

Zenith  
Minerals  
Limited

ABN 96 119 397 938

## QUARTERLY ACTIVITY REPORT FOR THE PERIOD ENDING 30<sup>th</sup> JUNE 2019 HIGHLIGHTS

**ASX CODE: ZNC**

### Exploration / Development

- Kavaklitepe Gold - Turkey
- American Lithium
  - Zacatecas – Mexico
  - San Domingo – USA
  - Burro Creek – USA
  - Wilson Salt Flat – USA
  - Spencer - USA
- Split Rocks Lithium, Gold & Cobalt – Aus
- Develin Creek Copper-Zinc-Gold

### Details as at 30<sup>th</sup> Jun 2019

Issued Shares (ZNC)	212.8 m
Unlisted options	4.15 m
Mkt. Cap. (\$0.07)	A\$16m
Cash as at 30 <sup>th</sup> Jun 2019	A\$1.1m
Debt	Nil

### Directors

Michael Clifford	Managing Director
Mike Joyce	Non Exec Chairman
Stan Macdonald	Non Exec Director
Julian Goldsworthy	Non Exec Director
Graham Riley	Non Exec Director

### Major Shareholders

HSBC Custody. Nom.	12.2%
Nada Granich	5.4%
J P Morgan	4.8%
Miquilini	4.3%
Abingdon	4.1%

### Contact Us

Zenith Minerals Australia Limited  
Level 2, 33 Ord Street  
WEST PERTH WA 6005

PO Box 1426  
WEST PERTH WA 6872

Telephone: (08) 9226 1110  
Email: [info@zenithminerals.com.au](mailto:info@zenithminerals.com.au)  
Web: [www.zenithminerals.com.au](http://www.zenithminerals.com.au)

### Kavaklitepe Gold Project - Turkey

Preliminary 4-metre composite assay results reported from the 3,700m RC drill program (38 holes) completed at the Kuzey, Discovery and Guney Prospects: Results from Kuzey included:

- **KT-77: 20.0m @ 15.60 g/t Au, including 12.0m @ 24.67 g/t Au;**
- **KT-78: 16.0m @ 4.72 g/t Au, including 8.0m @ 7.99 g/t Au;**
- **KT-64: 44.0m @ 1.90 g/t Au, including 8.0m @ 5.50 g/t Au;**
- **KT-56: 24.0m @ 2.14 g/t Au; including 4.0m @ 5.45 g/t Au, and**
- **KT-53: 36.0m @ 2.06 g/t Au, including 8.0m @ 4.14 g/t Au.**

### Split Rocks Lithium-Gold Project – Western Australia

Highly encouraging initial reconnaissance surface sample results up to 0.39% Li<sub>2</sub>O were reported from pegmatite bodies on the recently optioned Dulcie Heap Leach Gold Operation tenure. The Company is continuing to explore its very strong ground position in the Forrestania lithium belt, adjacent to SQM-Kidman's Mt Holland/Earl Grey lithium deposit.

In addition to the lithium potential Zenith is planning a multi-hole drill program to follow-up on the historic high-grade gold results at Split Rocks (**6.0m @ 16.91 g/t Au, 2.0m @ 32.73 g/t Au, 2.0m @ 16.5 g/t Au, 2.0m @ 15.40 g/t Au, 5.0m @ 4.73 g/t Au, 4.0m @ 4.90 g/t Au and 9.0m @ 2.10g/t Au**) and to test the target zone where the large gold mineralised shallow dipping structures intersect the preferred BIF host rocks. Zenith's proposed drill program will have a dual purpose of testing gold and lithium pegmatite targets.

### American Lithium JV

Zenith and Bradda Head are working towards providing the market with an update on the American Lithium JV in the first half of August.

### Other Australian Projects

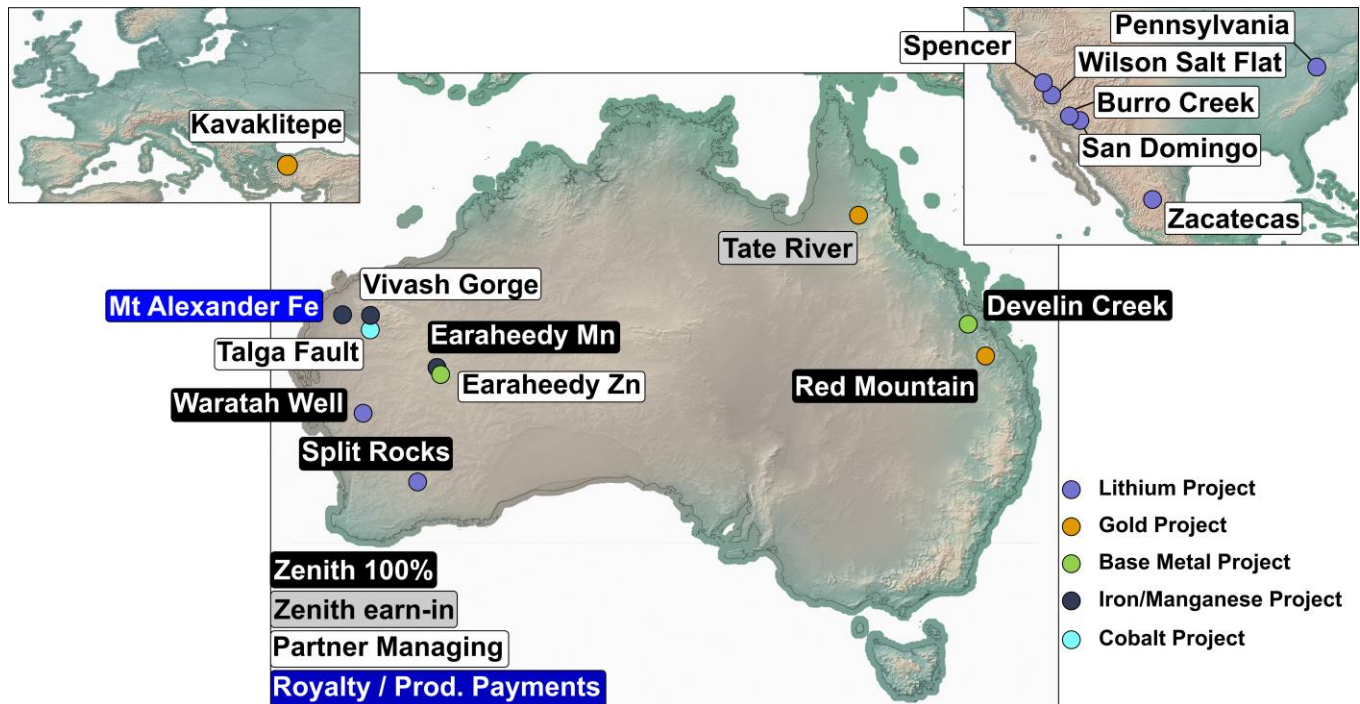
Diamond drilling commenced at the **Earaheedy Zinc** project. The program will test high-order gravity targets outlined by Zenith's partner Rumble Resources Limited (RTR) that are associated with widespread (20km x 3.5km) zinc mineralisation defined by historic drilling. Better historic drill intersections include: **11.3m @ 4.34% zinc including 2.3m @ 14.42% Zn, 1.15% Pb** from 150.2m.

Follow-up field work at the **Red Mountain Gold-Silver** project returned further highly encouraging silver and gold rock chip sample results up to 2.01 g/t gold and 52.5 g/t silver around 800 metres north of the best results from 2017 sampling. In addition, systematic geochemical sampling outlined a large 2km by 1.5km zoned soil anomaly with peak soil gold result of 1.6 g/t Au and peak silver soil value 2.1 g/t Au.

