



Summary

Outstanding gold & lithium portfolio in Australia & USA

New Rare Earths (REE) Project – Wyoming USA

Significant current & upcoming exploration activity focussed on;

- High-grade gold at Split Rocks returned up to 10m @
 2.20g/t Au (incl 6m @ 3.32 g/t Au) and 5m @ 3.23 g/t Au¹ over 4km strike, plus lithium target definition
- First pass grab sampling up to 0.60% TREO over very large area and composite sampling to 80m @ 0.40% TREO at Laramie REE Project Wyoming²
- Advancing QLD gold target to drill status, awaiting infill sampling results
- External funding for several projects spreads risk and increases exposure to success, drilling of two partnered projects before end of year



¹ZNC ASX Release 28 Oct 19 ²ZNC ASX Release 6 Nov 19



Rights Issue - Use of Funds

Non-renounceable 1:6 entitlement offer at 5.5c to raise ~\$1.95 million¹. Funds from the raising are intended to be applied towards accelerating activity at the following projects, in addition to general working capital requirements:

Split Rocks Project Gold & Lithium Project – WA (100% owned) Further work to include:

- extensional drilling to follow-up gold mineralisation over 4 km strike at the Dulcie Heap Leach Operation (DHLGO) target*.
- defining lithium targets adjacent to WES / SQM's Earl Grey Deposit.

Laramie REE Project – Wyoming USA (100% owned)

Finalising leasing, further metallurgical test work and advance project toward initial first pass drill testing.

Red Mountain Gold Project – QLD (100% owned)

Advancing project to define drill targets

Advancing other 100% owned projects towards drill testing including the Develin Creek Copper-Zinc Project (QLD) and the Waratah Well Lithium Project (WA)



¹ZNC ASX Release 28 Oct 19, closed 5pm AEDT 19 Nov 2019

*Note Zenith holds gold rights below 6 metres depth beneath the operating 3rd party gold heap leach mine at Dulcie see ASX release 21 Mar 19



Corporate Structure



Capital Structure – ASX: ZNC	
Share Price (19 Nov 19)	\$0.055
Shares on Issue - ZNC fully paid ordinary	213m
Shares on Issue –post Entitlement Offer (assumes fully subscribed)	248m
Market Capitalisation	\$11.7m
Cash (30 Sept 19)	\$0.64m
Listed Equities 4.67m RTR Shares (19 Nov 19)	\$0.31m

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

Listed in 2007
Limiting shareholder dilution
Lean
Tightly held
Experienced Board & Management



Contact Details Level 2/33 Ord Street

West Perth, WA, 6005 Mail: PO Box 1426 West Perth, WA, 6872 T: +61 8 9226 1110

1: +61 8 9226 1110

E: info@zenithminerals.com.au W: www.zenithminerals.com.au

ASX:ZNC



Split Rocks: Gold

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



Major gold district

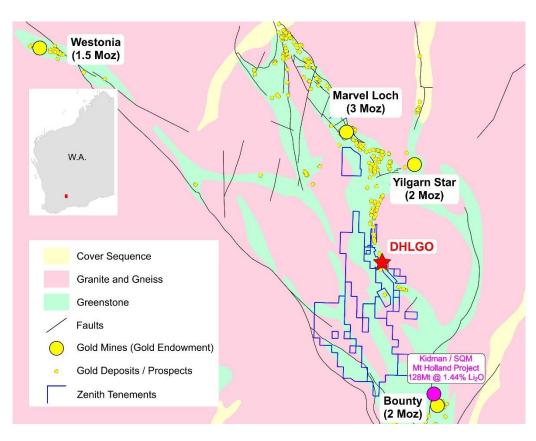
Initial Phase 1 Drilling Completed – Oct 19

High-grade gold intersected in very wide spaced RC drilling beneath operating 3rd party gold heap leach mine

ZNC Results include²:

- 10m @ 2.20 g/t Au(incl 6m @ 3.32 g/t Au)
- 5m @ 3.23 g/t Au
- 5m @ 2.04 g/t Au

Follow-up drilling planned



650 sq km of tenure - surrounded by major gold deposits



Split Rocks: Gold

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

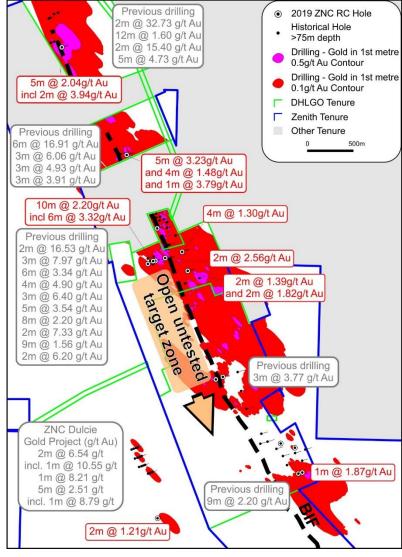
Initial Phase 1 Drill Program Completed (16 RC holes):

- 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
- ZNC results include²:
 - 10m @ 2.02 g/t Au (incl 6m @ 3.32 g/t Au)
 - > 5m @ 3.23 g/t Au
 - > 5m @ 2.04 g/t Au
- Follow-up drilling planned



Drilling beneath operating 3rd party heap leach gold mine



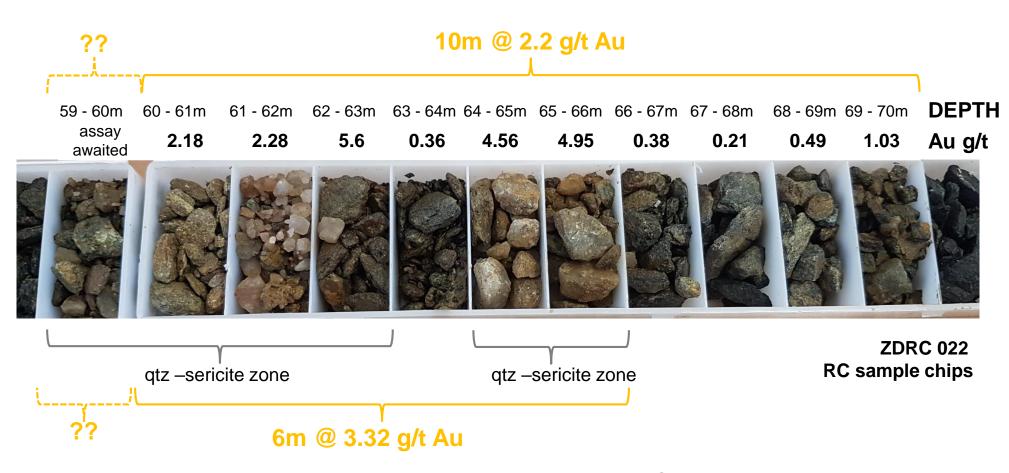


¹ ZNC ASX Release 12 Sep 19 ² ZNC ASX Release 21 Oct 19 & 28 Oct 2019



Split Rocks: Gold

Typical Goldfields style Archaean lode-gold mineralisation

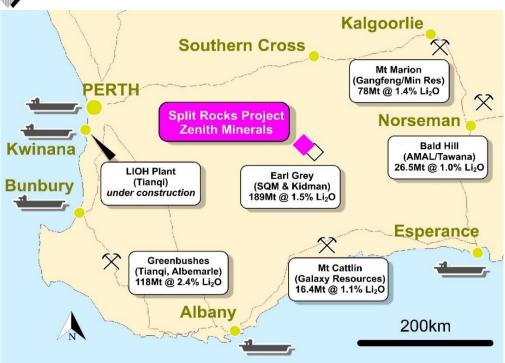


Open and untested along strike Potential for stacked lodes



Split Rocks: Lithium

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



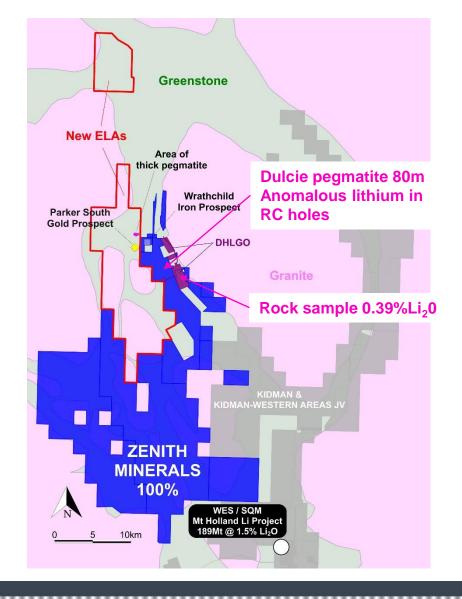
Major strategic ground holding adjacent to WES / SQM's Earl Grey Lithium Deposit. Recent WES takeover of KDR values 100% of project at ~\$A1.55 billion¹

