

24th January 2022



Corporate Details

Zenith Minerals Limited (ASX:ZNC)
ABN: 96 119 397 938

Issued Shares	343.8M
Unlisted options	14.5M
Mkt. Cap. (\$0.35)	A\$120M
Cash (30 th Sep 21)	A\$6.2M*
Equities (30 th Sep 21)	A\$8.3M
Debt	Nil
*Excludes \$6M placement to EVM (ASX Release 13-Jan-22)	

Directors

Michael Clifford	Director-CEO
Stan Macdonald	Non-Exec Director
Julian Goldsworthy	Non-Exec Director
Nicholas Ong	Co Sec
Nick Bishop	CFO

Major Shareholders (31st Dec 21)

Directors	3.4%
HSBC Custody Nom.	9.4%
Citicorp Nom	9.0%
BNP Paribas Nom	5.8%
Granich	3.7%

Our Vision

Zenith has a vision to maximise shareholder value through superior project generation and exploration activities.

Focus is on 100% owned Zenith projects, whilst partners progress multiple additional opportunities.

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WARATAH WELL LITHIUM – TANTALUM TARGET DRILLING COMMENCED

- Drilling is underway to test a large-scale lithium-caesium-tantalum (LCT) pegmatite target at the Waratah Well joint venture project in Western Australia.
- Waratah Well is the first target to be drilled under the recently announced ZNC-EVM lithium joint venture (refer to ASX Release 13th January 2022), where, among other terms, EVM may earn a 60% interest in the lithium rights in the Waratah Well project by sole funding the completion of a feasibility study within 24 months, with Zenith retaining a 40% project share.
- Extensive outcropping, highly fractionated, prospective LCT pegmatite dykes with very high-grade tantalum (up to 1,221 ppm Ta₂O₅) and local high-grade lithium (up to 2.09% Li₂O) extend over large surface area (3km x 2km) at Waratah Well.
- Drilling will target conceptual deeper lithium (spodumene) bearing pegmatites below the surface tantalum-lithium rich pegmatite dyke swarm, akin to zonation observed in other lithium deposits in Western Australia.
- A total of 7 initial wide-spaced (1km spacing), 200m deep RC drill holes are planned to be completed over a 2-week period with assay results anticipated 8 weeks thereafter.

Commenting on the Waratah Well drill program CEO Mick Clifford said:
"Following on from the announcement of a new partnership with the EVM Group to build a lithium business, I am pleased to advise that we have commenced the initial phase of our joint assessment work on the Waratah Well pegmatite field. The first phase drill program will target lithium (spodumene) bearing pegmatites beneath the widespread, surface tantalum-lithium rich pegmatite dyke swarm, akin to zonation observed in other lithium deposits in Western Australia".

Waratah Well Project key positives include:

- Developed world location with excellent logistics
 - Excellent location adjacent to gazetted access road leading to regional state road currently used by neighbouring operations to transport mineral concentrates using road trains; and
 - Easy access to the Port of Geraldton which has mineral concentrate handling export facilities.

Large field of highly fractionated lithium-tantalum bearing pegmatites

- Pegmatites mapped over an area approximately 2km x 3km;
- High-grade lithium, rock chip samples up to 2.09% Li₂O;
- High-grade tantalum, rock chip sample results up to 1221 ppm Ta₂O₅;
- Variable dips to pegmatite bodies flat lying to 60°;
- Pegmatite thickness ranging up to 21 metres;

- Tantalum rich samples contain the tantalum bearing minerals dominated by microlite with lesser wodginite, tantalite, tantite and plumbo-microlite with variable grain sizes between 10 microns and 400 microns.

Waratah Well Lithium-Tantalum Project Background and Drill Targets

The Waratah Well Project is located approximately 20km northwest of the regional town of Yalgoo in the Murchison Region of Western Australia (Figure 1). The coastal town of Geraldton is situated 190km west of the project where a port facility is used for the export of mining concentrates. In addition, the Dampier to Bunbury Gas pipeline runs parallel to the Geraldton – Mt Magnet Road that lies immediately south of the project.

