

# 31 January 2020

# Activities Report Quarter Ended 31 December 2019

The board is pleased to provide an update on activities in what was an extremely active and highly successful quarter to 31st December 2019.

## **KEY HIGHLIGHTS**

### **COLORADO HELIUM PROJECT**

- Leased acreage grew significantly to 92,443 gross (50,692 net) acres across 11 helium prospects and additional leads, far exceeding internal targets.
- Enterprise and Voyager within 6 miles and interpreted to be analogous to the Model Dome helium field
- 12 soil gas samples within leased acreage contain elevated helium readings
- Offtake discussions initiated with a number of mid-stream suppliers and end users of helium

## **CORPORATE**

- Cash on hand at the end of the quarter was \$1.14million
- \$1.37million was raised (net of costs) from financing activities during the quarter

## **OPERATIONS**

### Helium Project - Colorado, USA

The Company leased aggressively during the quarter reaching a total land position of 92,443 gross (50,692 net) acres across 11 prospects and additional leads in Las Animas, Colorado (up from 5,120 gross and 1,010 net at the end of the September quarter respectively). Big Star now holds a dominant land position in Las Animas County, Colorado including some leases at Enterprise and Voyager within 6 miles of the historical Model Dome helium field.

The Model Dome helium field was discovered in the 1920s and produced for a short period before being strategically acquired by the US Government. It produced gas containing 8% helium and is included in the top 4 highest concentration helium fields produced in the USA. Model Dome's shallow, vertical wells initially produced between 500 and 1,000 mcf/day of raw gas per well.

Geological modelling indicates helium prospectivity analogous to Model Dome in similar nearby structures identified by Big Star. The high-quality Lyons sandstone reservoir, which produced at Model Dome, is interpreted to be broadly distributed

and correlatable across the region, including at Enterprise, Voyager and Big Star's other prospects.

Further to this, elevated helium readings from soil gas samples collected at 12 locations within the Company's lease position confirm an active helium system. These results are consistent with soil gas results at Harley Dome in Utah which has reportedly produced gas at 7% helium concentrations.

Customary due diligence continues with respect to the lease position secured in the December quarter prior to payment of the lease bonus amounts to each lessor. Approximately 38,000 net acres have been confirmed as at the date of this report.

Big Star will continue to add to both its gross and net position over preferred prospects in Las Animas County whilst we complete the technical and well location selection work necessary to progress 5 prospects to drill-ready status.

### **New Ventures - Helium**

The Company continues to actively pursue upstream helium opportunities in accordance with its stated strategy.

# Percy Creek Oil Exploration Project - Wyoming, USA

During the quarter, in order to concentrate its resources on the helium strategy, the Company withdrew from its Farmin and Option Agreement by mutual agreement with the vendor.

# Big Star Project – Texas, USA

During the quarter, production continued from the Simmons well. The Stuart, Esmond and Cline wells did not produce in the quarter and remain shutin.

## **CORPORATE**

During the quarter, the Company raised \$1.37million (after brokerage costs) from the issue of 264,149,010 shares.

Big Star's cash at the end of the December 2019 quarter was approximately \$1.14 million.

### TENEMENT TABLE

Tenements held at the end of the quarter and changes thereof:

Project Name	Acreage held at	Acreage held at the	Acreage acquired
	the beginning of	end of the Quarter	(disposed/lapsed)
	the Quarter		
Held By Production Acreage, Big	80 acres	80 acres	-
Star Project, USA			
Helium Project, Las Animas,	5,120 gross	92,443 gross	87,323 gross
Colorado, USA*	(1,010 net) acres	(50,692 net) acres	(49,682 net) acres

<sup>\*</sup>As announced 19 December 2019

The Board has authorised for this announcement to be given to ASX.

# For further information, please contact:

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## **About Big Star:**

Big Star Energy Ltd (ASX:BNL) is an independent oil and gas exploration and production company, headquartered in Australia, with operations and exploration in North America. Big Star's strategy is to provide its shareholders with exposure to multiple high-value helium projects in North America. For further information please visit the Company's website at <a href="https://www.bigstarenergy.com.au">www.bigstarenergy.com.au</a>

### **About Helium:**

Helium is a unique industrial gas that exhibits characteristics both of a bulk, commodity gas and of a high value specialty gas and is considered a "high tech" strategic element. Due to its unique chemical and physical qualities, helium is a vital element in the manufacture of MRIs and semiconductors and is critical for fibre optic cable manufacturing, hard disc manufacture and cooling, space exploration, rocketry, lifting and high-level science. There is no way of manufacturing helium artificially and most of the world's reserves have been derived as a by-product of the extraction of natural hydrocarbon gas.