

Finding and developing low cost, high grade helium in USA

Corporate Presentation

November 2020

ASX | BNL

BLUE STAR | HELIUM



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The Company owns 4 wells (3 operated) in Dawson County, Texas with minor, non-material production. Various options are under consideration for the disposal of all or part of this asset.

The Board has authorised this announcement to be given to ASX. Security holders and other interested parties can contact Joanne Kendrick, Managing Director at info@bluestarhelium.com.au

Net Recoverable Helium (mmcf)	1U (P90)	2U (P50)	3U (P10)
Enterprise Prospect	372	2,204	5,494
Galileo Prospect	495	1,292	2,329
Total Net Recoverable Helium	867	3,497	7,823

Note 1: The estimated quantities of helium that may potentially be recovered by the application of a future development project 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 helium.

Note 2: The resource estimates have been prepared using the probabilistic method and are presented on an unrisks basis. In a probabilistic resource distribution, 1U (P90), 2U (P50), 3U (P10) estimates represent the 90% probability, 50% probability and 10% probability respectively that the quantity recovered will equal or exceed the estimate assuming a success case in the prospect. Resource totals have been arithmetically added.

Note 3: The resource estimates are reported as at an evaluation date of 1 November 2020.

Note 4: The resource estimates are presented on a net entitlements basis and represent Blue Star's net economic interest in the prospective recoverable helium volumes after deductions for the volume weighted royalty burden in accordance with the methodology described in the Company's announcement of 1 November 2020.

Note 5: The estimates of prospective resources contained in this document are more fully described in the Company's announcement of 16 November 2020. The Company is not aware of any new information or data that materially affects the information included in the announcement of 16 November 2020 and all the material assumptions and technical parameters underpinning the estimates in that announcement continue to apply and have not materially changed.

ONLY HELIUM PURE PLAY ON ASX

- Find and develop low cost, high grade helium resources in USA
- High value commodity with high-tech applications and increasing demand
- Asset locations central to helium supply chain

ASSET BASE

- Circa 177,000 gross (120,000 net) acres
- Proven play fairway, high grade helium (Top-3 historical helium concentration produced in the US)
- Enterprise & Galileo Prospects
 - 3.5 BCF P50 prospective helium resource (independently assessed)
- Galactica, Pegasus prospects
 - Drilling targets ranked on par with Enterprise
 - Independent prospective helium resource assessment imminent
- Leasing continues aggressively to consolidate land over all prospects

DRILLING PLANS

- Minimum of 3 and up to 5 well maiden drilling campaign
 - Test multiple prospects and maximise exposure to prospective resources
- Enterprise well location staked, awaiting approvals
- Assess potential well locations at Galileo, Galactica, Pegasus, Voyager
 - Permitting process on additional wells to be initiated following site visit
 - Approvals expected early 2021 for new locations

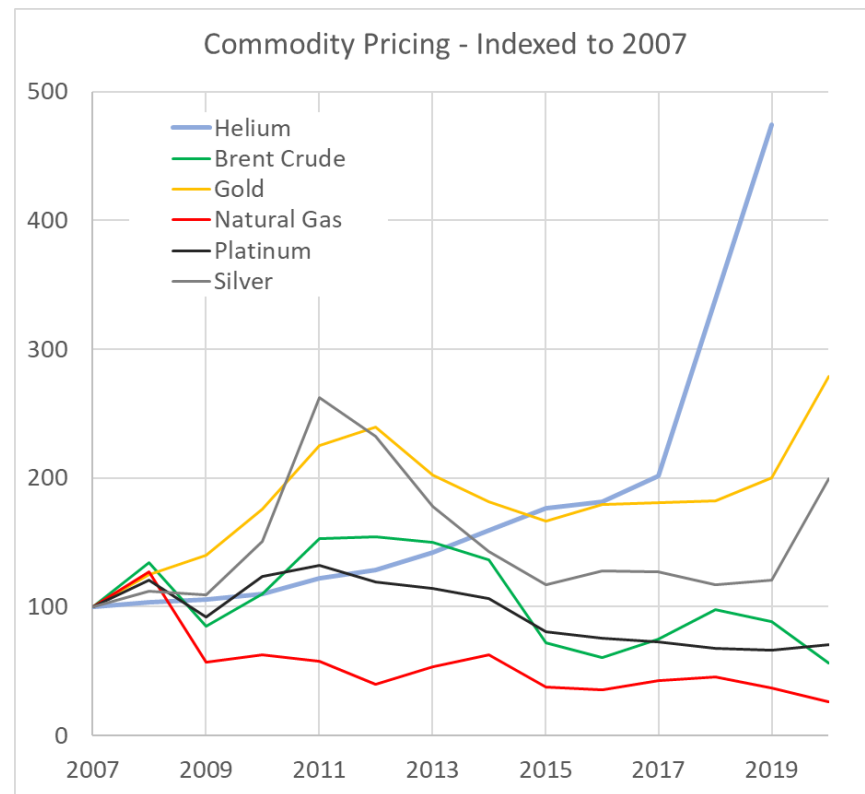


A unique set of physical and chemical properties

- Non-toxic, non-flammable, low-density gas
- Chemically and radiologically inert
- Ultra-cold boiling point (-269°C), stays liquid at absolute zero
- Second most abundant element in the universe (25%)

