

# SUN resources z

## **INVESTOR PRESENTATION**

## BOWSPRIT PROJECT CONVENTIONAL OIL DEVELOPMENT: OFFSHORE LOUISIANA

Alex Parks Managing Director and CEO

April 2018

## **Executive Summary**



#### Focus on Gulf of Mexico Conventional Oil

- Sun has made a strategic shift to development of oil reserves in a neglected portion of Gulf of Mexico with Joint Venture "JV" participant Pinnacle Exploration Pte Ltd "Pinnacle"
- Sun secured a 50% working interest in 1,154 acres leased in Breton Sound Area, inland shallow waters offshore Louisiana 70km southeast of New Orleans

#### The Bowsprit Lease

- Lease contains a field first developed by Shell in the 1960s for deep gas (450ft column)
- Oil & gas has been proven to flow from shallower oil zones but was sub commercial to fully develop in 1960s
- The field is a re-development project with proven, conventional, good quality reservoir, light-sweet oil
- Minimum economic field size is ~0.5MMbbls
- The Conceptual Development plan assumes (gross) 2.5MMbbls of oil from 5 wells, with a Breakeven oil price of ~US\$30/bbl.
- Sun's net (50%) 2C Contingent Resources is independently estimated by RISC as 0.5MMboe (0.38MMbbls + 0.42Bscf)
- Suns net (50%) (Best Case) Prospective Resources (unrisked) independently estimated by RISC as (1MMboe) (0.86MMbbls + 0.83Bscf)
- RISC modelled a 1,200ft Horizontal Bowsprit well at IP of 2,000bopd and an EUR of 670,000 bbls
- Cost for a **horizontal well only US\$3.25 million**, substantially to be funded via farm out.
- To prove the field potential, JV is targeting drilling appraisal well in Q4 2018
- Full field development and first oil in 2019.



#### Capital Structure: As at 1 April 2018

ASX code	SUR
Ordinary shares on issue	756m
Listed options (A\$0.01) exp. 19 October 2020	393.8m
Listed options (A\$0.06) exp. 31 May 2019	192.09m
Unlisted options (A\$0.0375)	2.7m
Share price as at 1 April 2018	A\$0.007
Market capitalisation (@ A\$0.007)	A\$5.3m
Cash at 31 December 2017	A\$653k

#### **Top Five Shareholders: As at 1 April 2018**

Total	33.92%
Bellarine Gold P.L	3.07%
Winform Nominees P/L	3.27%
Mrs Noreen McColl	3.30%
CM Super Fund P/L	4.49%
Fast Lane Aust. P/L	19.79%

Note: The top 20 shareholders, including Board, hold 59.92% of shares currently on issue.

#### Share Price History: As at a 27 March 2018



#### **Board of Directors**

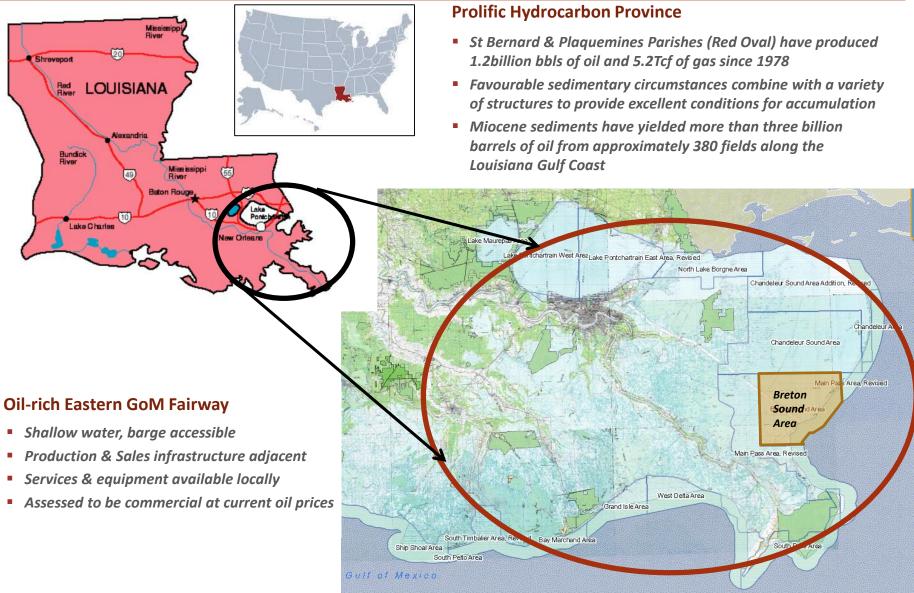
Mr Ian McCubbing	Non-Executive Director, Chairman
Mr Alex Parks	Managing Director & Chief Executive Office
Mr William Bloking	Non-Executive Director