Field follow-up and assessment of the new zinc soil anomalies reported in the previous quarter at **Develin Creek** has returned encouraging gossanous rock samples from both anomaly areas

Zenith announced the sale of its 100% owned **Mt Alexander magnetite iron project** located in Western Australia to a private Australian company. Zenith received cash of \$250,000 and will receive ten annual payments of \$250,000 each (total \$2.5 million) once the project reaches commercial production, for a total consideration of \$2.75 million.

## ZENITH'S EXPLORATION PROJECTS



*Figure 1: Zenith Project Locations*

The Company has continued to implement its strategy of acting as a project generator. Projects are either advanced by the Company's experienced team applying innovative exploration techniques or by partners with the technical and financial capability, depending on how the Board believes shareholders' best interests are served.

Zenith has two non-managed joint ventures - Kavaklitepe (Teck) and American Lithium (Bradda Head Limited) whilst three other projects are being funded under option by partners: Earraheedy Zinc (Rumble Resources ASX:RTR), Vivash Iron (Rio Tinto Exploration Pty Ltd) and Talga Fault Cobalt (Greenpower ASX:GPP). In addition to Zenith's own exploration activities it is estimated that these partners will spend in the order of \$1 to \$5 million over the course of 2019 on Zenith's projects.

Significant partner funded 2019 drill programs have taken place at Kavaklitepe and are in progress at the Earraheedy Zinc project, whilst drill programs are planned to test targets on the American Lithium and Vivash Iron projects later this year.

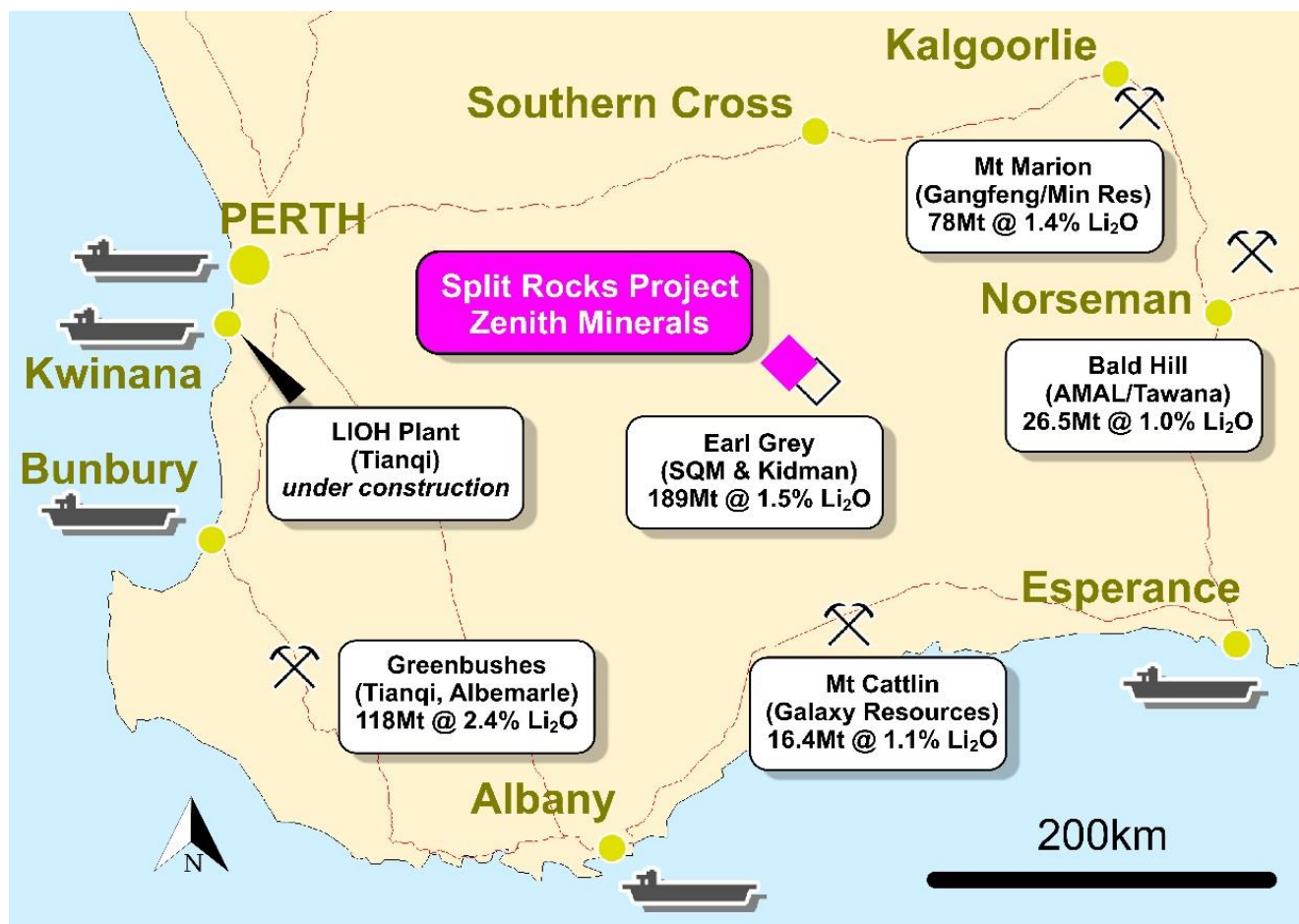
### SPLIT ROCKS LITHIUM & GOLD PROJECT – WA (Zenith 100%)

- The 100% owned Split Rocks Project covers a large portion (total area >500sqkm) of the Forrestania Greenstone Belt of Western Australia. This emerging lithium district is host to the new Earl Grey lithium deposit containing 189Mt @ 1.5% Li<sub>2</sub>O (KDR ASX Release 19<sup>th</sup> Mar 2018).
- RC drill testing of the Dulcie lithium pegmatite target confirmed thick pegmatite bodies containing broad anomalous levels of lithium including: 79m @ 284ppm Li<sub>2</sub>O with a peak value of 1m @ 1072ppm Li<sub>2</sub>O. Pegmatite body remains open to the north and west.
- Soil sampling defined 7 lithium anomalies to date, of which 5 have had preliminary shallow drill tests.
- Significant gold mineralisation at the Dulcie Prospect includes: 5m @ 2.51 g/t gold including 1m @ 8.79 g/t gold & 2m @ 6.54g/t gold, ZNC ASX Release 5<sup>th</sup> June 2018 – follow-up drilling to be completed.
- Option on bedrock gold & lithium rights over adjoining Dulcie Heap Leach Operation. High-grade historic drill results include: 6.0m @ 16.91 g/t Au, 2.0m @ 32.73 g/t Au, 2.0m @ 16.5 g/t Au, 2.0m @ 15.40 g/t Au, 5.0m @ 4.73 g/t Au, 4.0m @ 4.90 g/t Au & 9.0m @ 2.10g/t Au. Several high-priority drill targets for follow-up.
- Highly encouraging initial reconnaissance surface sample results up to 0.39% Li<sub>2</sub>O from pegmatite bodies on the recently optioned Dulcie Heap Leach Gold Operation tenure.

## Activities During the Quarter

Initial lithium reconnaissance surface sampling completed on the Dulcie Heap Leach Gold Operation (DHLGO) project returned highly encouraging lithium results up to 0.39%  $\text{Li}_2\text{O}$ , as advised to the ASX on the 13<sup>th</sup> May 2019. Surface sampling recommenced in July on Zenith's wholly owned southern tenements.

