

## WA-31-L Cliff Head Contingent Resource Update

- **Cliff Head Renewal Project has defined multiple opportunities that are progressing to December 2019 investment decisions**
- **Potential change in production and asset life economic extension to past 2030**
- **Driving toward significant production uplift and revenue**

The Board of Triangle Energy (Global) Limited (**ASX:TEG**) (**Triangle, the Company**) provides the following update on its Cliff Head Oil Field (**Cliff Head**) operations located in the Perth Basin approximately 270 kilometres north of Perth in Western Australia.

Throughout 2019, work has been progressing to identify opportunities to transform production rates and economic life at Cliff Head (**Cliff Head Renewal Project**).

The Company has enjoyed stable production from the Cliff Head field for several months at around 800 BOPD from 4 producing wells with a facility uptime in excess of 98%. The fifth producing well, CH13, is awaiting a replacement ESP and expected to be brought back online in November returning production to approximately 1,000 BOPD.

The Company has been progressing several opportunities within and near the Cliff Head field to enhance production, thereby extending the economic life of the offshore Cliff Head platform, and onshore Arrowsmith Oil Stabilisation Plant.

Several drilling and workover opportunities in the Cliff Head area have matured to Contingent Resources. Final Investment Decisions (**FID**) for these opportunities is planned for December 2019. Subject to FID and development drilling success, these opportunities will provide new production streams and represents a step change to oil production rates at Cliff Head. Upon FID, it is intended that the contingent resource will be classed as reserves for the Cliff Head field.

Contingent and Prospective Resources are tabulated below.

Cliff Head							
Gross Contingent Resources				Net TEG 78.75% Contingent Resources			
(MMstb Oil)	1C	2C	3C	(MMstb Oil)	1C	2C	3C
CH11 Recompletion	0.13	0.28	0.85	CH11 Recompletion	0.10	0.22	0.67
SE Nose	0.86	1.43	2.4	SE Nose	0.68	1.13	1.89
West High	0	1.42	1.95	West High	0.00	1.12	1.54
West Flank	0	0.79	1.14	West Flank	0.00	0.62	0.90
CH13 Attic		0.51		CH13 Attic		0.40	
East Horst K Sand		0.36		East Horst K Sand		0.28	
				<b>Total TEG Share</b>		<b>3.77</b>	
Gross Prospective Resources**				Net TEG 78.75% Prospective Resources**			
(MMstb Oil)	Low	Best	High	(MMstb Oil)	Low	Best	High
Cliff Head				Cliff Head (78.75% TEG share)			
Mentelle Updip	0.3	3.3	10	Mentelle Updip	0.24	2.60	7.88
South Cliff Head		3		South Cliff Head		2.36	
				<b>Total TEG Share</b>		<b>4.96</b>	

**Table 1 Contingent and Prospective Resources**

*\*\*The estimated quantities of petroleum that may potentially be recovered by the application of future development projects 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.*

## Cliff Head Renewal Project

### West High and SE Nose to progress to FID

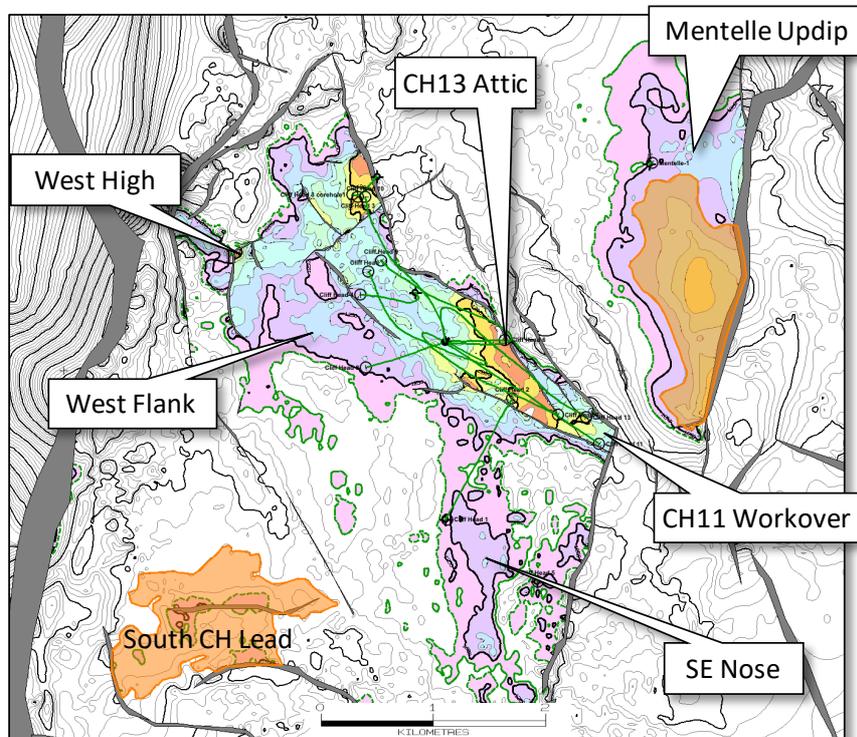
The Company previously announced initial results from static modelling and geological interpretation of Cliff Head field that identified several opportunities (ASX announcement 2 July 2018) and Prospective Resources for several near field features in July 2018 (ASX announcement 10 July 2018).

Over 2019, these opportunities have been further refined. An update of the geological model for the field in advance of the final dynamic modelling is now complete and a dynamic model update is about to commence.

