



Disclaimer

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 in-situ Mineral Resources at the Develin Creek project is based on information compiled by Ms Fleur Muller an employee of Geostat Services Pty Ltd. Ms Muller takes overall responsibility for the Report. She is a Member of the AusIMM and has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity she is undertaking, to qualify as a Competent Person in terms of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012 Edition). Ms Muller consents to the inclusion in the report of the matters based on her information in the form and context in which it appears.

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.



Corporate Structure



Capital Structure – ASX: ZNC	
Share Price (at 18 th May 2018)	\$0.18
Shares on Issue - ZNC fully paid ordinary	213m
Market Capitalisation	\$38m
Cash (31 st Mar 2018)	\$2.9m

Major Shareholders	
HSBC Custody. Nom	12.8%
Granich	5.4%
Miquilini	4.3%
J P Morgan Nom.	4.1%
Abingdon	4.1%
GDR PL	3.8%



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

ASX:ZNC



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Board & Management

History of technical & commercial success

Mike Joyce - Non-Executive Chairman

Geologist, substantial prior experience at Aberfoyle Resources Ltd (1980-98) then MD at Giralia Resources NL (1998-2011 - \$828m takeover). Chairman of Gascoyne Resources Ltd.

Mick Clifford - Managing Director

Geologist, >29 years experience, Billiton Australia, Acacia Resources & AngloGold Ashanti. MD of PacMag Metals Ltd (2005 – 2010 - \$50m takeover).

Stan Macdonald - Non-Executive Director

Industry veteran, founded numerous ASX listed companies including Giralia Resources NL, Director of Gascoyne Resources Ltd.

Julian Goldsworthy - Non-Executive Director

Geologist, currently Geology Manager at Gascoyne Resources Ltd. Substantial experience with Newcrest Mining & Newmont Australia (1986-2007) and Giralia Resources NL (2007-2011).

Graham Riley - Non-Executive Director

Lawyer, extensive ASX corporate experience with Giralia Resources, Buru, Entek, Red Hill Iron, Adelphi Energy & Gascoyne Resources Ltd.





Key Projects - 2018

TURKEY USA/MEXICO AUSTRALIA Spencer Wilson Salt Flat **Burro Creek** San Domingo Zacateca Gold Develin Creek Kavaklitepe JV (Turkey) ZNC 30%. New discovery: 16m @ 4.7g/t Au and 9m @ lithium Split Rocks

Cobalt

5.2g/t Au*

Split Rocks (WA-100%) 22m @ 0.06% Co & 0.70% Ni

incl: 8m @ 0.12% Co & 0.96% Ni#

Copper/Zinc

USA / Mexico JV (90%) - Five projects (brines, pegmatite & clay) fully funded by Bradda Head/Jim Mellon farm-in.

Lithium

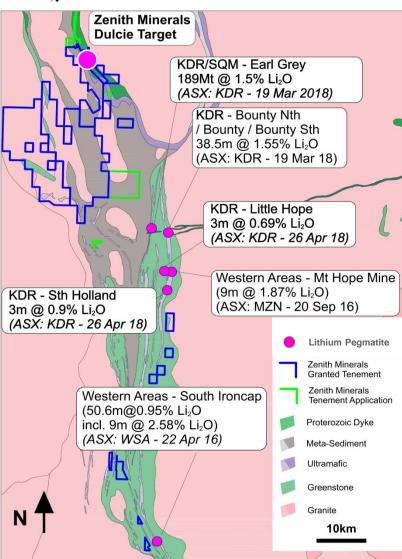
Split Rocks (WA-100%) -10km from KDR/SQM Earl Grey **Lithium Deposit**

Develin Creek (QLD -100%) - JORC massive sulphide resource 2.57Mt @ 1.76% Cu, 2.01% Zn, 0.24g/t Au & 9.6g/t Ag (Feb '15). 50km of prospective strike.

