

### Important Notices & Disclaimer

DeSoto Resources Limited ACN 658 510 242 (DeSoto or the Company) is the issuer of this presentation. The issue of this presentation is intended only for the person or entity to which it has been transmitted.

These presentation materials and any accompanying verbal presentation (together, the **Presentation Materials**) have been prepared by DeSoto Resources Limited (**Company**) as at 29 May 2024 and statements are current only as at that date. Information in the Presentation Materials remains subject to change without notice. The Company has no responsibility or obligation to inform you of any matter arising or coming to its notice, after the date of this document, which may affect any matter referred to in this document. By receiving the Presentation Materials, you acknowledge and represent to the Company that you have read, understood and accepted the terms of this disclaimer. It is the responsibility of all recipients of these Presentation Materials to obtain all necessary approvals to receive these Presentation Materials and receipt of the Presentation Materials will be taken by the Company to constitute a representation and warranty that all relevant approvals have been obtained.

#### **Confidential Information**

The Presentation Materials are strictly confidential and are intended for the exclusive benefit of the persons to whom they are given. The Presentation Materials may not be reproduced, disseminated, quoted or referred to, in whole or in part, without the express written consent of the Company. By receiving this document, you agree to keep the information confidential, not to disclose any of the information contained in this document to any other person and not to copy, use, publish, record or reproduce the information in this document without the prior written consent of the Company, which may be withheld in its absolute discretion.

#### Not an Offer

These Presentation Materials are for information purposes only. The Presentation Materials do not comprise a prospectus, product disclosure statement or other offering document under Australian law (and will not be lodged with the Australian Securities and Investments Commission) or any other law. The Presentation Materials also do not constitute or form part of any invitation, offer for sale or subscription or any solicitation for any offer to buy or subscribe for any securities nor shall they or any part of them form the basis of or be relied upon in connection therewith or act as any inducement to enter into any contract or commitment with respect to securities. In particular, these Presentation Materials do not constitute an offer to sell or a solicitation to buy, securities in the United States of America.

#### **Not Investment Advice**

The Presentation Materials are not investment or financial product advice (nor tax, accounting or legal advice) and are not intended to be used for the basis of making an investment decision. Recipients should obtain their own advice before making any investment decision.

#### Summary Information

The Presentation Materials do not purport to be all inclusive or to contain all information about the Company or any of the assets, current or future, of the Company. The Presentation Materials contain summary information about the Company and its activities which is current as at the date of the Presentation Materials. The information in the Presentation Materials is of a general nature and does not purport to contain all the information which a prospective investor may require in evaluating a possible investment in the Company or that would be required in a prospectus or product disclosure statement or other offering document prepared in accordance with the requirements of Australian law or the laws of any other jurisdiction, including the United States of America.

While reasonable care has been taken in relation to the preparation of the Presentation Materials, none of the Company or its directors, officers, employees, contractors, agents, or advisers nor any other person (Limited Party) guarantees or makes any representations or warranties, express or implied, as to or takes responsibility for, the accuracy, reliability, completeness or fairness of the information, opinions, forecasts, reports, estimates and conclusions contained in this document. No Limited Party represents or warrants that this document is complete or that it contains all information about the Company that a prospective investor or purchaser may require in evaluating a possible investment in the Company or acquisition of shares in the Company. To the maximum extent permitted by law, each Limited Party expressly disclaims any and all liability, including, without limitation, any liability arising out of fault or negligence, for any loss arising from the use of or reliance on information contained in this document including representations or warranties or in relation to the accuracy or completeness of the information, statements, opinions, forecasts, reports or other matters, express or implied, contained in, arising out of or derived from, or for omissions from, this document including, without limitation, any financial information, any estimates or projections and any other financial information derived therefrom.

#### Forward-looking statements

Certain statements contained in the Presentation Materials, including information as to the future financial or operating performance of the Company and its projects, are forward looking statements. Such forward looking statements involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company and which may cause actual results, performance or achievements to differ materially from those expressed or implied by such statements. Forward looking statements are provided as a general guide only, and should not be relied on as an indication or guarantee of future performance. Given these uncertainties, recipients are cautioned to not place undue reliance on any forward looking statement. Subject to any continuing obligations under applicable law the Company disclaims any obligation or undertaking to disseminate any updates or revisions to any forward looking statements in this document to reflect any change in expectations in relation to any forward looking statements or any change in events, conditions or circumstances on which any such statement is based.

#### **JORC Disclaimer**

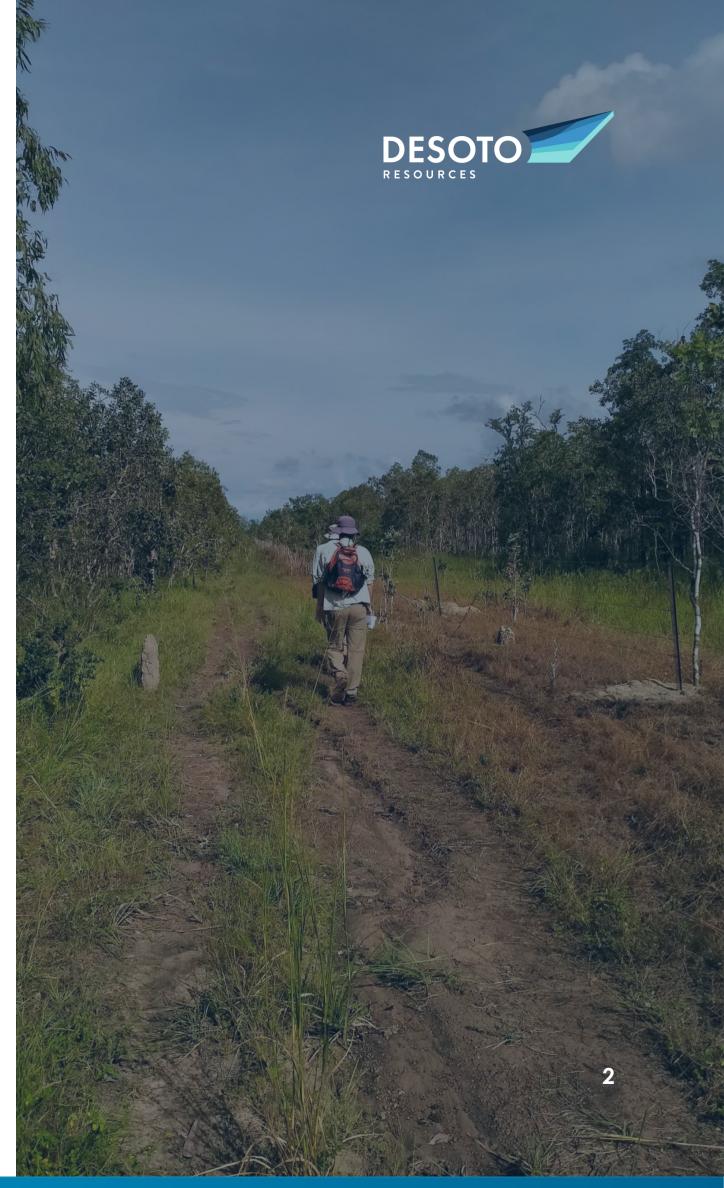
The Presentation Materials are not a "public report" for the purposes of 2012 Edition of the 'Australasian Code for Reporting of Exploration results, Mineral Resources and Ore Reserves' (JORC Code). As such, the information in this Presentation Materials that relate to exploration results, exploration targets, mineral resources and ore reserves is not reported in accordance with the JORC Code and has not been reviewed by a competent person for the purposes of the JORC Code.

The Company confirms that it is not aware of any new information as at the date of the Presentation Materials that materially affects the information included in the Presentation Materials and that all material assumptions and technical parameters underpinning the estimates in the Company's previous announcement[s] continue to apply and have not material changed.

#### **Competent Persons Statement**

The information in this report that relates to exploration results is based on and fairly represents information and supporting documentation prepared by Ms Bianca Manzi.