Zenith commenced an initial assessment of the lithium potential of the DHLGO in conjunction with systematic screening of its large, 100% owned Split Rocks project landholdings (500 sqkm) in the Forrestania greenstone belt. This emerging lithium district is host to SQM-Kidman's Mt Holland/Earl Grey lithium deposit containing 189Mt @ 1.5%  $\text{Li}_2\text{O}$  (KDR:ASX Release 19<sup>th</sup> Mar 2018), with KDR the subject of an off-market takeover by Wesfarmers (ASX:WES) (Figures 2 & 3).



**Figure 2- Split Rocks Project Location Map Showing Regional Lithium Projects**

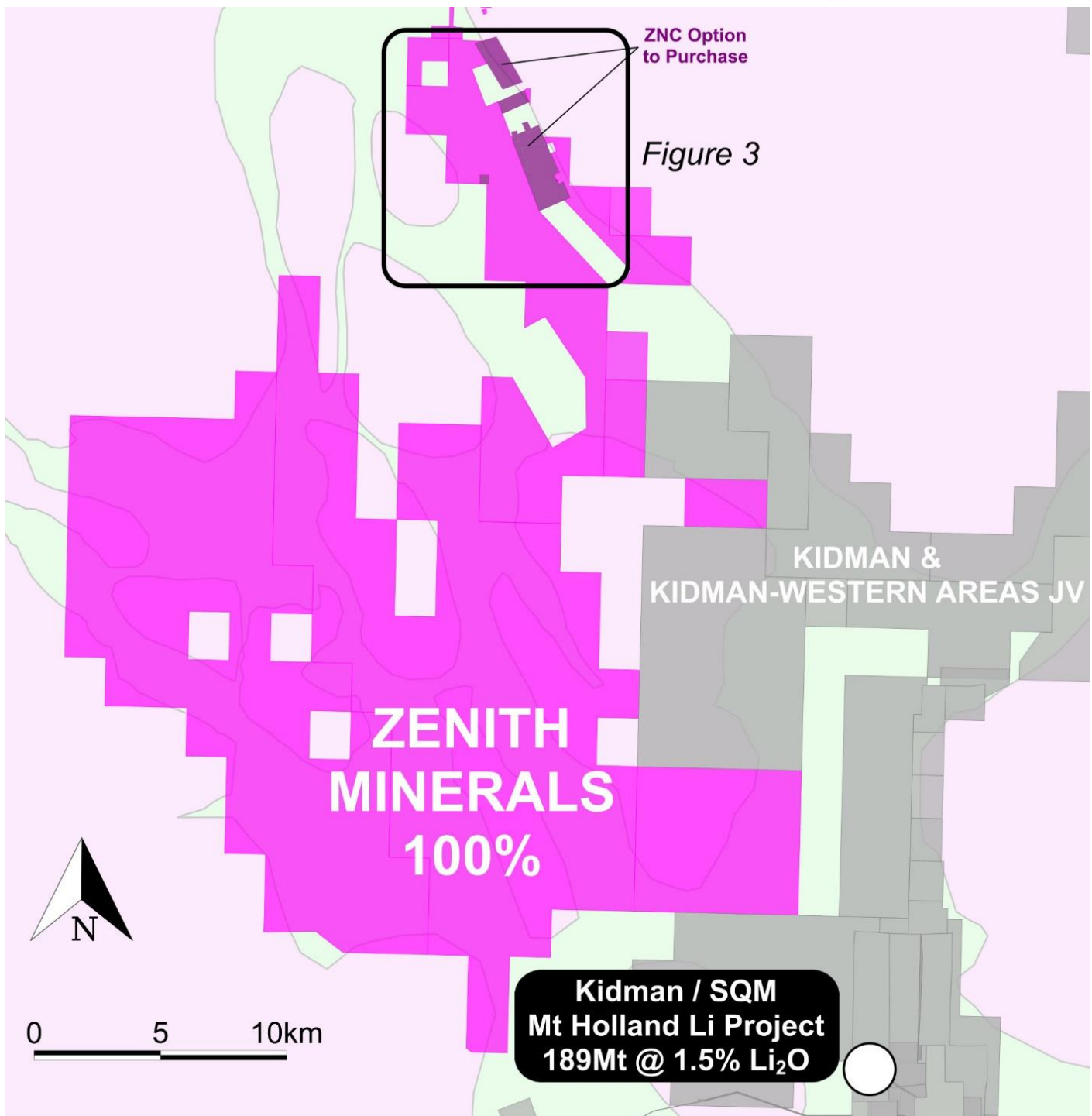
As previously announced (ASX Release 21<sup>st</sup> March 2019) Zenith executed an agreement that provides the Company with an exclusive right to explore for bedrock gold and lithium mineralisation beneath the large laterite rich gold cap currently being mined and treated on leases located contiguous with Zenith's Split Rocks project licences (Figure 3).

In addition, to the high-grade gold targets, several historic exploration drill holes intersected pegmatite bodies that were never analysed for lithium.

The DHLGO ground is located immediately east of Zenith's Dulcie lithium target, where aircore and RC drilling has confirmed thick pegmatite bodies (up to 79m downhole widths) containing broad anomalous levels of lithium throughout 79m @ 284ppm  $\text{Li}_2\text{O}$  with a peak value of 1m @ 1072ppm  $\text{Li}_2\text{O}$  (Figure 4).

Zenith's proposed drill programs will test both pegmatite bodies identified in historical drilling, surface lithium anomalies generated via the Company's work programs as well as bedrock gold targets.



