

ASX ANNOUNCEMENT

10 June 2022

MAIDEN SERENITY HELIUM WELL

Highlights

- Rig contracted to drill maiden Serenity helium exploration well with planned spud in week commencing 27 June
- Three additional appraisal and development locations approved to follow up on success
- Initial well to test up-dip from historic well with gas interpreted in both the upper and lower Lyons formation
- The Serenity AMI located immediately south of the recently announced discoveries made by Blue Star at Galactica and Pegasus in both the upper and lower Lyons

Blue Star Helium Limited (ASX:BNL) (**Blue Star** or the **Company**) provides an update on the planned drilling of the Sammons 315310C well to test the Serenity prospect. The operator has advised the Company that the rig has been contracted and the well is planned to spud in the week commencing 27 June 2022. The Company has also received the well Authorisation for Expenditure (AFE), prognosis and plan.

The Sammons 315310C well is one of four (4) approved helium wells located in the Area of Mutual Interest (AMI) agreed between Blue Star (50%, non-operated interest), Prospero Oil and Gas LLC (25%, non-operated interest) and Vecta Oil & Gas Ltd (25% operating interest) (refer BNL ASX release dated 22 December 2021). The AMI includes Blue Star's Serenity prospect, located immediately south-east of its Galactica and Pegasus prospects where the Company recently announced three (3) significant discoveries.

Serenity (Sammons 315310C well) Drilling

The Sammons 315310C well is the maiden Serenity helium exploration well and will target the Lyons formation.

The top Lyons formation at the well location is expected to be similar to recent wells drilled at Galactica and Pegasus to the north. The well is planned to TD in gas bearing Lyons reservoir to maximise production upon success. The Company will announce at spud further details surrounding expected timing of drilling operations.

The rig, crew and operational team are the same as those used on Blue Star's three recent discoveries.

Three follow up appraisal and development locations have been approved (see BNL ASX release dated 25 February 2022) with final permits to drill (Form 2) to be submitted upon success at Sammons 315310C well.

Budgeted dry-hole costs for drilling of the Sammons well remain in the order of US\$150,000 net to Blue Star.

Serenity prospect

Blue Star's re-interpretation of offset logs showing gas in the Lyons formation, surface mapping and proprietary gravity and magnetics interpretation highlights the significant potential of Serenity leading to drilling in the first round of exploration.

The Serenity AML contains the historic State #3053-36-4 well where Blue Star has performed wireline log interpretation highlighting gas on logs in both the upper and lower Lyons. The part of the Serenity prospect being tested by the upcoming Sammons well is interpreted to be up-dip and fault separated from the State #3053-36-4 well where gas has been interpreted.

Blue Star also interpreted gas in the Lyons formation on historic logs in the Denton B#1 and Colorado #B-1 wells on the Galactica and Pegasus prospects where recent discoveries confirmed, and significantly extended, the gas interpretation across these prospects (see BNL ASX release dated 17 May 2022).

The Serenity prospect has the potential to significantly increase the Company's resource base. Blue Star's current Las Animas P50 net unrisks prospective helium resource of 13.4 Bcf does not include an estimate for the Serenity prospect (see BNL ASX releases dated 16 November 2020 and 10 June 2021). Upon success and integration of the well data into Blue Star's geologic model Sproule will be engaged to prepare the first independent resource assessment for the Serenity prospect.

