



**Corporate Presentation**  
**May 2023**

## CAUTIONARY NOTES & FORWARD LOOKING STATEMENTS

The information contained herein has been prepared to assist interested parties in making their own evaluation of Total Helium Ltd., (“Total Helium” or the “company”) and does not purport to contain all of the information that a prospective investor or partner may desire. In all cases, interested parties should conduct their own investigation and analysis of Total Helium. Neither the company nor any of its affiliates, directors, officers or employees make any representation or warranty as to the accuracy or completeness of the information presented. This includes, without limitation, any estimates or projections, and neither the company nor its affiliates, directors, officers or employees shall have any liability for any statements (expressed or implied) contained in, or for any omissions from, this presentation or any other written or oral communications transmitted to the recipient hereof in the course of its evaluation of the company, nor should anything contained herein be relied upon as a promise, representation or warranty regarding future events or performance of the company. Moreover, the information contained herein speaks as of the date hereof; the company undertakes no obligation to update any such information, except as required by law. The only statements that will have any legal effect will be those specifically contained or referred to, and then only to the extent provided, in definitive legal documentation.

This presentation contains “forward-looking information” within the meaning of the Canadian securities laws. Statements, other than statements of historical fact, may constitute forward-looking information and include, without limitation, statements about: management’s expectations regarding the company’s future growth, results of operations (including, without limitation, future production and capital expenditures), performance (both operational and financial), business prospects (including the timing and development of drilling and the success of exploration activities), opportunities and the business plans of the company, including advancement of the Pinta South Helium Project. Information concerning potential contingent helium resource estimates also may be deemed to be forward-looking information.

With respect to the forward-looking information contained in this presentation, the company has made numerous assumptions including, without limitation, that the geological, engineering, financial and economic advice that the company has received is reliable, and is based upon practices and methodologies which are consistent with industry standards. While the company considers these assumptions to be reasonable, these assumptions are inherently subject to significant uncertainties and contingencies. Additionally, there are known and unknown risk factors which could cause the company’s actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking information contained herein. Known risk factors include, among others: fluctuations in commodity prices and currency exchange rates; uncertainties relating to interpretation of drill results, production tests and the geology, continuity and quality of petroleum and helium bearing reservoirs; uncertainty of estimates of capital and operating costs, recovery rates, production estimates and estimated economic return; the need for co-operation of government agencies in the exploration and development of properties and the issuance of required permits; the need to obtain additional financing to develop properties and uncertainty as to the availability and terms of future financing; the possibility of delay in exploration or development programs or in construction projects and uncertainty of meeting anticipated program milestones; uncertainty as to timely availability of permits and other governmental approvals; increased costs and restrictions on operations due to compliance with environmental and other requirements; increased costs affecting the gas industry; increased competition in the gas industry for properties, qualified personnel and management; and Covid-19 related costs.

All forward-looking information herein is qualified in its entirety by this cautionary statement, and the company disclaims any obligation to revise or update any such forward-looking information or to publicly announce the result of any revisions to any of the forward-looking information contained herein to reflect future results, events or developments, except as required by law.

Investors should carefully consider the cautionary notes and risk factors set out above, in Appendix II hereof and in the company’s Management Discussion and Analysis filed on SEDAR.com on February 23, 2023 (the “**MD&A**”), the disclaimers set out herein and all other information contained in the company’s public filings and herein before making an investment decision. The risks and disclaimers set out herein and in the MD&A are not an exhaustive list and should not be taken as a complete summary or description of all the risks associated with the company’s business (including its anticipated business) and the helium business generally.

**Total Helium owns a 50% interest in the Pinta South helium project in the Holbrook basin of Arizona**

**World class helium concentrations of 5-8%**

**2 revenue generating wells, 8 additional wells completed awaiting pipeline connection and additional wells planned for Q2 2023**

**150+ wells at 160-acre spacing with \$220k estimated drilling and completion cost per well**

**27,000 acres of leases with opportunity to increase the lease holding**

**Helium processing plant efficiencies with minimal hydrocarbon concentrations (nitrogen as sole by-product)**

**Primary geological zone is shallow at 700-1,200 ft and additional upside from deeper structures**

**~\$8 MM direct costs already spent on land acquisition, drilling and completing wells, pipeline construction, geological, and soil sample surveys**

**Offtake agreement with Linde for first 10 wells with all other wells having spot market pricing upside**

## Total Helium (TSXV:TOH; USOTC:TTLHF)

Publicly traded helium exploration, production, and storage solutions company working to bring a stable, domestic helium supply to North America

## Arizona Producing Assets

In partnership with the major industrial gas company Linde, Total Helium has acquired interests in the Pinta South helium field in Arizona.