Very large area (~650km²) with abundant pegmatites, Dulcie Lithium Prospect 80m thick pegmatite - anomalous Li in first pass RC drilling

Using surface geochemistry 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

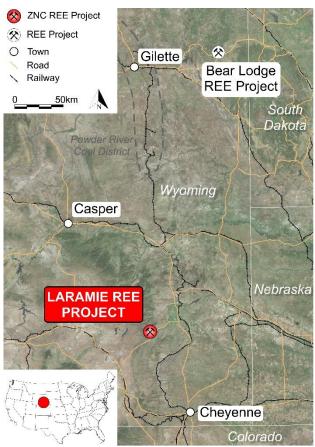
IKDR ASX Release 11th July 2019





Ownership:
Location: W
Commodity: Rare
Stage: Pr

100% WY-USA Rare Earths Prospects



Excellent Location

30km to Interstate

35km to Rail

Abundant low-cost commercial electricity

Multiple existing major mining operations

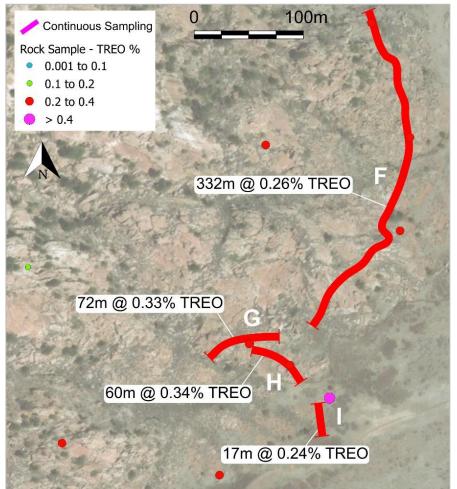
Local engineering and construction companies

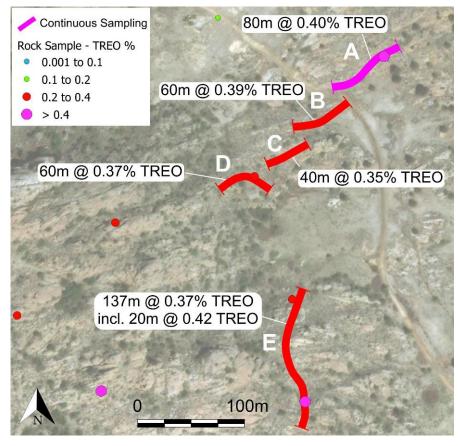
Legend Rock Sample - TREO % • 0.001 to 0.1 0.1 to 0.2 0.2 to 0.4 > 0.4 • • Syenite

Zenith surface rock sampling returned widespread TREO (Total Rare Earth Oxide) grades up to 0.60% in three initial sampling areas 2 - 3km apart with strong values of high-value neodymium, praseodymium and dysprosium¹.



Ownership: Location: Commodity: Stage: 100% WY-USA Rare Earths Prospects





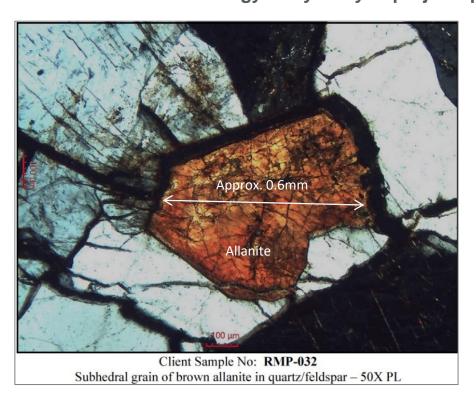
Widespread REE mineralisation over hundreds of metres identified in all nine recent systematic chip sample traverses¹ 1 ZNC ASX Release 6 Nov 19

