BLUE STAR | HELIUM

THE LEADING HELIUM PURE PLAY

Delivering high-grade, low-cost helium projects in the United States

May 2022

ASX | BNL
OTCQB | BSNLF

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The Company has obtained data from water wells (BBB#1, JXSN#1-3, Hill#1-2) drilled and owned by ranchers. These wells are the property of the rancher and the Company does not have an economic interest in them. Water wells are drilled for the purpose of producing water for use by the rancher. Water wells may not produce helium and may not be converted into producing helium wells.

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**

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. Resource totals have been arithmetically added.

Notes specifically in relation to Galactica, Pegasus and Argo

Note 3: 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. The information in this report relating to prospective resources is based on, and fairly represents, information and supporting documentation prepared by or under the supervision of Trent Spry who is executive director of Blue Star. Mr Spry is a qualified geoscientist with over 20 years of oil and gas industry experience and a member of the American Association of Petroleum Geologists and the Petroleum Exploration Society of Australia. Mr Spry consents to the inclusion of the information in this report relating to helium prospective resources in the form and context in which it appears.

Notes specifically in relation to Enterprise and Galileo

Note 4: 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 information in this report relating to prospective resources is based on, and fairly represents, information and supporting documentation prepared by or under the supervision of Trent Spry who is executive director of Blue Star. Mr Spry is a qualified geoscientist with over 20 years of oil and gas industry experience and a member of the American Association of Petroleum Geologists and the Petroleum Exploration Society of Australia. Mr Spry consents to the inclusion of the information in this report relating to helium prospective resources in the form and context in which it appears.

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

BLUE STAR: LEADING HELIUM PURE PLAY

- Strategic large-scale US land position
- Early-mover in the world's largest helium market
- High grade green helium resource in Las Animas, Colorado, U.S.
- Low cost, high impact exploration and development drilling program
- Recent discovery successes at Galactica/Pegasus and Voyager
- Additional large untested exploration portfolio
- Clear commercialisation pathways in under-supplied helium market

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A YEAR IN REVIEW

4 Helium Discoveries

3 Prospects in Development

HELIUM DISCOVERED	▪ Outstanding exploration success rate
	▪ Helium discoveries at Voyager & Galactica/Pegasus
	  ▪ BBB#1 – 8.8% helium (Voyager)
	  ▪ JXSN#1, 2 and 3 – 1.98% and 3.14% helium (Galactica/Pegasus)
	  ▪ Gas on logs at Enterprise (Enterprise 16#1 testing planned)

NEW WELL PERMITTING	▪ Up-coming drilling
	  ▪ Serenity maiden well permitted and drilling to commence 2Q 2022. Three further locations approved pending discovery.
	  ▪ Four helium development well locations at Galactica/Pegasus set for approval hearing on 19 July 2022. Offsetting JXSN#1, 2 and 3 discoveries.
	  ▪ Two helium development well locations at Voyager submitted. Three to follow. Offsetting BBB#1 discovery.
	▪ 47 helium exploration and development well permits in process

FACILITIES	▪ Initiated plan of development and FEED studies for facilities at both Voyager/Enterprise and Galactica/Pegasus/Serenity areas following discoveries
FUNDING SECURED	▪ A$15 million raised in Oct 2021. A$13.6 million at 31 March 2022 (Appendix 5B)

CORPORATE SNAPSHOT

CLEAN CAPITAL STRUCTURE

ASX Ticker	BNL
OTCQB ticker	BSNLF
Share price (30 May 22)	3.1 ¢
Issued share capital	1,586 M
Basic market capitalisation	A$49.1 M
Cash (29 April 22)	A$13.6 M

SUPPORTIVE SHAREHOLDER BASE

Board	4.0 %
Pamplona Group	3.8 %
Hugh Warner	3.1 %
Nikola Krkovski	2.9 %
Top 20	37.1 %

As at 29 April 2022

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

Amanda Wilton-Heald – Company Secretary & Accountant

CA with 20+ years of accounting, auditing and company secretarial (including O&G exploration), listing and corporate advisory experience

HELIUM: A CRITICAL TECHNOLOGY ENABLER

- High value commodity with high-tech applications
- Continued supply shortage and strong demand growth to persist beyond current crisis into medium term
- Helium pricing at historic highs

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THE U.S. HELIUM MARKET

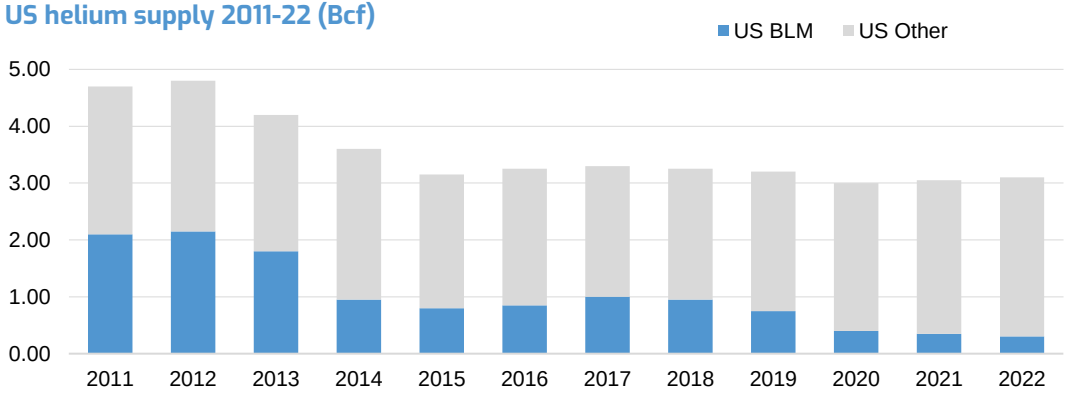
DOMESTIC SUPPLY CHALLENGES

- U.S. strategic reserve (BLM) progressively sold-off – minimal residual
- Most worldwide He supply is a by-product of hydrocarbon extraction; price inelastic plus climate targets expected to significantly impact on new supply
- Supply critically strained

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 global semi-conductor players

US helium supply 2011-22 (Bcf)



Source: AAAS; US Department of Interior's BLM and Office of Minerals Evaluation, Edison Research, Hannam Partners Research

Current Status:

Helium Shortage – Supply Constrained

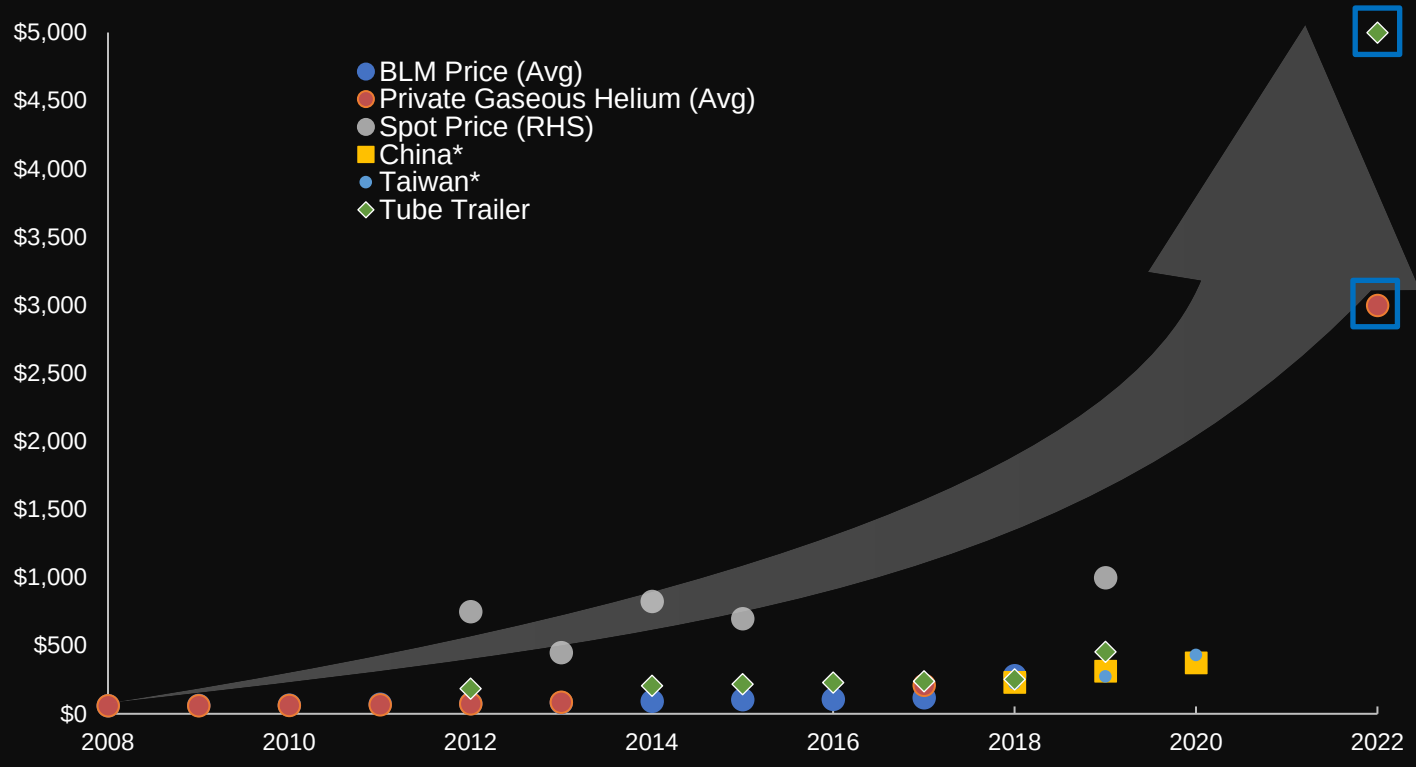
Uncertain supply outlook following:

- **explosion & fires at Gazprom's Amur gas processing plant - Ukraine war casts doubt on future availability**
- **BLM storage facility down for unplanned maintenance**
- **explosion at Kenawa Haven Plant, Kansas**
- **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 now rationing supply to their customers