## Corporate Capital Structure

Outstanding Shares (Undiluted)	77,393,542
Special Warrant Share Purchase	26,500,000
<b>Post Prospectus Outstanding</b>	<b>103,893,542</b>
Special Warrant Shares Warrants (\$ 0.75)	26,500,000
Existing Share Purchase Warrants (\$2.00)	12,500,000
Existing Incentive Stock Options (\$1.00-\$1.70)	5,382,900
<b>Fully-Diluted Outstanding Shares</b>	<b>148,276,442</b>

## Board of Directors

### Robert B Price – Director and Chief Executive Officer

Mr. Price has assembled and managed a series of companies in the fields of energy, real estate, and manufacturing. He was Vice President, Trust Officer and Oil and Gas Trust Energy Department Manager of the First National Bank and Trust Company of Tulsa, now J P Morgan Chase Bank. Mr. Price formed Brooks Energy Company, active in both oil and natural gas and helium exploration and production in the Mid-Continent and Rocky Mountain regions. He recently sold his 75% stake in a hydrogen electrical generation business in New Mexico to Tallgrass Energy which is funded by the Blackstone group. Mr. Price served as Chairman and CEO for Highlands Natural Resources, which primarily developed oil and gas horizontal wells in the DJ Basin of Colorado. Mr. Price was also the founder and Chairman of Zeledyne, which purchased Ford Motor Company's Glass division with plants in Tulsa, Nashville and Juarez, Mexico, manufacturing and distributing automotive and architectural glass, employing over 1,200 employees. Mr. Price served as a member of the U.S. Department of Interior's Mineral Management Service (now known as The Bureau of Ocean Energy Management, Regulation and Enforcement) Royalty Policy Committee. He also served on Tulsa Technology Center's governing board, which provides workforce training to thousands of people. Former Colorado Governor John Hickenlooper appointed Mr. Price to serve as a commissioner to the State of Colorado Economic Development Commission. Mr. Price received a B.A. from the University of Colorado at Denver and J.D. from the University of Tulsa.

### Robert Johnston – Director

Mr. Johnston is presently the President of Atalaya Resources, LLC, a private oil and gas exploration company operating in Western Oklahoma and the Texas Panhandle. Mr. Johnston retired from Apache Corporation in 2014 as Executive Vice President. His positions at Apache included Vice President of the Central Region, responsible for the Anadarko Basin, Permian Basin, and East Texas Basin; Country Manager Apache Argentina, responsible for Neuquén Basin, Austral Basin, and Cuyo Basin; Exploitation Manager, Apache Canada, responsible for southern Alberta and Saskatchewan; and Development Manager, Apache Egypt, responsible for Khaldia concession. Mr. Johnston began his career in 1982 as geologist with Apache Corporation. Mr. Johnston received a Bachelor of Science degree from The University of Tulsa.

### Ian Telfer - Director

Mr. Telfer is a Canadian executive and philanthropist known for his strategic business success in the mining and resource sector. Mr. Telfer was the Chief Executive Officer of Wheaton River until its merger with Goldcorp in 2005 when he became Goldcorp's President and Chief Executive Officer. In 2006, Mr. Telfer was appointed Chairman of the Board for Goldcorp, a position that he held until 2019 when Goldcorp was acquired by Newmont Mining for \$15 billion, creating the world's largest gold company. He studied Political Science at the University of Toronto and earned his M.B.A. from the University of Ottawa. Mr. Telfer is also a Fellow in the Institute of Chartered Accountants, a member of the National Association of Corporate Directors, and a member of the Institute of Corporate Directors. In addition, Mr. Telfer was formerly chairman of the World Gold Council and was inducted into the Canadian Business Hall of Fame in 2018.