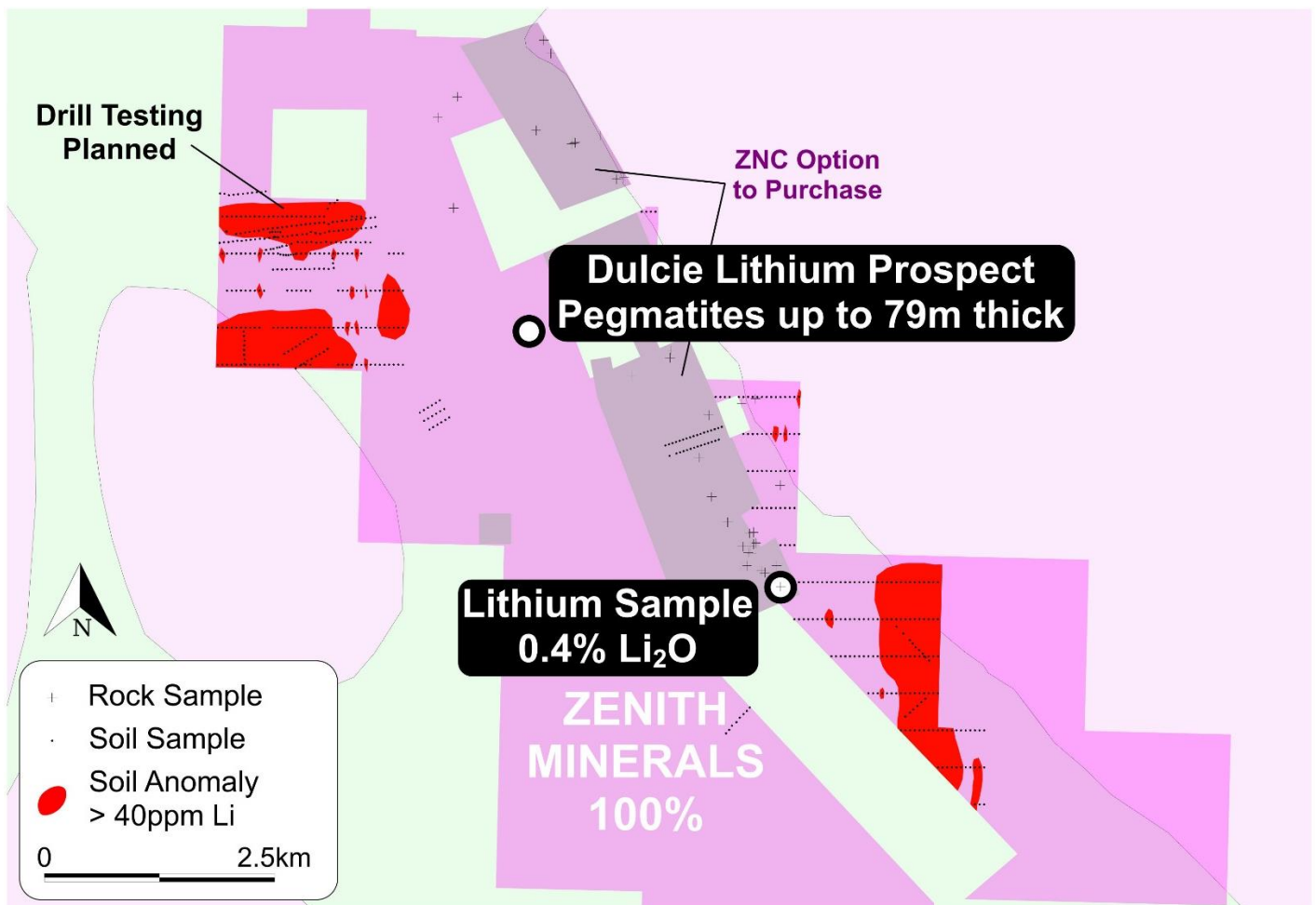


**Figure 3- Split Rocks Project – Location and Tenure Relative to Kidman/SQM Mt Holland Lithium Project**

### Split Rocks Lithium

As detailed in Zenith's ASX releases on (21<sup>st</sup> Sept 2018, 17<sup>th</sup> April 2018, 14<sup>th</sup> September 2017, 4<sup>th</sup> December 2017, 6<sup>th</sup> July 2018 and 14<sup>th</sup> August 2018) first pass surface samples taken at Split Rocks, to date covering approximately 20% of the Company's tenements, defined seven large, coherent lithium anomalies with variable levels of associated caesium, tantalum and rubidium surrounding granite bodies that may be potential source rocks for lithium bearing pegmatites.

The tenor of these large-scale lithium anomalies is comparable with competitor surface results that upon drilling have returned significant bedrock lithium mineralisation in several instances. Field follow-up by Zenith indicated very little to no outcrop in the areas of the lithium soil anomalies and that drill testing is required (Figure 4).



**Figure 4 – Split Rocks (NE Sector) Lithium Prospects & Anomalies**

### **Split Rocks – Dulcie Lithium Prospect**

Zenith's Dulcie lithium prospect is a 950-metre-long zone of pegmatites, from which shallow aircore drill holes in Zenith's maiden program returned strongly anomalous lithium results up to 2m @ 0.12%Li<sub>2</sub>O.

Follow up RC drilling at Dulcie (ASX Release 14<sup>th</sup> August 2018) confirmed thick pegmatite bodies (up to 79m downhole widths) with lithium content in 4m composite samples strongly anomalous in the northern most drill hole ZDRC006 (80m @ 353ppm Li<sub>2</sub>O) (Figure 2). Subsequent one metre resampling confirmed the tenor of the 4m composite samples, ZDRC006 (79m @ 284ppm Li<sub>2</sub>O), with a peak value of 1m @ 1072ppm Li<sub>2</sub>O. The pegmatite body remains open to the north and east and further drilling is planned in combination with RC drill programs scheduled to be completed later this calendar year.

### **Split Rocks Gold**

Large scale historic and current gold mining operations attest to the gold endowment of the Southern Cross-Forrestania Greenstone Belt (Figure 5).

Significant gold mineralisation was intersected in several drill holes in the south of the Dulcie prospect area (ZNC ASX Release 12<sup>th</sup> Apr 2018). Zenith's maiden aircore drill program confirmed the presence of gold mineralisation first identified in historic exploration in 1998 returning intersections of **5m @ 2.51 g/t gold including 1m @ 8.79 g/t gold** as well as outlining new gold mineralisation on Zenith's southernmost drill lines up to **2m @ 6.54g/t gold** (end of hole) – as detailed in ZNC ASX Release 5<sup>th</sup> June 2018. The planned program to use an RC drill rig to drill test beneath and down dip of the better gold intersections reported above (such as **2m @ 6.54g/t gold** (end of hole) was previously cancelled due to excessive rainfall. Follow-up testing is still to be completed.

In addition, gold within surficial laterite has been outlined with results including 4m @ 1.16 g/t gold from surface (ASX Release 31<sup>st</sup> July 2018). Follow-up drilling by Zenith indicates that there is potential for one or more modest scale, laterite gold, surface deposits of a similar style to that currently being mined and treated at the adjoining Dulcie Heap Leach gold operation.

### Dulcie Heap Leach Gold Project – Bedrock Gold Option

As announced to the ASX (21<sup>st</sup> March 2019) a detailed review by Zenith's geological team of historical exploration reports on the area of the DHLGO leases highlight that high-grade gold mineralisation is predominantly hosted by moderately west dipping BIF units. High-grade historic drill results include: **6.0m @ 16.91 g/t Au, 2.0m @ 32.73 g/t Au, 2.0m @ 16.5 g/t Au, 2.0m @ 15.40 g/t Au, 5.0m @ 4.73 g/t Au, 4.0m @ 4.90 g/t Au and 9.0m @ 2.10g/t Au**, presenting several high-priority target zones for follow-up by Zenith.

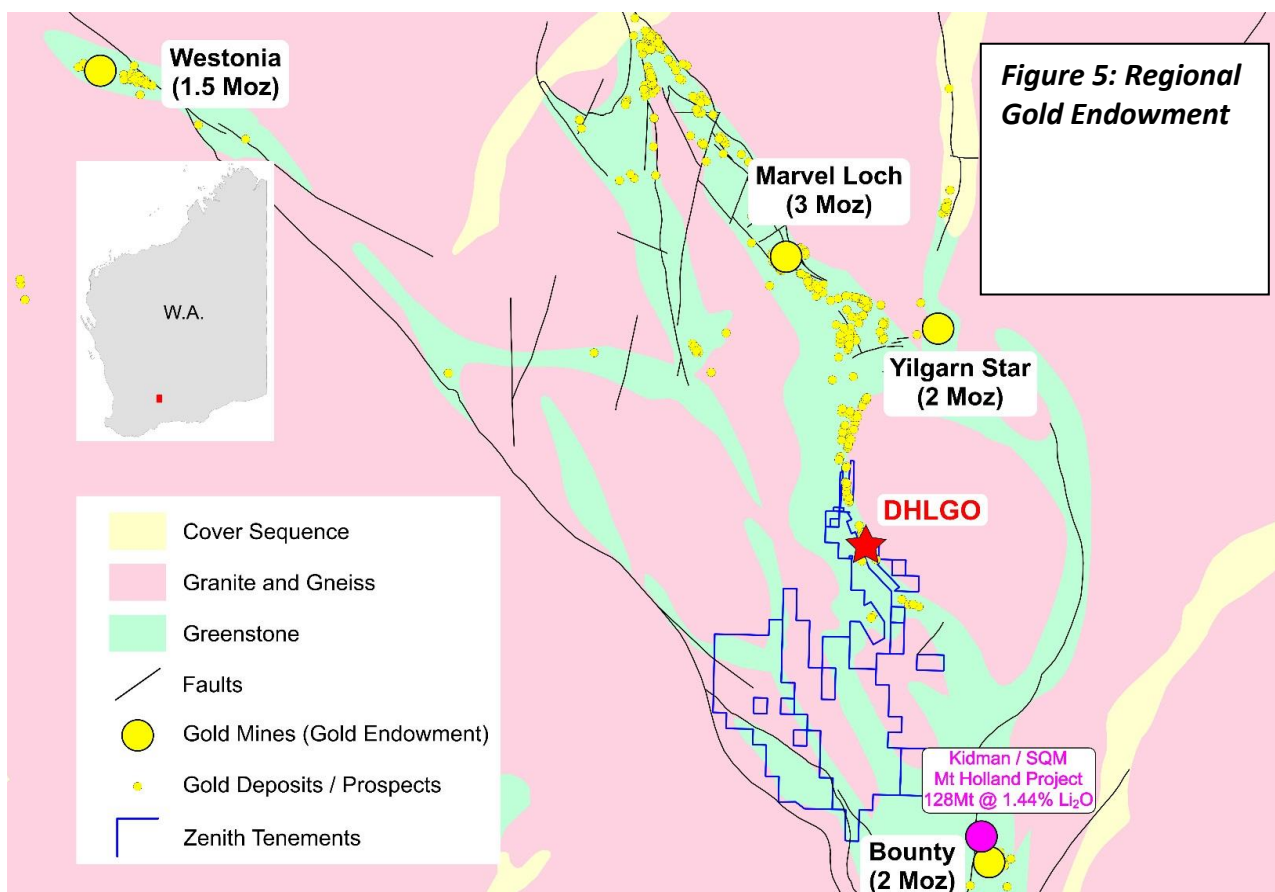
Of note, most historic drill holes have failed to adequately test Zenith's high-priority BIF target zone, where the shallow, wide, west dipping mineralised structures (with results such as: 32m @ 0.6 g/t Au and 57m @ 0.28g/t Au) intersect the north-south moderately west dipping preferred host rock BIF units. Most of the historic exploration drill holes have been collared to test the main laterite gold zone and are too far east of the target BIF host unit to be an effective test. In addition, most historic drill holes have only focused on the near surface laterite rich gold zone with only 38 holes of a total of 1,777 being drilled deeper than 75m. The average drill hole depth for the project area is only 19.7m.

