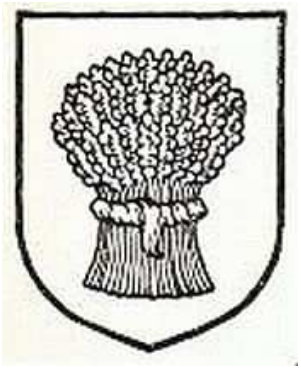
Tuesday, June 28, 2022



HALLGARTEN & COMPANY

Initiation of Coverage

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PVW Resources

(ASX: PVW)

Strategy: LONG

Price (AUD)	$0.26
12-Month Target Price (AUD)	$0.67
Upside to Target	158%
High-low (12 mth)	$0.13 - $0.805
Market Cap (AUD mn)	25.0471
Shares O/S (millions)	**96.34**
Fully Diluted (millions)	**83.69**
Management holdings	5.47%

PVW Resources

New/Old Kid on the Block in REEs

- + The company is targeting Rare Earths and gold in Western Australia
- + The management team is the same that developed the Rare Earths mine at Brown's Range in Western Australia into one of the few producers to emerge from the first Rare Earths boom of 2009-11
- + The Tanami property is prospective for both Rare Earths and gold and is located some 90kms south from Brown's Range?
- + The portfolio of gold properties is in the well-known districts of Kalgoorlie, Leonora and the West Yilgarn
- + Rare Earth prices have been on a tear since 2021 returning the sub-sector to favour with investors and enhancing financing prospects for junior explorers seeking REEs
- + In the wake of a recent oversubscribed financing the company is well funded with $10mn in the bank
- ✘ China still has the whiphand in REE-pricing and can sink prices, suddenly, at will
- ✘ The Rare Earth space is now perceived (incorrectly) to be subject to the dynamics of the EV space and thus might go off the boil if sentiment takes a step back on the pace of EV implementation
- ✘ The environment for funding gold exploration is fickle

Applying Lessons Learnt

We remain card-carrying fans of Xenotime but precious little has been done to cultivate further projects of this mineralisation with Ionic-adsorption clays being very much a flavour (and not without merits) in this latest recovery of interest in Rare Earths, linked to the EV revolution.

For a decade, we had favoured the main Xenotime play, Northern Minerals (NTU.ax) that owns the Browns Range REE mine and it did indeed reach production of a sort. However, we eventually purged it from the Model Resources Portfolio as it was clear that the sheer volume of shares on issue mean that moves in the price would at best be infinitesimal. Further complicating the picture was a "Mexican standoff" (pardon the pun) with the Chinese shareholders.

Much of the management of Northern Minerals have decamped to PVW bringing the skillsets in Xenotime that moved Brown's Range into the exclusive producer category. They also come with the experience learned of what not to do.

In this initiation of coverage we shall look at their new venture, which at least for the moment straddles

both Gold and Rare Earth opportunities. If both pursuits prosper then a division into more thematically pure vehicles might be envisaged. At least on the Rare Earth front, various lessons have been learnt and thus pitfalls can be avoided.

Projects

The company's projects are biased towards gold, but one is also a Rare Earths target. It is rare in our experience to encounter REEs with Gold mineralisations and we can only think of one previous example.

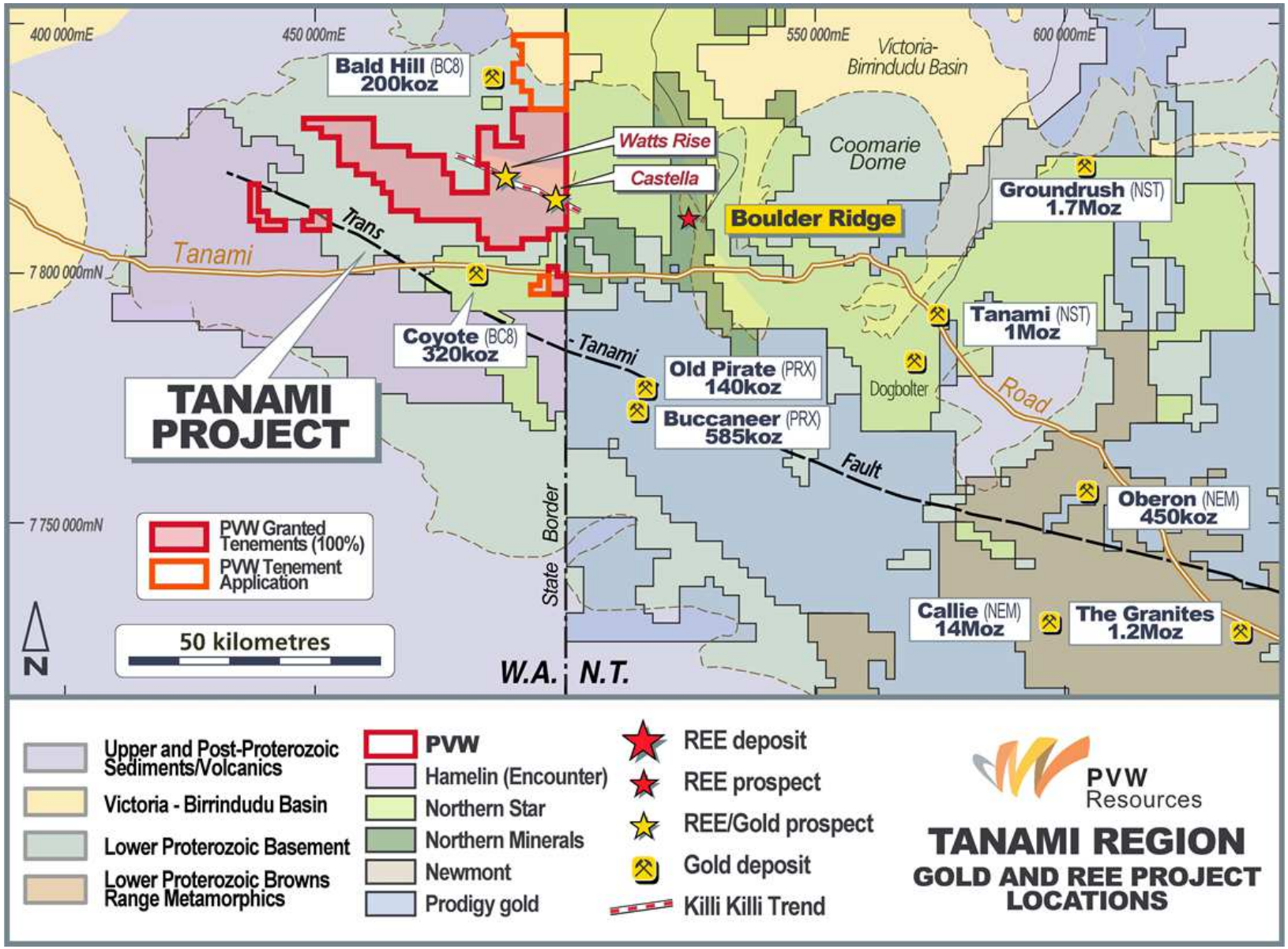
The mixed gold/REE target is the Tanami project in north-eastern Western Australia. The other gold projects are all far to the south in the (supposedly) well-trodden territory around Kalgoorlie, Leonora and the West Yilgarn. However it's the company's view that some of these territories are surprisingly underexplored despite their very well-known addresses.