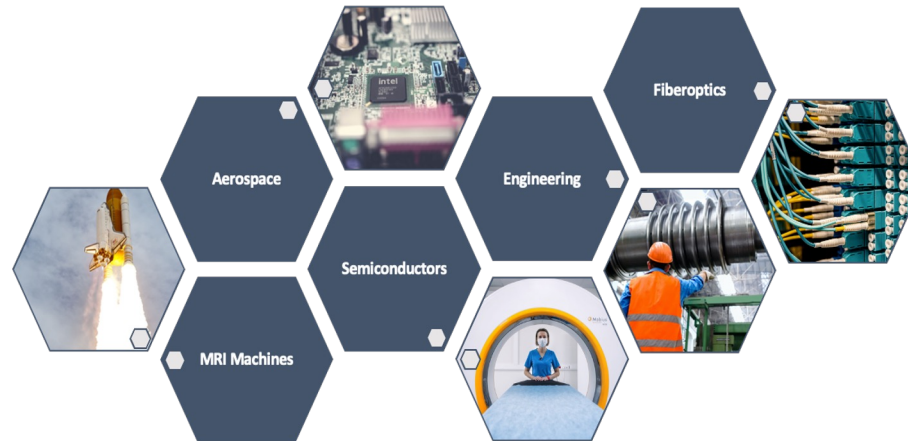
### Gordon Keep - Director

Mr. Keep has extensive business experience in investment banking and public natural resource companies. Mr. Keep is the CEO of Jasper Management & Advisory Corp., a private financial advisory firm. He also serves as an officer and/or director for several natural resource companies. He holds a B.S. in Geological Science from Queen's University and an M.B.A. from the University of British Columbia.

### Diana McQueen- Director

Ms. Diana McQueen has energy and environmental public policy experience from regional, provincial, and international levels, in addition to entrepreneurial experience in operating an independent business. She is currently the Senior Vice President of Corporate Communications & Stakeholder Relations at Reconnaissance Energy Africa Ltd. (TSX-V listed issuer) and a director of MEG Energy Corp. (MEG.TO) Ms. McQueen held various Alberta provincial cabinet roles during 2008 to 2015, including Minister of Energy, Minister of Environment and Water, and Minister of Municipal Affairs. Ms. McQueen has her own consulting firm and is a Senior Policy & Strategic Advisor to her clients in the areas of Energy, Environment, Indigenous and Municipal relations. She is also a member of the Institute of Corporate Directors and holds the ICD.D designation.

## An Irreplaceable Critical Element for Modern Industry



- Helium is a unique chemical element that is used in many advanced industrial applications with little or no substitute
- The U.S. has historically produced most of the world's helium, a situation that is rapidly changing with the shut down of the strategic helium reserve
- **Strong demand growth from semiconductor manufacturing, space industry and other high-technology uses makes helium more important than ever for domestic manufacturing and national security**
- **Most future new supplies of helium are to come from geopolitically sensitive places like Russia and Qatar**

## The Vision of Total Helium

- **The name, Total Helium, symbolizes the company's commitment to start and contribute to projects that are critical for North American independence in helium**
- To support this vision, Total has created a portfolio of current & potential projects in all aspects of helium supply - exploration, processing and storage
- Total Helium has acquired a 50% working interest in the 27,000-acre Pinta South Helium Field with 10 existing production wells and 150+ planned wells in a US\$12M transaction
- **The Pinta South Helium Field acquisition is the next step on the company's portfolio for growth in the helium supply industry**



### Partnership Details

- Total Helium has partnered with Linde, a \$170+ billion market cap multinational industrial gas and chemicals manufacturing company
  - World's largest industrial gas company by both market share and revenue
- **Linde has committed to fund the pipeline expansion on the Pinta South project and to purchase all helium from the first 10 wells – all other wells have spot market pricing upside**
  - With Linde's funding, the pipeline is being constructed to connect 8 wells to the processing facility

## Assets

US\$12M for the acquisition of:

20% Working Interest - 2 Producing Wells

50% Working Interest - 27,000 acres, 150+ wells

50% Working Interest - 8 Wells Awaiting Connection

## Current Well Production Summaries<sup>1</sup>

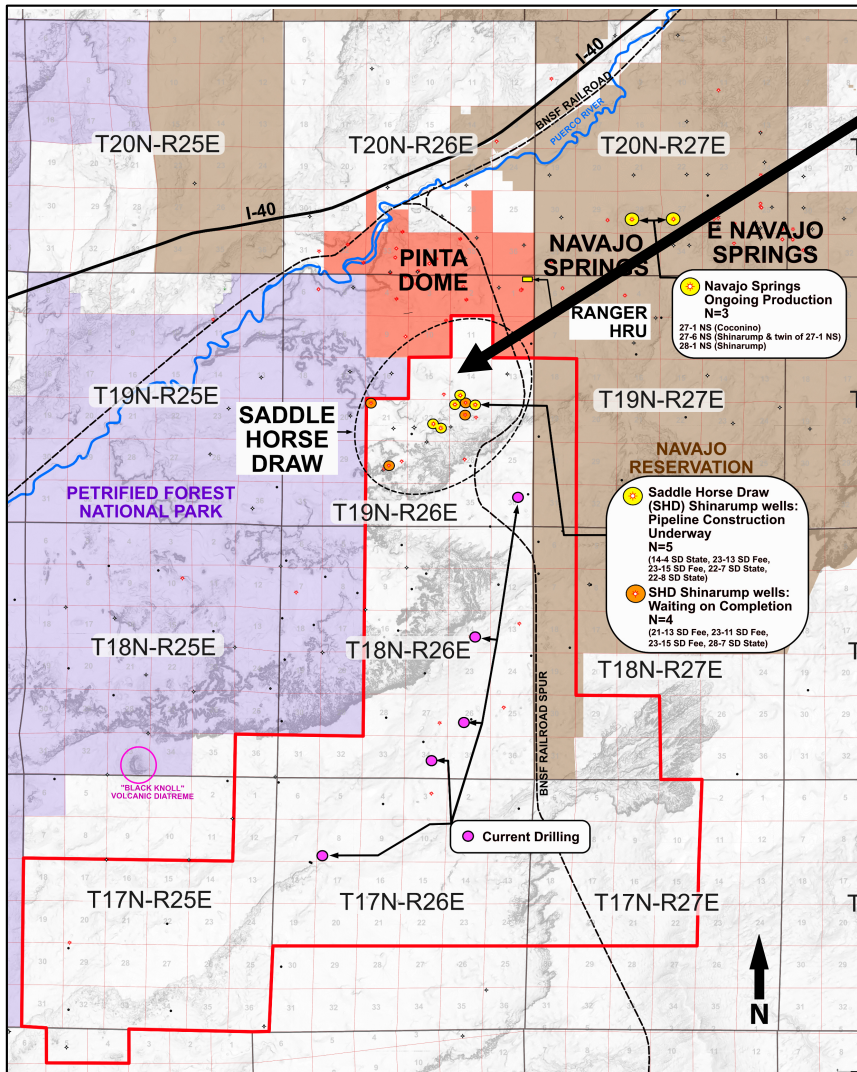
### 2 Producing Wells – 20% WI

- Ranger 28-1 NS – 150 Mcf/d of total gas, ~8% helium
- Ranger 27-6 NS - 115 Mcf/d of total gas, ~8% helium

### 8 Additional Wells – 50% WI

- 5 Drilled and Completed, Awaiting Pipeline Hookup
- 3 Wells Awaiting Completion and Pipeline Hookup
- 1,000 Mcf/d at 5-8% helium concentration

1. Pinta South Operating production numbers for the month of December 2022



Pinta South's current 27,000-acre property (inside red outline)

- **World class helium concentrations of 5-8% helium**
- Helium processing plant efficiencies with minimal Hydrocarbon concentrations
  - **Nitrogen is sole by-product**, easily vented into atmosphere through processing with no greenhouse emissions
- Multiple prospective reservoirs
  - Shinarump Formation (700-1,200 ft) with proven production
  - Coconino Sandstone, Fort Apache Dolomite, Big A Butte, Granite Wash and Basement (3,800 ft) for upside opportunity
- Shallow Shinarump Formation offers fast development opportunity at low cost
  - **\$220k estimated per well drilling and completion cost**
  - **Well payback ~3 months**
- ~\$8 MM direct costs already spent on land acquisition, drilling and completing wells, pipeline construction, geological, and soil sample surveys.