STRONG RECENT PRICE MOMENTUM

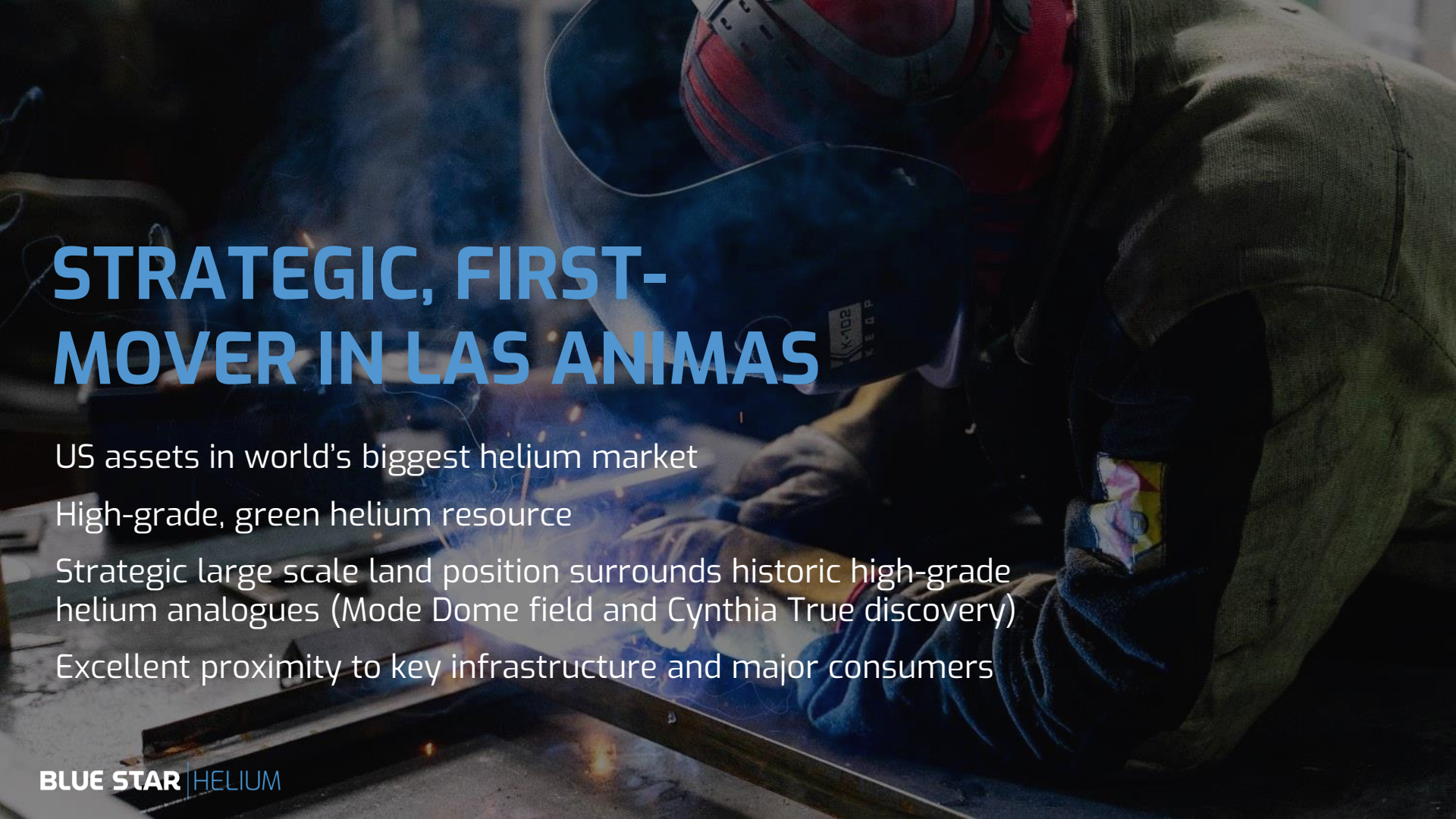
Supply shocks and scarcity cause sharp increases in pricing



- Scarcity of supply has caused sharp increases in pricing
- Reports of helium sales of up to US$600/mcf and anecdotally, tube trailer auctions fetching between US$3,000-5,000/mcf in 2022
- Some reported sales of liquid helium have been as high as US$10,000/mcf
- Price (in)elasticity effecting end user ability to buy, with helium being un-substitutable in many applications

* Denotes CFR price
Note existence of select spot price references at levels well above those price points depicted above

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



STRATEGIC, FIRST-MOVER IN LAS ANIMAS

US assets in world's biggest helium market

High-grade, green helium resource

Strategic large scale land position surrounds historic high-grade helium analogues (Mode Dome field and Cynthia True discovery)

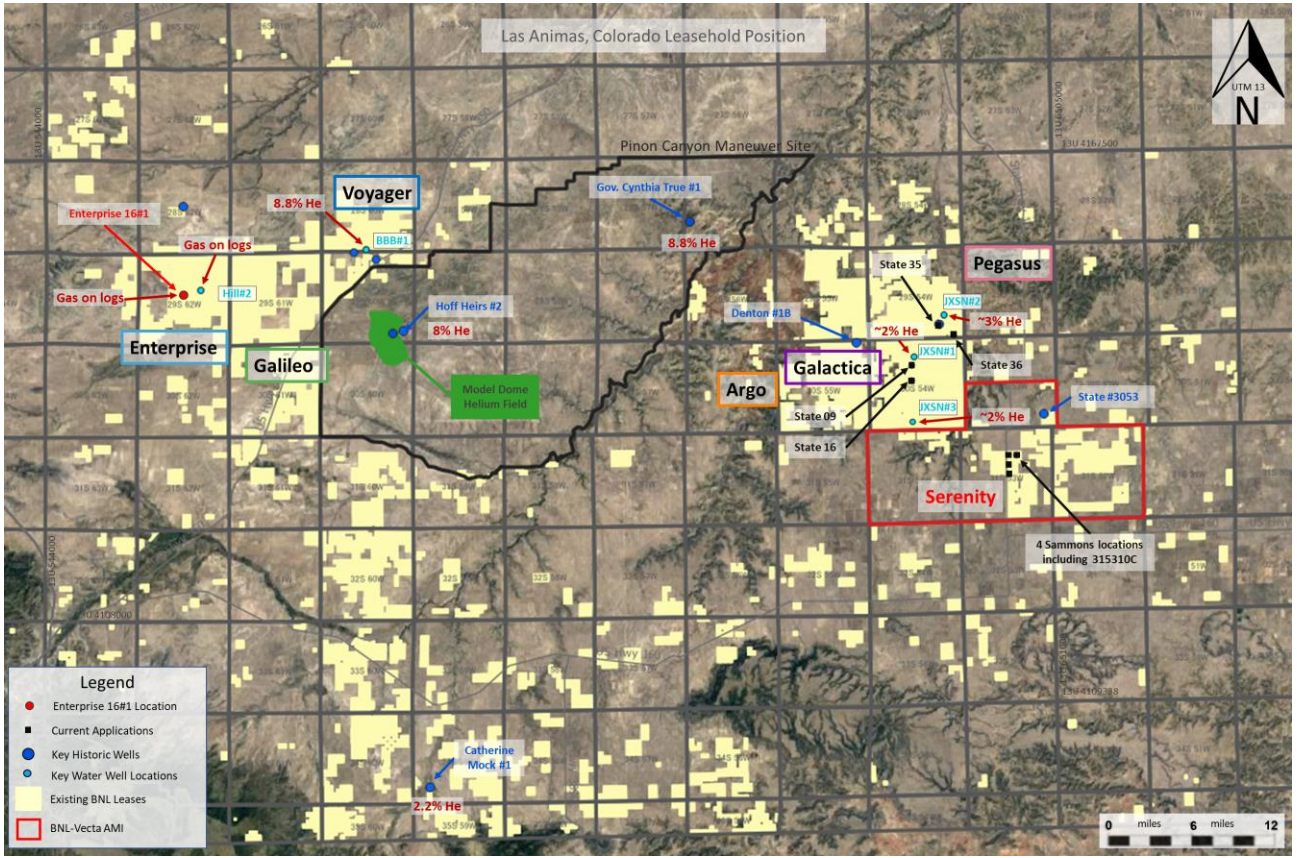
Excellent proximity to key infrastructure and major consumers

BLUE STAR'S FLAGSHIP HELIUM PROJECTS

Extensive landholding in premier U.S. helium location

FIRST MOVER IN LAS ANIMAS COUNTY, COLORADO

- Dominant, strategic large-scale land position secured
- Circa 298,141 gross acres leased (215,345 net acres)
- Proven Lyons helium play fairway
  - Historical production at Model Dome (Top 3 He concentration in U.S.)
  - Recent Blue Star discoveries at Galactica/Pegasus & Voyager
- Highly strategic location proximate key infrastructure and downstream helium consumers
- Cultivated key stakeholder relationships



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SUBSTANTIAL SHALLOW RESOURCES & DEEPER PLAYS

Across large land position and significant prospect portfolio

LYONS HELIUM PLAY

- 13.4 BCF prospective helium resources currently from 5 prospects
- Additional uncertified prospects including Voyager and Serenity
- Conventional drilling, shallow target depths: 1,000 - 1,200 ft
- Modest drilling cost of US$300k per well (dry hole)*
- Highly attractive helium concentrations
  - Historic Model Dome analogue – helium: 8%
  - Historic Cynthia True discovery – helium: 8.8%
  - Galactica/Pegasus discoveries – helium: ~2-3%
  - Voyager discovery – helium: 8.8%

LEVIATHAN PROJECT (Deeper Play Concepts/Secondary Targets)

- Catherine Mock#1 – helium: 2.2% at 2,390ft in the deeper Pennsylvanian
- Las Animas formation contains potential additional helium source, reservoirs and sealing units
- Potential for fractured basement source play
- Similar aged proven plays in the Anadarko Basin and helium bearing on the Las Animas Arch to the north