Tanami Project

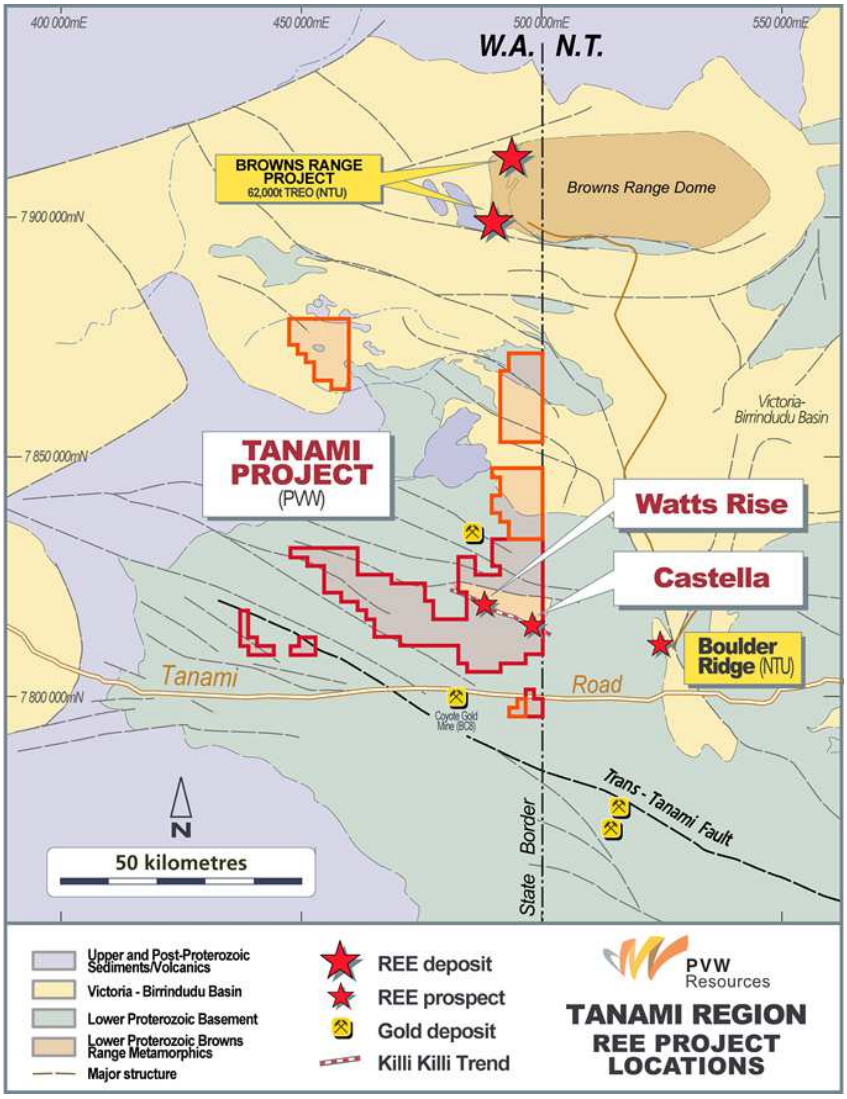
Leaving to the side the gold projects, the REE target of PWV is its Tanami project, located in the Kimberley region of WA, and occupies ~1270km^2. It is located approximately 1,500km northeast of Perth, 220km south-southeast of Halls Creek in the Tanami desert, adjacent with the Northern Territory border.

Background

Seven granted exploration licenses, totaling 346km^2, were acquired through the acquisition of the Tanami West Project from Orion Metals in August 2019 and finalised in February 2021. Six exploration licenses totaling 523km^2 were pegged by PVW Resources in March 2018 and granted in 2020. A further four exploration licenses were pegged in September 2021 totalling 400km^2. The initial focus of the acquisition of the Tanami West project was for the gold potential with known REE mineralisation.


400 000mE
450 000mE
550 000mE
600 000mE
Victoria-
Birrindudu Basin
Bald Hill (BC8)
200koz
Watts Rise
Castella
Coomarie
Dome
Boulder Ridge
Groundrush (NST)
1.7Moz
Trans
Tanami
7 800 000mN
Tanami (NST)
1Moz
Coyote (BC8)
320koz
Tanami
Old Pirate (PRX)
140koz
Dogbolter
Road
Buccaneer (PRX)
585koz
TANAMI
PROJECT
Fault
Oberon (NEM)
450koz
7 750 000mN
State Border
PVW Granted
Tenements (100%)
PVW Tenement
Application
50 kilometres
N
W.A.
N.T.
Callie (NEM)
14Moz
The Granites
1.2Moz
Upper and Post-Proterozoic
Sediments/Volcanics
Victoria - Birrindudu Basin
Lower Proterozoic Basement
Lower Proterozoic Browns
Range Metamorphics
PVW
Hamelin (Encounter)
Northern Star
Northern Minerals
Newmont
Prodigy gold
REE deposit
REE prospect
REE/Gold prospect
Gold deposit
Killi Killi Trend
PVW
Resources
TANAMI REGION
GOLD AND REE PROJECT
LOCATIONS

REE's have historically been targeted within the project and are considered a focus for future exploration efforts. The map below puts in context the Tanami project vis a vis the Xenotime project of Northern Minerals at Brown's Range.



Geology

The bedrock geology of the project area is dominated by the Tanami Group sequence of Lower Proterozoic folded metasediments. The Killi Killi Formation overlies the Stubbins Formation, a sequence of metasediments and minor volcanics which in turn overlies Archaean basement. The Killi Killi Formation is a sequence of turbidites, predominantly sandstones, greywackes and shales metamorphosed to greenschist grade. Because of weathering and their composition, the rocks seldom outcrop and usually only do so as lateritised low ridges with quartz veining.

The structural grain of the district is west-northwest reflecting the major element of faulting, the Tanami Structural Corridor, which extends from the west into the Tanami and Granites/Callie goldfields of NT. Near the Coyote mine it is manifested in the large quartz reef referred to as the Tanami Fault reflecting a regional fracture.

A number of granites intrude the Lower Proterozoic sediments. The Lewis Granite, a large granite pluton was drilled by Orion and found to be a variably magnetic K-feldspar – biotite granite with subdued geochemical character.

Strongly magnetic bodies within stratigraphy have not been effectively targeted in historical exploration efforts. They may have been intruded during rifting phases, folded with stratigraphy during orogenesis. Their origin is uncertain and will be tested during exploration activities.

Structurally controlled orogenic gold deposits host the majority of gold mineralisation in the Granite – Tanami Orogen. Identifying areas of thrusting, anticlinal stacks, crustal penetrating shear zones and associated structures is considered key to discovering gold in the region.

