



Zenith Minerals Limited

ABN 96 119 397 938

Investor Presentation November 2017

Cannings Purple – Investor Insight Rooftop Event



Grab sample 8.0% Li_2O

San Domingo Lithium Pegmatite - Arizona



Wilson Salt Flat Lithium Brine Target - Nevada



Burro Creek Lithium Clay - Arizona



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.



Key Projects

TURKEY

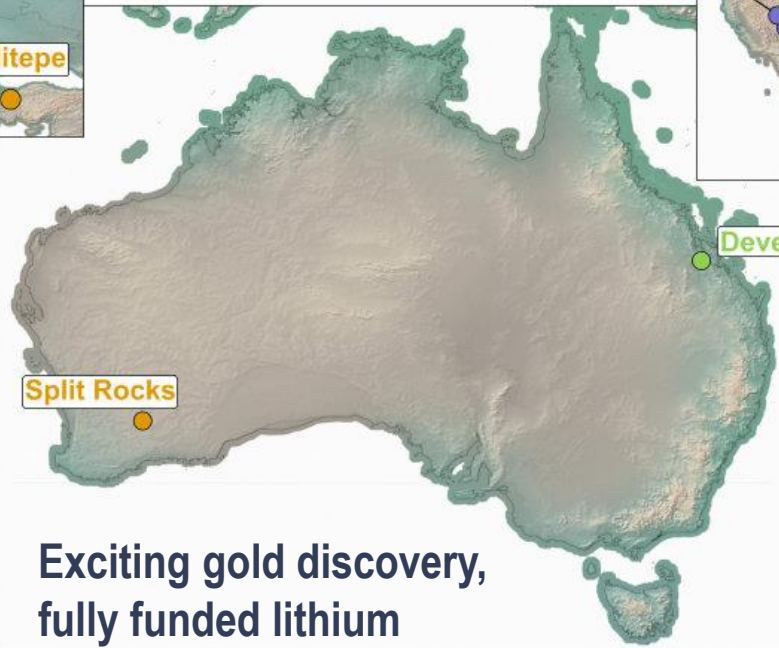


Gold

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

Split Rocks (WA-100%) – Two large gold-arsenic surface anomalies drilling Nov

AUSTRALIA



Exciting gold discovery, fully funded lithium

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.

USA/MEXICO



Lithium

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



Corporate Structure

ZNC Share Price

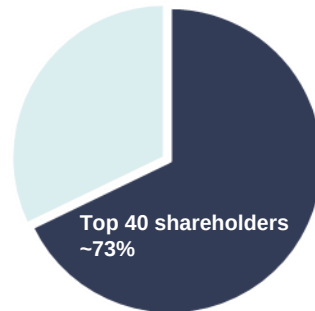


Capital Structure – ASX: ZNC

Share Price (at 15 th Nov 2017)	\$0.13
Shares on Issue ZNC fully paid ordinary	190m
Market Capitalisation	\$25m
Listed Options ZNCO (\$0.10 Exercise price, expiring 31 st Dec 2017)	23m Potential \$2.3M
Cash (Sep 2017)	\$1.3m

Major Shareholders

HSBC Custody. Nom	6.6%
City Corp. Nom.	6.2%
Granich	6.1%
Miquilini	4.1%
Abingdon	4.1%
GDR PL	3.9%



Tight supportive register
Directors ~11%
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, >28 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).

