NORTH AMERICA'S DEVELOPING ZERO-CARBON HELIUM PRODUCER

# DESERT MOUNTAIN ENERGY CORP.

+ 100,000 ACRES OF LAND IN THE U.S. SOUTHWEST



# FORWARD-LOOKING STATEMENTS

Statements in this presentation that are forward-looking statements are subject to various risks and uncertainties concerning the specific factors. Such forward-looking information represents management's best judgment based on information currently available. No forward-looking statement can be guaranteed and actual future results may vary materially. Desert Mountain Energy Corp. does not assume the obligation to update any forward-looking statement.



# DESERT MOUNTAIN ENERGY CORP.

The exploration and development of helium, hydrogen and noble gas properties in Northeastern Arizona

Advancing the McCauley Helium Field to initiate production in Q1 2023

World-Class technical team with decades of experience in the exploration and development of helium, hydrocarbons and other minerals

Recently raised CDN \$23 million for capital expenditures planned in 2023

Now trading on TSX Venture Exchange under the ticker symbol "DME.V". Also trades on the U.S. OTCQX as "DMEHF" and Frankfurt as "QM01". The Company has more value in place than ever before

A corporate philosophy that respects the environment, the community and education



# DESERT MOUNTAIN ENERGY CORP.

## ABOUT

+100,000 acres of mineral leases in the Holbrook Basin, Northeastern Arizona

Successfully drilled 5 wildcat helium wells and 3 offsets

GENERON completed the construction of the McCauley Helium Processing Facility with all-in costs of approximately US \$12,000,000

The commissioning of the McCauley Helium Processing Facility took place on January 17, 2023

Pre-order plant components, casing and buildout support infrastructure to support helium production

Currently generating revenue from DME's trucking and drilling investments

Desert Mountain Energy was selected for the 2023 OTCQX Best 50 and the TSXV Best 50

## Management Team

**Robert Rohlfing**, CEO & Executive Chairman, is a seasoned oil & gas industry operations executive with a strong geological background and over 25 years experience in formulating, conducting and managing successful exploration, drilling, development and production programs for oil & gas and minerals worldwide.

**Don Mosher**, President & Director, has 35 years of experience in corporate finance, business development, management and marketing. He has served on boards and management teams of many publicly traded companies, advising companies on marketing, financing and corporate strategies.

**Valorie Farley**, CPA & CFO, has experience in power generation and distribution, natural resources, regulatory and financial reporting, audits and real estate development.

**Jessica Davey**, Vice President of Land & Director, is an international oil and gas geologist with more than 10 years of experience in research and reporting on resource evaluation, environmental studies, feasibility reports, competent person reports, litigation support and mine closure procedures.

**Marta Wasko**, Vice President of Geology, has development, exploration, and operations experience including the Permian, the Denver Julesburg, the Uinta and Piceance Basins. Additionally, she has regulatory experience in mining, oil & gas, waste water and helium permitting and compliance.

Eric Witt, Drilling Operations Manager, was previously the drilling engineer for Conoco Philips and Marathon Drilling.

**James Hayes**, Vice President of Engineering, has over 14 years of experience in engineering design and with on-site field operations in Oklahoma, Texas, Colorado, North Dakota and Alaska.

**Ched Wetz**, Vice President of Risk Management, has served as the director of risk management/facility ethics as well as compliance officer/safety officer at various hospitals, care centres and businesses. He has served in a distinguished manner on numerous boards, both for-profit and non-profit, and joint commissions on accreditation for state departments.

**Dr. James Cronoble**, VP of Exploration and Director, earned his B.S. in Geology from the University of Oklahoma followed by both his M.S. and PhD. in Geology from the Colorado School of Mines. He has more than forty years of exploration and operations experience in the Rocky Mountains and Mid-Continent of the United States.

#### Board of Directors

Robert Rohlfing, CEO and Executive Chairman

**Don Mosher**, President & Director

Jessica Davey, Vice President of Land & Board of Director

**Dr. James Cronoble**, Vice President of Exploration & Director

**Dr. Kelli Ward**, Independent Director, has dedicated herself to medicine, business, public policy and politics for the past 25 years. In 2012, she ran and was elected for the Arizona State Senate. She was then elected Chair of the Republican Party of Arizona in 2019 and was reelected in January 2021.

**Jenaya Rohlfing,** Independent Director, is a Petroleum Engineer who has exhibited exceptional technical, leadership and organizational skills in all facets of drilling operations for oil & gas over the past 13 years in various management positions with ConocoPhillips. Currently, she is the Drilling Engineering Supervisor for ConocoPhillips', Permian Basin.

