

# Byron Energy Ltd 2016 AGM Presentation



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## Forward looking statements

Statements in this presentation 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.

Although management believes the expectations reflected in such forward-looking statements are reasonable, forward-looking statements are based on the opinions, assumptions and estimates of management at the date the statements are made, and are subject to a variety of risks and uncertainties and other factors that could cause actual events or results to differ materially from those projected in the forward-looking statements. These factors include, but are not limited to, risks relating to: amount, nature and timing of capital expenditures; drilling of wells and other planned exploitation activities; timing and amount of future production of oil and natural gas; increases in production growth and proved reserves; operating costs such as lease operating expenses, administrative costs and other expenses; our future operating or financial results; cash flow and anticipated liquidity; our business strategy and the availability of lease acquisition opportunities; hedging strategy; exploration and exploitation activities and lease acquisitions; marketing of oil and natural gas; governmental and environmental regulation of the oil and gas industry; environmental liabilities relating to potential pollution arising from our operations; our level of indebtedness; industry competition, conditions, performance and consolidation; natural events such as severe weather, hurricanes and earthquakes; and availability of drilling rigs and other oil field equipment and services. Accordingly, readers are cautioned not to place undue reliance on such statements.

All of the forward-looking information in this presentation 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.

## NPW-10

NPW -10 figures are net present value of future net revenue, before income taxes and using a discount rate of 10%. The estimated future net revenue values utilised do not necessarily represent the fair market value of Byron’s oil and gas properties. All evaluations of future net revenue in this presentation are after deduction of royalties, drilling and development costs, production costs and well abandonment costs.

# RESERVES INFORMATION

## Reserves Reporting

Pursuant to ASX Listing Rules (“LR”) the reserves, contingent resources, and prospective resources information in this document:

- (i) is effective as at 30 June, 2016 (LR 5.25.1)
- (ii) has been estimated and is classified in accordance with SPE-PRMS (Society of Petroleum Engineers - Petroleum Resources Management System) (LR 5.25.2)
- (iii) is reported according to the Company’s economic interest in each of the reserves and net of royalties (LR 5.25.5)
- (iv) has been estimated and prepared using the deterministic method; and 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; and prospective resources have not been adjusted for risk using the chance of discovery (LR 5.25.6)
- (v) 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) is reported on a best estimate basis for prospective resources (LR 5.28.1)
- (vii) is reported on an un-risked basis for prospective resources which have not been adjusted for an associated chance of discovery and a chance of development (LR 5.35.4)

**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 and these estimates have both an associated risk of discovery and a risk of development; and further exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons (LR 5.28.2)

## Other Reserves Information

Byron currently operates all of its properties which are held under standard oil and gas lease arrangements on the outer continental shelf of the Gulf of Mexico and in South Louisiana. The Company’s working interest ownership (WI%), net revenue interest (NRI%) and lease expiry dates in relation to each of its properties are generally included in the Company’s presentations and ASX releases which are available on the ASX or the Company’s website.

## Competent Person’s Statement

The information in this presentation 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 (LR 5.41 and 5.42).

## Reserves Cautionary Statement

Oil and gas reserves and resource 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. The 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.

## Oil and Gas Prices used in the Reserves Report

Oil prices used in the reserves report represent NYMEX base, starting on July 1, 2016 of \$US 50.21 per barrel with a final price of \$US 59.97 per barrel on December 1, 2024 and held constant there after; gas prices used in this report represent Henry Hub base, starting on July 1, 2016, of \$US 3.10 per MMBtu, rising to a final price of \$US 4.68 per MMBtu on December 1, 2029 and held constant thereafter.

# Byron Energy Overview

•Byron Energy Ltd. (BYE) is focused solely on the US Gulf of Mexico Shelf taking advantage of:

- Team Track Record of Success in Gulf of Mexico
- Extensive Oil and Gas Infrastructure
- Low Cost CAPEX, Operating and Producing Environment
- Reduced Competition for Leases

•SM71 Light Oil Discovery in 2016

- 151 TVT feet of Hydrocarbons Logged in 4 Sands
- 2P Net to Byron: 2,271 MBOE\*
- 2P Finding Costs Estimated at \$1.25/boe
- 2P Find & Develop Cost Estimated at \$7.73/boe
- 2P OPEX Estimated at \$3.20/boe
- 3p + Prospective Resources 5,248 MBO (Net)
- Production Expected to Commence Q3/Q4 2017
- Development Financing in Place Through Metgasco Loan Facility

•Bivouac Peak Exploration Well Expected to Spud Q1/Q2 2017 in Louisiana Transition Zone

- Initial Well Will Test Multiple Amplitude Supported Objectives
- Gross Potential 125 Bcf + 11.3 Mmbo
- 90% Net Working Interest Net to Byron subject to optional farm-ins as noted

•All \$ amounts in this presentation are in US \$ unless otherwise noted

Byron Energy Limited	ASX:BYE As at 23/11/16
Share Price	A\$0.125
Ordinary Shares	272 million
Options	51 million*
Market Cap (Undiluted)	A\$34 million
Director Shareholdings	24.6%