Finite, irreplaceable and rare on Earth

- Makes up only 0.0005% of Earth's atmosphere
- Light enough to escape Earth's gravitational pull into space
- Generated by the radioactive decay of uranium and thorium
- Accumulates in commercial quantities only in subsurface reservoirs overlain by competent seal
- 45 days storage/transport limit
- Can not be manufactured artificially
- No substitute in most applications

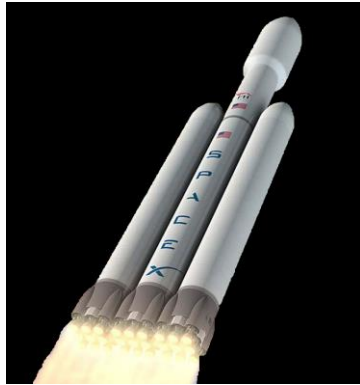


Sources : International Monetary Fund; BLM

■ Healthcare ■ Electronics & Semiconductors ■ Aerospace ■ Defense ■ Energy & Power ■ Others



NETFLIX



Healthcare

- MRI machines – growing at 6%/year
- Heliox mixtures in respiratory treatments

Electronics and Semi-conductors

- Fibre optics, LCD panels
- Computer hard drives and servers

Aerospace and Aircraft

- Rocket propulsion and fuel systems
- Lifting hybrid airships

Defence

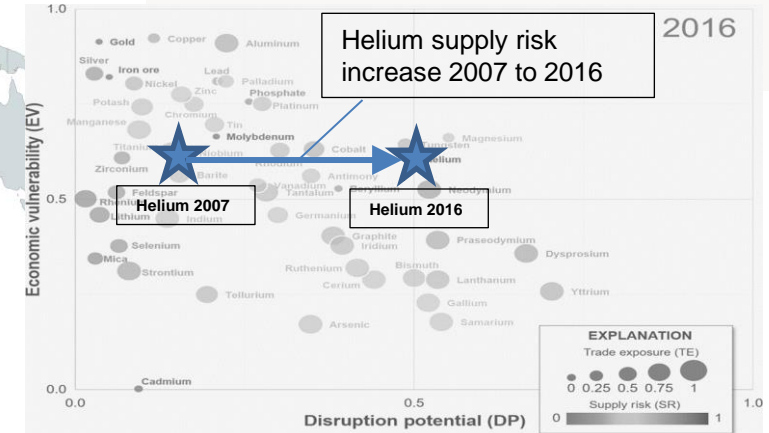
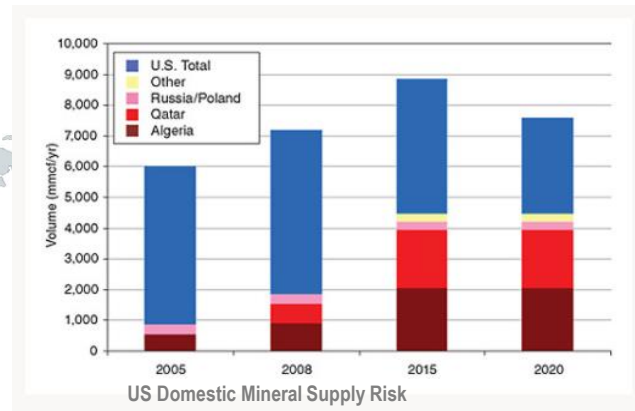
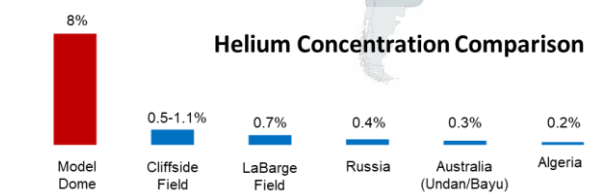
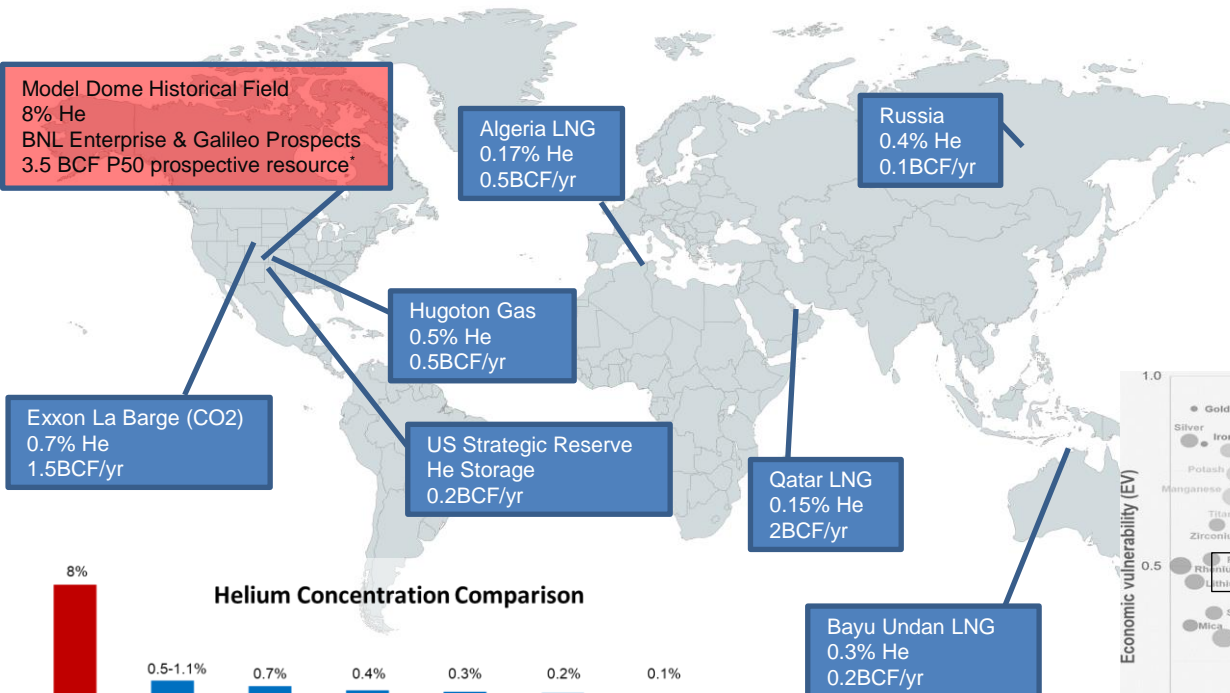
- Missile propulsion systems
- High-end thermographic cameras
- Navy submarine detectors