Net Recoverable Helium (mmcf)	1U (P90)	2U (P50)	3U (P10)
Galactica Prospect	2,131	4,395	6,849
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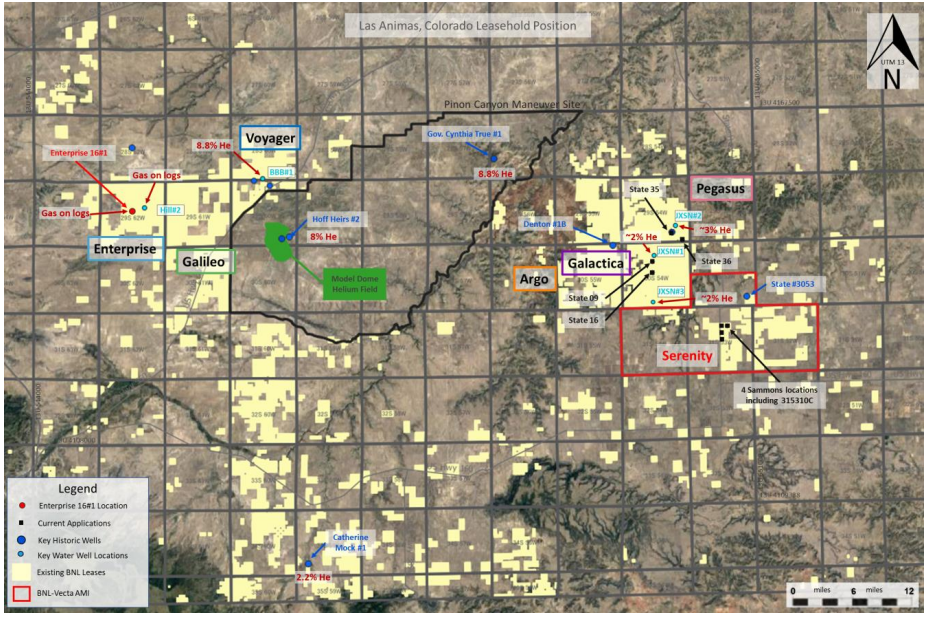

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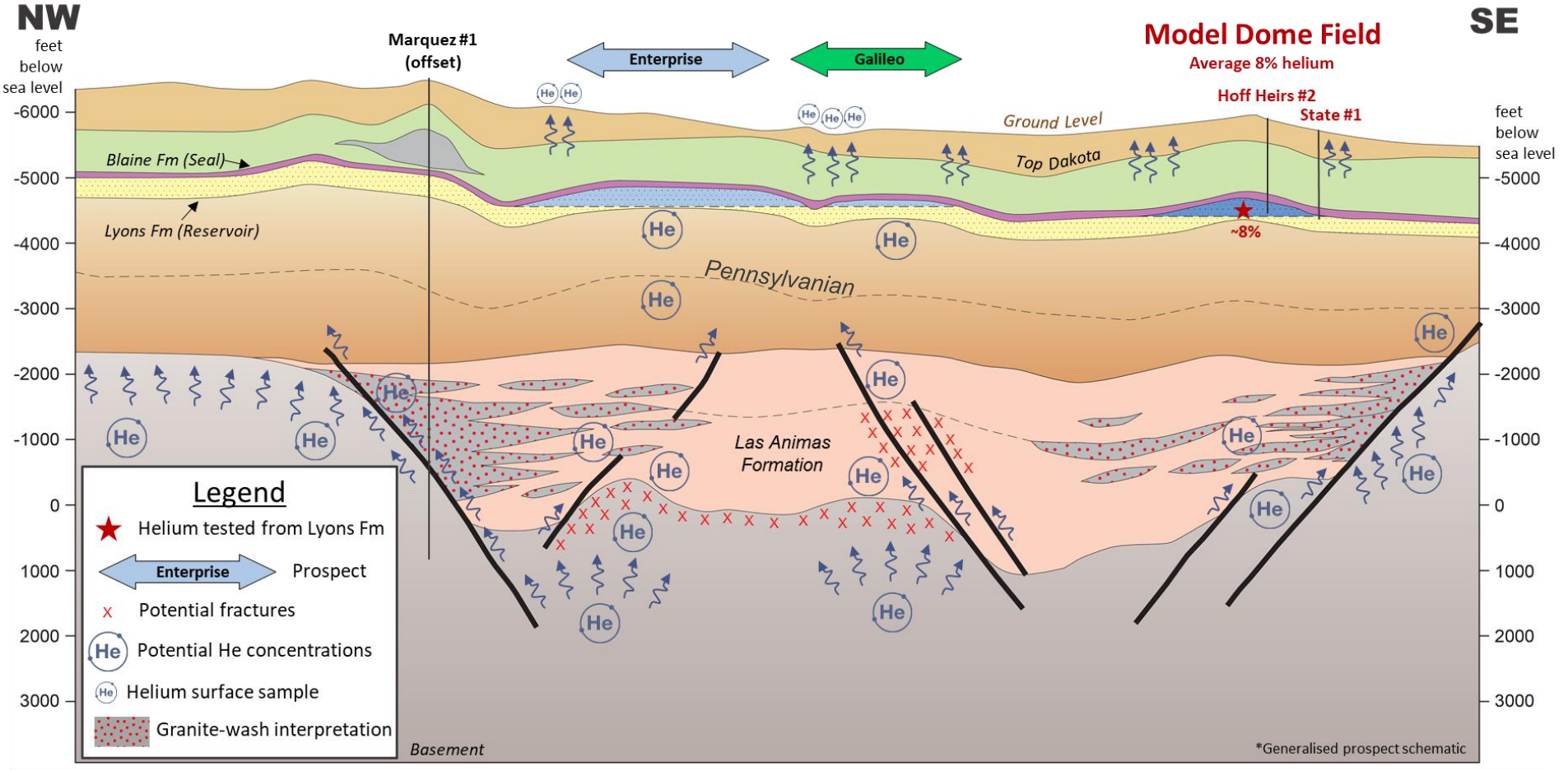
*Planned log evaluation and well testing program upon helium discovery

SUBSTANTIAL SHALLOW RESOURCES & DEEPER PLAYS



ACCELERATING THE PORTFOLIO

- Exploration program underway – outstanding success to date
- Follow up well permit locations offset discoveries
- Permitting of large helium exploration, appraisal and development well inventory in process
- Geologic and economic uncertainty significantly reduced by recent exploration results
- Plan of development including FEED initiated

EXPLORATION PROGRAM UNDERWAY

Early success & advancing exploration development program

Exploration Results

- Outstanding exploration success
  - 4 helium discoveries over 3 prospects (Voyager, Pegasus & Galactica)
  - Gas on logs in two wells on Enterprise (Enterprise 16#1 testing planned)
- Geologic & economic uncertainty significantly reduced by recent drilling results

Forward Exploration & Development Program

- First well in Blue Star-Vecta AMI (Blue Star 50% WI) over the Serenity prospect targeted to commence drilling in June
- Four helium well locations at Galactica/Pegasus set for approval hearing 19 July 2022. Rapid follow up appraisal and development of recent discoveries
- Two new applications (Form 2As) submitted for wells at the Voyager prospect offsetting 134 ft helium bearing gas column discovery with further three to follow to further appraisal and development
- Successful exploration program strategically front running helium appraisal and development drilling with further locations being sought at Voyager, Enterprise, Galactica/Pegasus, & Prometheus
- A total of 47 helium well permits in process across the Blue Star portfolio

Drill rig preparing for spud at Enterprise 16#1 pad

VOYAGER

Fast tracking appraisal and development

Discovery

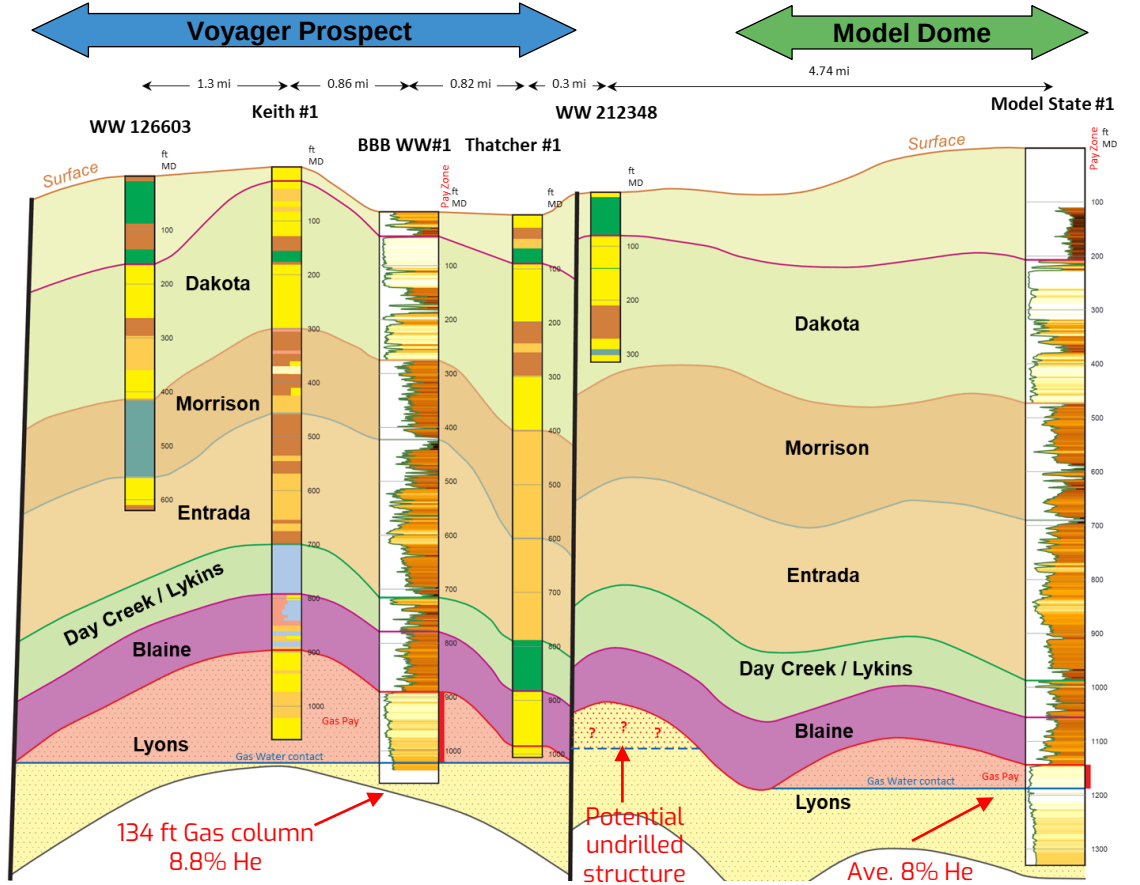
- BBB#1 well: calculated air-free gas concentration of 8.8% helium in the Lyons formation with a 134 ft gas column discovered in the Lyons formation at Voyager prospect
  - Similar gas composition to the historic Model Dome analogue production and one of the highest in-situ helium concentrations both in the U.S. and globally
  - The average gas column height for wells in the historic Model Dome field is approximately 50 ft, making the column height at Voyager of 134 ft very significant

Development planning

- SIGIT appointed to prepare plan of development to include Front-End Engineering and Design (FEED) for an initial processing facility at the Voyager prospect expected completion during Q3 CY2022.
- Sproule appointed to prepare the Company's first independent helium resource assessment for Voyager with expected completion this quarter.
- Applications for permits to drill the initial two Voyager appraisal and development wells submitted offsetting discovery well with three to follow shortly thereafter.