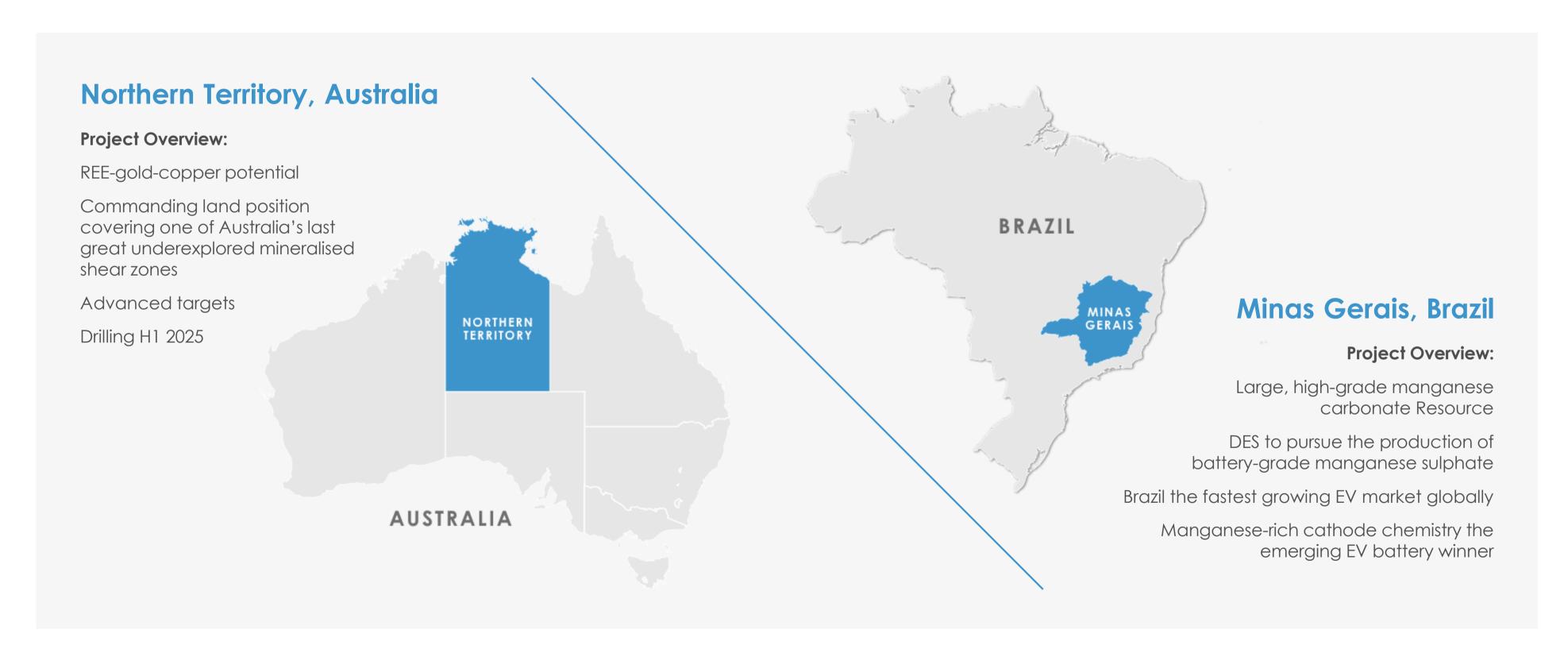
Ms Manzi is an employee of the company, is a member of the Australian Institute of Geoscientists and has sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Ms Manzi consents to the inclusion in this report of the matters based on this information in the form and context in which they appear.



### **Our Projects**



UNMATCHED EXPLORATION POTENTIAL IN TWO PREMIER CRITICAL MINERALS HOTSPOTS



### **Corporate Overview**

<b>Share price</b> (2nd Dec 24)	\$0.075
Shares on issue	92.5M
Options listed:	DESO: 44M @ 0.25c
Options Unlisted	33.9M @ 0.25c & 1.6M @
	0.35c & 1.6M @ 0.23c
Market Capitalisation	~\$7m
Enterprise Value	\$2.3m
<b>Cash</b> (Q3 2024)	\$4.7m

### **Major Shareholders**

Board & Management	~14%
Hugh Business Enterprises major producer of cathode materials	~19%
Founders	~13.7%
Rock the Polo Pty Ltd	~3.5%
Lowell Resource Fund	~1.1%

### TECHNICALLY-DRIVEN BOARD WITH A RECORD OF IDENTIFYING GLOBALLY SIGNIFICANT MINERAL PROJECTS





Paul Roberts
Non-Executive Chairman

Founder of Predictive Discovery Limited (ASX:PDI) responsible for discovery of the 5.4Moz Bankan Gold Project in Guinea, the Henty gold deposit and major extensions to the St Dizier tin deposit (both in Tasmania), as well as resource evaluations of the Kuridala copper deposit in North Queensland, the Bongara zinc deposit in Peru and various gold deposits in the Cue and Meekatharra districts in Western Australia.



Chris Swallow
Managing Director

Previously the Corporate Development Officer for Predictive Discovery (ASX:PDI), Chris was part of the team which developed the Bankan Gold Project into West Africa's most exciting gold discovery.

Chris was previously CEO at BPM Minerals and is currently a Non-Executive Director of Lord Resources (ASX:LRD) and a partner at Modena Ventures.



**Dr Barry Murphy**Non-Executive Director

A Geoscientist with expertise in structural geology, geophysics and exploration targeting. Barry was part of the Predictive Discovery team (ASX:PDI) which discovered the Bankan Gold Project in Guinea and supported the Project in its development.



Nick Payne
Exploration Manager

Nick Payne has over 25 years' experience as a Geologist with extensive exploration and mining experience in Australia, Canada and the USA, and significant experience working as an exploration geologist in the Pine Creek region of the Northern Territory.