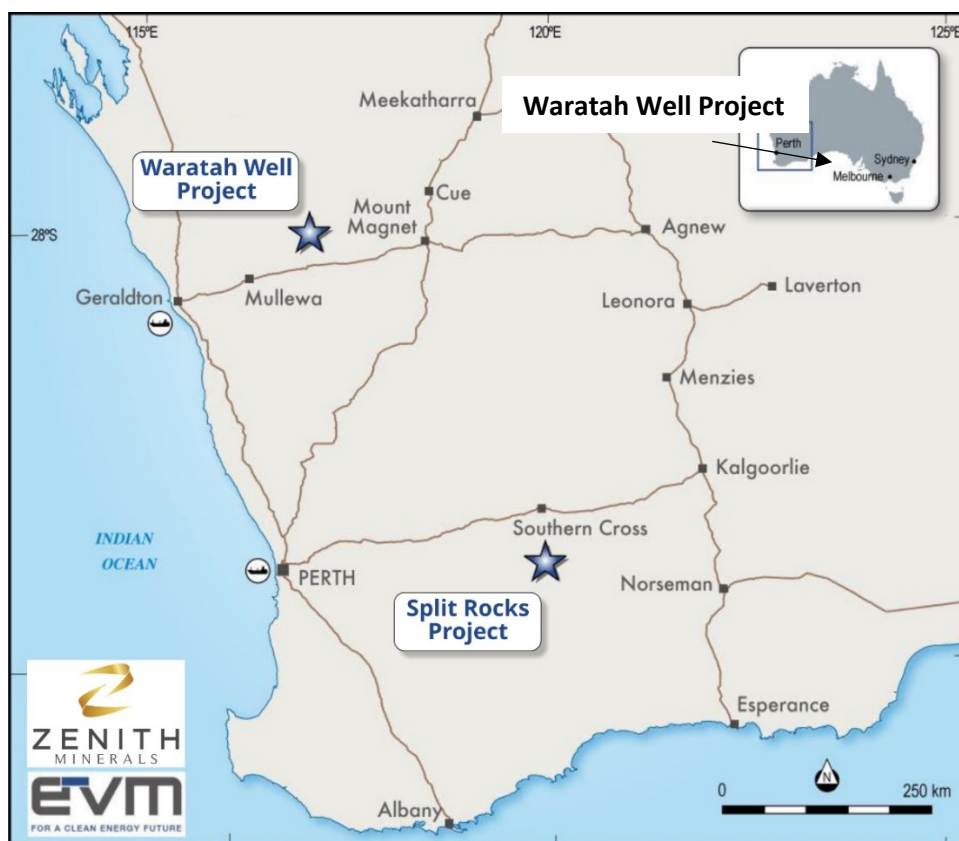


Figure 1: ZNC-EVM Joint Venture Project Locations

Tantalum and locally lithium bearing pegmatite sills and dykes crop out over a 3km x 2km area (Figure 2) with a range of dips from 60° to flat lying and thickness from 0.5m to 21m (Figure 3) – refer to ASX Release 27-Apr-18, 30-Apr-20 and 3-Nov-21):

- Lithium rock chip sample grades up to 2.09% Li₂O in the north-western portion of the target area.
- At the north-eastern end of the pegmatite outcrop area 14 closely spaced stacked dykes occur where surface composite rock chip sampling has returned tantalum grades including 262, 299, 360, 366, 421 & 573 ppm Ta₂O₅; this zone is open ended to N, NE & SE where it runs under surface soil cover.
- A second area of dykes returned similarly high tantalum values such as 207, 250, 323, 518, 616, 1184 ppm Ta₂O₅.
- A third zone of narrower dykes occurs in the northwest of the pegmatite belt but with very high grades of 708, 995, 1007, 1166 and 1221 ppm Ta₂O₅.

The key lithium target is to drill for blind lithium spodumene mineralisation beneath the tantalum bearing dykes a geological architecture similar to that noted at the Bald Hills lithium mine (formerly owned by ASX:TAW) – refer to Figure 4. A similar picture is also noted at Liontown's (ASX:LTR) Kathleen Valley lithium project (Figure 4) whereby relatively narrow surface pegmatite dykes merge at depth to form a thick flat lying lithium spodumene rich sill.