## Arizona Partner Backgrounds: Experienced Operating Team



- Total Helium’s joint venture partner Pinta South Operating Company (PSOC) consists of experienced operations professionals
- PSOC owns drilling rig, cementing equipment, trenching equipment, etc. Allows the partnership to control costs, schedule, and production. Not dependent on expensive third-party contractors.
- The partner team has extensive geological and operational expertise in the area
- **The established and experienced operating team enables Total Helium to rapidly develop the project without additional staffing costs**

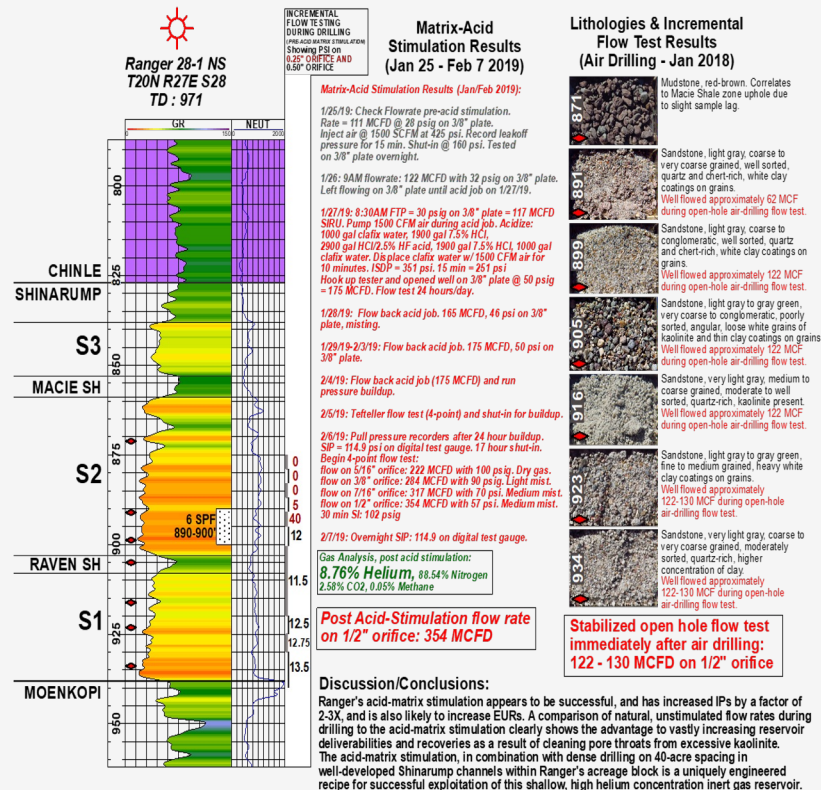
Brad Butler - Driller/Entrepreneur

- Managed active operations in multiple states in the mid-continent for various oil, gas and helium projects
- In recent years, focused exclusively on helium exploration and production in Arizona and Colorado
- Vast operational expertise

Additional Team Members

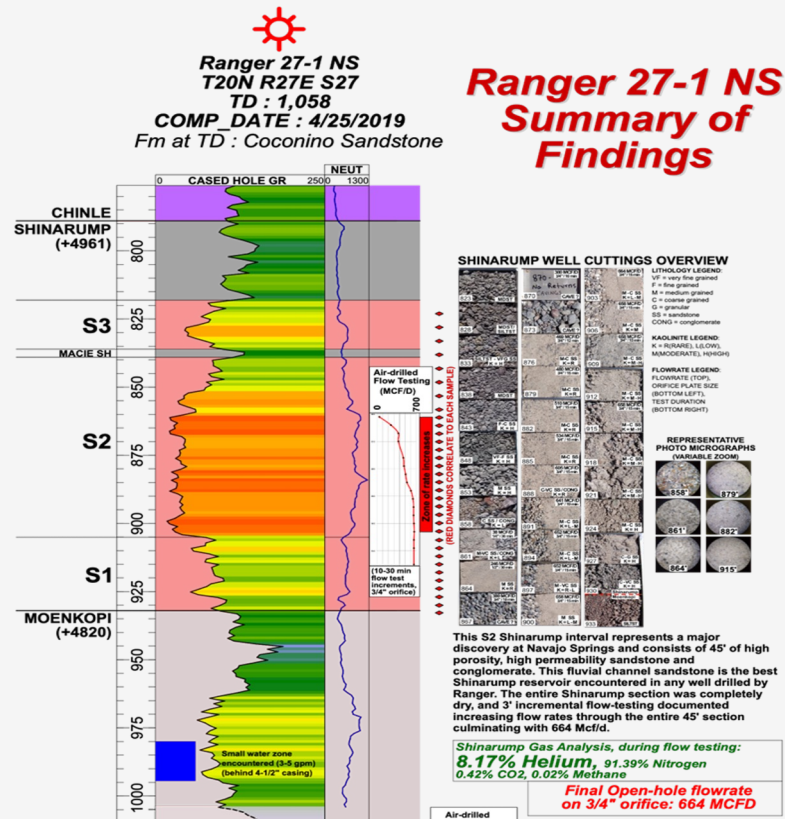
- Deidre O’Callaghan – Land Manager
- Kurt Constenius, PhD – Director of Exploration, Geophysicist
- Andrew Payton - Exploration Geologist