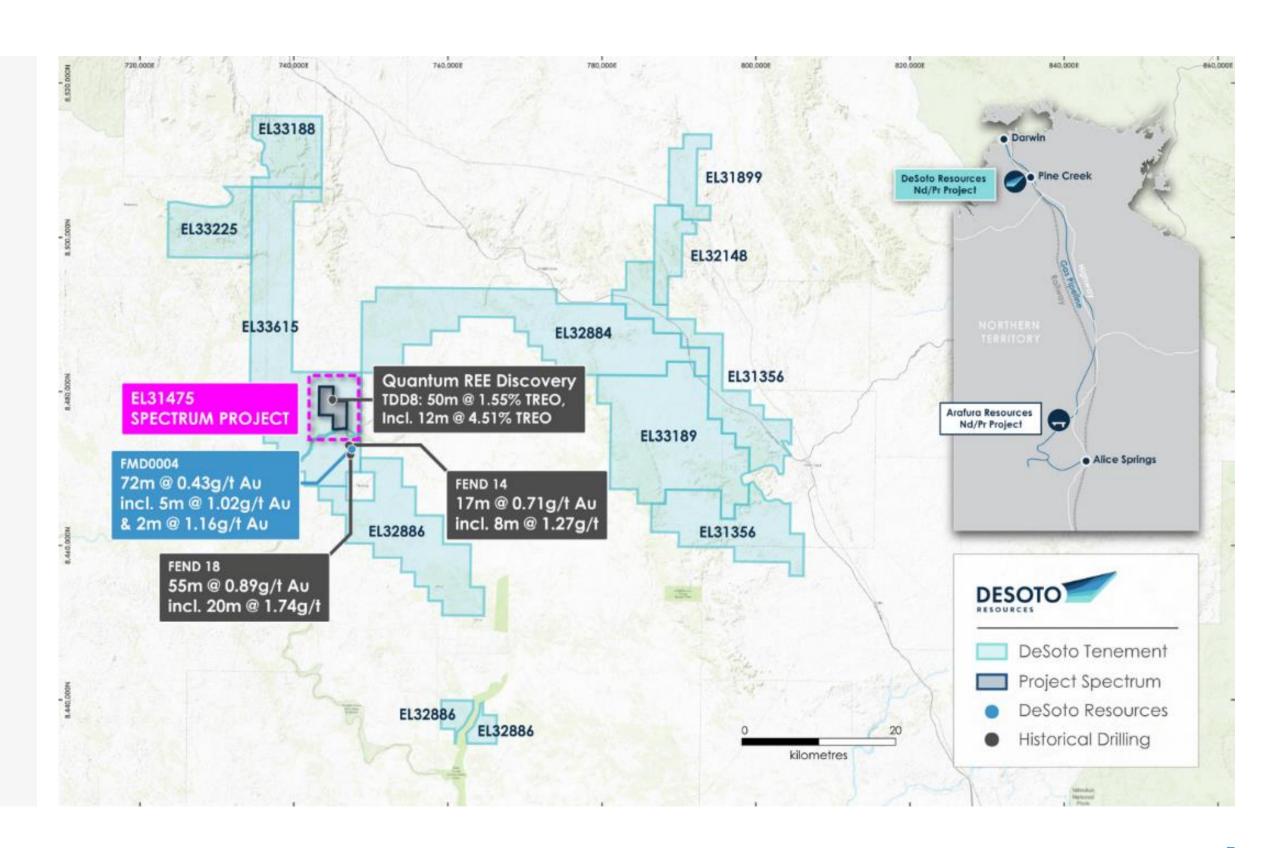
DESOTORESOURCES.COM • ASX:DES

### **Commanding Land Position**



COVERING ONE OF AUSTRALIA'S LAST GREAT UNDEREXPLORED MINERALISED SHEAR ZONES

- ~2,000km<sup>2</sup> straddling Fenton and Pine Creek Shear zones
- 17Moz Au in Pine Creek trend cf. Fenton Shear under cover & barely explored
- REE-Au-Cu Potential
- 8km strike copper anomalism untested
- Fully permitted for 23-hole drilling program Q2 2025



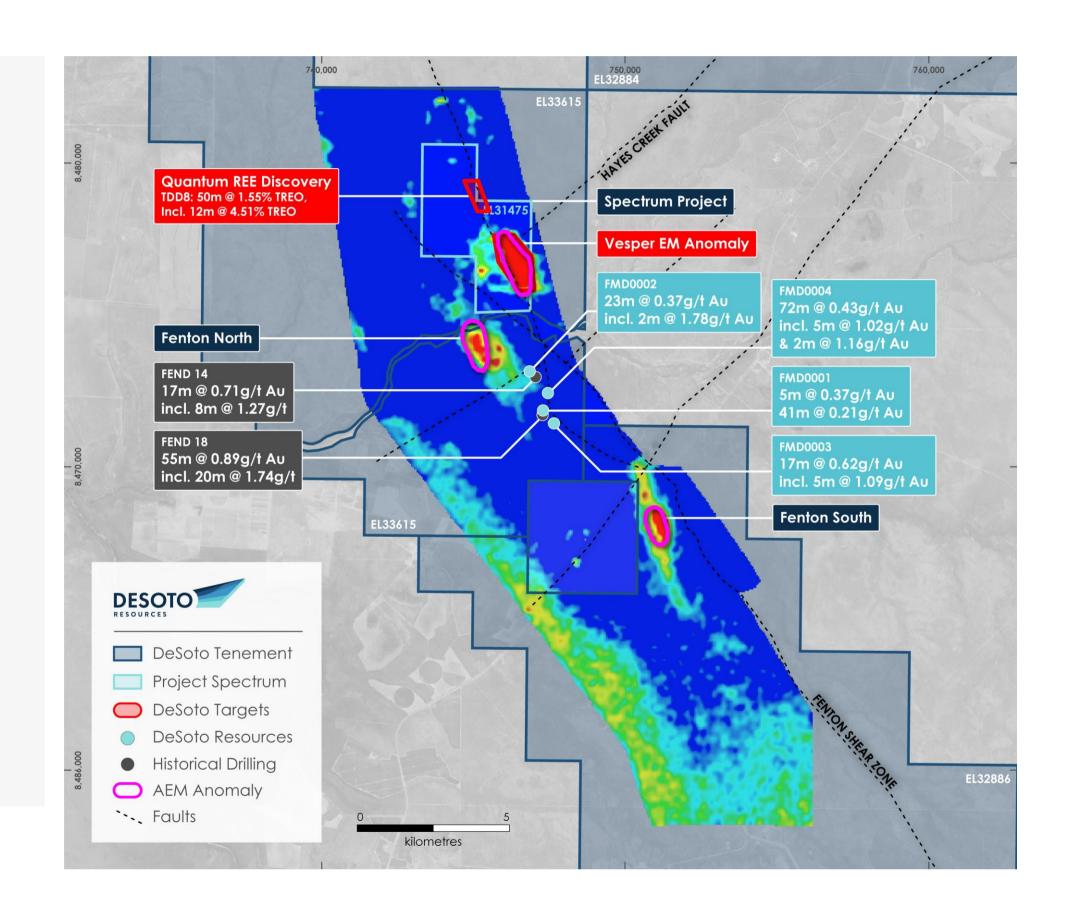
### Fenton Shear Zone



#### REGIONAL-SCALE STRUCTURE HOSTING THE SPECTRUM & FENTON PROJECTS

#### History of the Fenton Shear Zone

- Large regional-scale shear zone with targets under cover
- 1990's Limited drilling by Homestake Australia targeting 40Moz Lead-style gold deposit
- 1997 Homestake: 55m @ 0.89g/t Au, including 20m @ 1.74g/t Au (FEND 18)
- 2010-11 Territory Uranium Quantum REE discovery: 50m @ 1.55% TREO, incl.
   12m @ 4.51% TREO and 0.50 g/t Au from 247m (TDD8)
- 2023 DES drilled 72m @ 0.43g/t Au, incl. 5m @ 1.02g/t Au from 528m
   (FMD0004)- not assayed for REE
- 2023 DES AEM Survey picked out Spectrum Project EM conductor, incl.
   Quantum REE discovery
- June 2024: DES acquires Spectrum
- 2024 DES geophysical program outlines EM conductors at Vesper + MMI survey confirms 8km-long copper-in-soil anomaly
- 2024 DES fully permitted for a 23-hole Program H1 2025





# Spectrum Project, Northern Territory (DES earning into 70%)

Shear-hosted REE-Au-Cu potential along crustal scale underexplored mineralised shear zone