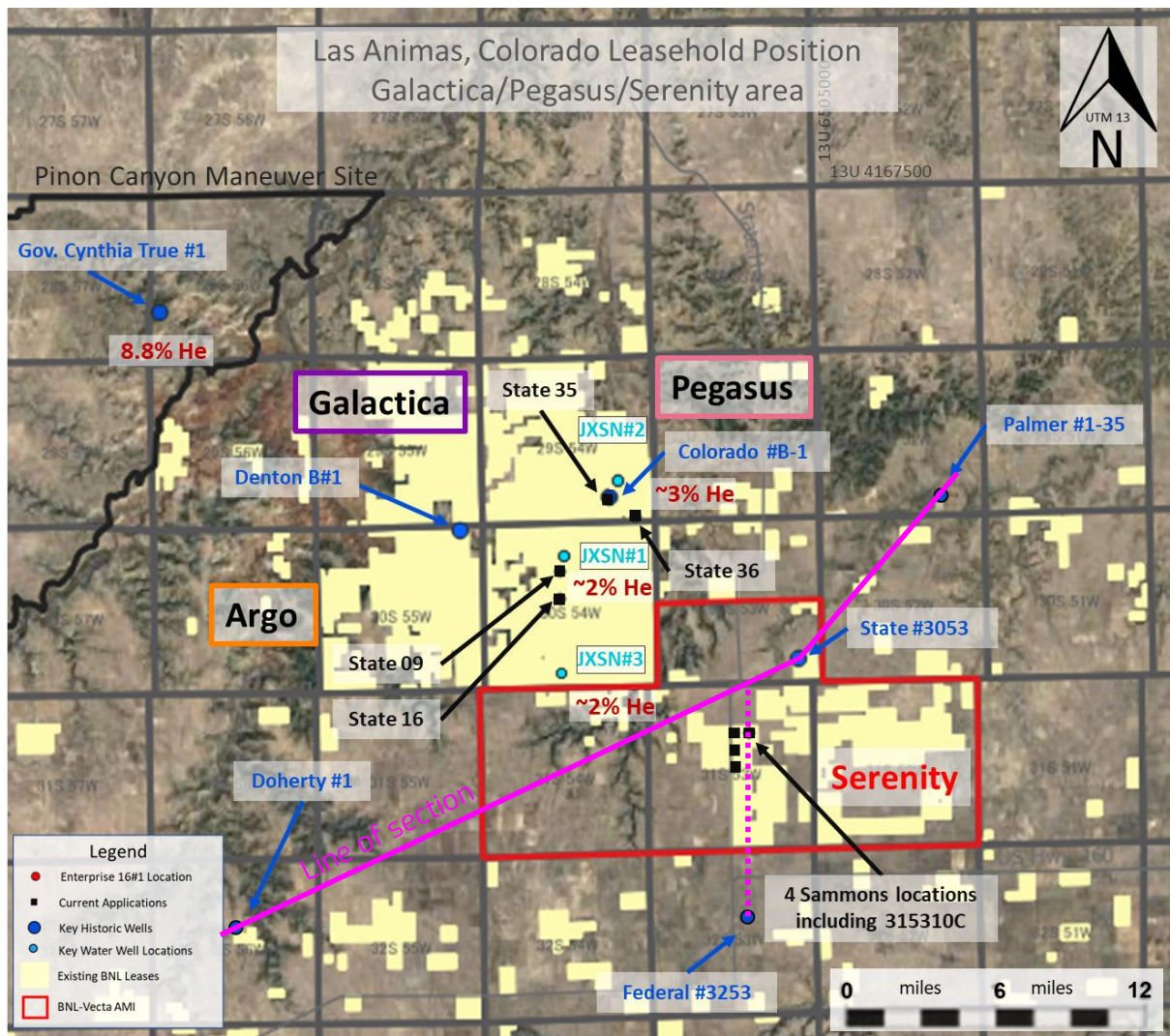


Figure:1 Blue Star's lease holding and key well locations. Line of section shown.