## 28-1 NS Results

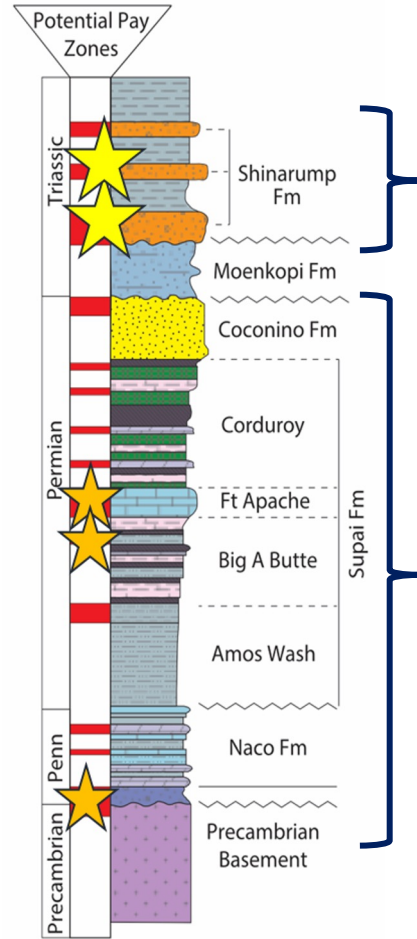


- 243,700 MCF gross gas in 3 years of production
- Notable kaolinitic matrix in observed in S2/S3 cuttings
- Acid stimulation increased initial flowrate by 3 times

## 27-1 NS Results



- 179,000 MCF gross gas produced to date
- Initial flow rates of 664 to 1,300 MCF (less air injection pressures) while drilling
- Less kaolinite in matrix, thicker sand



### Shinarump development:

- \$220k estimated completed well cost
- 150+ wells at 160 acre spacing with additional infill opportunity on 80 acre spacing (300 wells) or 40 acre spacing (600+ wells)
- Drill depths of 700' – 1,200'
- Proven 5-8% helium

