

Corporate Presentation / 公司介绍

April 18<sup>th</sup>, 2024 / 2024年4月18日

TSXV: PLSR

OTCQB: PSRHF



The Force in Helium

氦气中的力量



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This presentation contains forward-looking statements and forward-looking information within the meaning of Canadian securities legislation (collectively, "forward-looking statements") that relate to the Company's current expectations and views of future events. Any statements that express, or involve discussions as to, expectations, beliefs, plans, objectives, assumptions or future events or performance (often, but not always, through the use of words or phrases such as "will likely result", "are expected to", "expects", "will continue", "is anticipated", "anticipates", "believes", "estimated", "intends", "plans", "forecast", "projection", "strategy", "objective" and "outlook") are not historical facts and may be forward-looking statements and may involve estimates, assumptions and uncertainties which could cause actual results or outcomes to differ materially from those expressed in such forward-looking statements. In particular and without limitation, this news release contains forward-looking statements pertaining to the Company's business objectives going forward. No assurance can be given that these expectations will prove to be correct and such forward-looking statements included in this news release should not be unduly relied upon. These statements speak only as of the date of this presentation.

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This presentation shall not constitute an offer to sell or the solicitation of an offer to buy securities.

2nd Highest Grade in North America / 北美品位第二高



**10.5%**

helium drilled and flowed in Pulsar's Topaz Project in Minnesota <sup>1</sup> / 在明尼苏达州 Pulsar 的 Topaz 项目中钻探和流出的氦气<sup>1</sup>

**>0.3 %**

helium concentration is considered economically significant <sup>2</sup> / 氦气浓度超过0.3%即被认为具有重要的经济意义<sup>2</sup>

Sources / 来源: <sup>1</sup> Refer to slide 15 for analytical results / 分析结果详见幻灯片第15页  
<sup>2</sup> <https://repository.mines.edu/handle/11124/172822>

\* Refer to Pulsar News Release dated March 14, 2024 参考Pulsar日期为2024年3月14日的新闻稿

# Corporate Snapshot / 企业概况

## CAPITAL STRUCTURE 资本结构

TSXV TICKER 股票代码	PLSR
SHARE PRICE 股价 (TSXV CLOSE, MARCH 19, '24 截止2024年3月19日收盘)	C\$1.18
ISSUED SHARE CAPITAL 已发行股本	95.6 M
WARRANTS 认股权证	27.3 M
OPTIONS 股票期权	9.3 M
PSUs / 绩效股份单位	4.0 M
FULLY DILUTED 完全稀释后	136.2 M
BASIC MARKET CAPITALIZATION 基本市值	C\$112.7 M
CASH / 现金*	C\$4.4 M

\* includes cash at Dec 31, 2023 of C\$200,000 plus PP proceeds of C\$4.2M

\* 包括截至2023年12月31日的现金20万加元和私募发行收益420万加元

## SHAREHOLDER BASE 股东基础

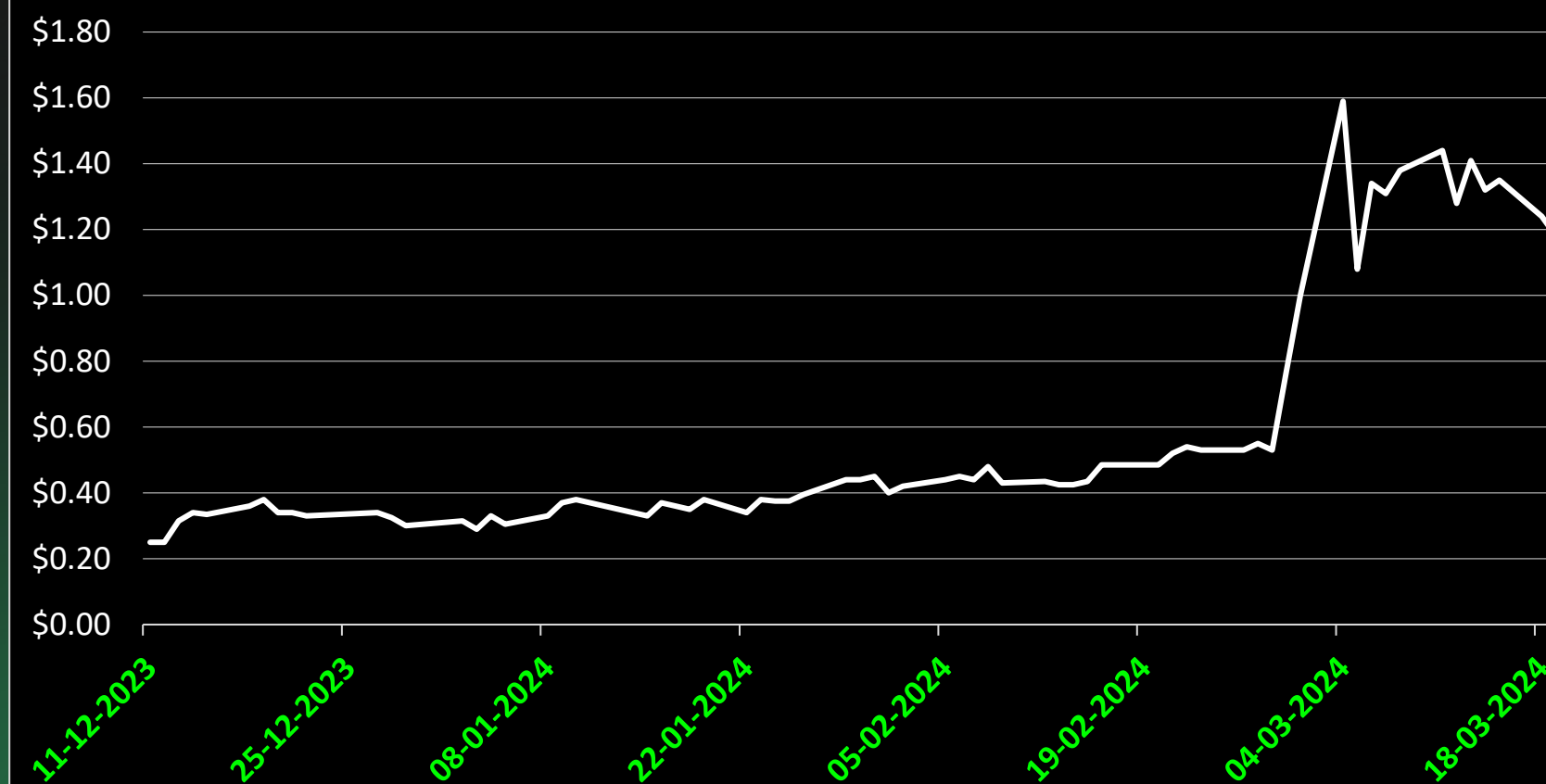
ABCRESCENT B.V.	16%
CAMBRIAN LIMITED (NEIL HERBERT)	13%
THOMAS ABRAHAMJAMES (PRESIDENT & CEO 总裁兼首席执行官)	12%
FOUNDING SHAREHOLDERS 创始股东	25%
PUBLIC SHAREHOLDING FLOAT 公众持股浮动	34%



Pulsar listed on the TSX Venture Exchange on August 15th, via initial public offering (IPO) / 去年8月15日, Pulsar通过首次公开募股 (IPO) 在多伦多证券交易所创业板上市

3 Month Share Chart

3个月股价走势图



# Board & Management / 董事会和管理层

**Thomas Abraham -James** President & CEO / 总裁兼首席执行官



- Corporate executive and chartered geoscientist / 企业高管、特许地球科学家
- Co-founder & former managing director of Helium One Global Ltd (LSE: HE1)/Helium One Global Ltd (LSE: HE1)联合创始人、前董事总经理
- 18+ years in mineral resources (10 years in helium) / 在矿产资源行业积累了超过18年的经验（氦气行业10年）

**Doris Meyer** Independent Director / 独立董事



- Financial professional & corporate executive / 金融专家、企业高管
- Non-executive with TSXV:AZR, NSU & PEAK / 担任TSXV上市公司AZR、NSU和PEAK的非执行董事
- 13+ years in mineral resources / 在矿产资源领域有13年以上的经验

**Brice Laurent** Independent Director / 独立董事



- Financial professional & corporate executive / 金融专家、企业高管
- Represents ABCrescent B.V. as an investor nominee on the board of Pulsar / 代表ABCrescent B.V.担任Pulsar董事会投资者代表
- Former investment banker with Morgan Stanley / 摩根士丹利前投资银行家
- 13+ years in finance / 在金融行业有13年以上的经验

**Neil Herbert** Executive Chairman / 执行主席



- Corporate executive & accountant / 企业高管、会计师
- Former chairman of Helium One Global Ltd (LSE: HE1) and current chairman of Atlantic Lithium (LSE: ALL) / Helium One Global Ltd (LSE: HE1)前董事会主席，Atlantic Lithium (LSE: ALL) 现董事会主席
- 30+ years in mineral resources / 在矿产资源领域有30多年的经验