#### **Convertible Note**

Sun has a convertible note with Winform Nominees P/L (a subsidiary of Hancock Prospecting) for \$1million plus interest. The loan is repayable out of future production from Bowsprit by 31 March 2021

### Focus Area - Breton Sound, Louisiana



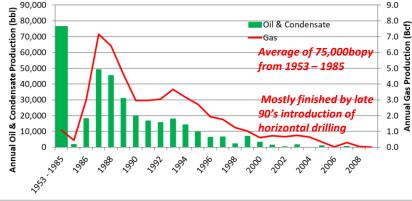


## **Breton Sound – Bowsprit Project**



#### **Bowsprit Lease in Gulf of Mexico**

- Located offshore Louisiana, 70km southeast of New Orleans
- Prolific hydrocarbon province neglected since 1990's
- In Breton Sound area which has produced over 134 MMbbls and 650BCF between 1950 to 1998 from hundreds of wells
- Favourable fiscal regime, shallow water, low cost, highly serviced area
- No work commitment on 3 year lease



Breton Sound Block 1- Oil & Gas Annual Production 1953 - 2009

#### 50/50 Sun and Pinnacle JV – Bowsprit Lease History

Breton Sound Block 1 - Oil & Gas Annual Production 1953-2009

- Shell discovered deep field in 1955
- Produced gas & condensate for 25+ years from deeper zones
- 1Bscf & 75k bbls of oil produced from 7,200' & 7,400' sand from vertical wells
- Stacked zones with up to 55' feet of oil column in target sand, in < 4m of water and close to infrastructure
- Extensive existing infrastructure, ready offtake arrangements and low unmanned operating costs
- Sands are thin for vertical offshore wells but horizontal wells should increase IP's and EUR's to commercial volumes
- Horizontal well in nearby analogous field was production tested at 1,500bopd. RISC modelled a 1,200ft horizontal crestal well in Bowsprit capable of IP of 2,000bopd and EUR of 650,000bbls (Ref ASX release 5 April 2018)
- Up to 5 horizontal wells to be drilled into main target sand at 7,400 ft, constrained to an average IP of ~1,000bopd to extend field life
- Secondary potential in undeveloped shallower oil reservoirs.



RISC Advisory Ltd has probabilistically estimated the following contingent and prospective resources for the Bowsprit Project as of 15 March 2018:

RISC's independent estimate of resources net to Sun's 50% working interest within polygon of held leases at 15 March 2018.

	Contingent Resources											
Sand	1C	2C	3C	Units								
7,200′	0.07	0.21	0.38	Bscf								
7,400′	0.04	0.38	0.85	MMbbls								
7,400' Associated Gas	0.04	0.42	0.95	Bscf								

Contingent on appraisal well confirming horizontal well deliverability at commercial rates

	Unr	Unrisked Prospective Resources											
Sand	Low	Best	High	Units									
7,400' Deep	0.05	0.86	3.04	MMbbls									
7,400' Deep	0.05	0.83	4.44	Bscf									
associated Gas													

Contingent on appraisal well confirming "resistivity kick" on logs is actually moveable oil

RISC assesses the chance of success for the prospective resources as 20% (1 in 5)

Due to the old data set, RISC have assumed a wide range of parameters, that will narrow dramatically once an appraisal well is drilled

See ASX Release of 5 April 2018 for the full Initial Resource Assessment disclosure and Cautionary Statements