Refer to map on page 14 for complete project portfolio



Ownership: 100%
Location: WA
Commodity: Li, Co & Gold
Stage: Prospects

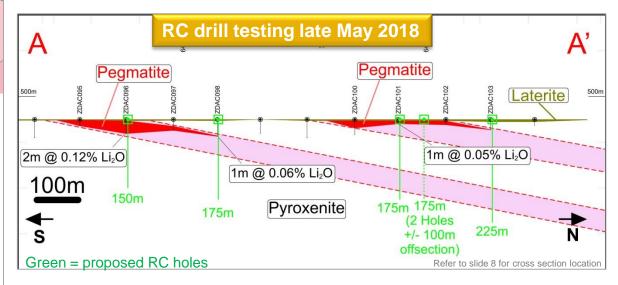


Lithium

100% owned, over ~500 km²;

Zenith major landholder in new lithium province close to KDR/SQM – Earl Grey lithium discovery;

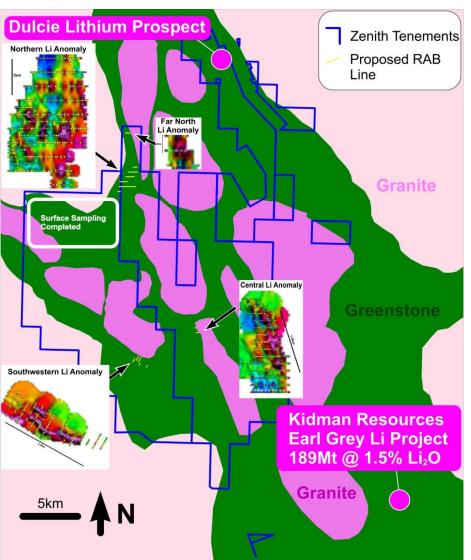
Maiden drill program in Apr 2018 intersected 2 shallow dipping pegmatites.



ZDAC096 - 2m @ 0.12%Li₂O from 28m downhole**



Ownership: 100% Location: WA Commodity: Li, Co & Gold Stage: Prospects



Lithium

First pass surface samples to date covering less than 10% of the Company's tenements, defined 4 large, coherent zones of anomalous lithium, caesium and rubidium surrounding granite bodies that may be potential source rocks for lithium bearing pegmatites**

Tenor of anomalies comparable with competitor surface results that upon drilling have returned significant bedrock lithium mineralisation in several instances.

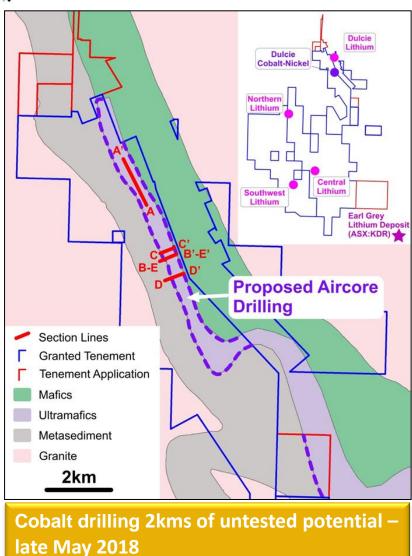
No outcrop in the areas of the lithium soil anomalies - drill testing required.

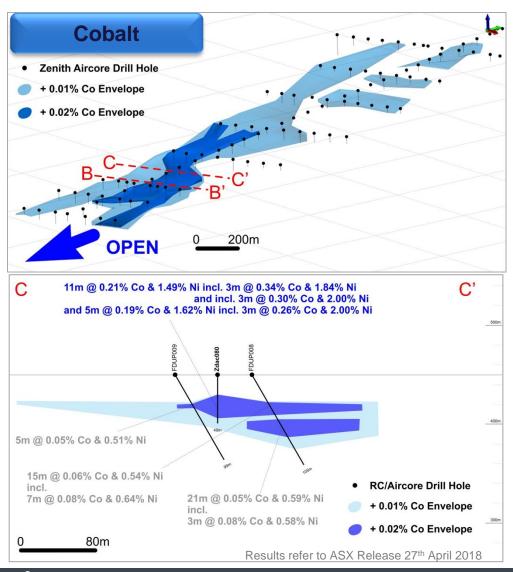
Further 1000 surface samples collected – assays awaited

Drill testing early June 2018



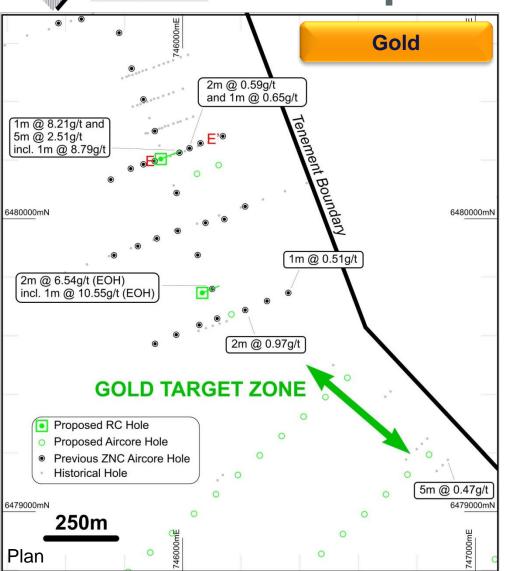
Ownership: 100% Location: WA Commodity: Li, Co & Gold Stage: Prospects

