PVW Resources

ASX: PVW

RIGHT PLACE, RIGHT TEAM, RIGHT TIME: CLOSING-IN ON AUSTRALIA'S NEXT RARE EARTHS DISCOVERY

Pivotal exploration campaign underway at the Tanami Heavy REE and Gold Project

Investor Presentation | JULY 2022 | George Bauk, Executive Director

ersonal use only

DISCLAIMER

PVW Resources ACN 124 541 466

This document is neither a prospectus nor an offer to subscribe for Shares.

PVW Resources ACN 124 541 466 (the Company) and its directors, employees and consultants make no representations or warranty as to the accuracy, reliability or completeness of this document, and have no liability, including liability to any person by reason of negligence of, or contained in or derived from, or for any omissions from this document, except liability under statute that cannot be excluded.

This document contains reference to certain targets and plans of the Company which may or may not be achieved. The performance of the Company may be influenced by a number of factors, uncertainties and contingencies, many of which are outside the control of the Company and its directors, staff and consultants.

Compliance Statement

The information in this report that relates to REE exploration results is extracted from the ASX announcements dated 13 October titled "Confirmation of high-grade Heavy Rare Earths at Tanami Project (100%) , Western Australia" , dated 18 November titled "Tanami Rare Earths Project – Exploration Update" and dated 7 December titled "Mineralogy confirms Heavy Rare Earths at Tanami are Xenotime" which are available to view on the Company's website (pvwresources.com.au). 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 and that that all material assumptions and technical parameters in the relevant announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

Competent Person's Statement

The information in this document relating to gold exploration activities is based on information compiled by Mr Karl Weber, a professional geologist with over 25 years' experience in minerals geology including senior management, consulting, exploration, resource estimation, and development. Mr Weber completed a Bachelor of Science with Honours at Curtin University in 1994; is a member of the Australasian Institute of Mining and Metallurgy (Member No. 306422) and thus holds the relevant qualifications as Competent Person as defined in the JORC Code. Mr Weber is a full-time employee of PVW Resources. Mr Weber has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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'. Mr Weber consents to the inclusion in this document of the matters based on his information in the form and context in which it appears.

For personal use only

A DIVERSIFIED, WELL-FUNDED EXPLORER

Unlocking new Rare Earths and gold discoveries

- Specialist team with proven track record of Rare Earth Elements (REE) discovery and development
- Focused on the greenfields Tanami REE Project, WA:
  - 18km long corridor with strong potential for a major new unconformity-hosted heavy REE discovery
  - Drill-ready targets, rock chip assays up to **12.45% TREO**
  - Significant high-grade gold potential
- Maiden drill program **underway**:
  - ~10,000m of RC and ~25,000m of AC drilling
  - Aiming to extend areas of known heavy REE mineralisation
- Well-funded: $10M cash following recent capital raising
- Exciting exploration pipeline, with a portfolio of gold and base metals projects spanning WA's Tier-1 exploration jurisdictions

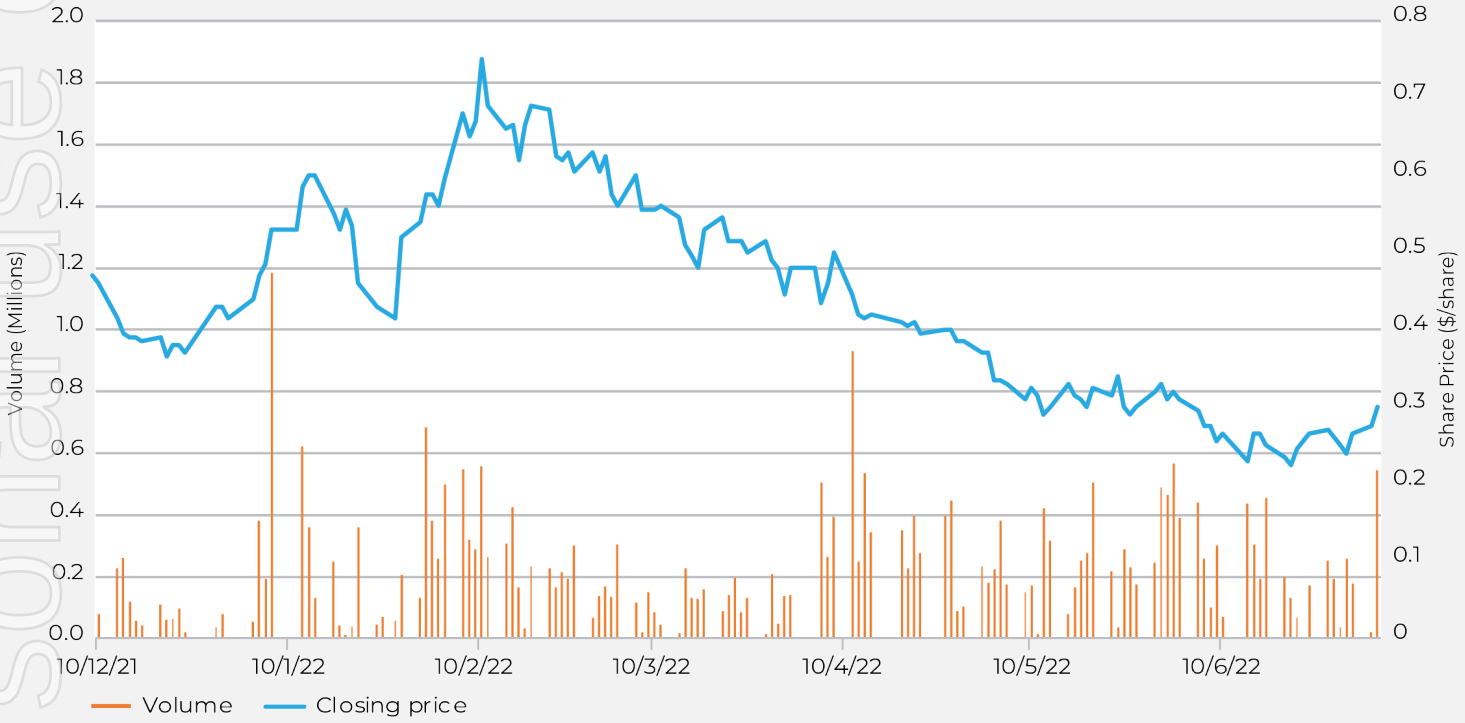
Scan here to join our mailing list

personal use only

CORPORATE OVERVIEW

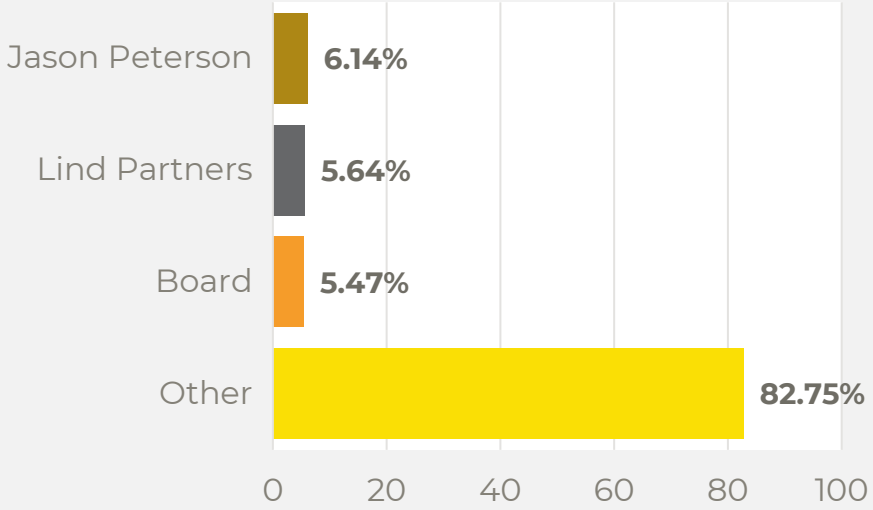
Shares on issue	Share price	Market capitalisation	Cash at bank*
96,335,413	**30 cents**	**$28.9m**	**$10m**

Share price performance (ASX:PVW)



Top shareholders

Top 100 own 67.31%



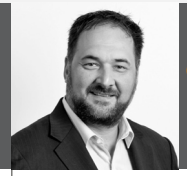
** Following $9.5M Capital Raising completed 19 May 2022*

personal use only

BOARD AND MANAGEMENT

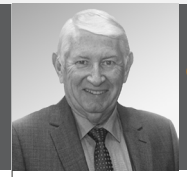
DAVID WHEELER
NON-EXECUTIVE CHAIRMAN

- David has more than 30 years of Senior Executive Management, Directorships, and Corporate Advisory experience.
- He is a foundation Director and Partner of Pathways Corporate a boutique Corporate Advisory firm
- David has engaged in business projects in the USA, UK, Europe, NZ, China, Malaysia, Singapore and the Middle East.
- David is a Fellow of the Australian Institute of Company Directors
- Currently holding a number of Directorships and Advisory positions in Australian companies.



GEORGE BAUK
EXECUTIVE DIRECTOR

- An experienced executive/director with 30 years in the resources industry.
- **Former MD/CEO of Northern Minerals 2010 to 2020. Responsible for the successful development of the Northern Minerals Browns Range REE Project.**
- Global operational and corporate roles with Northern Minerals, WMC Resources and Western Metals.
- George has a strong background in building companies, with a variety of commodities – in particular rare earths, graphite, lithium, gold, nickel and uranium.
- George is currently Chairman of: Lithium Australia, BlackEarth Minerals and Valor Resources.



COLIN MCCAVANA
NON-EXECUTIVE DIRECTOR

- Colin has over 40 years' experience in the mining and resources sector and has extensive experience in exploration, project development, capital raising, financing, operations.
- He has had extensive involvement in rare earths and **gold exploration and development** including the successful development of several CIP and heap leach projects in WA.
- Colin is also Chairman of Reward Minerals Limited.
- **Colin was the founding director of Northern Minerals and PVW Resources and oversaw the development of the Browns Range REE Project.**

JOE GRAZIANO
COMPANY SECRETARY

- Joe has over 30 years' experience providing a wide range of business, financial and taxation advice.
- Over the past 7 years he has been focused on Corporate Advisory and strategic planning with Corporations and Private Businesses.
- He has extensive experience in Capital Raisings, ASX compliance and regulatory requirements.
- Joe is currently a director of Pathways Corporate Pty Ltd a specialised Corporate Advisory business and sits on several Boards of ASX Listed Companies.
- He also provides CFO and Company Secretarial services as part of his service offering.

KARL WEBER
EXPLORATION MANAGER

- Karl has over 25 years of experience within a diverse career in **gold and base metal exploration** within Australia and Internationally.
- He has held technical and management positions with Mines and Resources Australia (COGEMA), Harmony Gold, Venturex Resources (Brazil) and Gascoyne Resources.
- His roles include geologist, manager and country manager.
- He has held roles in many successful teams taking projects from discovery through resource definition to mining. Projects include White Foil and Frog's Leg.