Giralia Resources Historic Share Price Chart

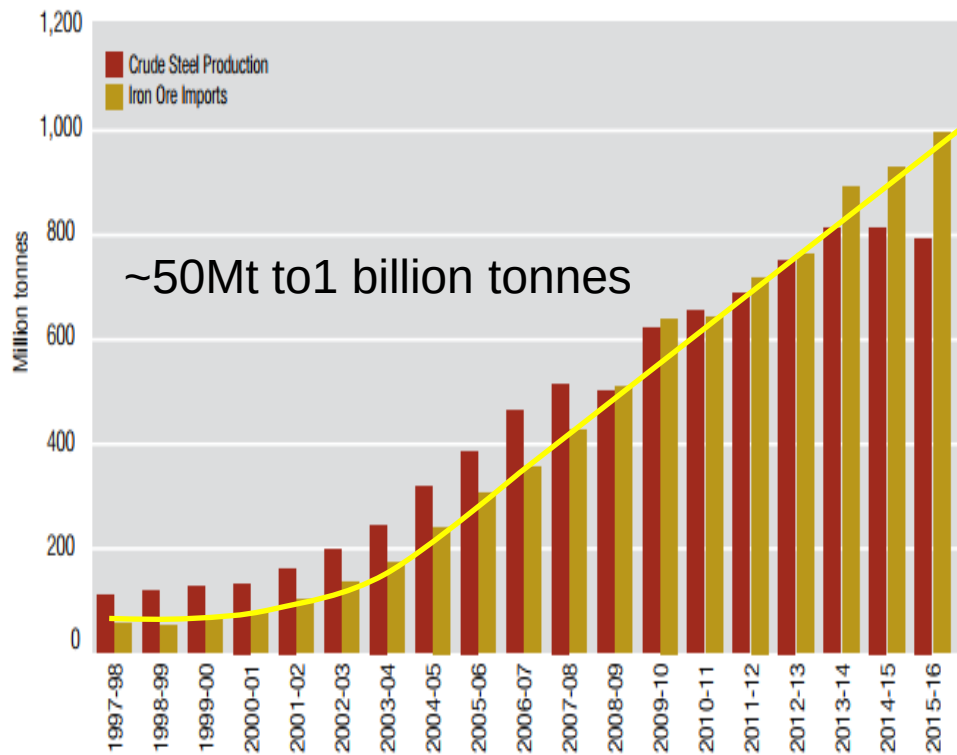




Lithium – Cusp of a new boom

Iron Ore – Actual Consumption - China

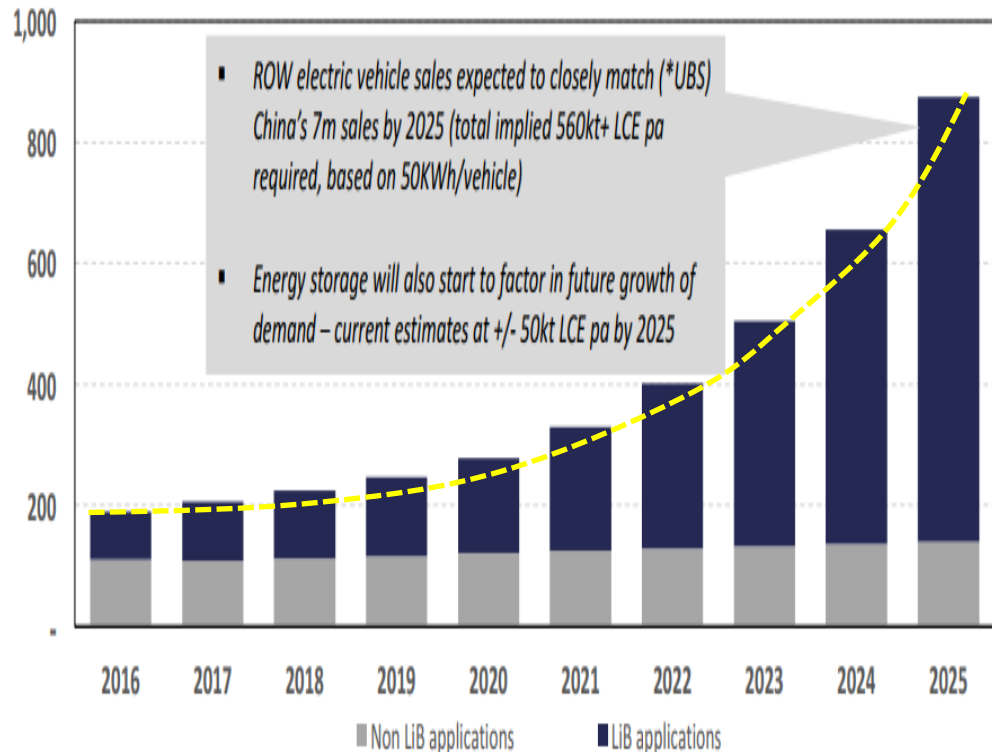
Driven by government mandated modernisation of China



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



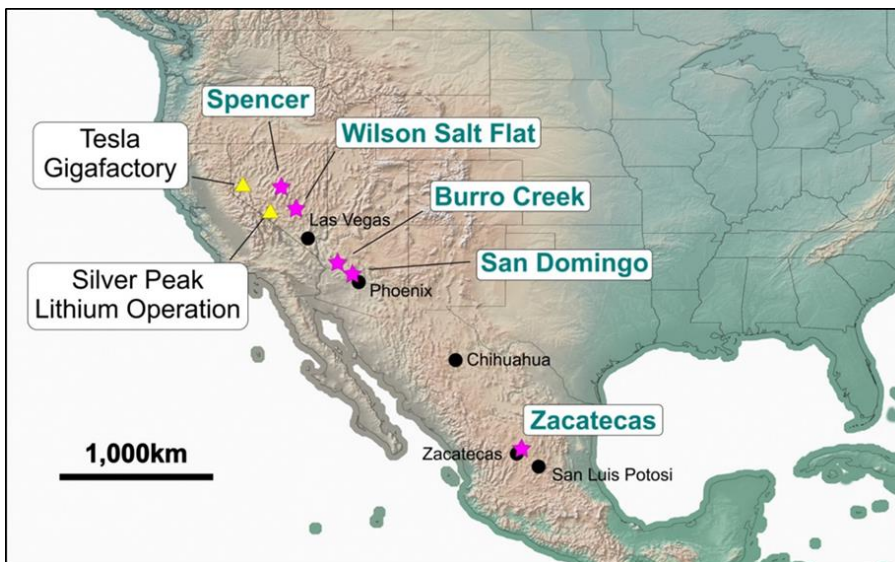
Source: UBS

World - Lithium Carbonate Demand (kt LCE)