High-end Science

- Hadron Energy Collider
- Quantum research

More...

HELIUM GLOBAL SUPPLY



Sources : USGS; Edison Research; Kornbluth; National Academy of Sciences

* The estimate of prospective helium resources must be read in conjunction with the cautionary statement on page 2 that the estimated quantities of helium that may potentially be recovered by the application of a future development project 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 helium.

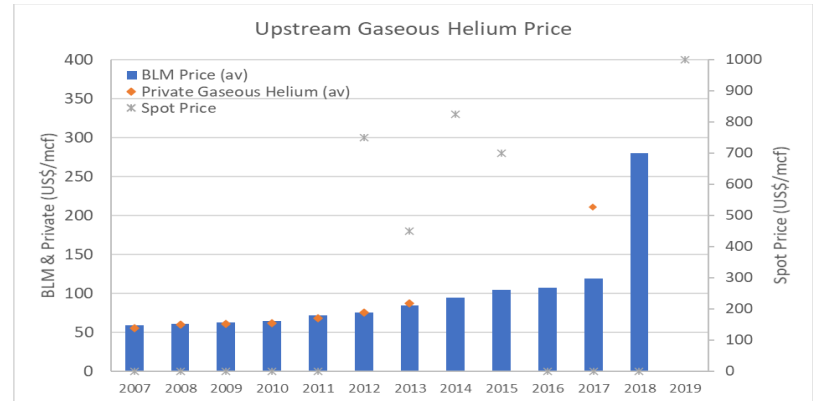
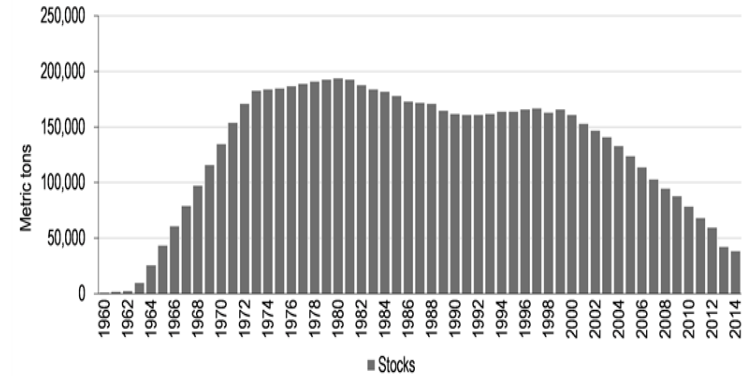
USA – CENTRE OF GLOBAL HELIUM MARKET AND SUPPLY CHAIN

