



Zenith
MINERALS
LIMITED

Gold Projects Update

1st October 2019

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Drilling high-grade gold targets
in Western Australia

Summary

Outstanding gold & lithium portfolio in Australia & America

Significant current & upcoming exploration activity

- Zenith drilling for high-grade gold at Split Rocks – WA commenced 17th Sep 19.
- Advancing 2 x QLD gold targets to drill status, IP geophysical survey to commence shortly
- External funding for several projects spreads risk and increases exposure to success



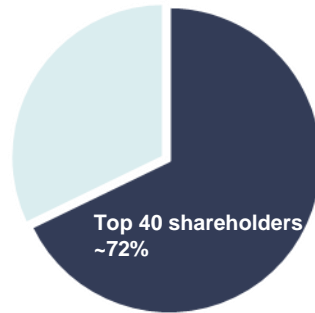
Corporate Structure

ZNC Share Price



Major Shareholders

HSBC Custody. Nom	13.4%
J P Morgan Nom.	6.8%
Granich	5.4%
Miquilini	4.3%
Abingdon	4.1%



Tight supportive register
Directors ~14%
Top 40 ex-ASX:GIR holders & UK sophisticated

Capital Structure – ASX: ZNC

Share Price (at 27 th Sep 2019)	\$0.063
Shares on Issue - ZNC fully paid ordinary	213m
Market Capitalisation	\$13.4m
Cash (30 th Jun 2019)	\$1.1m