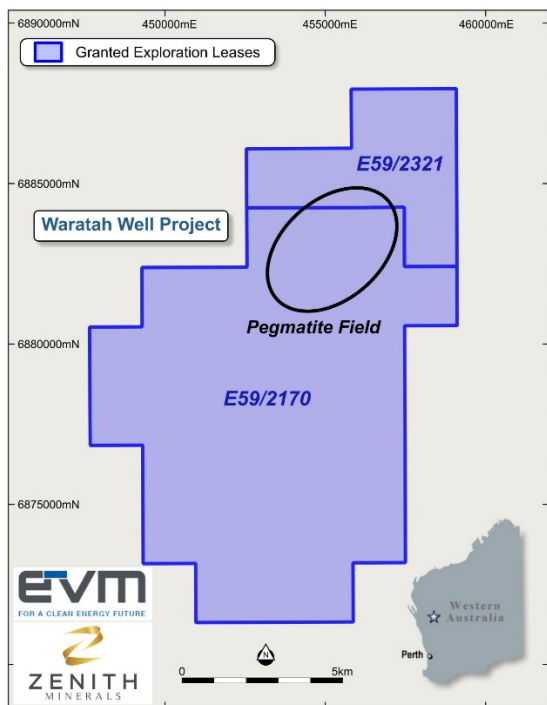


Figure 2: Waratah Well – Tenement Map



Photo of RC Drill Rig at Waratah Well

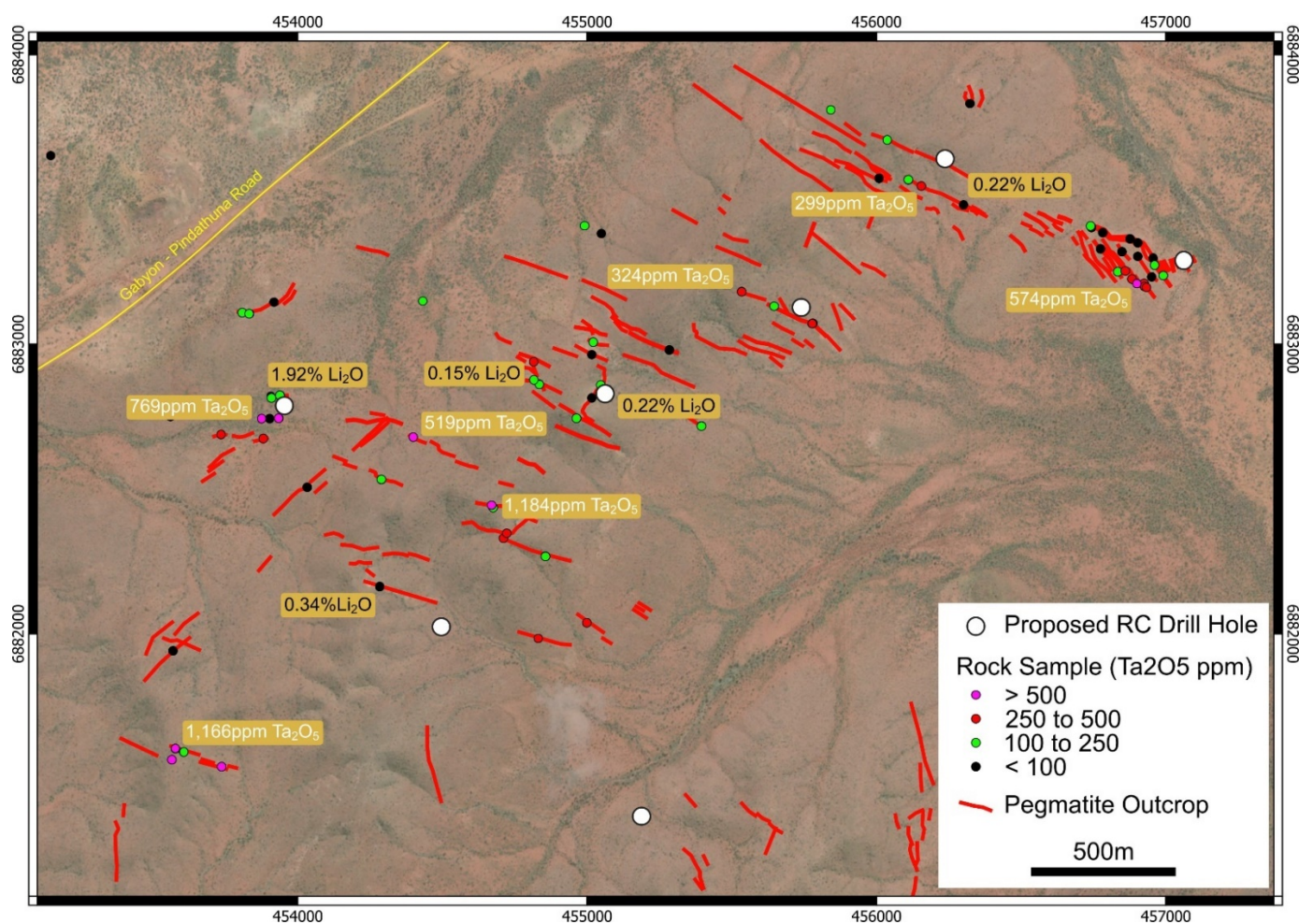
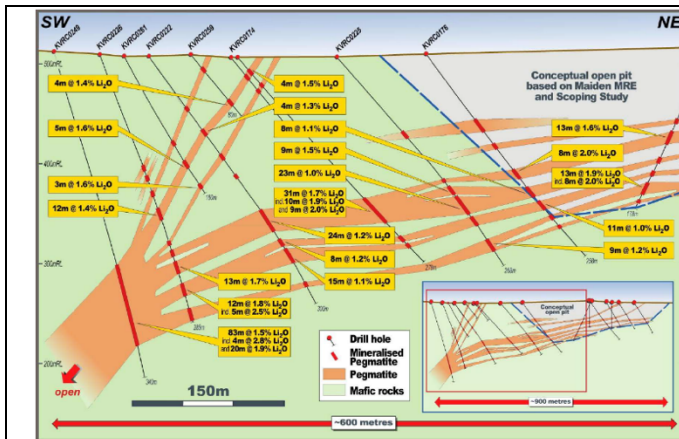
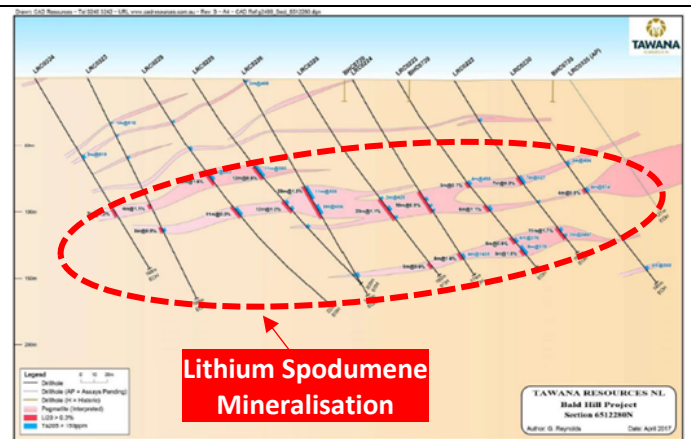