- 40% total market share feeding greatest demand
- Premium in-ground helium grades
- “Strategic Commodity” classification
- Significant increase in domestic helium supply risk as BLM sales cease
- Developed market for helium processing equipment and services

LOCAL HELIUM PRODUCTION

- Blue Star early mover in growing trend towards helium-centric E&P outside of hydrocarbon areas
- Helium product generally sold :
 - as a compressed gas at 98%+ concentration
 - under long-term take or pay contract
 - sold at plant gate and trucked by buyer
- \$280/mcf last published price average from BLM Auction
 - BLM auction has historically served as a “defacto” crude price for plant-gate sales (according to the US BLM)
- Growing B2B spot market

Stocks of helium in US strategic reserve





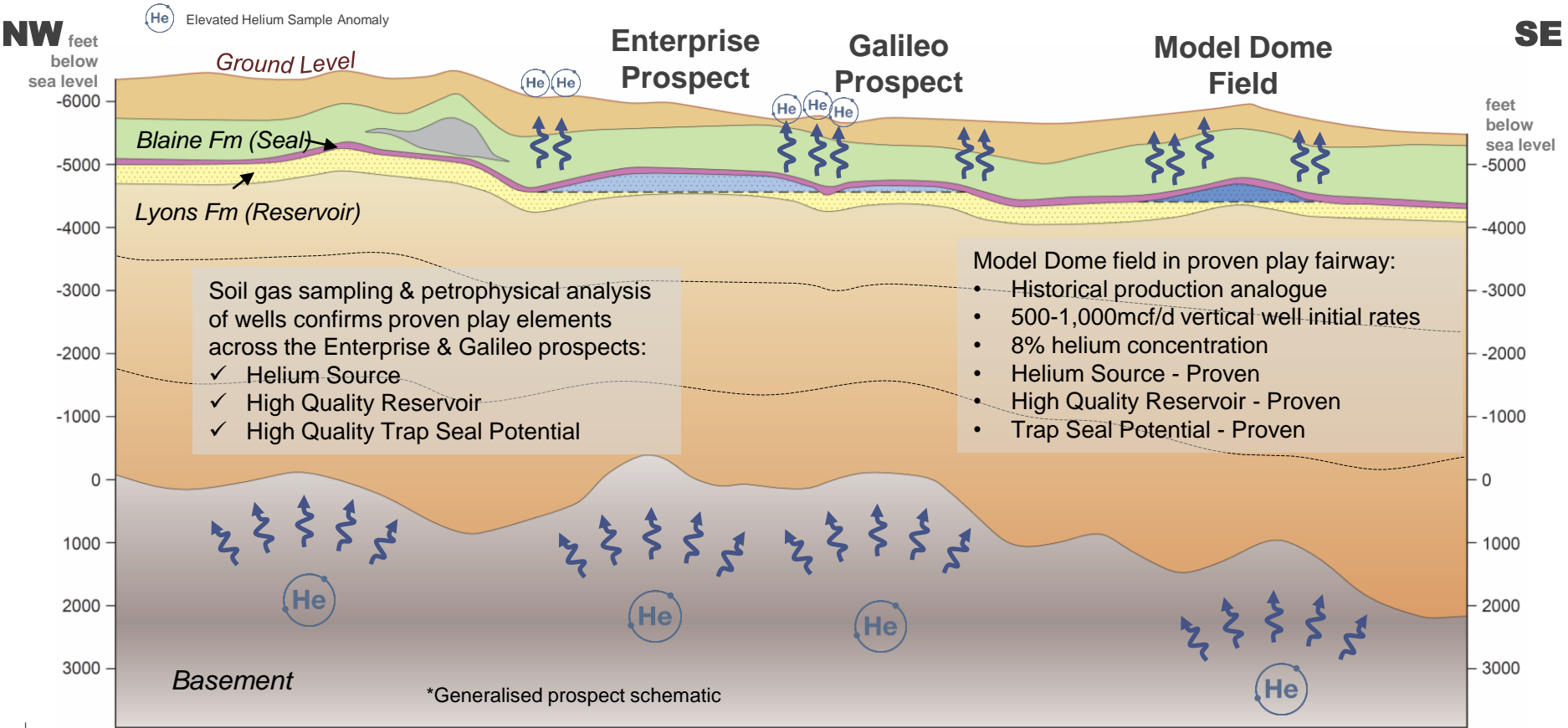
3.5 BCF IN ENTERPRISE AND GALILEO

Location staked, drilling subject to permit approvals

Fast, low cost, modular development concept upon success

Prime location & high grade resource

PROVEN HELIUM PLAY FAIRWAY



3.5 BCF (3,500,000 mcf) P50 Prospective Helium Resource*

- Net to Blue Star, after applicable royalties
- Shallow target depth 1,000-1,200 ft
- Enterprise well location staked; drilling subject to permit approval
- US\$300k proof-of-concept dry hole drilling cost

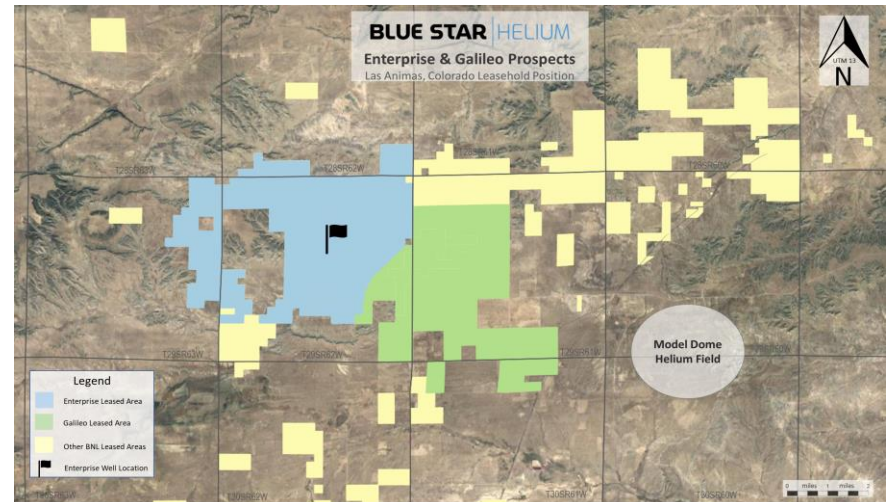
Proven Helium Play Fairway

- **Historic Production at Model Dome**
 - 8% helium concentration
 - 500-1,000mcf / vertical well initial rates
 - BNL leases within 6 miles