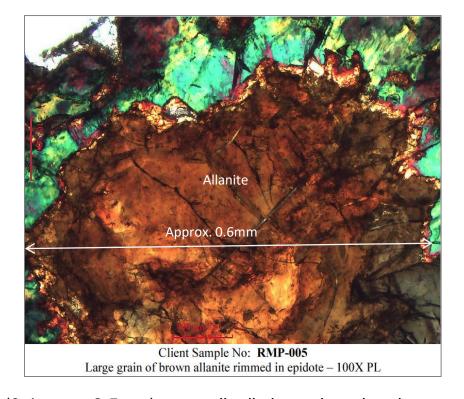


Ownership: Location: Commodity: Stage: 100% WY-USA Rare Earths Prospects

Large scale at surface REE target

Metallurgy likely a key to projects potential – further test work planned

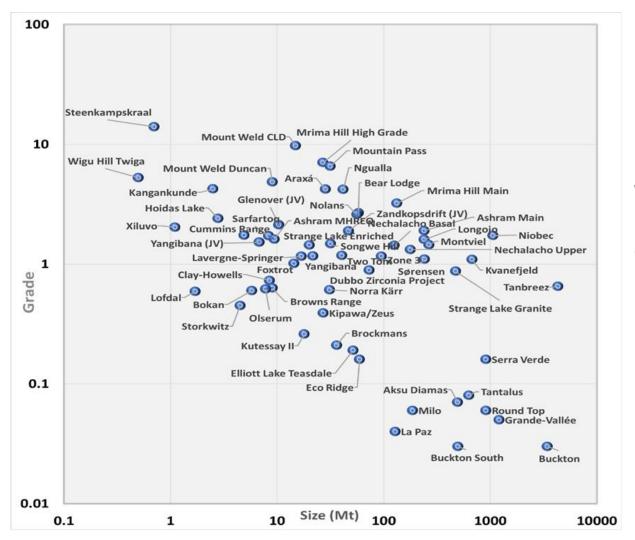




The REE mineral allanite occurs as relatively coarse grained (0.4mm to 2.5mm) generally distinct mineral grains. DCM reported that" the large size of the allanite crystals should facilitate liberation upon grinding"......from the syenite host rock¹.







World REE
Projects Size and
Grade

Source:

http://www.techmetalsresearch .com/metrics-indices/tmradvanced-rare-earth-projectsindex/ updated where new information available by Zenith 29-05-2019 from Company ASX reports and from SEDAR for TSX listed entities .



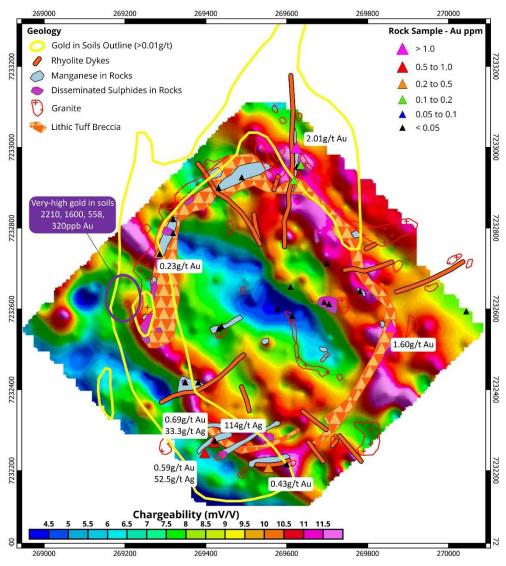
Red Mountain: Gold

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

Recent field work returned further encouraging results, including¹;

- High-grade gold in soils up to 2210 ppb Au (2.2g/t Au), 1600 ppb Au (1.6 g/t Au), 550ppb Au and 320ppb Au;
- Gold in rock sample results up to 2.0 g/t Au and 114 g/t Ag (silver);
- Detailed geological mapping by Zenith outlined a previously unknown felsic volcanic breccia complex;
- IP chargeability anomaly coincident with breccia margin
- Gold mineralisation appears to be focused on the margins of the breccia system.

Infill soil sampling completed - results expected Nov 19



Red Mountain Soil and Rock Results with Geological Outlines over IP



USA Lithium JV

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

Bradda Head

- JV manager
- Spending US\$5M on 5
 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
- 5 USA lithium projects in JV with Bradda Head
- Does NOT include Zenith's Australian lithium projects