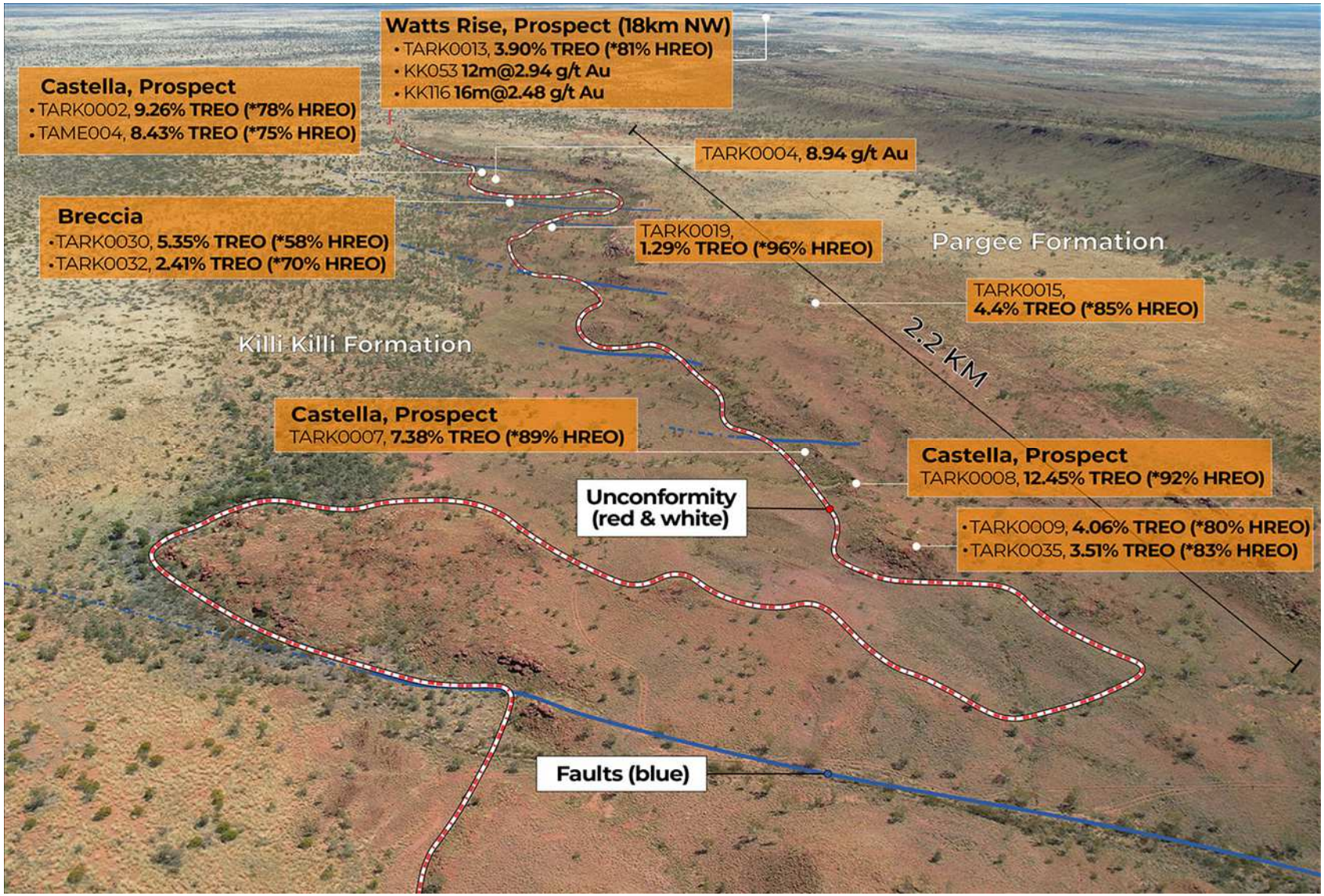
Historically mineralisation has been identified in the Killi Killi and Stubbins Formations, both metamorphosed sedimentary sequences of the Tanami Group. These formations along with intrusive granitoids dominate the geology underlying PVW tenements. The Lewis Granite, part of the Granites Supersuite, is a significant geological feature and itself represents a prospective host for Au, Cu and Sn mineralisation.

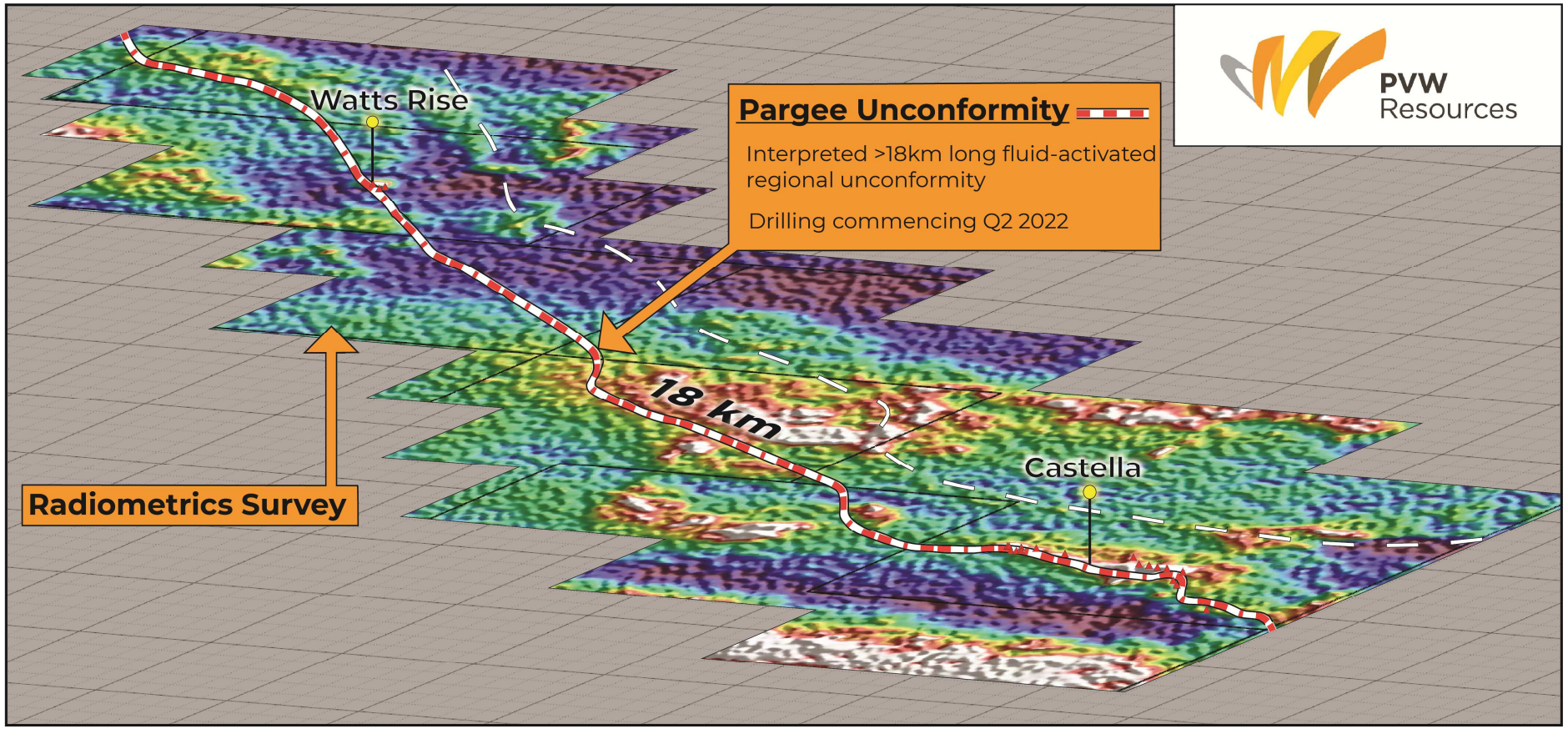
The PGE potential has not historically been tested by explorers in the project area, however the knowledge gained from recent discoveries of layered mafic-hosted PGE's in otherwise Granite/Metasedimentary dominated regions adds to the suite of possible mineralisation styles. Management intends to investigate known magnetic anomalies that require testing to confirm lithology and geochemistry.