\* 37 million options ex @ \$A0.50 expire 31/12/2016

## Board of Directors

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

# Byron Team Track Record: US Gulf of Mexico

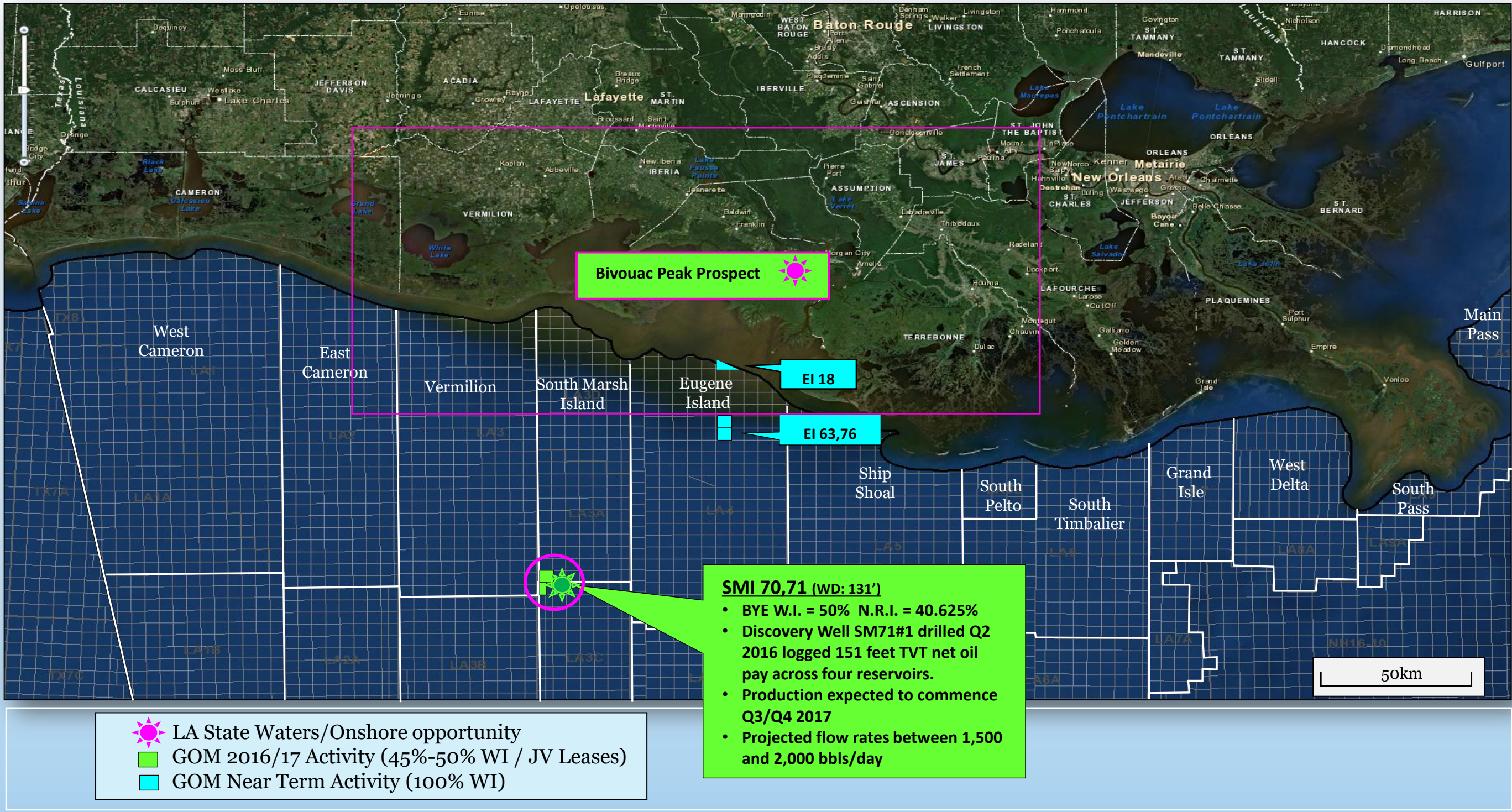
- **Combined Experience:**
  - *Over 140 years of oil and gas exploration the US GOM*
- **Prior wells initiated by the Byron team in the GOM:**
  - *Have produced 22 million barrels of oil and 263 bcf of gas*
  - *Revenue generated at current prices \$1.7 billion*
  - *115 producing wells from 141 attempts (>80% success rate)*
- **Monetizing the Results:**
  - *Petsec Energy exit ('93-'97) multiple of 26 X investment*
  - *Darcy Energy exit ('00-'05) multiple of 11 X investment*
  - *Aurora Exploration exit ('00-'12) multiple of 8 X investment*

# Byron Energy Ltd. Corporate Strategy

- **Manage and execute existing portfolio of projects and prospects**
  - **SM 71 – Install production facility and pipeline**
  - **Bivouac Peak – Drill Initial Test Well**
  - **EI 63/76 – Begin permit process**
- **Generate, lease and drill high quality projects using best available technology**
- **Maximize shareholder value by controlling costs, risks and exit points**
- **Be a safe, environmentally responsible operator**
- **Management/Board heavily invested with ~25% ownership – not a lifestyle company**

# Byron Energy

## Gulf Of Mexico & Louisiana State Waters Leases



# SM 71 Byron Reserves – Collarini Report 2016\*

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South Marsh Island Block 71 (Byron Energy: 50% WI/40.625% NRI)											
									Undiscounted	NPW@10%	A/\$BYE share*
									Pre tax	Pre tax	NPW@10%
Reserve Category	# Wells	Reserves Gross 8/8ths			Reserves (net to Byron)			Net Capex	Net Cash Flow	Net Cash Flow	Pre tax
	(cumulative)	Oil Mbo	Gas mmcf	Mboe*	Oil Mbo	Gas mmcf	Mboe*	US\$000	US\$000	US\$000	\$A
Proved	2	1,432	994	1,598	582	404	649	\$11,590	\$20,899	\$13,361	\$0.07
Probable		3,558	2,605	3,992	1,445	1,058	1,622	\$3,126	\$79,228	\$55,243	\$0.28
2P	3	4,990	3,599	5,590	2,027	1,462	2,271	\$14,716	\$100,127	\$68,604	\$0.34
Possible		1,328	917	1,481	540	373	602	\$3,477	\$27,639	\$15,629	\$0.08
3P	4	6,318	4,516	7,071	2,567	1,835	2,873	\$18,193	\$127,766	\$84,233	\$0.42
											PR Additional
Prospective Resources	5	5,029	4,899	5,846	2,043	1,990	2,375	\$4,114	\$118,433	\$52,035	\$0.26
				*6:1							*272 m shares; \$A1=\$US0.74

