

# Castile Resources

A New Mine for the New Future

Northern Territory Resources Week

August 2022





# **Compliance & General Disclaimer**

#### COMPETENT PERSONS STATEMENTS

The information in this report that relates to Exploration Results and Mineral Resources and Exploration Data is based on, and fairly and accurately represents, information and supporting documentation compiled by Mr. Jake Russell B.Sc. (Hons) MAIG and Mr Mark Savage who each have sufficient experience which is relevant to the styles of mineralisation, the types of deposit under consideration and to the activities being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC 2012)". Mr Russell is a Member of the Australian Institute of Geoscientists and is a Director of Castile Resources Limited and is eligible to and may participate in any short-term and long-term incentive plans of the Company as disclosed in its annual reports and disclosure documents. Mr Savage is a Member of The Australasian Institute of Mining and Metallurgy and a full-time employee of Castile. Mr Russell and Mr Savage each consent to the inclusion in this report of the matters based on this information in the form and context in which it appears.

The information contained in this report that relates to metallurgical results is based on, and fairly and accurately represent the information and supporting documentation prepared by Damian Connelly. Mr Connelly is a full time employee of METS Engineering who are a Contractor to Castile, and a Fellow of The Australasian Institute of Mining and Metallurgy. Mr Connelly has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Exploration Targets, Mineral Resources and Ore Reserves. Mr Connelly consents to the inclusion in the report of the matters based on the results in the form and context in which they appear

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This overview of Castile does not purport to be all inclusive or to contain all information which its recipients may require in order to make an informed assessment of the Company's prospects. You should conduct your own investigation and perform your own analysis in order to satisfy yourself as to the accuracy and completeness of the information, statements and opinions contained in this presentation before making any investment decision.

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#### PREVIOUSLY REPORTED INFORMATION

This presentation refers to information previously announced to the ASX, including mineral resource estimates and exploration results announced to the ASX on 12 February 2020 in its Prospectus dated 3 December 2019, and exploration results announced to the ASX on 14 and 20 October 2020 and also on 2 November 2020 and ASX:CST Announcement 26 November 2020 "Castile Resources Drilling Program Update" and ASX Announcement 24 May 2021 "High Grade Gold and Copper Results in Drilling at Rover 1", ASX Announcement 29 June 2021 "Spectacular Copper In Assays From Rover 1", ASX:CST August 23, 2021 "More Bonanza Gold Hits Expand Rover 1", ASX:CST August 30, 2021 "Spectacular Copper Hits at Rover 1", September 3, 2021 "ASX:CST Outstanding Metallurgical Resources Drilling Program Update" and ASX:CST November 19 2021 "Additional Environmentally Sustainable Product at Rover 1", ASX:CST 4 March 2022 "Custanding Recoveries in Gold, Copper and Cobalt at Rover 1" ASX:CST 8 March 2022 "Large Increases in Gold, Copper and Cobalt at Rover 1" ASX:CST 4 July 2022 Rover 1 PFS and Field Activities Update, ASX:CST 18 July 2022 "Rover 4 Drilling Completion And Activities Update", ASX:CST 18 July 2022 "Amended – More Copper From Expanded IOCG At Jupiter Deeps"

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements or this presentation, and that all material assumptions and technical parameters underpinning the mineral resource estimates continue to apply and have not materially changed.

This presentation was released on 24 August 2022 and was authorised for release by the Board of Castile Resources Limited – Level 7, Ashton Chambers, 189 St Georges Terrace, Perth WA 6000.



# **Downstream Production in the Northern Territory**



 Gold, Pure Copper, Pure Cobalt and High-Grade Magnetite

Battery, EV and Critical Minerals produced in Australia



Significant new gold discovery and IOCG alteration extensions to be added to Mineral Resource Estimate



