
Block 200	Byron	100.00/81.25	Exploration	June 2018	20.23

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

## Appendix 5B

### Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/2013

Name of entity

Byron Energy Limited

ABN

88 113 436 141

Quarter ended ("current quarter")

30 September 2013

#### Consolidated statement of cash flows

Cash flows related to operating activities	Current quarter \$US'000	Year to date (3 months) \$US'000
1.1 Receipts from product sales and related debtors	-	-
1.2 Payments for (a) exploration & evaluation (b) development (c) production (d) administration	(950) - - (562)	(950) - - (562)
1.3 Dividends received	-	-
1.4 Interest and other items of a similar nature received	13	13
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Other (provide details if material) - Refundable security deposit	(150)	(150)
<b>Net Operating Cash Flows</b>	<b>(1,649)</b>	<b>(1,649)</b>
<b>Cash flows related to investing activities</b>		
1.8 Payment for purchases of: (a) prospects (b) equity investments (c) other fixed assets	(173) - -	(173) - -
1.9 Proceeds from sale of: (a) prospects (b) equity investments (c) other fixed assets	- - -	- - -
1.10 Loans to other entities	-	-
1.11 Loans repaid by other entities	-	-
1.12 Other (provide details if material)	-	-
<b>Net investing cash flows</b>	<b>(173)</b>	<b>(173)</b>
1.13 Total operating and investing cash flows (carried forward)	(1,822)	(1,822)

+ See chapter 19 for defined terms.

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## Mining exploration entity and oil and gas exploration entity quarterly report

1.13	Total operating and investing cash flows (brought forward)	(1,822)	(1,822)
	<b>Cash flows related to financing activities</b>		
1.14	Proceeds from issues of shares, options, etc.	39	39
1.15	Proceeds from sale of forfeited shares	-	-
1.16	Proceeds from borrowings	-	-
1.17	Repayment of borrowings	-	-
1.18	Dividends paid	-	-
1.19	Other	-	-
	<b>Net financing cash flows</b>	<b>39</b>	<b>39</b>
	<b>Net increase (decrease) in cash held</b>	<b>(1,783)</b>	<b>(1,783)</b>
1.20	Cash at beginning of quarter/year to date	14,989	14,989
1.21	Exchange rate adjustments to item 1.20	3	3
1.22	<b>Cash at end of quarter</b>	<b>13,209</b>	<b>13,209</b>

**Payments to directors of the entity, associates of the directors, related entities of the entity and associates of the related entities**

		Current quarter \$US'000
1.23	Aggregate amount of payments to the parties included in item 1.2	185
1.24	Aggregate amount of loans to the parties included in item 1.10	-

1.25 Explanation necessary for an understanding of the transactions

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**Non-cash financing and investing activities**

2.1 Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows

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2.2 Details of outlays made by other entities to establish or increase their share in projects in which the reporting entity has an interest

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**Financing facilities available**

*Add notes as necessary for an understanding of the position.*

	Amount available \$US'000	Amount used \$US'000
3.1 Loan facilities	-	-
3.2 Credit standby arrangements	-	-

**Estimated cash outflows for next quarter**

	\$US'000
4.1 Exploration and evaluation	1,100
4.2 Development	-
4.3 Production	-
4.4 Administration	700
<b>Total</b>	<b>1,800</b>

**Reconciliation of cash**

Reconciliation of cash at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts is as follows.	Current quarter \$US'000	Previous quarter \$US'000
5.1 Cash on hand and at bank	13,209	14,989
5.2 Deposits at call	-	-
5.3 Bank overdraft	-	-
5.4 Other (provide details)	-	-
<b>Total: cash at end of quarter (item 1.22)</b>	<b>13,209</b>	<b>14,989</b>

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## Mining exploration entity and oil and gas exploration entity quarterly report

## Changes in interests in mining tenements and petroleum tenements

	Tenement reference and location	Nature of interest (note (2))	Interest at beginning of quarter	Interest at end of quarter
6.1	Interests in mining tenements and petroleum tenements relinquished, reduced or lapsed	Nil	-	-
6.2	Interests in mining tenements and petroleum tenements acquired or increased	Nil	-	-

## Issued and quoted securities at end of current quarter

Description includes rate of interest and any redemption or conversion rights together with prices and dates.

	Total number	Number quoted	Issue price per security (see note 3) (cents)	Amount paid up per security (see note 3) (cents)
7.1	<b>Preference securities</b> (description)	Nil		
7.2	Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs, redemptions			
7.3	<b>+Ordinary securities</b>	128,053,647	108,603,129	
7.4	Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs	83,800	83,800	\$A0.50
7.5	<b>+Convertible debt securities</b> (description)	Nil		

+ See chapter 19 for defined terms.

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## Mining exploration entity and oil and gas exploration entity quarterly report

7.6	Changes during quarter (a) Increases through issues (b) Decreases through securities matured, converted				
7.7	<b>Options</b> (description and conversion factor)	37,296,284	Nil	Exercise price \$A0.50	Expiry date 31 December 2016
7.8	Issued during quarter	Nil	Nil		
7.9	Exercised during quarter	83,800	Nil	\$A0.50	31 December 2016
7.10	Expired during quarter	Nil	Nil		
7.11	<b>Debentures</b> (totals only)	Nil			
7.12	<b>Unsecured notes</b> (totals only)	Nil			

**Compliance statement**

1 This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act or other standards acceptable to ASX (see note 5).

2 This statement does give a true and fair view of the matters disclosed.

Sign here:

*N. Filipovic*

(Company secretary)

Date: 21 October 2013.

Print name: Nick Filipovic

## **Notes**

1 The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity wanting to disclose additional information is encouraged to do so, in a note or notes attached to this report.

2 The "Nature of interest" (items 6.1 and 6.2) includes options in respect of interests in mining tenements and petroleum tenements acquired, exercised or lapsed during the reporting period. If the entity is involved in a joint venture agreement and there are conditions precedent which will change its percentage interest in a mining tenement or petroleum tenement, it should disclose the change of percentage interest and conditions precedent in the list required for items 6.1 and 6.2.

3 Issued and quoted securities The issue price and amount paid up is not required in items 7.1 and 7.3 for fully paid securities.

4 The definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report.

5 Accounting Standards ASX will accept, for example, the use of International Financial Reporting Standards for foreign entities. If the standards used do not address a topic, the Australian standard on that topic (if any) must be complied with.

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