65.3M
shares
on Issue
at IPO
2007

Limiting shareholder dilution
Lean
Tightly held
Experienced Board & Management

212.8M
shares
on issue
2019
12
years
later



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ASX:ZNC

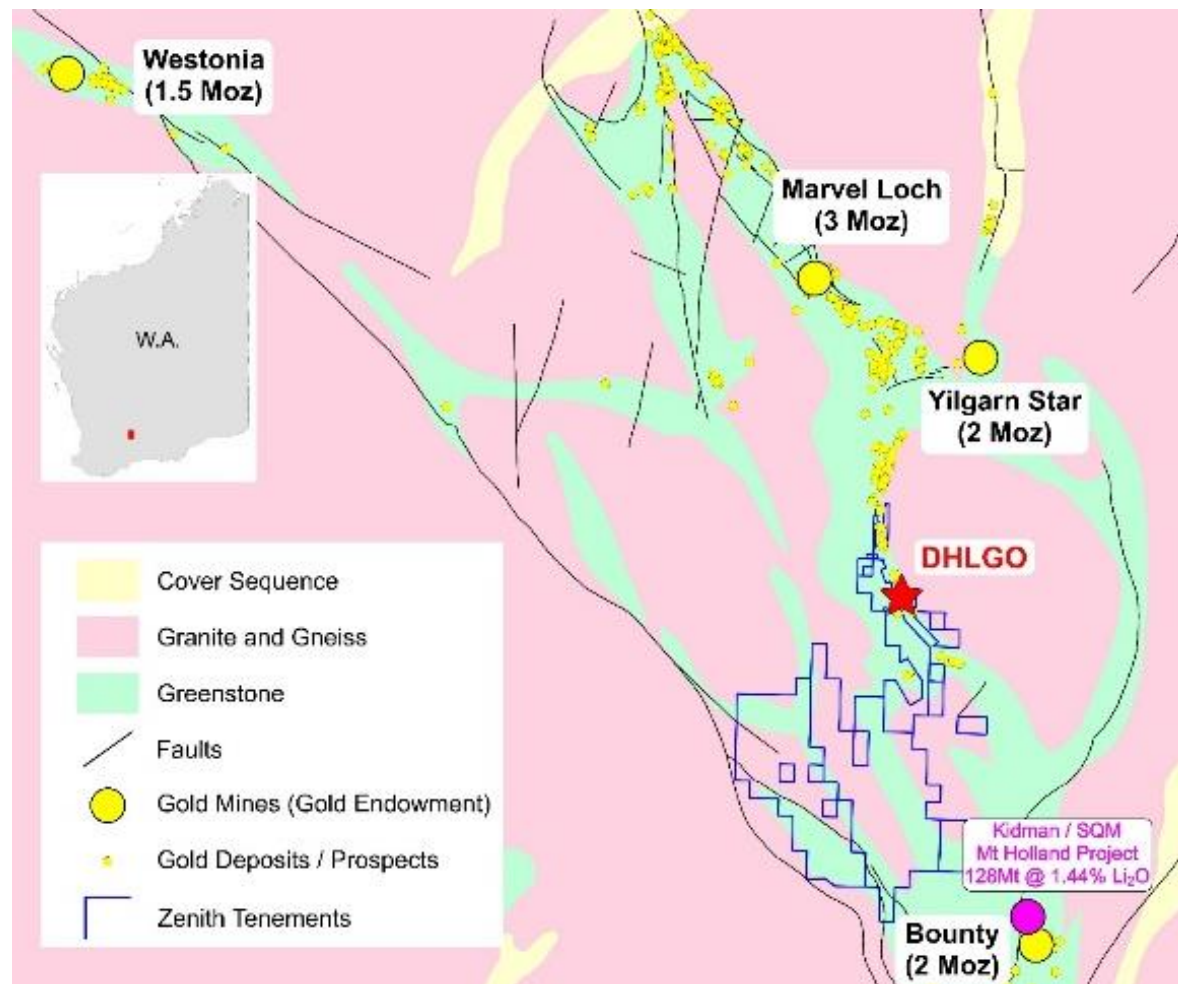
Split Rocks: Gold

Ownership: 100%
Location: WA
Commodity: Gold & Lithium
Stage: Prospects

Drilling commenced 17th Sep 19



Surrounded by major gold deposits



DHLGO = Dulcie Heap Leach Gold Operation, Zenith has subsurface rights (gold below 6m)¹

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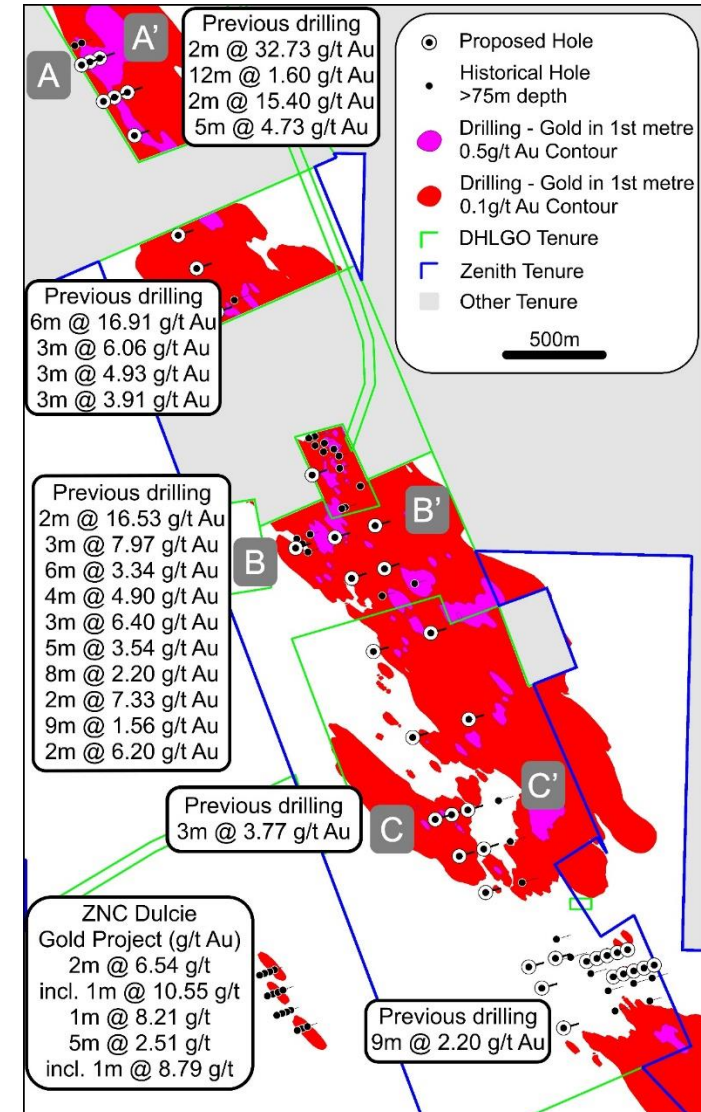
Drilling commenced

17th Sep 2109:

- 2000m (approx. 13 holes) RC
- Testing high-grade gold targets over 4km of strike
- Limited previous deeper (>75m depth) drill holes, results include¹:
- **6.0m @ 16.91 g/t Au**
- **2.0m @ 32.73 g/t Au**
- **2.0m @ 16.53 g/t Au**
- **2.0m @ 15.40 g/t Au**
- Assay results expected by mid - end Oct 19



Drilling beneath operating 3rd party heap leach gold mine



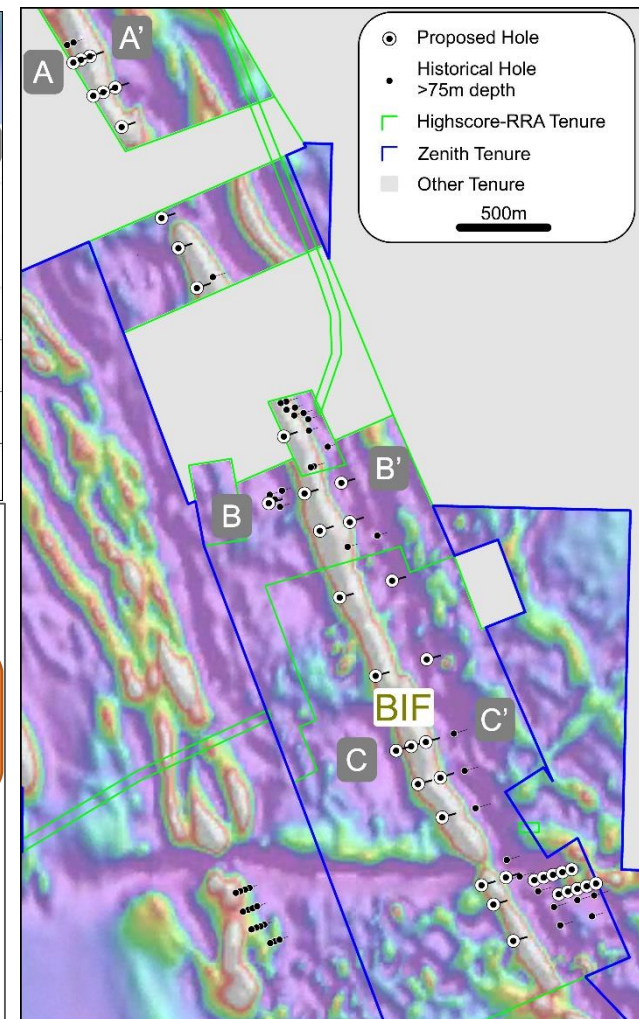
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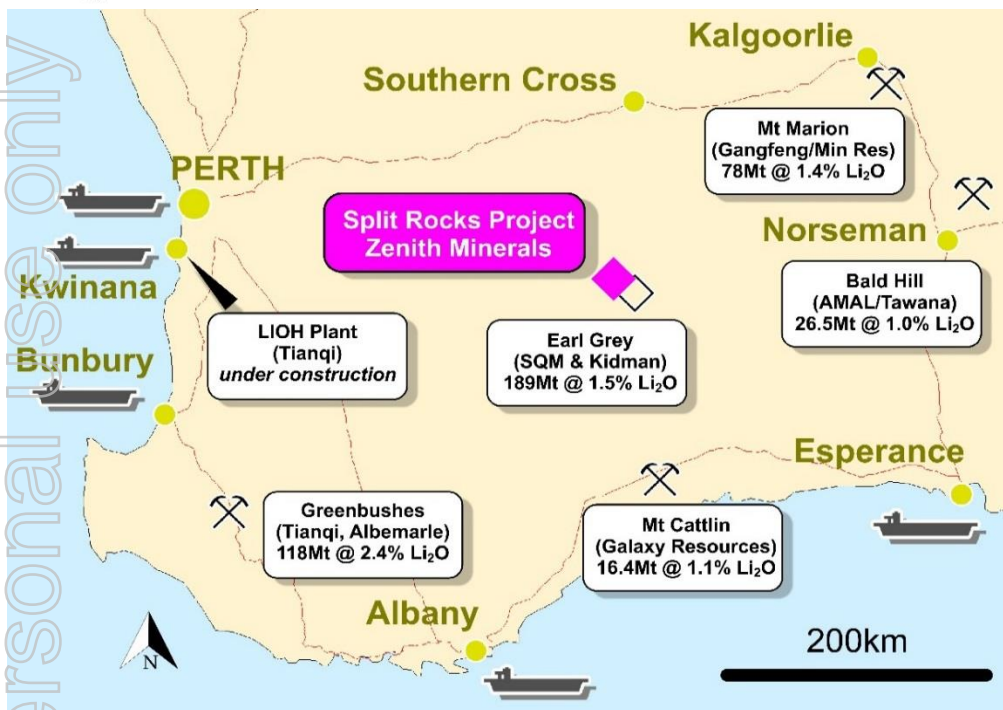
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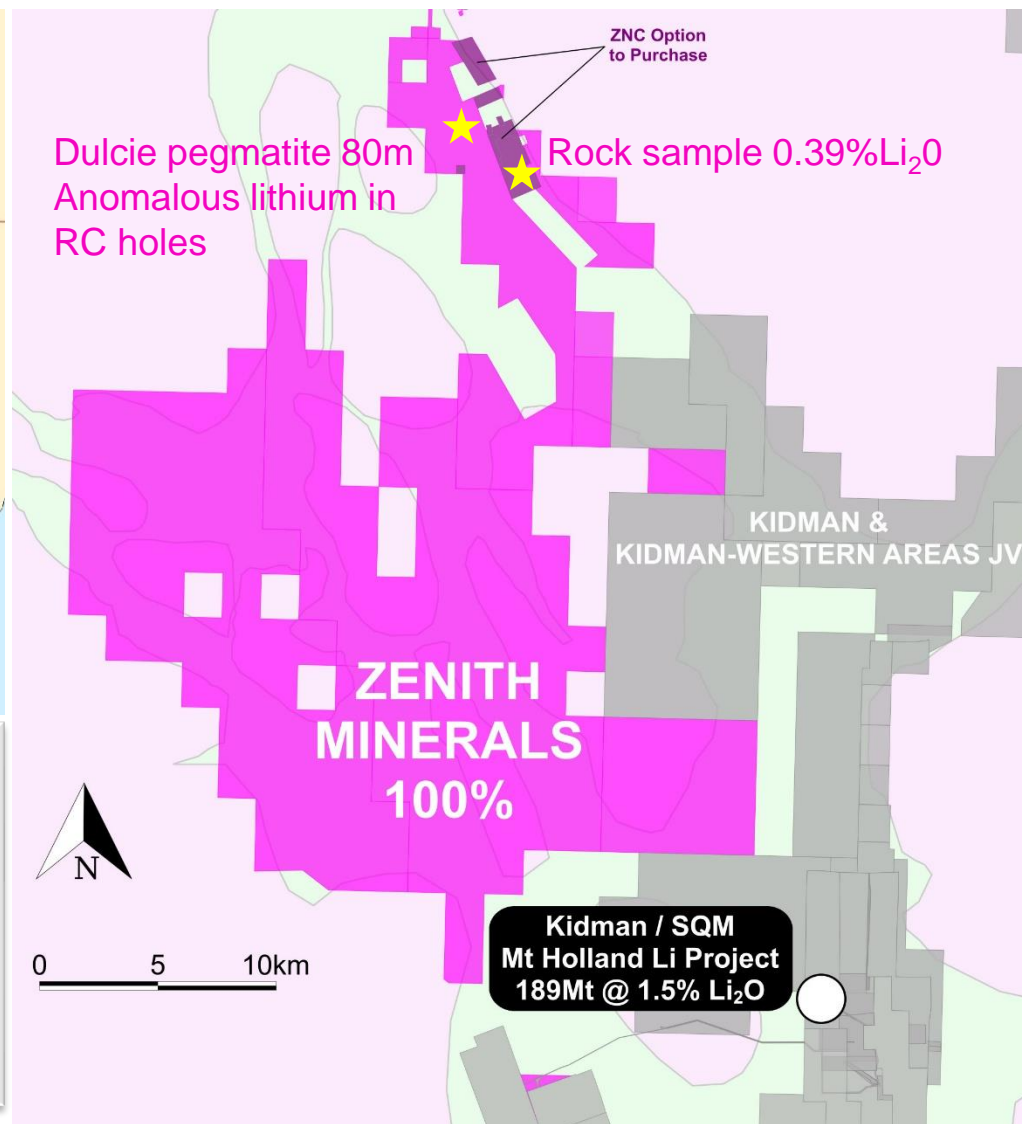
Split Rocks :Lithium