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

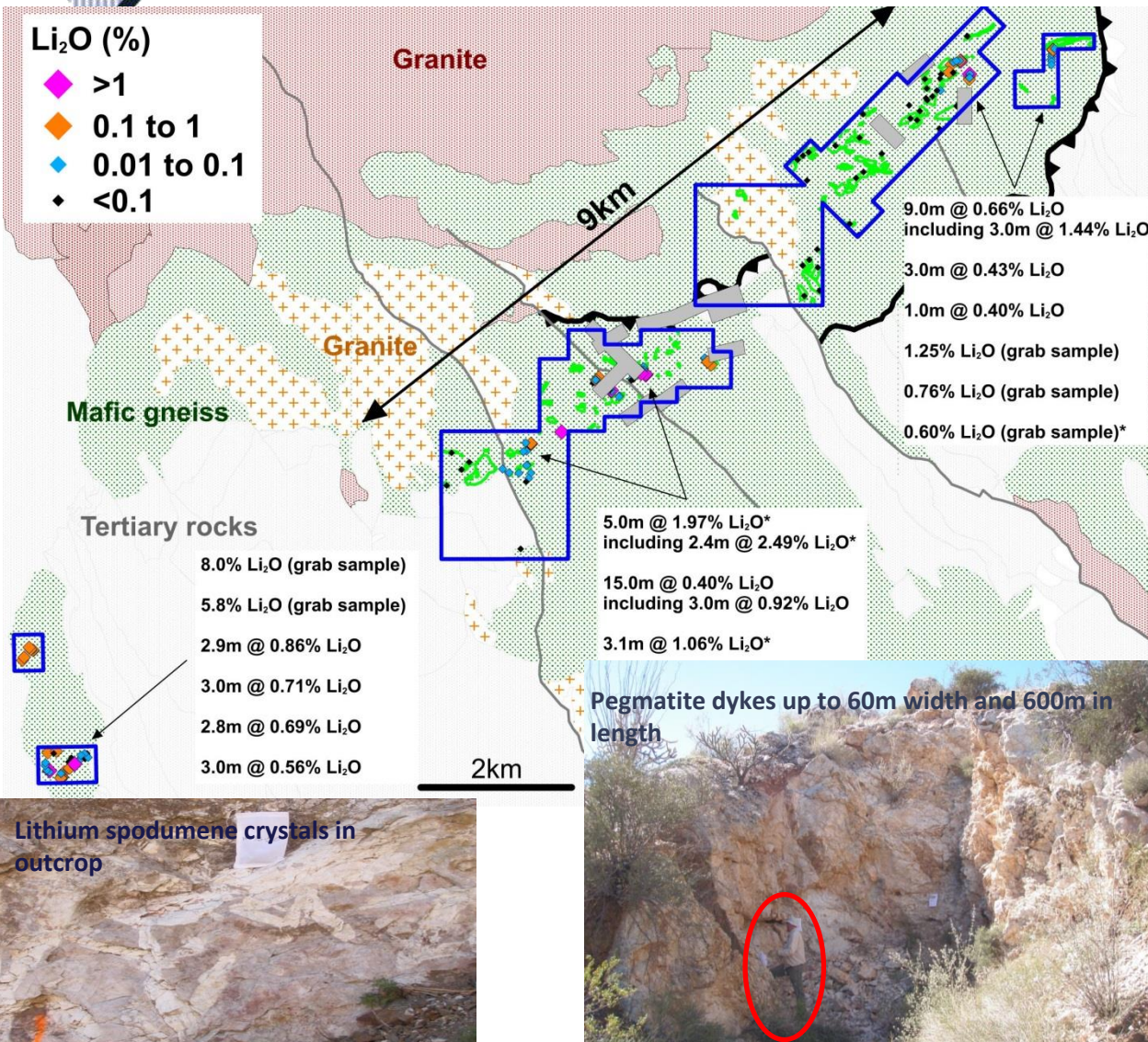


- Bradda Head to list on the London AIM exchange – planning for early Feb 2018
- Potential for future spin out of Zenith's lithium portfolio on ASX, once projects are more advanced.



San Domingo Lithium

Bradda Head Ltd (Jim Mellon)
earning initial 55%
Location: USA
Commodity: Lithium
Stage: Prospects



**Large pegmatite field >9km by 1.5km
numerous lithium bearing
pegmatites;**

**Initial Zenith sampling highly
encouraging to 8% Li₂O**

**Historic lithium production (1947 –
1952);**

Very limited previous drilling:

- **1952- anecdotal info** “..considerable thicknesses of spodumene - bearing pegmatite..” &
- **1980-82 mostly for Ta and Nb focussed outside Zenith’s claims.**

**Permitting for drill testing by
Bradda Head in early 2018**



Burro Creek Lithium

Bradda Head Ltd (Jim Mellon)
earning initial 55%
Location: USA
Commodity: Lithium
Stage: Prospects

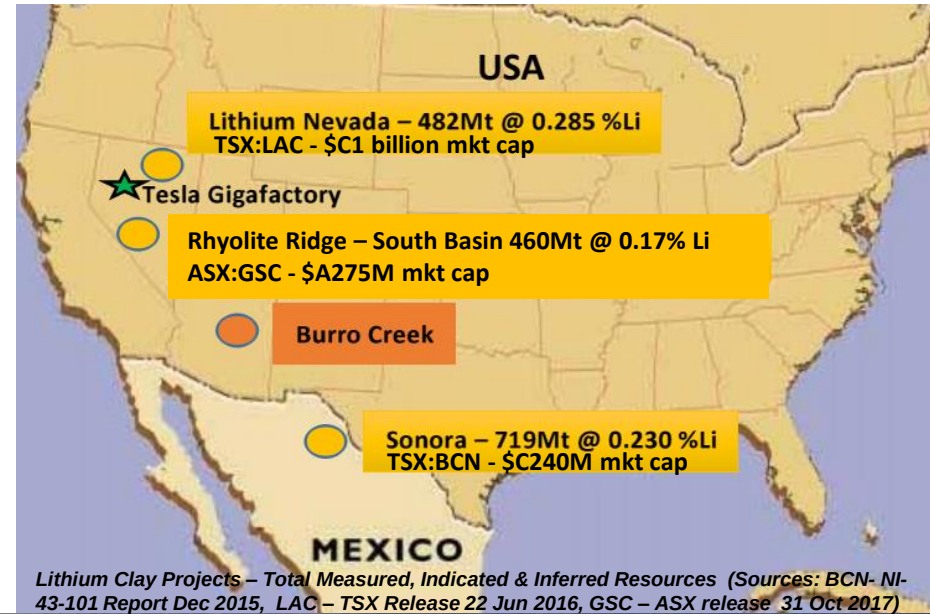
Large scale lithium clay target under exclusive option in Arizona, USA