**Jon Ferrier** Independent Director / 独立董事



- Corporate executive & geoscientist / 企业高管、地球科学家
- Former CEO of Gulf Keystone Petroleum Ltd (LSE: GKP) / Gulf Keystone Petroleum Ltd (LSE: GKP) 前首席执行官
- 35+ years in oil and gas / 在石油和天然气行业有超过35年的经验

**Stu Crow** Independent Director / 独立董事

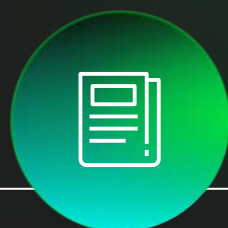


- Corporate executive & financier / 企业高管、金融家
- Chairman of Lake Resources (ASX: LKE) / Lake Resources (ASX: LKE)董事会主席
- 30+ years in mineral resources / 在矿产资源领域有30多年的经验

# Competitive Advantages / 竞争优势

## HIGH IMPACT, NEAR TERM NEWS FLOW

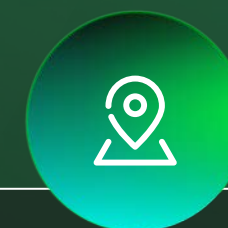
近期具有深远影响力的新闻流



- Appraisal well completed at the Topaz Project in February '24, concentration up to 13.8% helium\* / 24年2月在Topaz项目完成评估井，氦气浓度高达13.8%\*
- Down-hole logging, pressure and flow tests to come / 即将进行井下测井、压力和流量测试

## LOCATION, LOCATION, LOCATION

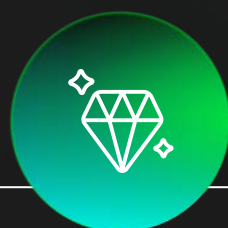
位置、位置、位置



- The Topaz project is in the USA, the world's largest consumer of helium / Topaz项目位于美国，而美国是世界上最大的氦气消费国
- No exports! / 没有出口!

## HIGH VALUE PRODUCT IN SHORT SUPPLY

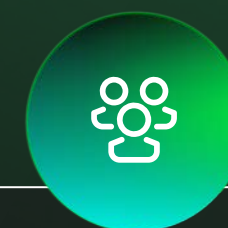
高价值产品供不应求



- Essential for semiconductor fabrication, space rocket launches, MRI scanners, and beyond / 氦气对半导体制造、太空火箭发射、核磁共振成像扫描仪等都至关重要
- USA production is in decline / 美国氦气产量正在下降

## WIDELY EXPERIENCED TEAM

经验丰富的团队



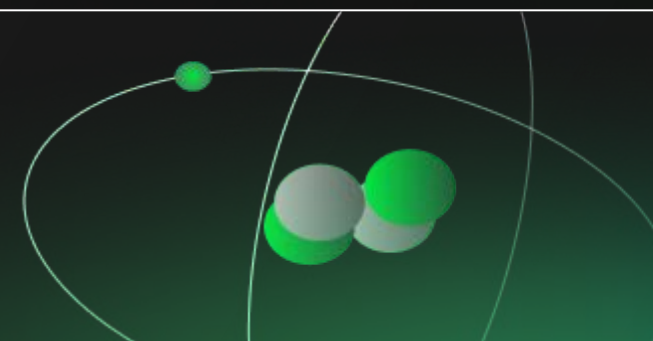
- The CEO, chairman and technical manager have been in the helium industry since 2014 / 首席执行官、董事会主席和技术经理自2014年以来一直从事氦气行业的工作

## HELIUM IS THE PRIMARY ECONOMIC DRIVER

氦气是主要的经济驱动力



- ~95% of the world's helium is produced as a byproduct of hydrocarbon production / 全世界大约95%的氦气是作为生产碳氢化合物的副产品产生的<sup>1</sup>
- We focus only on projects where helium is the primary economic driver / 我们只关注以氦气为主要经济驱动力的项目



Source / 来源: (1) <https://www.gasworld.com/story/helium> - start - up - activity - at - unprecedented - levels/

# ★ Pricing / 定价



>100x

Helium is valued at over 100x the natural gas price  
氮气的价值是天然气价格的100倍以上

638%

price increase for Grade -A gaseous helium since 2000 (data from the United States Geological Survey (USGS)) / 自2000年以来A级气态氮的价格涨幅（数据来自美国地质调查局(USGS)）<sup>1</sup>

### Air Products <sup>3</sup>

major 5-year off-take with NASA in 2022, valuing the liquid helium and ancillaries at ~US\$1,100 per mcf / 2022年与NASA签订为期5年的氮承购协议，液态氮和辅助设备的价格约为每千立方英尺1100美元

### Prices in excess of US\$1,000 per mcf / 每千立方英尺价格超过1000美元

in the past 12 months data has shown several liquid helium shipments being traded globally for > US\$1,000 per mcf <sup>4</sup> / 过去12个月的数据显示，全球有好几批液态氮的交易价格超过每千立方英尺1000美元<sup>4</sup>

### Royal Helium Ltd. <sup>2</sup>

(TSXV: RHC): off-take with a private North American company valued at US\$625 per mcf of Grade -A gaseous helium (announced in 2023) / 与一家北美私营公司签订了每千立方英尺625美元的A级气态氮承购协议（2023年宣布）

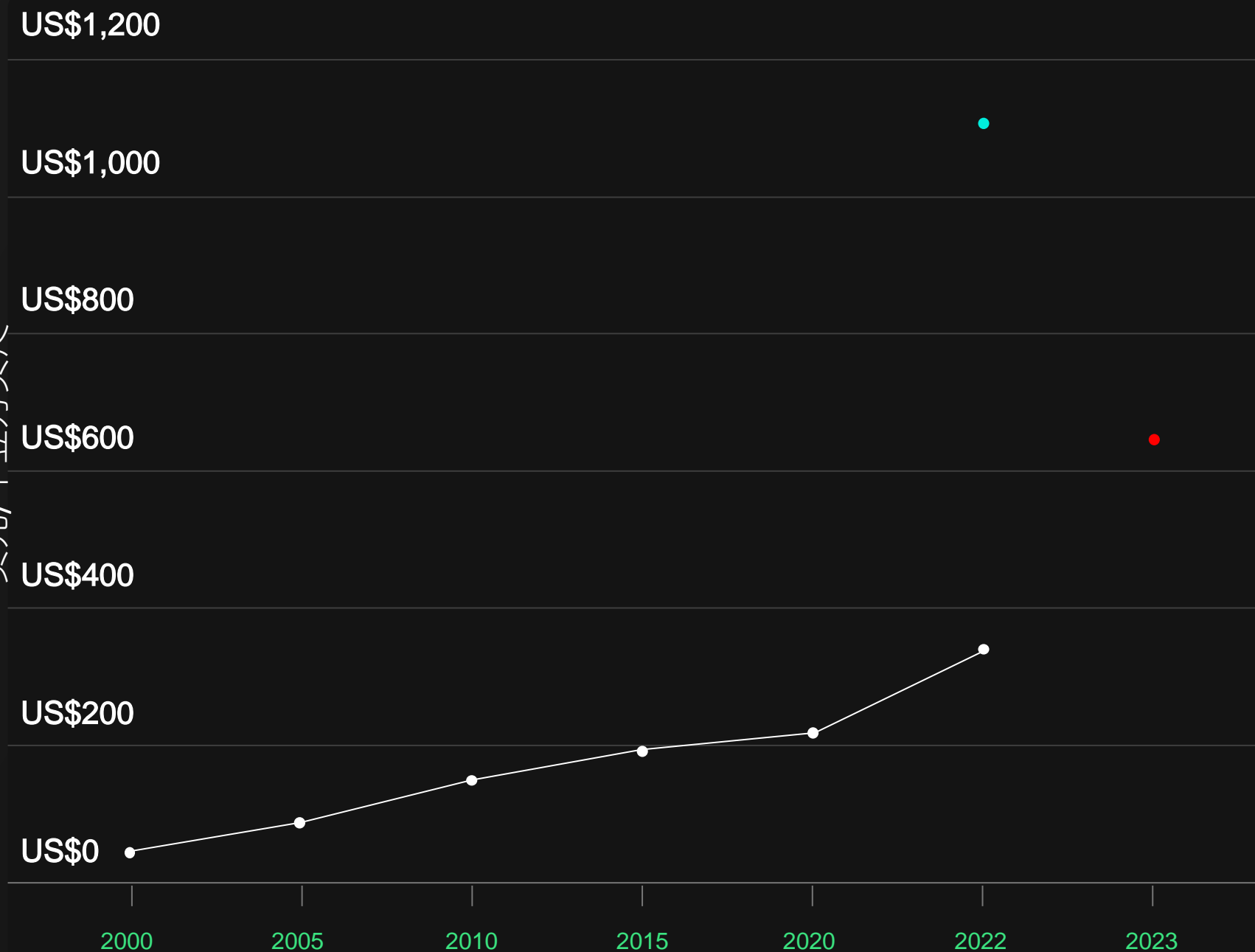
Sources: (1) <https://www.usgs.gov/centers/national-minerals-information-center/helium-statistics-and-information>  
来源: (2) <https://royalheliumltd.com/investors/corporate-presentation/>  
(3) <https://www.nasa.gov/press-release/nasa-awards-contract-for-liquid-helium-acquisition-at-kennedy>  
The 5-year contract includes unit prices for the helium commodity per year (including transportation expenses), the lease of six helium pumps, and other ancillary services. / 这份为期5年的合同包括每年氮气商品的单价（包括运输费用）、6台氮气泵的租赁以及其他辅助服务。  
(4) Edelgas Group