Ownership: 100%
Location: WA
Commodity: Gold & Lithium
Stage: Prospects



- Major strategic ground holding adjacent to WES / SQM's Earl Grey Lithium Deposit. Recent WES takeover of KDR values 100% of project at ~\$A1.55 billion²
- Very large area (~500km²) abundant pegmatites, Dulcie Lithium Prospect 80m thick pegmatite anomalous Li in first pass RC drilling
- Using surface geochem to screen land holding. Only 25% soil coverage to date. Soil anomalies of similar tenor to those defined by KDR - Ongoing drilling of soil targets
- Zenith - Lithium testing along with gold RC drilling – in progress

²KDR ASX Release 11th July 2019

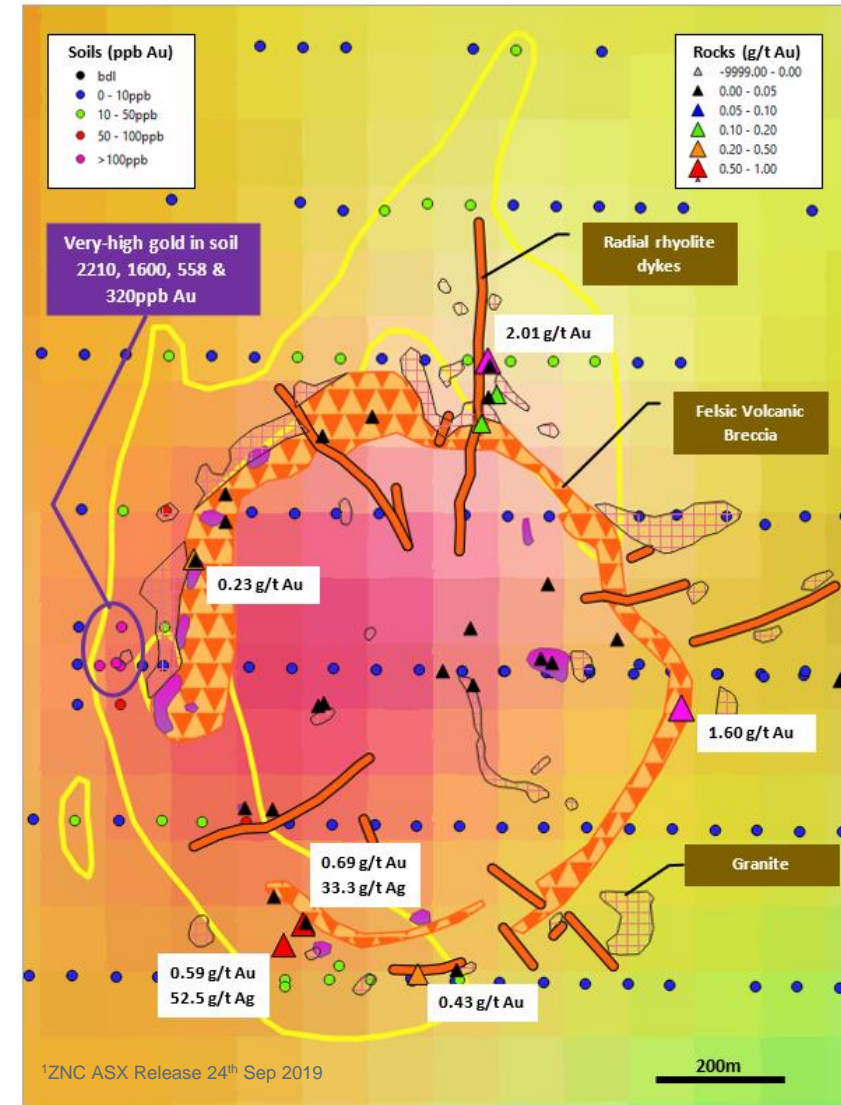


Red Mountain: Gold

Ownership: 100%
Location: QLD
Commodity: Gold & Silver
Stage: Prospect

Recent field work returned further encouraging results, including;

- New high-grade gold in soils up to 2210 ppb Au (2.2g/t Au), with supporting results of 550ppb Au and 320ppb Au. Confirms previous high-grade soil sample that returned 1600 ppb Au (1.6 g/t Au);
- New gold in rock sample results up to 1.6 g/t Au and 18.9 g/t Ag (silver).
- Detailed geological mapping by Zenith outlined a previously unknown felsic volcanic breccia complex.
- Appears gold mineralisation is focused on the margins of the breccia system; and
- Infill soil sampling & IP geophysical surveying to commence shortly to assist with drill target definition.