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



Permits submitted for resource drilling

Detailed metallurgical testwork to recommence on drill samples

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

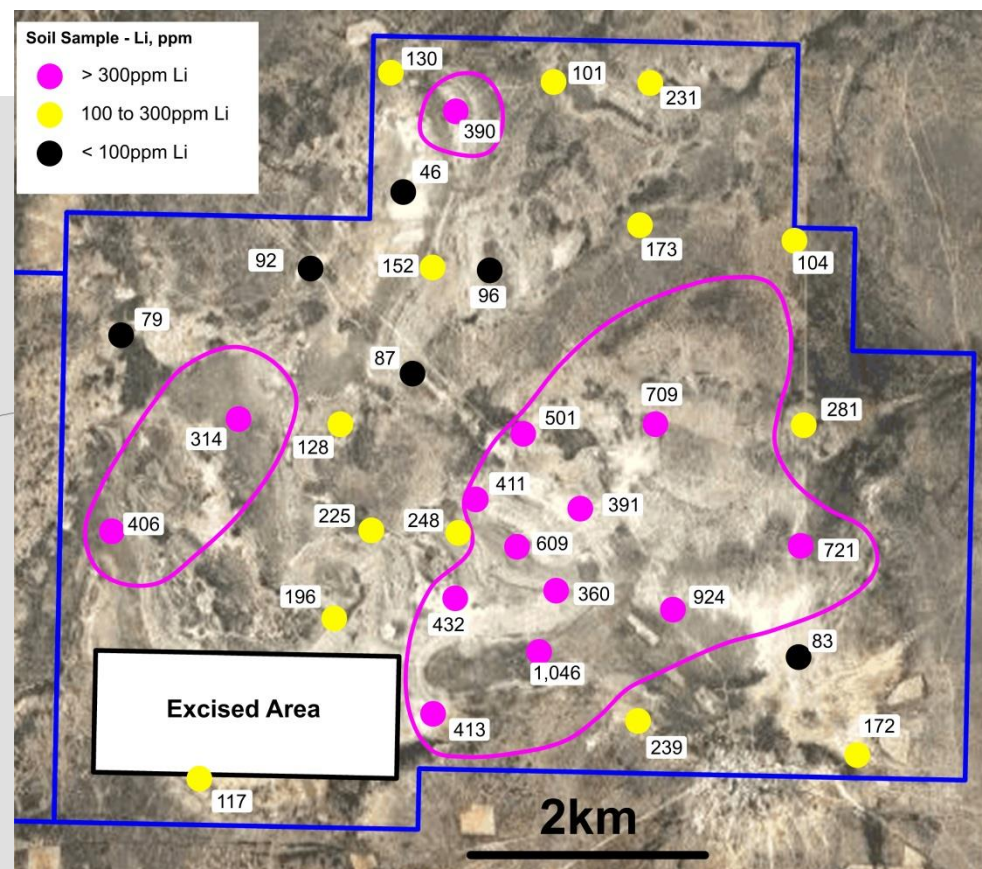
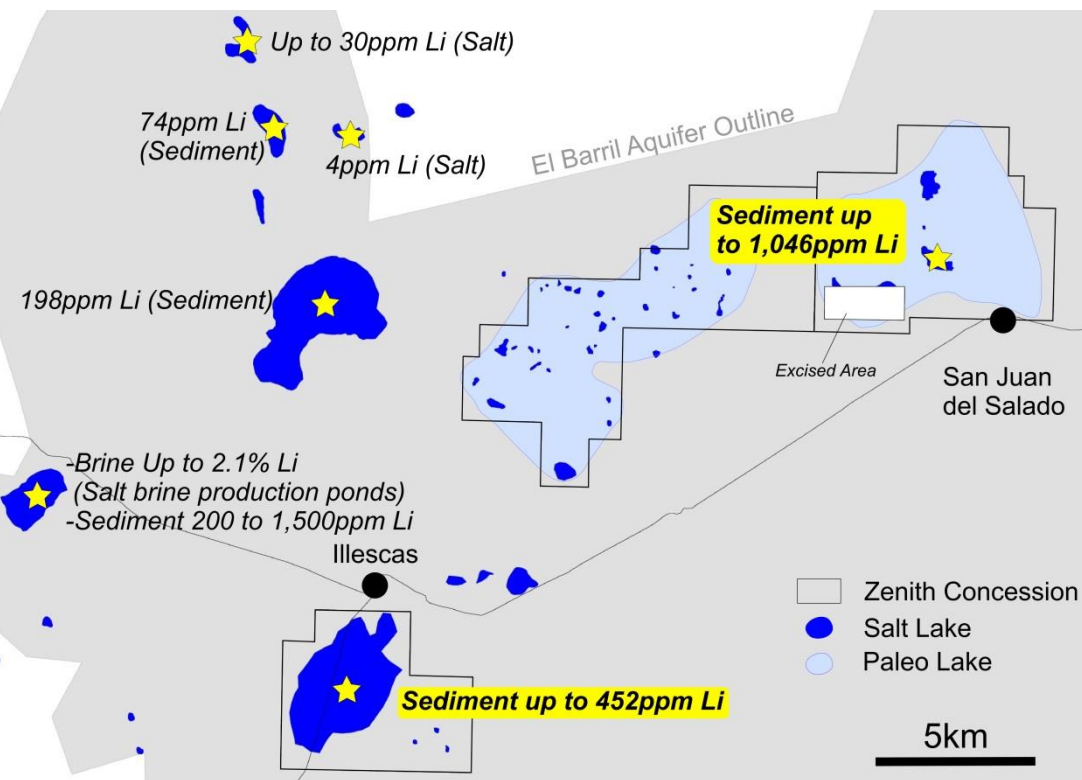


Zacatecas project - Mexico

Bradda Head Ltd (Jim Mellon)
earning initial 55%
Location: Mexico
Commodity: Lithium
Stage: Prospects

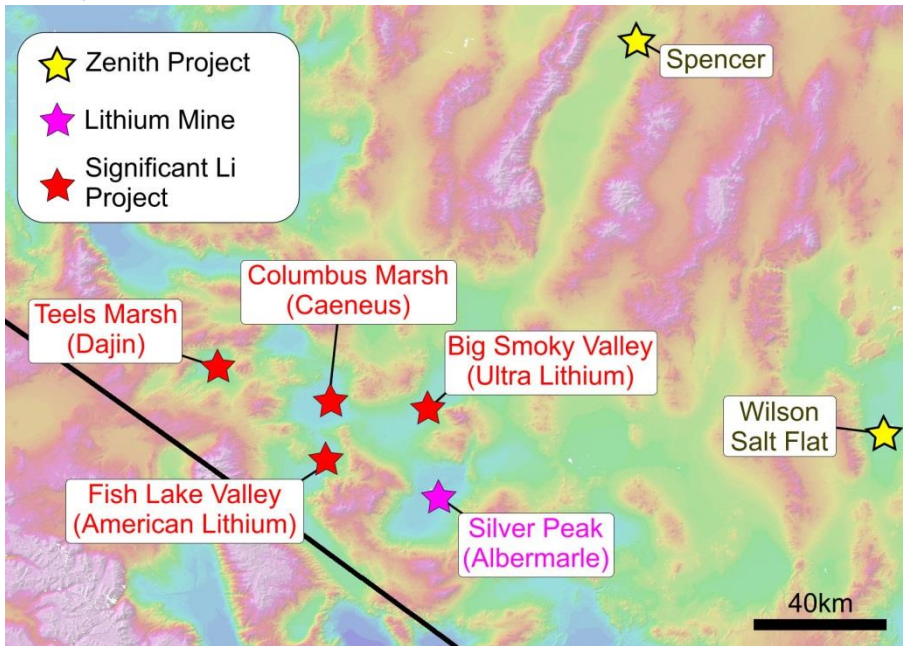
- Emerging lithium brine district in central Mexico
- Surface sampling by Zenith 5km x 2km anomaly up to 1046ppm lithium
- Brines to 2.1% lithium reported from solar evaporation ponds on adjacent salt lake - confirms lithium-enriched source brines present in the district