From the geomodel update, previously identified Prospective Resources warrant progression to Contingent Resources at SE Nose (previously referred to as Area A3: NFE South East – ASX announcement 10 July 2018) and West High (previously referred to as Area A1: NFE West – see ASX announcement 10 July 2018). Both opportunities are attractive targets for new wells and will be thoroughly assessed with the dynamic model and evaluated for drilling. Final investment decisions are expected to be made in December 2019. Drilling will follow on Q4 2020/Q1 2021 allowing for planning and approval lead times.

West High is an undrilled culmination of the Cliff Head structure that appears to extend the field. A development well for West High can be drilled from the Cliff Head platform. This opportunity is assessed to have 2C Contingent Resources of 1.42 MMstb (gross). Potential production profiles and final resources will be evaluated with the dynamic model. Early assessment of the drilling strategy and expenditure has provided confidence of the robust economic associated with West High. This work will be refined further leading to an investment decision in December.

SE Nose is a broad, low relief culmination immediately updip of the Cliff Head-1 discovery well. This opportunity can also be developed by a single horizontal well from Cliff Head platform. Potential production profiles and final resources will be evaluated with the dynamic model and a drilling strategy and capex defined during 2H 2019 also leading to an investment decision in December. Early assessment of the drilling strategy and expenditure has provided confidence of the robust economic associated with SE Nose.



**Cliff Head area structure map**

### **Multiple bypassed oil and infill opportunities identified**

Several bypassed and infill oil opportunities have been identified within Cliff Head field and also are being matured for development. These include the shut-in of water injection at Cliff Head followed by the upward recompletion of this well as an oil producer from an upper oil zone, potential attic /bypassed oil at the eastern extent of the field updip of Cliff Head 13. Infill opportunities at the deeper IRCM K previously reported in July 2018 continue to be assessed.

The conversion of the Cliff Head 11 well to an oil producer is the most mature and highest priority of the infill opportunities under review. It potentially provides an additional production stream at relatively low cost. An investment decision for the workover is planned for November 2019, allowing for planning and procurement lead times, execution of the workover is expected in Q4 2020.



## Notes Regarding Contingent and Prospective Resources

The Contingent Resources for the Cliff Head asset are held under the Production Licence WA-31-L in which Triangle holds a net equity share of 78.75%. Some of these Contingent Resources were previously reported as Prospective Resources (Triangle Energy ASX announcement of 18 July 2018). West High was previously reported as A1(a):NFE West and SE Nose as A3(b): NFE South East. West High and West Flank are interpreted to be a western extension of the main Cliff Head field and nearby the Cliff Head 8 oil column. SE Nose is updip of the Cliff Head-1 oil recovery. The Contingent Resources are based on detailed interpretation of the Cliff Head 3D seismic survey and geological interpretation based on the Cliff Head exploration, appraisal and development wells that were undertaken as part of the 2019 geological modelling update. The CH11, West High, West Flank and SE Nose Contingent Resources were prepared using the probabilistic method and those for CH13 attic and East Horst K sand were prepared using the deterministic method. These Contingent Resources are contingent on further field development studies and economic evaluation.

The Prospective Resources are also held under the Production Licence WA-31-L in which Triangle holds a net equity share of 78.75%. The Mentelle and Cliff Head South Prospects are based on the interpretation of 2D seismic data and Cliff Head area wells. The Mentelle Prospective Resources were prepared using the probabilistic method and the South Cliff Head Prospective Resources using the deterministic method. The South Cliff Head prospect was previously referred to as A2(a) NFE South. The acquisition of additional seismic data is planned for 2020 and exploration drilling in 2021. They are considered to have a moderate chance of discovery and a high chance of development if exploration drilling is successful development and can be developed through the Cliff Head infrastructure.

Summations of resources, where present, are arithmetic.

The evaluation date for the Contingent Resources and Prospective Resources reported here is 23 August 2019. The Petroleum Resources were prepared in accordance with the SPE-PRMS (2018).

## Qualified Petroleum Reserves and Resources Evaluator Statement

The Contingent Resources and Prospective Resources were prepared by the company's Sub-Surface Manager Mr Matt Fittall, who is a full time employee of Triangle Energy (Global) Limited. Information that relates to the Contingent Resources and Prospective Resources is based on and fairly represents, information and supporting documentation prepared by or under the supervision of Mr Fittall. He has consented to the form and context in which the information that relates to the reserves is presented. Mr Fittall is a Geologist BSc(hons)Geology with more than 30 years' experience, practising in Petroleum Geology. Mr Fittall is a member of the Petroleum Exploration Society of Australia (PESA).

## About Triangle Energy (Global) Ltd

Triangle Energy (Global) Ltd is an ASX listed (ASX:TEG) oil producer and explorer based in Perth, Western Australia. The Company has a 78.75% interest in, and is Operator of, the producing Cliff Head Oil Field, which includes the Arrowsmith Stabilisation Plant. Triangle also has a 50% share of the Mt Horner L7 production licence<sup>1</sup> and a 45% share of the Xanadu-1 Joint Venture, both located in the Perth Basin. Triangle also has a substantial equity interest in State Gas Ltd (ASX:GAS), which has a 80% operating interest in the Reids Dome production licence (PL 231) in Queensland. The Company continues to assess acquisition prospects to expand its portfolio of assets.