10th June 2021

ZENITH SECURES LARGE STRATEGIC LAND POSITION IN EARAHEEDY BASIN

- **Zenith has secured seven 100% owned exploration licences totalling 150 lineal kilometres of what is interpreted to be the prospective zinc host rock sequence within the Earaheedy Basin, Western Australia.**
- **The new exploration licence applications lie along the highly prospective Frere Formation – Yelma Formation contact and were selected based on key geological and geochemical criteria supported by previous exploration the Company has completed within the basin for both zinc and manganese.**
- **This strategic initiative follows on from the above-mentioned work and the recent Earaheedy Joint Venture (EJV) Zinc discovery. The EJV is held by Zenith Minerals (ZNC:25%) and Rumble Resources (RTR :75%). The EJV is managed by RTR and the exploration lease (E69/3464) appears to cover approximately 45 lineal kilometres of the prospective zinc host rock sequence.**
- **The EJV Zinc discovery is interpreted to be large scale with the upper portions drilled to date being shallow covering a projected surface area of approximately 2km by 1.2km. Work at the recent discovery is being accelerated with a 30,000m RC and DD drill program now underway. ZNC is a strong supporter of this approach.**
- **The recent technical work undertaken to date by the RTR team is suggesting a SEDEX style Zinc dominant deposit (refer to ZNC ASX Release 2-Jun-21). This interpretation will support ongoing exploration evaluation of the EJV and in time may assist with the newly acquired ZNC licences.**
- **The EJV remains the key focal point for exploration activity for at least the next six months.**

Commenting on the new Earaheedy exploration licences Chairman Peter Bird said: *"We are very pleased to have secured approximately 150km of new zinc prospective host rock sequence surrounding the EJV zinc discovery within the Earaheedy Basin via 7 new 100% owned exploration licence applications. Along with the existing Zenith tenure and the EJV, Zenith now holds rights to approximately 200km of strike of zinc prospective acreage. In time we believe that this move will prove to be both strategic and valuable. Zenith has a long history of exploration activity in the Earaheedy basin and in applying for the new exploration licences has used its prior experience and existing geological, drilling and geochemical datasets to select key landholdings it believes is highly prospective for zinc.*

It is very early in the journey of the EJV zinc discovery with mineralisation remaining unconstrained both along strike and down dip. The current 30,000m, 4 drill rig program that is fully funded by our JV partner will be a 10-fold increase in drilling activity on the project and has the ability to define more mineralisation on the Joint Venture property and hence add significant value to our existing business."

ZENITH MINERALS

Corporate Details

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

Issued Shares	294.4M
Unlisted options	16.55M
Mkt. Cap. ($0.235)	A$69M
Cash (31-Mar-21)	A$3.1M
Debt	Nil

Directors

Peter Bird	Exec Chair
Michael Clifford	Director-CEO
Stan Macdonald	Non-Exec Director
Julian Goldsworthy	Non-Exec Director
Graham Riley	Non-Exec Director
Nicholas Ong	CFO & Co Sec

Major Shareholders

Directors	~7%
HSBC Custody. Nom.	10.4%
BNP Paribas. Nom.	5.0%
Citicorp Nom	4.3%
Granich	4.1%

Our Vision

Zenith has a vision to build a gold and base metals business with a team of proven project finders.

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

Contact Us

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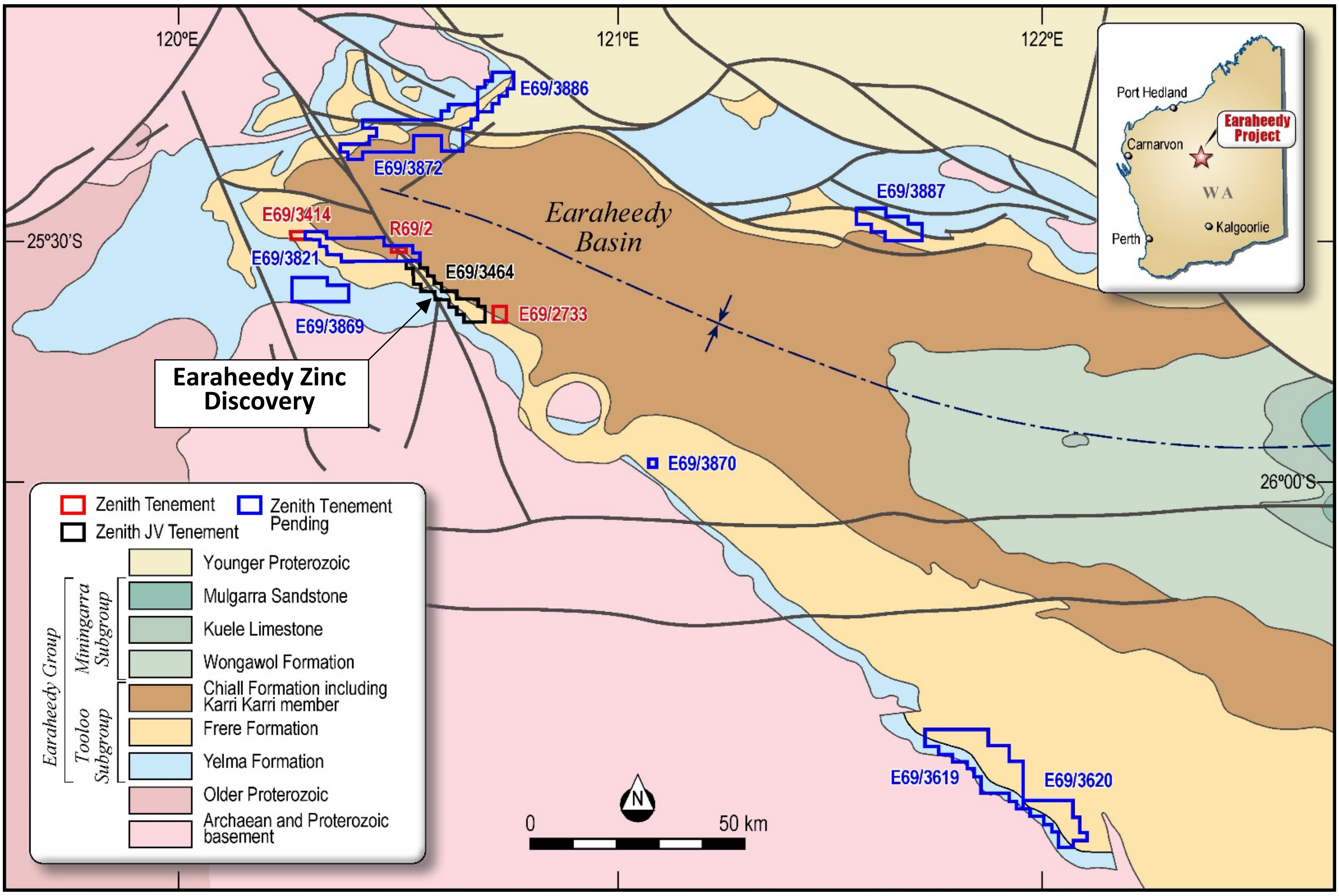