Proposed Sustainable Development for the Decarbonised Future

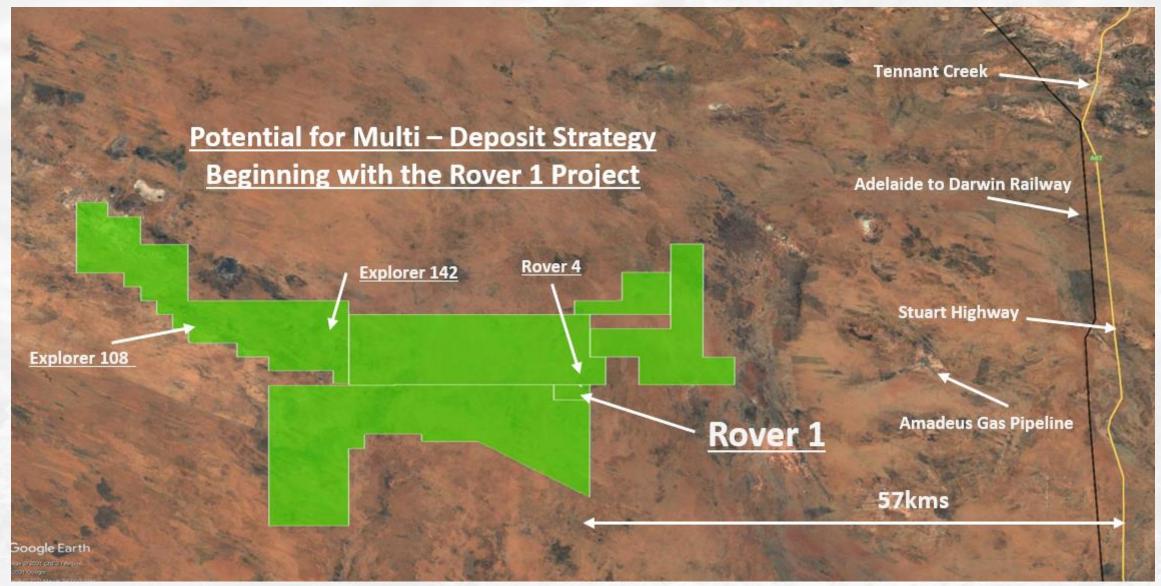
Rover

Warumpi





# The Rover Mineral Field – A Multi-Deposit Strategy



# Significant High-Grade IOCG System Gold Intercepts

10m @ 47.97g/t Au

from 471m in R1ARD41-1

7m @ 125.93 g/t Au

from 542m in WGR1D034

12m @ 58.40 g/t Au

from 555m in WGR1D002-5

30.4m @ 35.6 g/t Au

from 506m in 20CRD001

20m @ 32.61 g/t Au

from 469m in WGR1D003



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ROVER 1
Drilling Highlights



21m @ 6.86% Cu

from 469m in WGR1D011

27m @ 4.75% Cu

from 429m in WGR1D024-1

42m @ 4.10%Cu

from 360m in R1ARD30

30.2m @ 4.46% Cu

from 827m in WGR1D059-2A1

29m @ 3.60% Cu

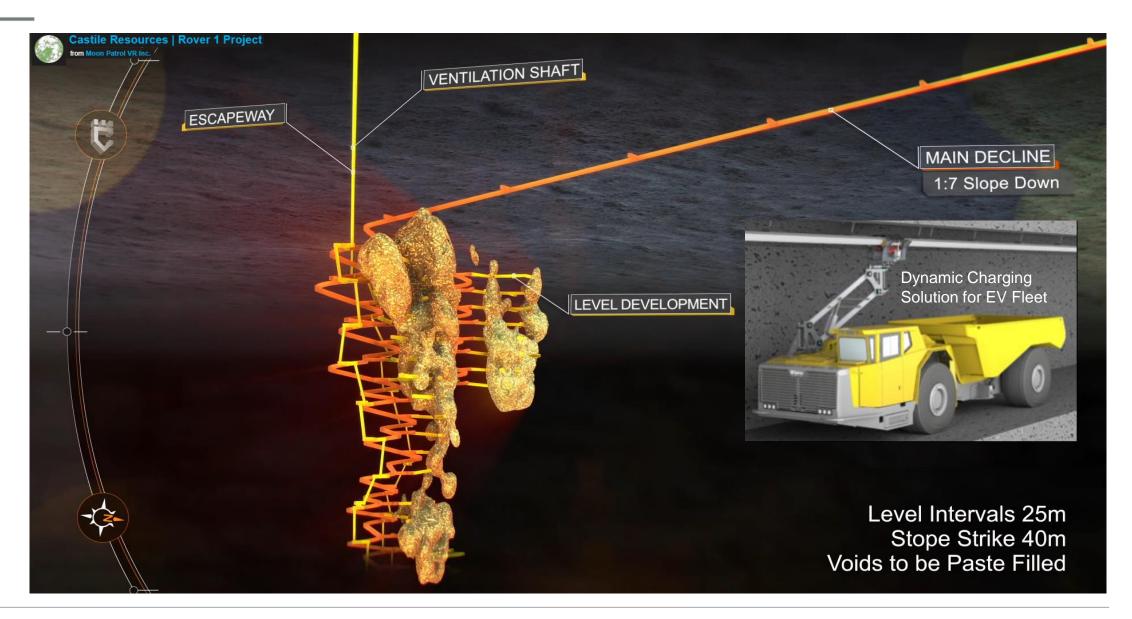
from 399m in WGR1D034-1

95,000 METRES OF DIAMOND DRILLING

(85km pre CST, 10km with CST)