- **Proven Helium Source and Active Charge**
 - Elevated soil gas sample locations under lease
 - Up to 100% above normal atmospheric levels
- **Proven High Quality Reservoir (Lyons Formation)**
 - Petrophysical analysis confirms ~ 20% porosity, 160mD perm
- **Proven Trap Sealing Formation (Blaine Formation)**
 - Petrophysical analysis confirms high-quality anhydrite/shale seal

Prospect Definition

- Structural definition utilizing gravity/magnetics, well data, surface and subsurface mapping to define individual trap risk

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SURFACE FACILITIES

- Staged, standard-size modular development concept upon success
 - 2mmcf/d raw gas nameplate capacity
 - ~50mmcf helium per annum (at P50 He concentration)
 - Plant mobilisation time to site ~6 months
 - 5 simple vertical producers (similar to proof of concept well)
- Use of standard modules
 - Reduces up-front capital expenditure, rental units available
 - Accelerates time to first production
 - Allows redeployment to subsequent locations
- Development expansion to multiple modules as required
- Discussions ongoing with potential suppliers



Modular units used to treat the raw gas stream to remove nitrogen, CO2 and concentrate helium



HELIUM OFFTAKE

- 10+ year contracts are customary
- Sellers' market
 - Take or pay with price reopeners
 - Potential to retain spot market component
 - Potential for development funding support by buyer
- Sell at plant gate into buyers' tube trailers
- Discussions ongoing with potential offtakers