Exploration at Tanami

PWV's field programs commenced in August 2021 at Castella and Watts Rise prospects. The geological team sees regional potential for hydrothermal unconformity-related Rare Earth mineralisation along the 18km long Watts Rise/Killi Killi trend with the contact/unconformity between the Pargee Sandstone and the Killi Killi Formation being considered prospective for this style of mineralisation. Overarching this is the conviction that Tanami has a similar geological setting to Northern Minerals Browns' Range project which is located 100km to the north.

The upcoming work REE regional exploration program will focus on the area between Watts Rise and Castella, with reprocessing and interpretation of airborne radiometric and magnetic data reveal potential new REE targets.


Watts Rise, Prospect (18km NW)
• TARK0013, 3.90% TREO (*81% HREO)
• KK053 12m@2.94 g/t Au
• KK116 16m@2.48 g/t Au
Castella, Prospect
• TARK0002, 9.26% TREO (*78% HREO)
• TAME004, 8.43% TREO (*75% HREO)
TARK0004, 8.94 g/t Au
Breccia
•TARK0030, 5.35% TREO (*58% HREO)
•TARK0032, 2.41% TREO (*70% HREO)
TARK0019,
1.29% TREO (*96% HREO)
Pargee Formation
TARK0015,
4.4% TREO (*85% HREO)
2.2 KM
Killi Killi Formation
Castella, Prospect
TARK0007, 7.38% TREO (*89% HREO)
Castella, Prospect
TARK0008, 12.45% TREO (*92% HREO)
Unconformity
(red & white)
•TARK0009, 4.06% TREO (*80% HREO)
•TARK0035, 3.51% TREO (*83% HREO)
Faults (blue)


Watts Rise
Pargee Unconformity
Interpreted >18km long fluid-activated regional unconformity
Drilling commencing Q2 2022
PVW Resources
18 km
Castella
Radiometrics Survey

The company believes it had identified a prospective 3km long target at the Castella prospect with a large amount of rock chips over 1% TREO and up to 12.45% TREO (124,500ppm TREO). These samples have been studied and confirmed the Heavy REE to be predominantly hosted by Xenotime. A number of targets have been identified over the 18km unconformity. The geological team have several areas identified for follow up in 2022 to explore and hopefully add to the list of drill ready targets.

It is worth reminding that the "Wet" season which runs for five months from November to April is a constraint upon exploration activities, knocking five months off every year's schedule. Road access is restricted during this period but there are other means of access. However, as shall be noted further on the construction of improved road infrastructure in the region at Federal government expense.

If the gold campaign starts to yield promising results… and the Rare Earth sampling lives up to expectations then a division of the company into two parts would look like the way to go. One to watch…

Xenotime is (still) the Word

Many moons ago we described Xenotime as the "thinking man's REE mineralization". In the Rare Earth space we have been convinced for some time that the word is "Xenotime" and this is what arouses our interest in those REE players who have a Xenotime component in their REE mix.

The mineral in question is a REE phosphate mineral, whose major component is yttrium orthophosphate (YPO_4). The rare earths Dysprosium, Erbium, Terbium, and Ytterbium, and metal elements like Thorium and Uranium (all replacing Yttrium) are the expressive secondary components of Xenotime. Due to Uranium and Thorium impurities, some Xenotime specimens may be weakly to strongly radioactive. Xenotime is used chiefly as a source of Yttrium and heavy lanthanide metals (Dysprosium, Ytterbium, Erbium, and Gadolinium).

Occurring as a minor accessory mineral, Xenotime is found in pegmatites and other igneous rocks, as well as gneisses rich in mica and quartz.

The advantage of Xenotime is the mix of REE in the mineral. The lanthanide content is typical of "yttrium earth" minerals, and runs about two-thirds yttrium, with the remainder being mostly the heavy and medium lanthanides, where the even-numbered lanthanides (such as Gd, Dy, Er, or Yb) each being present at about the 5% level, and the odd-numbered lanthanides (such as Tb, Ho, Tm, Lu) each being present at about the 1% level. Dysprosium is usually the most abundant of the even numbered heavies, and holmium is the most abundant of the odd numbered heavies.

The relevance of this is that, as became well-known in the REE boom, with most Rare Earth mineralisations one must take on a preponderance of the abundant REEs (Cerium and Lanthanum) to get to the more valuable rarer Rare Earths that appear in much smaller proportions. Thus the preponderance of lookalike deposits with bastnasite, eudialyte and apatite started to ring alarm bells

that there may be "too much of a good thing".

In the case of YPO_4, instead one is encountering phosphate (which has a market in fertilizers), Yttrium (a rare earth not always found in standard REE deposits because it lies outside the Lanthanide series) and then a preponderance of the more attractive Heavy Rare Earths and obscurer Light Rare Earths.

As is also (now) well known there are no shortcuts in treating the REE minerals that the bulk of companies have so far discovered. One cannot "send the Cerium to the tails". One must process out each REE in sequence in a very elaborate and costly process. Not having the "rubbish" REEs of Cerium and Lanthanum to an appreciable level makes Xenotime more valuable and with less processing cost per tonne of rock.

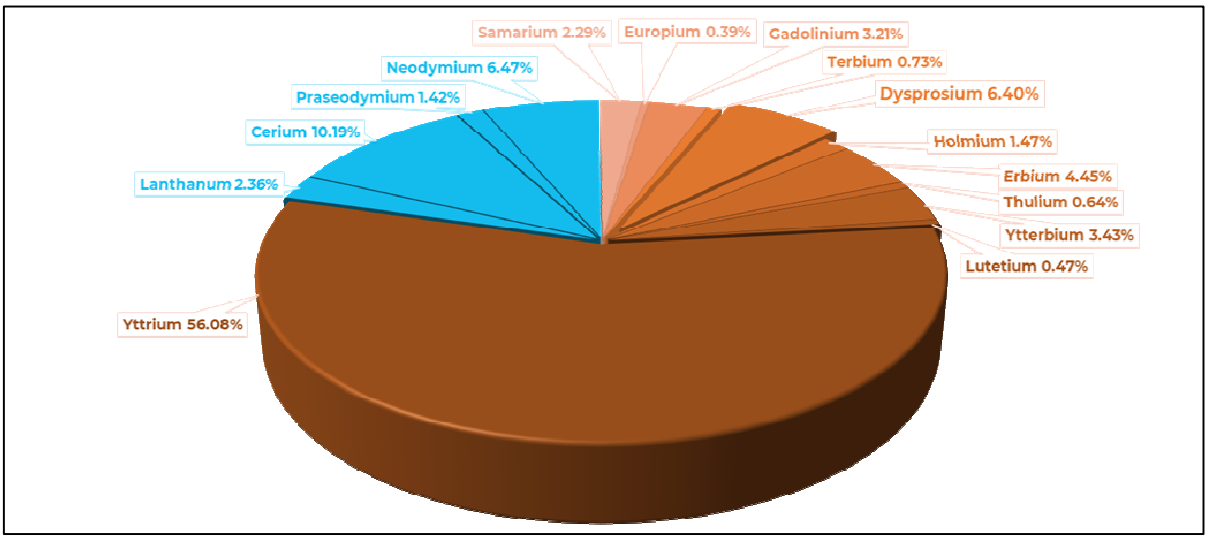
Current production from Xenotime is largely that of Northern Minerals plus the small tonnages of Xenotime sand that are recovered, in association with Cassiterite tin mining in Malaysia. It is also mined in Guangdong province in China. The metal mix of these two sources in shown in that table at the right:

Metal Mix - Some Xenotime Producers

	Lahat Perak Malaysia	Guangdong China
La2O3	1.20%	1.20%
CeO2	3.10%	3%
Pr6O11	0.50%	0.60%
Nd2O3	1.60%	3.50%
Sm2O3	1.10%	2.20%
Eu2O3	trace	0.20%
Gd2O3	3.50%	5%
Tb4O7	0.90%	1.20%
Dy2O3	8.30%	9.10%
Y2O3	61%	59.30%
Total	81.20%	85.30%

Source: IMCOA

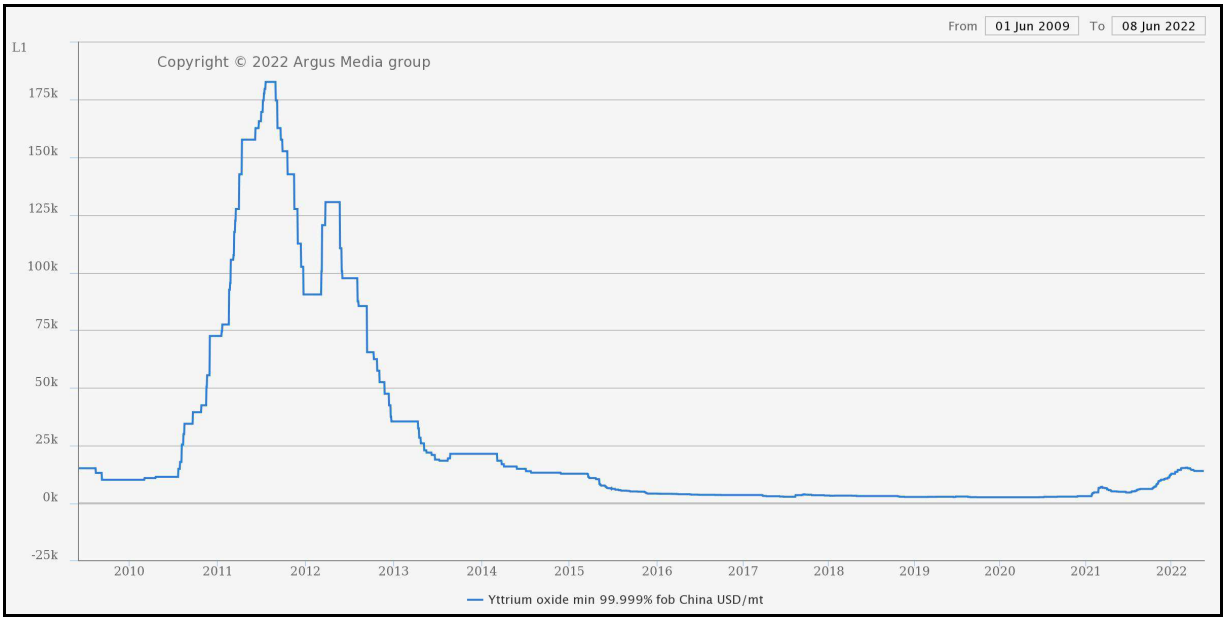
The pie chart below shows the REE weightings the Brown Range deposit in Western Australia, with the small exposure to Light Rare Earths (the blue segment) being particularly poignant.



As can be noted, the low value Light Rare Earths, Lanthanum and Cerium appear in minimal amounts in Xenotime production.

The Value of Yttrium

The chart (compiled by us from information from IMCOA/Metal Pages) shows the exponential rise in the Yttrium price during the First Rare Earth Boom. In the the first decade of the century the metal was almost a giveaway at a mere $4 per kg, but at one point in 2011 the oxide was going for $180 per kg. However, the wheel turned and the metal went back to levels even lower than in 2010. It has upticked slightly in the last two years.



Source: Argus Metals

More than any other REE, we see the strongest potential in Y for the Western producers to take significant market share away from the Chinese. This would be via the onset of serious volume output from non-Chinese developers.

The Advantage

When we first stumbled upon Xenotime it wasn't via any company's presentation it was rather through some reading on exotic REE mineralizations. How could it be that there was a REE mineralization not massively (over) weighted towards Lanthanum and Cerium? Quite straightforward indeed.

All the REE companies had deposits that were LREE-heavy (to mix a metaphor) and thus they would have

it that La and Ce were necessary evils (but then make an aside that they had less of them than the next presenter). With Xenotime one scarcely has these “necessary evils”, indeed they represent the type of percentages in a Xenotime material that Samarium might represent in a monazite or bastnasite. Xenotime can best be described as “having the icing without having to eat the whole cake”.

Xenotime Occurrences

Historically, the main occurrences of note of Xenotime were at Hidra (Hitterø), Flekkefjord, Vest-Agder, Norway (the mineral first being described in 1832 from an occurrence at the latter location). Other notable localities include Arendal and Tvedestrand in Norway, in Brazil at Novo Horizonte, São Paulo, Novo Horizonte, Bahia, and Minas Gerais and in Madagascar. In the US, California, Colorado, Georgia, North Carolina and New Hampshire have occurrences. Then Western Australia appeared on the Xenotime scene around 2010.

In the equities markets the main exposure is through Northern Minerals, now joined by PVW, and there is one rather confused Australian junior, Asra Minerals (formerly Torian Resources) who don’t seem really sure if they have Xenotime or not.

The Gold Targets at Tanami

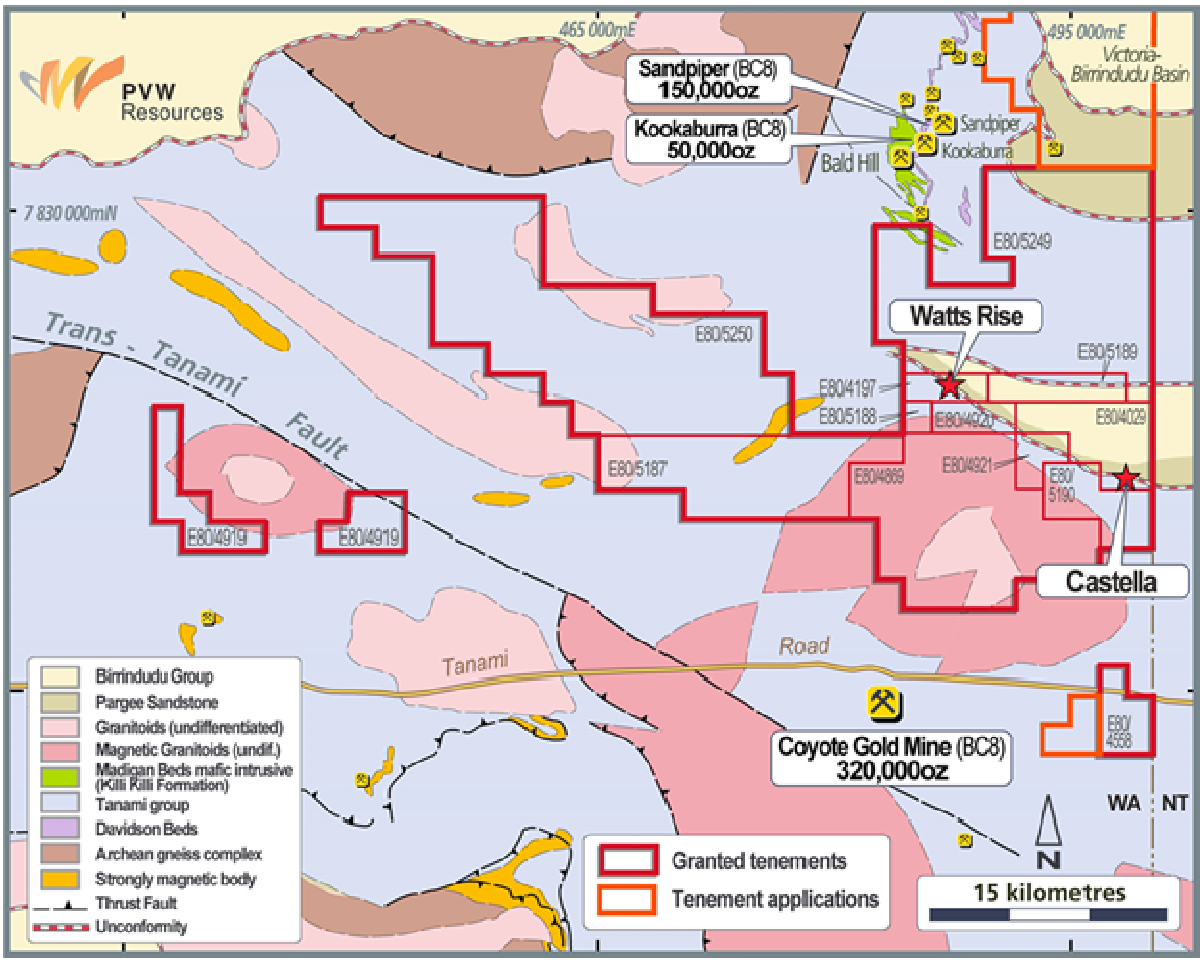
The gold in the mix was more of a case of diversification though as the real target seems to be REE territory (and moreover Xenotime potential) to the south of Browns Range, ergo, familiar territory for the management team. However, it would not surprise us if the gold was spun out at some early juncture if the Rare Earths prove to have legs, particularly as Rare Earths have a more propitious funding environment at the moment.