# Proposed Engineered Mining Plan For the Pre-Feasibility Study







# Large Increases in Indicated Resources for the Pre-Feasibility Study

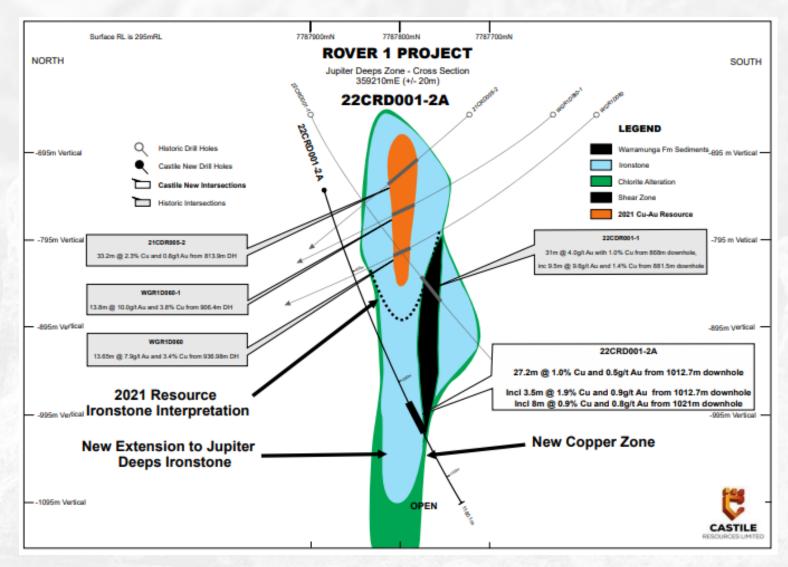
#### Engineers designing a 500,000tp/a Processing Plant for the PFS

Classification	Rover 1 Mineral Resource Estimate					
	Gold (Oz)	Copper (T)	Cobalt (T)	Magnetite(T)		
Indicated	242,600	63,400	2,900	933,000		
Inferred	20,900	14,000	900	163,000		
Total	263,500	77,400	3,800	1,096,000		

2g/t Eq Cut Off Grade		Grade				
Classification	Tonnes	Gold (g/t)	Copper (%)	Cobalt (%)	Magnetite (%)	
Indicated	3,882,000	1.94	1.63	0.07	24.04	
Inferred	865,000	0.75	1.62	0.10	18.79	
Total	4,747,000	1.73	1.63	0.08	23.08	



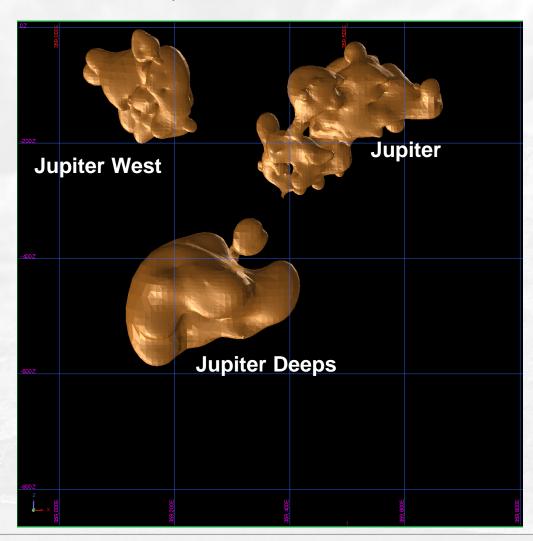
# July 2022 Virgin High Grade Gold Zone Discovery and Extended IOCG Alteration to be added to the Mineral Resource Estimate