ROBIN WILSON
CONSULTANT GEOLOGIST

- Robin has held senior exploration positions in several exploration and mining companies, including Polaris Metals, Tanganyika Gold, Troy Resources and CRA Exploration.
- **Between 2006 and 2021 Robin led the Northern Minerals exploration team that discovered the Browns Range REE deposits that has produced HRE carbonate.**
- He also spent 5 years working in oil and gas exploration for Woodside Energy.
- During nearly 30 years of involvement in mineral exploration, Robin has worked on rare earths, gold, nickel, REE, uranium, copper, lithium and phosphate projects throughout Australia and Africa.

personal use only

PVW Resources

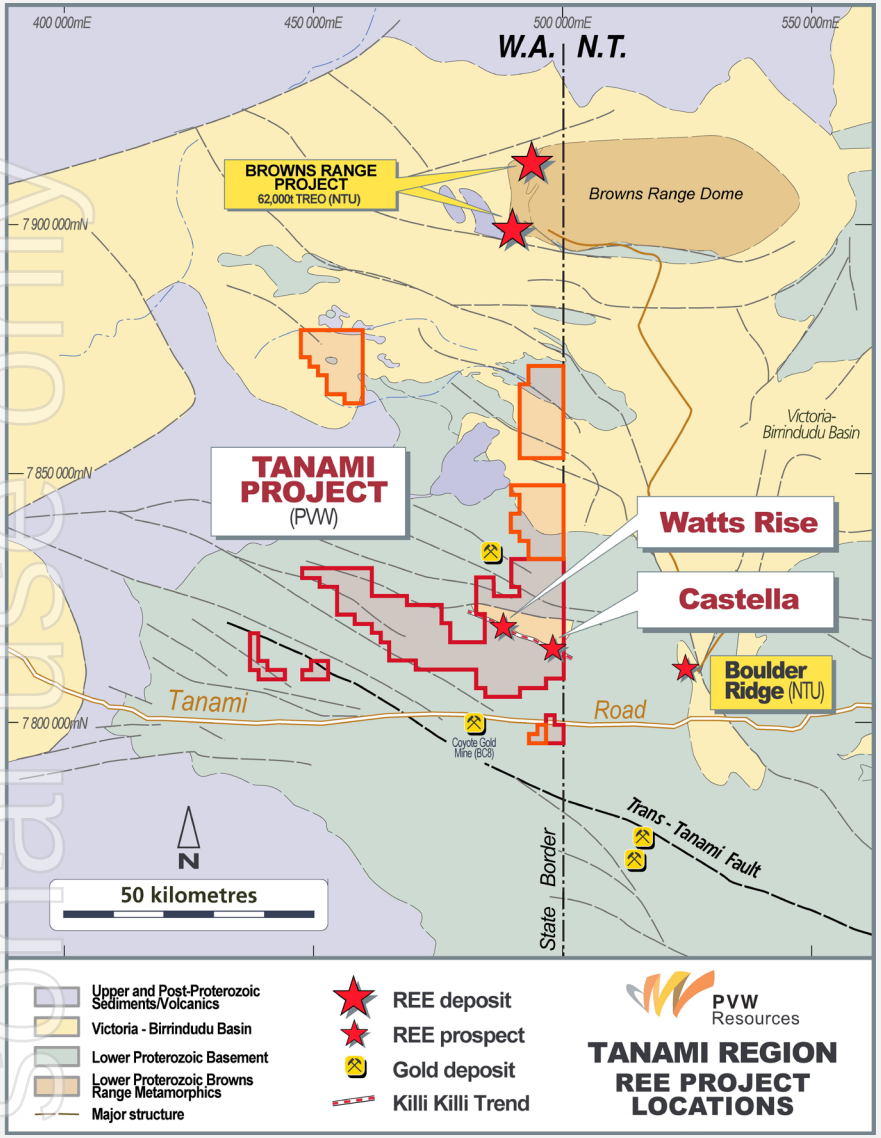
RIGHT PLACE – TANAMI REE AND GOLD

Large-scale discovery potential in Australia's new Heavy Rare Earth province

PVW RESOURCES | JULY 2022

ersonal use only

TANAMI – AN EMERGING HEAVY RARE EARTHS PROVINCE



- ~1,270km^2 project area with historical REE and gold results – but minimal modern exploration
- PVW commenced field programs in August 2021 at Castella (previously Killi Killi East) and Watts Rise prospects
- Potential for extensive hydrothermal unconformity-related rare earth mineralisation identified along the 18km Watts – Castella trend
- Contact/unconformity between the Pargee Sandstone and the Killi Killi Formation is highly prospective for this style of mineralisation
- Similar geological setting to Northern Minerals' Browns Range Project, located ~90km to the north
- Tanami Road located within 15km of the project, with Federal and WA Government plans to upgrade and seal the road up to the WA/NT border with $900m allocated from state and federal government

personal use only

THE 3 KEY INGREDIENTS FOR DISCOVERY SUCCESS …

An unconformity-related HREE deposit must have 3 key ingredients:

1 Unconformity

The right stratigraphic setting

Unconformity between the Pargee Sandstone and the Killi Killi Formation at Castella is analogous to the unconformity between Gardiner Sandstone and Browns Range Metamorphics at Browns Range.

2 **Castella, Prospect**
TARK0008, **12.45% TREO (*92% HREO)**

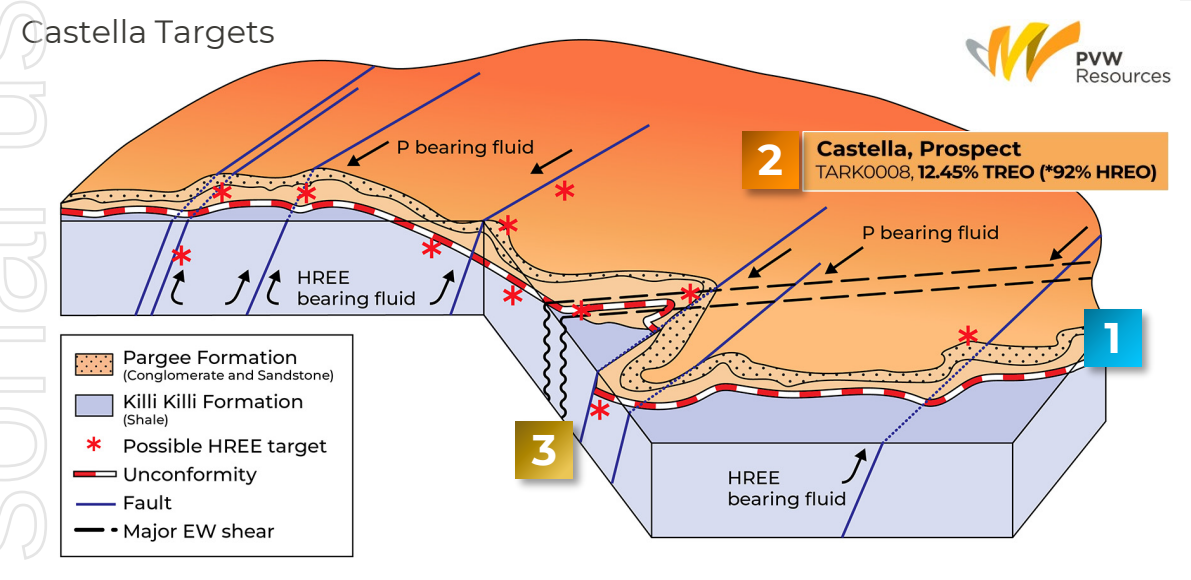
The right style of mineralisation

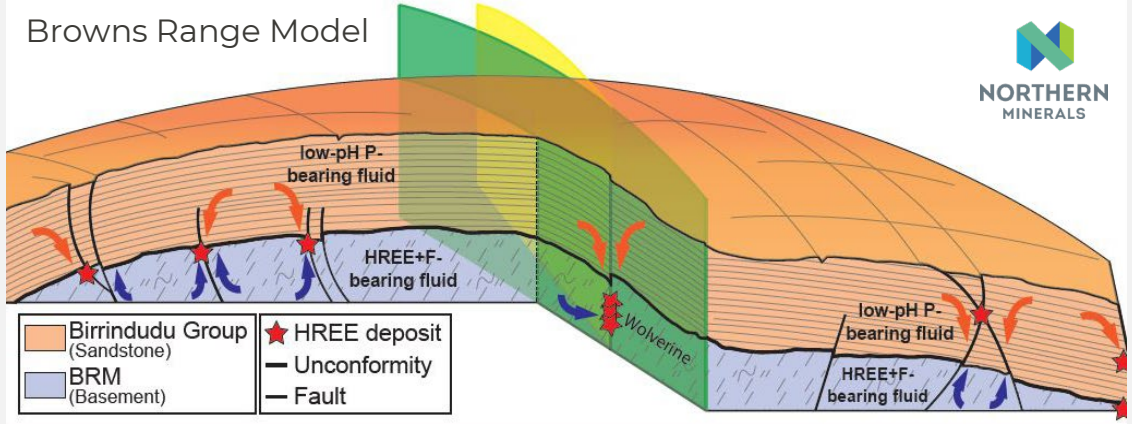
Extensive surface mineralisation includes HREE in Xenotime, confirming the right ore-forming system (same as Browns Range).

