

Zenith Minerals Limited

ABN 96 119 397 938

Master Investor Conference London - 17th March 2018





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 12 th Mar 2018)	\$0.18
Shares on Issue - ZNC fully paid ordinary	213m
Market Capitalisation	\$38m
Cash (31st Dec 2018)	\$3.1m

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 ~10%
Top 40 ex-ASX:GIR holders & UK sophisticated

ASX:ZNC



Contact Details

Level 2/33 Ord Street West Perth, WA, 6005 Mail: PO Box 1426 West Perth, WA, 6872 T: +61 8 9226 1110

F: +61 8 9481 0411

E: info@zenithminerals.com.au

W: www.zenithminerals.com.au



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.

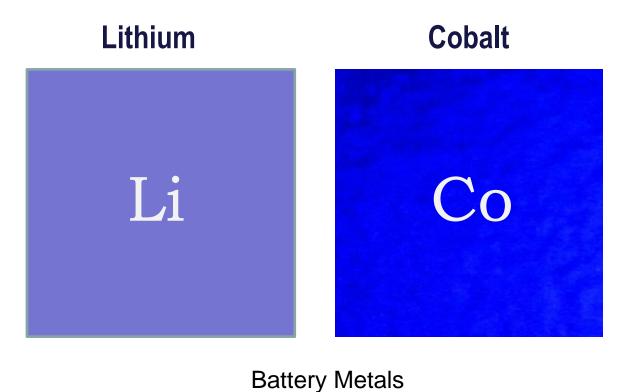
Julian Goldsworthy - Non-Executive Director

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





Why this metal mix



Au Value rises in times of

instability.

Gold



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



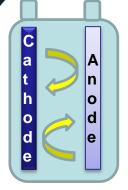
KTM Freeride E-XC 2018



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



Lithium Battery - Chemistry



Metallic cathode

(Cobalt / nickel, Manganese / iron, phosphate / aluminium) ← Lithium ions ←

Lithium

Graphite anode

Graphite

Graphite anodes but lithium battery chemistry named after the cathode.

LCO LMO

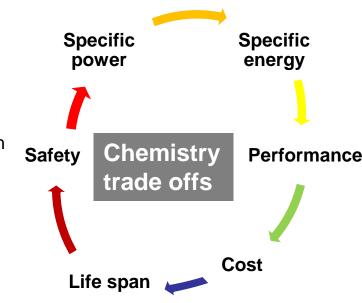
LFP

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







Lithium Battery - Economics

Lithium in Batteries

12g Cell Phone (LCO)

58g Laptop (LCO)

2kg E-bike (NMC)

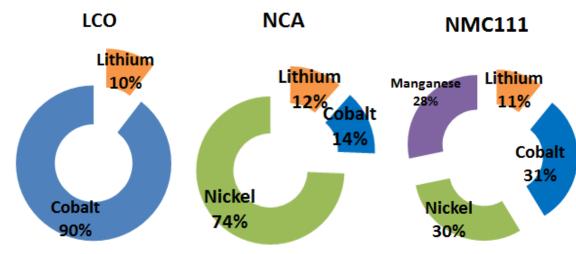
10kg PHEV (NCA/LFP/NMC)

52kg EV (NCA/LFP/NMC)

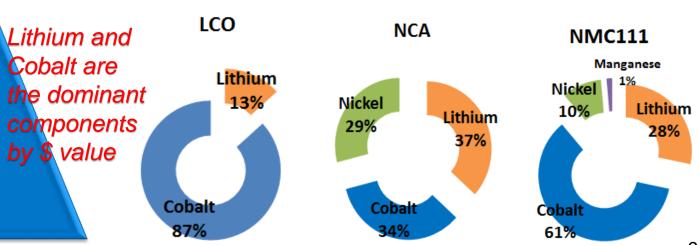
144kg E-Bus (NCA/LFP/NMC)

100t Power Storage (NMC)