VOYAGER PROSPECTS

Fast tracking appraisal and development



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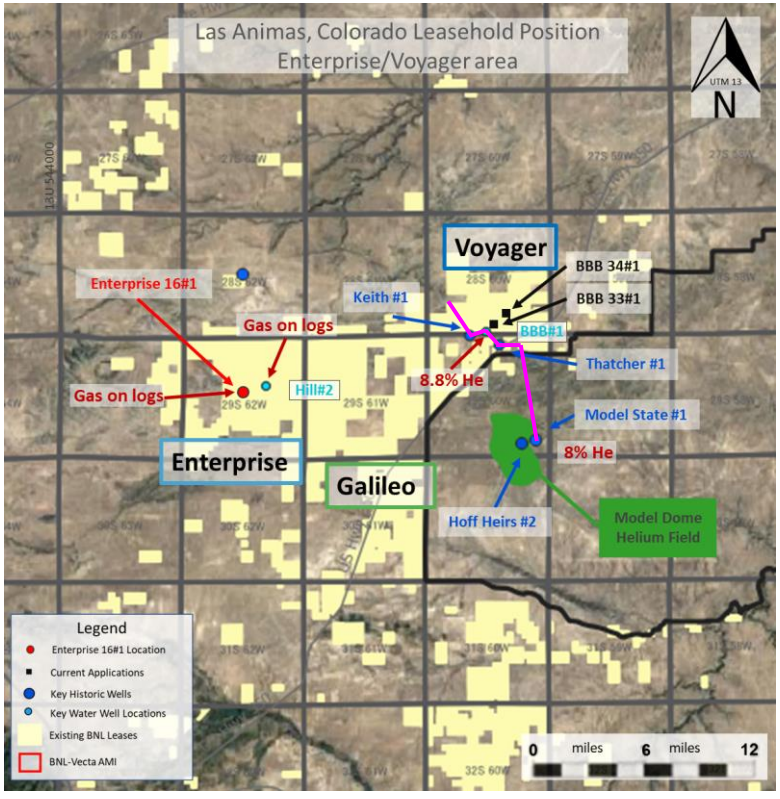


GALACTICA & PEGASUS

Helium discovered at Galactica/Pegasus prospects

Exploration Success

- Helium discoveries in JXSN#1, JXSN#2 and JXSN#3 in May 2022

Key parameter	JXSN#1	JXSN#2	JXSN#3
Helium concentration (%)	1.98	3.14	2.1
Gas column in Lyons formation (ft)	217.5	101+	230
Net pay in Lyons formation (ft)	143.5	101	153.5
Stabilized initial flow rate (mcfd)	412	202	412

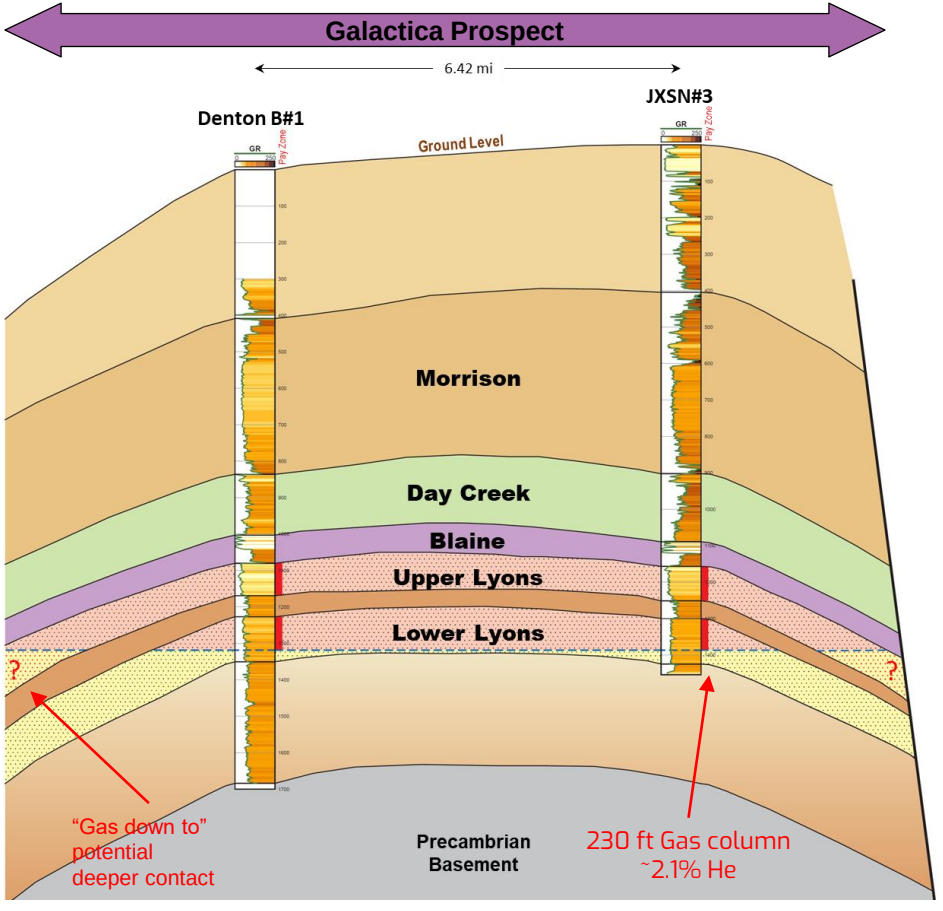
- Discoveries confirm historical well log interpreted gas columns in Denton B#1 and Colorado #B-1
- Resulting in 5 wells now showing gas defining the Galactica and Pegasus prospects

Forward Exploration & Development Program

- Four helium well locations at Galactica/Pegasus set for approval hearing 19 July 2022. Rapid follow up appraisal and development of recent discoveries
- A further 29 helium wells for Galactica/Pegasus currently in various stages of the permitting pipeline
- SIGIT engaged to prepare plan of development and FEED for the area
- Sproule engaged to undertake update of the Galactica/Pegasus resource, at least contingent resources expected

GALACTICA PROSPECT

Helium discovered and confirmed in offset well



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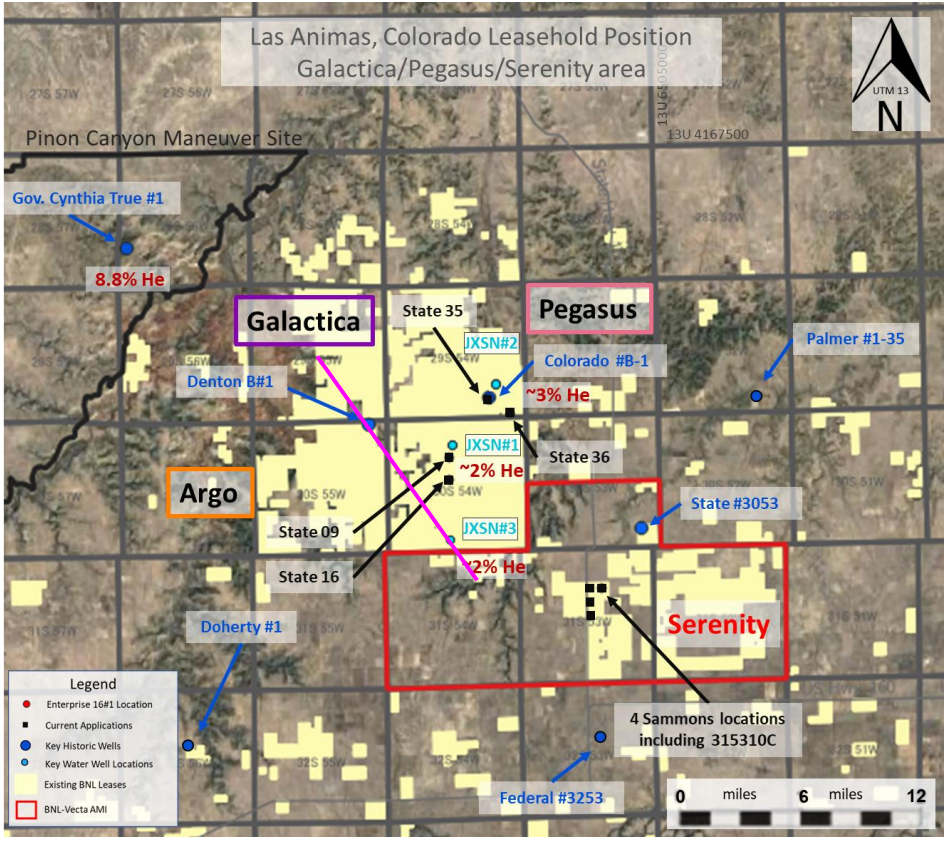
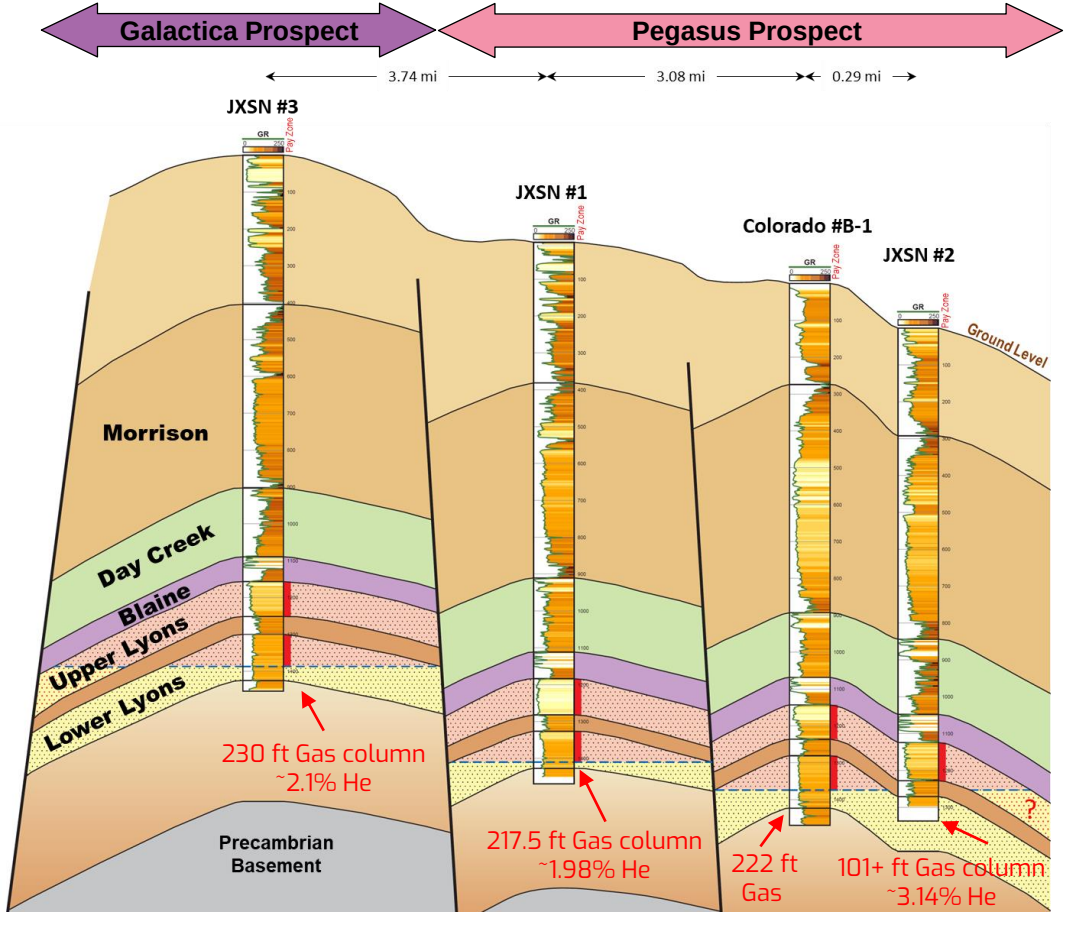