Electrical geophysics early 2018
prior to deeper drill testing by Bradda Head





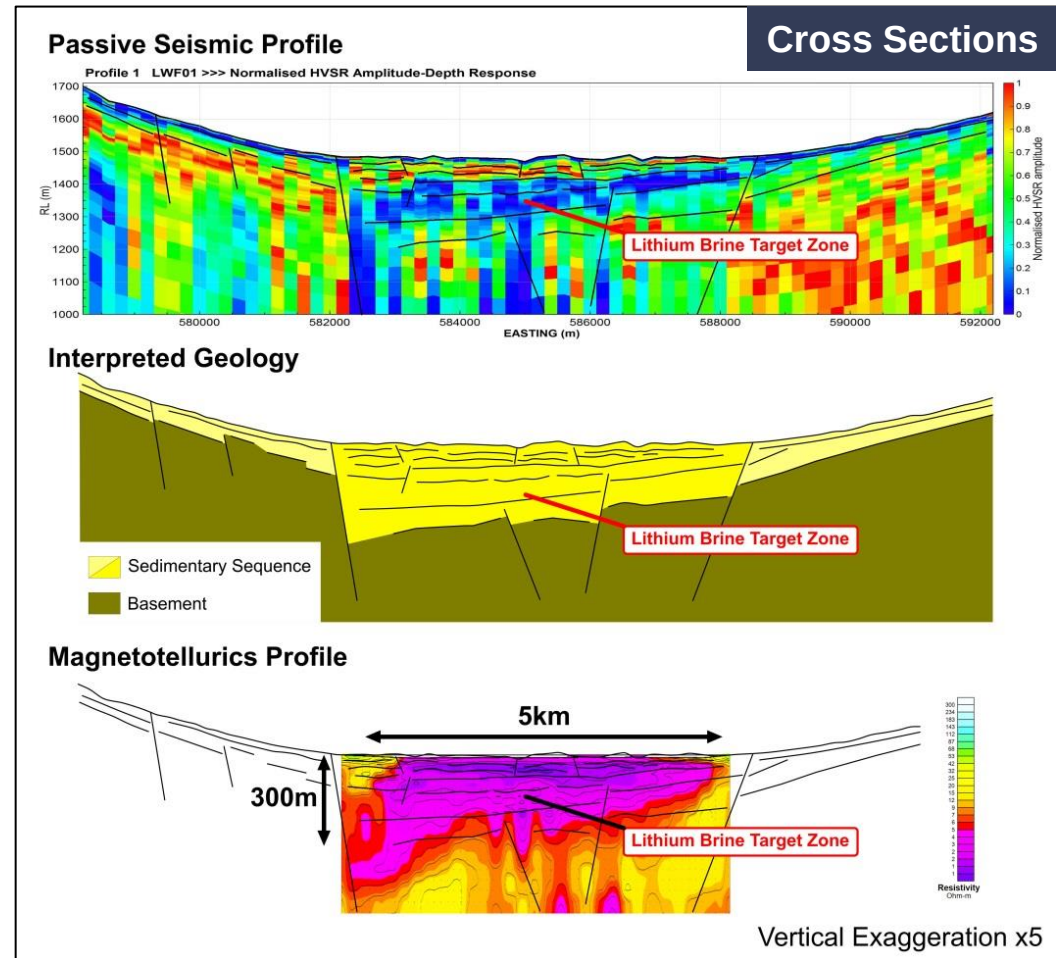
Wilson Salt Flat - Nevada



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

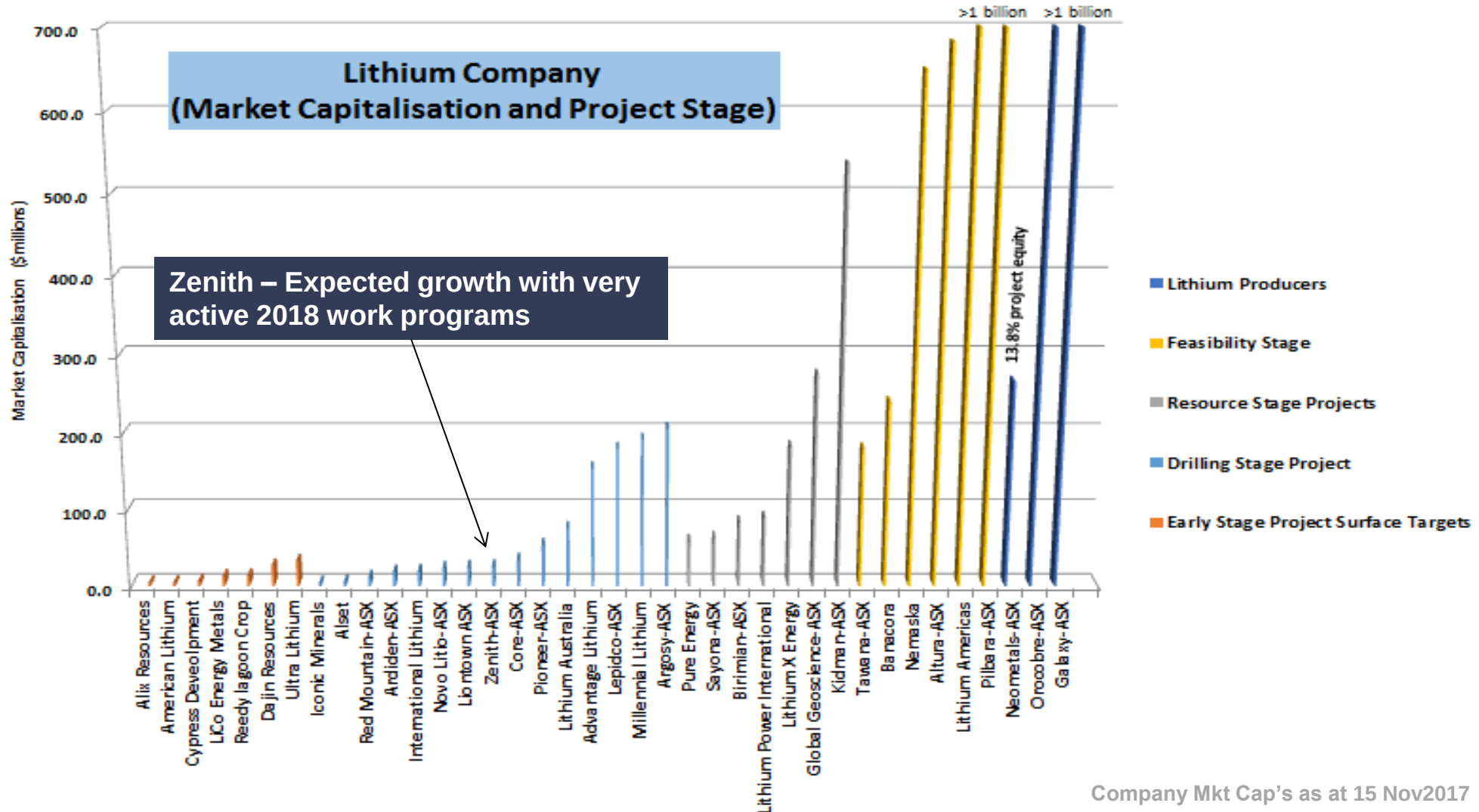
Geophysical modelling supports prospective basin architecture with thick conductive body indicative of sub-surface brine.