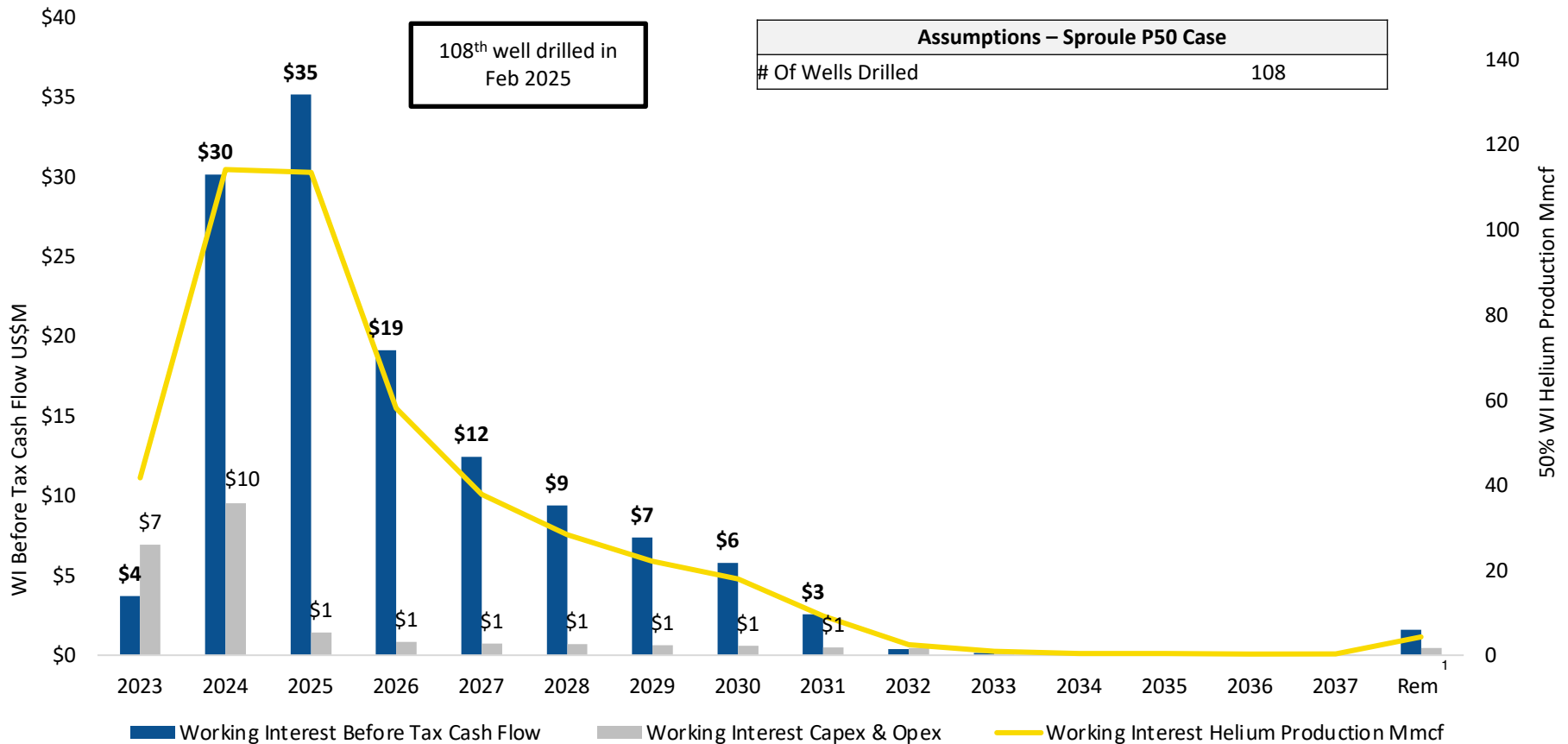
### Supai-Basement targets draped over basement structures (Deeper Potential):

- Puerco Ridge Deep Prospect – structure partly mapped on 2D potash seismic and regional well control
- Fort Apache (8.2% He), Upper Big A Butte, Granite Wash, fractured basement
- PSOC's rig is capable of drilling to depth of 5,000 ft.
- These deeper formations were *not included* in Sproule's competent person's report and represent potential upside.



## WI Sproule P50 Case Results

### Illustrative Using Sproule's P50 case



Sources: Company Filings, Sproule Report

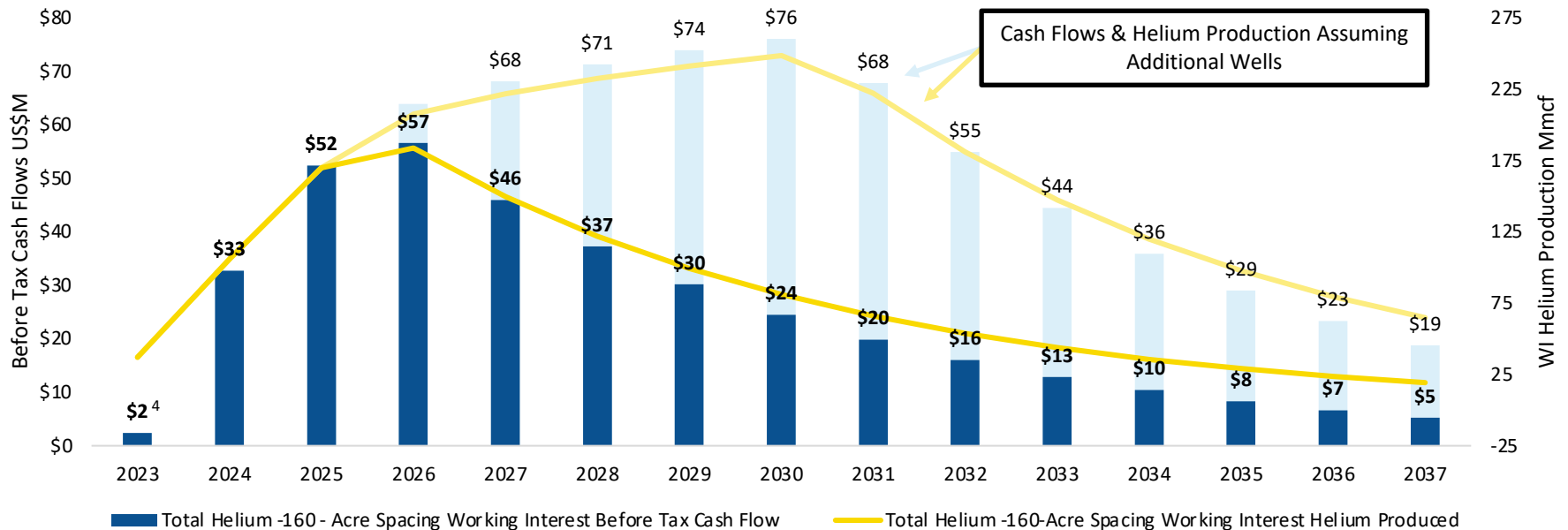
1. All future Helium production & opex summed. Sproule indicates total project lifespan of 39 years, ending in 2062