3 Fault
Major EW shear

The right plumbing system

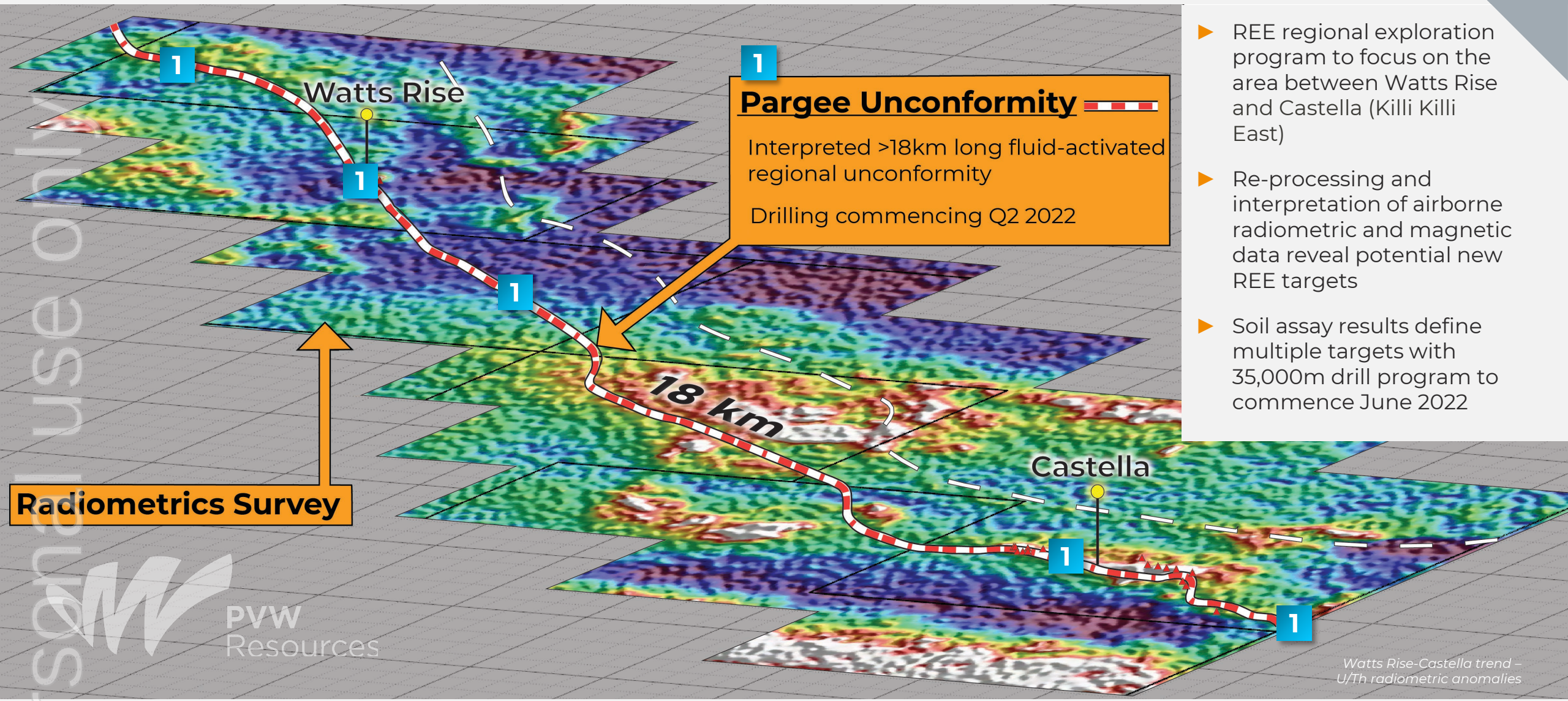
Structures (faults and folds) are present, offsetting and deforming the unconformity. The Pargee Sandstone and Killi Killi Formation both host mineralisation with breccia zones linking the two.





personal use only

1 THE RIGHT STRATIGRAPHIC SETTING – AN 18KM CORRIDOR

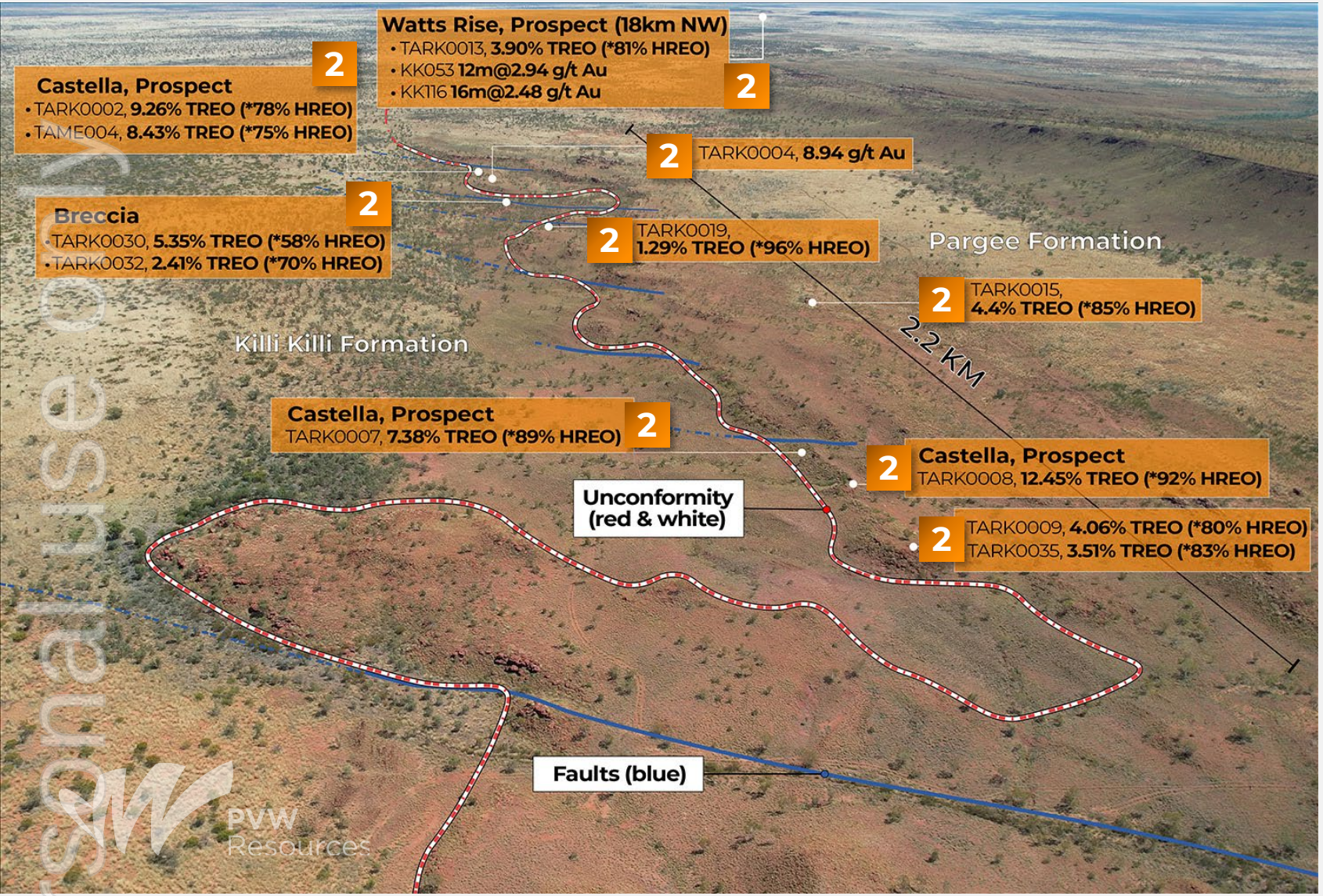


Watts Rise-Castella trend – U/Th radiometric anomalies

- REE regional exploration program to focus on the area between Watts Rise and Castella (Killi Killi East)
- Re-processing and interpretation of airborne radiometric and magnetic data reveal potential new REE targets
- Soil assay results define multiple targets with 35,000m drill program to commence June 2022

For personal use only

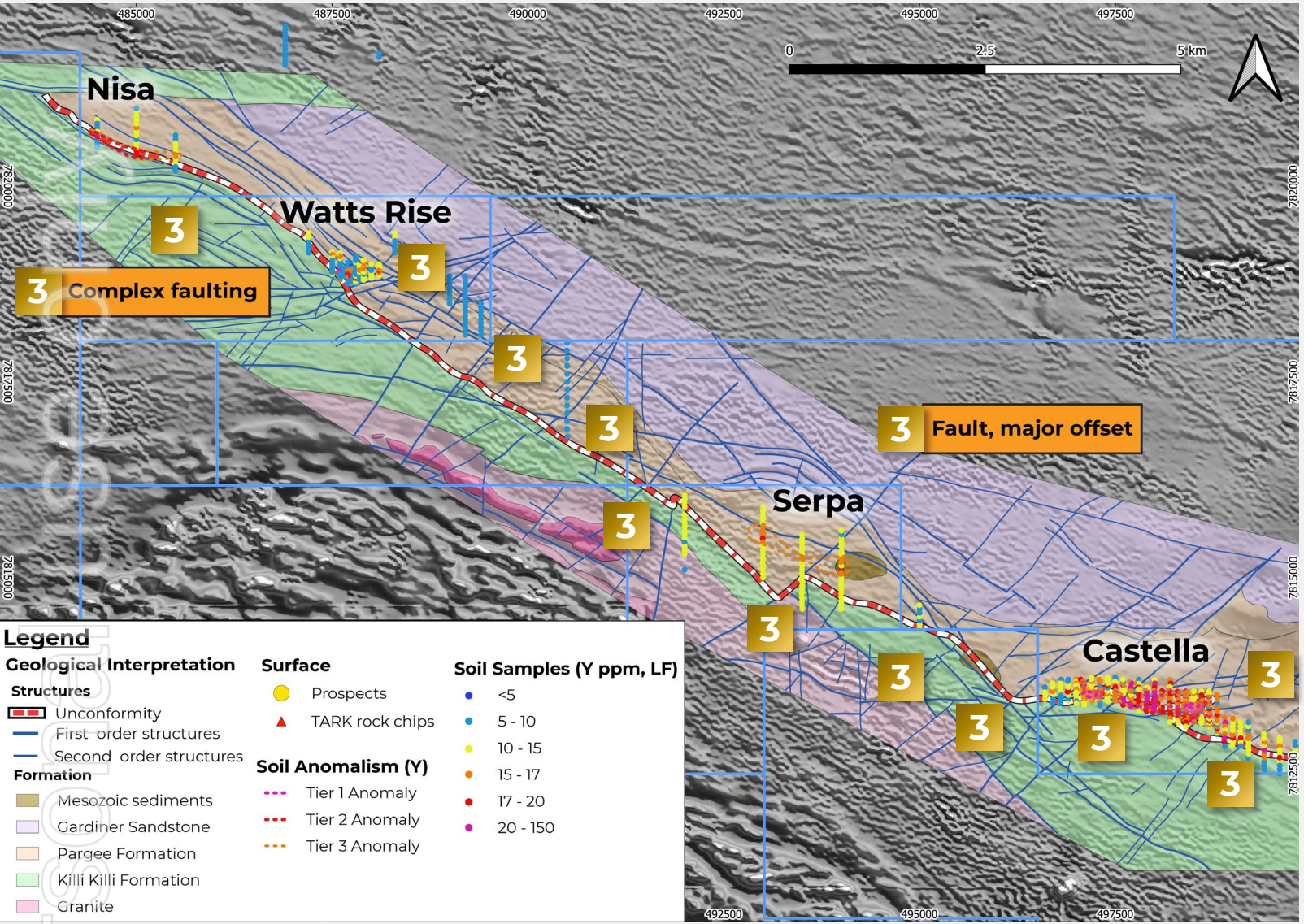
2 RIGHT STYLE OF HEAVY REE MINERALISATION