• USGS

• ROYAL HELIUM

• AIR PRODUCTS

USD\$ per thousand cubic feet  
美元/千立方英尺



# ★ The Helium Market / 氦气市场

**8.1 bcf**  
**81亿立方英尺**

(2030 EST.  
预计到2030年)

**6.6 bcf**  
**66亿立方英尺**

(2025 EST.  
预计到2025年)

**6.1 bcf**  
**61亿立方英尺**

(2023  
2023年)

**Forecast Total Market** 2030  
预测市场总量

<b>8.1B</b> 81亿 Cubic Feet 立方英尺	<b>\$750</b> Per mcf 每千立方英尺	<b>~\$6.1B</b> ~\$61亿
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**Forecast Total Market** 2025  
预测市场总量

<b>6.6B</b> 66亿 Cubic Feet 立方英尺	<b>\$750</b> Per mcf 每千立方英尺	<b>~\$5.0B</b> ~\$50亿
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**Total Market / 市场总量** 2023

<b>6.1B</b> 61亿 Cubic Feet 立方英尺	<b>\$750</b> Per mcf 每千立方英尺	<b>~\$4.6B</b> ~\$46亿
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Source: Edelgas Group

来源:

Disclaimer: Subject to market conditions, risks, and uncertainties. No assurances can be made that such forward-looking market information will occur or prove to be correct. / 免责声明: 受市场条件、风险和不确定性的影响。不能保证此类前瞻性市场信息一定会实现或被证明是准确的。



# Supply - USA in Decline / 美国的供应正在下滑

## Worldwide Helium Production by Supply Source to 2030 到2030年各供应来源下的全球氦气产量

(million ft<sup>3</sup>/year)  
(百万立方英尺/年)



**USA PRODUCTION IS IN SIGNIFICANT DECLINE**  
美国产量大幅下滑

- Exxon Mobil Corporation (USA) stands as the most reliable source. / 埃克森美孚公司（美国）是最可靠的来源。
- The USA Federal Reserve is decreasing rapidly. / 美国联邦储备正在迅速减少。
- Algeria is influenced by Europe's varying LNG demand. / 阿尔及利亚受到欧洲不同液化天然气需求的影响。
- Qatar is overshadowed by constant geopolitical risk. / 卡塔尔被持续的地缘政治风险所笼罩。
- Both Russian and South African supply are displaced from demand. / 俄罗斯和南非的供应都被需求所取代。

Source: Edelgas Group

来源:

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**Reliability and sustainability of any supply outweigh price and volume. / 任何供应的可靠性和可持续性比价格和供应量更重要。**

# Uses / 用途

Helium is critical for electronics (semiconductors), the internet (fiber-optics) and other everyday items that we rely upon.  
氦气对于电子产品（半导体）、互联网（光纤）和我们依赖的其他日常用品至关重要。

## Semiconductors <sup>1</sup> / 半导体 <sup>1</sup>

Used in the manufacturing process of semiconductors (computer chips).  
用于半导体（计算机芯片）的制造过程中。

## Modular Helium Reactors <sup>2</sup> / 模块化氦反应堆 <sup>2</sup>

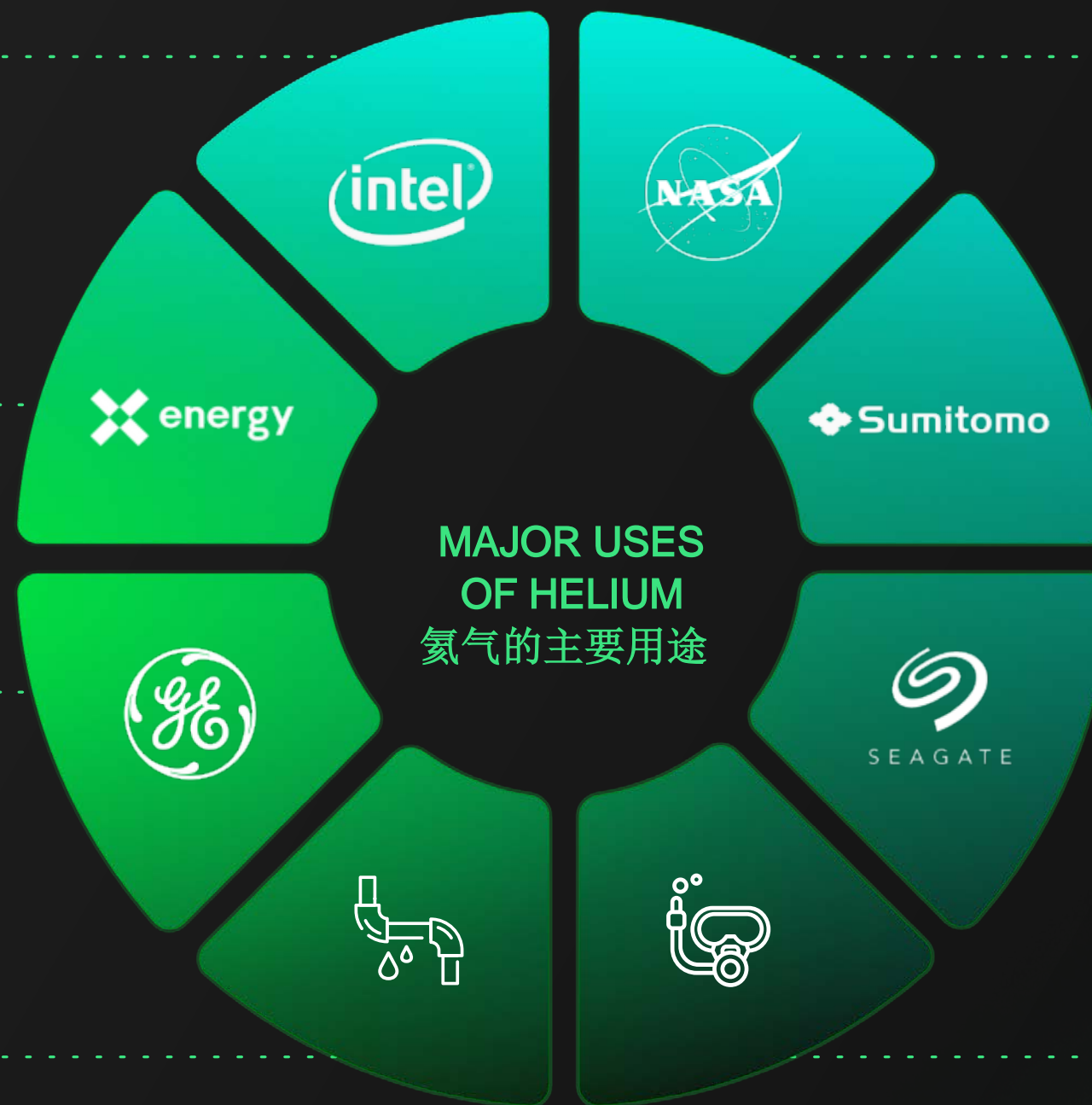
Helium transfers heat from the reactor to a steam generator, producing electricity.  
氦气将热量从反应堆传递到蒸汽发生器，从而产生电力。

## MRI Scanners <sup>3</sup> / 核磁共振成像扫描仪 <sup>3</sup>

Helium chills the copper coil into superconducting state for continuous high magnetic field operation.  
氦气使铜线圈冷却到超导状态，以持续产生高磁场。

## Leak Detection <sup>4</sup> / 泄漏检测 <sup>4</sup>

Due to being small and inert, helium detects microscopic leaks – essential for aerospace and engineering.  
由于氦气体积小且具有惰性，因此可以检测到微小的泄漏，对航空航天和工程设计至关重要。



## Spacecraft <sup>5</sup> / 航天器 <sup>5</sup>

An inert purge gas for hydrogen systems and pressurizing agent.  
系统的惰性净化气体和增压器。

## Fiber-optics <sup>6</sup> / 光纤 <sup>6</sup>

Made in a pure helium environment to prevent air bubbles in cables.  
在纯氦环境中制造，防止电缆中产生气泡。