## NOTES:

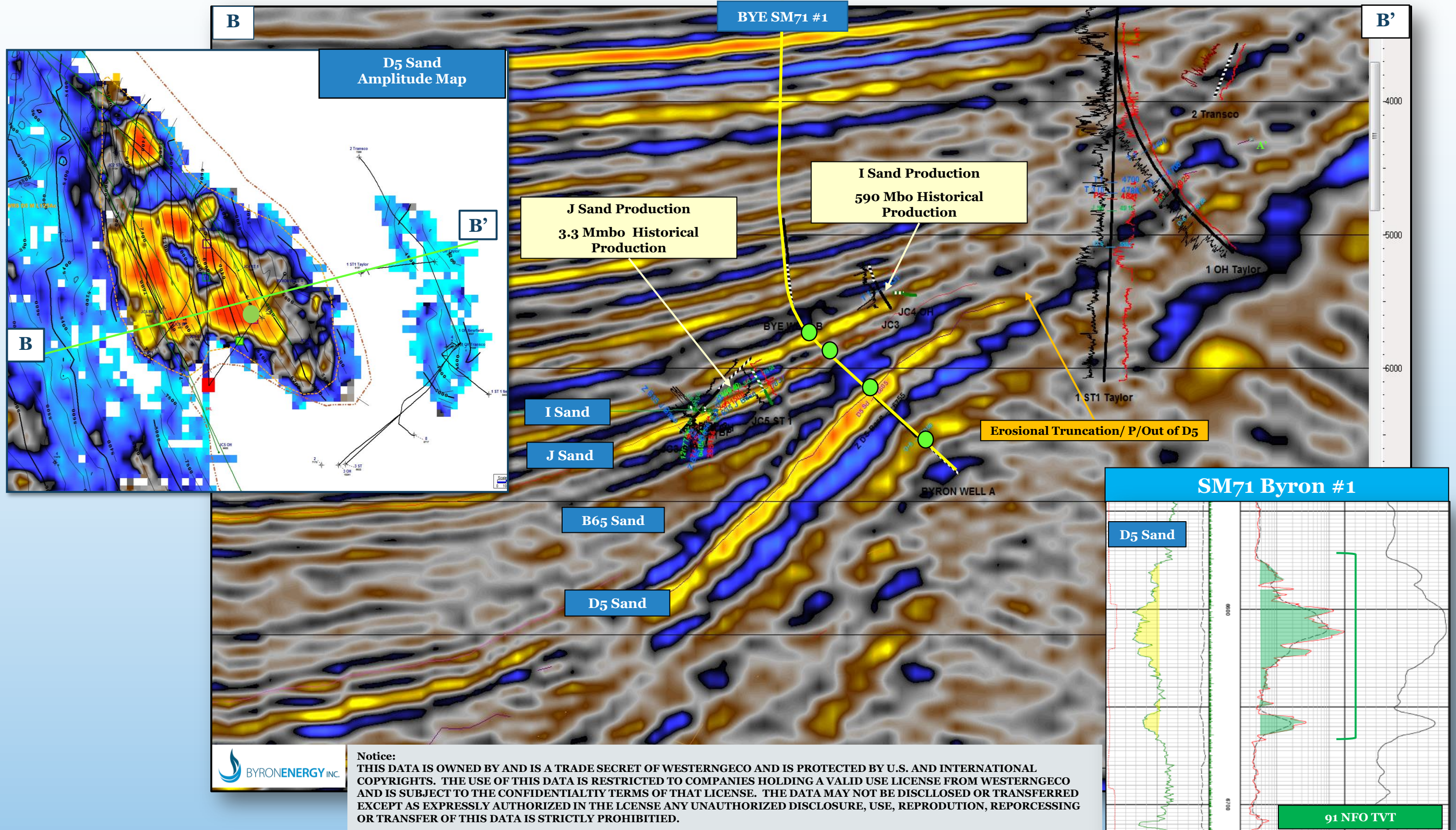
- All Reserves and Cash Flows are un-risked
- 507% increase in gross 2P BOE and 401% increase in gross 3P BOE over previous year reflecting successful drilling of SM 71 #1 well
- \* Reserves as at 30 June 2016; Source: Collarini and Associates report dated 20 July 2016; Oil prices used in the reserves report represent NYMEX base, starting on July 1, 2016 of \$US 50.21 per barrel with a final price of \$US 59.97 per barrel on December 1, 2024 and held constant thereafter