Boots on the ground are paying off

- Rock chip and soil sampling, ground radiometrics, geological mapping and re-processing of airborne geophysics completed in second half of 2021
- Rock chip assays of up to **12.45% TREO**, with 25 of 37 samples returning assays greater than 1% TREO
- Four 20kg metallurgical samples returned assays of up to **8.43% TREO**
- Rare earth mineralised samples at Castella (Killi Killi East), located adjacent to a regional unconformity and predominantly hosted in the Pargee Formation
- 3km strike of outcropping unconformity, breccia zones and soil sampling anomaly

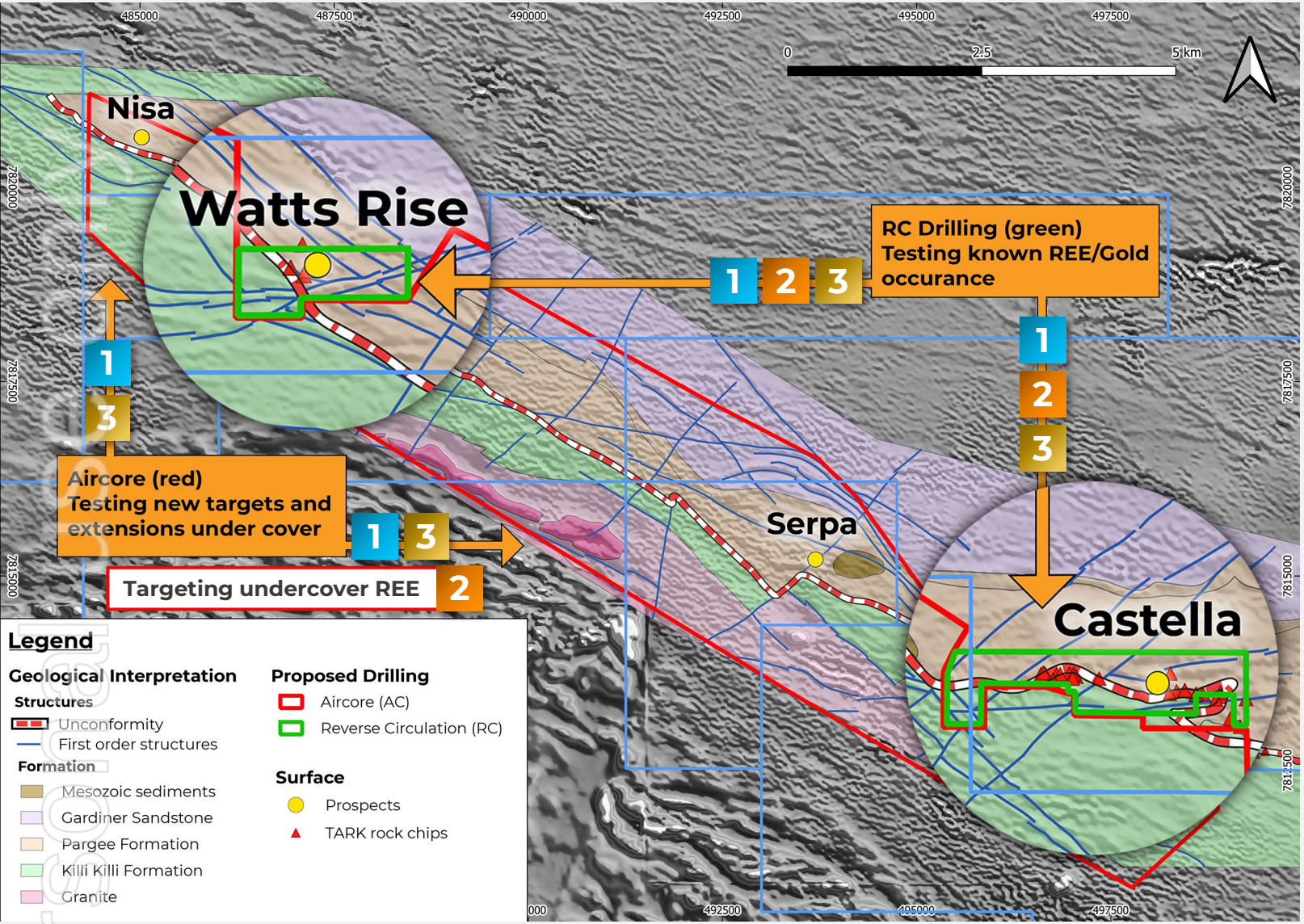
3 THE RIGHT PLUMBING SYSTEM



2021 field program reaps rewards, highlighting prospectivity of Watts Rise – Castella Trend

- Soil sampling results delineate large drill target area at Castella
- Soil sampling also identifies multiple drill targets at Watts Rise
- Regional soil sampling results support prospectivity of the regional unconformity, outlining new REE anomalies
- Geophysical interpretation supports high-priority targets, with **complex faulting and folding identified**
- Several U/Th radiometric anomalies require ground-based follow-up

1 2 3 KEY INGREDIENTS IDENTIFIED – DRILLING UNDERWAY

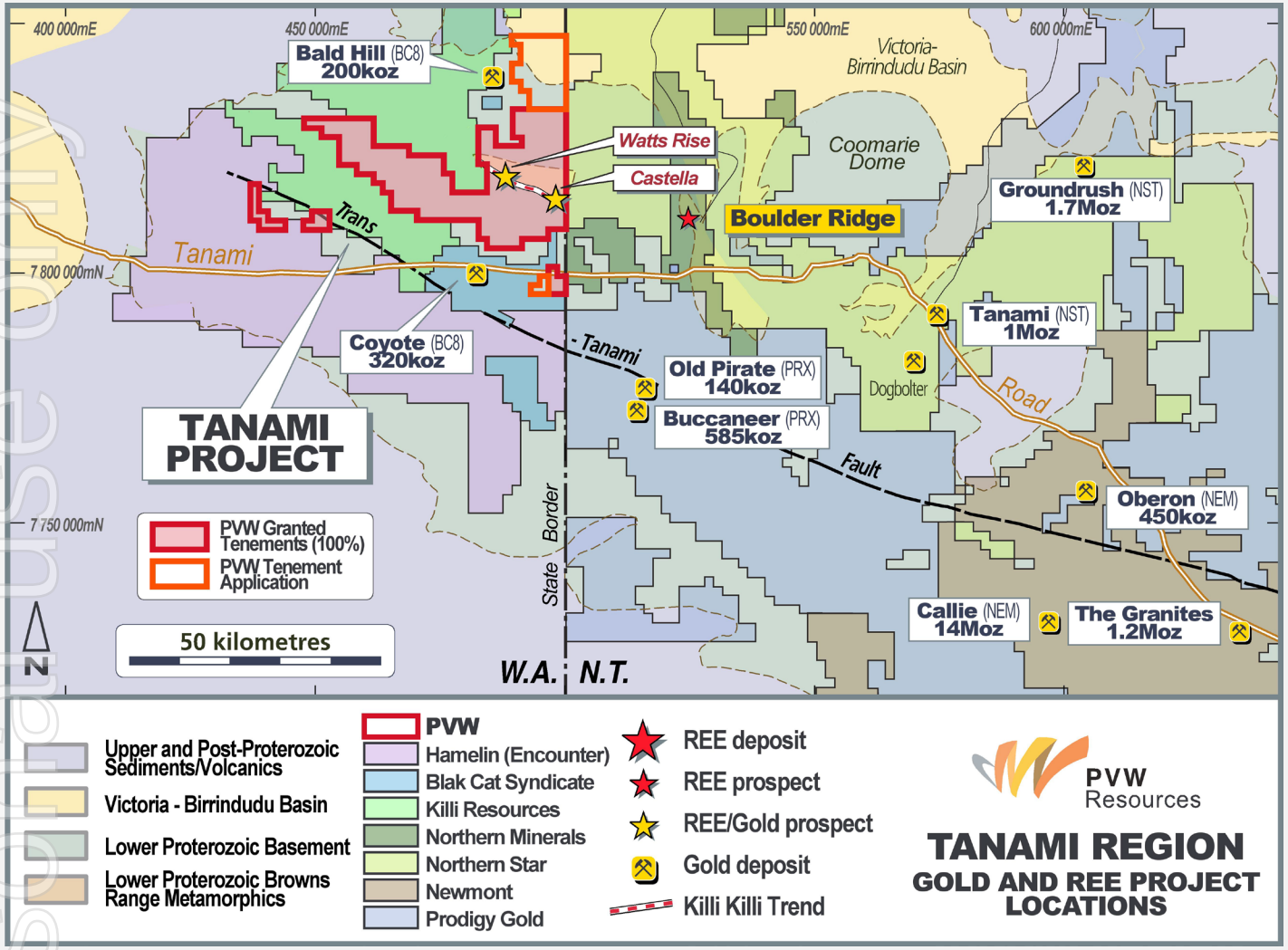


2022 program

Initial program of 10,000m RC and 25,000 air-core drilling targeting REE mineralisation plus gold

- Heritage Survey: **JUNE**
- RC and Aircore drilling at Castella (Killi Killi East) and Watts Rise: **JUNE–AUGUST**
- Aircore drilling along strike focusing on extensions, Serpa and Nesa prospects: **SEPTEMBER–NOVEMBER**
- Regional reconnaissance and sampling of prospective gold targets, additional U/Th anomalies and structural targets: **ONGOING**
- Extensive ground-based activities including mapping and surface sampling: **ONGOING**