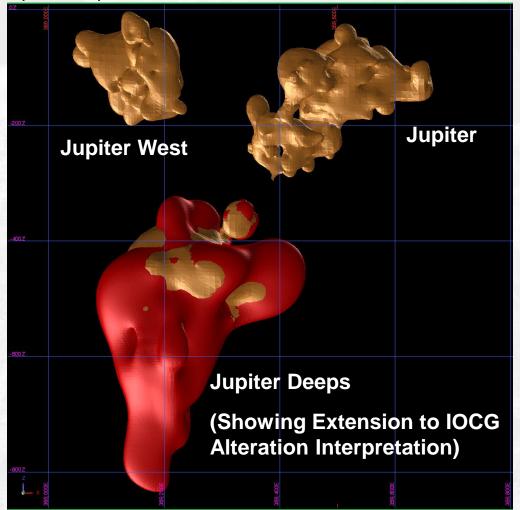


# Significant New Gold Discovery and IOCG Alteration Extension in the Jupiter Deeps section of Rover 1

Previous Interpretation of Rover 1 IOCG Alterations



Red Area shows New Interpretation of the Extension to the Jupiter Deeps IOCG Alteration







# **Downstream Processing Plant to Enhance Economics**



HIGH TOTAL RECOVERIES OF

> GOLD, PURE COPPER AND PURE COBALT METALS



500,000tpa PROCESSING

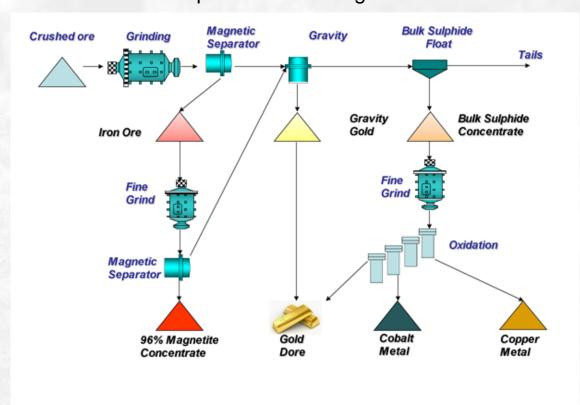
> PLANT PROPOSED FOR PRE-FEASIBILITY STUDY



END USER PRODUCTS FOR BATTERY AND

> ELECTRIFICATION INDUSTRIES

Rover 1 Proposed Processing Flowsheet



**Total Recoveries** 

67.7%

92.8%

82.8%

95.8%

# End User Metals produced in Australia



**Key Metals** 



**Pure Cobalt Metal** 



**By-Products** 

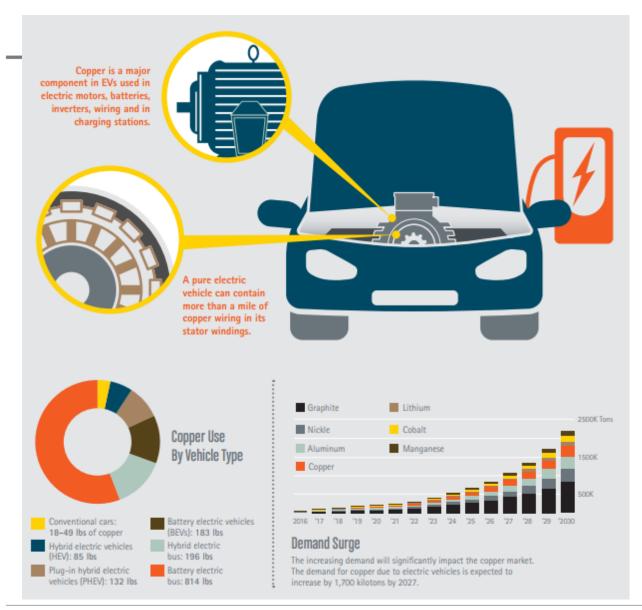




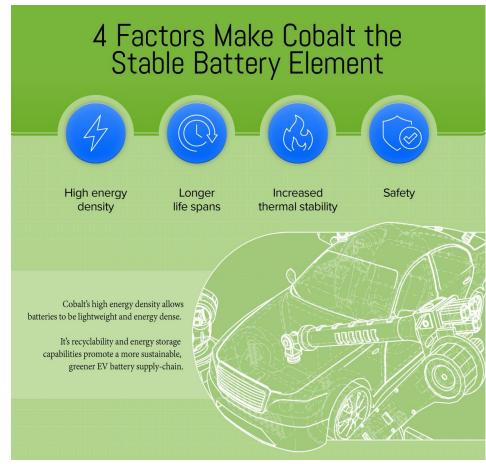
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#### Pure Battery Metals for the Electrification Revolution