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



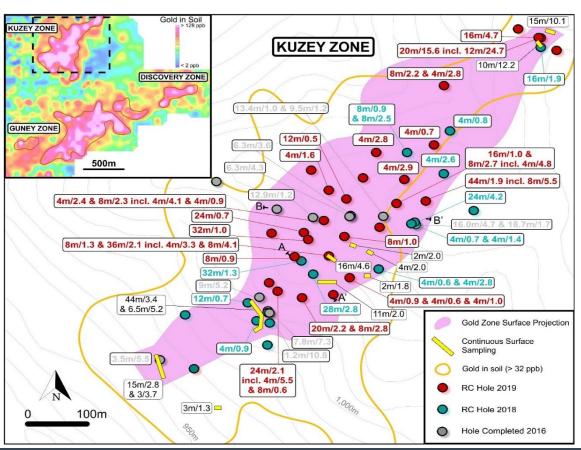


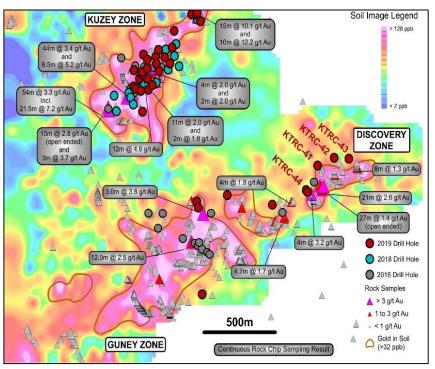


Kavaklitepe: Gold

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

- 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)
- 2019 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)





Zenith to dilute or divest/monetise?



Focus on Discovery

100% Owned ZNC Projects

Our Aim is Discovery



Split Rocks Lithium & Gold - WA

Red Mountain Gold - QLD

Laramie REE – Wyoming USA

Develin Creek –
JORC Copper-Zinc Resource QLD



Partnering? ——

Waratah Well – Lithium – Fertile LCT Field

Partners Spending \$\$ on ZNC Projects

Increased Spending
Increasing Chance of Success
Sharing Risk



\$1.5M received in cash & shares from deals on ZNC projects since Feb 17

American Li – Bradda Head JV Major drill campaign planned

Kavaklitepe Gold – Teck JV Turkey

Earaheedy Zinc JV ASX:RTR – Drill plan Dec 2019

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



Newsflow & Catalysts

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

- ZNC initial wide spaced drill program returned up to 10m @ 2.20g/t Au (incl 6m @ 3.32 g/t Au) and 5m @ 3.23 g/t Au¹ beneath operating 3rd party heap leach gold mine
- Previous results: 6.0m @ 16.91 g/t Au, 2.0m @ 32.73 g/t Au, 2.0m @ 16.53 g/t Au²
- Awaiting further gold resample results & follow-up drill planning in progress
- Major ground holding (650sq km) adjacent to WES / SQM Earl Grey Lithium Deposit
- Recent KDR takeover by WES (values Earl Grey project at ~\$A1.55 billion³⁾
- 80m thick pegmatite drilled with anomalous lithium, surface sampling to 0.39%Li₂0⁴

Red Mountain Gold – QLD (100% owned)

- Regional location between two large scale operating gold mines
- Felsic volcanic breccia complex with high-grade gold in soils to 2.2g/t Au⁵ & Coincident IP Geophysical chargeability anomaly⁶
- Follow-up soil program completed results expected Nov 19

Laramie REE – USA (100% owned)

- Initial sampling returned widespread TREO (Total Rare Earth Oxide) grades up to 0.60% over very large area & composite sampling to 80m @ 0.40% TREO with strong values of high-value neodymium, praseodymium and dysprosium⁷.
- Finalise leasing, further metallurgical assessment & advance towards drill testing

Partners drilling ZNC projects in 2nd half 2019

- Vivash Iron Rio Tinto Exploration Pty Ltd drilling in progress
- Earaheedy Zinc (identified new Zn mineralisation⁸) ASX:RTR Drilling planned Dec 2019
- Kavaklitepe Gold High-grade gold near surface i.e. 20m @ 15.6 g/t Au⁹
- Bradda Head US\$5M spend before Feb 2021 on 5 USA lithium projects

¹ZNC ASX Release 28 Oct 19 ² ZNC ASX Release 12 Sep 19 ³ KDR ASX Release 11 Jul 19 ⁴ZNC ASX Release 13 May 19 ⁵ZNC ASX Release 24 Sep 19 ⁶ZNC ASX Release 25 Oct 19 ⁷ZNC ASX Release 17 Oct 19

⁸ RTR ASX Release 22 Aug 19 ⁹ZNC ASX Release 1 Oct 19



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.