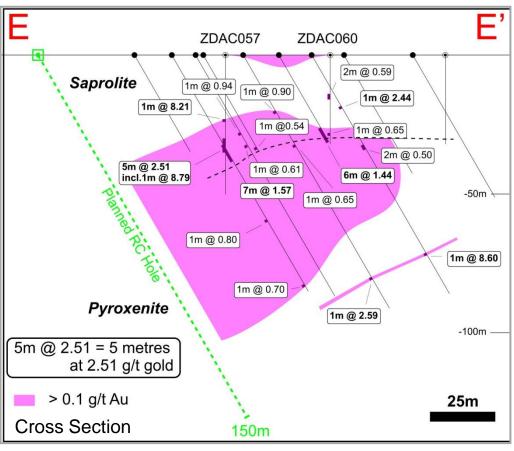






Ownership: 100% Location: WA Commodity: Li, Co & Gold Stage: Prospects





Aircore drilling >750m long target zone & RC testing down dip of shallow aircore results – late May 2018

Results refer to ASX Release 27th April 2018



USA – Mexican Lithium JV

- All 5 projects included in deal with UK billionaire Jim Mellon's Bradda Head Ltd*
- Received US\$500,000 (~A\$660,000) cash
- Zenith carried for US\$5 million (A\$6.6 million) expenditure over 3 years by Bradda Head to earn 55% project interest, one off right for Zenith to contribute at 45%, or be free carried at 30% to the end of pre-feasibility studies on two projects;



- Bradda Head to list on the London AIM exchange – planning for later in 2018
- Potential for future spin out of Zenith's lithium portfolio on ASX, once projects are more advanced.



Burro Creek Lithium

Bradda Head Ltd (Jim Mellon) initial 55%

Location: Commodity: Stage: USA Lithium

Prospects

Large scale lithium clay target under exclusive option in Arizona, USA

Very encouraging initial metallurgical testwork#

- 90% lithium recovery by acid leaching,
 with similar *acid consumption to Rhyolite Ridge;
- Up to 89% lithium recovery using calcine & water leach similar approach to Sonora.

For details refer to ZNC ASX Release 27th Sep 2017

Note - Zenith metallurgy based on bulk surface sample which may or may not be representative of clays below surface

Drilling completed – results awaited



Initial reconnaissance surface sampling results comparable to competitor lithium clay projects that area subject to feasibility studies

Lithium Nevada – 482Mt @ 0.285 %Li
TSX:LAC - \$C720M mkt cap

Tesla Gigafactory

Rhyolite Ridge – South Basin 460Mt @ 0.17% Li
ASX:GSC - \$A616M mkt cap

Burro Creek

Sonora – 719Mt @ 0.230 %Li
TSX:BCN - \$C201M mkt cap

Lithium Clay Projects – Total Measured, Indicated & Inferred Resources (Sources: BCN- NI-43-101 Report Dec 2015, LAC – TSX Release 22 Jun 2016, GSC – ASX release 31 Oct 2017)

Detailed metallurgical testwork to recommence on drill samples

Extensive outcrop shallow dipping lithium bearing clay beds with rk

^{*} Reference GSC ASX Release 1st Jun 2017.



Zacatecas - Mexico

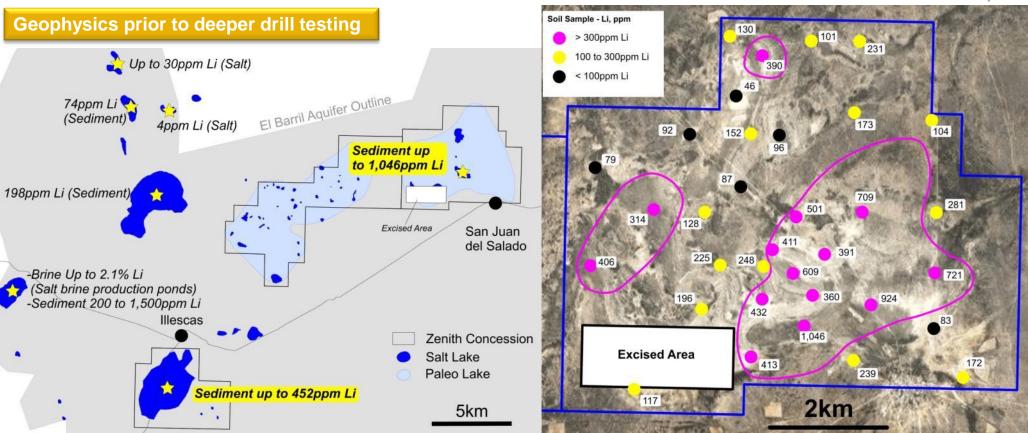
Bradda Head Ltd (Jim Mellon) initial 55%