**Weldon Stout**, Independent Director, recently retired from his position after serving for eight years as a District Court Judge in Oklahoma. Prior to his appointment as a judge, his private practice focused on business, estate planning and Federal Court litigation. He served as both Assistant District Attorney following as Chief Prosecutor.

# CAPITAL STRUCTURE

Outstanding shares: 89,813,109

Options: 6,655,000

Warrants: 2,314,218

Tradeable Warrants: 11,400,000

Fully diluted: 110,182,327

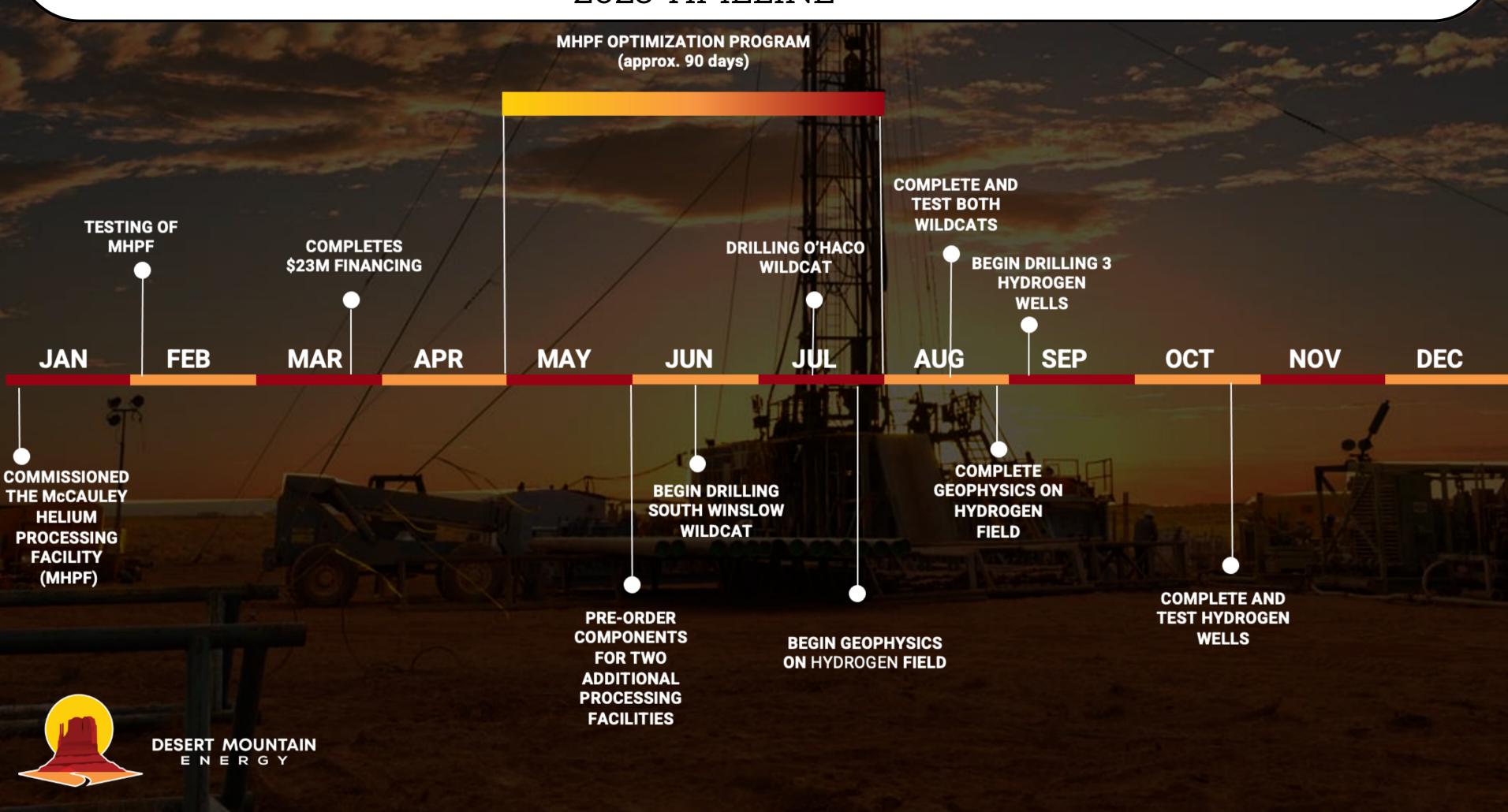
TSX Venture Exchange: DME U.S.

