

ADVANCED PRIMARY HELIUM OPPORTUNITY

Strategic early-mover in the world's largest helium market
Successful low cost, high impact exploration results
Developing discoveries at Voyager, Galactica & Pegasus
Voyager development, first helium from Q4 2023
High grade helium exploration portfolio large resource upside

Visit bluestarhelium.com

ASX: BNL | OTCQB: BSNLF

Corporate Presentation: July 2023

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

Prospective Resources			
Net Recoverable Helium (MMcf)	1U (P90)	2U (P50)	3U (P10)
Galactica Prospect	2,131	4,395	6,849
Pegasus Prospect	1,970	3,423	5,092
Argo Prospect	276	2,108	3,065
Enterprise Prospect	372	2,204	5,494
Galileo Prospect	495	1,292	2,329
Total BNL Net Recoverable Helium	5,244	13,422	22,829

Contingent Resources			
Net Recoverable Helium (MMcf)	1C (P90)	2C (P50)	3C (P10)
Voyager Prospect	299	643	1,228

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 unrisked 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. Prospective resource totals have been arithmetically added. The aggregate low estimate may be a very conservative estimate and the aggregate high estimate may be a very optimistic estimate due to the portfolio effects of arithmetic summation.

Note 3: The prospective and contingent resource estimates are presented on a net entitlements basis and represent the Blue Star group's net economic interest in the prospective and contingent recoverable helium volumes after deductions for the volume weighted royalty burden.

Notes specifically in relation to Galactica, Pegasus and Argo

Note 4: The estimates of prospective resources in respect of Galactica, Pegasus and Argo prospects are reported as at an evaluation date of 4 June 2021 and are more fully described in the Company's announcement of 10 June 2021. Aside from the information contained the Company's ASX releases dated 17 May, 7 June, 29 September and 5 October 2022 and the installation of a helium processing facility at the third party owned Red Rocks project adjoining the Company's Galactica Prospect, the Company is not aware of any new information or data that materially affects the information included in that announcement and all the material assumptions and technical parameters underpinning the estimates in that announcement continue to apply and have not materially changed.

Notes specifically in relation to Enterprise and Galileo

Note 5: The estimates of prospective resources in respect of Enterprise and Galileo prospects are reported as at an evaluation date of 1 November 2020 and 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 that announcement and all the material assumptions and technical parameters underpinning the estimates in that announcement continue to apply and have not materially changed.

Notes specifically in relation to Voyager

Note 6: The estimates of contingent resources in respect of the Voyager prospect are reported as at an evaluation date of 1 August 2022 and are more fully described in the Company's announcement of 27 September 2022. Aside from the information contained in the Company's ASX release dated 11 April 2023 regarding the acquisition of additional mineral leases, the Company is not aware of any new information or data that materially affects the information included in that announcement and all the material assumptions and technical parameters underpinning the estimates in that announcement continue to apply and have not materially changed

CORPORATE SNAPSHOT

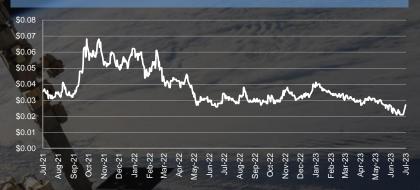
CLEAN CAPITAL STRUCTURE	
ASX Ticker	BNL
OTCQB ticker	BSNLF
Share price (ASX close, 03 July 23)	2.7 ¢
Issued share capital	1,586 MM
Options	34 MM
Performance Rights	91 MM
Basic market capitalisation	A\$42.8 MM
Cash (31 March 23)	A\$5.40 MM

SUPPORTIVE SHAREHOLD	ER BASE	
Board	4.0	%
Hugh Warner	3.0	%
Nikola Krkovski	2.9	%
Cecil Dowson	2.9	%
Top 20	35.6	%

As at 28 April 2023

BLUE STAR HELIUM

SHARE PRICE PERFORMANCE



EXPERIENCED BOARD AND MANAGEMENT

Ross Warner – Executive Chairman

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

Trent Spry – Managing Director & CEO

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

Neil Rinaldi – Non-Executive Director

Executive leader and finance professional with 20+ years in asset acquisitions and disposals, company structuring and growth strategy

Peter Kondrat – Chief Operating Officer

Extensive helium operating and development experience, including most recently as President/COO of US helium E&P business, Tacitus LLC

Scott Fenoglio - Chief Financial Officer

Seasoned executive and industry professional with 20+ years in the oil & gas and financial services industries. Previously the CFO of Ossidiana Energy.