## Hard-Drives <sup>7</sup> / 硬盘驱动 <sup>7</sup>

Reduces drag on the spinning platters, increasing speed and reducing power consumption.  
减少旋转碟片的阻力，提高速度并减少能耗。

## Deep Sea Diving <sup>8</sup> / 深海潜水 <sup>8</sup>

Helium in a technical diving air mix reduces breathing resistance and nitrogen narcosis on deep dives.  
技术潜水混合气体中的氦气可减少深潜时的呼吸阻力和氮麻醉。

Sources: (1) <https://www.instituteforenergyresearch.org/fossil-fuels/helium-is-instrumental-in-semiconductor-manufacturing/>. (2) <https://www.energy.gov/ne/articles/x-energy-developing-pebble-bed-reactor-they-say-cant-melt-down>  
来源: (3) <https://www.europhysicsnews.org/articles/epr/pdf/2012/04/epr2012434p26.pdf>. (4) <https://www.tqc.co.uk/our-services/leak-testing/helium/guide-to-helium-leak-testing/>  
(5) <https://www2.jpl.nasa.gov/basics/cassini/he.html#:~:text=Helium,valves%20in%20the%20propulsion%20system>. (6) <https://summit.sourceforge.com/helium-used-for-internet-access-fiber-optics/>  
(7) <https://blog.westerndigital.com/race-to-seal-helium/> (8) <https://www.envinsci.co.uk/use-helium-deep-sea-diving/#:~:text=Benefits%20of%20helium%20for%20divers&text=In%20some%20dives%2C%20both%20nitrogen,surface%2C%20without%20surf>  
[erling%20decompression%20sickness](https://www.nerve.com/nerve-erling-decompression-sickness).

# ✦ The Portfolio / 资产组合



## First mover in two new primary helium regions 两个新的原生氦产区的先行者

Topaz, Minnesota, USA / 美国明尼苏达州的Topaz项目

✦ Drilled and flowed gas with a concentration of 13.8% helium<sup>1</sup>, the highest recorded from a well globally / 钻井流出浓度为13.8%的氦气<sup>1</sup>，是全球记录的氦气浓度最高的

The USA is the largest market for helium / 美国是氦气的最大市场

✦ Appraisal well drilled February 2024 / 2024年2月钻探评估井

✦ Exclusive leases secured for up to 4,181 acres of land<sup>2</sup>, including the original discovery site

✦ / 拥有多达4181英亩土地<sup>2</sup>的独家租约，包括最初的发现地

## Tunu, Greenland / 格陵兰的Tunu项目

Large land position of 2,772 km<sup>2</sup> (~685,000 acres) / 2772平方公里（约68.5万英亩）的大

✦ 片土地

A European Union (EU) overseas territory and helium is on the European Commission's list

✦ of critical raw materials / 欧盟（EU）的海外领地，氦气被列入欧盟委员会的关键原材料清单

Helium concentration at least 0.8% / 氦气浓度不低于0.8%

✦ The only helium explorer in Greenland / 是格陵兰岛唯一的氦勘探者

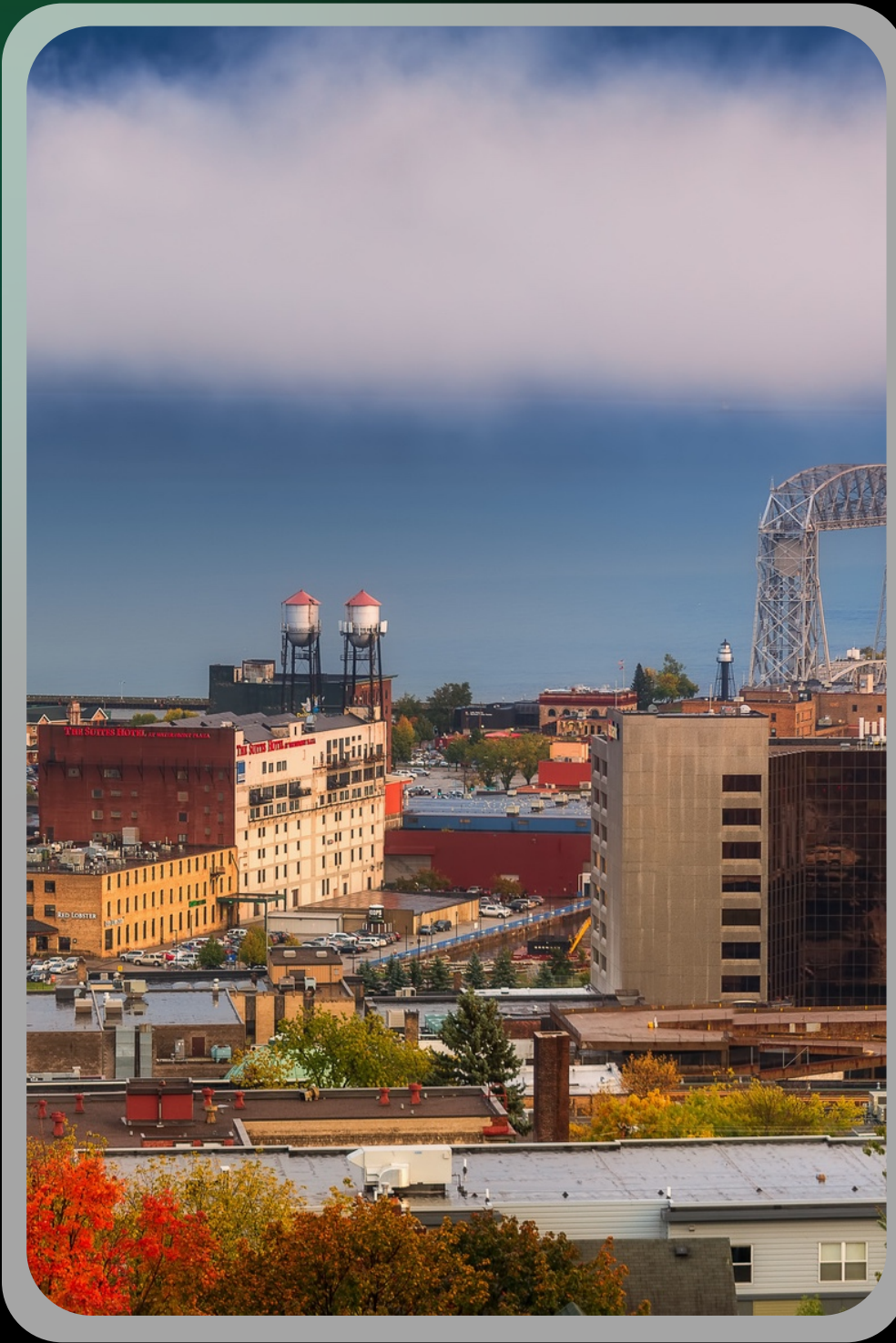
✦

Sources / 来源:

(1) Refer to slide 15 for analytical details / 分析结果详见幻灯片第15页

(2) Refer to slide 16 for lease details / 租约详情见幻灯片第16页

# ✦ Topaz, Minnesota / 明尼苏达州的Topaz 项目



Duluth, Minnesota  
明尼苏达州德卢斯



Location of the helium discovery  
发现氦气的地点

# High Impact News Flow 影响力深远的新闻流

## SEISMIC SURVEY 地震探测



Processed data in December  
十二月份处理数据

## NEW LEASE APPLICATIONS 申请新租约



Lodged with private and State  
mineral right owners  
与私人和州矿权所有者交涉

## APPRAISAL WELL 评估井



Drilling completed  
完成钻探

## RESOURCE / RESERVE CALCULATION 资源量/储量计算



To commence after all  
appraisal well data is received  
将在收到全部评估井数据后启动

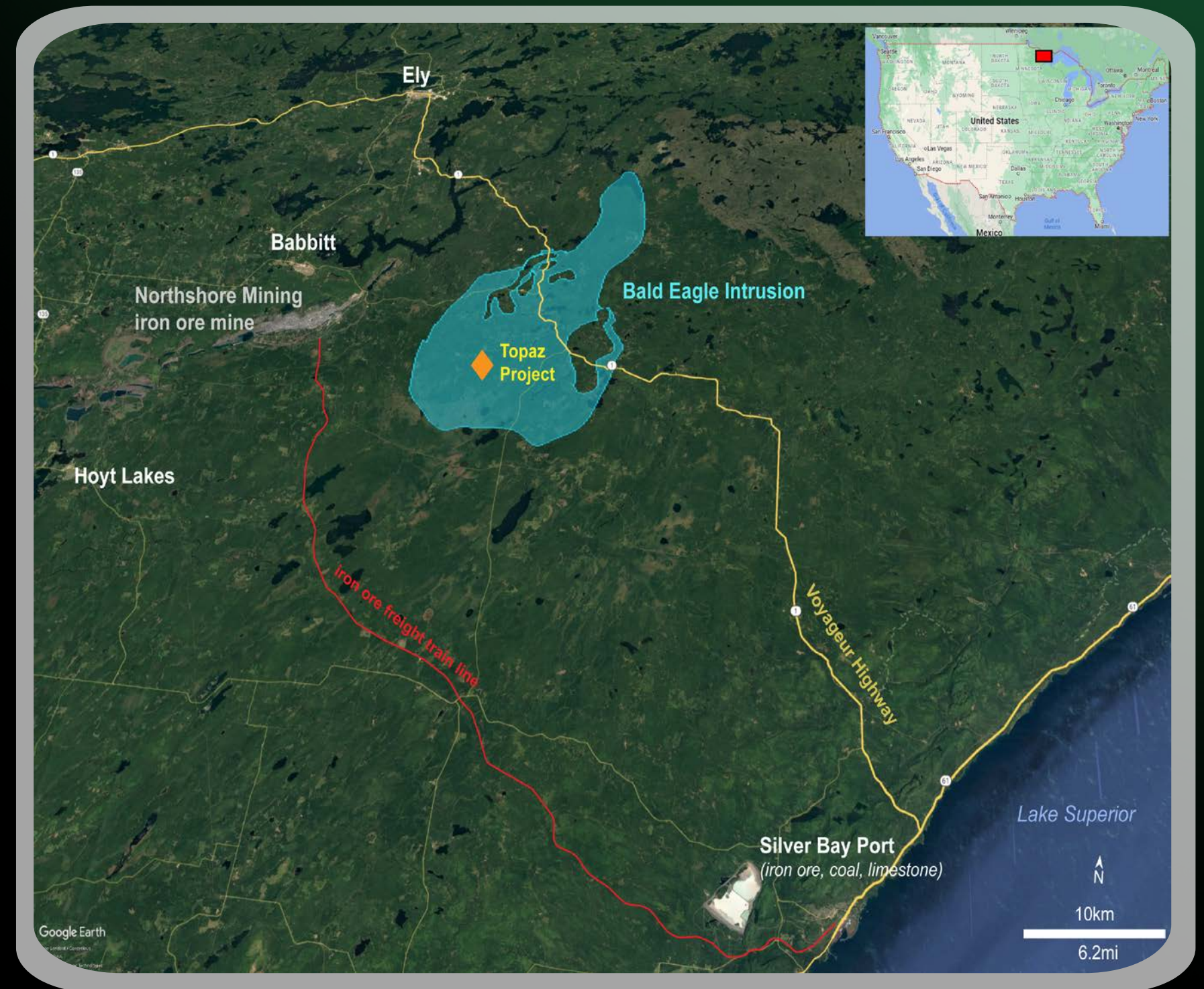
# Location, location, location 位置、位置、位置

- ✦ Located in Lake County, northern Minnesota. / 位于明尼苏达州北部的莱克县。
- ✦ Within 8 km (5 mi) of the Northshore Mining iron ore mine, and the towns of Babbitt and Ely. Natural resources are the backbone of the local economy. / 距离Northshore Mining的铁矿、巴比特镇和伊利镇均在8公里（5英里）以内。自然资源是当地经济的支柱。

- Next to the Voyageur Highway that leads to Duluth (125 km / 78 mi) and Minneapolis (380 km / 236 mi). / 紧邻通往德卢斯（125公里/78英里）和明尼阿波利斯（380公里/236英里）的Voyageur高速公路。

- Location is everything as liquid helium is notoriously difficult to transport long distances. Modern 40' helium ISO containers can hold at 90% capacity for 45 days before loss of product occurs<sup>1</sup>. / 位置决定一切，因为液态氦很难长途运输。现代化的40英尺ISO标准氦气集装箱可以在产品损失前将90%的氦保持45天<sup>1</sup>。

- The Topaz project is within 2 days drive of anywhere in the contiguous United States. No bottlenecks at ports, no customs clearance, minimal opportunity for product loss – reliable. / Topaz项目距离与美国相邻的任何地方驾车两天都可以到达。在港口没有瓶颈，无需通关，产品损失的机会最小，非常可靠。



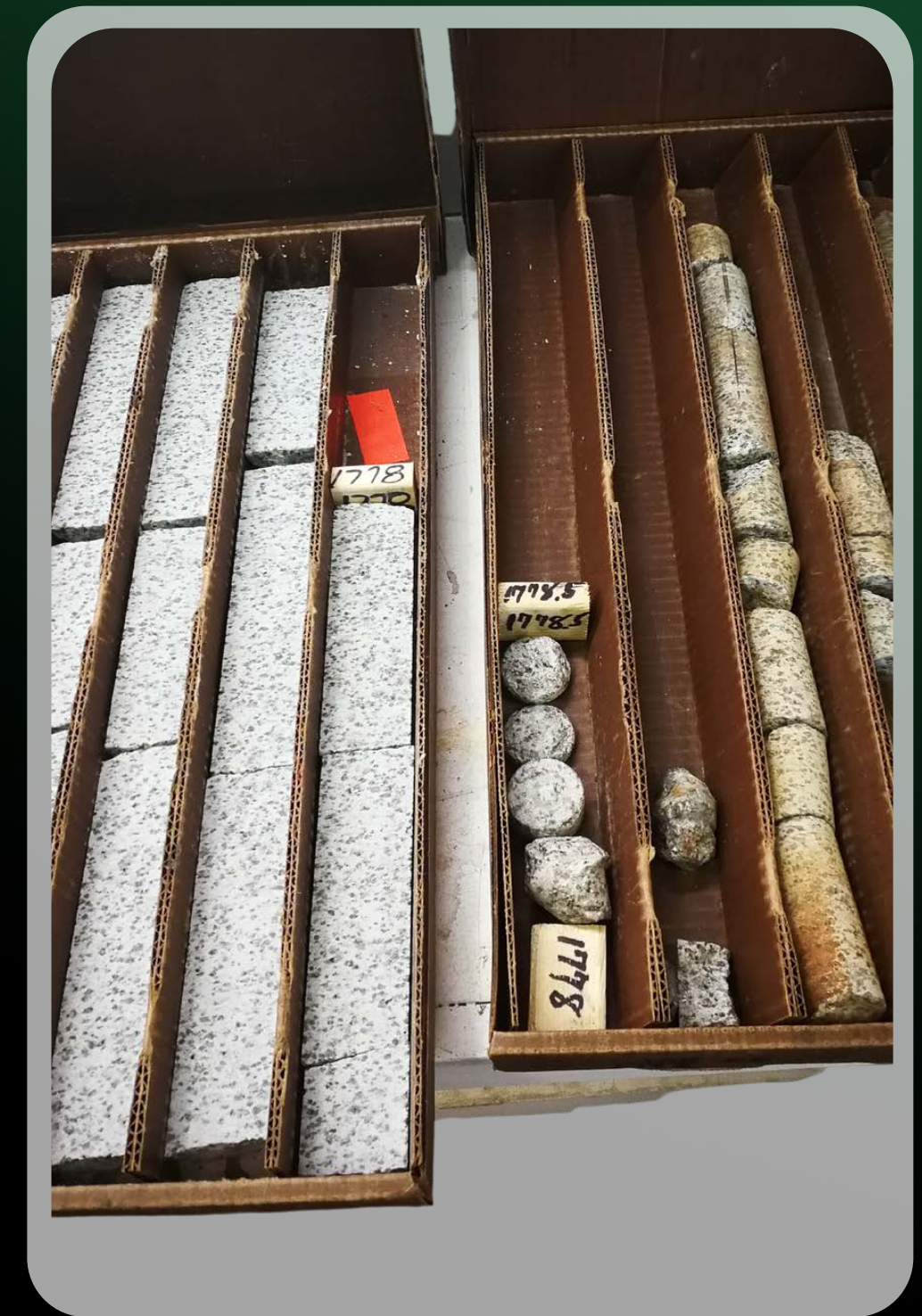
Topaz location map  
Topaz位置地图

# ★ The Discovery 发现

## Helium Discovery at Topaz / Topaz的氦气发现

- ★ In 2011, a drill-hole targeting nickel intersected gas at 1,778 feet (542 meters) / 2011年，一个勘探镍的钻孔在1778英尺（542米）处发现了气体
  - ★ Gas flowed for 4 days with no apparent reduction in pressure / 气体流出了4天，压力没有明显降低
  - ★ Samples of the gas were sent to: / 气体样本被送往：
    - The University of Toronto, that reported a concentration of 10.5% helium, and / 多伦多大学报告的氦气浓度为10.5%，以及
    - Pace Analytical also reported a consistent concentration of 10.5% helium after correction for air contamination / Pace Analytical同样报告，在对空气污染进行校正后，氦气的浓度始终为10.5%
- Gas analysis measured CO<sub>2</sub>, N<sub>2</sub> and helium as the main constituents / 气体分析测得的主要成分是二氧化碳、氮气和
- ★ 氦气

