

### **Gold Projects Update**

1<sup>st</sup> October 2019

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 17<sup>th</sup> 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**



#### **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

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Capital Structure – ASX: ZNC	
Share Price (at 27 <sup>th</sup> Sep 2019)	\$0.063
Shares on Issue - ZNC fully paid ordinary	213m
Market Capitalisation	\$13.4m
Cash (30 <sup>th</sup> Jun 2019)	\$1.1m



Limiting shareholder dilution Lean Tightly held Experienced Board & Management



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ASX:ZNC



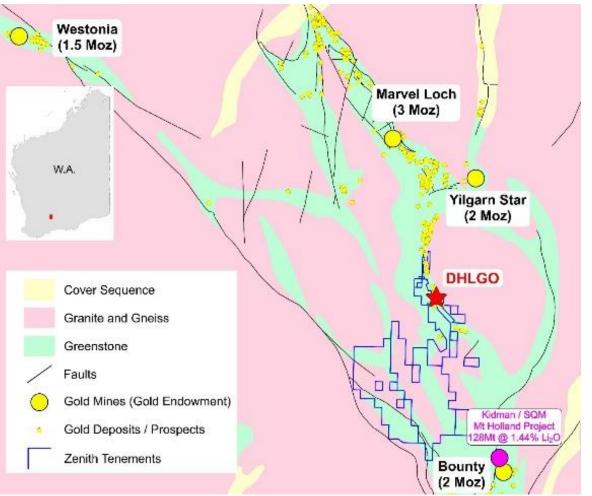
## Split Rocks: Gold

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

### Drilling commenced 17<sup>th</sup> Sep 19



Surrounded by major gold deposits



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



## Split Rocks: Gold

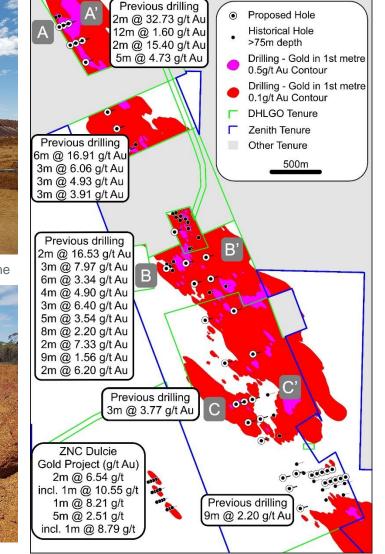
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Drilling beneath operating 3<sup>rd</sup> party heap leach gold mine



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### Drilling commenced 17<sup>th</sup> Sep 2109:

- > 2000m (approx. 13 holes) RC
- Testing high-grade gold targets
  over 4km of strike
- Limited previous deeper (>75m
  depth) drill holes, results include<sup>1</sup>:
  - > 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