Currently under care and maintenance, the Coyote Gold Mine is the region’s most significant modern mining project. Northern Star Resources Limited own the Coyote Gold Mine, the village and operations are located just 10km from the project area.

Historical Exploration

The early explorer Henry William Beamish Talbot passed through the area in 1909 and recorded the presence of gold at several locations in the Tanami. The project area was first explored commercially by Queensland Mines Ltd in 1969 as a uranium project that found small quantities of secondary uranium. However, a small suite of samples was analysed for Yttrium and REE. Petrology was also done, and this work first confirmed the existence of crystalline Xenotime mineralisation (Premoli & Day, 1970).

Ongoing work since the 1950’ by Geoscience Australia, GSWA and GSNT has included geological mapping, compiled total magnetic intensity, bouguer gravity and radiometric images, and undertaken numerous research initiatives throughout the Tanami region.



Modern exploration in the project area has been dominated by the Western Tanami Project which was commenced by Shell in 1992 and continuing for 22 years through a series of tenements, deals and various joint ventures involving eight other companies concluding with Tanami Gold NL, as follows:

- 1992 – 1995 Shell Company of Australia Ltd
- 1993 – 1996 Acacia Resources Ltd
- 1994 – 1995 Zapopan
- 1995 – 1996 Cove Mining NL
- 1994 – 1996 Zapopan NL
- 1994 – 2000 Tanami Gold NL
- 1995 – 2000 AngloGold (Acacia Resources Ltd)

- 2000 – 2003 AngloGold Australia
- 2000 – 2004 Barrick Gold of Australia Ltd
- 2004 – 2014 Tanami Gold NL

Most recent exploration efforts in 2012 involved surface geochemical rock chip sampling and RC drilling program at Castella. Rock chip sampling of conglomerate lenses at Castella returned encouraging REE assays, delineated a strike length of more than 1km of REE anomalism with totaled REE assays averaging 4730ppm TREE.

While the drill REE assays were disappointing, gold mineralisation was intersected in three holes, with a best intercept of 16m @ 2.48g/t Au from 60m in KKO-116. In 2013 mapping investigated gold mineralisation in KKO-116 confirming drilling had intersected an outcropping shear zone.

Planned Exploration

The bulk of PVW's efforts thus far have been on integrating the regional data and reprocessing GSWA seismic data with a focus on interpretation of shallow data. The work to date has significantly improved the understanding of major structures and where they provide possible drill targets.

In conjunction with further geophysical data collection and interpretation, field work will be focused on follow up drilling of existing gold anomalies. Detailed geophysics will be ongoing and essential to efficiently target within the large tenement package.

This program commenced drilling on the 26th of June. It will initially be comprised of 10,000m of RC drilling along with 25,000m Aircore (AC) drilling targeting the 18km unconformity trend from Watts Rise to the Castella (formerly known as Killi Killi East) prospects. The program will commence at the Castella target which has a strike length of three kilometres, identified through the 2021 exploration program comprising rock chips, soil samples, mapping, airborne surveys and structural interpretation. A large number of samples were collected with over 1% TREO results and up to 12.45% TREO. Significant gold results were also present including 8.94 g/t and 4 g/t Au.

The AC drilling will target areas both between Watts Rise and Castella and also to the north of Watts Rise. Funds raised will also be used for capital items including exploration vehicles, portable XRFs, site transportable office and other general exploration equipment required.

Infrastructure Boost

In late March 2022 under the new Energy Security and Regional Development Plan, the Federal government committed AUD$7.1bn to a new investment pipeline. Amongst the projects is AUD$400mn in additional funding to completely seal the Tanami Road to the Western Australian border. This is a 310km section of the Tanami Road that can be closed during the wet season and suffers from increased traffic during the dry season. The road is one of few interstate routes between WA and the NT, and

services several regional communities hence it is a very significant primary transport route.

The Tanami Road is PVW's road access for equipment and consumables being freighted into site and for samples and equipment being transported from site. Sealing the road will bring significant benefits to PVW's exploration activities.

The Coyote Mine

As far as *closeology* goes the nearest recently-producing asset is the Coyote mine. Tanami Gold acquired the tenement in November 2003 from AngloGold for AUD$14mn in cash and shares.

The mine was opened in May 2006 after a 12-year planning phase. It initially had a production target of 60,000 ounces per year however technical issues and climatic events stymied plans to achieve this run-rate. In 2013, the Coyote mine was one of the State's highest-cost producers, pouring gold at basic costs of $1220/oz (despite most production being at over 5g/t Au). The mine went into care and maintenance shortly after that retrenching 150 employees.

In October 2017, Northern Star Resources (ASX:NST) purchased the mine for AUD$4mn from Tanami Gold. Tanami Gold had previously offered the mine to ABM Resources, who had an option to buy it between 2014 and 2016 but ultimately declined. Under Northern Star, the Coyote mine became part of their larger Tanami Project, which spanned mining leases in both Western Australia and the Northern Territory. However in the never-ending game of "pass the parcel", in mid-April 2022, Northern Star agreed to sell its wholly-owned Paulsens Gold Operation in Western Australia, and Western Tanami Gold Project to Black Cat Syndicate for AUD$44.5mn.

There is a good haul road to the Coyote mine which brings tangential benefits to PVW's Tanami project.