# Byron Energy Inc.

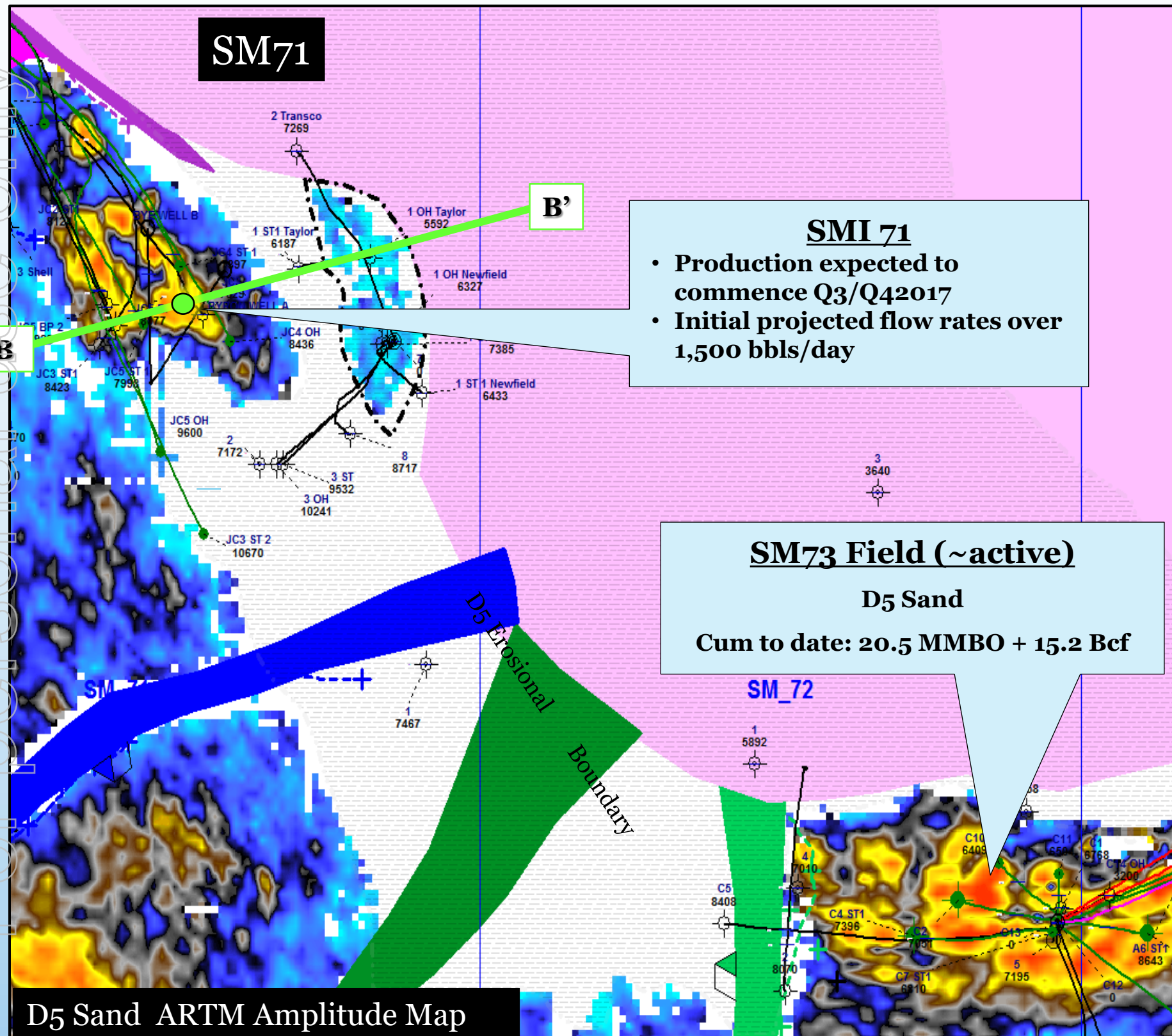
## 2012

# SM71 Prospect - ARTM Depth

## D5 Amalgamated Channel and Erosional Truncation Trap/Pinch Out



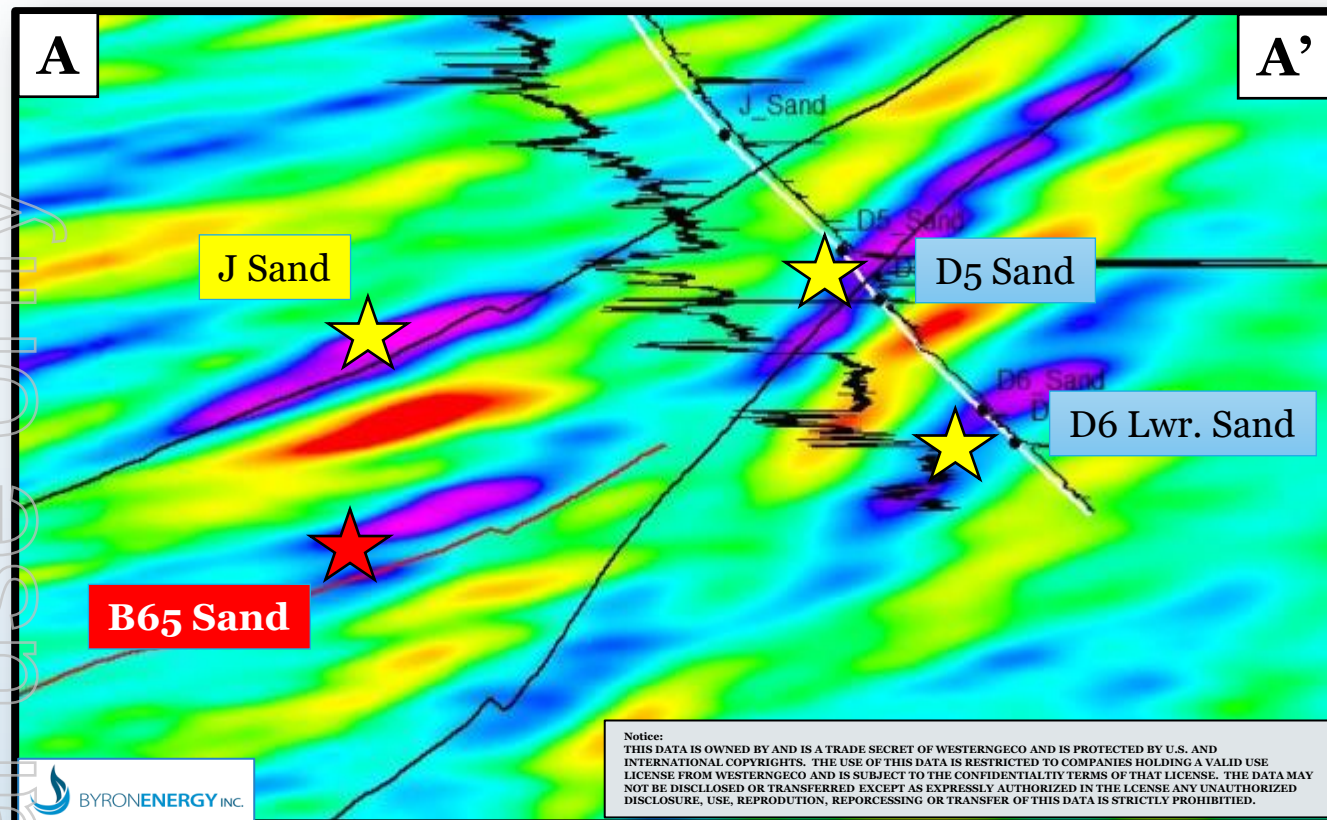
# South Marsh Island 71 – D5 Sand Discovery



- SM71 # 1 Well logged oil pay in the I3, J and D5 sands and gas in the Lower D6 Sand
- 1P: 649 MBOE (Net)\*
- 2P: 2,271 MBOE (Net)\*
- 3P: 2,873 MBOE (Net)\*
- SM71 discovery made possible through use of ARTM seismic technology
- Development costs net to Byron expected to be \$5mm from this point forward
- Future well locations on SM71 under technical review
- 50/50 JV with Otto

*\*As at 30 June 2016; Source : Collarini and Associates report  
Dated 20 July 2016; refer to Byron's ASX release on 25/7/2016*