BLUE STAR: ADVANCED PRIMARY HELIUM OPPORTUNITY



DEFINED PATHWAY TO PRODUCTION: High-grade Voyager discovery (643 MMcf contingent helium resource) targeting first helium output in Q4 2023 via initial midstream pathway; Galactica/Pegasus targeted for first production in 2024



LOW CAPITAL AND HIGH RETURNS: Voyager midstream development pathway is capex-lite, expertise-rich, and projected to deliver high returns and maximum product market pricing and flexibility



HIGH-VALUE PRODUCT IN SHORT SUPPLY: Helium is a high-value, finite resource in structural undersupply in the US; prices have responded by increasing substantially over the past two years



SUSTAINABLE HELIUM RESOURCE: Primary helium production possesses effectively zero hydrocarbon (methane) content compared to majority of global He supply produced as a by-product of natural gas production



EXTENSIVE EXPLORATION UPSIDE: 13.4 Bcf prospective helium resources from five prospects; further prospects being advanced, ongoing development of contingent helium resource via multiple commercialisations

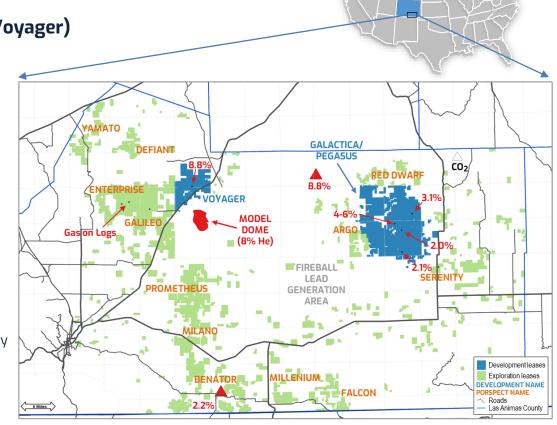
LAS ANIMAS: PREMIER US HELIUM ASSETS...

Extensive landholding and prospect portfolio in highly prospective location Developing discoveries at Voyager, Galactica & Pegasus

643 MMCF Contingent helium resources (Voyager)

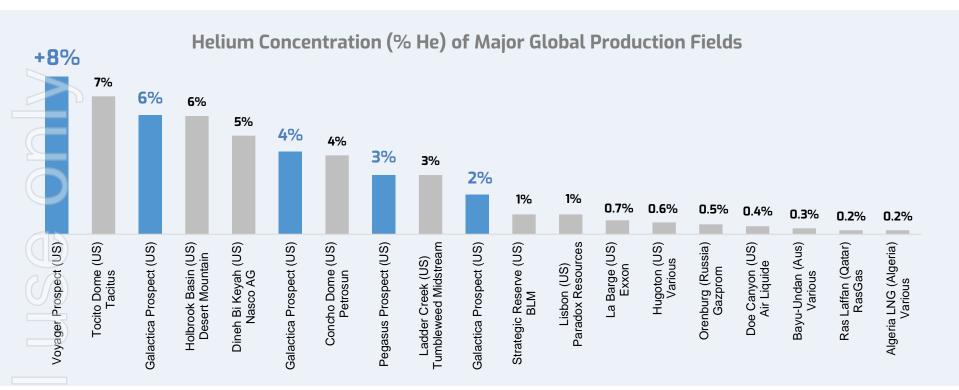
13.4 BCF Prospective helium resources

- Strategic, large-scale land position secured
- 311,250 gross acres leased (225,920 net acres)
- Outstanding drilling success proven helium resources
- Highly attractive helium concentrations
 - Historic Model Dome analogue helium: 8%
 - Historic Cynthia True discovery helium: 8.8%
 - Blue Star discoveries
 - Voyager discovery helium: 8.8%
 - Galactica/Pegasus discoveries helium: 2-6%
- Voyager development first helium from Q4 CY2023
- Excellent geology, ready local infrastructure and proximity to key downstream customers
- Exploration upside; 2023/24 plan advance exploration portfolio, including additional independent prospective resource evaluations; drilling of high ranked prospects



... AT STAND-OUT HELIUM GRADES

Globally high helium concentration levels







CURRENT HELIUM USES

Helium is a modern technology enabler

Aerospace/aircraft

Space flight

NASA (and private space organisations) uses helium as an inert purge gas for hydrogen systems and a pressurizing agent for ground and flight fluid systems. Helium is also used throughout the agency as a cryogenic agent for cooling various materials and in precision welding applications.

Controlled atmosphere

Helium's use as an inert, non-toxic gas makes it ideal in controlled atmosphere environments.

Advanced science

Quantum computing

Helium exists in liquid form at temperatures below - 269C (4K); this enables its use as the ideal coolant for quantum computing research.

Research / Large Hadron Collider

Helium has been essential to numerous Nobel Laureates and their advanced research; more than 5,200 patents relying on liquid helium have been awarded since 1975 in the U.S. alone.

Healthcare

Heliox breathing mixtures

Helium in breathing mixtures assists with breathing and improves oxygenation in medicine and diving. Potentially reducing inflammation for COVID-19 patients with acute respiratory distress syndrome.

Magnetic Resonance Imaging (6% annual growth)

MRI technology is essential in modern medicine. The superconductive magnets inside MRI machines reach extreme temperatures and rely on helium for cooling. A single MRI machine uses 700 litres of helium per year.