Figure 1: Zenith Landholdings in the Earaheedy Basin

Status of the Earaheedy Joint Venture (EJV)

The Earaheedy zinc discovery is located on a Joint Venture between Zenith Minerals Limited (ASX:ZNC) and Rumble Resources Limited (ASX:RTR) whereby ZNC's 25% interest is free carried to the completion of a Bankable Feasibility Study.

Recently reported drill results (ASX Releases 19-Apr-21 & 2-Jun-21) show widespread zinc and lead mineralisation over a surface area of 2km x 1.2km. Results previously reported include:

- EHRC044 – 21m @ 4.31% Zn + Pb, incl. 10m @ 5.02 % Zn + Pb from 67m
- EHRC050 – 34m @ 4.22% Zn + Pb, incl. 17m @ 6.65 % Zn + Pb from 73m
- EHRC055 – 11m @ 3.98% Zn + Pb, incl. 6m @ 6.57% Zn + Pb, 16 g/t Ag from 69m
- EHRC059 – 18m @ 3.06% Zn + Pb, incl. 9m @ 5.3% Zn + Pb, 6.6 g/t Ag from 64m
- EHRC061 – 23m @ 4.1% Zn + Pb, incl. 17m @ 5.21% Zn + Pb, 6.2 g/t Ag from 103m

A major (30,000m) multi-rig (DD & RC) follow-up drill campaign is ramping up on site at the Earaheedy zinc discovery with the key aims of:

- Twin the significant mineralization in EHRC044 and EHRC050, to facilitate RC assay reconciliation; and preliminary metallurgical test-work.
- Scope on 500m line spacings over 12km of strike for further extensions and discoveries between the Chinook and Magazine Prospects.
- Test the potential higher-grade Zn-Pb corridors associated with inferred extension faults (feeder structures).

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 – 10th June 2021

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.

About Zenith

Zenith has a vision to build a gold and base metals business with a team of proven project finders. Focus is on 100% owned Zenith projects, whilst partners progress multiple additional opportunities using third party funds.

Zenith is continuing to focus on its core Australian gold and copper projects including:

- **Red Mountain Gold Project** in Queensland (100% owned) where ongoing 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), including:
    - 13m @ 8.0 g/t Au & 3.2 g/t Ag from surface
    - 15m @ 3.5 g/t Au, incl. 2m @ 22.4 g/t Au
    - 5m @ 10.4 g/t Au, and
    - 12m @ 4.9 g/t Au

- **Split Rocks Gold Project** in Western Australia (100% owned), where recent 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-Ja-21, 11-Mar-21, 21-Apr-21), including:
    - Dulcie North: 32m @ 9.4 g/t Au, incl 9m @ 31.4 g/t Au.
    - Dulcie Laterite Pit:
        - 2m @ 14.5 g/t Au, incl. 1m @ 20.8 g/t Au,
        - 18m @ 2.0 g/t Au (EOH) incl. 1m @ 23.7 g/t Au &
        - 14m @ 3.5 g/t Au
    - Estrela Prospect: 2m @ 9.8 g/t Au (open to north & south)
    - Dulcie Far North: 5m @ 5.6 g/t Au incl. 4m @ 6.8 g/t Au
    - Water Bore: 3m @ 6.6 g/t Au

- **Develin Creek Copper-Zinc Project** in Queensland (100% owned) – maiden drill test of the new Snook copper target located 30km south of Zenith's JORC resources discovers massive copper-zinc sulphides (ASX Release 17-Dec-20).

- **Jackadgery Gold Project** in New South Wales (option to earn initial 90%), historic trenching returned 160m @ 1.2 g/t Au. No drilling to date. Zenith planning maiden drill test (ASX Release 10-Sep-20).

- **Earaheedy Zinc Project** in Western Australia (25% free carry to end BFS). 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).