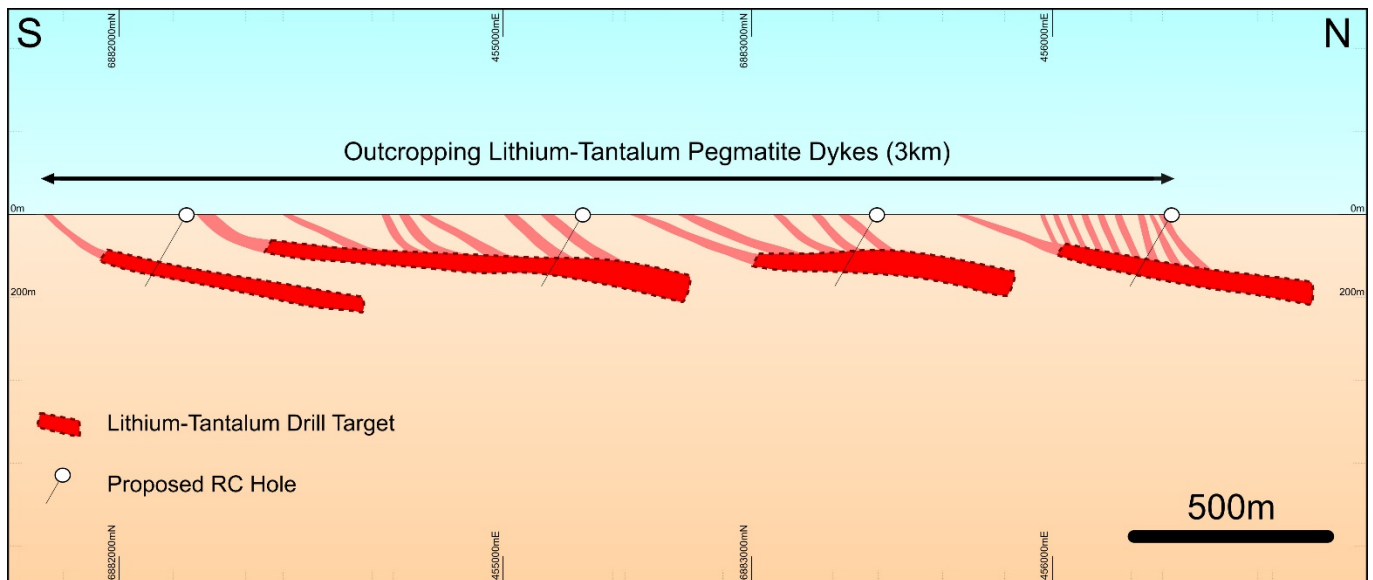
Figure 3: Plan of the Waratah Well Pegmatite Field Showing High-Grade Tantalum and Lithium Rock Chip Results and Planned Drill Hole Locations