Castile will produce pure Copper and Cobalt metal required for EV's, charging networks and battery producers



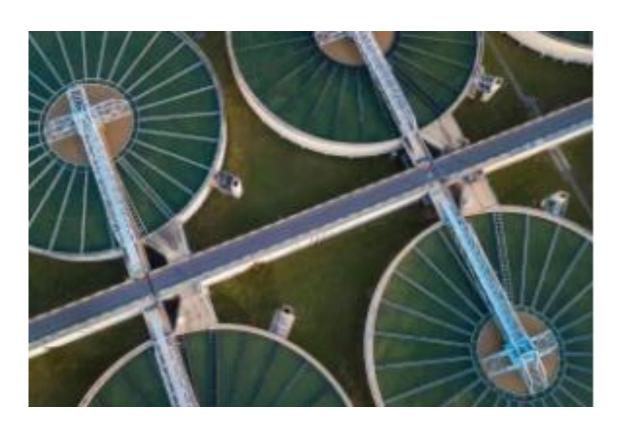
Cobalt is listed as a critical mineral by the Australian Federal Government

Source: copper.org Source: visualcapitalist.com



# High Grade Industrial Mineral From the Host Rock at Rover 1





High Grade Magnetite is used to produce a dense medium separation slurry for coal washing, mineral processing and recycling of metals and plastics.

Indicated Magnetite Resource 933,000t Inferred Magnetite Resource 163,000t

Total 1,096,000t

Approximately 24% of the host rock ore mined will be magnetite. Castile can recover 67.7% of that material and produce a high quality  $P_{95}53\mu m$  magnetite rich magnetite product on site that is saleable directly to end users as a density modifying mineral. The material will grade 96.4% magnetite.

Not only will this provide addition revenue, it will vastly reduce the waste stream and the environmental footprint at Rover 1