TANAMI – UNDER-EXPLORED GOLD PROVINCE



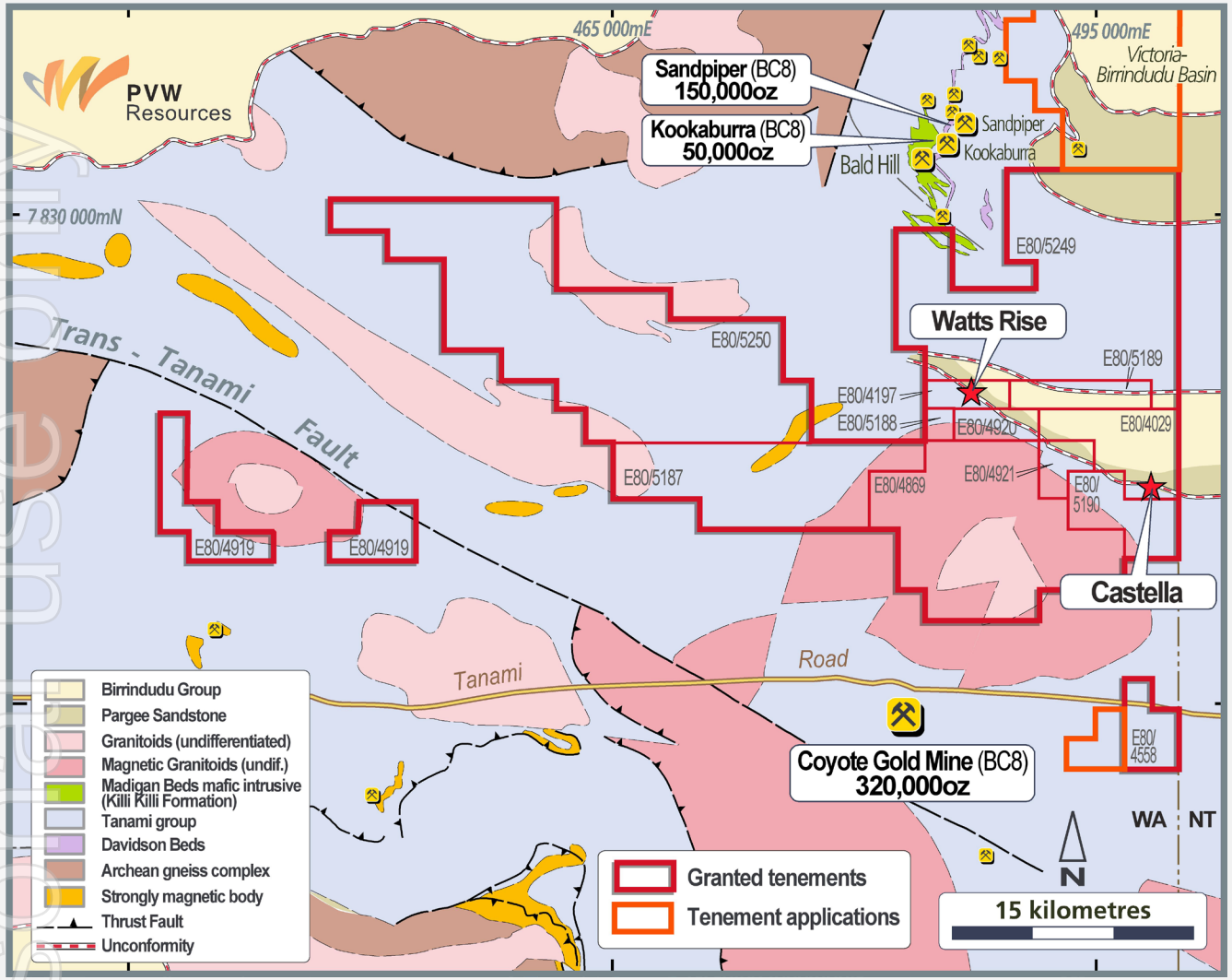
Callie gold deposit, Newmont (Reserve 33.2Mt @ 5.3g/t Au) is an example of the potential within the Tanami. It is one of the most productive gold mines in Australia.

Discoveries pending…

- PVW's tenure straddles prospective stratigraphy and structure
- Majors have invested in exploration via earn-in for projects in the region
- Modern active junior explorers in the region – Killi Resources and Hamelin Gold
- Black Cat Syndicate acquisition of Coyote Gold Operation – 2022. Immediate plan includes drilling targeting extensions. ASX: BC8, announcement 30 May 2022

For personal use only

TANAMI – POISED FOR A NEW GOLD DISCOVERY



Limited and ineffective previous exploration

- Historic (2010–12) RC drilling Au intercepts at **Watts Rise:**
  - **12m @ 2.94g/t Au from surface**
  - **12m @ 1.50g/t Au from 44m**
  - **16m @ 2.48g/t Au from 60m**
  - **5m @ 6.99g/t Au from surface**
- **Watts Rise –** Au intercepts in RC drilling, **open along strike and at depth never followed up by previous explorer**
- **Castella –** Recent rock chip sampling, in addition to REE, also returned assays of, **8.94 g/t and 4.43 g/t Au**[3]
- **Watts Rise to Castella –** 35,000m RC and Aircore drilling has commenced in June

[3] ASX:PVW Announcement dated 13 Oct 2021, Confirmation of high-grade Heavy Rare Earths at Tanami Project (100%), Western Australia

For personal use only

PVW Resources

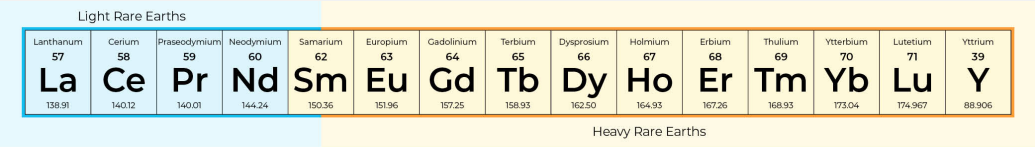
RIGHT TEAM, RIGHT TIME FOR RARE EARTHS

Ideal timing to discover and develop new independent sources of supply

PVW RESOURCES | JULY 2022

ersonal use only

RARE EARTHS ARE CRITICAL TO MANY INDUSTRIES



- Underpins the best technology for permanent magnets
- Permanent magnets are a critical component of the EV future:
  - Permanent magnet motors are:
    - ~15% more efficient than induction motors
    - 4–5 times cheaper than induction motors
- Permanent magnets are essential to critical defence technology
- Tanami region currently hosts a critical deposit and processing facility at Northern Minerals' Browns Range REE Project
- There is a demand for a diversified supply chain of Rare Earths to meet the ever-growing EV production targets set for 2030

Personal use only

USA AND AUSTRALIAN GOVERNMENTS THROW MONEY AT REE

CNN

Biden announces new investments in mineral production to address supply chain shortages

The President announced $35 million in funding awards to the Nevada-based mining company MP Materials from the Department of Defense's Industrial Base Analysis and Sustainment program to separate and process materials at a Mountain Pass, California, facility. The investment will allow MP Materials to establish a full end-to-end domestic permanent magnet supply chain, creating more than 350 jobs by 2024 and upping the nation's competitive capacity with China, which is currently responsible for 87% of the global permanent magnet market, according to the administration.

By Donald Judd, Kate Sullivan and Maegan Vazquez, CNN, Feb 23, 2022

The Market Herald
FIRST WITH THE NEWS THAT MOVES MARKETS

Lynas Rare Earths (ASX:LYC) awarded US $120m contract by US Department of Defence

Lynas Rare Earths' (LYC) subsidiary Lynas USA secures a contract with the US Department of Defence (DoD) to establish
a commercial heavy rare earths (HRE) separation facility in the US.

The contract is worth US$120 million (A$173 million) and will fully cover costs for the HRE facility.

The facility will assist the company in establishing an operating footprint within the country, with a location in the industrial area along the Gulf Coast of Texas.

Yvette Ogilvie, The Market Herald, 14 June 2022

FINANCIAL REVIEW

Iluka shares soar on WA rare earths refinery funding

Taxpayers will lend $1.05 billion to build the first fully integrated, rare earths separation faculty in Australia, highlighting the growing appetite for governments to invest in critical minerals supply chains.

Iluka Resources shares surged 8 percent at the opening of trading on Monday after it vowed to build a $1.2 billion refinery at Eneabba in Western Australia.

The decision was made after securing the $1.05 billion loan from the 'critical minerals fund' that has placed under the stewardship of the federal government's Export Finance Australia.

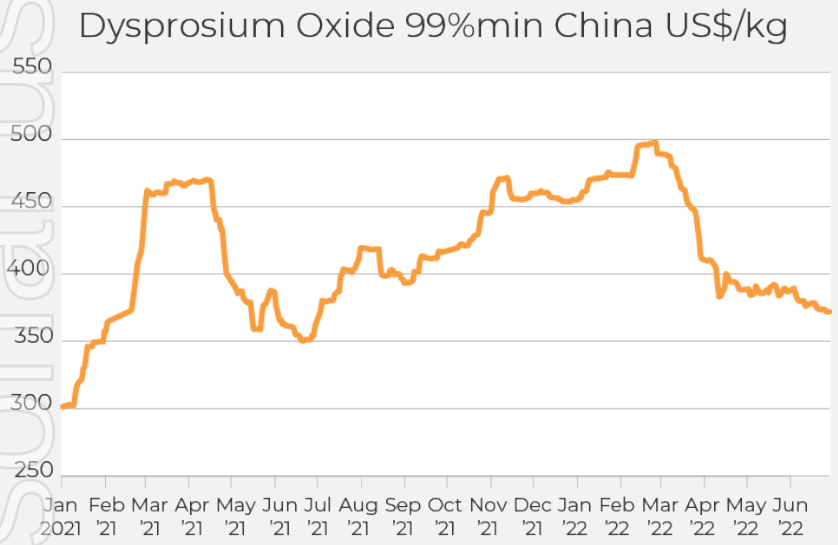
The loan comes after last week's federal budget contained significant amounts of funding for resources industry infrastructure projects and as governments in nations such as the US, Australia, Japan and Britain increasingly seek to secure supply chains.

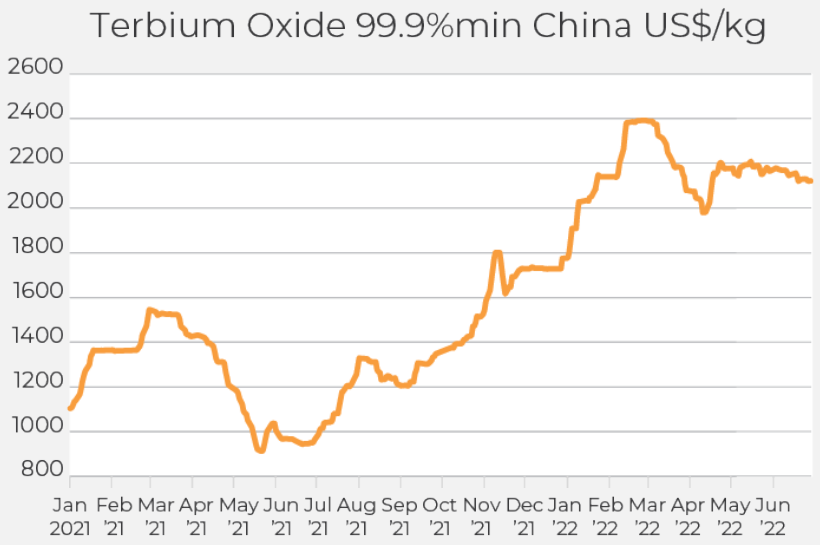
Peter Kerr, Resources reporter, AFR, 4 April 2022

personal use only

BRINGING BALANCE TO THE GLOBAL SUPPLY CHAIN

- China's dominance in supply of Heavy REE is over 99%
- Rising geo-political tensions
- Need for 'green' production of Heavy REEs
  - Current production is from Chinese Ionic Clays, which require large quantities of ammonium sulphate for in-situ leaching
- Provide confidence of supply to meet the demands set out in the Biden Electrification Policy 2030