<sup>1</sup> ZNC ASX Release 12<sup>th</sup> Sep 2019



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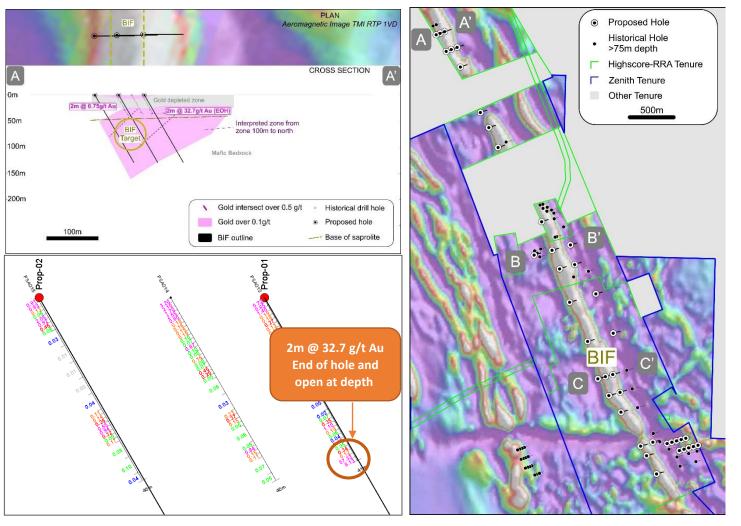
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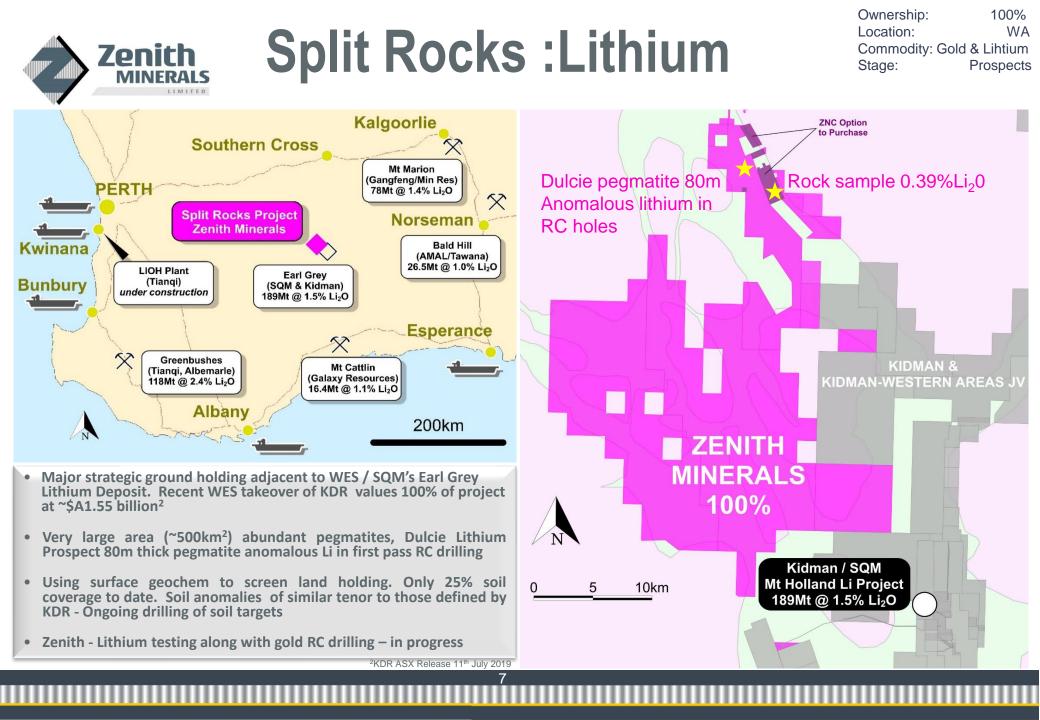
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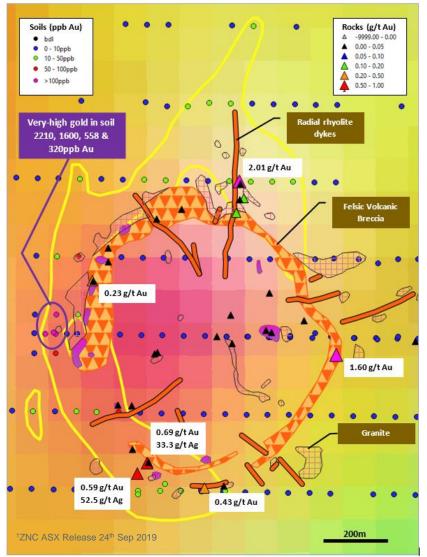
## **Red Mountain: Gold**

Ownership:100%Location:QLDCommodity:Gold & SilverStage: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.



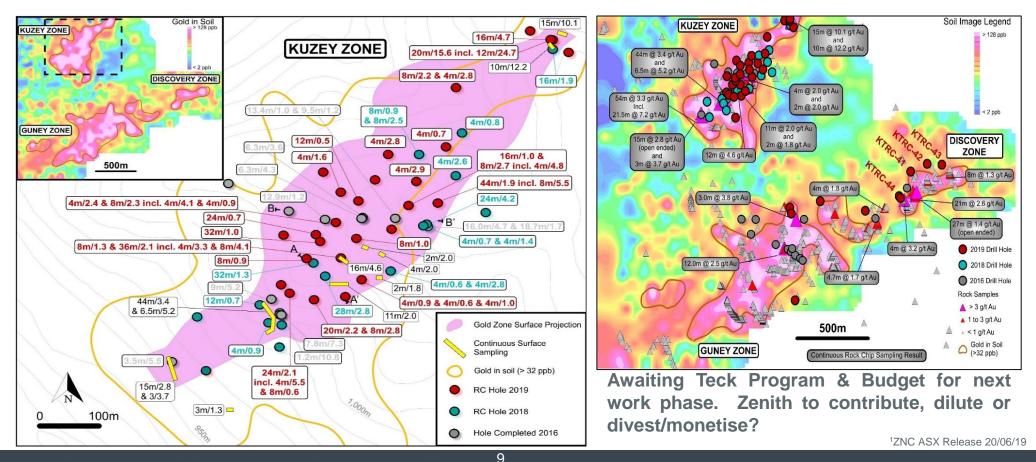
Red Mountain Soil and Rock Results with Geological Outlines over Radiometric Image (Total Count)