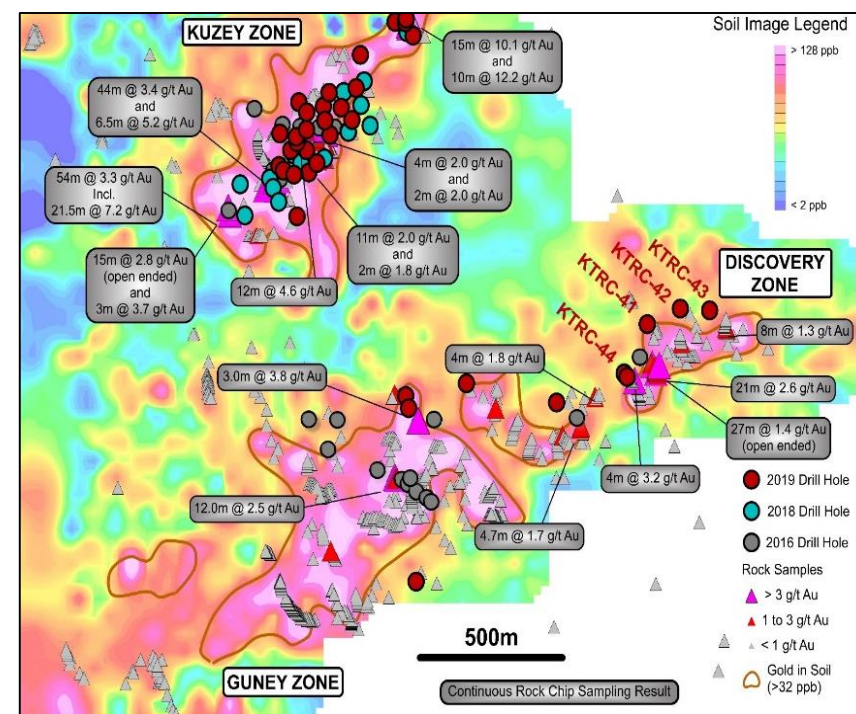
Red Mountain Soil and Rock Results with Geological Outlines over Radiometric Image (Total Count)



Joint Venture with Turkish affiliate of Teck ~75% / 25%, ZNC can contribute at ~25% or option to dilute to a 5% NPI

~30km south west of major new 3Moz gold discovery at Sogut (Koza)

Recent drill results include¹: **20m @ 15.6 g/t Au, 16m @ 4.7 g/t Au, 36m @ 2.1 g/t Au, 44m @ 1.9 g/t Au** (4m composite)



Awaiting Teck Program & Budget for next work phase. Zenith to contribute, dilute or divest/monetise?

¹ZNC ASX Release 20/06/19

American Lithium JV

Zenith 45%
Bradda Head Ltd initial 55%
Location: USA
Commodity: Lithium
Stage: Resource

Bradda Head

- JV manager
- Spending US\$5M on 6 lithium projects in JV with Zenith before Feb 2021

Bradda
Head
Spending
US\$5M for
55%

Zenith
45%

Zenith

- US\$5M free carry on BH JV
- 6 American lithium projects in JV with Bradda Head
- Does NOT include Australian lithium projects



- Burro Creek – maiden JORC Mineral Resource, extension drilling planned
- Wilson Salt Flat – lithium brine target ready for drill testing
- Zacatecas – lithium brine target ready for drill testing
- San Domingo – lithium pegmatite target ready for drill testing
- Pennsylvania – large lithium oil brine play