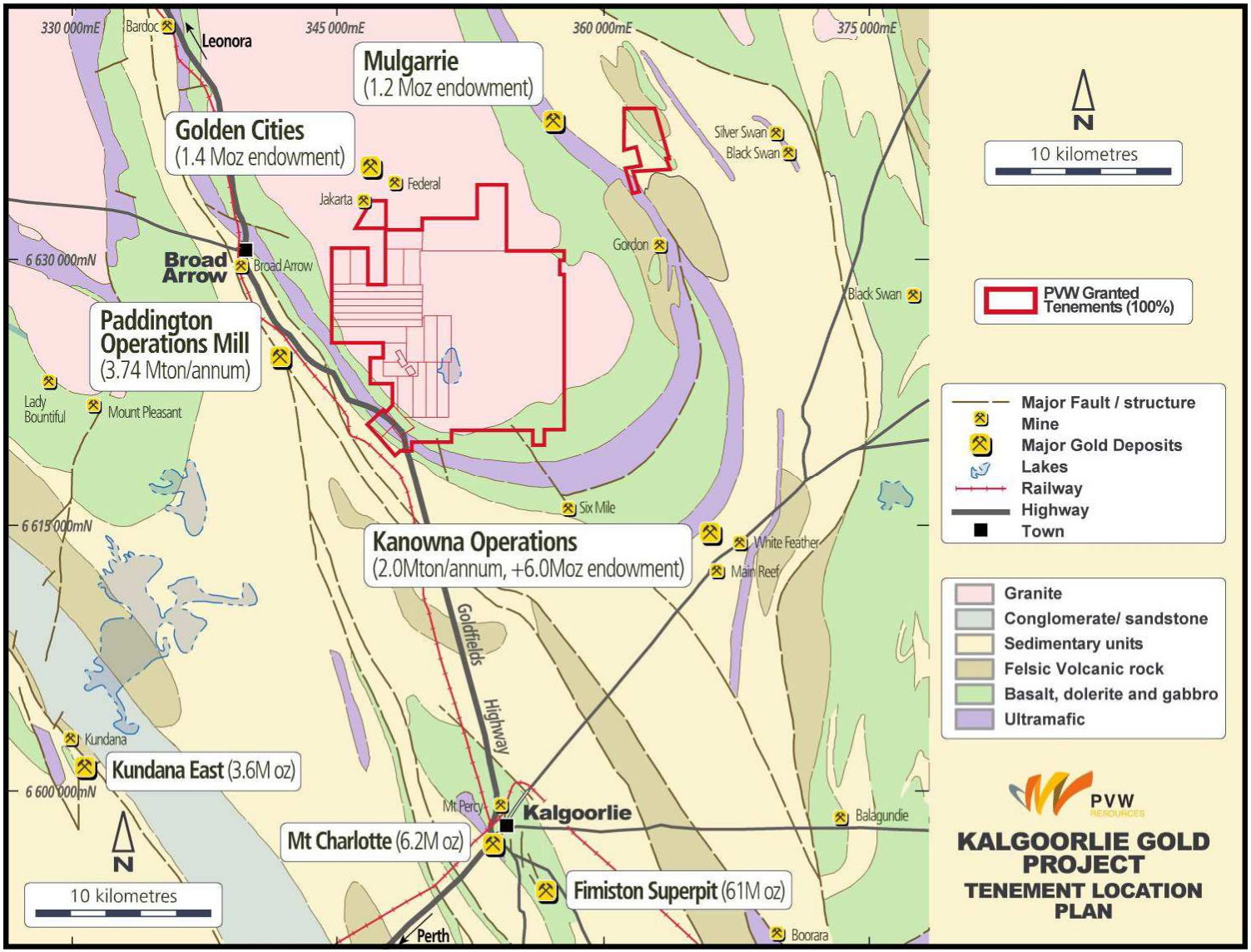
The Kalgoorlie Project

This 100%-owned target extends over 150 km^2. It is situated about 30km north of Kalgoorlie near Broad Arrow Townsite and Norton Gold's Paddington operations. The map on the following page shows the tenement areas and its central position vis-a-vis various other substantial mines.

The project is comprised of three project areas, Black Flag, King of the West, and Gordon Sidar. Management regards them as highly prospective as they straddle a varied greenstone and granite package.

Access to the project area is via haul roads heading east off the Goldfields and then through a series of station tracks and fence line tracks that dissect the project area.

The tenement package is within close proximity to many operating gold processing plants, including the aforementioned Paddington plant.


330 000mE
345 000mE
360 000mE
375 000mE
6 630 000mN
6 615 000mN
6 600 000mN
Bardoc
Leonora
Mulgarrie
(1.2 Moz endowment)
Golden Cities
(1.4 Moz endowment)
Federal
Jakarta
Broad Arrow
Broad Arrow
Paddington
Operations Mill
(3.74 Mton/annum)
Lady
Bountiful
Mount Pleasant
Silver Swan
Black Swan
Gordon
Black Swan
Six Mile
Kanowna Operations
(2.0Mton/annum, +6.0Moz endowment)
White Feather
Main Reef
Goldfields
Highway
Kundana
Kundana East (3.6M oz)
Mt Percy
Kalgoorlie
Mt Charlotte (6.2M oz)
Balagundie
Fimiston Superpit (61M oz)
Boorara
Perth
N
10 kilometres
N
10 kilometres
PVW Granted
Tenements (100%)
Major Fault / structure
Mine
Major Gold Deposits
Lakes
Railway
Highway
Town
Granite
Conglomerate/ sandstone
Sedimentary units
Felsic Volcanic rock
Basalt, dolerite and gabbro
Ultramafic
PVW
RESOURCES
KALGOORLIE GOLD
PROJECT
TENEMENT LOCATION
PLAN

Geology

Mineralisation occurring close to the areas is varied and demonstrates the importance of understanding local geological controls.

Gold exploration drilling within the areas is surprisingly sparse and superficial given the location within 30km of Kalgoorlie and 15km from Kanowna. The area has often been overlooked due to the granite dominated tenure.

Exploration History

The Kalgoorlie Gold Project tenure has been continuously held by various exploration companies and prospectors since the nickel boom exploration phase of the late 1960's. Early – 1970s BHP Minerals

- 1985 – 1986 Tern Minerals
- 1985 – 1990 Summit Gold
- 1991 – 1993 Galtrad / Galbraith JV
- 1992 – 1993 Majestic Resources
- 1994 – 1996 Reefton Mining
- Mid – 1990's North Limited
- 1996 – 1998 Centaur Mining & Exploration
- 2007 – 2012 Jackson Minerals / Fe Limited
- 2014 – 2018 Dalla Costa

The company has noted that surprisingly little effective exploration has occurred over much of the project area despite quite an impressive rollcall of past owners.

Proposed Exploration

Near term drill targets: Regional Bedrock Targets including previous drill results including 6m @ 2.61 g/t and 4m @ 2.39 g/t and new conceptual targets. Aircore drilling at the Black Flag prospect and auger drilling at King of The West and the Pappy Prospect have confirmed these target areas are very prospective with initial exploration efforts returning positive results requiring ongoing follow up. Significant drill results have been returned for granites and within greenstones. Paleochannel targets with possible links to bedrock mineralisation are yet to be tested.

King of the West

The company is evaluating the results (assays pending) from the King of the West project 30km north of Kalgoorlie and aims to undertake a follow up drill program.

Leonora District

This target is 100%-owned and extends over 195km^2 in the well-regarded Leonora district. The Jungle Well and the Brilliant Well projects both have immediate follow up targets. Jungle Well, which was picked up for around AUD$10k, has a 26,800oz Au inferred resource that is JORC[12] compliant. The open pit was mined previously in 1996 during a period of low gold prices.

Jungle Well Deposit
November 2019 Maiden Inferred Mineral Resource Estimate
(0.5g/t Au Cut-off)

Type	Tonnage Kt	Au g/t	Au Ounces
LG Stockpile	7	1.3	300
Oxide	210	1.0	6,800
Transitional	309	1.1	10,600
Fresh	208	1.4	9,200
Total	**735**	**1.1**	**26,800**

Drilling plans to explore the extension of the existing resource and along strike following up an intersection of 13.2m @ 1.74 g/t which was drilled exploring for Nickel.