#### Sun's Conceptual Field Development Plan

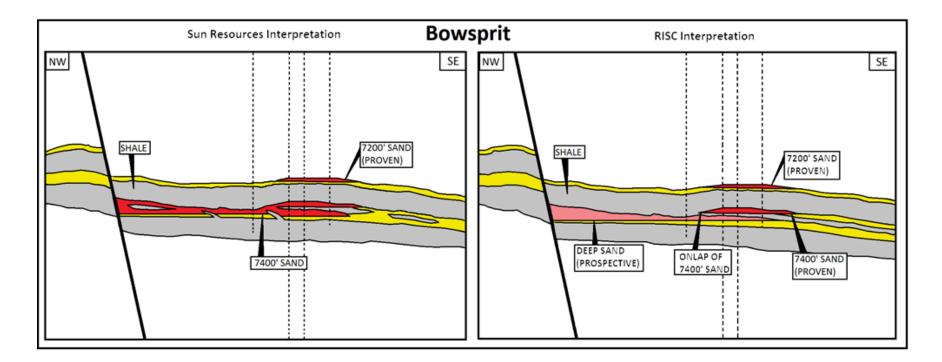
- An appraisal well is planned for Q4 2018 to:
  - Establish the Prospective Resources are present and moveable (Sun interprets oil on logs)
  - A Horizontal section will be drilled and flow tested to prove deliverability of Contingent Resources
- Subject to results of the appraisal well Sun estimates approximately 2.5MMbbls of Oil and 3.5Bscf of Gas may be produced from 5 horizontal development wells with a breakeven oil price of ~US\$25-30/bbl

## **Bowsprit Cross Section**



#### Field schematic and alternative interpretations

- The Bowsprit Field is covered by high quality 3D seismic, it has an area of approximately 1,000 acres (4km<sup>2</sup>)
- The gas in the 7,200' sand stands out on seismic and conforms to structure. The 7,200' sand is juxtaposed against the 7,400' sand to the north of the fault and appears to be water saturated beneath the gas.
- The 7,400' sand contains moveable oil (57,800bbls produced ) and appears to juxtapose against a thick shale to the north of the fault.
- *RISC separate the 7,400' into two sands. Sun interprets it as one zone with interbedded sand and shales.*

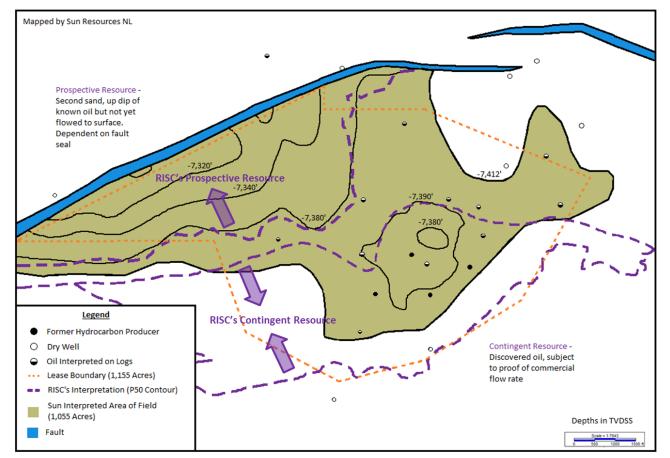


## **Bowsprit Top Structure Map**



#### Map and Area of Contingent Resources, Prospective Resources and Suns Top Structure Map

- Sun maps a package of sands under the 200ft thick shale that separates the 7,200' and 7,400' zones.
- RISC maps an onlap (7,400' sand) and underlying deeper sand (7,400' deep)
- Overall the mid case volumetric estimates are similar
- Sun and Pinnacle acquired lease extension in March 2018 to cover the drillable area of the field.





RISC Advisory Ltd has probabilistically estimated the following STOIIP & GIIP for the Bowsprit Project as of 15 March 2018:

	Potential I	Hydrocarbons Ini	tially in Place		
Sand	P90	P50	P10	Units	Status
7,200′	1.47	1.89	2.37	Bscf	<b>Proven in Place</b> Flowed 18,000bbls and 1Bscf in 1960's
7,400'	0.7	0.7 5.01		MMbbls	<b>Proven in Place</b> Flowed 57,700bbls in 1960's
7,400' Deep	0.99	11.8	49.00	MMbbls	<b>Prospective</b> Possible separate sand unit. Up dip of know (flowed) oil, resistivity on logs, but not yet flowed to surface

**Cautionary Statement – See ASX release 5 April 2018 for detailed Initial Resource Assessment and full cautionary Statements** RISC assesses the chance of success for the prospective resources as 20% (1 in 5)