## WI 160-Acre Spacing Case

- Illustrative Using Sproule's P50 case with increased wells

168<sup>th</sup> well drilled in Feb 2026

Assumptions - 160 Acre Spacing Case <sup>2</sup>	
# Of Wells Drilled	168 (Avg. 5/month)
Avg. Gas Produced Per Well mcf/d	133 <sup>3</sup>
Avg. Helium Concentration	6.5%
Avg. Helium Produced Per Well mcf/d	9
Well Decline Rate Per Year	20%
Helium Selling Price US\$/mcf	\$500
Estimated Capex Per Well US\$	\$220,000



Sources: Company Filings, Company Assumptions

1. Does not include 20% interest in initial two wells as they are substantially declined

2. Management Assumptions based on geological evaluation by Total Helium

3. Average from 2 initial producing wells Ranger 28-1NS & 27-6NS

4. Includes initial cash outlay of \$9M for 50% WI in Pinta South Field

5. Assuming all assumptions stay the same from 160-acre case except decrease drilling speed to 3 wells a month

## Highlights & Upside

<b>Attractive Price</b>	<ul style="list-style-type: none"> <li>Total Helium has a completed agreement with Pinta South Operating Company for a 50% WI in an already proved and producing helium project for US\$12M</li> </ul>
<b>Experienced Operators</b>	<ul style="list-style-type: none"> <li>Brad Butler and his team are highly experienced in helium exploration and development and own all their own operating equipment making it so there is no reliance on third party contractors</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>The Pinta South Field is easily accessible terrain and has multiple formations that hold economical reserves of helium and are cost effective to drill</li> </ul>
<b>Chemistry</b>	<ul style="list-style-type: none"> <li>The helium reserves are made up of 5-8% helium with the sole by-product being nitrogen, which makes processing economical and fast, allowing for the nitrogen to be vented into the atmosphere</li> </ul>
<b>Linde</b>	<ul style="list-style-type: none"> <li>Strong relationship with Linde: Offtake agreement for first 10 wells and agreement for Linde to fund pipeline construction to connect 8 already completed wells to the processing facility</li> </ul>
<b>Potential Upside</b>	<ul style="list-style-type: none"> <li><b>Acreage:</b> Ongoing negotiations to increase holdings</li> <li><b>Well Spacing:</b> License acquired to decrease well spacing from 160-acres to 80-acres, increasing the number of wells that can be drilled. Further potential to decrease spacing to 40-acres if deemed economical</li> <li><b>Creative Extraction Techniques:</b> Test performed using nitrogen frack produced attractive results on increasing raw gas flow rates. Analysis underway for the utilization of Acid Fracking to further increase flow rates</li> <li><b>High Concentration &amp; Production Channel:</b> Data indicates a high helium concentration (8%+) &amp; production (1,000+ mcf/d) channel running through the property. Management is confident they can identify and target the channel with future wells</li> <li><b>Selling Price Increase:</b> Opportunity to sell on open market at spot pricing believed to be over US\$1,000/mcf</li> <li><b>Deeper Formation:</b> Coconino Sandstone, Fort Apache Dolomite, Big A Butte, Granite Wash and Basement at (3,800ft) providing the Company with a deeper formation to drill into</li> </ul>