ACCELERATING THE PORTFOLIO

3 - 5 well maiden drilling campaign

Dominant land position across proven helium play fairway

Additional acreage and prospective resources estimates

BLUE STAR | HELIUM

Las Animas, Colorado Leasehold Position



Yamato

Enterprise Leases
2.2 BCF P50
Prospective
Resource

Defiant

Red Dwarf

Voyager

Pegasus

Enterprise

Galileo

Model Dome
Helium Field

Galactica

Argo

Serenity


Galileo Leases
1.3 BCF P50
Prospective
Resource


Prometheus

Millennium


Falcon

Legend

 BNL Leased Area

 Prospect/Lead Name

0 miles 6 miles 12

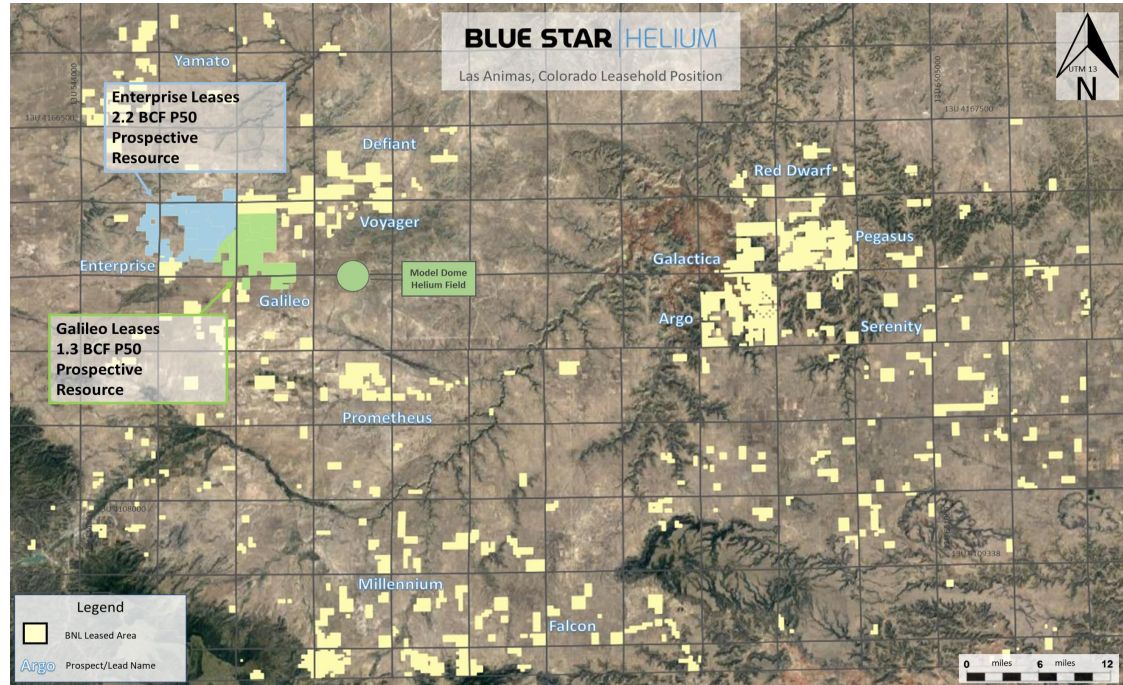


First mover in Las Animas, Colorado

- Historical production at Model Dome (Top 3 helium concentration in USA)
- Proven helium play fairway
 - Helium charge
 - High quality reservoir & seal pair
- 11+ prospects and leads within proven play fairway
- Technical work focused on reducing trap risk
- Prime market location - low cost area within trucking distance to customers (~150miles)
- Dominant land position secured, circa 177,000 gross (120,000 net) acres leased

Building the Drilling Program

- 3 - 5 well campaign
- Enterprise Prospect staked and awaiting permit
- Site visits on four further prospects in preparation for well staking
 - Galactica, Pegasus, Voyager, Galileo



Maiden Drilling Campaign

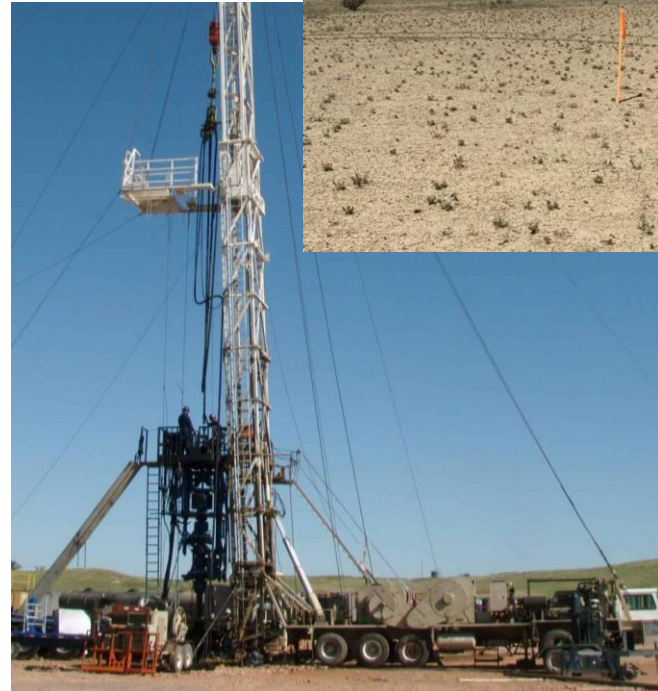
- Enterprise well staked and awaiting permit approval
- Site visit for location selection at 4 further prospects
 - Then well staking and permit approvals
 - New location approvals expected early 2021