#### **Recovery Factor**

- *RISC constructed a simple simulation model of the field and concluded a horizontal well placed crestally in the field could produce at initial rates of 2,000bopd and expect an EUR of approximately 650,000 bbls of oil.*
- RISC has assumed a Recovery Factor of 15% to 25% of the Field STOIIP assuming full field development.
- Subject to confirmation of well deliverability RISC estimates P50 EUR for 7,400' sand (whole Structure) as 0.97MMbbls + gas
- Subject to Prospective Resources being present and moveable RISC estimates P50 EUR for 7,400' Deep sand (whole Structure) as 2.33MMbbls + gas

#### Deterministic Planning Case

• SUN Deterministic Case – Sun's Best Case map used for development planning has a STOIIP of 12.5MMbbls and 2.5MMbbls (20%) recoverable.

## **Bowsprit Development Plan Progress**

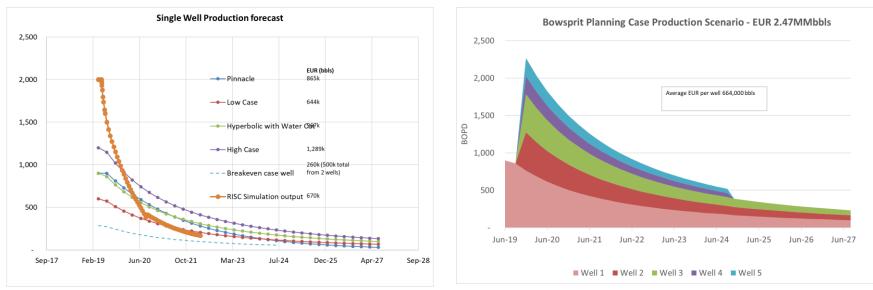


#### Implementation Team Appointed

- Louisiana based FensterMaker have been appointed to survey & permit the well and facility site location.
- Louisiana based Brammer Engineering have been appointed to implement the project
  - Provided Pre- AFE well cost estimates, CAPEX and OPEX estimates based on local experience
  - Is to provide (in conjunction with Sun), detailed well engineering, rig selection and well drilling management
  - Is to provide facilities design and installation management
  - Potential future sub-contract Field Operator and HS&E services

#### Well and Field Production Forecasting

- Sun / Pinnacle & RISC have independently predicted single well production forecasts for a range of scenarios
- A field forecast has been assumed for a combination of well types for economic modelling to give an average EUR of ~650,000bbls/ well and field recovery of 2.5MMbbls



## **The Project – Field Development Plan**



#### **Conceptual Field Development Plan**

#### 2.5MMbbls & 3Bscf of associated gas is produced

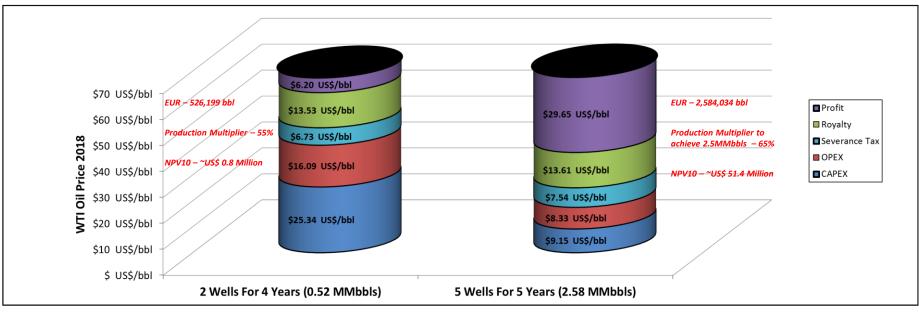
- 5 horizontal wells
- Unmanned production facility
- 2.5km parallel export pipelines to tie in point
- OPEX ~US\$1.8 million per annum for 5 Years
- Royalty payable to State of Louisiana
- Severance Tax

US\$ 15.25 Million	Brammer Engineering (pre AFE)
US\$ 4.5 Million installed	Checked by Brammer
US\$ 0.6 Million installed	Brammer Engineering (pre AFE)
US\$ 9.00 Million	Checked by Brammer
21%	
12.5% after cost recovery	