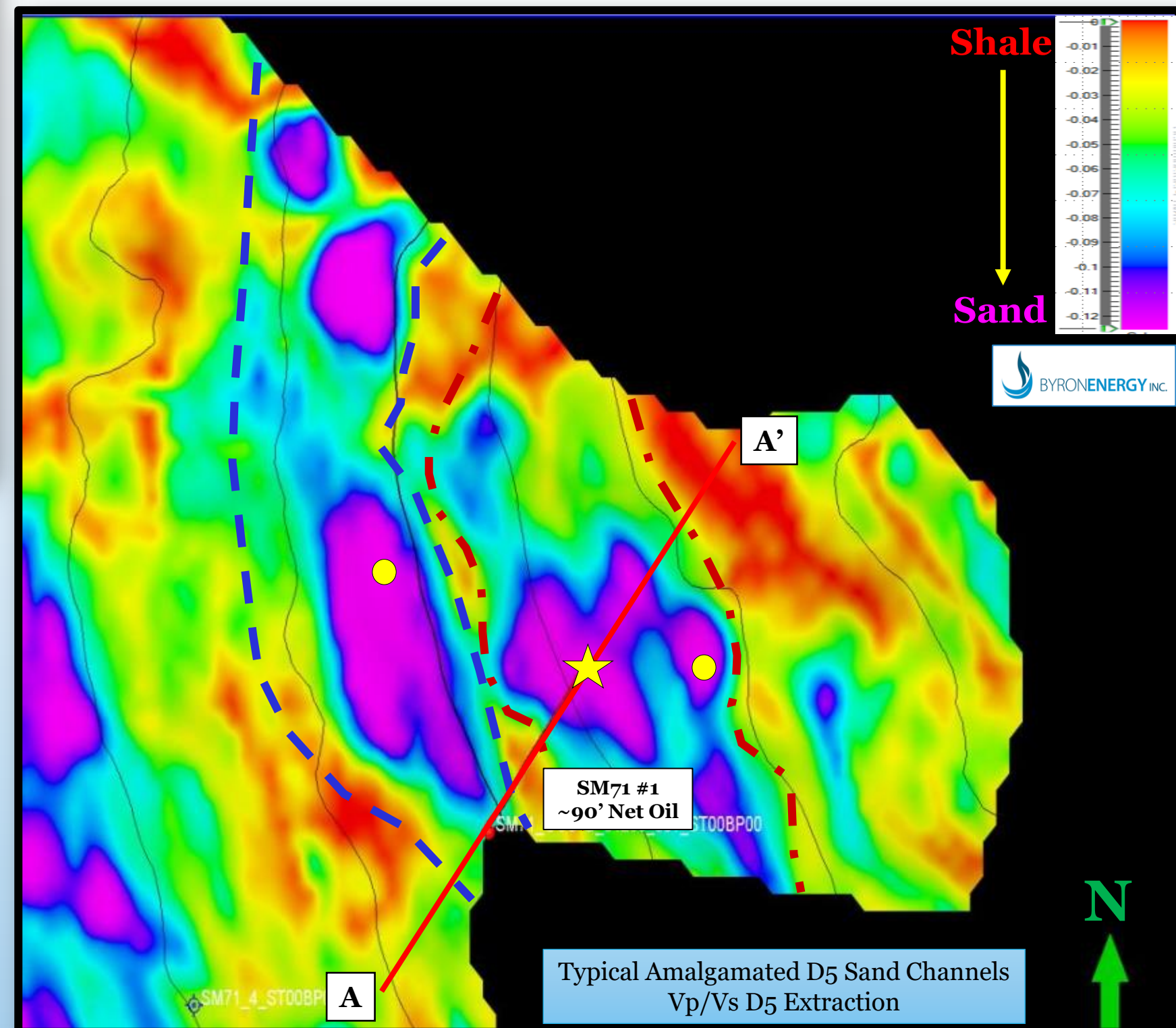
## SM71 – Vp/Vs Lithocube Volume



### Post Drill – SM71 – Inversion Data

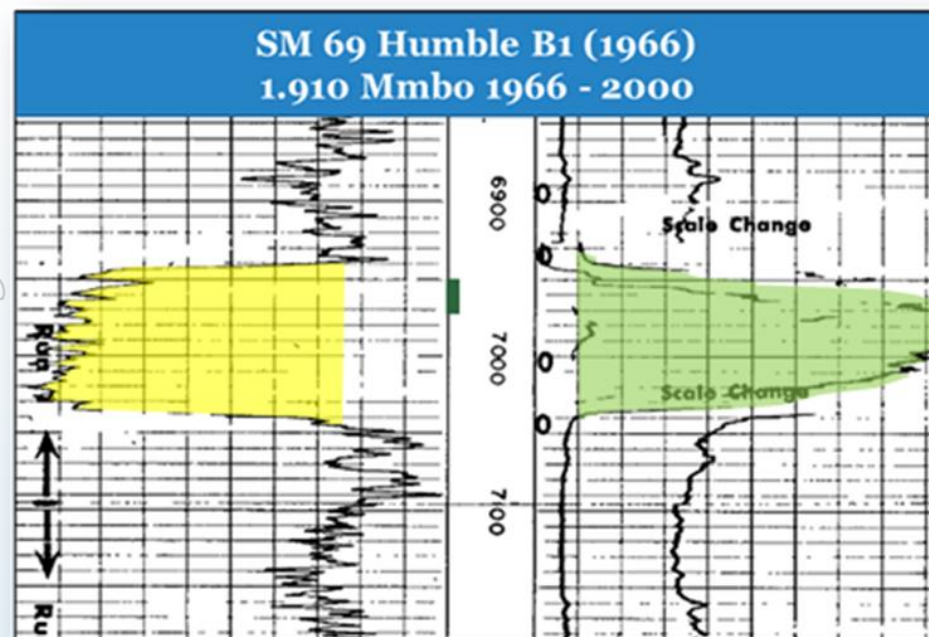
- Inversion processing predicts lithology using well log data and seismic relationships established by Poisson's ratio
- SM71 pay sands demonstrate Class 3 AVO characteristics based on SM71 #1 Shear Wave log data
- Excellent tie of hydrocarbon to Vp/Vs inversion data
- J, D5 and D6 Lower Sands all tie to Vp/Vs anomalies
- Full Zoeppritz Inversion reprocessing now underway at WesternGeco with promising preliminary results
- *B65 Sand also anomalous on Vp/Vs data and was not present in Byron SM71 #1 wellbore*
- *Byron's proprietary inversion dataset allows comparison to known B65 Sand production*