Topaz is not an isolated helium occurrence in Minnesota. Review of publicly available data has identified a well that measured 2.0% helium located 160km southwest of Topaz, and numerous records of “non-flammable” gas having been encountered but not analyzed for helium<sup>1</sup>. / 在明尼苏达州，Topaz并不是一个孤立的氦气存在地点。对公开数据进行审查后发现，在Topaz西南160公里处有一口测得氦气浓度2.0%的井，还有许多关于遇到“不可燃”气体但未进行氦气分析的记录<sup>1</sup>。



Drill core from the discovery drill-hole  
发现钻孔中的钻芯

# Drilling & Mineral Rights 钻探和矿权

## Appraisal Well / 评估井

✦ The Jetstream #1 appraisal was completed February 28<sup>th</sup>, drilled within 50 feet (20 meters) of the discovery well / Jetstream 1号评估井已于2月28日完成，钻井位置距离发现井不到50英尺（20米）

Helium concentrations received from laboratory analysis up to 13.8%\* were encountered between 1,750-

✦ 2,200 feet (533-671 meters) / 在1750-2200英尺（533-671米）之间，实验室分析得出的氦浓度高达13.8%\*

Down-hole wireline logs are awaited. Flow testing and pressure build up program to occur when spring thaw

✦ ends / 正在等待井下有线测井记录。将在春季解冻结束后进行流量测试和增压计划

## Mineral Rights / 矿权

Exclusive private leases have been issued over the discovery well and immediate areas of interest, a total of

✦ 2,089 net acres / 发现井和附近感兴趣的区域已获得独家私人租约，净面积共计2089英亩

✦ An exclusive option for additional private leases is in place for an additional 2,092 net acres / 还拥有另外2092英亩土地的独家租赁选择权

Applications have been lodged for additional private and State mineral rights / 已申请更多的私人和州采矿

✦ 权

✦



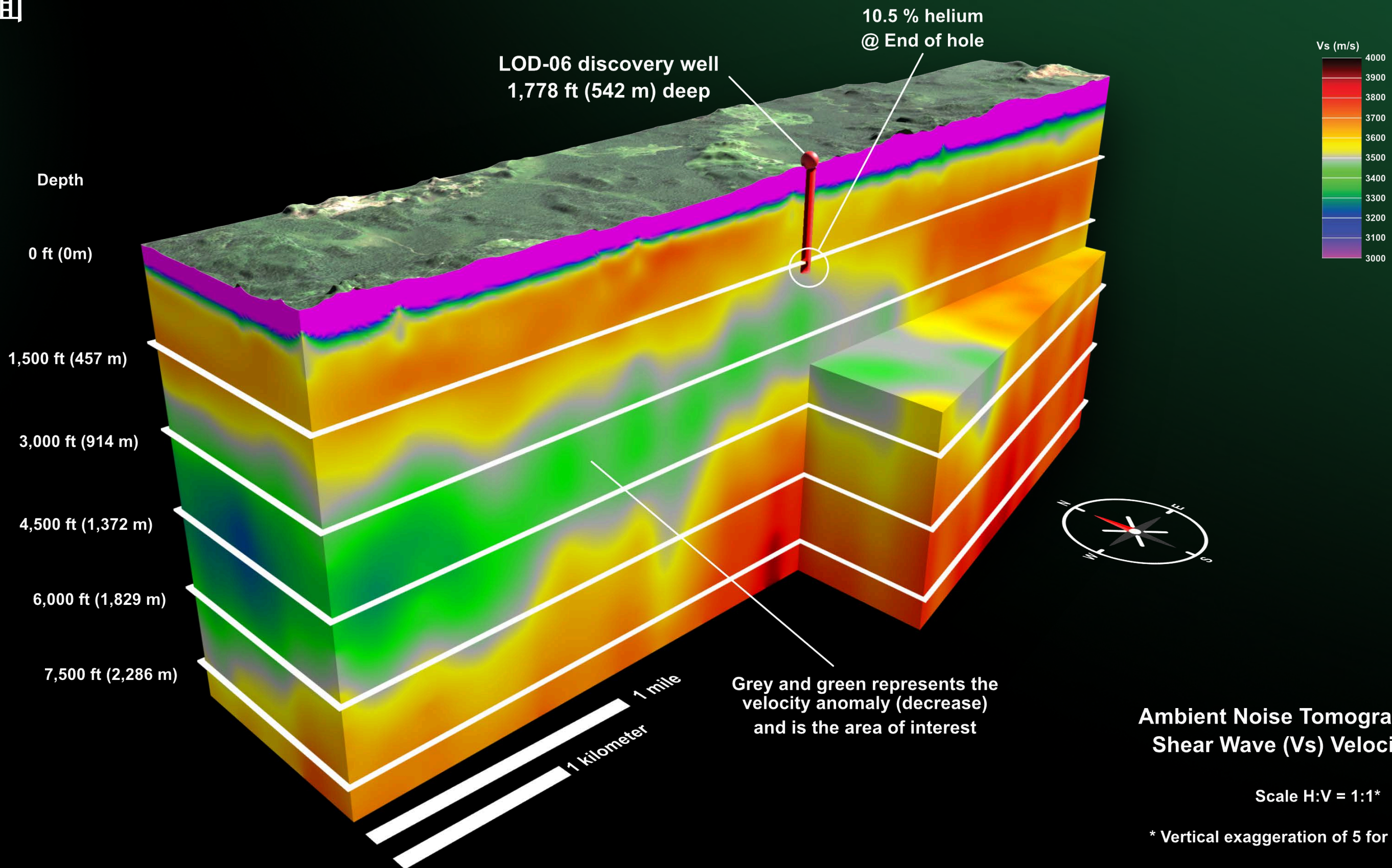
CEO Thomas Abraham-James at the Jetstream #1 well site  
首席执行官Thomas Abraham-James在 Jetstream 1号井现场



# Seismic Survey – cross section 地震勘测-横截面

A significant and distinct shear wave velocity anomaly (velocity decrease) has been identified at the same depth (1,778ft / 542m) where gas containing 10.5% helium was encountered in the LOD-6 discovery well. This is illustrated in the grey and green colors. / 在LOD-6发现井遇到浓度为10.5%氦气的同一深度（1778英尺/542米），发现了明显的剪切波速度异常（速度下降）。右图中用灰色和绿色表示。

The rock type above the helium is impermeable igneous rock which acts as an excellent sealing unit. / 氦气上方的岩石类型是不透水的火成岩，起到了绝佳密封单元的作用。