Defence

High-end thermographic cameras

Used as a coolant in thermographic quantum detectors.

Missile propulsion systems

A purge gas and fuel pressurising agent.

Submarine detection

Liquid helium is used to clean noisy sound signals.

Electronics/semiconductors

Fibre optics

Used in the manufacturing process and for cooling systems during use. High speed networks such as the internet rely on helium.

LCD panels

Helium is essential in the manufacture of LCD panels to cool the glass and to etch internal components.

Hard disk technology

The use of helium in hard disk drives reduces friction between disk platters, increasing speed, longevity and storage potential.

Lithium batteries

Helium is used in the quality assurance process of lithium battery manufacturing, to test every battery for leakage.

Renewables/low carbon tech

Energy/Transport

Essential in nuclear fusion and ideal for nuclear fission cooling

Small modular nuclear reactors (SMRs)

High speed Mag-Lev transport

Lithium-ion battery testing and quality assurance



HELIUM **DEMAND**

An enabler of innovation, helium is essential for key existing and future technology development

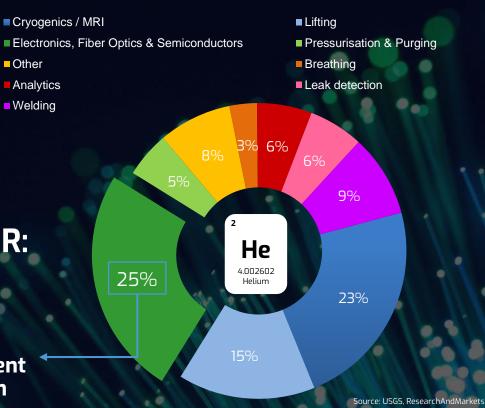
US\$6-8 billion Forecast 2021-25 CAGR:

Other

2-6% p.a.

Supercharged by strong, persistent semiconductor demand growth

Global share of helium applications (2021)



A diversified, deep market with increasing demand driven by medicine, consumer electronics and technological advancement

Source: Hannam Partners Research

STRUCTURAL UNDERSUPPLY IN THE U.S...

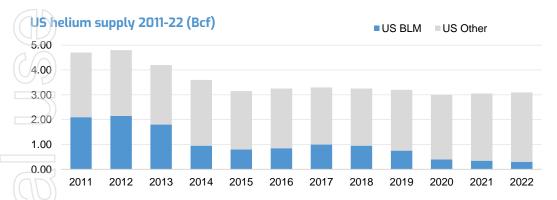
Growing helium shortage

DOMESTIC SUPPLY CHALLENGES

- U.S. supply structurally weakened by elimination U.S. strategic reserve (BLM)
- Supply now critically strained from recent further interruptions globally
- Most worldwide He supply is a by-product of hydrocarbon extraction; price inelastic plus climate targets expected to significantly impact new supply

SURGING DEMAND FROM SEMICONDUCTOR INDUSTRY – DOMESTIC AND OFFSHORE

- Push from U.S. Govt. to dramatically increase domestic semiconductor manufacturing with +US\$50bn investment (security of supply dynamic)
- Semiconductor manufacturers committing to investing +US\$50bn in new fabs in U.S.
- Additional capacity flagged globally from major semi-conductor players



Current Status: Supply challenged

区

Uncertain global supply outlook following:

- explosion & fires at Gazprom's Amur gas processing plant plus Russian sanctions
- BLM storage facility shut down
- Exxon plant 25% supply scheduled summer maintenance
- Kenawa Haven Plant, Kansas, shut down
- Algeria stopped processing helium and re-routed gas feedstock to Europe
- reduced production from Qatar due maintenance shutdown

Several helium majors reportedly declared force majeure and rationing supply to their customers

...HAS SEEN STRONG PRICE MOMENTUM

Ongoing supply challenges, increasing demand, transition to market pricing



- Scarcity of supply, strong demand and transition to market pricing resulting in strong price momentum
- Current short term contract and spot prices ranging between US\$450 – US\$3,000/Mcf for 98+% He
- Price (in)elasticity effecting end user ability to buy, with helium being un-substitutable in many applications

Source: BLM, Asian Customs Data, Bancroft Capital Research; private parties



* Denotes CFR price

[■] Note existence of select spot price references at levels well above those price points depicted above



VOYAGER: A PREMIUM INITIAL HELIUM DEVELOPMENT

First helium production Q4 2023





Gas processing services delivery by experienced US helium midstream service provider



Low upfront project development capex



Processing capacity readily scalable by addition of membranes / further PSA units