Drill testing by Bradda Head early 2018



Lithium Peer Comparison

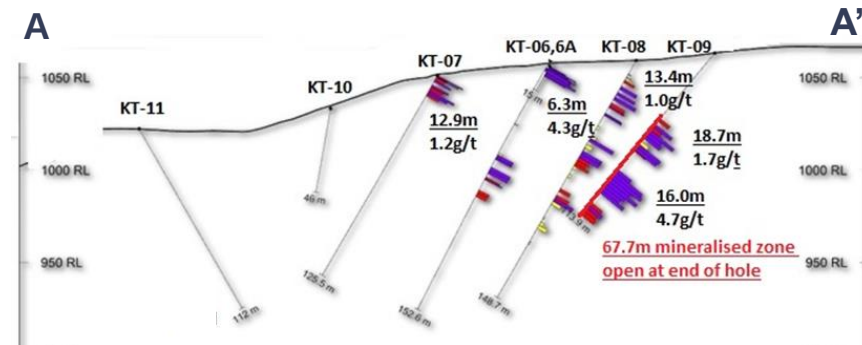
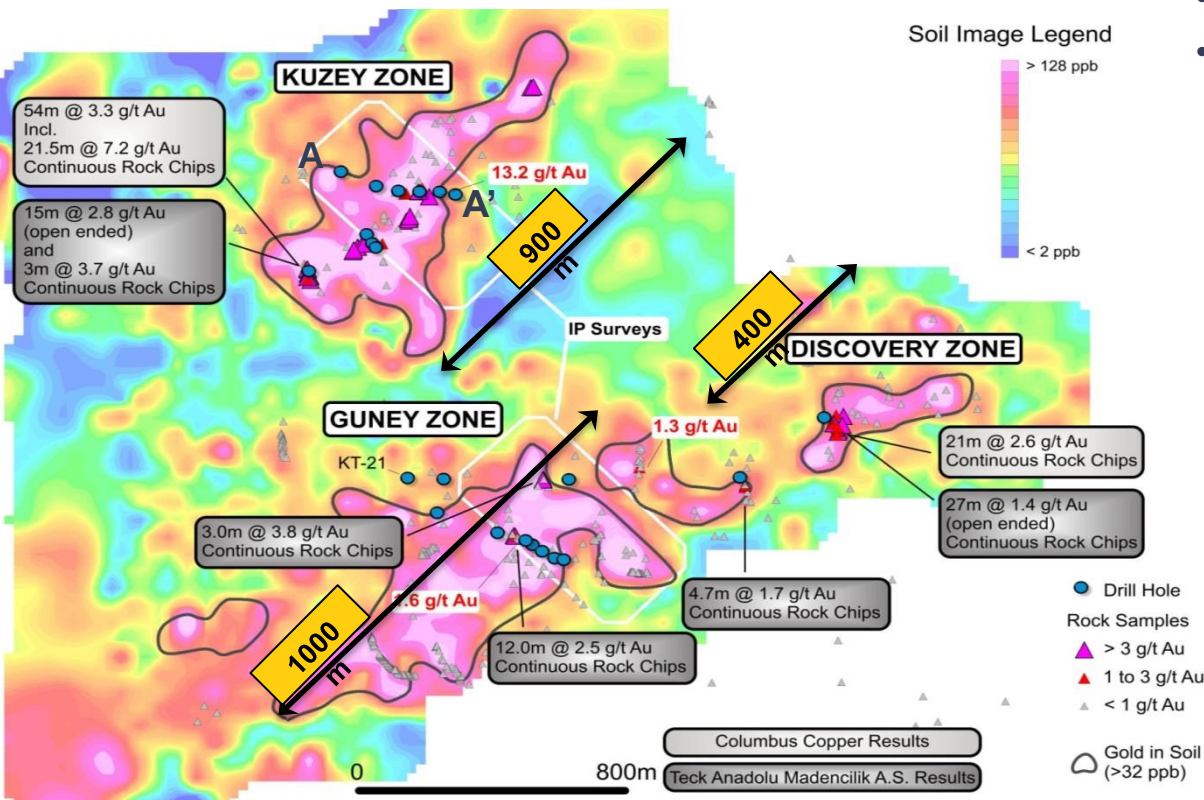




Kavaklitepe

Location: Turkey
Commodity: Gold
Stage: 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