Battery Metal Content by Weight (g) per kWh



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

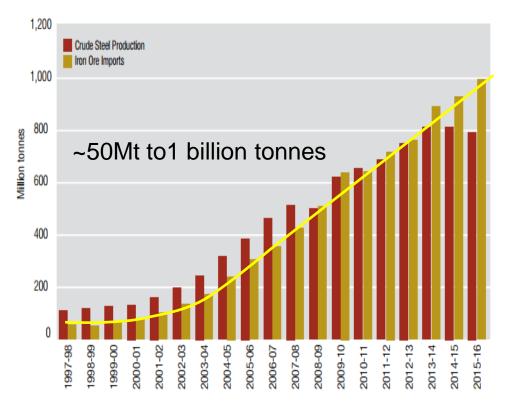




Lithium - Cusp of a new boom

Iron Ore - Actual Consumption - China

Driven by government mandated modernisation of China

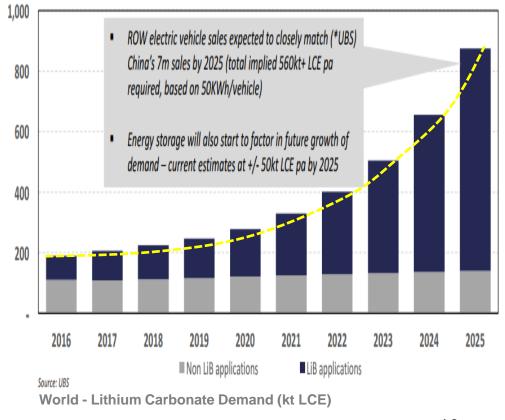


China's crude steel production & iron ore imports Source (World Steel Association)

Lithium – Forecast Consumption - World

China – "has said it wants alternative fuel vehicles to account for at least one-fifth of its 35 million annual vehicle sales projected by 2025" http://www.telegraph.co.uk.

Plus targets in France, Norway, Germany, Netherlands & Britain





Cobalt - Supply

65% of world cobalt supply comes from the Democratic Republic of Congo (DRC)



"The DRC was ranked 175 out of 182 in the 2011 World Bank's Doing Business report.

The DRC had previously been ranked second to last - 182 out of 183 countries in the 2010 Doing Business ranking and

ranked dead last in the 2008 and 2009 Doing Business rankings - 181 out of 181 countries". Source: US Department of State

Parliament has approved a new mining code that increases royalties five-fold to 10 percent, and removes a stability clause in the current law that protects miners from changes to the fiscal and customs regime for 10 years.

The code still has to be signed into law by Kabila....... Source: CNBC Feb 2018



Key Projects - 2018

TURKEY USA/MEXICO

AUSTRALIA



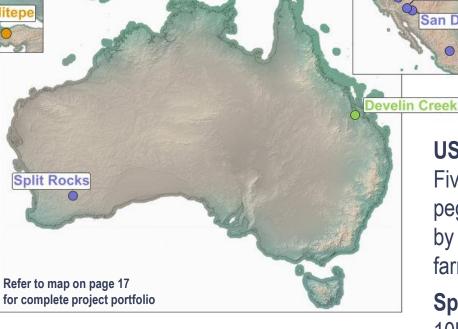
Gold

Kavaklitepe JV (Turkey) – ZNC 30%. New discovery: 16m @ 4.7g/t Au and 9m @ 5.2g/t Au

Cobalt

Split Rocks (WA-100%)

22m @ 0.06% Co & 0.70% Ni incl: 8m @ 0.12% Co & 0.96% Ni



Lithium

Wilson Salt Flat

San Domingo

Zacateca

Burro Creek

Spencer

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

Split Rocks (WA-100%) – 10km from Earl Grey Lithium Deposit

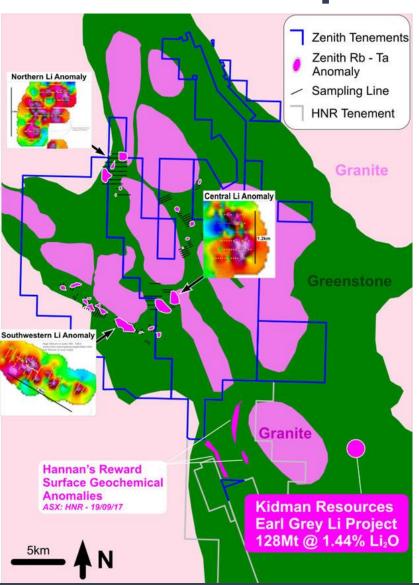
Copper/Zinc

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 prospective strike.