OTC: DMEHF Frankfurt

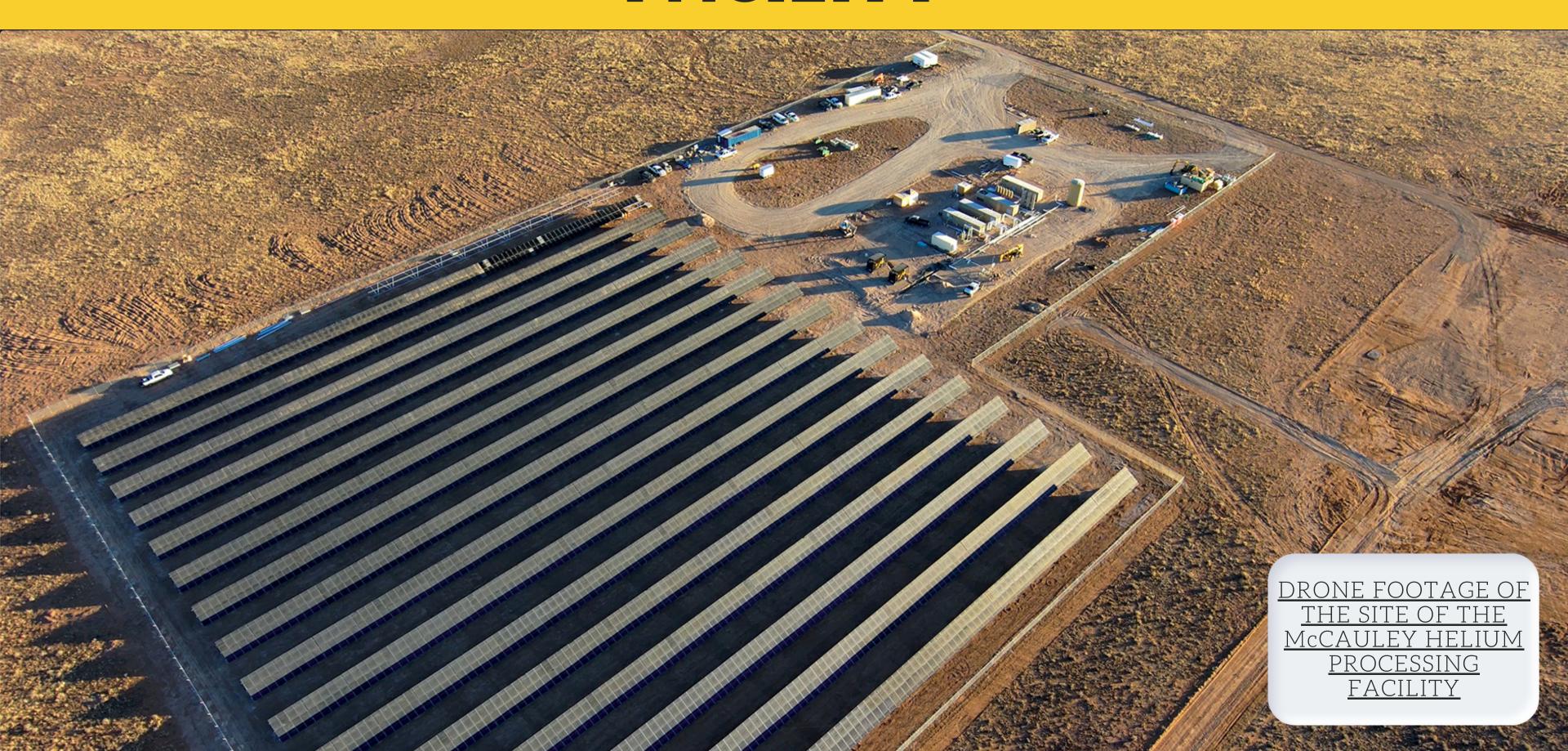
Exchange: QM01



#### 2023 TIMELINE



# THE McCAULEY HELIUM PROCESSING FACILITY



# THE McCAULEY HELIUM PROCESSING FACILITY (MHPF)

- Through-put ranges between a minimum of 300 mcf to 10.5 mmcf
- Designed to handle any helium produced in conjunction with hydrogen
- Can process helium with grades running from 0.03% to 11%
- The MHPF will initially be powered by compressed natural gas generators, later transitioning to solar power.
- MHPF to be fed with raw gas by flow lines from Wells #4, #5, #6 and #7
- In addition, raw gas from Wells #2 and #8 will be trucked to the MHPF
- Any new wells with compatible raw gas will be trucked to the MHPF
- DME will purchase off-takes from any other operators producing in the area, providing they have compatible raw gas



DME's management team at the commissioning of the MHPF on January 17, 2023

# THE McCAULEY HELIUM PROCESSING FACILITY



An external and interior view of 1 of the 4 modular housing units that will contain the processing facility

# The McCauley Helium Field

Wells #2, #4, #5, #6 & #7 will supply the initial feed to the helium processing facility.