Cross Section of Kathleen Valley Lithium Project Target Comparative – Thick Flat-Lying Lithium Pegmatite Sills below Narrow Near Surface Pegmatite Dykes – **Not An Asset of the Company** (LTR – ASX Release 9-Jul-19)



Cross Section of Bald Hills Lithium Project Target Comparative – Thick Flat-Lying Lithium Pegmatite Sills below Narrow Near Surface Tantalum Rich Pegmatite Dykes – **Not An Asset of the Company** (TAW – ASX Release 9-Apr-17)



Schematic Long Section Orientated NE-SW of Zenith's Waratah Well Pegmatite Field with Conceptual Lithium Drill Target (Dark Red Polygons) Below Surface Outcrop of Lithium-Tantalum Pegmatite Dykes (Pink Polygons). Note: Pegmatite dyke locations are based on surface geological mapping and surface structural measurements

Figure 4: Waratah Well Project Lithium Pegmatite Drill Target and Target Comparatives

Drilling of the total program is anticipated to take approximately 2 weeks, with assay results available some 8 weeks thereafter.

ZNC-EVM LITHIUM JOINT VENTURE

The ZNC-EVM Lithium Joint Venture was announced to the ASX on 13 January 2022. Key commercial terms of the new lithium joint venture include:

- EVM may earn a 60% interest in the lithium rights in two initial 100% owned Zenith projects Waratah Well and Split Rocks by sole funding the completion of a feasibility study within 24 months, with Zenith retaining a 40% project share.

- On and from completion of a feasibility study, Zenith and EVM will form a joint venture in respect of the project lithium rights. EVM will sole fund expenditure to a decision to mine, following which the parties will be required to fund future joint venture expenditure in accordance with their respective percentage shares.
- EVM must arrange all financing for the development, construction and commissioning of any future mine including Zenith's share. Zenith must repay its proportionate share of the project finance including interest from the sale of its proportionate share of minerals produced.
- EVM to spend a minimum of A\$7M on exploration on the projects, in 24 months, before being able to voluntarily withdraw provided that if EVM does not complete a feasibility study within 24 months it will be deemed to have withdrawn and will not earn an interest in the project lithium rights.

ABOUT EVM

EV Metals Group (EVM) is focused on becoming a global leader in battery chemicals and technology for a clean energy future. EVM will produce high purity chemicals and cathode active materials required in rechargeable lithium-ion batteries used in electric vehicles and renewable energy storage. We are committed to clean energy for future generations.

EVM's aim is to build a global battery chemicals and technology business which is now at the stage of completing front end engineering and design for the development of the world's first integrated Battery Chemicals Complex in Yanbu Industrial City in the Kingdom of Saudi Arabia.

ABOUT ZENITH

In addition to its lithium assets at Split Rocks and Waratah Well, Zenith Minerals Limited has a portfolio of gold and base metal assets in Western Australia and Queensland.

A new major zinc discovery at Earraheedy in Western Australia is to be fast tracked with extensive accelerated exploration programs underpinned by a recent \$40M capital raising by partner Rumble Resources Limited (ASX:RTR) (ASX Releases 28-Apr-21, 2-Jun-21, 8-Jun-21, 18-Oct-21, 13-Dec-21 and 21-Dec-21).

In Queensland an Inferred Mineral Resource 2.57Mt @ 1.76% Cu, 2.01% Zn, 0.24g/t Au & 9.6g/t Ag (ASX Release 15-Feb-15) underpins the Company's Develin Creek massive copper-zinc sulphide project. Recent 2021 drilling intersected massive copper-zinc sulphides at 2 new prospects, Wilsons North & Snook, a testament to the prospective nature of the extensive landholdings.

At Red Mountain in Queensland, drilling programs are planned to follow-up the high-grade near surface gold and silver intersected in Zenith's maiden & subsequent drill programs (ASX Releases 3-Aug-20 & 13-Oct-20, 9-Nov-20, 21-Jan-21 and 19-May-21).