PEGASUS PROSPECT

Helium discovered and confirmed in offset well



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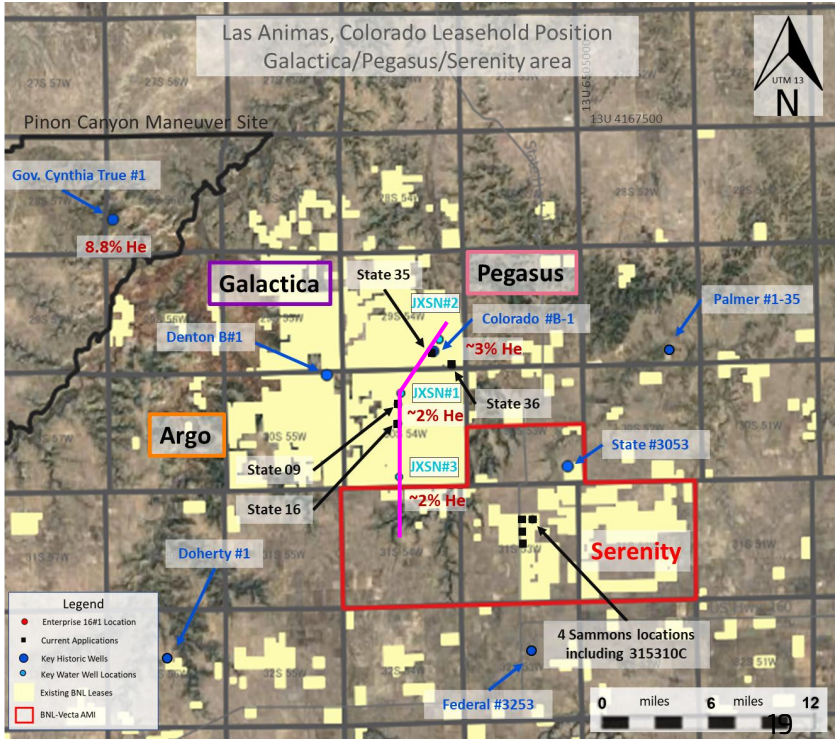


SERENITY

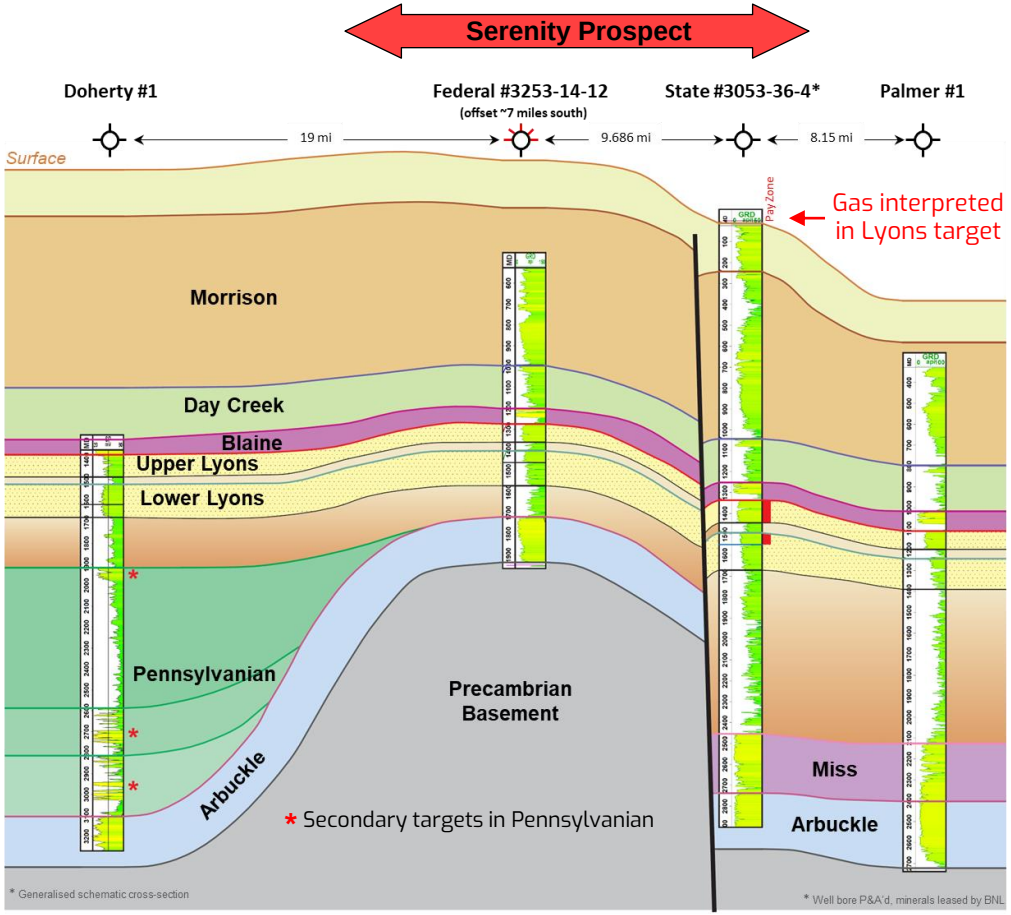
Structural high up dip from gas in Lyons reservoir sweet-spot

Drilling next

- First well (Sammons 315310C) in Blue Star-Vecta AMI (Blue Star 50% WI) over the Serenity prospect targeted to commence drilling in June
- 3 appraisal/development well locations already approved to follow-up successful initial well.
- The initial well is targeting an interpreted structural high, up-dip from the State #3053-36-4 (State #3053) well where gas has been interpreted on historically run wireline logs.
- The State #3053 well also highlights that the Lyons formation in this location is significantly thick with high net quality sand.
- Drilling and evaluation of this well is expected to cost less than US$150,000, net to Blue Star.

SERENITY PROSPECT

Structural high up-dip from interpreted gas in Lyons target



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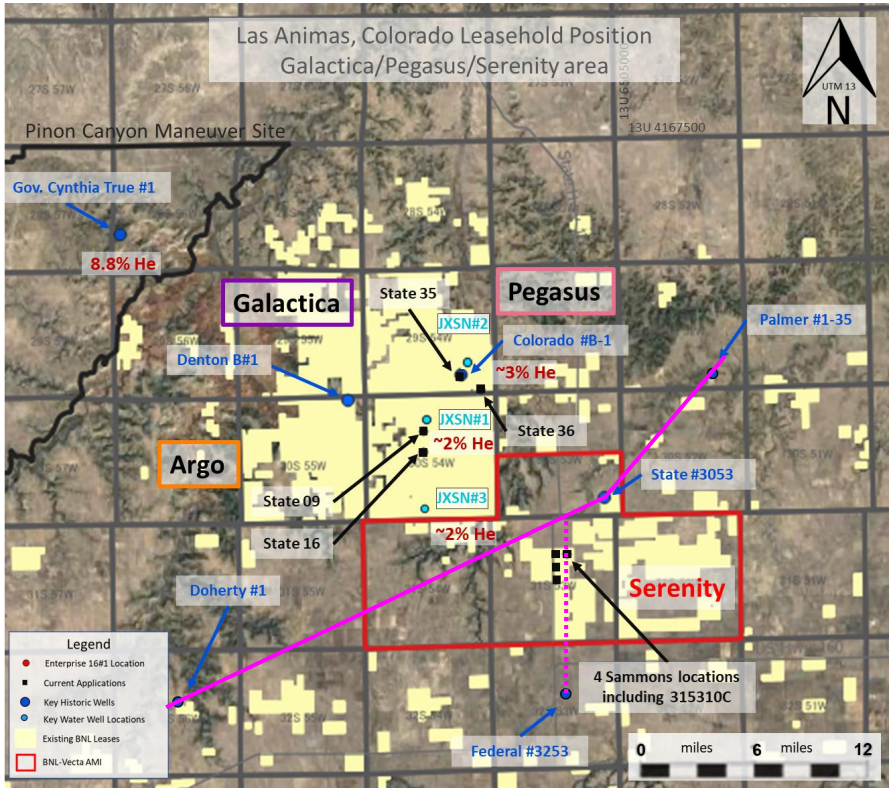
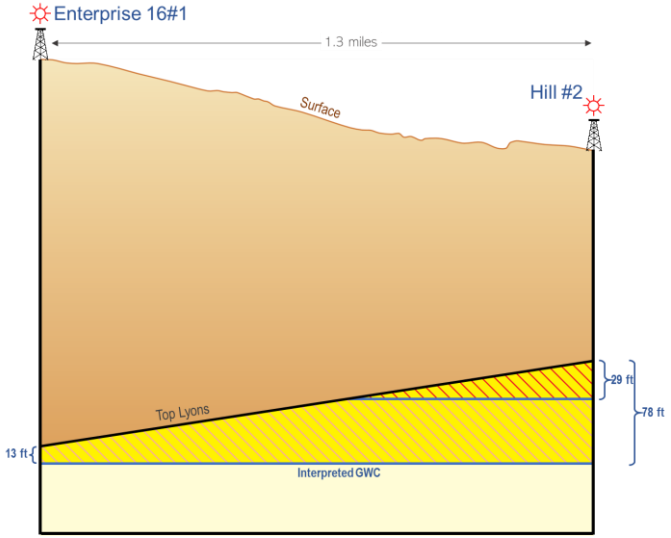