Holes were drilled either vertical or at -60° east and assuming moderate west dipping gold mineralisation then intersection widths will be close to true widths, however there is insufficient drill density to be confident that all gold zones are dipping west and therefore caution must be applied regarding the widths of reported gold zones.

Planned follow up drilling by Zenith will provide an initial test of several of the higher-grade bedrock. Drill holes are planned on lines nominally 200m apart.

### Planned Programs at Split Rocks

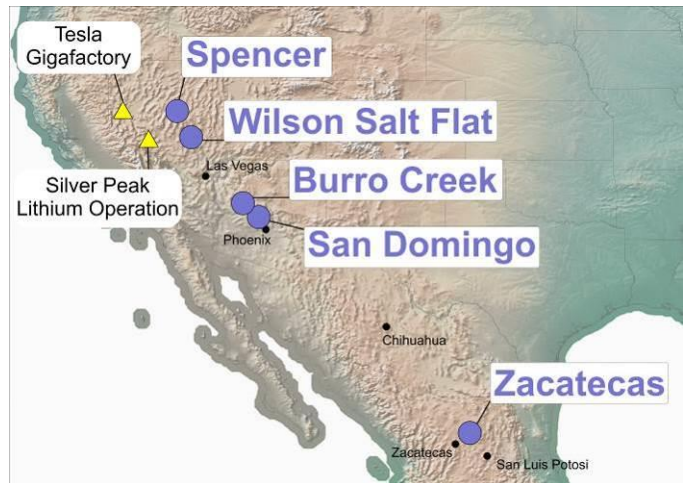
Geochemical field sampling programs commenced shortly after the quarter end.



## AMERICAN LITHIUM JOINT VENTURE

The American Lithium Joint Venture includes a US\$5 million farm-in deal with a private company controlled by prominent UK investor Jim Mellon (Bradda Head Ltd) (ASX Release 7<sup>th</sup> March 2017) to jointly unlock the potential of Zenith's USA and Mexican lithium project portfolio.

Zenith and Bradda Head are working towards providing the market with an update on the American Lithium JV in the first half of August.



## BURRO CREEK LITHIUM CLAY PROJECT – ARIZONA, USA (Option to Earn 100%)

- Widespread, near surface lithium results were intersected in the maiden drill program at the Burro Creek project including: 22.9 metres @ 1088ppm lithium and 2.94% potassium from 4.68m depth, and 24.4 metres @ 1361ppm lithium and 3.23% potassium from 19.8m depth (ZNC – ASX Release 19<sup>th</sup> June 2018).
- Depending on the cut-off grade used the lithium mineralised portion of the clay averages 23 to 54 metres in thickness, whilst recent testwork indicates a bulk density of 1.6 to 1.8 g/cm<sup>3</sup>.
- Drilling to date has tested only a small portion of the total project area that has recently been expanded by staking claims to the west;
- Mapping and sampling in the western claim area returned further widespread, high-grade lithium clays at surface with two new areas identified each equal in size to the zone of lithium mineralisation discovered in the current drill program;
- An initial Exploration Target was reported for the Burro Creek Project (ASX Release 19 June 2018) and a maiden mineral resource estimate is pending; and
- Metallurgical testwork has returned positive results.

### Activities During the Quarter

Nil this quarter.

### Planned Activities

Resource extension drilling

## ZACATECAS LITHIUM BRINE PROJECT – MEXICO

- Tenure (26,000 acres) over system of salt lakes in central Mexico;
- Lithium brines to 2.1% Li reported in regional sampling conducted by the Mexican Federal Government from solar evaporation ponds for salt production on adjacent salt lake (10km west of Zenith's tenure).
- Government results confirm lithium enriched brines are present in district, as well as demonstrating that concentration of lithium by solar evaporation methods is possible: Four water samples returned 1.2%, 1.4%, 1.4% and 2.1% lithium, these very high-grade lithium brines are like post-concentration brine feedstock to lithium brine production facilities;
- Systematic surface geochemical sampling by Zenith on salt pans returned highly anomalous lithium in surface sediments up to 1046ppm Li;
- Initial 11-hole shallow auger program (2017) returned strong lithium in salt lake sediments up to 0.09% Li;



- Near surface water samples are not strongly saline, perhaps due to rainwater dilution. However, lithium and total salinity in brine samples increase with depth in all holes pointing to deeper target;
- Ground based magnetotelluric (MT) geophysical surveys indicate conductive layer beneath the Illescas salt lake; 200 – 400m thick, 2.5km in length sited below strongly anomalous surface sample results, representing a compelling lithium brine drill target;
- Conductive layer defined at the San Vicente-San Juan salt lake concession, target zone is 100m to 200m in thickness, at a depth of 50 to 300m depth below surface; and
- Permitting for drill testing at San Vicente target completed.

#### Activities During the Quarter

Nil this quarter.

#### Planned Programs at Zacatecas

Drill testing of coincident geophysical and geochemical target.

### WILSON SALT FLAT LITHIUM BRINE PROJECT – NEVADA USA

- Sampling by Zenith returned up to 192ppm lithium from salt lake surface;
- The high-grade lithium surface sample results are coincident with gravity low anomalies reflecting basin sedimentary sequences that potentially host lithium brines.
- Both aeromagnetic and gravity modelling indicate complex basement geology indicative of major faults capable of channelling and focusing lithium enriched geothermal fluids; and
- Ground based magnetotelluric (MT) geophysical surveys indicates conductive layer in upper 200 – 300m below surface, representing a lithium brine drill target.
- Fully permitting for drill testing.

#### Activities During the Quarter

Nil this quarter.