#### **Standard Industry Specifications**

Maxfine Grade
96-99% - Passing 45 micron
98-100% - Passing 53 micron

<u>Ultrafine Grade</u> 90-95% – Passing 45 micron

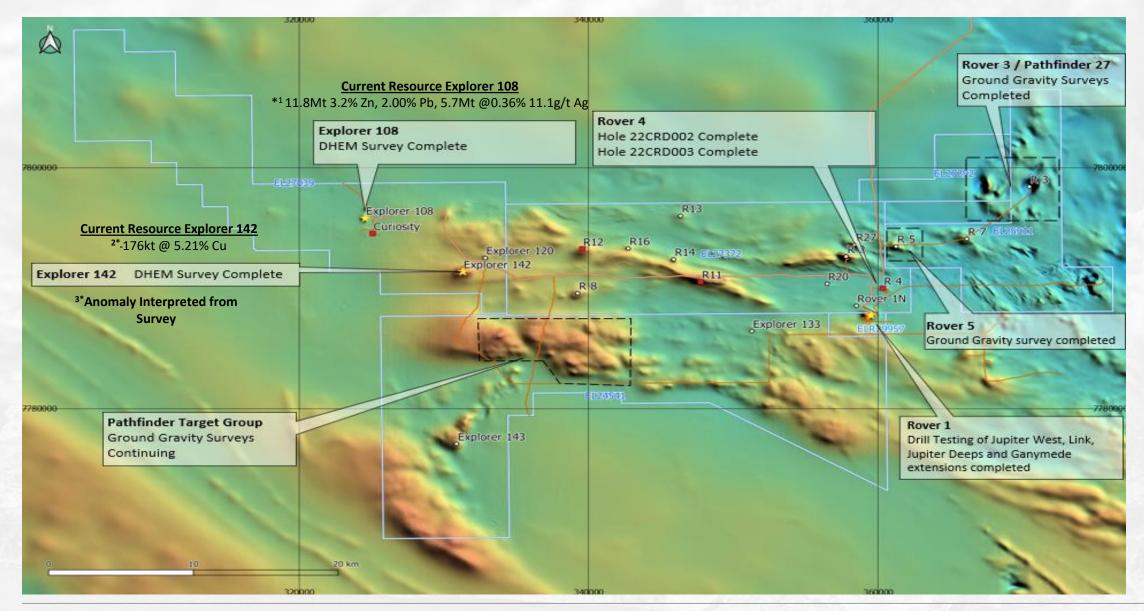
95-99% - Passing 53 micron

Testing was supervised by METS Metallurgy and performed by ALS Laboratories according to Australian Standard 4156.3-2008 (Coal Preparation, Part 3 L Magnetite for coal preparation plant use – Test Methods)





# Potential for a Multi-Deposit Regional Mining Jurisdiction

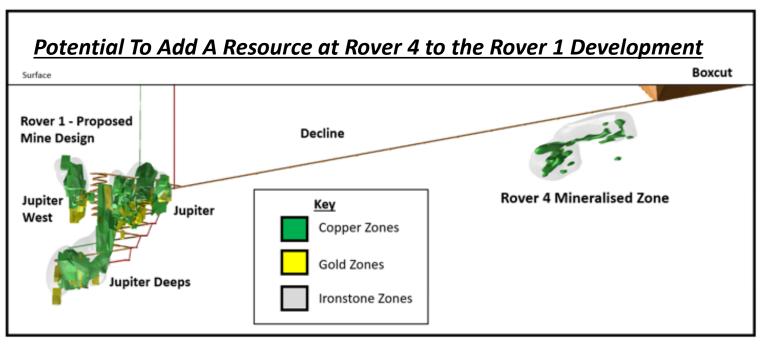


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## Rover 4 – Copper Mineralisation Close to Rover 1