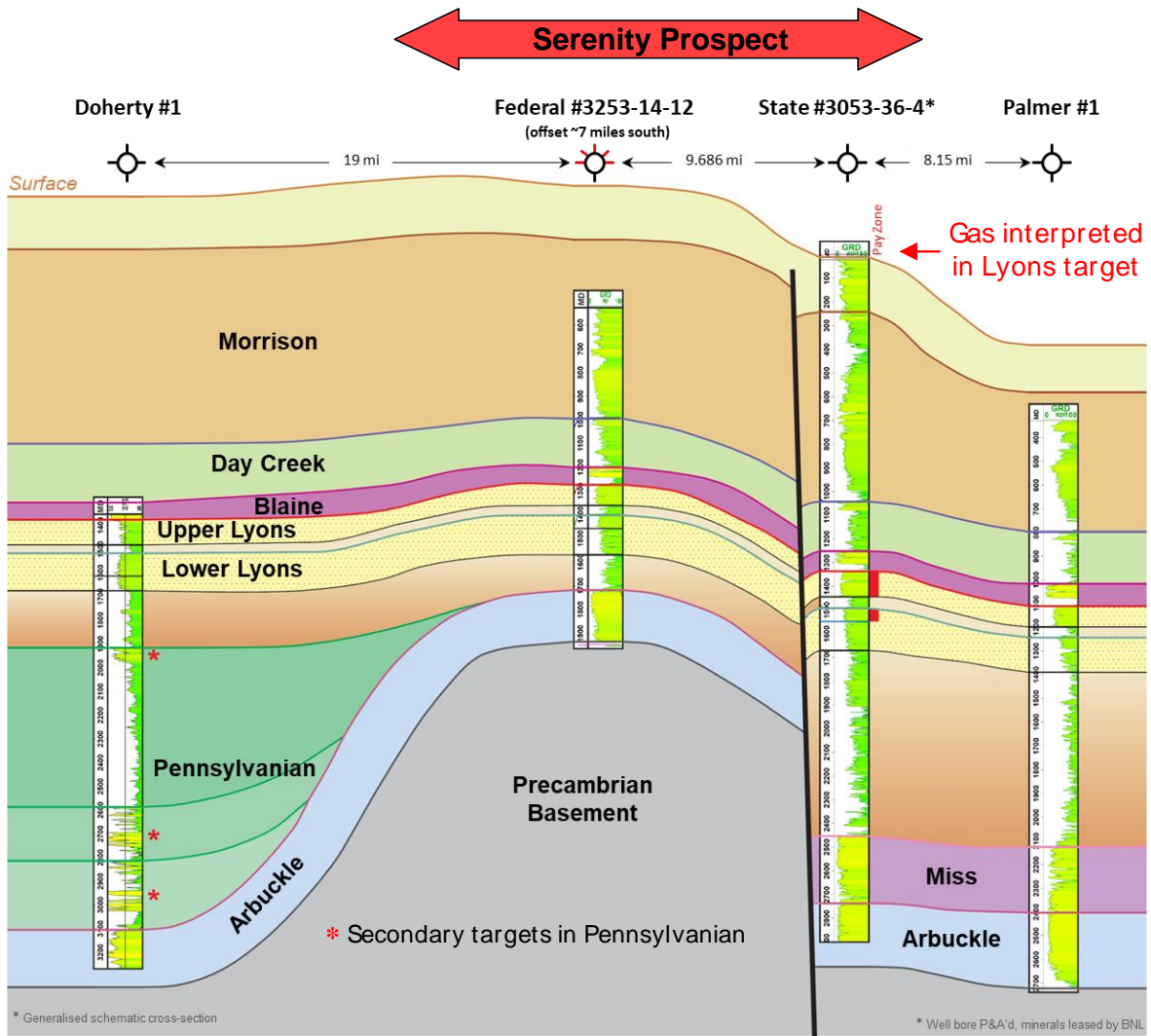


Figure:2 Structural schematic cross section across Serenity prospect, including State #3053-36-4 well with interpreted gas in Lyons formation.

This ASX Announcement has been authorised for release by the Board of Blue Star Helium Limited.

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About Blue Star Helium:

Blue Star Helium Ltd (ASX:BNL OTCQB:BSNLF) is an independent helium exploration and production company, headquartered in Australia, with operations and exploration in North America. Blue Star's strategy is to find and develop new supplies of low cost, high grade helium in North America. For further information please visit the Company's website at www.bluestarhelium.com

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.