## SM71 - Post Drill Inversion Interpretation



### D5 Sand – Relative Vp/Vs Lithocube Extraction

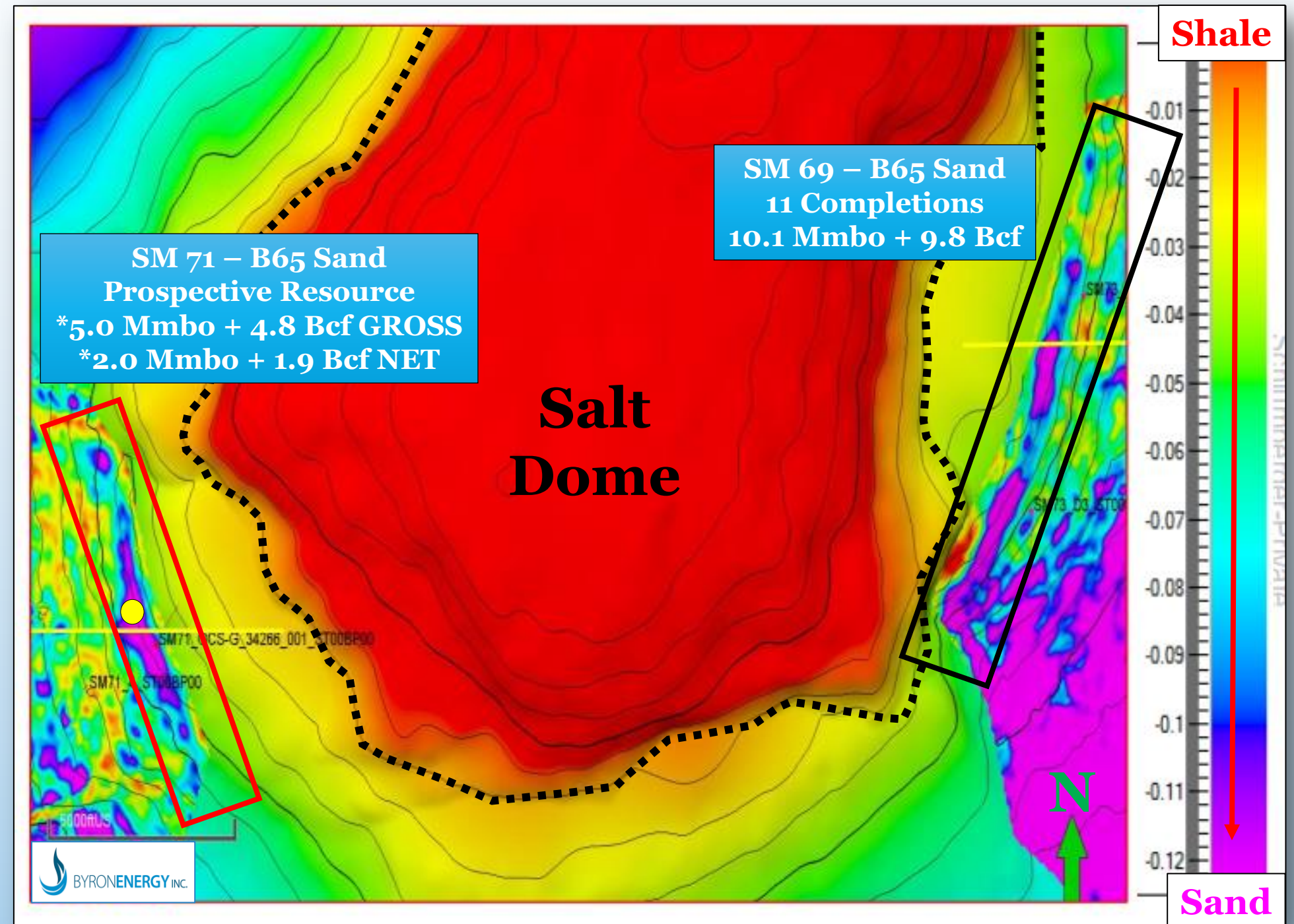
# SM71 – B65 Sand Prospect



## Typical B65 Sand

- 28-30% Porosity
- 300-500 Md Permeability
- 350 - 900 bopd I.P.
- 900 mbo Average Recovery (SM69)
- B65 Sand will be tested by the second well drilled at SM71
- Collarini Prospective Resource  
 \*5.0 Mmbo + 4.8 Bcf Gross  
 \*2.0 Mmbo + 1.9 Bcf Net

\*As at 30 June 2016; Source : Collarini and Associates report  
 Dated 20 July 2016; refer to BYE ASX release on 25/7/2016

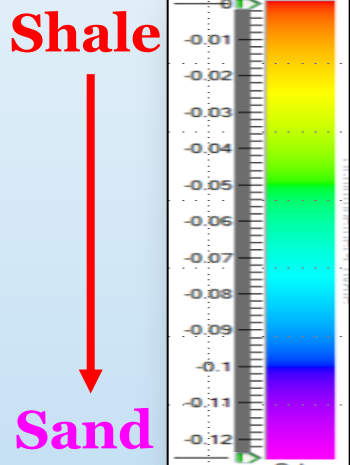


## B65 Sand – Relative Vp/Vs Lithocube Extraction

# SM71 – B65 Sand – Comparison of Prospect to Production

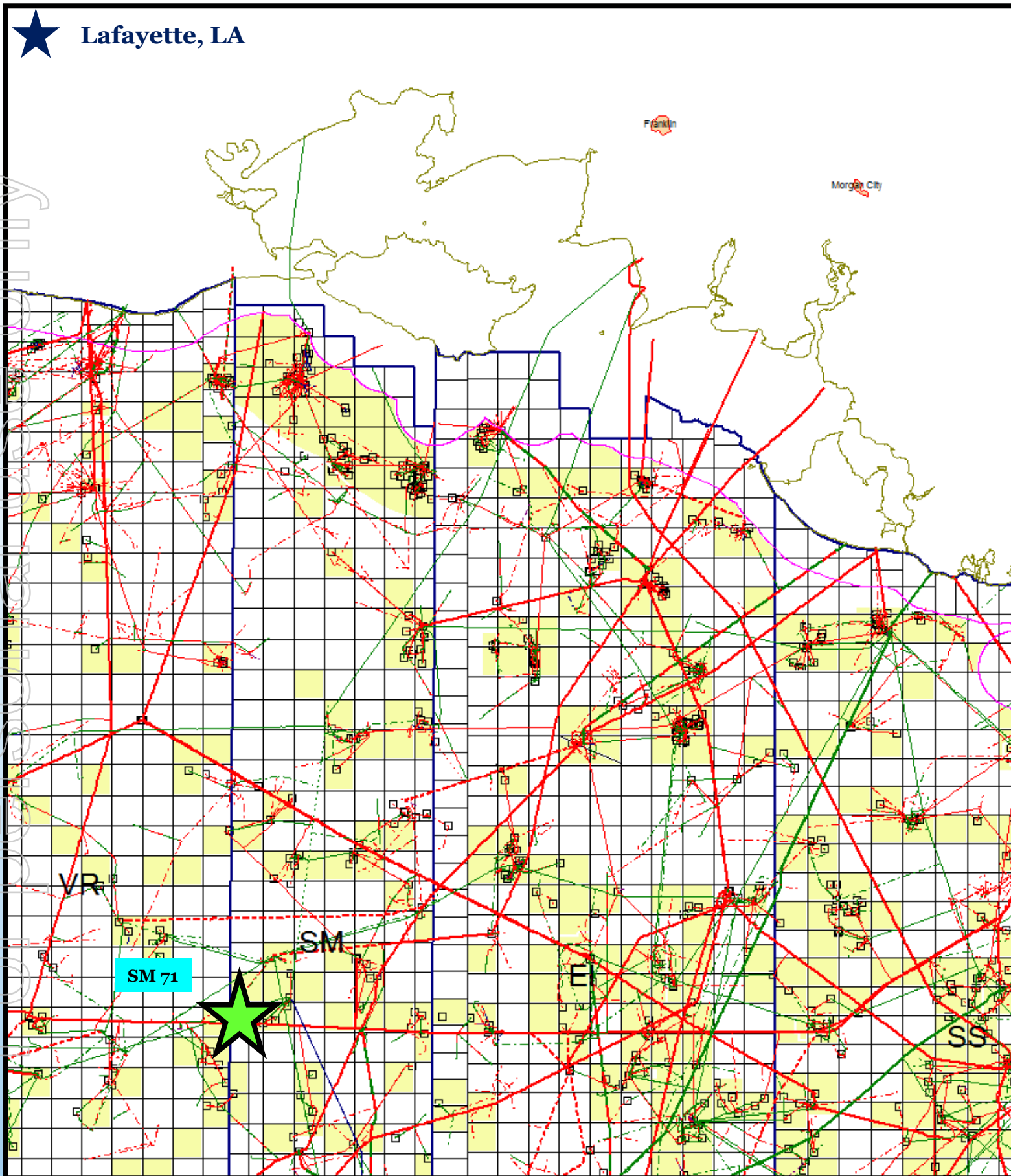
SM71 Prospect  
B65 Vp/Vs  
\*2.0 Mmbo + 1.9 Bcf NET  
Collarini Prospective Resource

SM73 Production  
B65 Vp/Vs  
10.1 mmbo + 9.8 BCF  
Produced to Date



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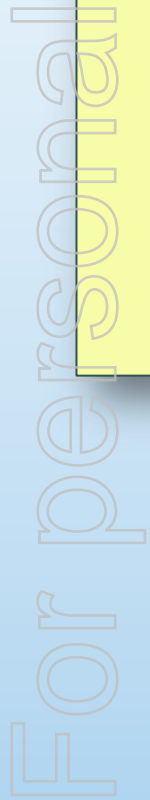
\*As at 30 June 2016; Source : Collarini and Associates report Dated 20 July 2016; refer BYE ASX release on 25/7/2016