Targeting
premium spot /
short term
market prices



First helium output and sales targeted for 04 CY2023

THE VOYAGER HELIUM DEVELOPMENT

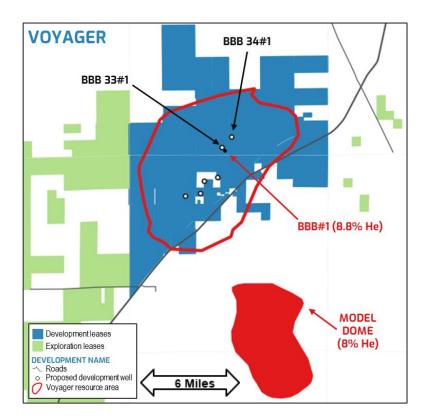
High-grade helium discovery appraisal and development

- BBB#1 well discovery at Voyager prospect in Nov 2021; calculated air-free gas concentration of 8.8% helium in a 134ft gas column discovered in the Lyons formation
 - Globally high in-situ helium concentration; similar gas composition to historic Model Dome analogue production
- Significant contingent resource declared (27 Sep 2022)

	Voyager Fiel	ld	
	1C	2C	3C
Net Recoverable Helium (MMcf)	299	643	1,228

Note: ~25% increase in net mineral leases added since contingent resource booked

- Permits to drill approved for first two development wells (off-setting BBB#1 discovery well)
- Further 4 development wells locations submitted for approval
- Drilling to commence August 2023
- Targeting first helium production and sales from Voyager
 during Q4 CY2023



VOYAGER DEVELOPMENT METRICS

Midstream development pathway adopted

- First development well to commence drilling Q3 CY2023; pressure/flow testing to follow
- Processing facility:
 - IACX to provide gas processing services via IACX owned and operated facility
 - Facility on site Q4 CY2023
- First production Q4 CY2023
- Targeted helium production of 38 MMcf in first full year
- Facility capacity readily scalable via addition of membranes and/or further PSA units

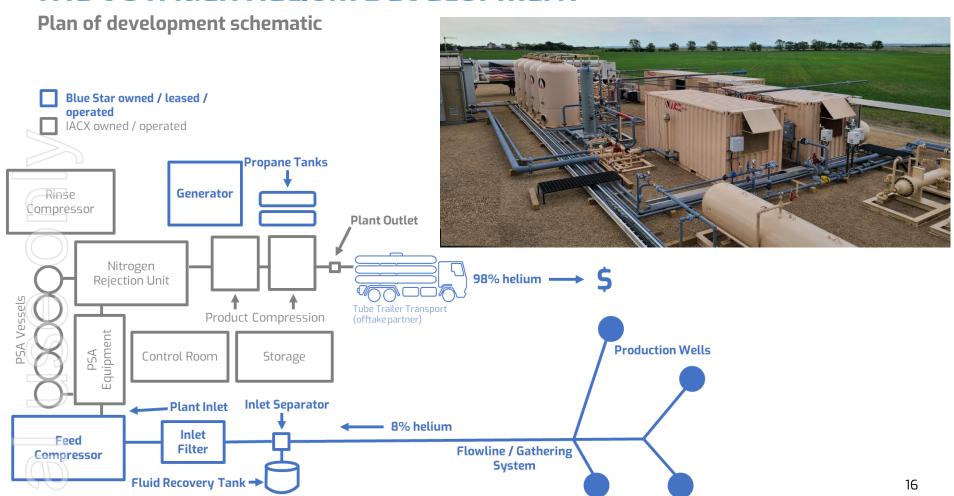
Plant metrics	Unit	Value
Nameplate raw gas input	MMcf/d	2.0
Helium recovery	%	90
Helium product purity	% He	98
Plant run time	%	95
Input gas assumptions		
Raw gas He concentration	% He	8.0
Output at full capacity		
Tailgate helium product gas output	MMcf pa	44.4
Net helium product gas output	MMcf pa	37.7

Notes to table above:

- The tailgate helium product gas output is the helium volume at the facility tailgate after applying the recovery, product purity and plant run time factors and assumes a raw gas input of 2 MMcf/d with an 8% helium concentration. It is calculated in respect of the first 12 months of operation at full capacity after a period of ramp-up to full production.
- The net helium product gas output is the tailgate helium product gas output net to Blue Star after deduction of royalties.
- There will be a period of ramp-up to full production. The length of this period is a function of a number of factors including well performance and well count.