#### Planned Activities

An initial 2-hole drilling program has been permitted to test structural and stratigraphic targets identified by geophysical surveys. Given success with these preliminary exploratory drill holes in finding brine aquifers and lithium, additional holes would be placed to expand on the information relating to basin hydrogeology, leading to resource estimation. Drilling planned to commence following Bradda Head planned re-listing on AIM.

### SAN DOMINGO LITHIUM PEGMATITE PROJECT – ARIZONA USA

- Abundant lithium bearing pegmatite dykes within Zenith's claims over an area 9km by 1.5km;
- Initial continuous rock chip sampling returned very encouraging results up to 5m @ 1.97% Li<sub>2</sub>O including 2.4m @ 2.49% Li<sub>2</sub>O within 14.1m zone @ 1.02%Li<sub>2</sub>O from spodumene rich pegmatites;
- In the SW of the project area select grab samples returned high-grade lithium from pegmatite dykes of 5.8% and 8.0% Li<sub>2</sub>O. Systematic composite rock chip sampling of more strongly weathered spodumene rich pegmatite returned: 2.9m @ 0.86% Li<sub>2</sub>O, 2.8m @ 0.69% Li<sub>2</sub>O, 3m @ 0.71% Li<sub>2</sub>O, and 3m @ 0.56% Li<sub>2</sub>O, the latter two samples are part of a near true width zone of 12.7m @ 0.45% Li<sub>2</sub>O; and
- Lithium as spodumene and amblygonite concentrates along with tantalum was produced from pegmatites within the district during the period 1947 – 1952.

#### Activities During the Quarter

Nil this quarter.

#### Planned Programs

Initial drill testing of the western San Domingo claim lithium pegmatite targets followed by drilling of the central and eastern pegmatite targets is planned.



## SPENCER LITHIUM BRINE PROJECT – NEVADA USA

- Initial reconnaissance sampling by Zenith returned up to 550ppm lithium in surface sediments - comparable to and higher than those from competitor lithium brine projects in the USA;
- The high-grade lithium surface sample results are coincident with gravity low anomalies reflecting basin sedimentary sequences that potentially host lithium brines.
- Local geothermal springs indicate active circulating hot waters capable of leaching lithium whilst both aeromagnetic and gravity modelling indicate complex basement geology indicative of major faults capable of channelling and focusing lithium enriched geothermal fluids; and
- Infill surface sampling and ground based geophysical surveys are planned prior to drill testing.

### Activities During the Quarter

Nil this quarter

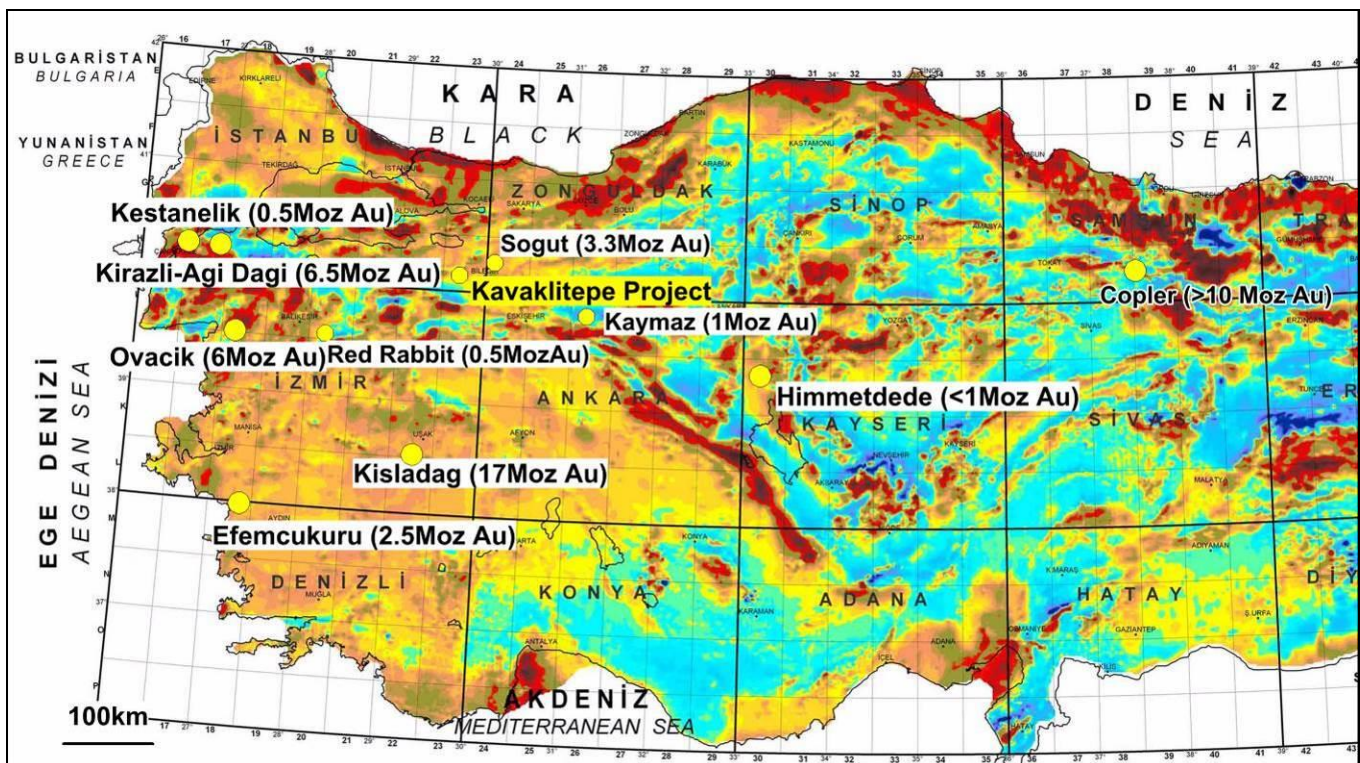
### Planned Activities

Infill surface sampling and electrical geophysical surveys followed by drilling are the next steps in exploration of the Spencer project.

## LITHIUM OIL BRINE PROJECT – PENNSYLVANIA USA

Initial and yet incomplete leasing of private oil field brine rights in Pennsylvania has been undertaken in an area where previous sampling of two historic oil wells located approximately 6 km apart returned significant lithium. The oil wells have been capped and shut-in and will require re-opening using a suitable oil field drill rig to allow confirmation sampling.

## KAVAKLITEPE GOLD JOINT VENTURE



*Kavaklitepe Project Location and Regional Gold Endowment (Image is Total Magnetic Intensity)*

## KAVAKLITEPE GOLD PROJECT – TURKEY (Zenith 30%-diluting)

- Two coherent plus 800-metre-long, high order gold in soil anomalies (+50 ppb), with peak soil sample values over 1 g/t gold;
- Kuzey Zone Drill results include: 21m @ 3.29 g/t Au, 14m @ 6.09 g/t Au, 16m @ 4.7 g/t, 9m @ 5.2g/t and 7.8m @ 7.3g/t gold, and continuous surface rock chip results include: 54.0m @ 3.33 g/t gold, 10m @ 12.2 g/t Au; 44m @ 3.37 g/t Au, 15m @ 10.10 g/t Au and 6.5m @ 5.18 g/t Au;
- Continuous rock chip sampling results include: 21m grading 2.67 g/t Au at the Discovery Zone, 44m @ 3.37 g/t Au, 10m @ 12.2 g/t Au and 15m @ 10.10 g/t Au at the Kuzey Zone and 12m @ 2.5 g/t gold at the Guney Zone.

### Activities During the Quarter

Initial 4 metre composite assay results from follow-up drill testing were received during the quarter from the Kavaklitepe Gold Project located within the highly gold endowed western region of Turkey (refer to Zenith ASX release dated 20<sup>th</sup> June 2019).