Schematic of Rover 1
Engineering Design with
Rover 4 Location Facing West

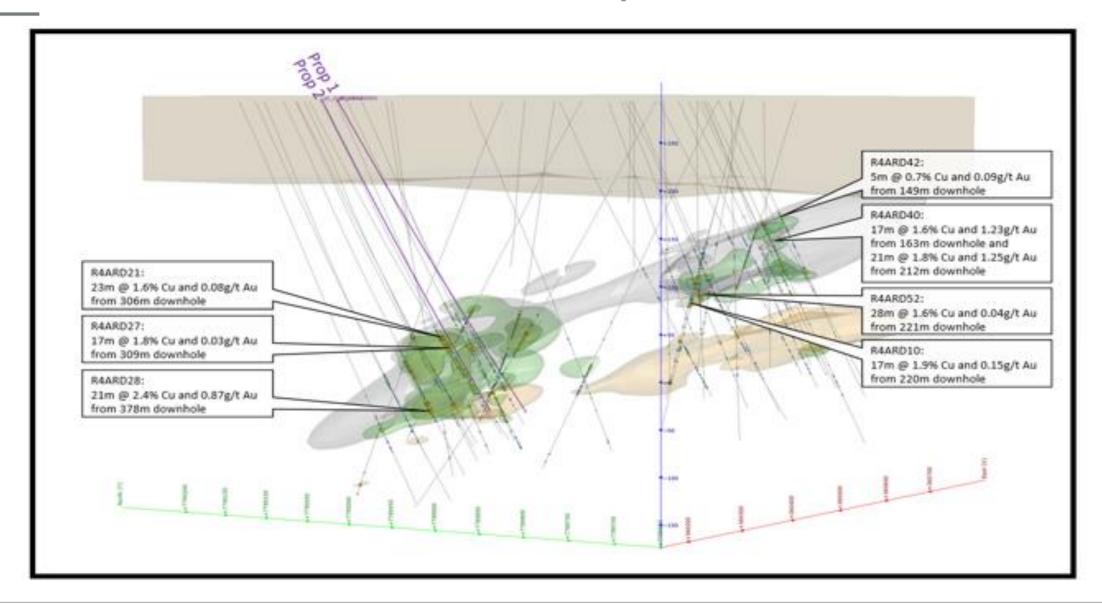


Plan View of Rover 1 Proposed
Engineering Design with
Rover 4 Location



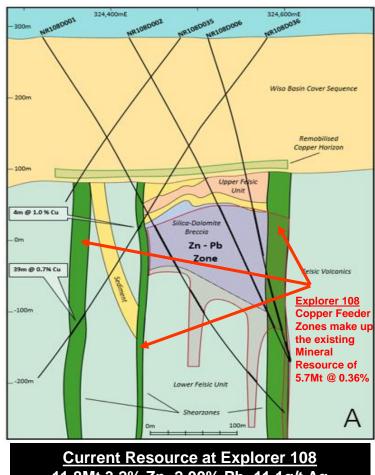


## Rover 4 – Maiden Resource Anticipated in Q4 2022





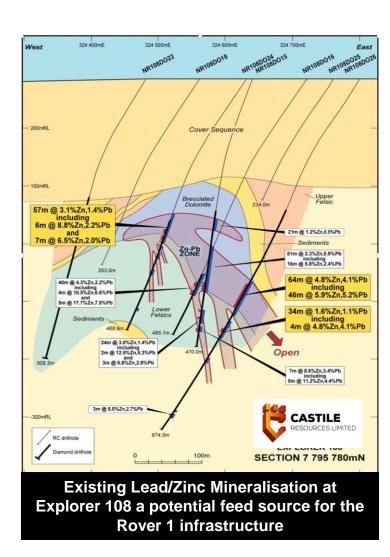
# **Explorer 108: A Huge Resource - The Next Development Target**

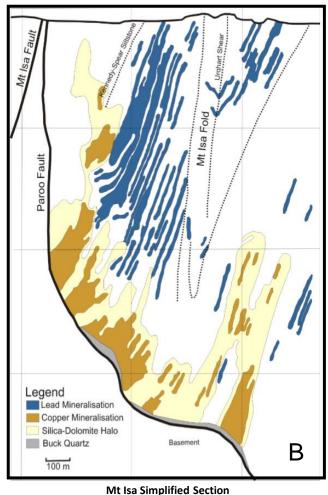


Current Resource at Explorer 108 11.8Mt 3.2% Zn, 2.00% Pb, 11.1g/t Ag with 5.7Mt 0.36% Cu

The Explorer 108 resource is comprised of the following:

- Indicated Resource of 8.438Mt @ 3.41% Zn, 2.05% Pb, 14.32g/t Ag; and
- Inferred Resource of 3.43Mt @ 2.81% Zn, 1.88% Pb, 3.32% Ag.

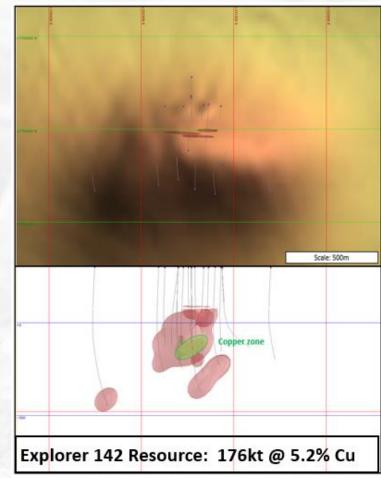




Explorer 108 and Mt Isa are 700kms apart and share the same Tectonic Setting, Host Rocks, Structural Controls and Mineralisation Style with the Primary Copper source situated beneath the lead/zinc deposit