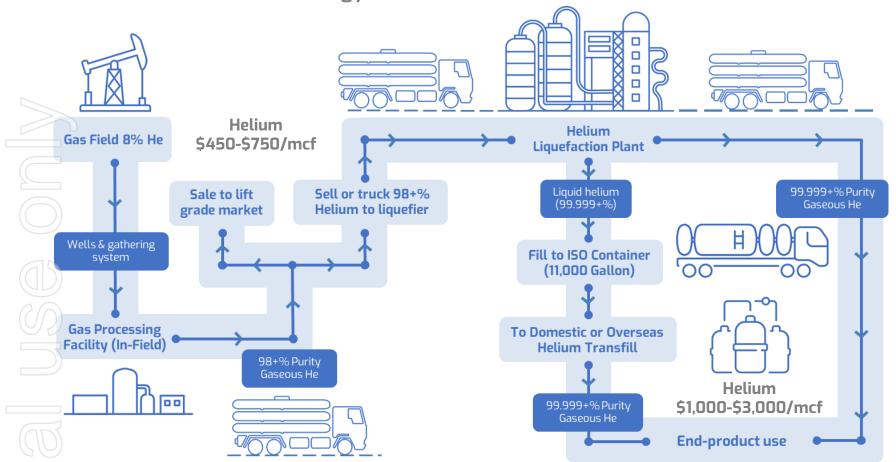


THE VOYAGER HELIUM DEVELOPMENT



REFINED PRODUCTION PROCESS

World-class extraction methodology and Helium value chain



MARKETING STRATGEY

Premium spot and short term market target to deliver optimal, price-of-the-day buyers



Leasing option avoids substantial debt funding and undesirable execution of long-term price-concession offtake contracts



Current spot and tube trailer pricing quotes substantially higher than typical long-term contract pricing



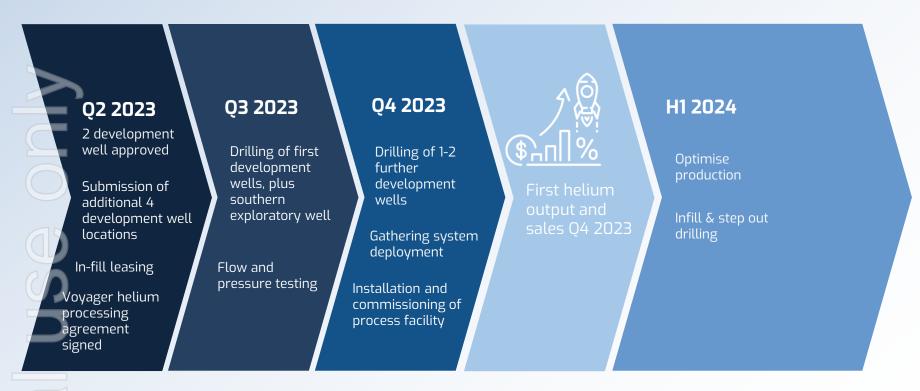
Strategy delivers flexible access to premium helium price markets and enables leverage to tight ongoing supply dynamics

Helium price is surging and transitioning to market pricing



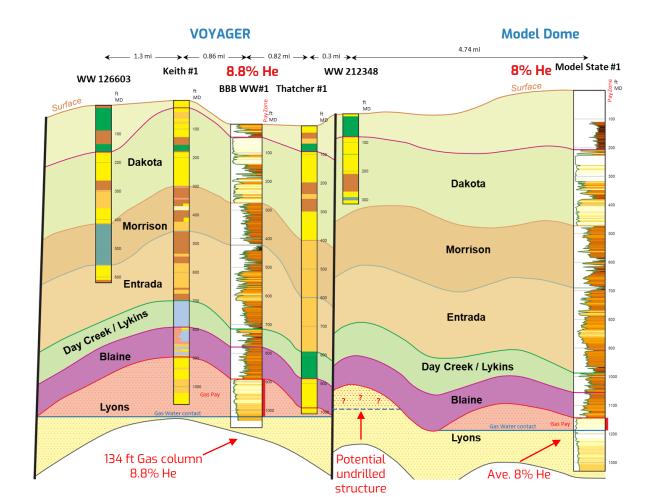
VOYAGER: MOVING RAPIDLY TO FIRST HELIUM

Evaluation and commercialisation timeline





VOYAGER – MODEL DOME CROSS SECTION



GALACTICA / PEGASUS PROJECT: THE NEXT STAGE

LARGE-SCALE, MULTI- PRODUCT DEVELOPMENT

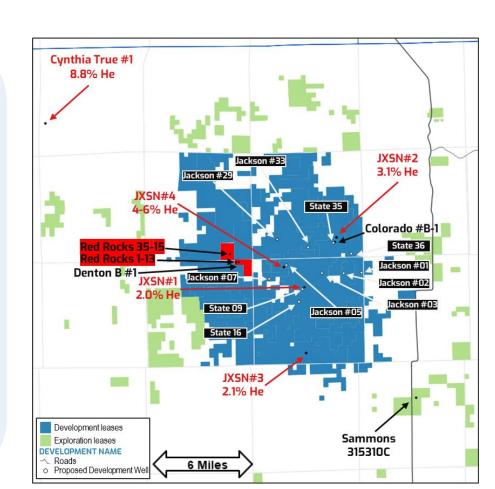
al use



THE GALACTICA/PEGASUS DEVELOPMENT AREA

Large scale, multi-product development

- Helium discoveries in JXSN#1 JXSN#4; gas bearing columns of up to 230 feet and up to 6% He
- Confirmed previous interpretations of historical well logs at Denton B#1 and Colorado #B-1 wells
- JXSN well flow rates as high as 412 Mcfd
- Adjoining Red Rocks project is proof of BNL concept
 - Third party producing two wells into IACX plant from c880 acres only and selling helium gas
 - Red Rocks situated within Galactica prospect
- Galactica / Pegasus Development; Extensive well permitting pipeline underway
- Resource update integrating Red Rocks discovery wells and production
- Plan of development in progress