Based on preliminary 4 metre composite results the drill program has successfully defined gold mineralisation over the length of the 900 metre long Kuzey Prospect (north prospect) with indications of more than one high-grade shoot. Kuzey infill results from drill holes KT-51 to KT-78) include: KT-77: **20.0m @ 15.60 g/t Au, including 12.0m @ 24.67 g/t Au, KT-78: 16.0m @ 4.72 g/t Au, including 8.0m @ 7.99 g/t Au, KT-64: 44.0m @ 1.90 g/t Au, including 8.0m @ 5.50 g/t Au, KT-56: 24.0m @ 2.14 g/t Au; including 4.0m @ 5.45 g/t Au, and KT-53: 36.0m @ 2.06g/t Au, including 8.0m @ 4.14 g/t Au**, (Figures 6, 7, 8 & 9). These drill intersections are interpreted to be close to true thickness of the gold mineralisation. New continuous rock chip sampling along drill access tracks at Kuzey returned 16.0m @ 4.6 g/t Au and 4.0m @ 3.73 g/t Au (Figure 6). Kuzey is one of three gold mineralised zones within the Kavaklitepe Project, the others being Discovery and Guney.

Drilling at the Discovery Prospect (drill holes KT-41 to KT-46) shows consistent, shallow west dipping gold mineralisation over a strike length of 600 metres. Discovery zone drill results include: **KT- 42: 8.0m @ 0.74 g/t Au, KT-43: 8.0m @ 1.20 g/t Au and KT-44: 8.0m @ 1.26 g/t Au** (Figure 10). These drill intersections are also interpreted to be close to true thickness of the gold mineralisation. In addition, new continuous rock chip sampling along drill access tracks at Discovery returned **8.0m @ 1.28 g/t Au, 4.0m @ 3.17 g/t Au and 4.0m @ 1.81 g/t Au** (Figure 10).

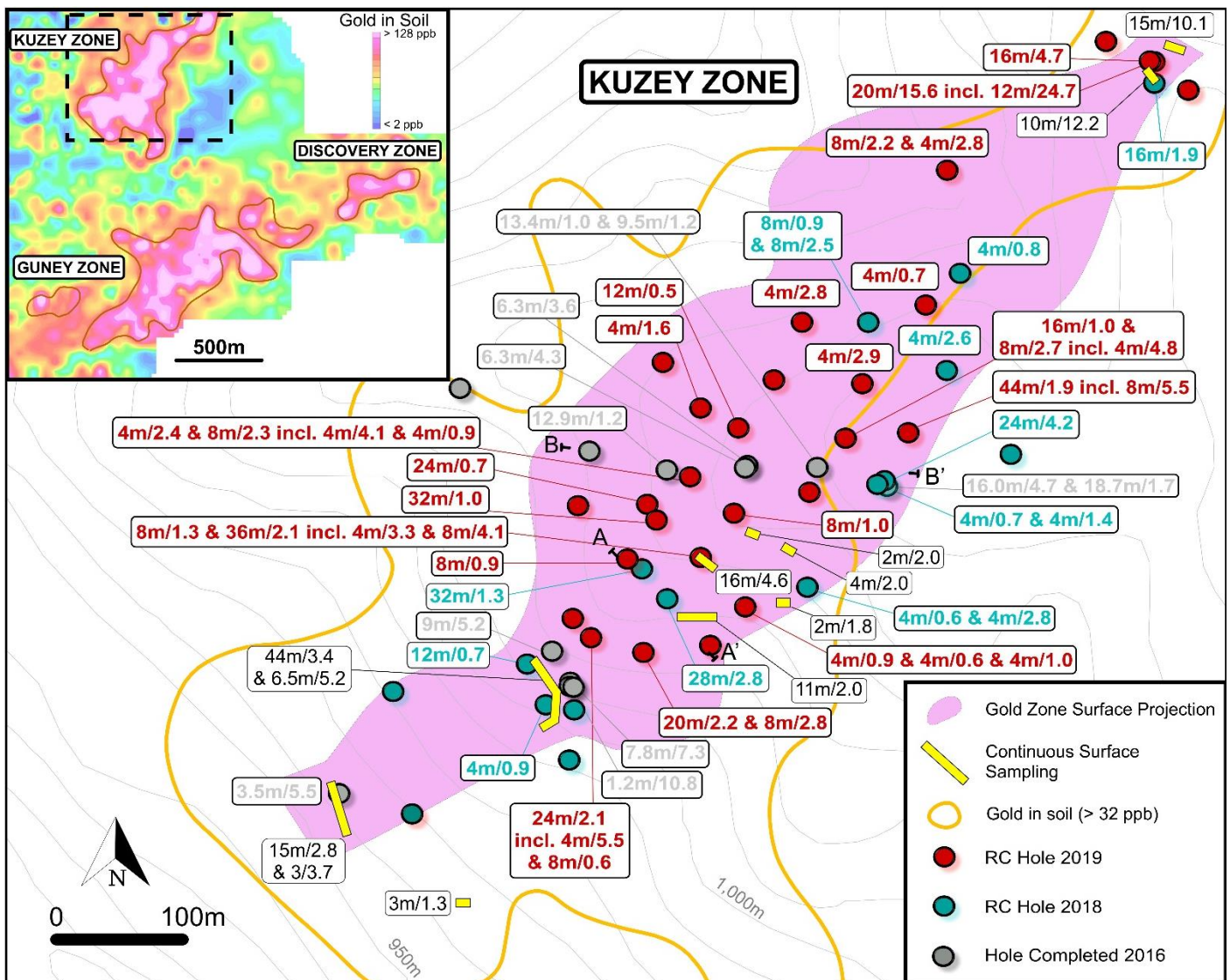
Drilling at the Guney Prospect (drill holes KT-47 to KT-50) returned a maximum of 8.0m @ 0.28g/t Au from surface in drill hole KT-49.

Gold mineralisation at Kavaklitepe is hosted in fault zone breccias and shear zones that are both subparallel to and cross-cut foliation in the host shales and schists in association with arsenic and antimony.

Individual 1 metre samples of the 4-metre composite gold mineralised intervals have been submitted to the assay laboratory for analysis with assay results expected in early August.

Exploration and evaluation of the Kavaklitepe gold project is managed by Teck Anadolu Madencilik Sanayi v. Ticaret A.S. ("Teck"), a Turkish affiliate of Teck Resources Limited through the Turkish joint venture company Kavak Madencilik A.S. partly owned by Zenith Minerals Limited. As previously advised (ASX Release 23rd April 2019) Zenith elected not to contribute its share of joint venture funds towards this drill program. The exact level of dilution will depend on final invoiced program costs, but it is estimated that Zenith's share of the joint venture holding company is now approximately 25%.