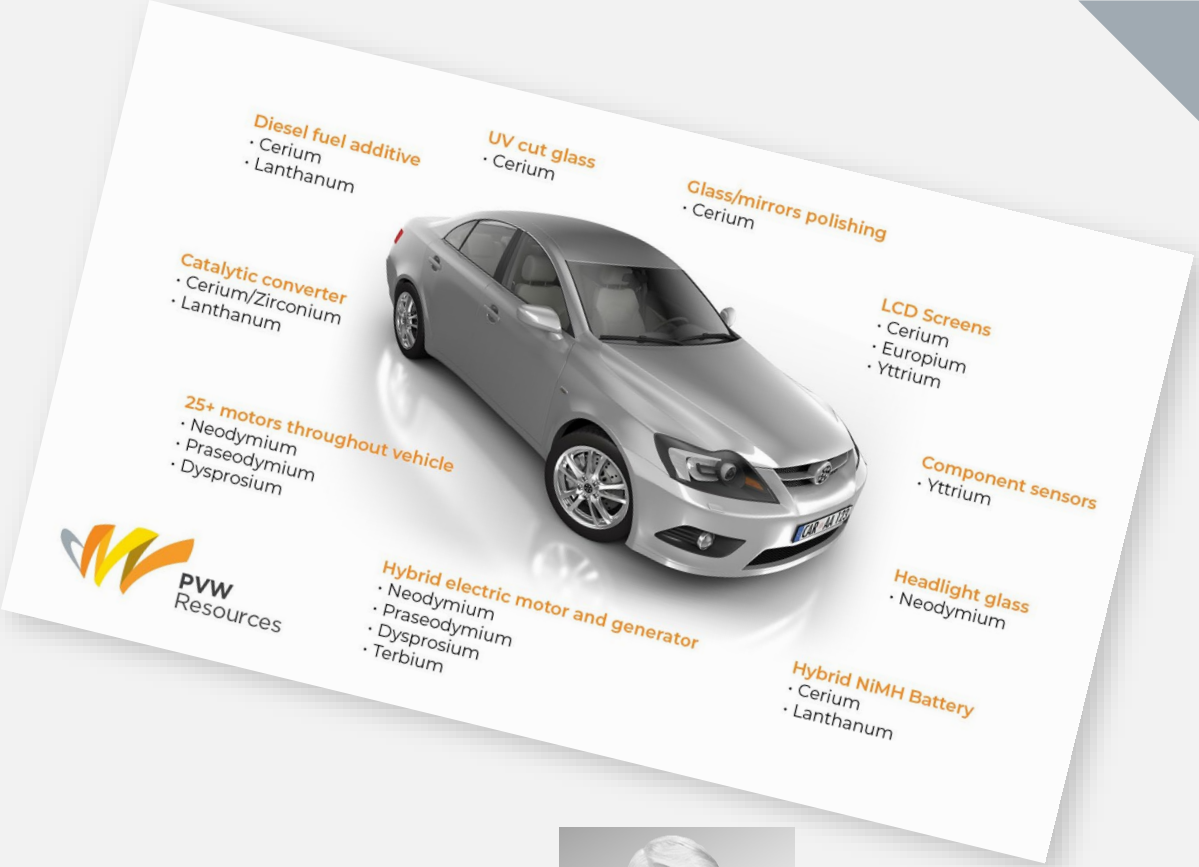
"The Middle East has oil, China has rare earth."

Chinese President,
Deng Xiaoping, 1987

personal use only

A TEAM OF REE EXPERTS

Our REE experts, who were involved in the discovery of the Browns Range REE deposits and led Northern Minerals' from greenfields exploration to production, **are ready to do it again, differently.**



George Bauk, former Northern Minerals MD/CEO, 2010–20 and led the transition to a producer of HRE carbonate.

Robin Wilson, former Northern Minerals Exploration Manager, credited with discovery of Browns Range.

Colin McCavana, founder and former Northern Minerals Chairman who oversaw the company's development.

personal use only

EARLY-STAGE SIMILARITY TO NORTHERN MINERALS JOURNEY, EXPLORATION THE KEY TO UNLOCK VALUE

PVW Resources

- Rock Chip Samples **Oct 2021**
- Mineralogy **Dec 2021**
- Sighter Met Testwork commenced **Dec 2021**
- **Exploration 2022 underway** ~ 10,000M RC ~ 25,000 Aircore

NORTHERN MINERALS

- Rock Chip Samples **Dec 2009**
- Mineralogy **Oct 2010**
- Sighter Met Testwork completed **Dec 2010**
- Maiden Resource 10,500t TREO **Dec 2012**
- Revised Resource 56,663t TREO **Feb 2015**
- Sold First HRE Carbonate from Pilot Plant **Dec 2018**

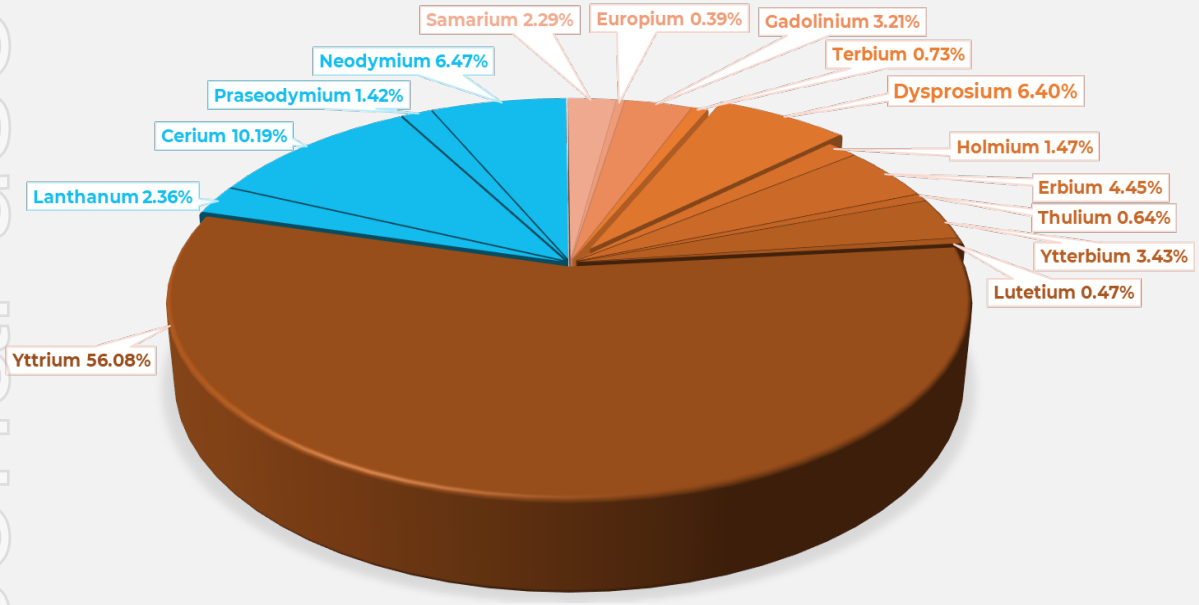
- IMO has commenced sighter metallurgical testwork on a 100kg bulk sample
- Test work to focus on ore sorting and the beneficiation stage to understand upgradability and recovery
- Provide information on the comparability to the Northern Minerals Limited Browns Range Project

Northern Minerals Limited Browns Range Pilot Plant and Gambit West Pit

Personal use only

IT'S XENOTIME!

- Mineralogy study has confirmed heavy rare earths are related to the rare earth mineral **xenotime** (similar to Northern Minerals' Browns Range project, ~90km north)
- Heavy rare earths comprise on average 80% of TREO for rock chip samples >1% TREO
- **Sighter metallurgical testwork underway** on a 100kg bulk sample



Pie chart showing average distribution of REO for all samples with TREO >1%

Northern Minerals Limited Browns Range Pilot Plant

IMO Sights Metallurgic Testwork

Personal use only

OTHER PROJECTS

Exploring in Tier-1 Jurisdictions

PVW RESOURCES JULY 2022

personal use only

PROJECT PIPELINE

4. West Yilgarn Region

Ballinue Project is located in the Ni-Cu-PGE province that hosts **Chalice's Julimar Project**

3. Leonora Region

Top 10 most prospective Au region globally and over 12 million Au ounces produced

- Jungle Well & Brilliant Well Projects
- Small gold resource at Jungle Well with numerous follow-up targets

2. Kalgoorlie Region

World-class gold district With over 70 million ounces Au produced including the Super Pit and Kanowna Belle

- Numerous near-term drill targets with historical results of 6m at 2.61g/t and 4m at 2.39g/t

ersonal use only

PVW – KEY TAKEAWAYS

- Tanami Heavy REE project has all the ingredients to be a **company-making, globally significant discovery**
- Board and management team with first-hand experience in taking a greenfields REE discovery through to production – **ready to do it again, differently**
- Major drilling campaign **underway**, supported by **strong** cash balance.