Source

#### \*Assumed export Tariff of ~US\$3/bbl offset by anticipated premium to WTI

#### As most costs are essentially fixed – the more oil produced the higher the profit margin



### Fit for Purpose, Low Cost Development Options





Shallow-draft barge Drilling rig

Suspended well with protection cage

**Typical Production Facility** 



Storage tanks with walk way to well head

## **Schedule to First Oil**



August 2017 March 2018 April 2018 - September 2018 April 2018 - September 2018 Cotober 2018 November 2018 – March 19 Feb 2019 CQ2 2019 June 2018 – October 2018 Award of Bowsprit Lease - triggers Sun and Pinnacle JV, JOA Award of Second Lease & Resource Certification Announcement Bowsprit Development planning and farm-out of first well Well permitting and rig selection **Drilling well 1** Facilities - selection, permitting, & installation Commence follow up development drilling 2-4 wells Facilities commissioning & **First Oil** Data purchase, technical review of follow up acreage (3-4 months) Lease nomination, bid and award (3-4 months) Work up and Farm out



						2	018							2019							
Program of Work	January	February	March	April	May	June	July	August	Septemb	oer October	November	December	January	February	March	April	May	June	July	August	
FIRST LEASE																					
2nd Lease (Extension) awarded over Bowsprit																					
Seismic interpretation																					
Independent Resource Report																					
3D Model																					
Farm out																					
Drilling planning																					
Well trajectory planning																					
Location surveys and permitting																					
Equipment identification and contracting																					
Rig selection and contract negotiation																					
Ancillary services identified and contracted																					
Risk assessment and responses developed																					
Appraisal Results interp and Refine Dev Planning																					
Permitting completed																					
Contract Rig																					
Rig mobilisation																					
Drilling Appraisal Well																					
Development Drilling																					
Pipeline																					
Commision Facilities																					
Potential first oil																					
Hurricane Season																					

## Sun's Growth Plan



Domestic US Companies are focused on capital intensive "harvest" of unconventional oil leaving a rich plethora of conventional opportunities in shallow water GOM with minimal competition

Over a multi-year period of working the shallow water east of New Orleans, Sun's coventurer Pinnacle has identified other potentially undeveloped oil accumulations that offer a reasonable probability of commerciality and form the basis for a regional focus strategy, with near term production and running room / upside

#### Foundation Asset – Bowsprit Lease (Sun 50%)

- Primary field on known accumulation with redevelopment potential
- 3D modelling and visualization, development plan work up and farm out to (partially) fund development drilling
- Drill & flow test to prove commercial rates
- Install production facilities produce first oil 2-4 further development wells
- Sun's prime focus will be on progressing Bowsprit to production ASAP

#### Expansion - Concurrently identify and secure follow up Projects 2/3/4 (Sun 75%)

- Data purchase and detailed work up of opportunities, development and appraisal concepts
- Nominate and secure acreage
- Detailed planning and desk top work, FEED etc
- Fund development planning from Bowsprit cashflow and farm out to fund drilling / development

#### Long Term Growth

- Identify new exploration to acquire in the area and use new, cable-less 3D Seismic to identify deeper fields.
- Use Quantitive Seismic Interpretation techniques on areas never before covered by high resolution 3D Seismic

## **JV Participants**



Pinnacle Exploration Pte. Ltd. ("Pinnacle") is a private, upstream oil and gas company incorporated in Singapore. Pinnacle's focus and expertise is the shallow water, oil and gas projects in the prolific Salt Dome Basin, Gulf of Mexico.

The Sun and Pinnacle Boards are well known to each other as former colleagues and anticipate a highly functioning Joint Venture. The Companies have executed a MoU, to jointly acquire and develop projects offshore Louisiana.

In accordance with the MoU, Sun carried Pinnacle through leasing costs for Bowspirt, at 50/50. In subsequent projects Sun will hold 75% WI and carry Pinnacle in leasing costs for 2 years. Carry does not include any drilling or operations. Sun has subscribed to a strategic shareholding in Pinnacle in exchange for ~A\$200,000. The project selection and management will be a collaborative effort between Sun and Pinnacle.