Location: Mexico

Commodity: Lithium Stage: Prospects

- Emerging lithium brine district in central Mexico
- Surface sampling by Zenith 5km x 2km anomaly up to 1046ppm lithium*
- Brines to 2.1% lithium reported from solar evaporation ponds on adjacent salt lake confirms lithium-enriched source brines present in the district

*For details refer to ASX Release 24th May 2017





Kavaklitepe

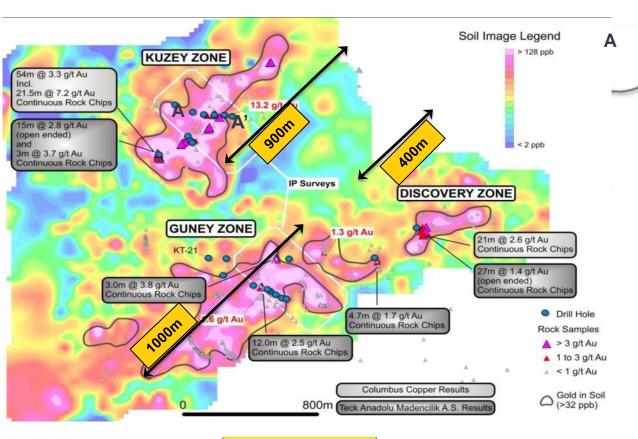
Location: Commodity: Stage:

KT-08

KT-09

Turkey Gold Drilling

Joint Venture with Turkish affiliate of Teck 70%, ~30km south west of major new 3Moz gold discovery at Sogut (Koza)



Drilling in 2018

12.9m 1.2g/t 4.3g/t 1.0g/t 1050 RL 1050 RL 1050 RL 1050 RL 1000 RL 16.0m 1.7g/t 1000 RL 16.0m

KT-06,6A

Kuzey Zone Holes KT-01 to KT-05* Flat lying, near surface oxide mineralisation;

KT-02 9.0m @ 5.2 g/t Au from surface;

KT-03 7.8m @ 7.3 g/t Au from 3.3m

KT-05 1.2m @ 10.8g/t Au poor core recovery

Kuzey Zone Holes KT-06 to KT-11* Extended oxide zone to over 400m strike, & first strong unoxidised gold:

KT-06 6.3m @ 4.3g/t Au from surface

KT-07 12.9m @ 1.2 g/t Au from surface

KT-08 13.4m @ 1.0g/t Au from 16.1m

KT-09 18.7m @ 1.7g/t Au from 50.2m

and 16.0m @ 4.7g/t Au from 82.1m

(*Refer to ASX Releases: 5^{th} Oct 2016 , 24^{th} Sep 2016, 20^{th} July 2016 & 16^{th} June 2016)



Exposure to Exciting Portfolio

Cardinals
Copper - Zinc

Mt Alexander - Magnetite Iron

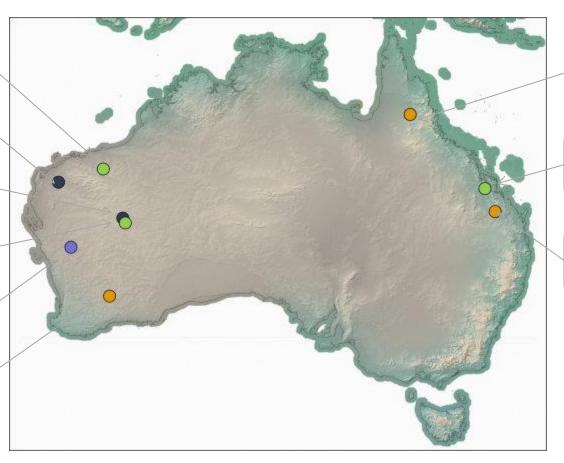
Earaheedy High- Grade Manganese

Earaheedy Zinc – option to ASX:RTR

Waratah Well Lithium Peg Target

Split Rocks Gold





Tate River Gold
Option – Trenching
5m @ 3.9g/t Au*

Develin Creek
JORC Resource
Copper-Zinc

Red Mountain Large Silver – Gold Anomaly

*Refer to ASX Release 21st Sep 2017



- 1. Proven generative skills, move fast to acquire projects, Au,Li focus;
- 2. Smart, cost-effective exploration to progress projects and add value;
- 3. Use experience and corporate skills to deliver value-add to shareholders