ENTERPRISE

Successful test of the proven Lyons helium play in the west

Results so far

- 78ft structural gas column interpreted at Enterprise
  - Based on the GWC interpreted at Enterprise 16#1 and the top of the currently highest penetration of the Lyons formation on the structure in the Hill#2
- Enterprise 16#1, 13 ft gas column in the high-quality Lyons formation interpreted on wireline logs
- Completion and testing program finalised and approved by the COGCC. The Company is now in the process of securing a workover rig to conduct the work.
- Forward work plan for helium well permitting at Enterprise prospect unchanged, including planned further strategic water well evaluations at select locations



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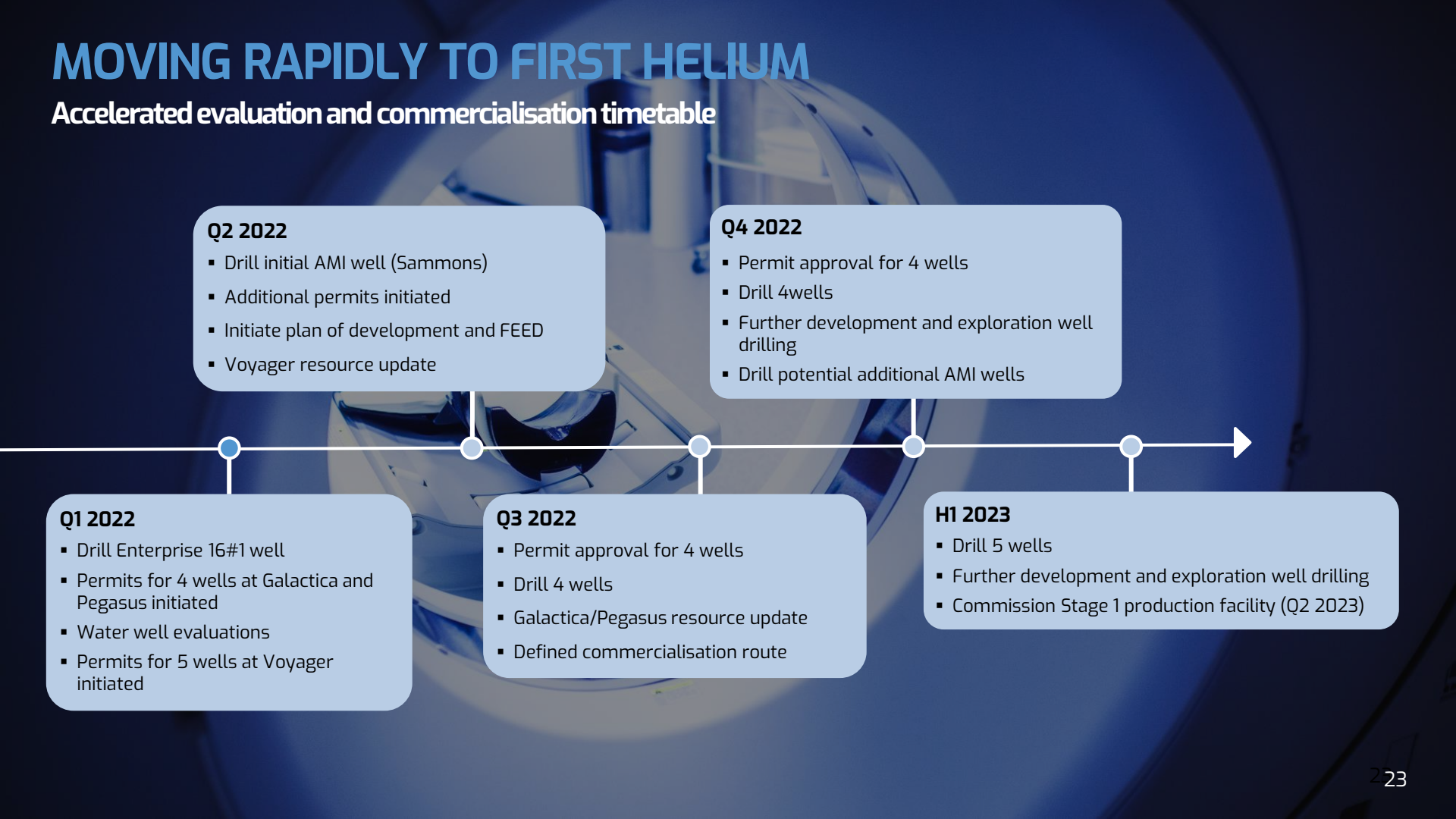
MOVING RAPIDLY TO FIRST HELIUM

Accelerated evaluation and commercialisation timetable



Q1 2022
- Drill Enterprise 16#1 well
- Permits for 4 wells at Galactica and Pegasus initiated
- Water well evaluations
- Permits for 5 wells at Voyager initiated

Q2 2022
- Drill initial AMI well (Sammons)
- Additional permits initiated
- Initiate plan of development and FEED
- Voyager resource update

Q3 2022
- Permit approval for 4 wells
- Drill 4 wells
- Galactica/Pegasus resource update
- Defined commercialisation route

Q4 2022
- Permit approval for 4 wells
- Drill 4wells
- Further development and exploration well drilling
- Drill potential additional AMI wells

H1 2023
- Drill 5 wells
- Further development and exploration well drilling
- Commission Stage 1 production facility (Q2 2023)

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APPENDICES

EXPLORATION PROGRAM UNDERWAY

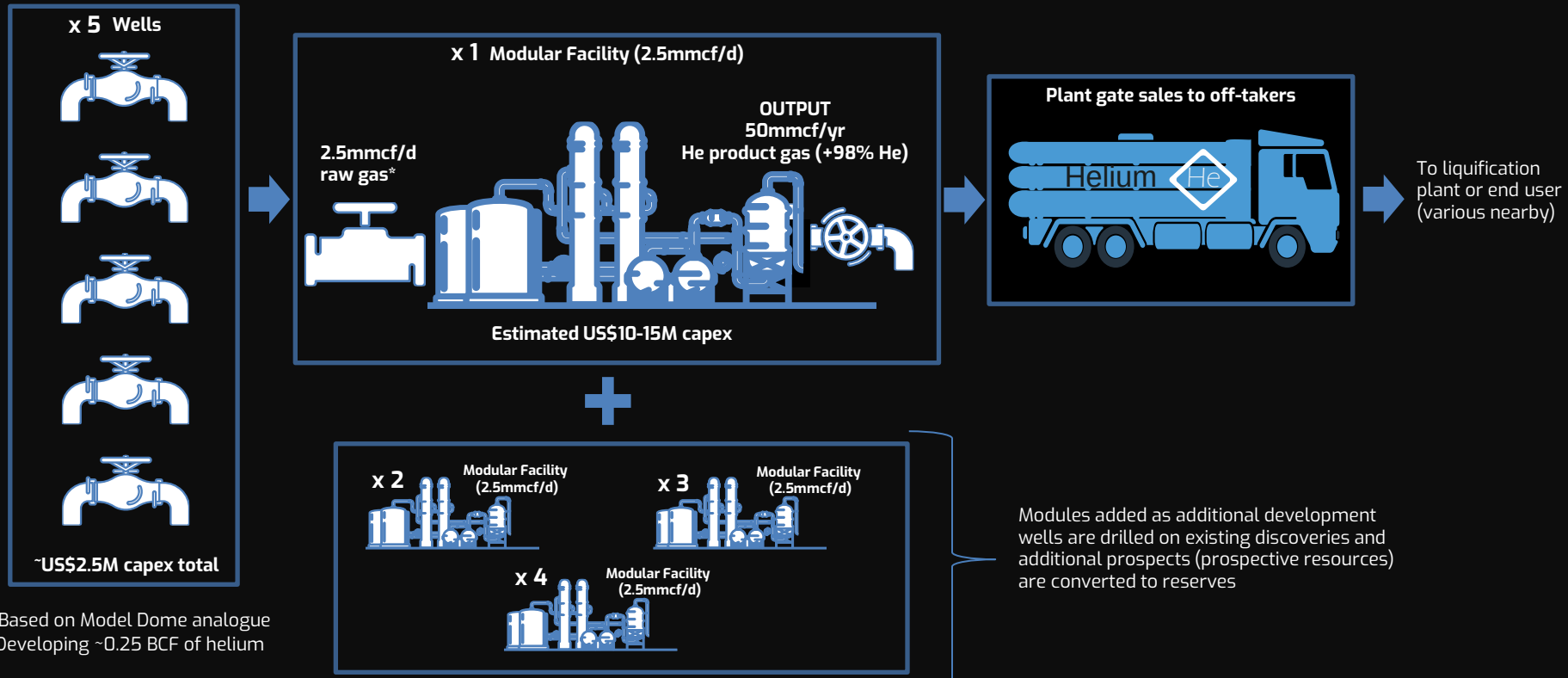
Well permitting status

Exploration Well Permitting Phases

Well Permitting Schedule								
Prospect	**Location Selection**	**Survey**	**Permit Preparation**	**COGCC Review**	**COGCC Hearing**	**Form 2**	**Issued**	**Total**
Enterprise	1	2	1				1	**5**
Galactica	6	7	2		2			**17**
Galileo			3					**3**
Pegasus		6	4		2			**12**
Serenity						3	1	**4**
Voyager	1		3	2				**6**
Total	**8**	**15**	**13**	**2**	**4**	**3**	**2**	**47**
Changes since 28 January 2022	-20	+10	+8	-2	-	+3	+1	