THE NEXT DEVELOPMENT

Commercialising Galactica/Pegasus

Larger-scale project with multiple potential product streams

Initial facilities planned to be permitted in parallel with the Voyager development

Initial Galactica/Pegasus plant configuration and commercialization strategy underway

Targeting 2024 production

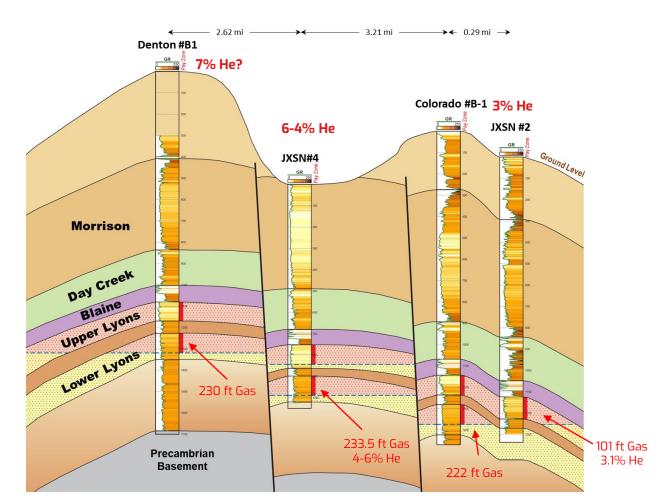
Current Evaluation Workstreams

- Further engineering and market work underway to refine planned development configuration and forecast helium and CO₂ production and cost estimates
- Range of development pathways under consideration, including a leased and third party operated plant option.
- Expansion expected to include a CO₂ by-product stream.

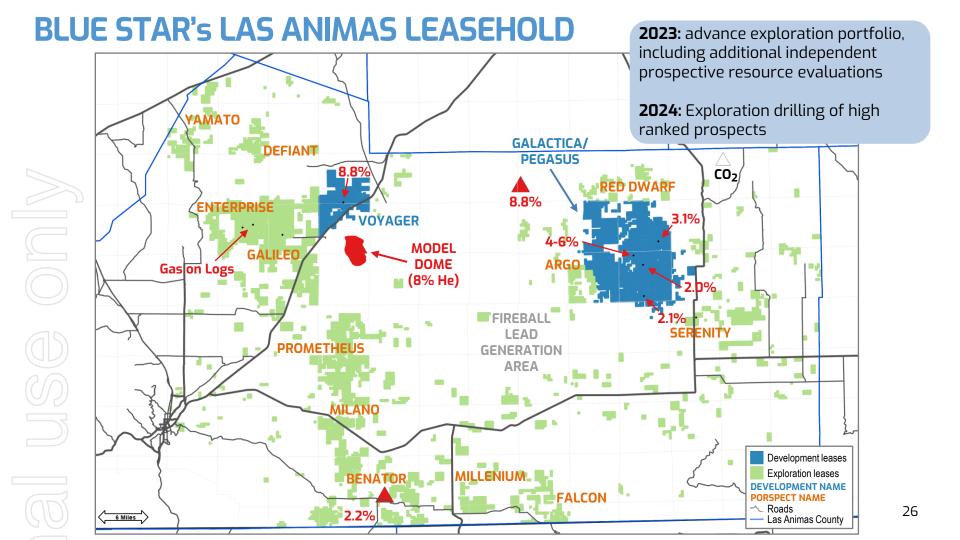
Permitting Progressing In Parallel

- Final drilling permits received for 4 wells and 3 additional locations approved, to be drilled as offset development wells to the JXSN#1 and 2 discoveries
- An additional 4 well OGDP submitted awaiting COGCC approval.
- Further 20 drilling locations identified for permitting.