Cost estimate including the solar farm US \$10.5 million. All gas will be moved either by flow lines from the wells, or truck.

#### Discovery Well #4

The average gas analysis showed: Average starting flow rates:

Helium- 1.137%

Nitrogen- 94.66%

Hydrocarbon - 3.4%

CO2- 0.1428%

Well #2

Nitrogen – 91.97% Helium - 4.171% Hydrogen – 3.832% Carbon Dioxide - 0.019%

#### Offset Wells #5, #6 & #7

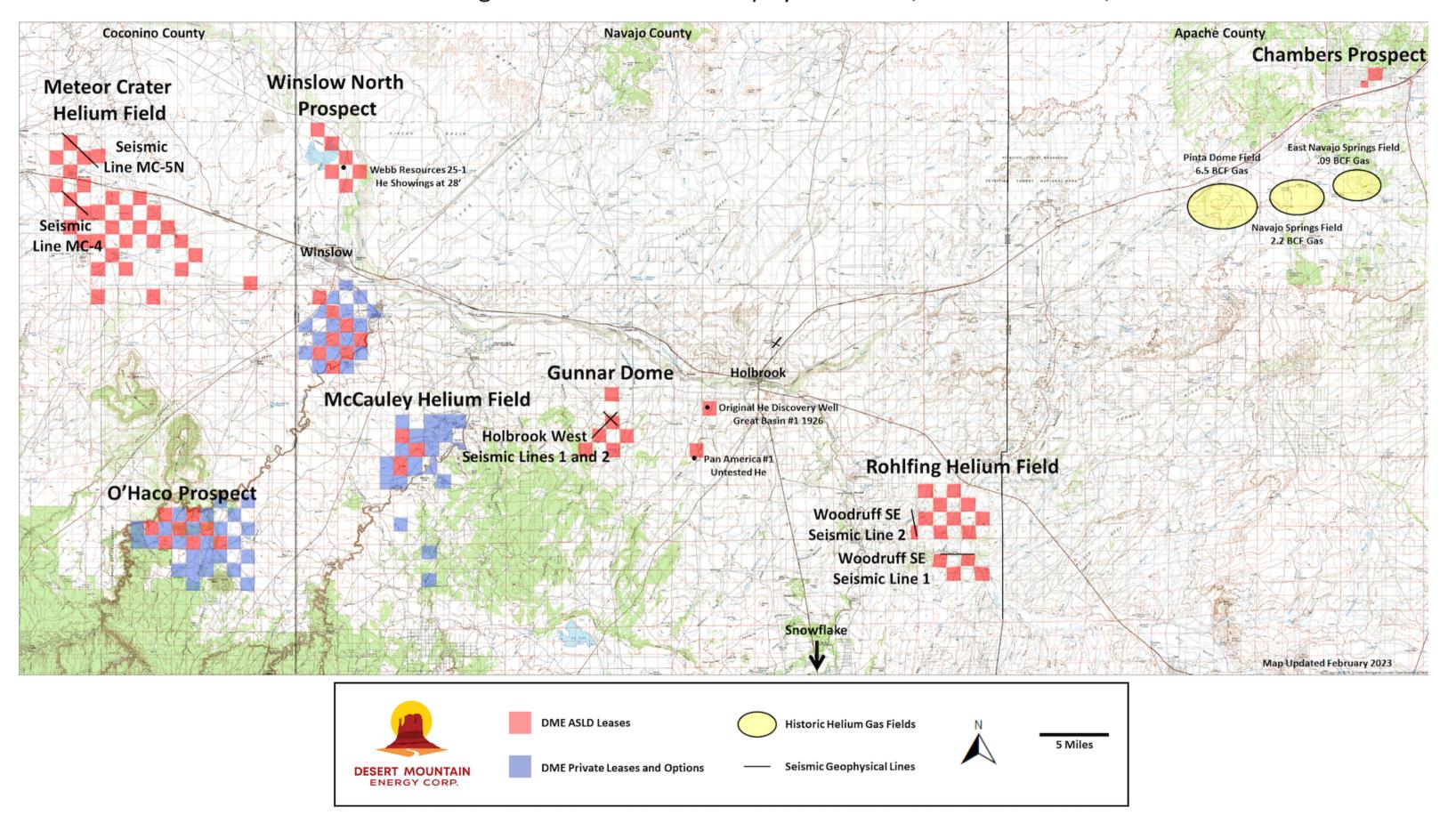
Nitrogen - 96.4689 % Helium - 3.511% Carbon Dioxide - 0.0201%

#### Gunnar Dome Wildcat #8

Production casing has been set and cemented. Completion and sampling scheduled for the end of August, 2022.