### Spectrum Project

8KM-LONG COPPER-IN-SOIL ANOMALY OVERLAYING EM CONDUCTORS & HISTORIC REE DISCOVERY

#### Project Background

DES acquired Spectrum Project May 2024

Strategically located inside existing Fenton Project

Vesper target: 8km-long untested copper-in-soil anomaly

Quantum target: historic high-grade REE discovery

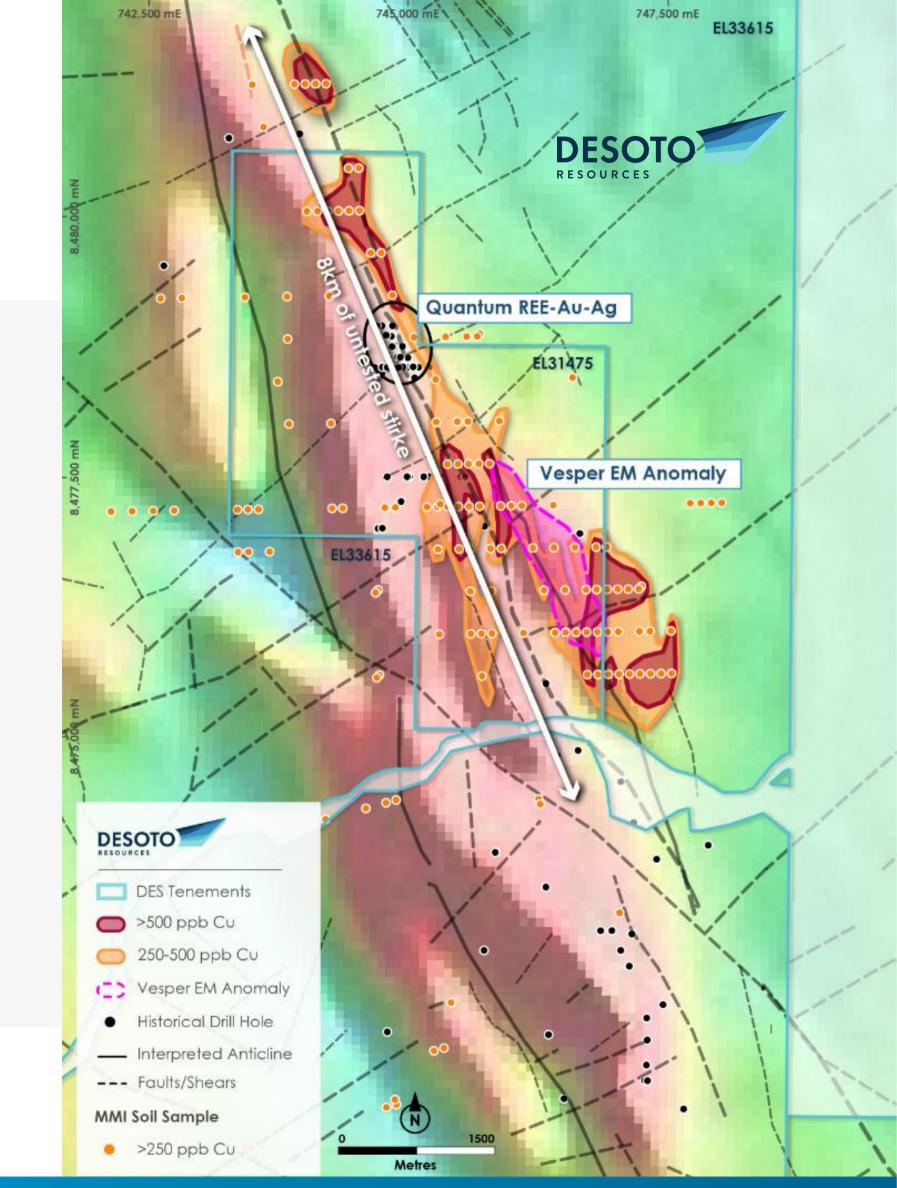
REE's were discovered before critical mineral designation

DES 2023 AEM survey highlighted Vesper as the most significant EM anomaly in the region

#### **Takeaway**

8km strike with REE-Au-Cu potential

DESOTORESOURCES.COM • ASX:DES



### **Geophysics Drives Discovery**



#### DES COMPLETES REGIONAL SCALE GEOPHYSICS ACROSS FENTON SHEAR ZONE

#### 2023 geophysicscal surveys

2023 NT Government co-funded AEM survey 18 priority bedrock conductivity anomalies identified up and down the Fenton Shear\*

Importantly, Spectrum Project highlighted, including two mineralised targets:

- Vesper target:
   Very strong EM anomaly associated with historical Cu-in soil MMI anomaly
- Quantum target:
   Well-defined & discrete EM anomaly
   associated with historic REE Discovery

#### Takeaway

Geophysics identified the Spectrum Project





### **Geophysics Driving Discovery**

2024 GEOPHYSICAL SURVEYS



#### 2024 surveys deliver targets for 2025 drilling

Geophysics targeted REE-Au-Cu mineralised zones associated with sulphide alteration

FLEM & IP survey confirmed 4 discrete AEM basement conductors and 6 new chargeable anomalies that may represent accumulation of massive, disseminated or vein hosted sulphides

#### Vesper:

13.5-line km of 2D pole-dipole induced polarisation and 77- line km of fixed loop electromagnetics collected across 11 transmitter loops

#### Quantum:

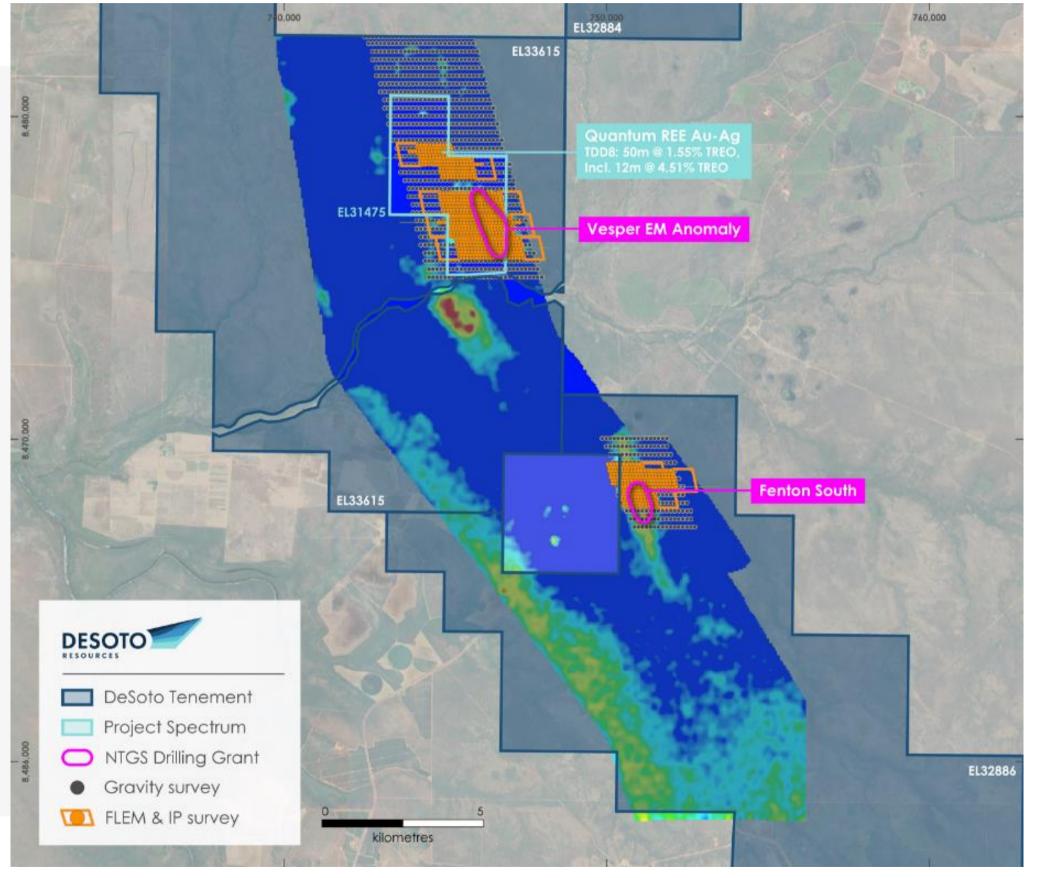
2x loops of FLEM and one 2D profile of induced polorisation

#### Fenton South:

3x loops of FLEM and 1 x 2D profile of IP

#### **Takeaway**

Geophysics delivered 10 targets for 2025 drilling program<sup>1</sup>



<sup>1</sup>ASX Announcement: High priority geophysical targets identified for immediate drill testing (13th Sept 2024)