### Kavaklitepe: Gold

Ownership:	~25%
Location:	Turkey
Commodity:	Gold
Stage:	Prospects

- 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)





JV manager

**Bradda Head** 

Spending US\$5M on 6

Zenith before Feb 2021

lithium projects in JV with

### **American Lithium JV**

Bradda

Head

Spending

US\$5M for

55%

•

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

### 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

Zenith

45%



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### **Project Generator – Value Add**





## **Newsflow & Catalysts**

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

- Drilling commenced 17<sup>th</sup> 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 Au<sup>4</sup>
- 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 billion<sup>2</sup>)
- 80m thick pegmatite drilled with anomalous lithium, surface sampling to  $0.39\% Li_2 0^5$

### Red Mountain Gold – QLD (100% owned)

- Felsic volcanic breccia complex
- High-grade gold in soils to 2.2g/t Au<sup>6</sup>
- 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 targets<sup>7</sup>
- 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)

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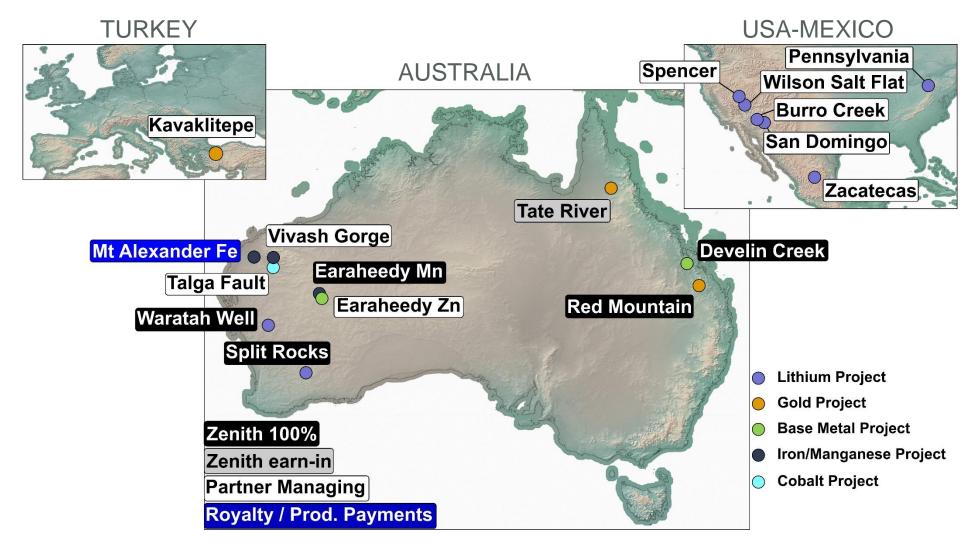
#### Partners drilling ZNC projects in 2nd half 2019

- Vivash Iron Rio Tinto Exploration Pty Ltd drilling late 2019
- Earaheedy Zinc (identified new Zn mineralisation<sup>3</sup>) Optioned to ASX:RTR
- Kavaklitepe Gold High-grade gold near surface i.e. 20m @ 15.6 g/t Au<sup>1</sup>
- Bradda Head US\$5M spend before Feb 2021 on 6 American lithium projects

<sup>1</sup>ZNC ASX Release 20<sup>th</sup> Jun 2019 <sup>2</sup> KDR ASX Release 11<sup>th</sup> Jul 2019 <sup>3</sup> RTR ASX Release 22<sup>nd</sup> Aug 2019 <sup>4</sup> ZNC ASX Release 12<sup>th</sup> Sep 2019 <sup>5</sup> ZNC ASX Release 13<sup>th</sup> May 2019 <sup>6</sup>ZNC ASX Release 24<sup>th</sup> Sep 2019 <sup>7</sup>ZNC ASX Release 1<sup>st</sup> Oct 2019



**Projects – July 2019** 



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#### **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.