Turkish JV company incorporated - sourcing drill rig



Split Rocks

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

Gold & Lithium

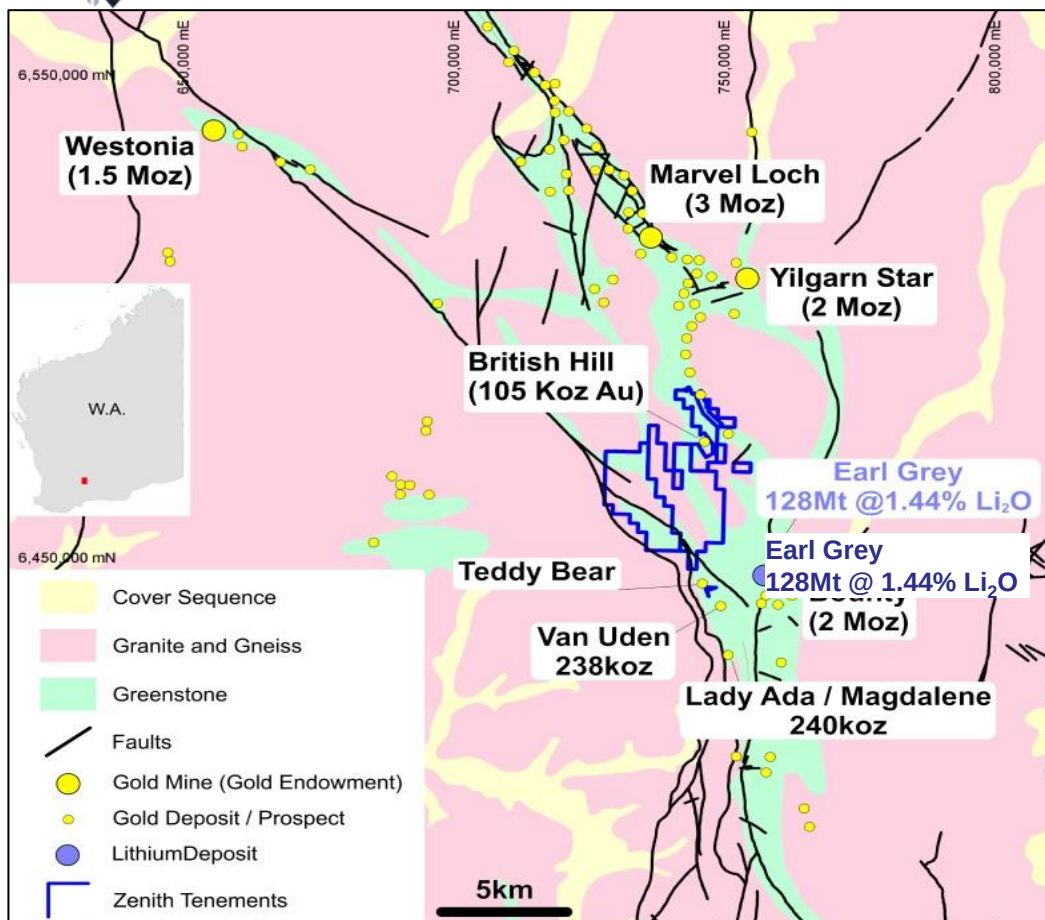
100% owned exploration
licences over ~500 km²;

Drilling 3600m two strong
gold targets Mawson &
Casey along gold
endowed shear;

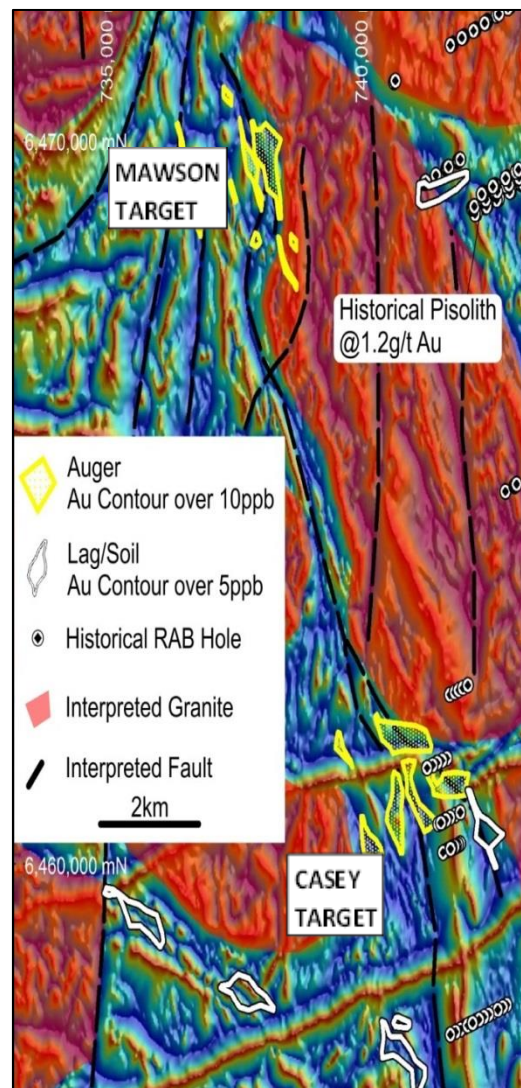
Zenith major landholder
in new lithium province –
nearby KDR – Earl Grey
lithium discovery;