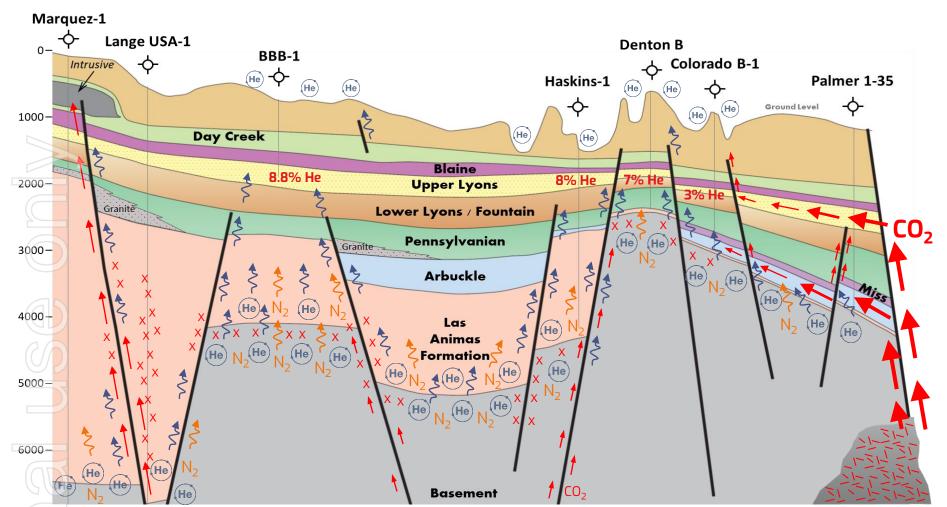
GALACTICA / PEGASUS CROSS SECTION





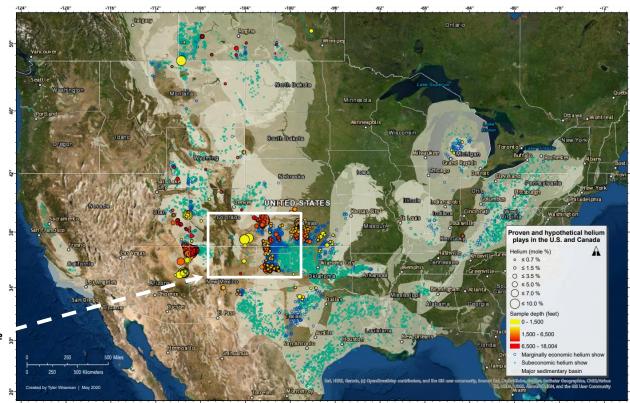


SUBSTANTIAL SHALLOW RESOURCES & DEEPER PLAYS



STRATEGICALLY LOCATED ASSETS

- Strategically targeted geology with high concentration helium and no (trace) hydrocarbons
- Proximate key infrastructure and downstream helium consumers



Map on Next Slide

STRATEGICALLY LOCATED ASSETS

- High helium grade, proximate key infrastructure and downstream helium purification and consumers
- Local infrastructure currently under utilised
- Within 100-150 miles trucking to purification facilities
- Conveniently located for customers and development scenarios

Private purification plant

BLM helium pipeline & storage system

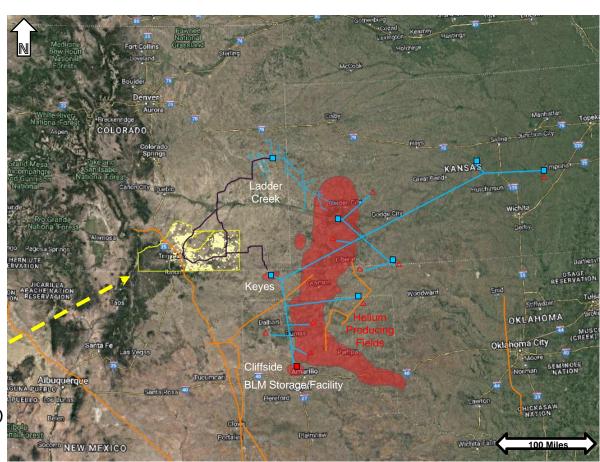
Ladder Creek helium gathering system

Private crude plant

Existing road access

Existing CO2 pipelines

Las Animas County Project Area (leases shown in yellow)