News Flow & Catalysts

Mav

2018 Jun

Jul

USA/Mexico Lithium – Jim Mellon/Bradda Head JV

- Burro Creek drilling completed assays awaited
- Mexican brine project geophysics late May
- New brine projects from generative study

Split Rocks

- Lithium pegmatite RC & RAB drilling
- Further lithium surface geochem (~1000 samples assays awaited)
- Cobalt-nickel aircore drilling
- Gold aircore drilling

Kavaklitepe-Teck JV

Drilling 2018 to follow up on exciting first pass 2016 drill intersections

Tate River

Gold surface geochem (~1000 samples)

Develin Creek

Copper-zinc surface geochem (~1000 samples)















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ZNC





EV's - Evolving Fast



Electric cars lined up at Kandi Electric Vehicles in Zhejiang Province. Chinese carmakers are currently leading the race to electrify

Credit: VCG via Getty Images

Source: telegraph.co.uk

Chinese manufacturer BYD (8.25% owned by Berkshire Hathaway) is the world's largest EV company and battery manufacturer.

Source: BMO 20 Feb 2018

Jaguar Land Roverall new models from 2020 will be fully electric or hybrid, a year later than Volvo's target....

Scottish government said it would phase out the need for petrol and diesel cars by 2032, eight years earlier than the UK and French targets www.theguardian.com

End 2017 - China had 440,000 public & private electric vehicle charging poles.

www.chinadaily.com.cn



Battery Adoption



Atlas Copco will continue to support all customers who rely on diesel-driven equipment but the decision to completely advance beyond diesel is a definitive move. "It's high time to look forward and leave fossil fuels behind," says Nordbrandt.

Not Just Electric Cars



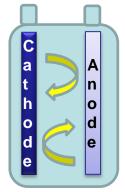
KTM Freeride E-XC 2018



World's largest lithium-ion battery officially turned on in South Australia



Zenith Lithium Battery - Chemistry



Metallic cathode

(Cobalt / nickel, Manganese / iron, phosphate / aluminium)



Lithium

Graphite anode

Graphite

Graphite anodes but lithium battery chemistry named after the cathode.

LCO LMO

LINIO

NCA NMC Lithium Cobalt Battery - electronics (cell phones, laptops etc.)
Lithium Manganese Oxide Battery (now used less in EV's)

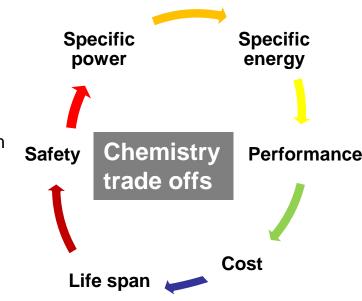
Lithium Ferro Phosphate Battery – Chinese electric vehicles

Lithium Nickel Cobalt Aluminium Battery - Tesla/Panasonic

Lithium Nickel Manganese Cobalt Battery - current focus of research

Nickel rich battery cheaper







Zenith Lithium Battery - Economics

Lithium in Batteries

12g Cell Phone (LCO)

58g Laptop (LCO)

2kg E-bike (NMC)

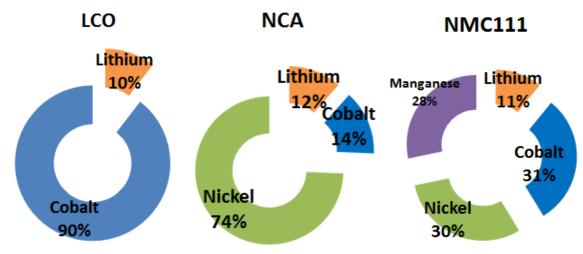
10kg PHEV (NCA/LFP/NMC)

52kg EV (NCA/LFP/NMC)

144kg E-Bus (NCA/LFP/NMC)

100t Power Storage (NMC)

Battery Metal Content by Weight (g) per kWh



Battery Metal Content by \$Value (85kwh EV battery equivalent size)