Drilling returned high-grade near surface gold mineralisation at multiple targets in the Split Rocks gold project in the Western Australian goldfields (ASX Release 5-Aug-20, 2-Sep-20, 19-Oct-20, 28-Oct-20, 15-Jan-21, 11-Mar-21, 21-Apr-21, 24-Jun-21, 30-Sep-21 and 18-Jan-22).

To allow the Zenith team to focus on EV-metal project generative activities, it is planned that the non-EV-metal projects, including base metals and gold assets will be demerged into one or more new companies to be listed on ASX. Any such demerger will be subject to ZNC Board approval, tax advice favourable to the Company, shareholder, ASX, ASIC and other regulatory approvals. ZNC shareholders to benefit by way of an in-specie distribution of the shares in the new listed vehicle/s. Further updates and information on the Demerger will be provided by Zenith in due course (ASX Release 13-Jan-22).

For further information please refer to the Company's website or contact the Company directly.

Authorised for release by the Zenith Minerals Limited Board of Directors – 24 January 2022

For further information contact Zenith Minerals Limited:

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Competent Persons Statement

The information in this report that relates to Exploration Results is based on information compiled by Mr Michael Clifford, who is a Member of the Australian Institute of Geoscientists and an employee of Zenith Minerals Limited. Mr Clifford 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 Clifford consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Material ASX Releases Previously Released

The Company has released all material information that relates to Exploration Results, Mineral Resources and Reserves, Economic Studies and Production for the Company's Projects on a continuous basis to the ASX and in compliance with JORC 2012. The Company confirms that it is not aware of any new information that materially affects the content of this ASX release and that the material assumptions and technical parameters remain unchanged.

Zenith Minerals Limited (ASX:ZNC)

Zenith has a vision to maximise shareholder value through superior project generation and exploration activities.

Key Australian gold and base metal projects include:

Earaheedy	Zinc	Western Australia	25% free carry to BFS
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New major zinc discovery to be fast tracked with extensive accelerated exploration program underpinned by a recent \$40M capital raising by partner Rumble Resources Limited (ASX:RTR) (ASX Releases 28-Apr-21, 2-Jun-21, 8-Jun-21, 18-Oct-21, 13-Dec-21).

Develin Creek	Copper - Zinc	Queensland	100% Owned
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Inferred Mineral Resource 2.57Mt @ 1.76% Cu, 2.01% Zn, 0.24% Au & 9.6g/t Ag (ASX Release 15-Feb-15). Massive sulphides intersected at 2 new prospects Wilsons North & Snook.

Sulphide City (ASX Release 5-Jul-21).	34m @ 3.5% Cu+Zn incl 10m @ 6.0% Cu+Zn	29m @ 3.5% Cu+Zn incl 12.3m @ 6.7% Cu+Zn
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Red Mountain	Gold	Queensland	100% Owned
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Drilling is following-up the high-grade near surface gold and silver intersected in the maiden & subsequent drill programs (ASX Releases 3-Aug-20 & 13-Oct-20, 9-Nov-20, 21-Jan-21, 19-May-21).

Results incl:	13m @ 8.0 g/t Au 5m @ 10.4 g/t Au	15m @ 3.5 g/t Au 12m @ 4.9 g/t Au
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Split Rocks	Gold	Western Australia	100% Owned
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Zenith drilling returned - high-grade near surface gold mineralisation at multiple targets (ASX Release 5-Aug-20, 2-Sep-20, 19-Oct-20, 28-Oct-20, 15-Jan-21, 11-Mar-21, 21-Apr-21, 24-Jun-21, 30-Sep-21). Results include:

Dulcie North	32m @ 9.4 g/t Au, incl 9m @ 31.4 g/t Au	16m @ 1.3 g/t Au
Dulcie Laterite Pit	2m @ 14.5 g/t Au 14m @ 3.5 g/t Au	18m @ 2.0 g/t Au
Estrella	2m @ 9.8 g/t Au	
Dulcie Far North	5m @ 5.6 g/t Au	3m @ 70 g/t Au
Water Bore	3m @ 6.6 g/t Au	
Scotts Grey	8m @ 4.1 g/t Au	4m @ 4.8 g/t Au

Investments



43.9M shares in Bradda Head Holdings Limited (AIM)



3.88M shares in Rumble Resources Limited (ASX:RTR)



2.5M shares in American Rare Earths (ASX:ARR)



0.5M shares in Nickel-X Limited (ASX:NKL)