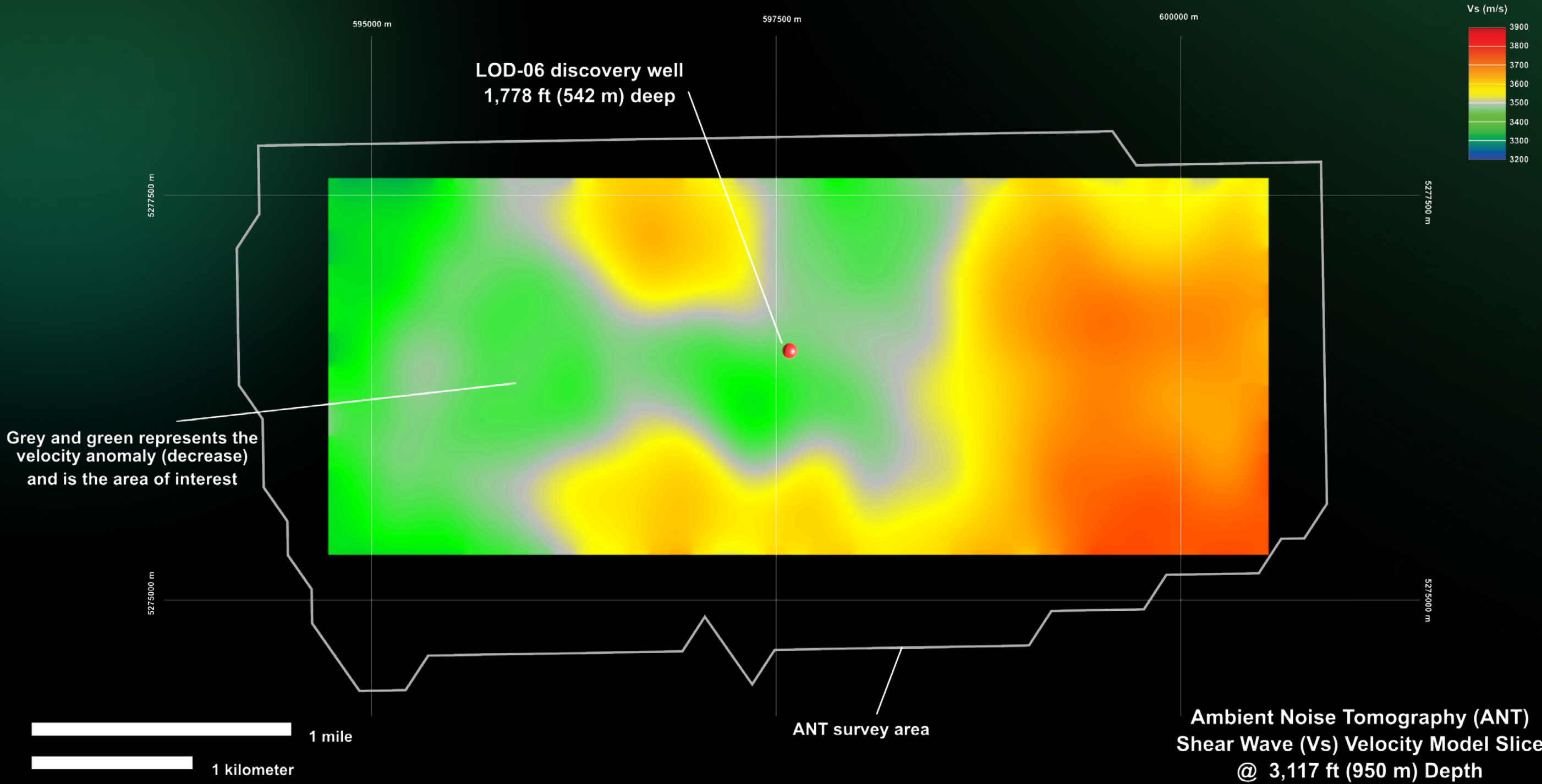


**Ambient Noise Tomography (ANT)  
Shear Wave (Vs) Velocity Model**

Scale H:V = 1:1\*

\* Vertical exaggeration of 5 for top surface.

# Seismic Survey – plan view (950m depth slice) 地震勘测-平面图 (950 米深度截面)

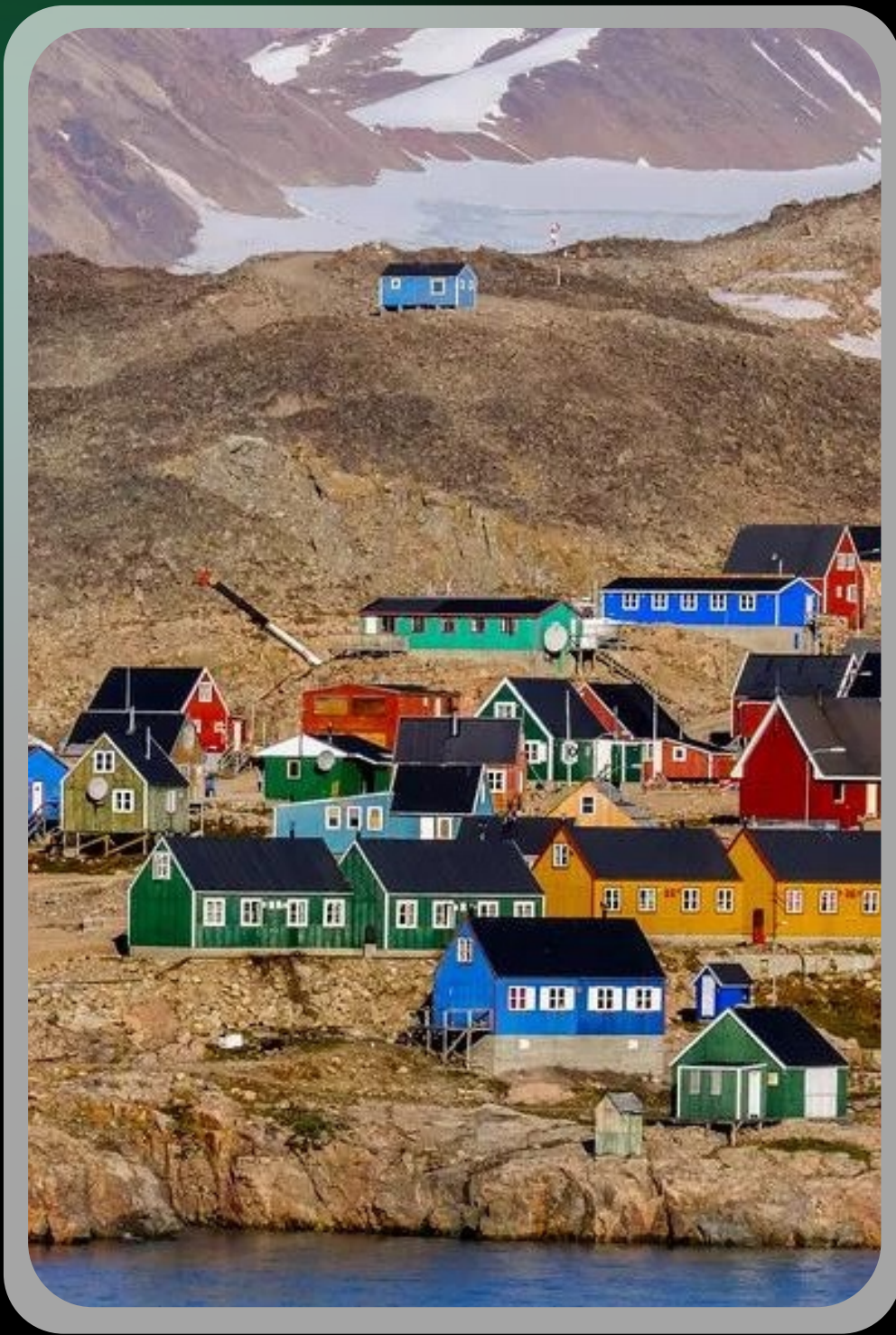


This image shows a depth slice of the shear wave velocity anomaly at 3,120ft (951m) depth. This is illustrated in grey and green colors. / 该图显示了3120英尺 (951米) 深处剪切波速度异常的深度切片。以灰色和绿色表示。

The shear wave velocity anomaly extends below the base of the discovery well LOD-6 and is interpreted to represent the lithology which hosts the helium-bearing gas reservoir(s). / 剪切波速度异常延伸至LOD-6发现井的井底以下，根据解释，该异常代表岩性中含氦气气藏。

The velocity anomaly persists to a depth of approximately 3,750ft (1,143m), giving it a vertical thickness of approximately 2,000ft (610m) and covers an aerial extent of ~7 km<sup>2</sup> (~4mi<sup>2</sup>). It is open to the north and the west. / 速度异常现象一直持续到约3750英尺 (1143米) 的深度，垂直厚度约为2000英尺 (610米)，空中覆盖范围约为7平方公里 (约4平方英里)，向北和向西开放。