Leasing and Resources

- 3.5 BCF prospective helium resource at Enterprise and Galileo
- Galactica, Pegasus independent review expected soon
 - Internally ranked on par with Enterprise
- Continue aggressive acreage consolidation across portfolio
 - Additional prospective resource assessments to follow

Development Concept

- Finalise concept selection; contract with equipment suppliers
- Select potential development well locations
- Progress discussions with potential offtakers





HELIUM PURE-PLAY

Proven Helium Play Fairway
High grade helium resource
Low cost, high impact drilling program

Market Snapshot ASX: BNL

Market Snapshot ASX: BNL	
Issued Share Capital (at 12 Nov 20)	1,062M
Unlisted Options (at 1.2¢ expiring Dec 21)	84M
Share Price (at 12 Nov 20) A\$	3.9¢
Market Capitalisation A\$	41.4M
Cash (as at 30 Sep 20) A\$	2.13M

Supportive Shareholder Base*

Shareholder	Undiluted	Fully Diluted
Board and Management	3.3%	8.8%
Pamplona	3.8%	5.1%
Ms Chunyan Niu	4.3%	4.0%
United Equity Partners Pty Ltd	2.9%	2.7%
BNP Paribas Nominees Pty Ltd	3.5%	3.2%
Top 20	45.5%	49.5%

*as at 12 November 2020

Share Price Performance (to 16 October 2020)



Board and Management

Ross Warner – Executive Chairman

Lawyer with 15+ years in oil and gas particularly in the United States, UK and Indonesia

Joanne Kendrick – Managing Director

Petroleum and reservoir engineer with 20+ years in exploration, development and production

Trent Spry – Executive Director

Experienced geoscientist with 20+ years in oil, gas and helium, exploration, development and new ventures

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Unit	Measure
B	Prefix - billions
mm	Prefix - millions
m	Prefix - thousands
/d	Suffix - per day

Unit	Measure
Bcf	billion cubic feet
mmcf	million cubic feet
mcf	thousand cubic feet

Term	Description
1U (P90), 2U (P50) and 3U (P10)	In a probabilistic resource distribution, 1U (P90), 2U (P50), 3U (P10) estimates represent the 90% probability, 50% probability and 10% probability respectively that the quantity recovered will equal or exceed the estimate assuming a success case in the prospect
gross acres and net acres	The minerals in a tract of land may be owned by one or more owners. Each owner may lease its respective percentage share of the minerals. The gross area of the tract of land is referred to as the "gross acres" of a lease. The "net acres" refers to the lessor's percentage share of the gross acres.
lead	A project associated with a potential accumulation that is currently poorly defined and requires more data acquisition and/or evaluation to be classified as a Prospect. A project maturity sub-class of Prospective Resources.
net revenue interest or NRI	A share of production after all burdens, such as royalty and overriding royalty, have been deducted from the working interest. It is the percentage of production that each party actually receives.
oil and gas lease	An agreement between a mineral owner (lessor) and an oil and gas company (lessee) permitting the lessee to explore, drill and produce oil and gas from the tract of property. Typically, the lease provides that lessee will pay a Royalty to the lessor. Also referred to as a "mineral lease" or a "lease".
operator	The owner of the right to drill or produce a well, or the entity contractually charged with drilling of a test well and production of subsequent wells.
overriding royalty	A percentage share of production, or the value derived from production, which is free of all costs of drilling and producing, and is created by the lessee or working interest owner and paid by the lessee or working interest owner.
PRMS	The Petroleum Resources Management System of the Society of Petroleum Engineers, World Petroleum Council, American Association of Petroleum Geologists and Society of Petroleum Evaluation Engineers as revised in June 2018.
prospect	A project associated with an undrilled potential accumulation that is sufficiently well defined to represent a viable drilling target. A project maturity sub-class of Prospective Resources.
royalty	A percentage share of production, or the value derived from that production, paid from a producing well.
working interest or WI	A percentage of ownership in an Oil and Gas Lease. Working Interest owners are obliged to pay a corresponding percentage of the cost of leasing, drilling and producing and operating a well or unit. After payment of Royalties, the working interest also entitles its owner to a share in production revenues with other working interest owners, based on the percentage of working interest owned.