## **IMPORTANT INFORMATION - DISCLAIMER**



This presentation has been prepared by Sun Resources NL ("Sun") for the purpose of providing a company and technical overview to interested parties to enable recipients to review the business activities of Sun. This presentation is limited in scope and is not intended to provide all available information regarding Sun. This presentation is not intended, and does not constitute an offer, invitation, solicitation or recommendation with respect to the purchase or sale of any securities in any jurisdiction, and should not be relied upon as a representation of any matter that a potential investor should consider in evaluating Sun. Any statements, opinions, projections forecasts or other material contained in this document do not constitute any commitments, representations or warranties by Sun Resources NL or its directors, agents and employees. Except as required by law Sun Resources NL shall in no way be liable to any person or body for any loss, claim, or in connection with, the information contained in the document.

**Cautionary Statement** This presentation was prepared with due care and attention and the information contained herein is, to the best of Sun Resources NL's (Sun) knowledge, current as at the date of this presentation. This document includes certain statements, opinions, projections, forecasts and other material, which reflect various assumptions. The assumptions may or may not prove to be correct. Statements contained in this presentation, including but not limited to those regarding the possible or assumed future costs, performance, dividends, returns, production levels or rates, oil and gas prices, reserves, potential growth of Sun Resources NL, industry growth or other projections and any estimated company earnings are or may be forward looking statements. Such statements relate to future events and expectations and as such involve known and unknown risk and uncertainties, many of which are outside the control of Sun Resources NL. Actual results, actions and developments may differ materially from those expressed or implied by the statements in this presentation. All forward-looking statements or estimates are not guarantees of future performance and accordingly, investors are cautioned not to rely on forward-looking statements or estimates due to their inherent uncertainty therein.

Recipients of the document must make their own independent investigations, consideration and evaluation. By accepting this document, the recipient agrees that if it proceeds further with its investigations, consideration or evaluation of investing in the company it shall make and rely solely upon its own investigations and inquiries and will not in any way rely upon the document. None of the information in this presentation can be reproduced without the permission of Sun Resources NL. Sun Resources NL recommends that potential investors consult their professional advisor/s as an investment in the company is considered to be speculative in nature. Nothing in this presentation should be construed as financial advice, whether personal or general, for the purposes of section 766B of the Corporations Act 2001. This presentation consists purely of factual information and does not involve or imply a recommendation of a statement of opinion in respect of whether to buy, sell or hold a financial product. This presentation does not take into account the objectives, financial situation or needs of any person, and independent personal advice should be obtained. The views expressed in this release contain information that has been derived from publicly available sources that have not been independently verified. No representation or warranty is made as to the accuracy completeness or reliability of the information. This information should not be relied upon as a recommendation or forecast by Sun.

Any offering or solicitation to investors in the United States of America will be made only to qualified prospective investors pursuant to a prospectus or offering memorandum, each of which should be read in its entirety. To the extent applicable, any placement of securities will only be available to parties who are "accredited investors" (as defined in Rule 501 promulgated pursuant to the Securities Act 1933, as amended) and who are interested in investing in the securities on their own behalf.

Neither the information in this presentation nor any other document relating to this presentation has been delivered for approval to the Financial Conduct Authority in the United Kingdom and no prospectus (within the meaning of section 85 of the Financial Services and Markets Act 2000, as amended ("FSMA")) has been published or is intended to be published. This presentation is issued on a confidential basis to "qualified investors" (within the meaning of section 86(7) of FSMA) in the United Kingdom. This document should not be distributed, published or reproduced, in whole or in part, nor may its contents be disclosed by recipients to any other person in the United Kingdom.

**Competent Person** - All of the technical information, including information in relation to reserves and resources that is contained in this document has been reviewed internally by the Company's Director, Mr Alexander Parks. Mr Parks is a Petroleum Engineer who is a suitably qualified person with over 20 years' experience in assessing hydrocarbon reserves and has reviewed the release and consents to the inclusion of the technical information.





ABN 69 009 196 810 Level 2, 30 Richardson Street, West Perth WA 6005 Telephone: +61 8 9321 9886 Facsimile: +61 8 9321 8161 Email: admin@sunres.com.au Website: www.sunres.com.au

#### **For further Information**

Media and Investor Enquiries Mr Alex Parks (Managing Director and CEO) Email: alex@sunres.com.au

#### **Administration Enquiries**

Miss Sheree Pedersen (Office Manager) Email: sheree@sunres.com.au