THE LEADING HELIUM PURE PLAY

Premier quality development asset opportunity

BLUE STAR HELIUM	DESERT MOUNTAIN	RENERGEN	Helium One	avanti helium	ROYAL HELIUM	GRANDGULF	noble	TOTAL H≣LIUM.	FIRST
Blue Star Helium	Desert Mountain Energy	Renergen	Helium One Global	Avanti Helium	Royal Helium	Grand Gulf Energy	Noble Helium	Total Helium	First Helium
ASX: BNL OTCQB: BSNLF	TSXV: DME; OTCQX: DMEHF; XFRA: QM01	JSE: REN; ASX: RLT	LON: HE1 OTCQB: HLOGF	TSXV: AVN OTC: ARGYF	TSXV: RHC	ASX: GGE OTCQB:GRGUF	ASX: NHE	TSXV:TOH; USOTC:TTLHF	TSXV: HELI; OTCQX: FHELF; FRA 2MC
U.S.	U.S.	South Africa	Tanzania	U.S. & Canada	Canada	U.S.	Tanzania	U.S.	Canada
Colorado	Arizona	Free State	Songwe Region	Montana; Alberta & Saskatchewan	Alberta & Saskatchewan	Utah	Manyara, Eyasi & Rukwa Regions	Arizona, Kansas	Alberta
\$28.7M	\$90.9M	\$169.7M	\$60.0M	\$27.8M	\$62.1M	\$11.2M	\$38.5M	\$50.0M	\$16.5M
222,693	+100,000	+460,000	+730,000	82,000	+1,000,000	28,100	1,350,000	+27,000	336,000
13.4	-	32.3	-	108Bcf Prospective, 21Bcf Contingent	-	25.7			0.323
2 - 8%	4 - 7%	3.4%	<10.6%	1.4 – 2.2%	0.4 - 0.64%	1 - 2%	4 – 10%	5 - 8%	1.7 – 5.7%
E&D	E&D	E&D	Exploration	Exploration	E&D	E&D	Exploration	Production, E&D	E&D
	Blue Star Helium ASX: BNL OTCQB: BSNLF U.S. Colorado \$28.7M 222,693 13.4 2 - 8%	Desert Mountain Energy	Blue Star Helium Desert Mountain Energy Renergen ASX: BNL OTCQB: BSNLF TSXV: DME: OTCQX: DMEHF; XFRA: QM01 JSE: REN; ASX: RLT U.S. U.S. South Africa Colorado Arizona Free State \$28.7M \$90.9M \$169.7M 222,693 +100,000 +460,000 13.4 - 32.3 2-8% 4-7% 3.4%	Blue Star Helium Desert Mountain Energy Renergen Helium One Global ASX: BNL OTCQB: BSNLF TSXV: DME: OTCQX: DMEHF; XFRA: QM01 JSE: REN; ASX: RLT LON: HEI OTCQB: HLOGF U.S. U.S. South Africa Tanzania Colorado Arizona Free State Songwe Region \$28.7M \$90.9M \$169.7M \$60.0M 222,693 +100,000 +460,000 +730,000 13.4 - 32.3 - 2-8% 4-7% 3.4% <10.6%	Blue Star Helium Desert Mountain Energy Renergen Global Helium One Global Avanti Helium ASX: BNL OTCQX: DMEH; OTCQX: DMEHF; XFRA: QM01 JSE: REN; ASX: RLT LON: HE1 OTCQB: HLOGF TSXV: AVN OTC: ARGYF U.S. U.S. South Africa Tanzania U.S. & Canada Colorado Arizona Free State Songwe Region Montana; Alberta & Saskatchewan \$28.7M \$90.9M \$169.7M \$60.0M \$27.8M 222,693 +100,000 +460,000 +730,000 82,000 13.4 - 32.3 - Prospective, 21Bcf Contingent 2 - 8% 4 - 7% 3.4% <10.6%	Blue Star Helium Desert Mountain Energy Renergen Global Helium One Global Avanti Helium Royal Helium ASX: BNL OTCQN: DMEH; OTCQN: DMEHF; XFRA: QMD1 JSE: REN; ASX: RLT LON: HEI OTCQB: HLOGF TSXV: AVN OTC: ARGYF TSXV: RHC U.S. U.S. South Africa Tanzania U.S. & Canada Canada Colorado Arizona Free State Songwe Region Montana; Alberta & Saskatchewan Saskatchewan \$28.7M \$90.9M \$169.7M \$60.0M \$27.8M \$62.1M 222,693 +100,000 +460,000 +730,000 82,000 +1,000,000 13.4 - 32.3 - Prospective, 21Bcf Contingent - 2-8% 4-7% 3.4% <10.6%	Blue Star Helium	Blue Star Helium Commission Helium Commission Commission	Desert Helium Canada Desert Mountain Energy Free State Songwe Region Montana; Alberta & Saskatchewan Saska

HELIUM: UNIQUE, **RARE AND** HIGHLY **VALUED**

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
- High thermal conductivity
- Lighter than air
- Small (leak detection)

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
- Accumulates in commercial quantities in sealed subsurface reservoirs
- Unable to be manufactured artificially
- No substitute in key applications

MINERAL RIGHTS IN THE UNITED STATES

- 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
- 5. 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.



GLOSSARY AND UNITS

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.

Unit	Measure
В	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
\$MM	million dollars

DATA SOURCES

Slide	Description	Source
		Currency conversion rates: CADUSD 0.75; AUDUSD 0.67; GBPUSD 1.27 (3 Jul 2023)
		Blue Star Helium – Investor Presentation, May 2023
		Desert Mountain Energy – Investor Presentation, June 2023
		Renergen Ltd - Annual Report to Shareholders, June 2023
		Helium One Global – Investor Presentation, May 2023
Slide (31)	Peer Comparative Table	Avanti Helium - Investor Presentation, March 2023
		Royal Helium - Investor Presentation, June 2023
		Grand Gulf Energy – Announcement: Bonus McCracken Formation Adds 1.8BCF to Gross Prospective Helium Resource, 22 June 2023
30		Noble Helium – Investor Presentation, June 2023
		Total Helium – Investor Presentation, May 2023
		First Helium – Investor Presentation, June 2023