# Gulf of Mexico Infrastructure

- **SM 71 takes advantage of GOM infrastructure.**
  - Byron SM71 production can be processed by offset operators and go to sales through existing trunk lines
- **US GOM offers some of the lowest cost oil and gas production in USA**
  - Finding Cost: \$1.25 per BOE Net to BYE
  - Find and Produce Costs: \$7.73 per BOE Net to BYE for 2P development
  - Operating Expenses: \$3.20 per BOE 2P Net to BYE
- **GOM production costs lower than shale/unconventional projects**
- **Royalty only to US Federal Government**
  - 18.75%

**Summary**



# Development Requirements

**The following additional items would be needed to bring the well into production:**

- ## Initial Facility & Development Costs

**Full 2P 3 well development: \$14.7m net to BYE**

## Initial Production Rate

**1,500 to 2,000 bopd (gross well production)**

## Timeframe

**Commence Production Q3/Q4 2017 – depending on permitting**

## Further potential

**Further opportunities with the SM71 lease would then be pursued by the joint venture**

# Bivouac Peak Project

- South Louisiana transitional zone utilizing barge rig
- Permitting process initiated with expected spud Q2 2017
- Multiple stacked amplitude channel sand targets
- Initial Bivouac Peak well will test
  - 32,270 MBOE\* Gross prospective resource
- Gross drilling costs estimated at \$8.5m in July 2016
- Subject to farm-in by Otto and Metgasco

Bivouac Peak Farm-in Scenarios		Pre Farm-Out Byron Interest	Post OEL Farm-Out Byron Interest	Post OEL & MEL Farm-Out Byron Interest
Working Interest		90.00%	45.00%	35.00%
Net Revenue Interest		67.05%	33.53%	26.08%
NET to Byron Reserve Potential				
Oil*	Mbo	10,721	5,360	4,169
Gas*	MMcf	119,125	59,562	46,326
Bbls of Oil Equivalent (6:1)	Mboe	30,575	15,287	11,890
Net to Byron Drilling and Development				
Initial Well Costs	(\$MM)	\$ 7.65	\$ 2.55	\$ 1.40
Development Costs	(\$MM)	\$ 4.32	\$ 2.16	\$ 1.68

\*As at 30 June 2016; Source : Collarini and Associates report  
Dated 20 July 2016; refer BYE ASX release 25/7/2016

# Bivouac Peak: Multi-play Lease Block Total Project

Combined Prospective Resource:  
178 Bcf + 16 Mmbo (Gross)\*

## Bivouac Peak Prospects\*\*

### East Prospect: (Proposed Byron #1)

- \*Gross: 125 Bcf + 11.3 Mmbo (32,270 Mboe)
- 665 Acres; 3 stacked objectives
- Tests Up Cib Op to Lwr Cris I ~ 18,000' PTD

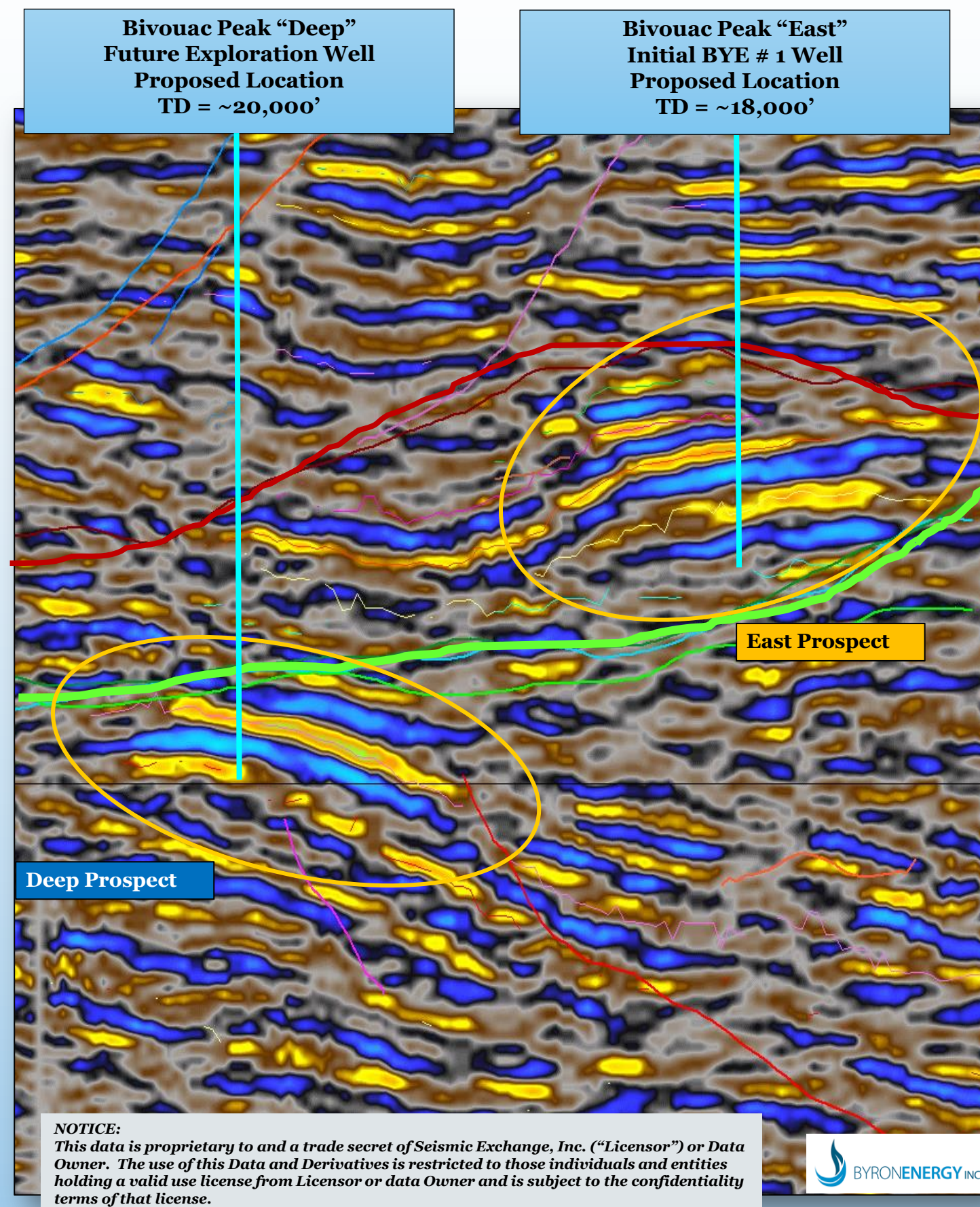
### Deep Prospect:

- \*Gross: 52 Bcf + 4.7 Mmbo (13,331 Mboe)
- 400 Acres; 2 stacked objectives
- Tests Operc- Up Gyro Sands ~ 20,000 PTD

\*As at 30 June 2016; Source : Collarini and Associates report  
Dated 20 July 2016; refer BYE ASX release 25/7/2016

\*\*Bivouac Peak is subject to farm-in by Otto Energy (ASC: OEL)  
and Metgasco Energy LTD. (ASX: MEL). Byron's final Net  
Revenue Interest will be adjusted to reflect that change when  
the farm-in interest is earned through drilling.