HIGH-RETURN COMMERCIALISATION PATHWAY

Scalable, modular growth concept to market



*Based on Model Dome analogue
Developing ~0.25 BCF of helium

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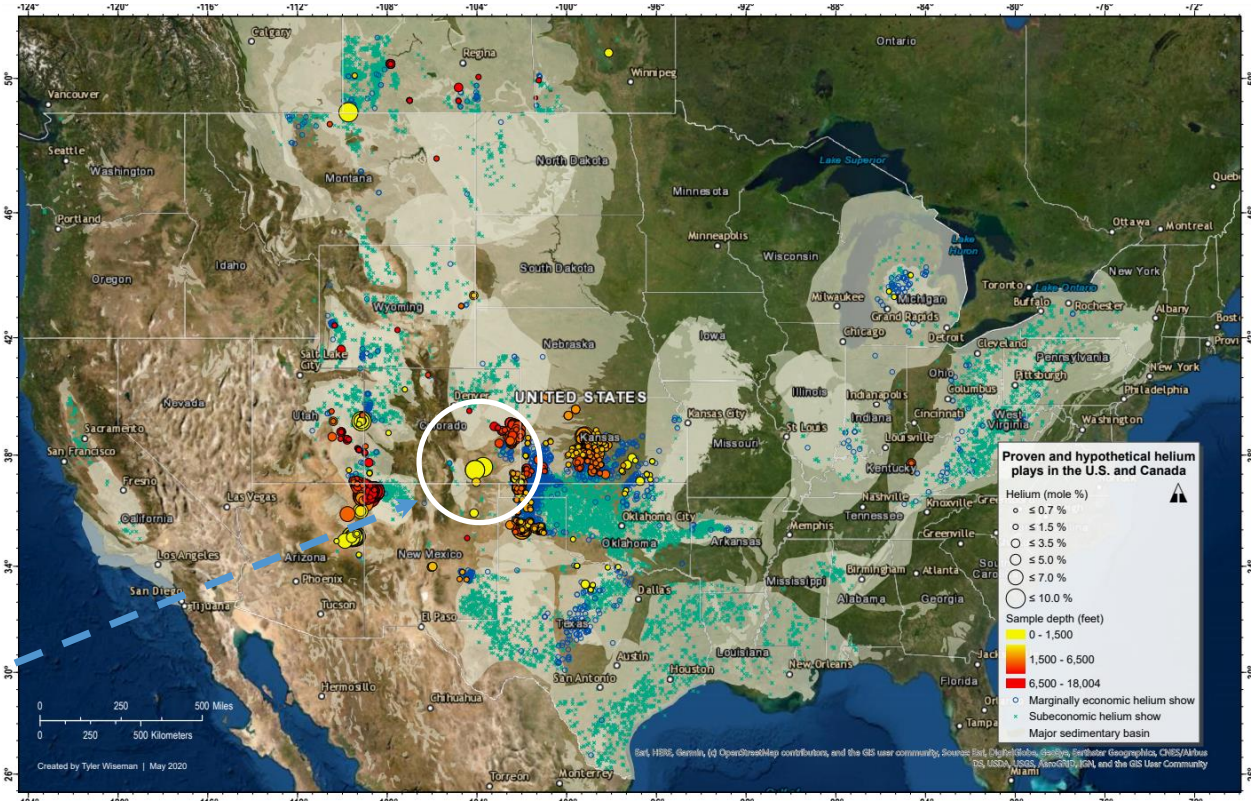
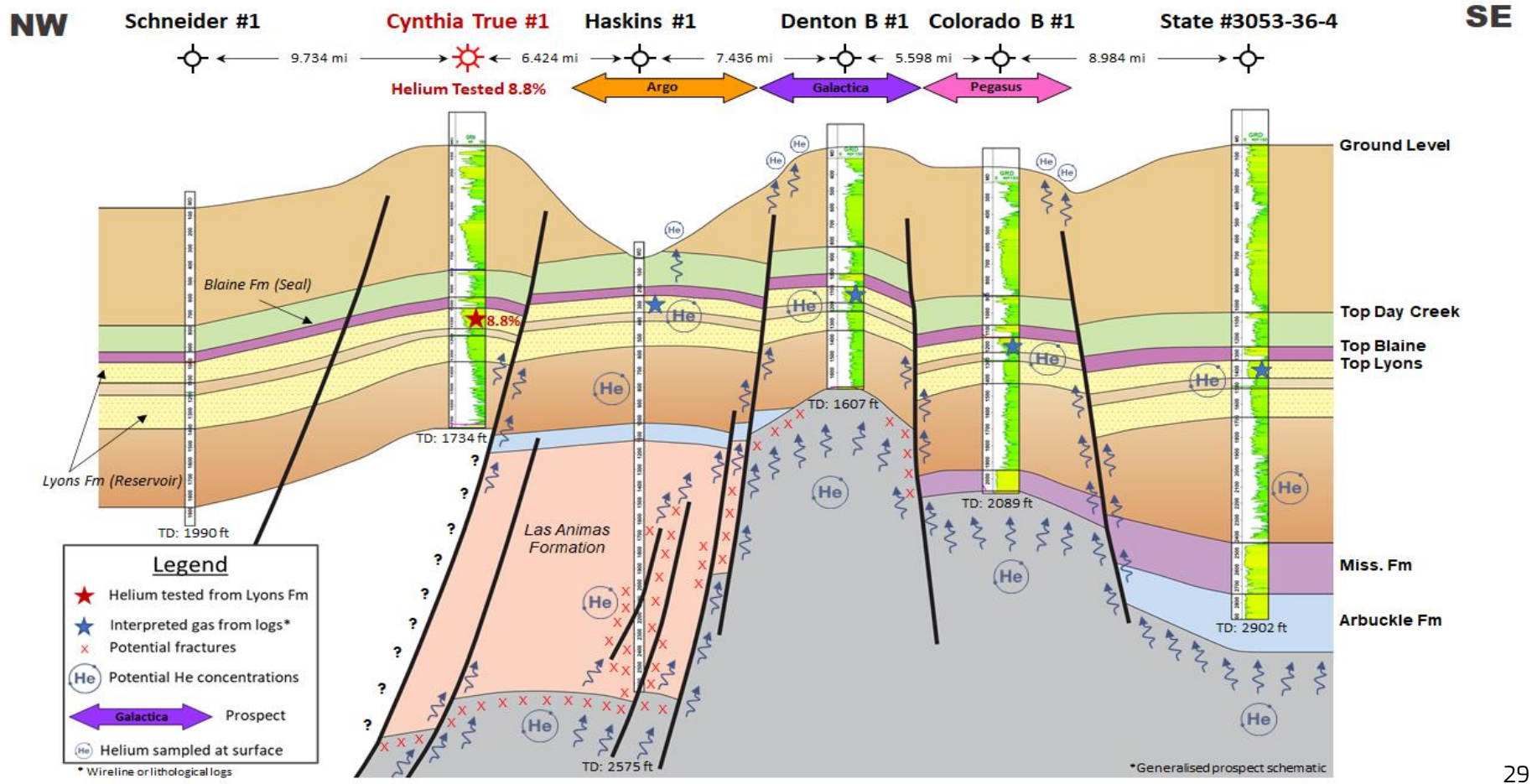
STRATEGICALLY LOCATED ASSETS

- High helium concentration
- Highly strategic location proximate key infrastructure and downstream helium consumers
- Strategic large-scale US land position



SUBSTANTIAL SHALLOW RESOURCES & DEEPER PLAYS



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

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

HELIUM DEMAND

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

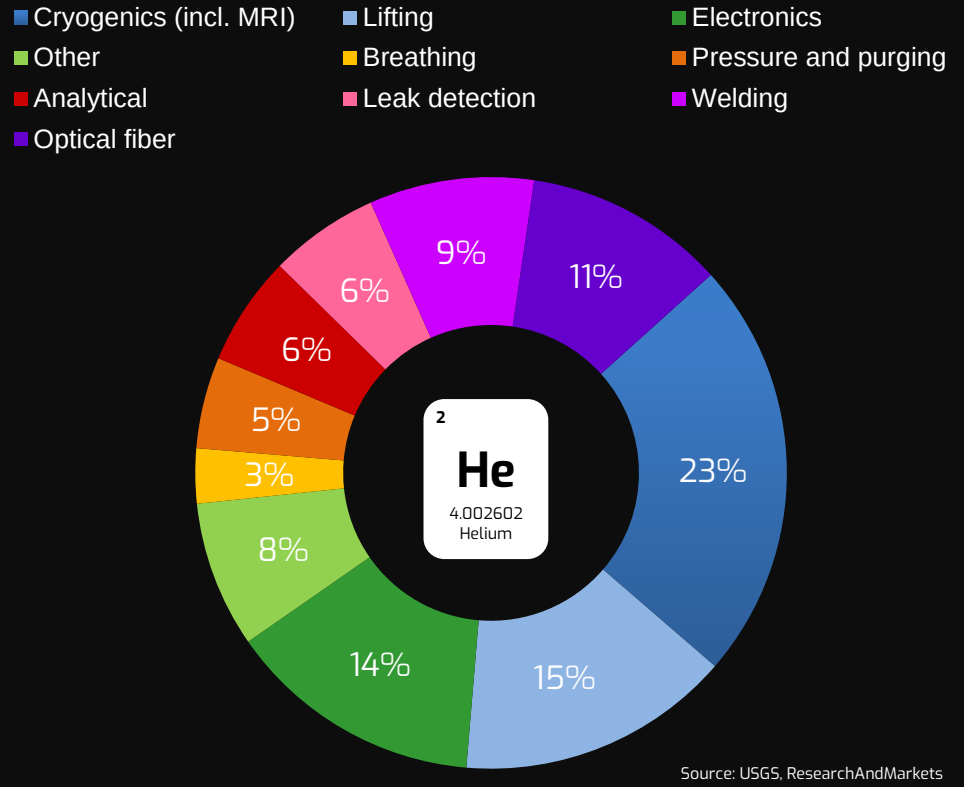
Estimated market size in 2025

US$18.2 B

Forecast 2021-25 CAGR: 11.2% p.a.

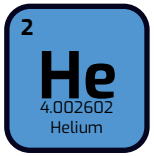
Source: ResearchAndMarkets

Global share of helium applications



Source: USGS, ResearchAndMarkets

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



CURRENT HELIUM USES

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.

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.

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.

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.

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.