Project Generator – Value Add

Project Generation

**Strong Project Generation Skills
Feeding Project Pipeline**

Next =

USA Rare Earth Elements



Funds from
shareholders

Funds from
partners

Split Rocks
Au-Li

Red Mnt
Au-Au – Ag

Develin
Creek Cu-Zn

American
Lithium JV

Kavaklitepe
Gold JV

Earaheedy
Zinc

**Finding the Balance -
Corporate dilution versus
project level dilution**

ZNC Managed Australian Projects

**Our Aim is
Discovery**



Split Rocks Lithium & Gold

**Waratah Well –
Lithium – Fertile LCT Field**

**Develin Creek –
JORC Resource Copper-Zinc
Geochem in progress**

**Red Mountain Gold –
Mt Rawdon (Evolution) Analogue**

Tate River Gold Option

Partners Spending \$\$\$\$ on ZNC Projects

**Increased Spending
Increasing Chance of Success
Sharing Risk**



**American Li – Bradda Head JV
Major drill campaign planned**

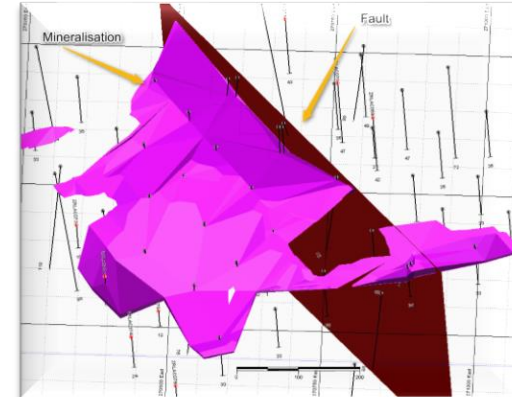
**Kavaklitepe Gold – Teck JV
Turkey**

**Earaheedy Zinc – Optioned to
ASX:RTR - Drilling planned**

**Vivash Iron - Optioned to Rio
Tinto Expl Pty Ltd - Drilling 2019**

**Talga Fault Cobalt – Optioned to
ASX:GPP – Field work Sep 2019**

Mineral Resources



Earaheedy WA - Manganese

Develin Ck QLD – Copper-Zinc

Monetise



**Mt Alexander Iron WA - Recently
divested. Further \$2.5M
payments to ZNC on production**

Split Rocks Gold & Lithium Project – WA (100% owned)

- Drilling commenced 17th Sep (approx. 2000m RC) beneath operating heap leach gold mine to test high-grade gold & lithium targets
- Previous results: **6.0m @ 16.91 g/t Au, 2.0m @ 32.73 g/t Au, 2.0m @ 16.53 g/t Au⁴**
- Major ground holding (500sq km) adjacent to KDR / SQM Earl Grey Lithium Deposit
- KDR subject to takeover by WES (values 50% of Earl Grey project at ~\$A1.55 billion²)
- 80m thick pegmatite drilled with anomalous lithium, surface sampling to 0.39%Li₂O⁵

Red Mountain Gold – QLD (100% owned)

- Felsic volcanic breccia complex
- High-grade gold in soils to 2.2g/t Au⁶
- IP Geophysical survey & follow-up soil program to commence early Oct19

Tate River Gold – QLD (option to earn 70%)

- Recent field work confirms two strike extensive targets⁷
- Previous results including: 14.1, 13.0 & 2m @ 8.7 g/t Au
- New results to 1.59 g/t Au & 74.3 g/t Ag

Active ongoing project generation by ZNC team

- REE in USA & Copper-Gold in Patterson WA (New licence application - subject to ballot)

Partners drilling ZNC projects in 2nd half 2019

- Vivash Iron - Rio Tinto Exploration Pty Ltd – drilling late 2019
- Earaheedy Zinc (identified new Zn mineralisation³) – Optioned to ASX:RTR
- Kavaklitepe Gold – High-grade gold near surface i.e. 20m @ 15.6 g/t Au¹
- Bradda Head US\$5M spend before Feb 2021 on 6 American lithium projects