### **Vesper Target**

ALL THE HALLMARKS OF A LARGE COPPER BASE-METALS SYSTEM



#### Big opportunity for a major discovery

4 x Large, shallow and untested EM and magnetic anomalies

8km-long copper-in-soil anomaly overlays the 4 conductor targets

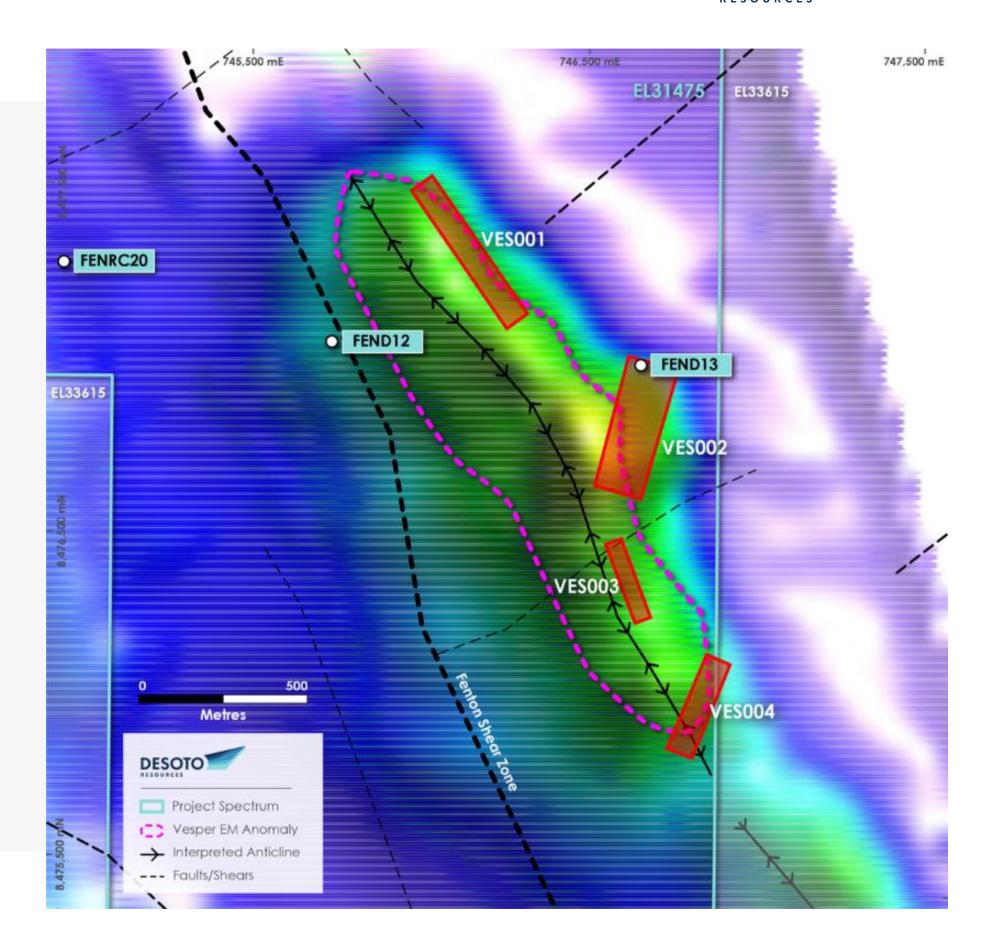
Located 1.5km south from the REE Spectrum prospect

Potential for Vesper & Quantum to be part of same system

Well-defined "twin-peak" anomaly in mid to late time channels

#### **Takeaway**

Untested EM targets supported by 8km-long copper-in-soil anomaly



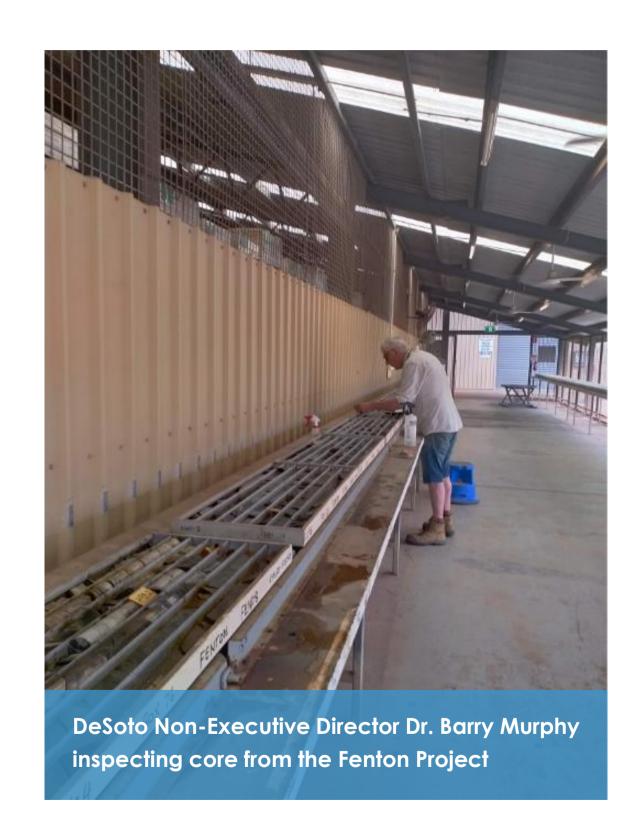


### **Quantum REE Discovery**



#### HIGH-GRADE HISTORIC REE INTERSECTIONS A STRONG WALK-UP EXPLORATION TARGET\*

HoleID	TREO*	Au	Ag
TDD8	50m @ 1.55% TREO from 245m	13m @ 0.49 g/t Au from 247m	13m @ 1.78 g/t Ag from 247m
	incl. 12 @ 4.51% TREO from 246m	8m @ 0.13 g/t Au from 277m	9m @ 1.3 g/t Ag from 277m
	32m @ 0.38% TREO from 389m	3m @ 0.75 g/t Au from 290m	3m @ 0.73 g/t Ag from 290m
		2.8m @ 0.29 g/t Au from 305m	2.8m @ 1.5 g/t Ag from 305m
TDD9	2.3m @ 2.75% TREO from 374m	2m @ 0.28 g/t Au from 375m	16.2m @ 1.11 g/t Ag from 365m
TDD10	21.9m @ 2.55% TREO from 276m	2.8m @ 0.33 g/t Au from 206m	5.2m @ 73.50 g/t Ag from 225m
	incl. 9.2m @ 3.78% TREO from 288m	6.4m @ 0.38 g/t Au from 276m	
		11m @ 0.85 g/t Au from 286m	17m @ 1.08 g/t Ag from 276m
TDD11	8.1m @ 1.4% TREO from 331m	4.2m @ 0.61 g/t Au from 330m	9.8m @ 0.79 g/t Ag from 330m
TDD12	1.6m @ 2.48% TREO from 354m	1.6m @ 1.57 g/t Au from 324m	20m @ 5.42 g/t Ag from 102m
TDD13	5.3m @ 1.58% TREO from	5.3m @ 0.56 g/t Au from 249m	19.6m @ 0.75 g/t Ag from 251m
	249m 6m @ 0.85% TREO from	3.2m @ 0.22 g/t Au from 251m	
	306m	5.9m @ 0.21 g/t Au from 304m	
TDD16			4.3m @ 6.66 g/t Ag from 275m
TDD18	4.5m @ 1.10% TREO from 367m	4.5m @ 0.90 g/t Au from 367m	
TDD19	17m @ 1.0% TREO from 254m	17m @ 0.19 g/t Au from 254m	11m @ 1.00 g/t Ag from 261m
	incl. 1m @ 6.42% TREO from 254m	5.4m @ 0.49 g/t Au from 295m	3.2m @ 0.79 g/t Ag from 296m
	3.2m @ 3.04% TREO from 296m		
TDD20	8.3m @ 1.01% TREO from 297m	1.4m @ 0.31 g/t Au from 297m	12m @ 1.62 g/t Ag from 292m
	incl. 2.4m @ 2.97% TREO from 297m		



\*ASX Announcement: Acquisition of high-grade rare earths project in the NT (29th May 2024)

DESOTORESOURCES.COM • ASX:DES

### **Forward Program**

DRILLING H1 2025

## The most exciting greenfields exploration opportunity in the NT

- Drill targeting completed
- Fully permitted 23hole program Q2 2025
- Drilling to targetVesper andQuantum targets