Renewables/low carbon tech

Small modular nuclear reactors (SMRs)

High speed Mag-Lev transport

Lithium-ion battery testing and quality assurance

BUILDING THE FUTURE

Helium is a modern technology enabler

- Helium is not a greenhouse gas and not an energy source
- It plays a key part in renewable energy and the technology required for a low-carbon economy:
  - Essential in nuclear fusion and ideal for nuclear fission cooling
  - High speed Mag-Lev transport, reducing travel related emissions
  - Space / satellite launches
  - Lithium-ion battery testing and quality assurance
  - Semiconductors and quantum computing
- Increasing pressure on companies to decarbonise themselves and their supply chains
- Growing attraction of primary helium sources vs hydrocarbon extraction by-products
- Blue Star ideally positioned to capitalise

MAJOR GLOBAL HELIUM SUPPLY SOURCES

Most helium production is a by-product output of hydrocarbon extraction

Asset	Owner	Domicile	He output (Bcf p.a.)	He concentration (% He in raw gas)	Notes
Ras Laffan	RasGas	Qatar	2.0	0.2%	Primarily LNG output
La Barge	Exxon	U.S.	1.5	0.7%	Primarily CO_2 output
Algeria LNG	Various	Algeria	0.4	0.2%	Primarily LNG output
Hugoton	Various	U.S.	0.4	0.6%	Primarily natural gas output (approaching depletion)
US Strategic Reserve	BLM	U.S.	0.4	1%	**Secondary He supply (approaching depletion)**
Concho Dome	Petrosun	U.S.	0.2	4%	Primary He supply
Doe Canyon	Air Liquide	U.S.	0.2	0.4%	Primarily natural gas output
Bayu-Undan	Various	Australia	0.2	0.3%	Primarily LNG output
Dineh Bi Keyah (DBK)	Nasco AG	U.S.	0.2	5%	Primary He supply
Tocito Dome	Tacitus	U.S.	0.1	7%	Primary He supply
Orenburg	Gazprom	Russia	0.1	0.5%	Primarily natural gas output (domestic supply only)
Odalonow	PGNiG	Poland	0.1	0.5%	Primary He supply
Lisbon	Paradox Resources	U.S.	0.1	1%	Primarily natural gas output

Primary He supply comprises only approx. 10% of global market supply

Legend

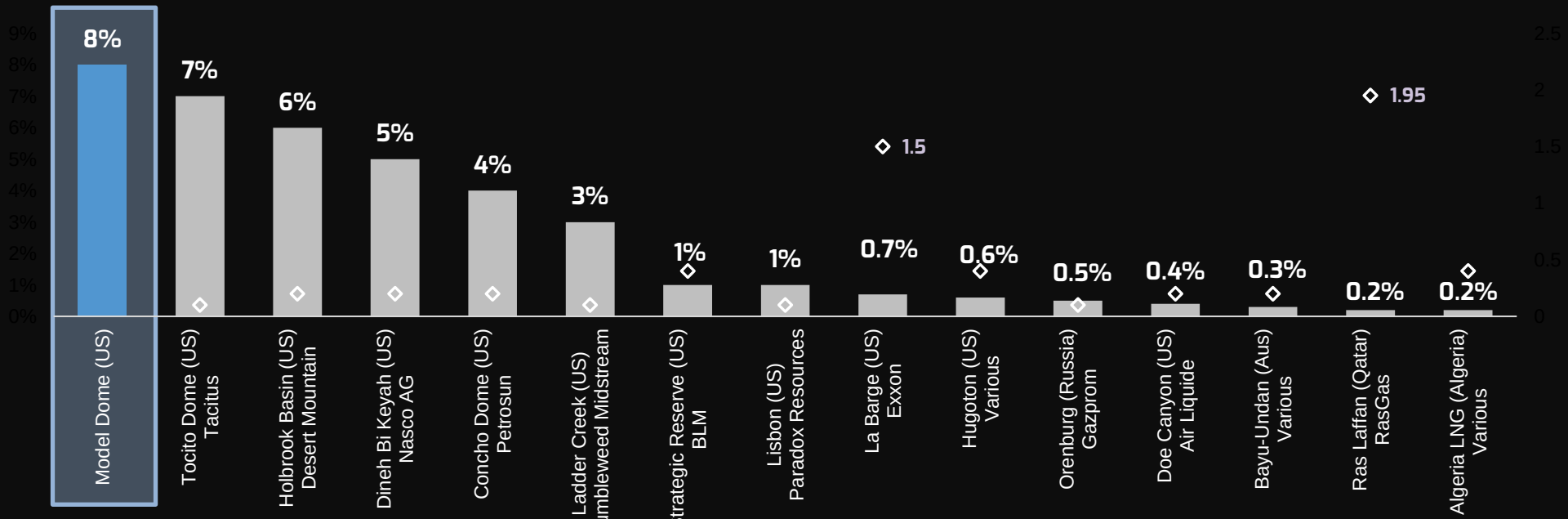
- Primarily Hydrocarbon
- Primarily CO_2
- Primary He

Source: Publicly available sources; see Appendix for full details

HIGH-GRADE HELIUM

Globally attractive helium concentration levels

Helium Concentration (% He) and Output (◇ Bcf pa) of Major Global Production Fields



Source: Hannam Partners research, publicly available sources; see Appendix for full details

THE LEADING HELIUM PURE PLAY

Premier quality development asset opportunity

Company	Blue Star Helium	Desert Mountain Energy	Renergen	Helium One Global	Avanti Energy	Royal Helium	Imperial Helium*	Grand Gulf Energy	Noble Helium
Listing	**ASX: BNL OTCQB: BSNLF**	TSXV: DME	JSE: REN; ASX: RLT	AIM: HE1	TSXV: AVN	TSXV: RHC	TSXV: IHC	ASX: GGE OTCQB:GRGUF	ASX: NHE
Asset domicile	**U.S.**	U.S.	South Africa	Tanzania	U.S. & Canada	Canada	Canada	U.S.	Tanzania
Provincial location	**Colorado**	Arizona	Free State	Songwe Region	Montana; Alberta and Saskatchewan	Saskatchewan	Alberta	Utah	Manyara & Rukwa Regions
Market capitalisation (US$M)	**$34M**	$184M	$291M	$71M	$64M	$39M	$12M	$34M	$12M
Net acreage held	**215,345**	+85,000	462,000	1,115,000	~132,000	1,067,500	60,500	29,000	~970,000
Net prospective He resource (Bcf, 2U)	**13.4**	-	32.3	138	-	-	-	20.8	101
Helium concentration (% He)	**2 - 8%**	4 - 7%	3 – 12%	NA	1 - 2%	1-2%	0.43%	NA	4 – 10%
Evaluation stage	**E&D**	E&D	E&D	Exploration	Exploration	Exploration	E&D	Exploration	Exploration

Source: Publicly available sources; see Appendix for full details (market data as at 30 May 2022)
* Imperial Helium to be acquired by Royal Helium

MARKETING BLUE STAR HELIUM

Right in the centre of the world's biggest helium market

TARGETING PREMIUM SUPPLIER STATUS

- Helium marketing study – completed
- Within trucking distance to established liquefaction plants with significant available capacity
- Targeting production of highly sought after and premiumly priced +98% He product gas
- Direct gas sales opportunities as well as long term contract options
- Relationships established with potential offtake parties and end-users
- Excellent timing as new entrant – major evolution underway in U.S. helium market
- Transformational market opportunity
  - Supply constrained
  - Gazprom's Amur facility delayed by explosion and fire
  - US Federal Helium Reserve sold but deliveries delayed due facility shutdown for unplanned maintenance
  - Qatar facility down for planned maintenance
  - explosion at Kenawa Haven Plant, Kansas
  - Algeria stopped processing helium and re-routed gas feedstock to Europe

BLUE STAR: A LOCAL PARTNER AND SUPPLIER OF CHOICE

A highly engaged, holistic stakeholder approach,

STRONG ESG CREDENTIALS

- Preparing Environment, Social and Governance (ESG) roadmap to guide the business as it grows
  - aim to become a leading supplier of helium utilising a best practice approach to management of ESG risks and opportunities.
  - Stakeholder engagement process guided by PwC.
- Green helium - natural gas composition advantages
  - Effectively zero hydrocarbon (methane) content
- Delivers strong, structural environmental competitive advantage
- Planned long-term sale of CO_2 by-product for use by food industry (dominant consumer) and/or sequestered for tax credits
- Evaluating significant renewable power penetration potential for helium production facility
- Well established, deep landowner and local community relationships
  - Funding drilling of water wells for local ranchers
  - Minimising surface disturbance
  - Preferencing of local commercial engagement and supplies sourcing

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
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

DATA SOURCES

Slide	Description	Source
Slide 36	Peer Comparative Table	Currency conversion rates: CADUSD 0.79; AUDUSD 0.72; GBPUSD 1.26 (30 May 2022)
		Desert Mountain Energy – *Investor Presentation*, 12 January 2022
		Grand Gulf Energy – *March 22 Quarterly Activities and Cash Flow Report*, 29 April 2022
		Blue Star Energy – *Activities Report Quarter Ended 31 March 2022*, 29 April 2022
		Renergen Ltd - *Prospective Resource Evaluation, July 2020; Annual Report to Shareholders*, 20 May 2022
		Royal Helium – *Investor Presentation, August 2021*
		Helium One – *Investor Presentation*, March 2022
		Avanti Energy - *Investor Presentation*, March 2022; *Avanti Energy Acquires 63,000 acres of helium exploration permits in SW Saskatchewan*, 3 May 2022
		Imperial Helium - *Investor Presentation*, February 2022; *Imperial Helium Completes Drilling of Second Well in the Steveville Project* , 31 August 2021
		Noble Helium – *Investor Presentation, April 2022*
Slide 7	The U.S. Helium Market	• https://www.reuters.com/technology/exclusive-tsmc-looks-double-down-us-chip-factories-talks-europe-falter-2021-05-14/ • https://www.anandtech.com/show/16483/samsung-in-the-usa-a-17-billion-usd-fab-by-late-2023 • https://www.forbes.com/sites/timbajarin/2021/03/23/intel-to-launch-two-new-fabs-in-arizona-and-why-this-is-important/?sh=54232a5247bb • https://www.industryweek.com/technology-and-iiot/information-technology/article/21170068/globalfoundries-announces-new-semiconductorfab-in-new-york
Slide 34	Major Global Helium Supply Sources	Edison Research, 'Helium – Macro View Update Update' , February 2019; 'Global helium market update' , May 2021; Hannam & Partners Equity Research, 'Helium, a super cool commodity', 14 December 2020;
Slide 35	High-grade Helium	Hannam & Partners Equity Research, 'Helium, a super cool commodity', 14 December 2020; Edison Research, "Global helium market update", May 2021

MINERAL RIGHTS IN THE UNITED STATES

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.