Split Rocks

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



Lithium

100% owned exploration licences over ~500 km²;

Zenith major landholder in new lithium province – nearby KDR – Earl Grey lithium discovery;

Many pegmatites noted in historic (Au, Ni) exploration in Zenith tenure - potential hosts to lithium mineralisation;

First pass surface samples to date covering less than 10% of the Company's tenements, defined 3 large, coherent zones of anomalous lithium, caesium and rubidium surrounding granite bodies that may be potential source rocks for lithium bearing pegmatites

Lithium infill and extensional surface sampling in progress to better define drill targets, Drilling early 2018



Split Rocks

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



100% owned exploration licences over ~500 km²;

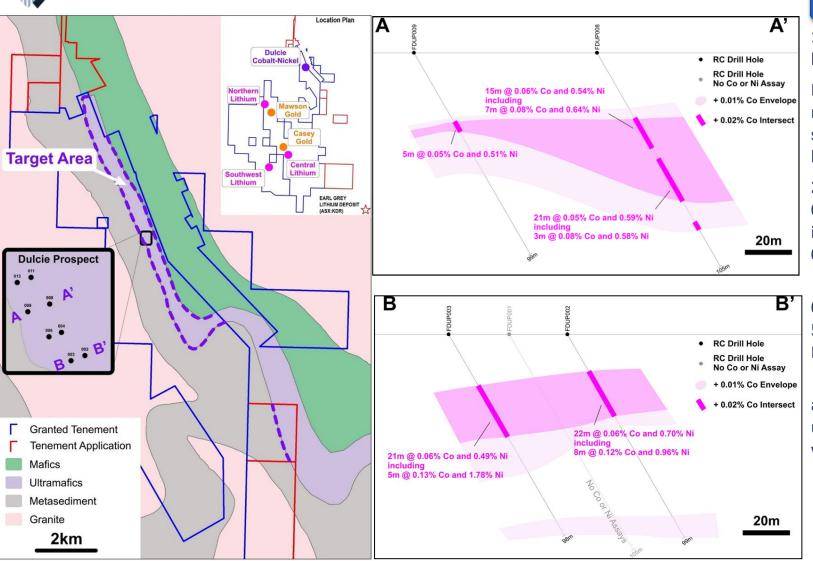
Previous exploration returned high-grade near surface cobalt and nickel historic drill results:

22m @ 0.06% Co & 0.70% nickel from 18m, incl: 8m @ 0.12% Co & 0.96% Ni:

21m @ 0.06% Co & 0.49% Ni from 25m, incl: 5m @ 0.13% Co & 1.78% Ni;

400m of strike additional up to 9kms of untested potential within Zenith's tenure;

Cobalt drilling Feb 2018 – results awaited





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 minimum spend US\$500,000 and drill at least one project before withdrawal



- Bradda Head to list on the London AIM exchange – planning for early 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) earning 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.

*Reference GSC ASX Release 1st June 2017. Note - Zenith metallurgy based on bulk surface sample which may or may not be representative of clays below surface

Permitted for resource drilling in early 2018

Detailed metallurgical testwork to recommence on drill samples

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

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)

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

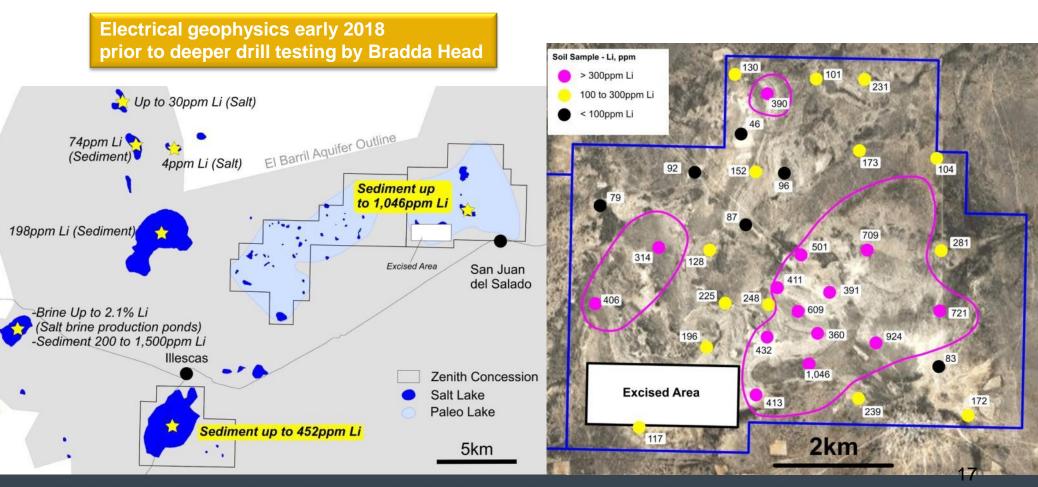
Extensive outcrop shallow dipping lithium bearing clay beds with true thickness up to 50m