ersonal use only

PVW Resources

THANK YOU

Scan here to join our mailing list

PVW Resources Limited
Level 3, 1138 Hay Street
West Perth WA, 6005

PO Box 300
West Perth WA, 6872

Contacts

George Bauk
T: +61 (0)408 931 746
E: george@totode.com.au

Media Enquiries – Read Corporate
Nicholas Read
T: +61 (0)419 929 046

pvwresources.com.au

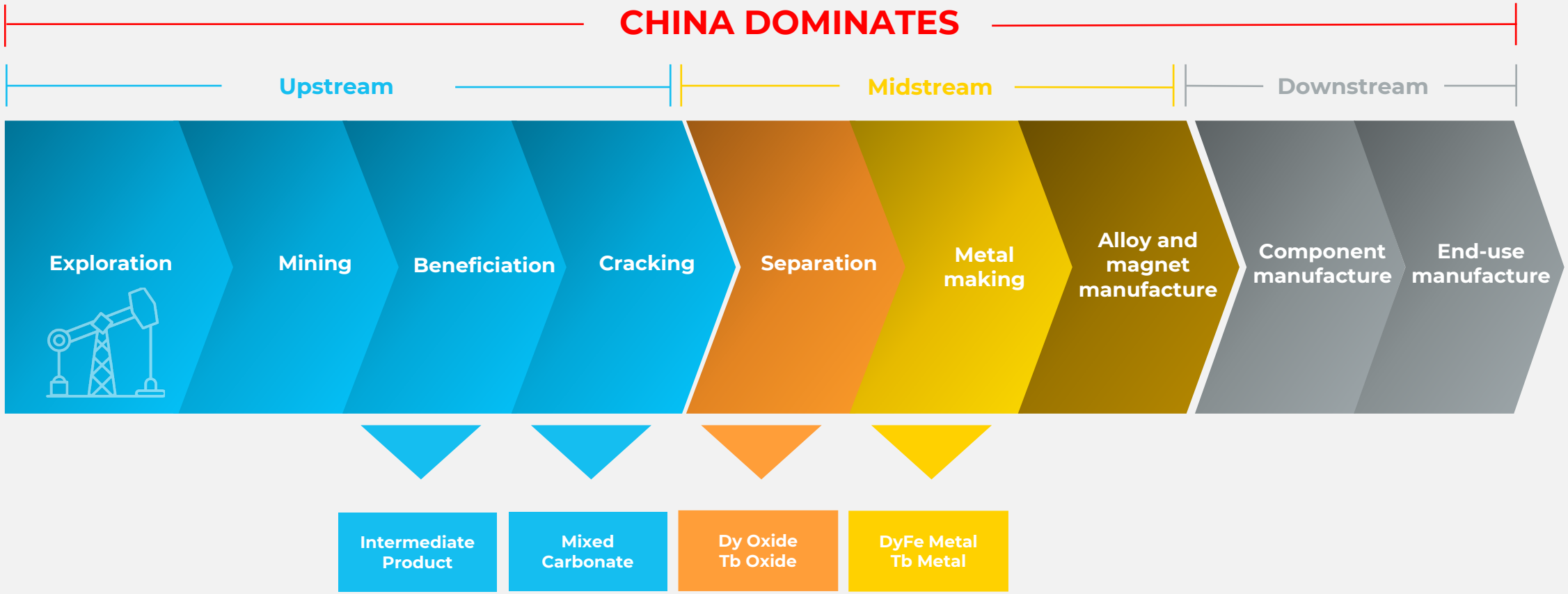
For personal use only

APPENDICES

PVW RESOURCES JULY 2022

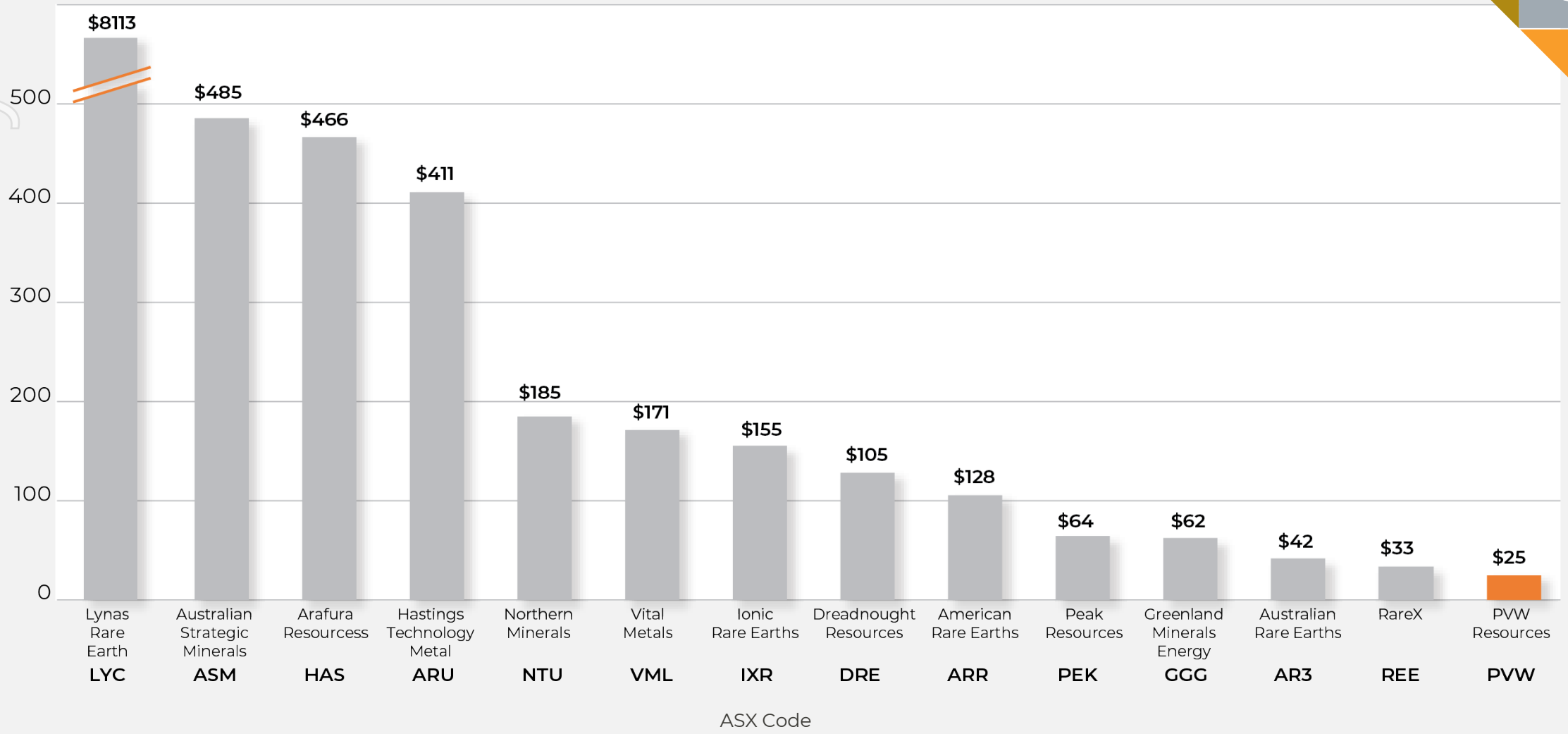
ersonal use only

PERMANENT MAGNET SUPPLY CHAIN



Personal use only

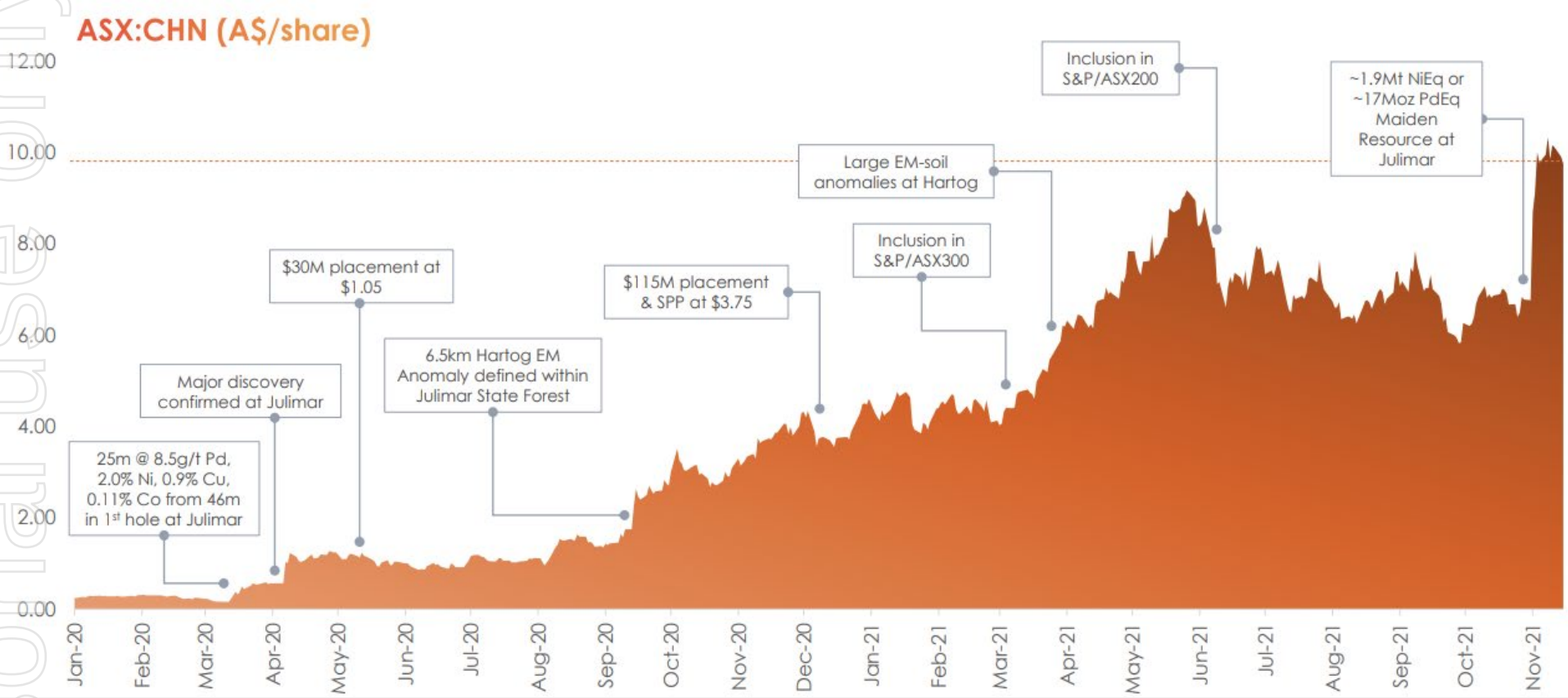
RARE EARTH COMPANIES – MARKET CAPITALISATIONS



Based on Market Capitalisations, 1 July 2022

Personal use only

CASE STUDY: CHALICE MINING (ASX:CHN) STARTED WITH A PORTFOLIO OF EXPLORATION ASSETS IN TIER 1 LOCATIONS AND ARE NOW A >A$3BN COMPANY



- ✓ Exploring for Tier 1 scale discoveries in frontier areas
- ✓ Tight Capital Structure
- ✓ Targeting big discoveries in underexplored provinces in Australia
- ✓ Chalice strategy is to systematically acquire and explore in premier terranes; aiming to address the rapid decline in tier-1 scale discoveries worldwide

Source: ASX:CHN Investor Presentation – December 2019 (3 December 2019)