#### DME's Lease Holdings and 2-D Seismic Geophysical Lines, Holbrook Basin, Arizona



# The Rohlfing Helium Field

DESERT MOUNTAIN ENERGY ANNOUNCES
SIGNIFICANT HELIUM PERCENTAGES IN TWO
NEW WELLS IN ARIZONA

#### State 10-1

The average gas analysis showed:

Helium- 7.1321%
Nitrogen- 77.0837%
CO2- 4.0183%
Methane and other assorted
minor gases- 2.6512%

#### State 16-1

The average gas analysis showed:

Helium- 4.0904%
Nitrogen- 90.2742%
CO2- 0.0063%
Methane and other assorted
minor gases- 3.5535%



## GEOLOGICAL SETTINGS

#### **Anticlinal Features**

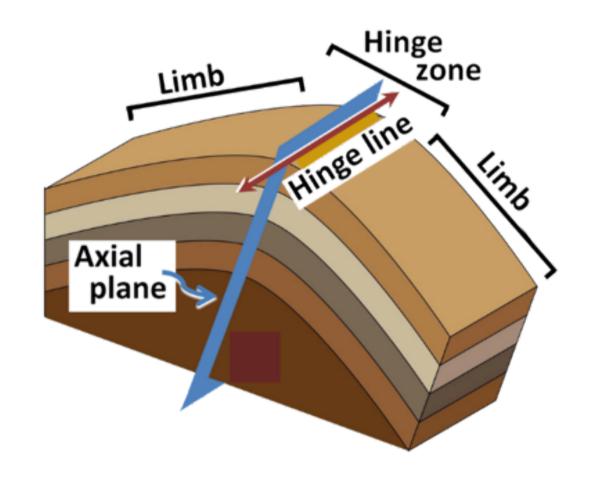
An anticline is an arch-shaped fold with the oldest beds at its core. Typically convex up with the greatest curvature at the hinge or crest. The limbs or sides of the fold dip away.

An anticline contains rock layers that become progressively older toward the center of the fold.

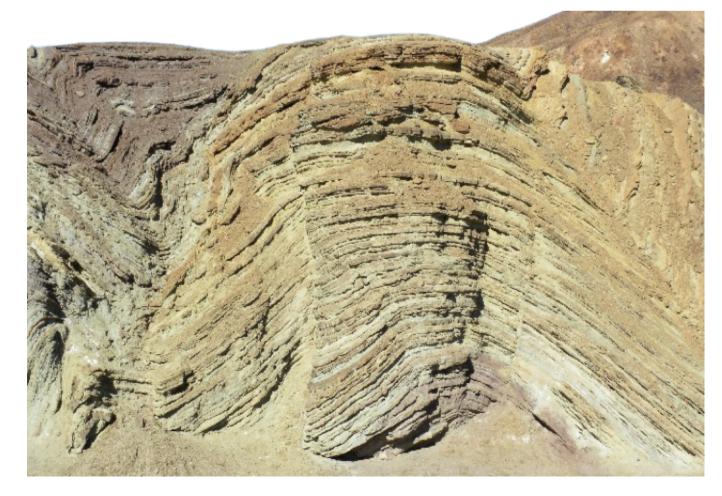
Anticlinal ridges typically develop above thrust faults.