### Why DES Got Into Manganese



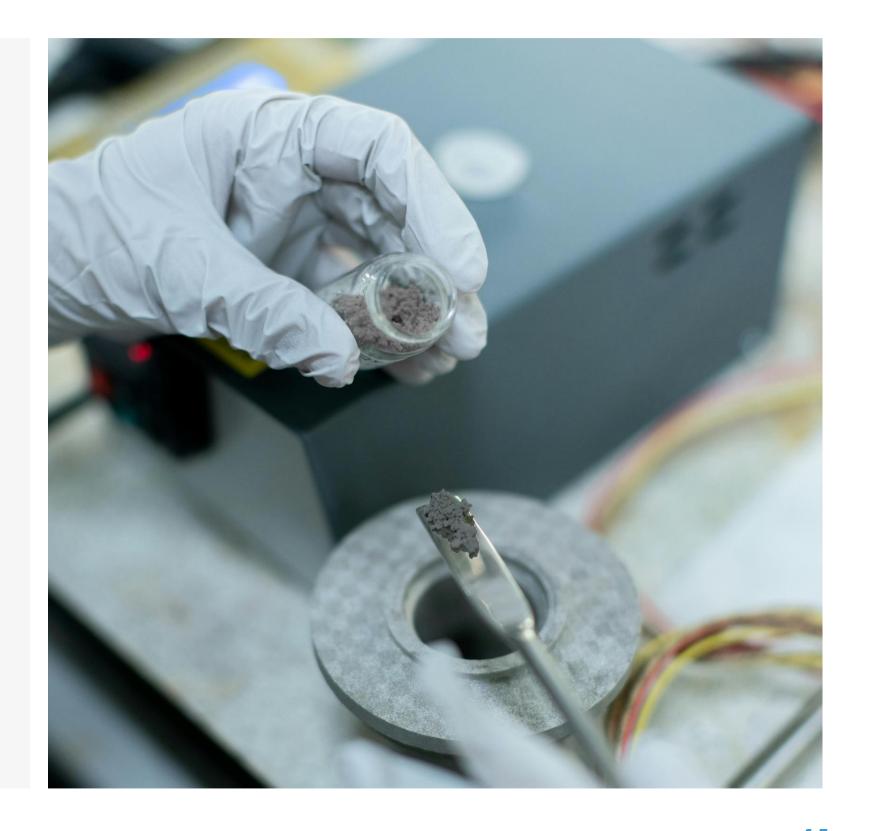
MANGANESE-RICH BATTERIES THE FASTEST GROWING CHEMISTRY FOR BATTERY CATHODES AT THE HEART OF THE EV TRANSITION

#### DES gets into the race to produce manganese sulphate

- 1) EV battery cathode chemistry is trending manganese-dominant (LMFP)
- 2) Dom Silverio located in Brazil, the fastest growing EV market in the world
- 3) Brazil is a tier-1 location for integrated mining, processing and refining
- 4) Dom Silverio has high-grade manganese carbonate mineralisation, with carbonate expected to be the lowest cost feedstock for battery-grade manganese sulphate

#### Takeaway

Dom Silverio acquisition accelerates DES into the race to produce manganese sulphate (outside of China) for LMFP/NMC batteries



<sup>1</sup>IEA Global Critical Minerals Outlook 2024

### **Dom Silverio Acquisition**





### Manganese carbonate may unlock the lowest cost path to sulphate production

Manganese carbonate is known at Dom Silverio (Foreign Estimate: 37.2Mt @ 20.7% Mn)

Manganese carbonates (leachable only) vs. magnesium oxide (leachable + calcining)

Mn carbonate potentially the lowest CO2 and energy cost feedstock for battery-grade Mn sulphate

From site visits, historic and Resource reports, DES has identified widespread manganese carbonate at Dom Silverio, in stockpiles and in-ground mineralisation





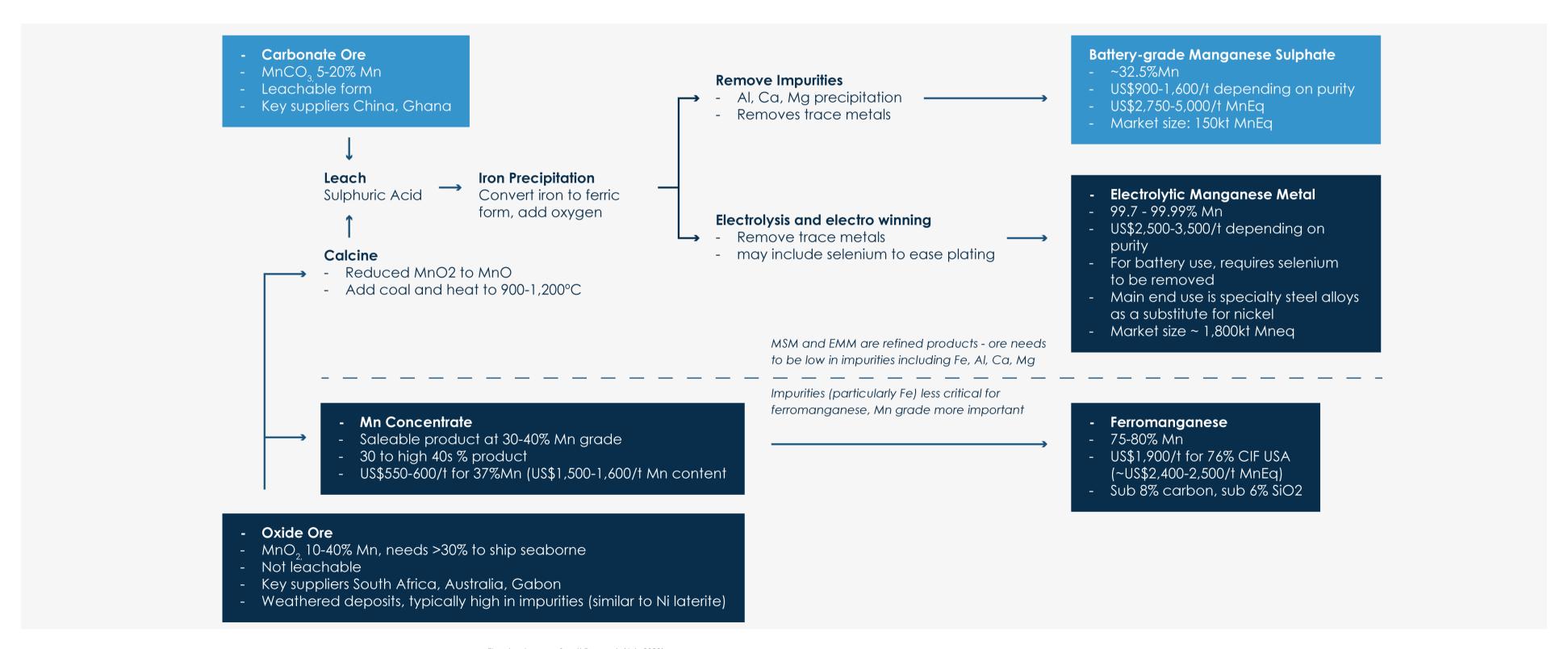
#### **Takeaway**

DES has manganese carbonate at Dom Silverio, potentially the lowest cost feedstock for battery-grade sulphate

### Battery-grade Mn sulphate flowsheet



Potential for a carbonate ore to be a low-cost production profile



Flowsheet source: Sprott Research (July 2022)

### Manganese-Rich Batteries To Drive Demand For Mn Sulphate



EV BATTERY CATHODES CHANGING TO MANGANESE-RICH CHEMISTRIES EN MASSE

### Safe, stable and abundant, manganese improves the performance of lower-cost EV batteries

- Lithium Manganese Iron Phosphate (LMFP) now the battery chemistry of choice for the BEV big 4: Tesla, BYD, Geely Auto & Chang'an
- Cathodes containing battery-grade manganese sulphate the fastest growing battery chemistry segment<sup>2</sup>
- manganese sulphate comes from China trading at ~US\$860/tCurrently 91% of supply for battery-grade <sup>3</sup>
- Ex China battery-grade manganese sulphate trades at US\$1,760/t-US\$4,019/t4
- LMFP forecast to take market share from nickel-based chemistries due to its increased range