¹ZNC ASX Release 20th Jun 2019

²KDR ASX Release 11th Jul 2019

³RTR ASX Release 22nd Aug 2019

⁴ZNC ASX Release 12th Sep 2019

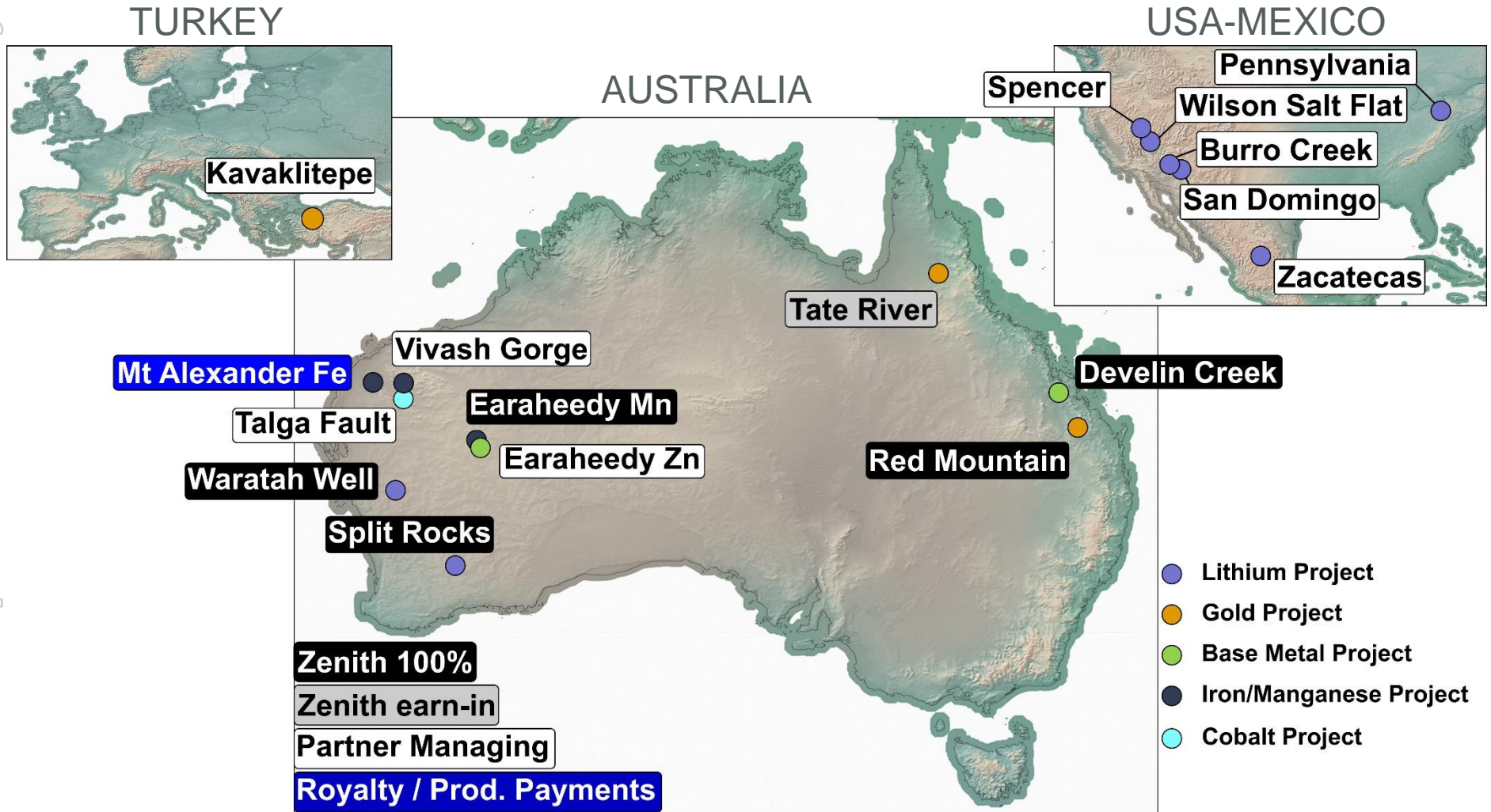
⁵ZNC ASX Release 13th May 2019

⁶ZNC ASX Release 24th Sep 2019

⁷ZNC ASX Release 1st Oct 2019

Projects – July 2019

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Disclaimer & JORC Statements

Forward looking statements

Some statements in this presentation regarding estimates or future events are forward looking statements. They involve risk and uncertainties that could cause actual results to differ from estimated results. Forward-looking statements include estimates of future production, reserve and mineralised material estimates, capital costs, and other estimates or prediction of future activities. They include statements preceded by words such as "believe", "estimate", "expect", "intend", "will" and similar expressions. Actual results could differ materially depending on such things as political events, labour relations, currency fluctuations and other general economic conditions, market prices for Zenith Minerals Limited products, timing of permits and other government approvals and requirements, change in operating conditions, lower than expected ore grades, unexpected ground and mining conditions, availability and cost of materials and equipment, and risks generally inherent in the ownership and operation of mining properties and investment in foreign countries.

Information presented is a summary

This presentation aims to provide a high level summary of various technical aspects of the Company's projects. For more details on the underlying technical parameters the reader is referred to the ASX Reports on the Zenith Minerals Limited's website: www.zenithminerals.com.au

JORC competent persons statements

The information in this report that relates to Zenith 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. 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. Material ASX releases related to the results reported in this report are listed on the respective project pages.