## Far Offset Stack



# BIVOUAC PEAK Development Plan

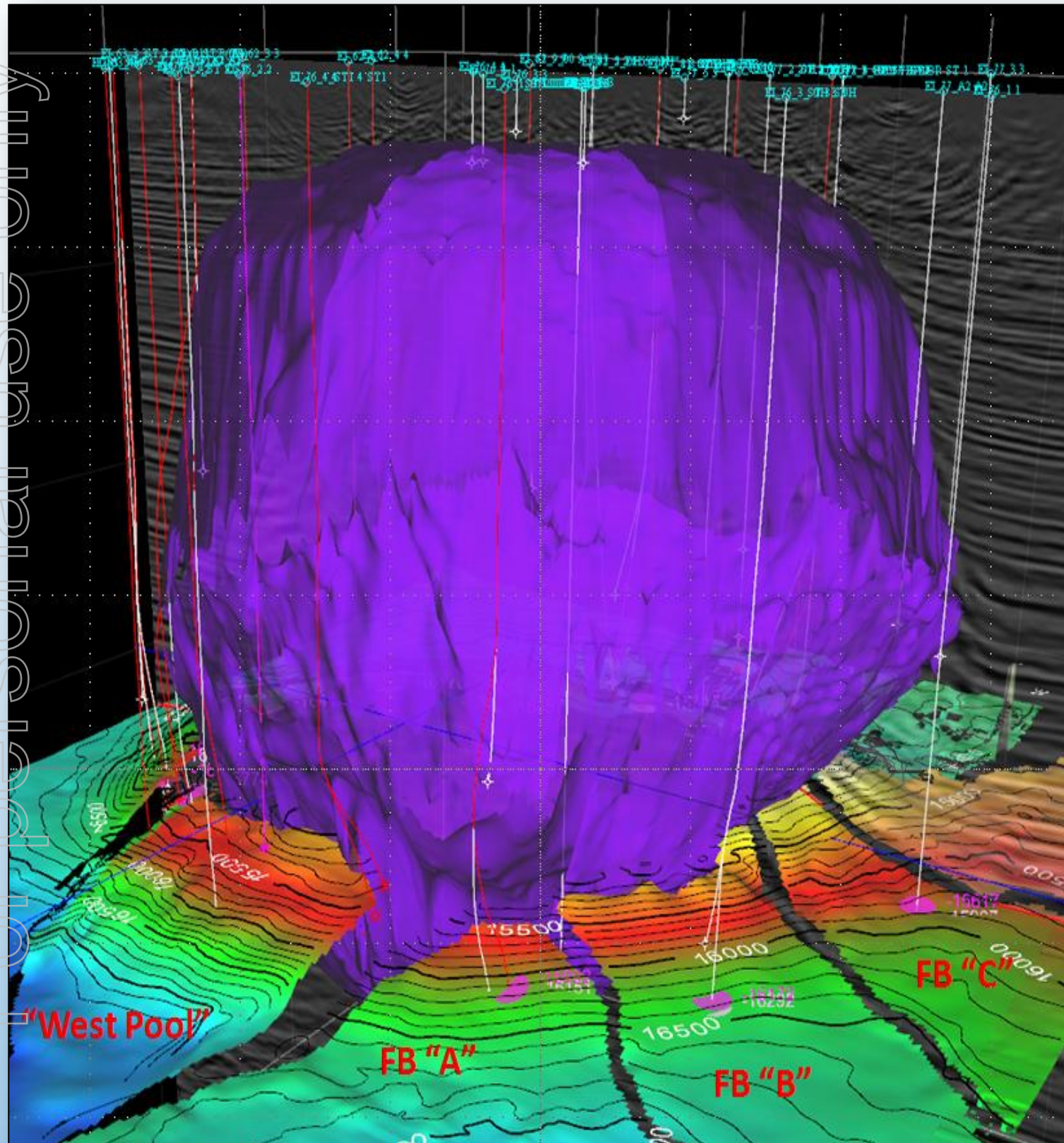


## Bivouac Peak Drilling and Development

Initial Well Costs*	\$8.5 m Gross Dry Hole to joint venture *
	Byron Share \$2.5 m for 45% Working Interest*
	<i>Byron Share \$1.4 m for 35% Working Interest*</i>
Development Scenario	Case and suspend initial well for future production
	Barge mounted surface production facility
	Tie in to nearby existing oil and gas trunk pipelines
Initial Production Rate	18,000 Mcfpd + 1,800 bopd (gross)
Timeframe	Commence production within 12 months of drilling initial test well
Further potential	Further opportunities within the Bivouac Peak lease would then be pursued by the joint venture

*\*Bivouac Peak is subject to farm-in by Otto energy (ASX: OEL) and Metgasco Energy LTD. (ASX: MEL). Byron’s final Net Revenue Interest will be adjusted to reflect that change when the farm-in interest is earned through drilling*

# Future Potential: Eugene Island 63/76



- High quality, large potential gas and gas condensate prospects in shallow water ready for permitting
- Supported by proprietary Reverse Time Migrated 3D seismic data
- Prospects lie updip to older, watered out producing wells or updip to wells with high quality wet sands at all intervals
- Stacked objectives:
  - 6-8 prospective sand targets per well
  - High initial rates from excellent reservoirs
- Potential multi well development across both blocks
- Project Reserve Potential Net to Byron\*
- PR      7112 Mbo      171 Bcf      35,612 MBOE

*\*As at 30 June 2016; Source : Collarini and Associates report  
Dated 20 July 2016; refer BYE ASX release 25/7/2016*

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# Defined Terms

## Defined Reserves and Resources Terms

“BBl” or “Bbl” means barrel

“bo” means barrels of oil

“boe” means barrels of oil equivalent and have been calculated using liquid volumes of oil and condensate and treated volumes of gas converted using a ratio of 6 MSCF to 1bbl oil equivalent, unless otherwise stated

“cf” means standard cubic feet

“M” or “m” prefix means thousand

“MM” or “mm” prefix means million

“B”, “b” prefix means billion

“pd” or “/d” suffix means per day

## Other defined Terms

“\$” or “US\$” means United States (US) dollars, unless otherwise stated

“NRI” means net revenue interest within leases

“WI” means working interest within leases

“NPW” net present worth