#### Government support for battery-grade manganese sulphate ex-China

US Department of Energy selected Element25 and South32 for a \$US166 million grant to produce battery grade manganese sulphate

Battery Type	NMC	LFP	LMFP
Cycles to 80%	500 times	2,000 times	2,000 times
Durable years	2.5 yrs	10 yrs	8-10 yrs
High Temp Resistant	40°C	60°C	60°C
Low Temp Resistant	-20°C	-10°C	-20°C
Voltage	3.7V	3.2V	3.75V
<b>Energy Density Ratio</b>	High	Low	High
Safety	Low	High	High

#### Takeaway

Ground floor exposure to a surging EV battery thematic

<sup>2</sup>IEA Global Critical Minerals Outlook 2024

### Brazil: The Fastest Growing EV Market Globally



LOCAL PRODUCTION TO BE THE HUB FOR EV'S PRODUCTION INTO LATIN AMERICA

#### Brazil's Battery Blue Sky

Brazil imported \$735 million worth of Chinese BEVs in 20231

9/10 EV's sold in Brazil Chinese branded<sup>2</sup>

January 2024, Brazil introduced import tax on battery-electric and plug-in hybrid to stimulate local EV manufacturing<sup>3</sup>

BYD and Great Wall Motor have announced plans to manufacture EVs in Brazil<sup>4</sup>

Potential to produce Mn Sulphate close to mine and market, provides opportunity for significantly reduced logistics and shipping costs vs. peers.

#### Takeaway

Brazil to emerge as the key EV export hub for the entire Latin America region



### **Brazil: The Perfect Manufacturing Hub**





**Tier-1 Mining Jurisdiction** - Established exploration and mining infrastructure to support new projects, a mining friendly regulatory code and a top ten producer of manganese globally

**Commercial Electricity Prices** - Average commercial electricity price of US\$1.2c per kilowatt-hour

**Reliable availability of key chemicals** - sulphuric acid, hydrofluoric acid, sodium sulphide, iron sulphide and calcium oxide due to robust local production capabilities and a well-established supply chain

Labour Costs - Not a high-wage nation

**Surging Local Demand -** Brazil's EV take-up grew 700% last year, with surging demand for manganese also in fertilisers and alloys

#### Takeaway

Brazil has all the mining, processing and refining ingredients for the production of battery –grade manganese sulphate



### Dom Silverio Acquisition

#### INVESTMENT RATIONALE



#### Manganese Blue Sky

Four-year option over the Dom Silverio Manganese Project

Our major shareholder is a battery cathode manufacturer

High-grade manganese Project with a 70-year history of mining

Four years to optimise production methods for battery-grade manganese sulphate from Dom Silverio ore at lowest possible cost

Year-round access

#### Takeaway

High-grade manganese project with intention to produce battery-grade manganese sulphate



Historic Portao mine, located in the Dom Silverio Project, showing the pit wall.

DESOTORESOURCES.COM • ASX:DES

### Dom Silverio Manganese



#### DES ENTERS INTO AN OPTION AGREEMENT TO ACQUIRE THE DOM SILVERIO MANGANESE PROJECT

#### **Dom Silverio Project Intro**

#### Location

110 km east of Belo Horizonte on the east edge of the "Iron Quadrangle" in Minas Gerais State, Brazil

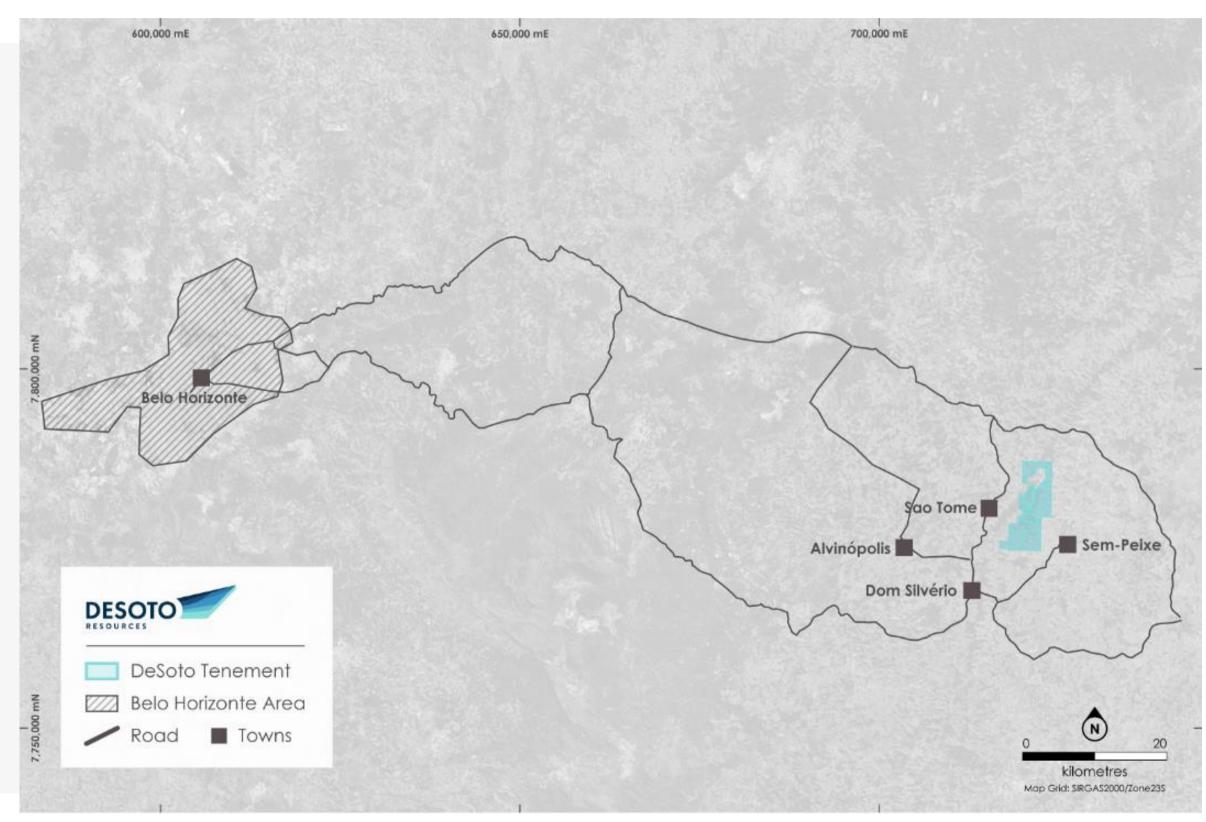
An established mining district with more than 70 years of manganese production, most notably as a supplier to U.S. Steel as part of the United States armament efforts during World War II.

#### Resources

Non JORC-compliant Foreign Estimate of 61.8Mt @ 21.1% Mn Oxide and 37.2Mt @ 20.7% Mn carbonate\*

#### **Historical Production**

Dom Silverio has historical production of high-grade metallurgical manganese oxide ore ~42% Mn (after sorting)



<sup>\*</sup>Source: Park, C.F., Jr., Dorr, J.V.N., II, Guild, P.W. and Barbosa, A.L.M. (1951) Notes on the manganese ores of Brazil. Economic Geology, v. 46, pp. 1-22.