The Brilliant Well Project is south of the Bundarra Gold Project (owned by Northern Star) with gold intersections from various drilling programs in 2011 and by PVW in 2019 which included 4m @ 4.09 g/t and 10m @ 3.36 g/t in historical 2011 drilling.

One could muse upon the attractions of Jungle Well's potential as a satellite pit for one of the near neighbours such as Red 5 (RED.ax) that has their King of the Hills mine nearby.

West Yilgarn – the Ballinue Project

This 100%-owned project is the most recent addition to the PVW portfolio and covers some 950km^2. The Ballinue project is located in the Mid-West region of Western Australia, over the Narryer Terrane and the Murchison Domain, within the West Yilgarn Ni-Cu-PGE Province. The West Yilgarn Province is defined by a corridor along the western margin of the Yilgarn Craton, bounded on the west by the Darling Fault and extending east for some 100km.

The corridor hosts significant new discoveries, the most significant being Chalice Mining – Julimar Project (ASX:CHN). PVW's Ballinue Project has two of three exploration tenements granted. It intends to

undertake systematic exploration, focusing on testing magnetic anomalies that could be the result of Layered Mafic Ultramafic Intrusions.

Financing

In early April 2022 the company announced that it had secured commitments from existing and new institutional and new high net worth investors to subscribe for 23,750,000 new fully paid ordinary shares at a price of $0.40 per New Share to raise proceeds of $9.5 million before costs.

On the 19th of May the company announced that it has completed an oversubscribed $9.5mn share placement. This raising was comprised of 23.75mn shares at an issue price of $0.40 per share. It was undertaken in two tranches because it exceeded the company's existing 25% placement company under Listing Rules 7.1 and 7.1A.

- Tranche 1, comprising 18,146,352 shares
- Tranche 2, comprising 5,603,648 shares

In the wake of this transaction, the company has 96,335,413 shares on issue and cash of $10 million.

Directors & Management

David Wheeler, non-executive chairman, 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 that undertakes assignments on behalf of family offices, private clients, and ASX listed companies. He has been involved in business projects in the USA, UK, Europe, NZ, China, Malaysia, Singapore and the Middle East.

He is a Fellow of the Australian Institute of Company Directors and has experience on public and private company boards, currently holding a number of Directorships and Advisory positions in Australian companies.

George Bauk, executive director has more then with 30 years as an executive and/or director in the resources industry, working in global operational and corporate roles with Northern Minerals, WMC Resources and Western Metals. He was Managing Director of the pioneering Xenotime miner, Northern Minerals from 2010 to 2020.

He has a strong background in strategic management, business planning, building teams, finance and capital/debt raising with a variety of commodities – in particular Rare Earths, gold, nickel and uranium. He is currently Chairman of: Lithium Australia, BlackEarth Minerals and Valor Resources.

Colin McCavana, non-executive director, has over 40 years' experience in the mining and resources sector and has extensive experience in exploration, project development, construction, corporate management, capital raising, financing, and operations.

He has had extensive involvement in gold exploration and gold project development including the successful development and operation of several carbon-in-pulp and heap leach gold projects in Western Australia.

He was the founding director of Northern Minerals and PVW Resources and oversaw the development of the Browns Range REE Project. He is also Chairman of Reward Minerals Limited.

Karl Weber, exploration manager, 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, 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 he led the Northern Minerals exploration team that discovered the Browns Range REE deposits that has produced HRE carbonate. He also spent five years working in oil and gas exploration for Woodside Energy.

During nearly 30 years of involvement in mineral exploration, he has worked on Rare Earths, gold, nickel, REE, uranium, copper, lithium and phosphate projects throughout Australia and Africa.

Risks

Despite the good vibes surrounding Rare Earths at the current time, it is worth enumerating some of the risks that may be faced:

- A return to weak Rare Earth prices
- The REE market is still controlled largely by China
- Proving up a viable deposit

- Gold going off the boil
- Difficulties in funding gold exploration
- Excessive number of competing projects can crowd the scene and investors' attention

Rare Earth prices are not likely to return to the abysmal levels than reigned after the REE "bust" of 2011 as the Chinese are not running a charity anymore. The realization of the finite nature of their own resources makes predatory pricing a thing of the past. Prices have been ebullient for the last two years but there is no rationale for them to even vaguely test the highs of 2011-12. When valuing their baskets of REE products the putative producers (and their consultants) are mainly valuing the Cerium and Lanthanum components at zero or "stockpiling" (which is essentially declaring them to be unsellable).

Despite the hullabaloo, there is not a lot of money for major REE capex pipedreams out there. The MP SPAC came with $500mn embedded, which got the company off to the races. UUUU are running in economy mode.

With the EV "revolution" finally gaining traction outside of China the potential for greater demand for REE magnets from the quarter is enhanced. We see no reason for REE demand to slacken and indeed there is the potential for it to finally start to meet some of the bullish projections of 10 years ago. However, being linked to the superheated EV space can bring its own problems if there is a correction there prompted by recessionary world economies or consumer resistance to the "EV Imperative".

Investors in the gold space have alternated, since 2012, between favouring producers and affording some credit to the junior explorers. However, this sentiment can turn on a dime. Gold price sentiment is not as open-ended to the upside as it was in 2019-2020 when $2,000 was perceived to be a floor rather than a ceiling. Financing for exploration is thus very linked to recent exploration grades. A few sub-1 g/t readings and an explorer can be sent to the penalty box.

Conclusion

In essence an investment in PVW Resources is a bet that the team that grew Northern Minerals will be able to build another REE company in the same region, while taking lessons learnt from the previous experience to avoid (metaphorical) pitfalls. The potential for Tanami to be biased towards a Xenotime-like mineralisation is higher and that is the prime attraction for us after the management team.

While doing this PVW is also targeting gold potential in the same area and a broader portfolio in the south of Western Australia. In doing so, there is a scenario for a potential spinout of the gold assets (or some other monetization) to enhance investor returns in having backed the venture.

The whole Rare Earth industry finds itself in a different world with some constants from the previous "boom", but also quite a few things have changed. In the first Rare Earth boom promotion of a myriad of mineralisations proliferated, without much focus on the finer details of the art of developing a Rare

Earth mining and processing operation. This time around the focus is on processability (and the cost thereof). Thus the key consideration now is if the host mineral for the REEs is economically mineable and then can be subjected to a processing regime that is not too expensive in terms of opex or capex.

A key difference this time is that the first boom saw indiscriminately high prices for ALL Rare Earth Oxides. This time the prices of Lanthanum and Cerium are so low they can be scraped off the floor. The implication of this is that the economics of also-ran deposits with high Le-Ce preponderance are shot to pieces in the marketplace. Less is more might be the mantra of this go-around in Rare Earths. Xenotime mineralisations have less Lanthanum, less Cerium and less radioactive elements. That must put the company in a stronger position than those trying to compete with the burden of these deleterious elements.

At least for the moment, PVW straddles both Gold and Rare Earth opportunities. If both pursuits prosper, then a division into more thematically "pure play" vehicles might be envisaged. At least on the Rare Earth front, various lessons have been learnt and thus pitfalls can be avoided.

We initiate our coverage of PVW Resources with a **LONG** rating with a 12-month target price of AUD$0.67.

Important disclosures

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