Source: ASX:CHN AGM Address and Presentation (24 November 2021)

ersonal use only

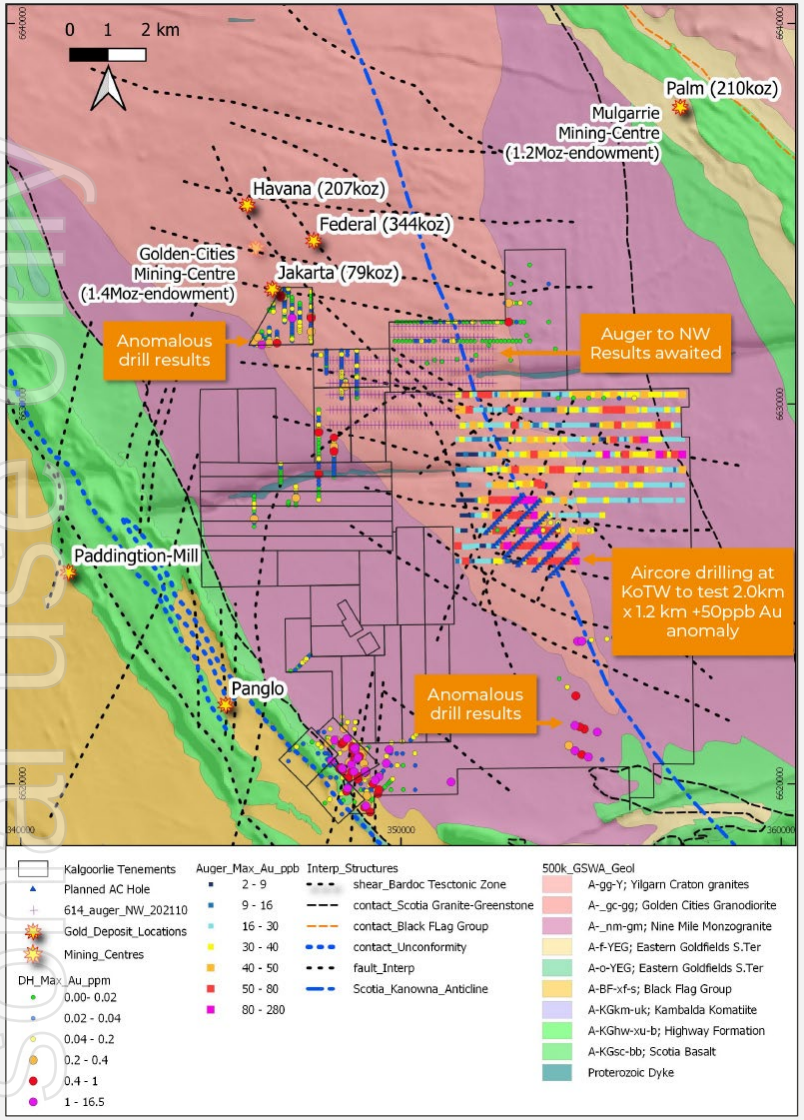
KALGOORLIE

New ground, results and targets

PVW RESOURCES JULY 2022

personal use only

KALGOORLIE – KING OF THE WEST EXPLORING UNDER COVER



King of The West auger +50ppb Au anomaly

The main 2km long anomaly is 8km southeast from Golden Cities operations: Havana, Federal and Jakarta open pits.

- Located over major structures, including the hinge-line which defines the Scotia – Kanowna Anticline, southeast to Kanowna Belle
- Interpreted faults analogous to Golden Cities mineralisation, controlled by northeast dipping shears within hornblende biotite granodiorite
- The auger anomalism is open to the south. Anomalous historical drill results located 4km to the south
- Drilling program testing for mineralisation with vertical Aircore drill holes completed on a 400 x 100m grid
- Results pending for 87 Aircore drill holes for 5,374m

For details please refer to announcement ASX:PVW, 6 Sep 2021, Kalgoorlie Exploration – Positive Aircore and Auger Results

For personal use only

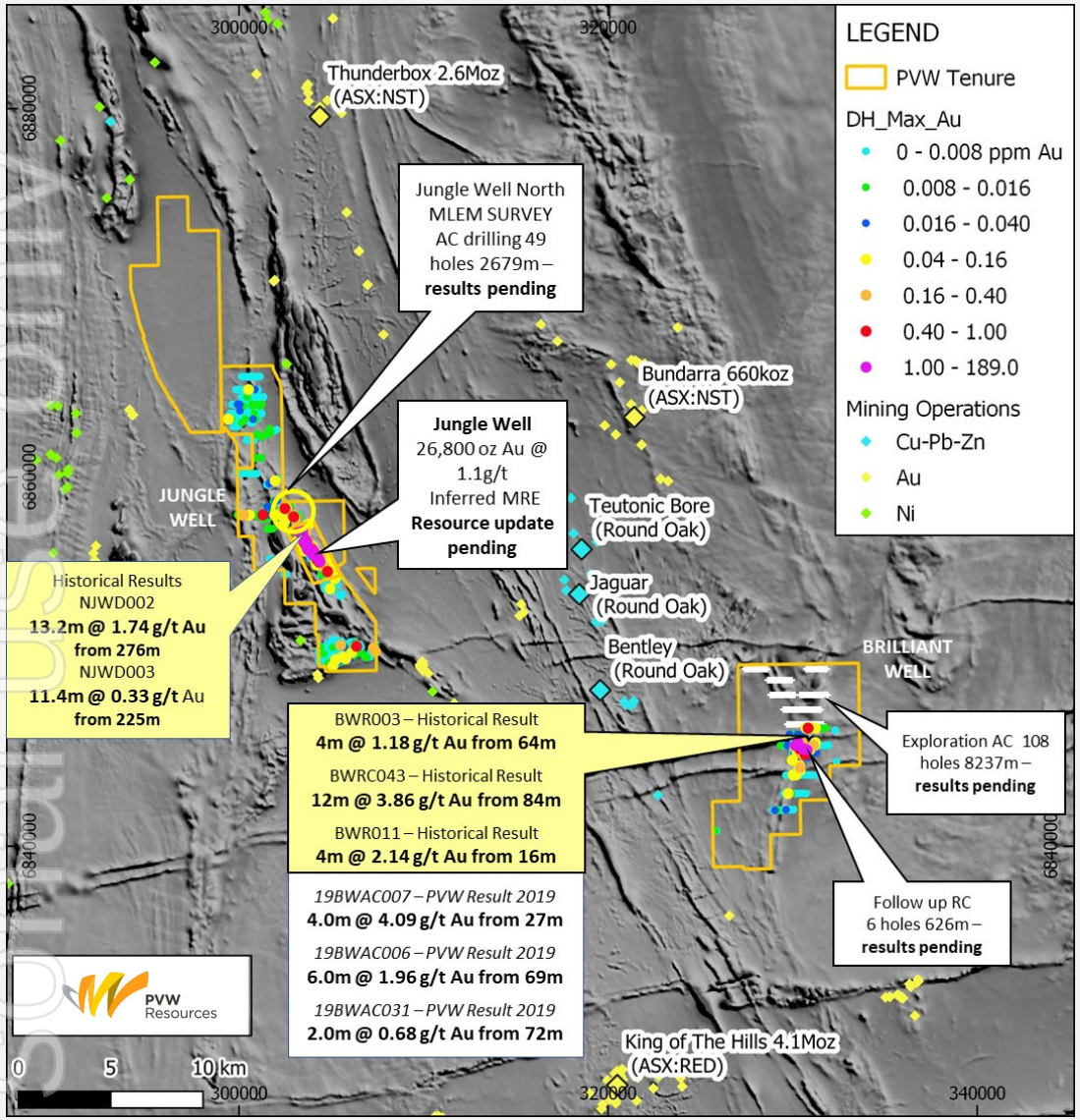
LEONORA

Opportunities to grow and discover

PVW RESOURCES JULY 2022

personal use only

LEONORA – SIGNIFICANT UPSIDE



Brilliant Well Project, significant upside along underexplored greenstone belt

- Brilliant Well Project – Regional Aircore and targeted RC. Reporting of results pending

Jungle Well – continuous tenure over ~15km strike

- Jungle Well – open along strike and down dip
- Two kilometres of near surface anomalism north of the Jungle Well Resource
- Jungle Well Regional – targets North and South, under explored, shallow drilling, previously Nickel focussed exploration
- Deep historical results
  - **13.2m @ 1.74g/t Au from 276m**
- Nugget patch identified – requires field confirmation prior to drilling

personal use only

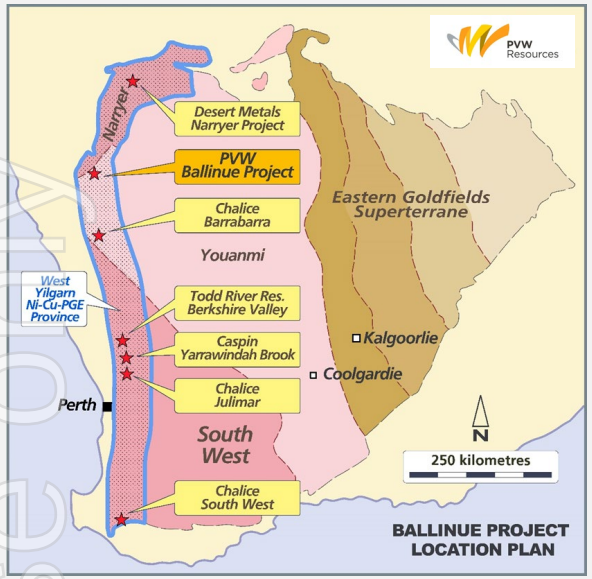
BALLINUE

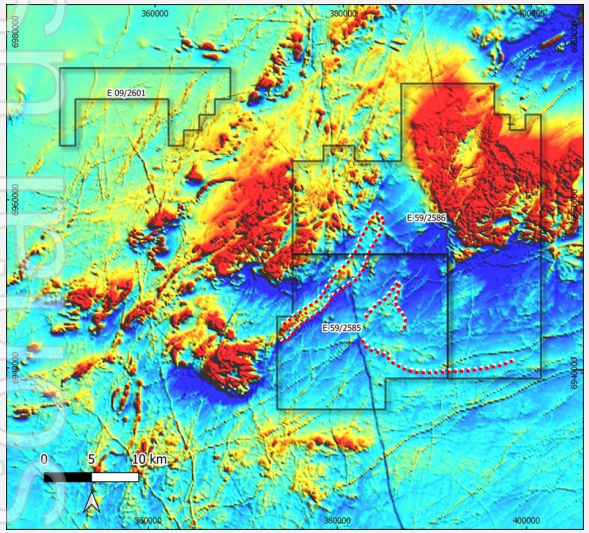
VTEM and Surface Sampling in 2022

PVW RESOURCES JULY 2022

ersonal use only

BALLINUE – NI-CU-PGE PROJECT





PVW has made three exploration licence applications in the highly prospective West Yilgarn **Ni-Cu-PGE** Province.

- This area was target following continued success by numerous explorers such as Chalice Mining, Pursuit Minerals, Caspin Resources, Todd River Resources and Desert Metals
- Following appraisal of numerous projects and available areas, tenement applications are in place for three large exploration licenses (E59/2585, E59/2586 and E09/2601) covering an area of 950km^2
- Data compilation and review of available datasets is ongoing
- Field appraisal and assessment of magnetics has confirmed areas to be targeted with VTEM and surface geochemistry in 2022

Previously released ASX material references that relate to PVW Ballinue include:
8 July 2021, PVW Expanding into West Yilgarn Ni-Cu-PGE Province

For personal use only

PVW Resources

THANK YOU

Scan here to join our mailing list

PVW Resources Limited
Level 3, 1138 Hay Street
West Perth WA, 6005

PO Box 300
West Perth WA, 6872

Contacts

George Bauk
T: +61 (0)408 931 746
E: george@totode.com.au

Media Enquiries – Read Corporate
Nicholas Read
T: +61 (0)419 929 046

pvwresources.com.au

For personal use only