### **Dom Silverio Project**

HIGH-GRADE MANGANESE IN A HISTORIC MN PRODUCING DISTRICT

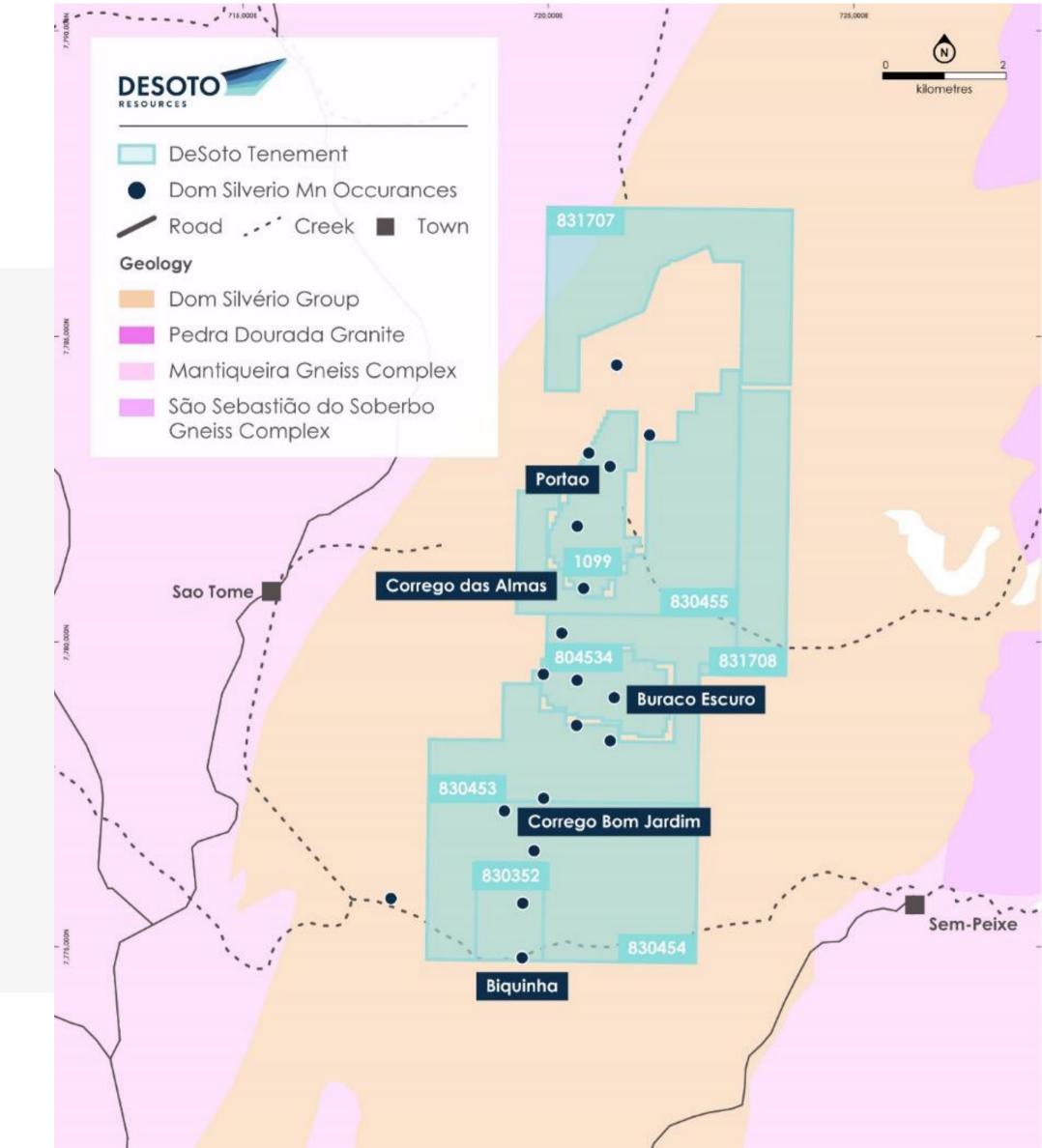
#### **Project Background**

The Dom Silverio Project consists of one granted mining concession and seven mining concession applications

Manganese mineralisation is hosted in a series of Mn-rich rocks (silicates and carbonates) between 10 to 30m in width that are laterally extensive over 12km of strike

Manganese oxide occurs at surface as supergene enrichment from a primary manganese-rich protolith

Manganese ore mined from the project was processed in Sao Tome (7km via road) to produce a 42% Mn oxide and 25% Mn carbonate lump product



### **Dom Silverio Project**

**BELT-SCALE POTENTIAL** 



#### **Exploitation Opportunity**

14km-long x 5km-wide belt of widespread, near-surface manganese mineralisation

Historic Mn mining pits and ore stockpiles

Existing processing infrastructure

Tonnage and grade of Mn produced has not been officially recorded, however numerous crushed Mn ore stockpiles still exist within the project area



Dom Silverio Project, located in Minas Gerais Brazil, showing a large manganese outcrop.

### **Dom Silverio Project**

#### SIGNIFICANT EXPLORATION UPSIDE



#### **Project Opportunity**

The project has seen almost no modern exploration

Tratex completed a 40-diamond hole program in 2011 with holes from 15m to 69m in depth (average depth of 30m)

Holes were planned to test Mn oxide only and only inadvertently intersected Mn carbonate protore

Tratex also completed detailed geological mapping and a ground gravity survey.

All work was completed on permit 1099 which is the site of the historic Portao mine

No work conducted on other permits despite historic manganese mining

	Mn Carbo	Mn Carbonate		Mn Oxide	
Area	Tonnes	Mn %	Tonnes	Mn %	
Portao	24,634,426	21.4%	57,480,331	20.6%	
Biquinha	-	-	217,747	30.0%	
Corrego das Almas	10,506,578	20.8%	2,626,643	27.5%	
Corrego Bom Jardim	789,710	17.3%	526,474	26.1%	
Sitio Sapucaia	1,241,601	10.5%	632,178	28.7%	
Fazenda Esmeril	-	-	34,749	22.3%	
Buraco Escuro	-	-	293,323	30.0%	
Total	37,172,315	20.7%	61,811,445	21.1%	

Cautionary Statement: A competent person has not done sufficient work to classify the historical estimates or foreign estimates as mineral resources or ore reserves in accordance with the JORC 2012 Code; and it is uncertain that following evaluation and/or further exploration work that the historical estimates or foreign estimates will be able to be reported as mineral resources or ore reserves in accordance with the JORC 2012 code.

<sup>\*</sup> Source: Sequenced Economic Use Plan – Tratex Mineracao Ltda – 2011: Completed by J. Mendo Consultoria Empresarial Ltda

### Dom Silverio next three months

**EXPLORATION & TESTWORK FEASIBILITY** 

#### **Metallurgical Test Work**

- Mineral processing test work to produce separate raw product streams
- Benchtop metallurgical studies for the lowest-cost route to battery-grade Mn Sulphate
- Petrophysical work

#### **Exploration & Resource Definition**

- Re-logging of the existing drill core and stockpiles using pXRF
- Geological mapping and rock chip sampling
- Project-scale geophysics
- Diamond drilling program
- Estimating resources

#### **Local Community & Environment**

- Outreach to local landholders and community representatives
- Environmental permissions for low impact drilling within the project area





CORPORATE PRESENTATION • NOVEMBER 2024

DESOTORESOURCES.COM • ASX:DES

### Right Geology & Mineralisation

#### PINE CREEK REGION



#### Geology

Hosted within the Pine Creek Geosyncline which is a mid-Proterozoic sequence of marine sediments intruded by a suite of granites

Regionally, known mineralisation primarily hosted within Pine Creek Shear

Pine Creek Project located on parallel structural corridor to the Pine Creek Shear Zone, partially under cover, known to be gold mineralised

Gold mineralisation found in a number of the sedimentary units

Higher-grade deposits such as Cosmo Howley and Mount Porter are developed within BIF Formations of the Koolpin Formation and the Gerowie Tuff

Koolpin formation outcrops known within the Pine Creek Project and interpreted as gold host rock in FSZ drill core.

Cosmo Howley deposit similar to 40Moz Homestake Deposit, South Dakota

Region also contains small high-grade Cu-Pb-Zn VMS deposits