✦ Tunu, Greenland  
格陵兰的Tunu 项目



Ittoqqortoormiit, Greenland



2022 sample site  
2022年采样点

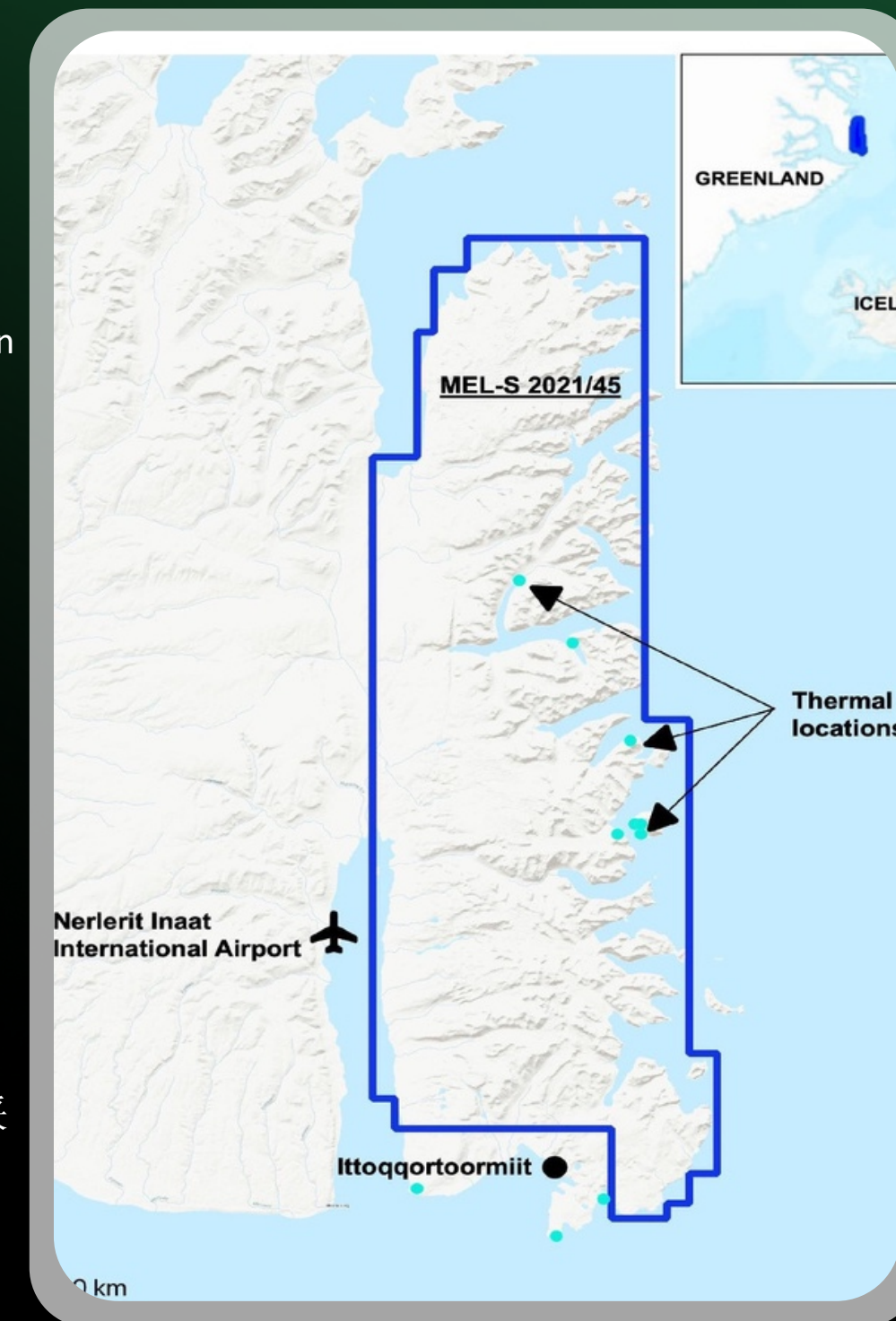
# Overview 概述

## Overview / 概述

- ✦ Helium is on the European Commission's list of critical raw materials<sup>1</sup> / 氦被列入欧盟委员会的关键原材料清单<sup>1</sup>  
East coast of Greenland, Europe facing / 位于格陵兰岛东海岸，面向欧洲
- ✦ Competent Person's Report written by Sproule International Limited (2022) & exploration potential report written by SRK Exploration Services Ltd. (2023) / Sproule International Limited (2022年) 撰写的合格人士报告和SRK Exploration Services Ltd. (2023年) 撰写的勘探潜力报告
- ✦ Helium concentrations of up to 0.8% from hot spring sampling<sup>2</sup> / 温泉取样中氦气浓度高达0.8%<sup>2</sup>
- ✦ Close to the EU market: / 临近欧盟市场:
  - Shipping to Aarhus, Denmark = ~4 days\* / 航运至丹麦奥胡斯大约4天时间

## Licence Terms / 许可条款

- ✦ A total licence area of 2,772km<sup>2</sup> (~685,000 acres) / 总许可面积为2772平方公里 (约68.5万英亩)
- ✦ Exclusive rights to all mineral resources (including helium and hydrogen), except hydrocarbons and radioactive elements / 对所有矿产资源 (包括氦气和氢气) 的专有权，碳氢化合物和放射性元素除外
- ✦ The first mineral licence in Greenland to be granted rights for helium and hydrogen / 格陵兰首个授予氦气和氢气开采权的矿产许可证



The Tunu licence area  
Tunu项目许可区域

# Field Work 现场工作

## Proposed Field Activities / 拟议的实地活动

- ✦ Ambient Noise Tomography (ANT) seismic survey over helium spring localities 对氦泉地点进行环境噪声层析成像 (ANT) 地震勘测
- ✦ Additional hot spring surface seep sampling / 额外进行温泉表面渗漏取样
- ✦ Resource calculation / 资源量计算
- ✦ Assess geothermal energy potential with partners in Iceland / 与冰岛合作伙伴一起评估地热能源潜力

## Summary / 概述

- ✦ The results to date justify the theory that East Greenland has the required geology for an active primary helium system / 迄今为止的研究结果证明，东格陵兰具有活跃的原生氦系统所需的地质条件
- ✦ Economically viable grades of helium are considered by industry to be 0.3% or greater<sup>1</sup> / 业内认为氦气品位达到0.3%或更高即被认为经济上可行<sup>1</sup>
- ✦ Only a small fraction of seeps have been sampled / 仅对小部分渗流进行了取样



2022 hot spring sampling  
2022年温泉取样

Source / 来源:<sup>1</sup> <https://repository.mines.edu/handle/11124/172822>

# ESG Commitment / 环境、社会和公司治理承诺

Primary helium not associated with hydrocarbon production is a significant opportunity to reduce the carbon footprint of a commodity. / 与碳氢化合物生产无关的原生氦是减少商品碳足迹的重要机会。

Pulsar is committed to being a positive addition to the communities we operate. Applying the highest environmental standards, transparency via consistent dialogue and local job creation. / Pulsar致力于为我们运营所在的社区做出积极贡献。我们采用最高的环保标准，通过持续对话提高透明度，并为当地创造就业机会。

We have also commenced: / 我们还开展了：

## #PulsarScholars

Each quarter, applications are open for the award of a financial bursary to final-year STEM students. Their project must be innovative and align with Pulsar's values of reducing reliance on hydrocarbons. / 每季度都会向科学、技术、工程和数学领域的应届毕业生发放助学金。他们的项目必须具有创新性，并符合Pulsar减少对碳氢化合物依赖的价值观。

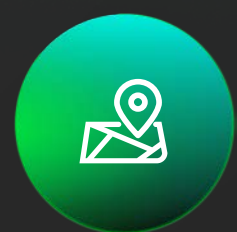
## #PulsarIgnite

Each month we highlight an industry that utilises helium and give away experiences for lucky participants. Recently, winners attended the London Formula E race, and visited the UK's largest offshore windfarm. Both industries using helium for their manufacturing. / 我们每个月都会重点介绍一个利用氦气的行业，并为幸运参与者送出体验。最近，获奖者参加了伦敦电动方程式赛车比赛，并参观了英国最大的海上风电场。这两个行业在制造过程中都要用到氦气。

Pulsar is a proud partner with the Envision Racing Formula E team. The only certified carbon neutral team on the grid, and the most successful – winning the 2023 Championship. / Pulsar是Envision Racing Formula E车队自豪的合作伙伴。该车队是唯一获得碳中和认证的车队，也是最成功的车队，赢得了2023年的冠军。



# Roadmap to Success 通往成功的路线图



## 01 IDENTIFY / 确定

Identify locations with potential for primary helium accumulations.  
确定可能出现原生氦气聚集的位置。



## 06 RESERVES 储量

Re-calculate resource / reserves.  
重新计算资源量/储量。



## 07 OFFTAKE 承购

Obtain offtake sale agreements.  
签订承购销售协议。

## 02 LEASE / 租约

Obtain exclusive leases for helium and associated gases. / 获得氦气和相关气体的独家租约。



## 05 DRILL / 钻探

Drill exploratory / appraisal wells.  
钻探勘探井/评估井



TOPAZ IS AT THIS PHASE  
TOPAZ项目在这个阶段



## 08 PRODUCE 生产

Design / build production facility.  
设计/建造生产设施。



## 03 DATA 数据

Acquire geophysics (gravity and seismic), and sample thermal springs (if present).  
获取地球物理数据（重力和地震），并对温泉（如果存在）进行取样。

TUNU IS AT THIS PHASE  
TUNU项目在这个阶段



## 04 RESOURCE 资源量

Initial prospective resource calculated by an independent third party. / 由独立第三方计算的初始远景资源量。

# ✦ Contact / 联系我们



**Connect today and join  
our vibrant community of  
investors!**

立即联系我们，加入我们充满活力的投资者社区吧！



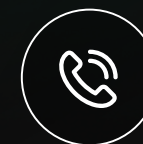
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# Appendices



# ✦ Glossary & Units

Term	Description
Air contamination	Contamination of atmospheric air within a sample
Appraisal well	Exploration well drilled to establish the extent and size of a helium deposit that has already been discovered by a wildcat well
bcf	Billion cubic feet
Concentration	For a gas mixture, concentration refers to the number of gas particles (percent) of a particular type that exists in the mixture
Grade- A	Means a grade that is 99.995 percent pure helium, or better by volume
ISO container	An intermodular container, also referred to as a shipping container
Lease	An agreement between a mineral owner (lessor) and a mineral right holder (lessee) permitting the lessee to explore, drill and produce helium and associated gases 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"
LNG	Liquified Natural Gas
mcf	Thousand cubic feet
Mineral right	The legal ownership rights to underground mineral resources
Net acre	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 "net acres" refers to the lessor's percentage share of the gross acres
Reserve	A subcategory of resources, where gas deposits are regarded as technically and economically feasible to extract from a geological formation
Resource	Gas deposits that have been considered to be physically present in a geological formation using a method of exploration
Royalty	A percentage share of production, or the value derived from that production, paid from a producing well
Surface right	The legal ownership rights to land or property