Zacatecas project - Mexico

Bradda Head Ltd (Jim Mellon) earning initial 55%

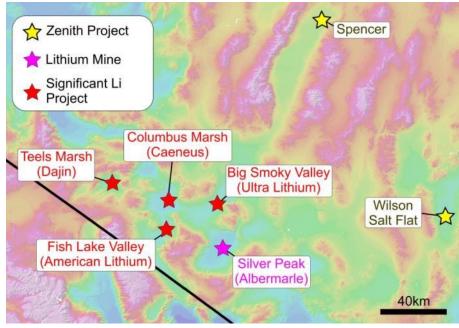
Location: Mexico
Commodity: Lithium
Stage: Prospects

- **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





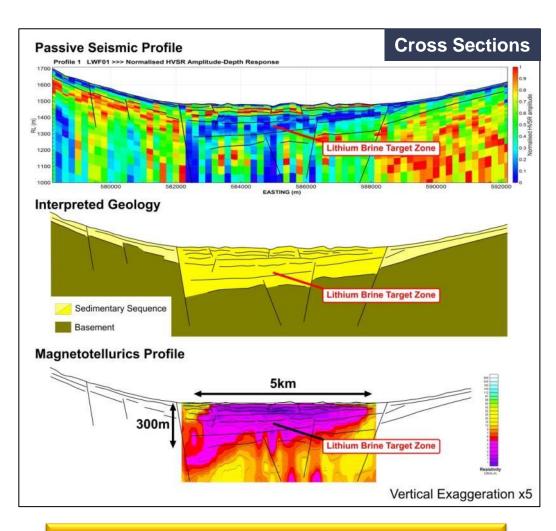
Wilson Salt Flat - Nevada



Salt lake lithium brine target in Nevada, close to Albermarle's operating Silver peak lithium mine

Zenith surface sampling shows strong lithium anomalies to 192ppm Li

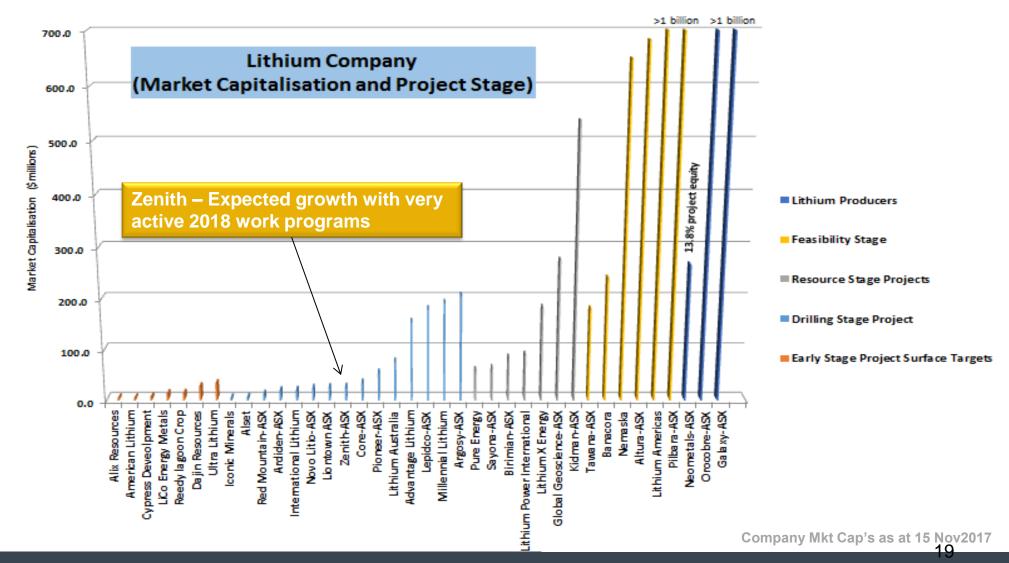
Geophysical modelling supports prospective basin architecture with thick conductive body indicative of sub-surface brine.