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

Further lithium analyses
in progress



Gold Target – Drilling November





In Addition ZNC Offers Exposure to Exciting Portfolio

**Cardinals
Copper - Zinc**

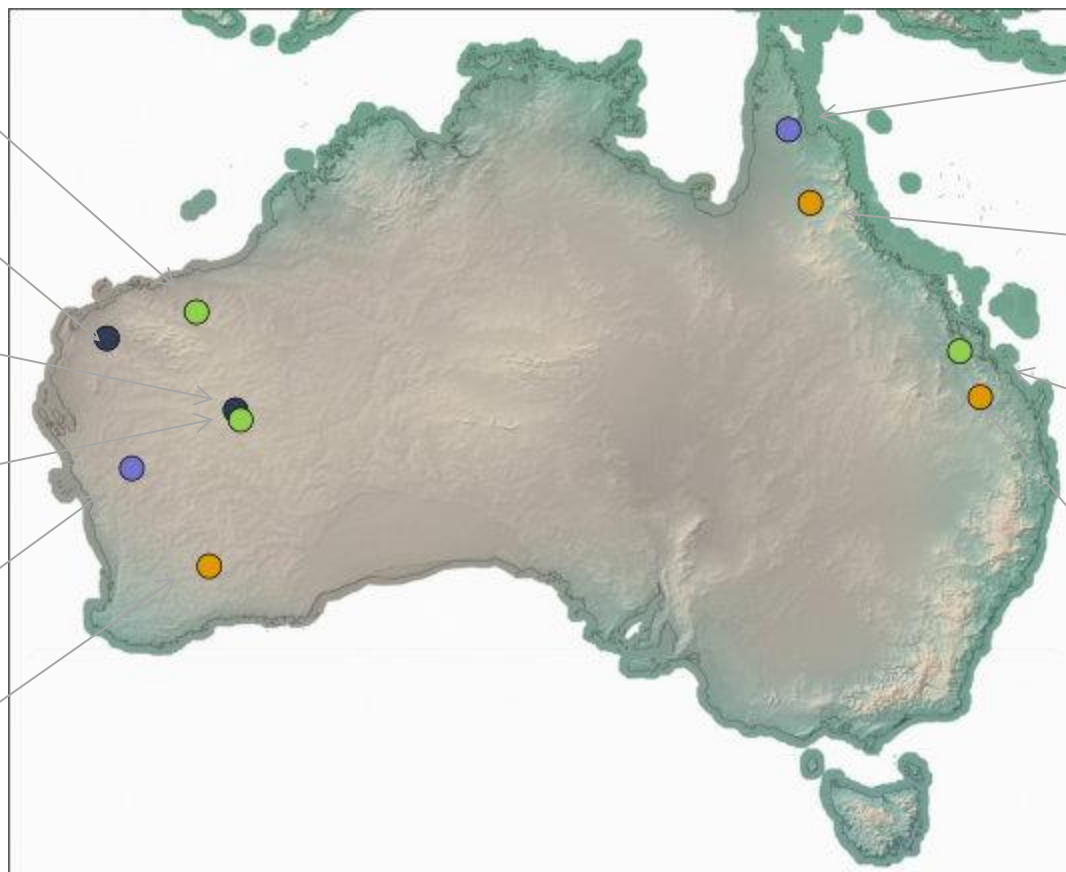
**Mt Alexander -
Magnetite Iron**

**Earaheedy High-
Grade Manganese**

**Earaheedy Zinc –
option to ASX RTR**

**Waratah Well
Lithium Peg Target**

**Split Rocks Gold &
Lithium**



**Pollappa Lithium
Field work Nov
2017**

**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

2017

Nov

Dec

2018

Jan

Feb

Mar

Kavaklitepe-Teck JV

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



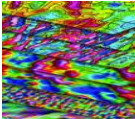
USA/Mexico Lithium – Jim Mellon/Bradda Head JV

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

Permitting

Drill permits
submitted

Permitting



Split Rocks

- Drilling gold targets in Nov. Further lithium geochem



Develin Creek

- Drilling 2017 twin holes, metallurgical sample and drill test new EM/geochemical targets





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ASX Code:

ZNC



Supplementary Slides





Lithium Deposit Styles

Lithium Pegmatite Deposits (40% of LCE supply):

- Deposits >10Mt – 100Mt @ grades >1.2% Li
- Hard rock open pit mines
- Example Operations: Greenbushes (Albermarle/Tianqi), Mt Cattlin (GXY), Mt Marion (MIN-NMT), Wodgina (MIN)
- Usually produce a spodumene concentrate which grades >6%Li
- Spodumene concentrate sold to Li-carbonate producers
- Li-carbonate producers sell to battery manufacturers

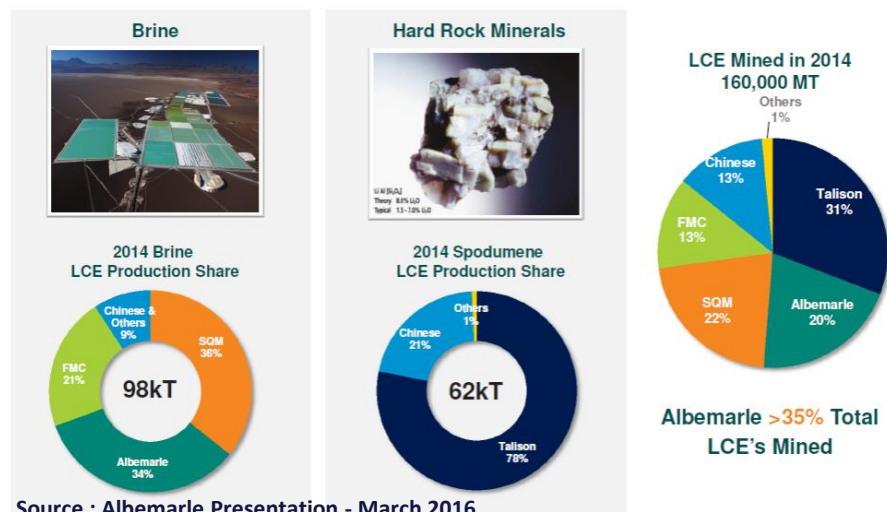


Lithium Clay Deposits:

- Deposits >50Mt – 500Mt @ 0.1% to 0.5% Li (1000 to 5000ppm Li)
- Soft rock open pit mines (proposed)
- Examples Projects: Sonora (TSX:BCN), Rhyolite Ridge (GSC), Kings Valley (TSX:LAC).
- Planned production of lithium carbonate

Lithium Brines Deposits (60% of LCE supply):

- Deposits grades: 245 mg/l to 1800 mg/l (~220ppm to 1000ppm Li)
- Subsurface brine deposits of lithium and potash extracted by wells, pumped to surface ponds and concentrated by solar evaporation
- Example operations :Chile: Salar de Atacama (Albermarle/SQM), Argentina Olaroz (ORE) , USA: Silver Peak (Albermarle)
- Produce lithium carbonate



Source : Albemarle Presentation - March 2016



Lithium brine projects USA & Mexico

Infill surface sampling completed

Ground based geophysical surveys planned prior to drill testing

Bradda Head Ltd (Jim Mellon)

earning initial 55%

Location: USA

Commodity: Lithium

Stage: Prospects

PROJECT	Spencer	Wilson Salt Flat	Zacatecas - Mexico
Large closed sedimentary basin	✓	✓	✓
Abundant Tertiary or younger felsic volcanic and tuffaceous deposits (which are considered to be the source of the lithium)	✓	✓	✓
Presence of salars or playa lakes where brines can evaporate resulting in the concentration of mineral salts including lithium	✓	✓	✓
Gravity data supports the presence of discrete fault bounded grabens within the basement of the larger enclosed basins.	✓	✓	No gravity data available
Evidence of hot springs depositing alkali salts onto lake surfaces	✓	✓	✓
Elevated lithium levels in regional water well sampling	✓	✓	✓
Seismic Data Confirms Basin Architecture	Survey Planned	✓	✓
Presence of salt brine aquifers (which can be detected by electrical resistivity surveys - MT).	Survey Planned	Survey Planned	Survey Planned