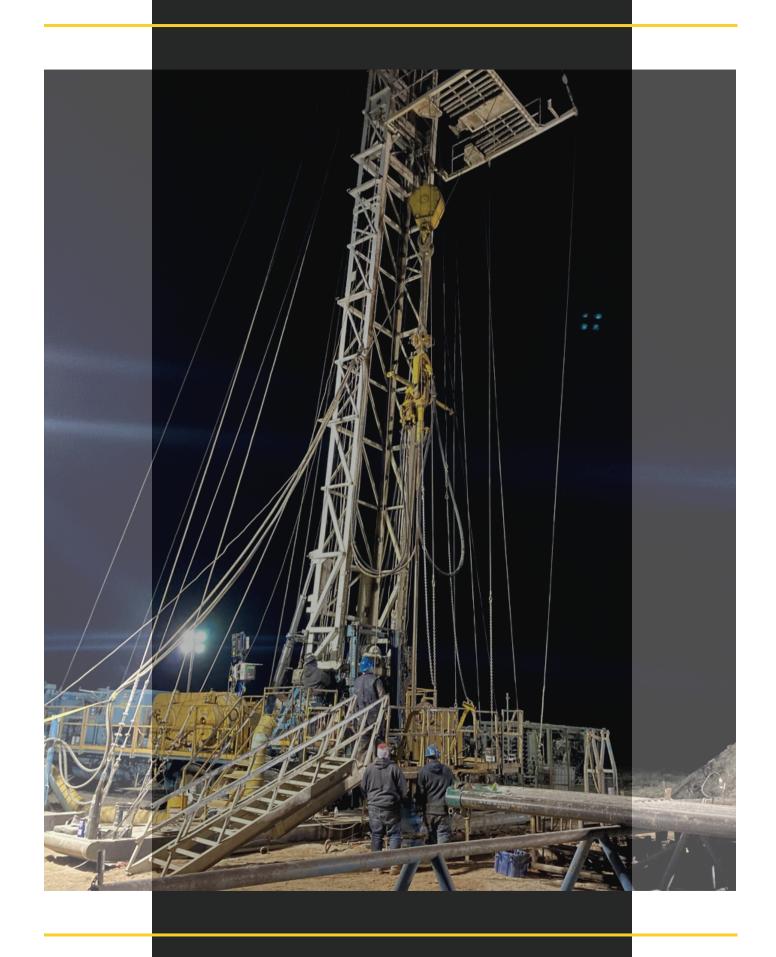
Anticlines, structural domes and stratigraphic traps are favorable for sourcing oil & natural gas, as well as Helium.

80% of the world's oil was found in anticlinal traps.



The Pinta Dome, Navajo Springs & East Navajo Springs gas fields characterized by: (i) anticlinal features; (ii) favorable reservoir rocks and (iii) impermeable caprock traps.





# In Summary:

- Commence commercial production of helium
- Begin to sell helium to end-users in and around Arizona
- Drill 3 hydrogen and 2 helium wells in addition to completing and testing Well #3
- Continue to add additional land holdings
- Additional geophysics on new mineral leases
- Expand DME team and infrastructure capabilities to service expanding corporate needs



#### WHAT IS HELIUM?

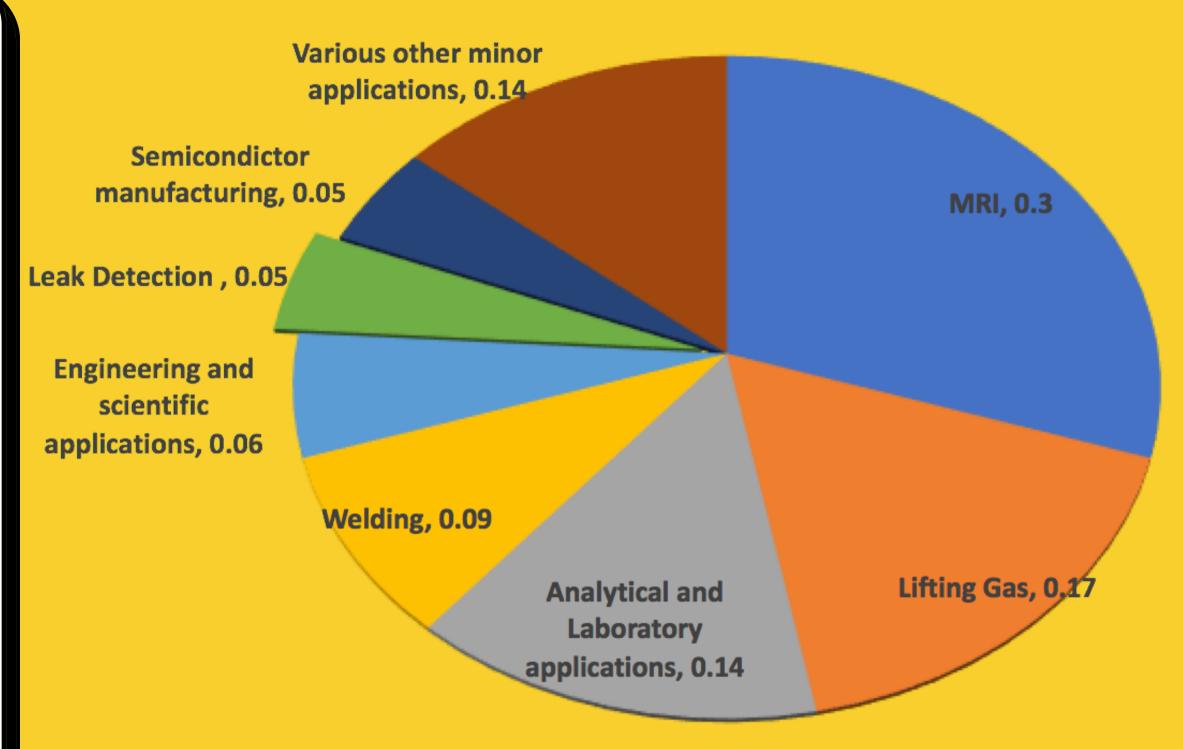
- An inert, monatomic gas that is non-flammable, colorless, odorless, tasteless, and has a boiling point of -452.07 f (-268.93 c), the lowest of any element on earth.
- The symbol is He and its atomic number is 2; part of the noble gas group.
- Prevalent throughout the universe but rare on earth.
- It's very small atom makes it extremely mobile, allowing it to penetrate most rocks and escape from earth's gravity, so trapping mechanisms are critical to retaining it in host rocks.
- Two sources on earth: (1) primordial, part of the original formation of the planet; (2) radioactive decay of uranium and thorium in the earth's crust.
- The isotope composition of He in Arizona is consistent with the preponderance of He arising from radioactive decay.
- Helium was historically found incidental to oil & gas exploration but exploration is now underway specifically for Helium.
- Helium is often found in wells associated with natural gas. In Holbrook Basin, it has generally been associated with nitrogen and carbon dioxide.
- After initial separation from other gases in the well, He is typically sold as raw Helium product grading 50–80% He; it is further processed into Grade A He.
- Typically shipped as a liquid to distribution centers in trucks and sold as bulk liquid He or gasified and compressed into tanks or small cylinders for delivery to end-users.