Permitted for drill testing by Bradda Head in 2018



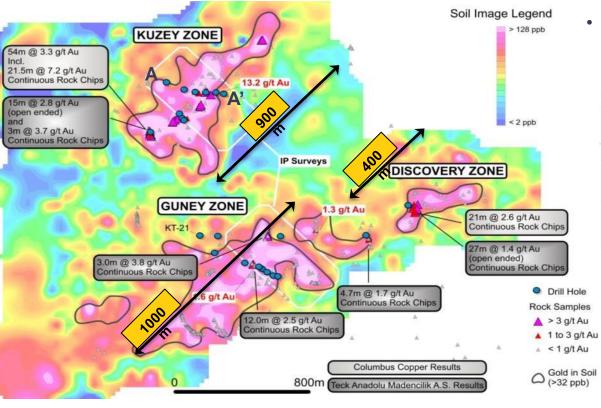
Lithium Peer Comparison



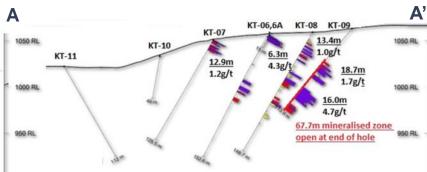


Kavaklitepe

Location: Commodity: Stage: Turkey Gold Drilling



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



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 the oxide zone to over 400m strike, plus first strong unoxidised gold intersections;

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

Drilling in 2018



In Addition ZNC Offers Exposure to Exciting Portfolio

Cardinals
Copper - Zinc

Mt Alexander - Magnetite Iron

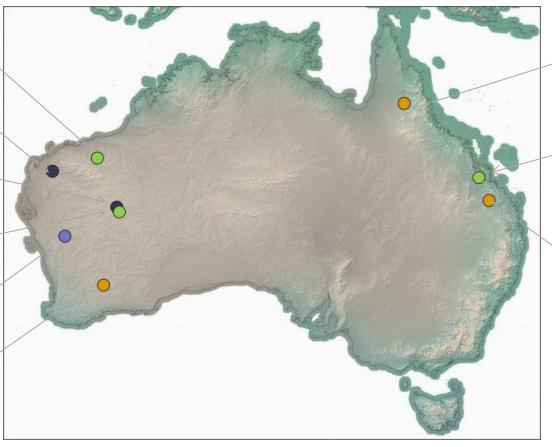
Earaheedy High- Grade Manganese

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

Zenith has a clear strategy for adding shareholder value

- 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

Kavaklitepe-Teck JV

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

Mar

2018 Apr

May



USA/Mexico Lithium - Jim Mellon/Bradda Head JV

- Mexican brine project geophysics early 2018, then drilling
- Nevada brine project drilling in early 2018
- Burro Creek metallurgy & resource drilling in early 2018
- San Domingo drilling 2018



Permitted

Permitted

Permitted





Split Rocks

• Drilled cobalt targets Feb. Further lithium geochem in progress to better define lithium drill targets









Waratah Well

Further lithium geochem in Feb to better define lithium drill targets



Assays awaited



Contact Details

For more information:

Mick Clifford Managing Director

E: mick@zenithminerals.com.au

Registered office:

Level 2, 33 Ord St

West Perth

WA 6005

Telephone:

Email:

Website:

Postal address:

Andrew Rowell

Cannings Purple

PO Box 1426

West Perth

WA 6872

+61 8 9226 1110

info@zenithminerals.com.au

Media and Broker Enquiries:

E: arowell@canningspurple.com.au

www.zenithminerals.com.au

ASX Code:

ZNC