1. The system of mineral ownership and development in the USA is substantially different to the system in Australia. The following is a general description of the system that commonly applies in the oil and gas producing states. It is important to note that local variations may apply.
2. The owner of land owns the surface and all oil, gas and other minerals beneath his/her tract, unless a severance has occurred that creates two distinct estates: the surface estate and the mineral estate. A severance of the mineral estate results from a conveyance or reservation of all, or a portion, of the oil, gas and other minerals in and to a specific tract.
3. The oil, gas and other minerals beneath a tract of land are a part of the realty until produced and become personal property when brought to the surface. Because the mineral estate is considered real property, it may be acquired, divested, encumbered, devised and inherited, thereby resulting in the possibility that an unlimited number of persons ("mineral owners") may own undivided interests in a tract's minerals.
4. Accordingly, the mineral estate in a tract may be owned by one or more distinct owners and each distinct owner may comprise one or more persons. The mineral estate may be divided amongst distinct owners by depth or geological formation. Where there is more than one distinct owner of a mineral estate, each such owner will own a percentage share of that mineral estate. The percentage shares of that mineral estate need not be equal. Therefore, each such distinct owner owns its percentage share of an undivided share in the mineral estate in that tract. In addition, private individuals may own the mineral rights directly beneath public surface owners or users, eg the mineral rights beneath a public road. This is commonly summarised by referring to the lessor's "net acreage" in a tract. This means the lessor's percentage share of the undivided total area of the tract's minerals ("gross acres") net of the percentage share of other mineral owners in the same tract. For example, assume the mineral rights in a tract of 100 acres are owned by 4 mineral owners in equal shares. If one of those mineral owners leases its mineral interests to a lessee, the lessee will have an interest in 100 gross acres and 25 net acres. If a second mineral owner leases its mineral interests to the same lessee, the lessee will then have an interest in 100 gross acres and 50 net acres.
5. If an owner of a mineral estate, whether severed or intact with the surface, chooses to pursue development of and production from the minerals beneath the ground, such owner may exercise its rights and may generate revenue through one or more of these methods: (1) the "right to develop" the mineral estate by contracting directly with a drilling and operating company and directly selling the minerals; (2) the "right to lease" the mineral estate to a third party, specifying the terms of the lease and defining the minerals that may be produced; (3) the "right to receive a bonus payment" for leasing the mineral estate, usually calculated per acre, from the lessee for leasing the mineral estate; (4) the "right to receive delay rentals" when the mineral estate is leased but not being produced; and (5) the "right to receive royalty payments" based on a percentage of minerals produced by the lessee. Given the inherent risk, cost of development and required technology to produce oil and gas, most mineral owners do not independently develop their minerals, and as a result, rely on their ability to lease to a third party.
6. The oil and gas lease serves as both a conveyance and a contract which establishes the parties' rights and obligations. There is no "standard form" of lease. The details within the lease are the contract which defines the rights and obligations of the parties.
7. An oil and gas lease creates rights in relation to the mineral estate only and does not grant surface rights to the lessee. Surface rights must be negotiated separately with the surface right owners. This process is facilitated by legislation.
8. The execution of an oil and gas lease that reserves a royalty to the lessor creates the leasehold estate and a royalty interest. The lessee acquires the working interest, or the cost bearing interest, which provides the lessee the right to develop the oil and gas the subject of the lease at its sole risk and expense ("working interest" or "WI"). The lessee may keep and sell its proportionate share of the oil and gas produced from the lease until the lease expires ("net revenue interest" or "NRI"). The NRI is the lessee's share of production derived from the lease after royalties and other burdens. The leasehold estate created by the oil and gas lease may be conveyed, assigned and encumbered similar to any other real estate, and it is common for the original lessee to assign undivided working interests to numerous parties, who share the burden of costs in developing the mineral estate. Generally, a lease will include a provision that allows the lessee to continue to produce the lease as long as it is economically producing a minimum amount of oil and gas. Such a lease is said to be "held by production" or "HBP".
9. The identity of the mineral ownership in respect of any tract may not be maintained in any single definitive register. The landman establishes the title of the mineral owner by ascertaining the chain of transfers from the original date of grant to the present day. It is customary before drilling a well on a leased property to obtain a drilling title opinion, by which the lessor(s) in question are determined to have the required authority to grant the right to explore, exploit and to assign the minerals in a specific tract of land based on a thorough examination of the chain of title. If errors are found in the course of that examination, it is customary for the lessor and lessee to conduct "Title Curative," which involves, but is not limited to, executing instruments, affidavits, conveyances and filing previously unrecorded documents to resolve any disputes, ambiguities or errors so that the operator has substantial support for its claims prior to undertaking the expense of drilling.
10. All of the major US oil and gas producing states other than California and Kansas have adopted some kind of mandatory pooling scheme to facilitate the development of oil and gas resources owned by more than one stakeholder. These rules provide a process to compel all mineral estate owners in a drilling area to contribute or pool their mineral estate to the drilling of a well in relation to that mineral estate.