### 2017 Estimated Domestic Helium Consumption and Usage by Application

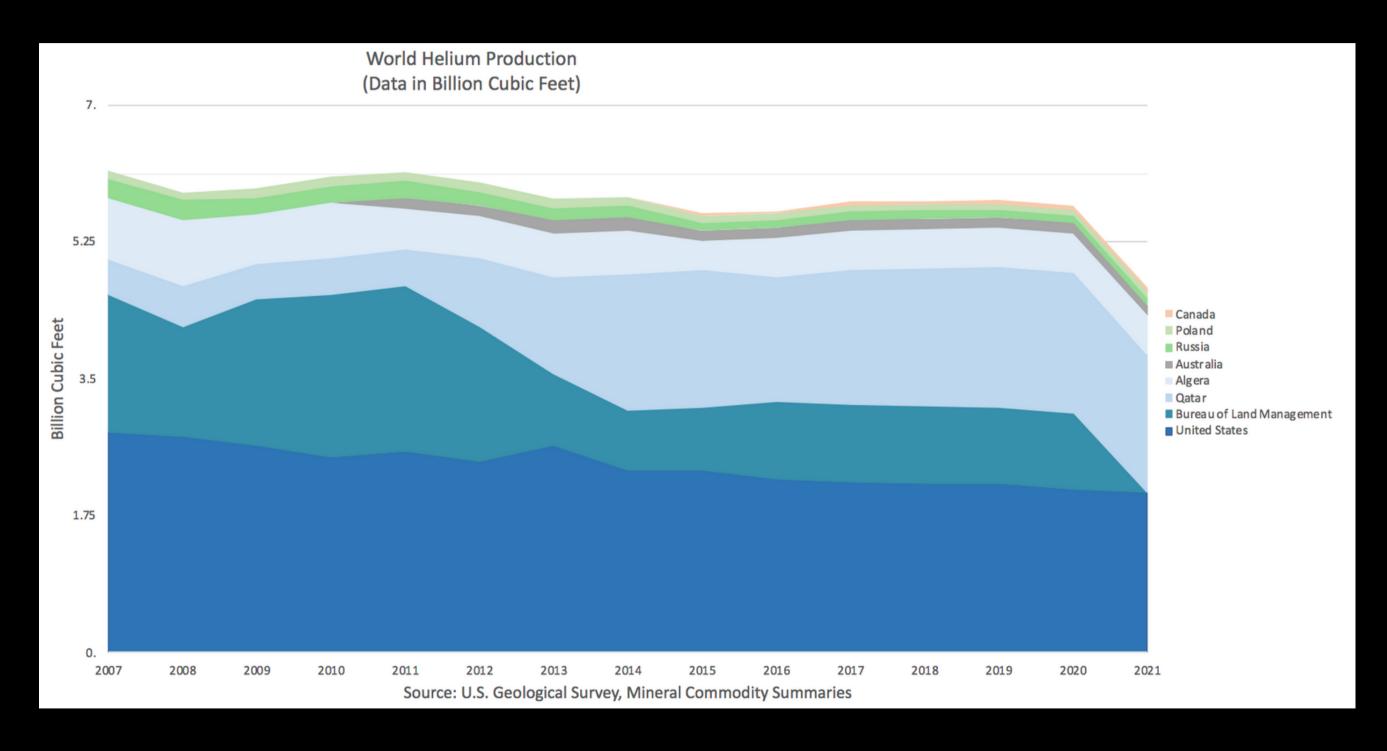
Helium has unique properties that cannot be satisfied with an alternative gas. Traditional uses remain, while the demand for helium has expanded with new high-tech applications, such as:

- The manufacturing of fibre optics
- Electric Vehicles; the liquid hard drives require helium due to energy efficiency and memory
- Space exploration; used to purge the rocket engines prior to take-off



Source: U.S. Geological Survey, Mineral Commodity Summaries, January 2018

## 2017 Estimated Domestic Helium Consumption and Usage by Application



As a result of low gas prices over the last decade, development in traditional gas fields has declined, resulting in less traditional gas production and therefore less helium. Helium is a by-product in Natural Gas, with grades of .3% to .7%

#### Natural Gas Gross Withdrawals and Production

Natural Cas Crass Withdrawals and Draduction

- Traditional Gas production has declined from 9.372
   BCF/year to 7.586 BFC/year
- Shale gas production over the same period has increased from 15,819 BCF/year to 27,773 BCF/year
- No helium is extracted from shales but it has created low gas prices for over a decade

(Volumes in Million Cubic Feet)								
Area: U.S.   Period-Unit: Annual-Million Cubic Feet   ✓								
Download Series History	Definitions, Sources & Notes							
Show Data By:  O Data Series	Graph Clear	2015	2016	2017	2018	2019	2020	View History
Gross Withdrawals	<b>-</b>	32,914,647	32,591,578	33,292,113	37,325,539	40,892,458	40,689,764	1936-2020
From Gas Wells	<b>-</b>	9,371,281	7,287,858	6,161,420	7,864,063	7,586,579		1967-2019
From Oil Wells	<b>-</b>	6,537,627	6,385,120	6,217,438	4,503,499	4,624,343		1967-2019
From Shale Gas Wells	<b>-</b>	15,819,319	17,847,539	19,927,602	23,977,248	27,773,024		2007-2019
From Coalbed Wells	<b>-</b>	1,186,420	1,071,062	985,653	980,730	908,512		2002-2019
Repressuring	<b>-</b>	3,412,269	3,548,106	3,538,733	3,587,368	3,549,763		1936-2019
Vented and Flared	<b>-</b>	289,545	230,410	255,488	470,601	538,479		1936-2019
Nonhydrocarbon Gases Removed	<b>-</b>	440,789	413,013	260,066	258,703	289,028		1973-2019
Marketed Production	<b>-</b>	28,772,044	28,400,049	29,237,825	33,008,867	36,515,188	36,172,542	1900-2020
NGPL Production, Gaseous Equivalent	<b></b>	1,706,584	1,807,934	1,897,242	2,234,593	2,547,631	2,736,764	1930-2020

**3**-m

**Notes:** Beginning with 2006, "Other States" volumes for the production series include the following states/areas: Alabama, Arizona, Florida, Idaho, Illinois, Indiana, Kentucky, Maryland, Michigan, Mississippi, Missouri, Nebraska, Nevada, New York, Oregon, South Dakota, Tennessee, and Virginia. Federal Offshore Pacific is included in California through 2019, and in "Other States" starting in 2020. Production series data for 2020 forward are estimates. Final 2020 state-level production series data will not be available until the 2020 Natural Gas Annual is published (scheduled for the third quarter of 2021). Gross withdrawal volumes in Florida fluctuate from year to year because nonhydrocarbon gases are occasionally included in gross withdrawals. See Definitions, Sources, and Notes link above for more information on this table.

27.065.460 26.592.115 27.340.583 30.774.274 33.967.557

33,435,778 1930-2020

Release Date: 5/28/2021 Next Release Date: 6/30/2021

Dry Production

Click on the source key icon to learn how to download series into Excel, or to embed a chart or map on your website.

<sup>- =</sup> No Data Reported; -- = Not Applicable; NA = Not Available; W = Withheld to avoid disclosure of individual company data.

# CONTACT

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