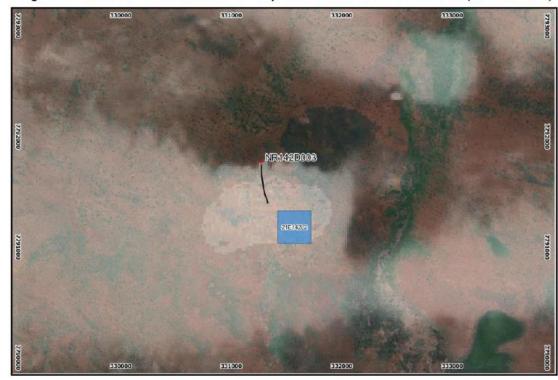


## **Untested Off-hole Conductor Identified at Explorer 142**



Explorer 142: Regional Magnetic TMI over existing drilling and identified ironstones The magnetic anomaly is of a similar size and intensity as Rover 1 Only a fraction of the ironstone has been identified to date. Ironstone is open to west and down dip. Gold rich 'root zone' to be discovered.

Figure 1: Location of NR142D003 and Tx Loop. Coordinates in MGA93 Zone 53. (from NX24337).



The downhole survey in NR142003 identified two anomalies:

- an early time on-hole (proximal) anomaly with interpreted conductive source associated with known ironstone; and
- a mid time off-hole (medium distal) anomaly with interpreted conductive source that is not associated with known ironstone bodies
- Castile to assess for further test work

# **Strong NT Government Support and Community Engagement**



Castile is committed to maintaining strong
Territory and local government support



Supporting local communities via employment and enrichment programs









Castile has donated Sporting
Equipment to all schools within the
entire Barkly Region and sponsors the
Barkly Rodeo and Tennant Creek
ANZAC Dinner



Federal Government encouraging downstream processing of value add "End User" products



# **Board & Management – Strong Project Development Expertise**

#### **Peter Cook**

#### Non-Executive Chairman

Mr Cook is a geologist BSc (App Geol 1983), mineral economist (MSc Min Econ 1995 WASM) and highly experienced veteran of the Australian resource sector. He is currently the Managing Director of and has substantial experience in the exploration, development, mining and financing of development projects within Australia as well as the corporate management of listed public entities.

#### Mark Hepburn

#### Managing Director

Mr Hepburn has a degree in **Economics and Finance** (B.Econ. & Fin 1992 UWA) and has been a member of the Australian Institute of Company Directors since 2008. He has significant experience in institutional stockbroking, corporate transactions and the management and corporate development of public companies. He brings 28 years of substantial financial markets experience in the resources sector to Castile Resources. Mr Hepburn is also a Non-Executive Director of ASX listed gold producer Firefinch Limited and

lithium developer Leo Lithium.

#### John Braham

#### Non-Executive Director

Mr Braham is an experienced Mining Finance and Investment professional having a 24-year career with Macquarie Bank until 2017. For the last 11 years of his service, he was an Executive Director and co-head of Macquarie's Global Mining and Finance Division. Mr Braham has vast experience in the provision of debt and equity to mining, exploration and development companies. worldwide. Since November 2018. Mr Braham has served as Managing Director of the ASX listed and South American focused Equus Mining Limited and is currently an NT Government Mineral Task Force Member.

#### Jake Russell

#### Non-Executive Director

Mr Russell is a geologist B.Sc. (Hons) MAIG with circa 20 years of experience in exploration, mining, resource development and management. He is currently the group Chief Geologist of Westgold Resources Limited and prior to its demerger from Metals X Limited, he was the Group Chief Geologist of Metals X Limited, Mr Russell brings Castile a second to none knowledge of the assets of Castile and a high degree of technical expertise in their exploration, resource development and exploitation.

#### **Michael Poepjes**

#### Mining Engineer

Mr Poepjes is a Mining Engineer (B Eng) a Mineral Economist (MSc [Min Econ]) and holds a Master's Degree in Business Administration (MBA). Mr Poepjes has over twenty years of experience in the mining industry working in gold, copper and tin across Australia in both Corporate and Operational roles. Mr Poepies previous role was the Chief Operating Officer for Millennium Minerals. Prior to Millennium Minerals, he was the Group Mining Engineer for Metals X (which included the Westgold and Castile assets) for seven years.

#### Mark Savage

#### Geology Manager

Mr Savage is a geologist B.Sc. (Hons) MAusIMM with more than 20 years of experience in exploration, resource development and mining brings a wealth of experience to Castile having worked previously for Metals X, RNI and Apex Minerals on pre-development assets.



# Castile Resources Limited

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Thank You