**Figure 6: Kavaklitepe Kuzey Zone Drill Hole Locations, Gold Intersections & Location of Cross Sections (A-A' & B-B') – (Legend: 20m/15.6 is 20.0m @ 15.6 g/t Au)**

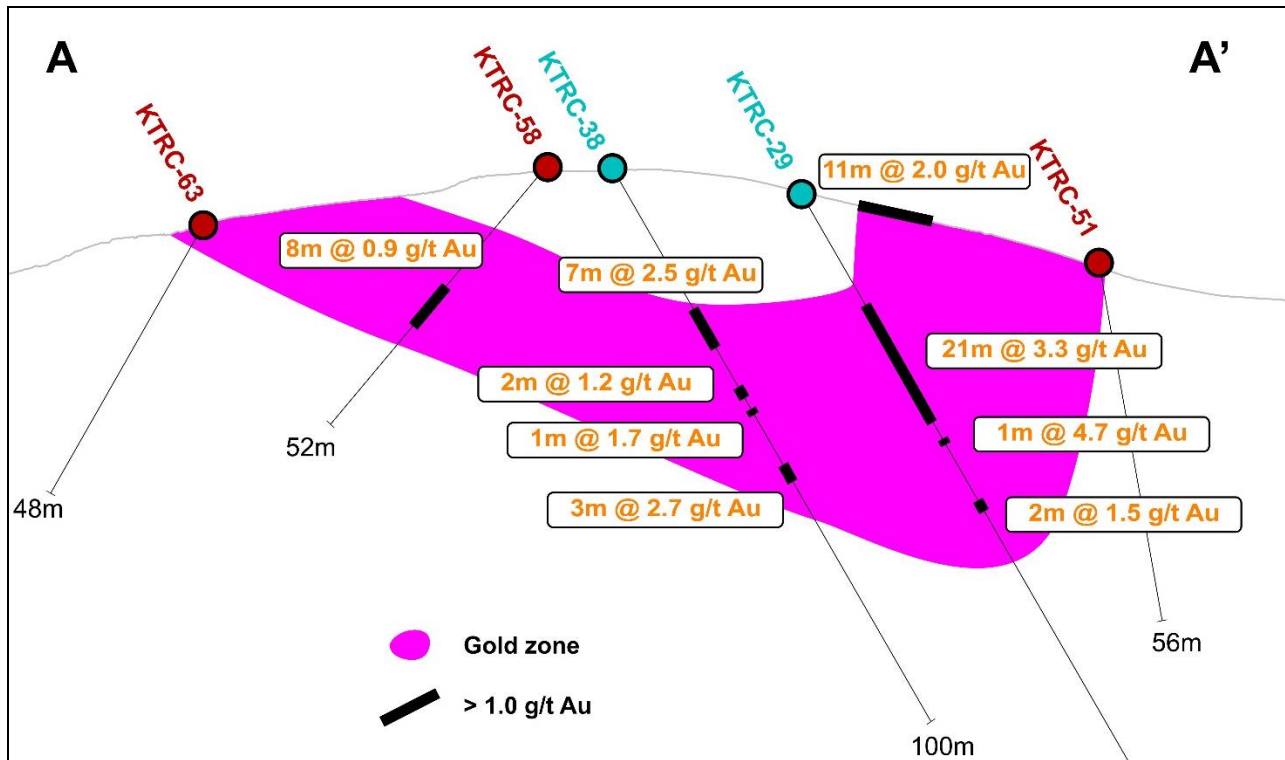
## Background

RC drilling in early 2019 was completed to determine the continuity, size and tenor of gold mineralisation intersected during the 2016 maiden short-hole diamond drilling program (KT-01 to KT-25) and the 2018 RC drill program (KTRC-26 to KTRC-40) at the Kavaklitepe gold project in western Turkey. Zenith considers the 2016 & 2018 programs to have been successful with sulphide-related gold mineralisation being discovered at both the Discovery Zone and Kuzey Zone, and with near surface high-grade oxide and transition gold mineralisation also intersected at Kuzey.

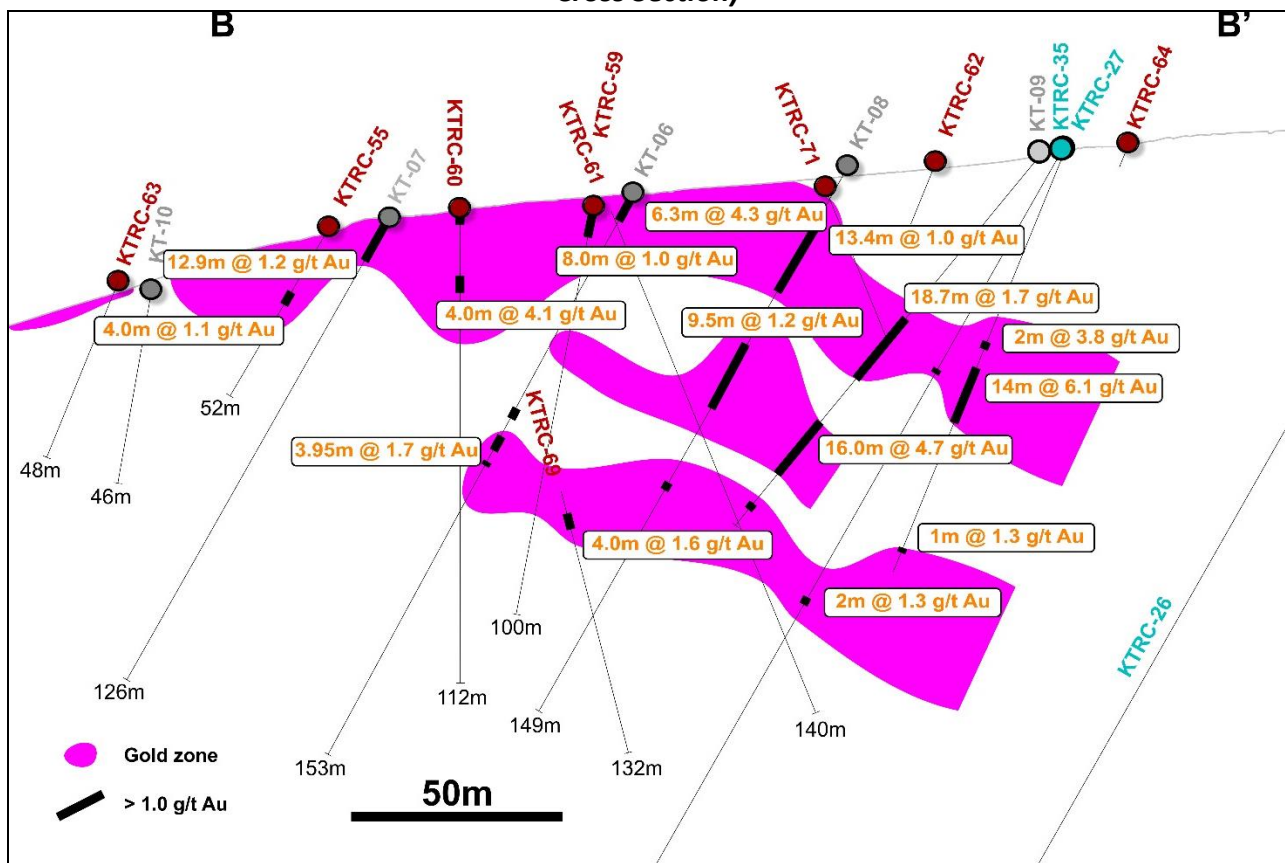
## Kuzey Zone

Drilling completed in 2016 (11 holes (KT-01 to KT-11, including KT-06A) provided an initial wide spaced test of only 360m of the 900m by 250m wide Kuzey Zone gold-in-soil anomaly target (Figures 6 & 10). Near surface oxide and transition gold mineralisation is interpreted to occur as a flat lying zone extending over the full 900m length of the prospect.

Better intersections from the 2016 drill program that are considered close to true width of high-grade, near surface, gold mineralisation (previously reported) include: KT-01; 3.5m @ 5.5 g/t Au from surface, KT-02; 9.0m @ 5.2 g/t Au from surface, KT-03; 7.8m @ 7.3 g/t Au from 3.3m depth, KT-05; 1.2m @ 10.8 g/t Au from 14.7m (as part of a 16.9m mineralised zone with lower core recovery), KT-06; 6.3m @ 4.3 g/t Au from surface, KT-06A ; 6.3m @ 3.6 g/t Au from surface and KT-07 ; 12.9m @ 1.2 g/t Au from surface.

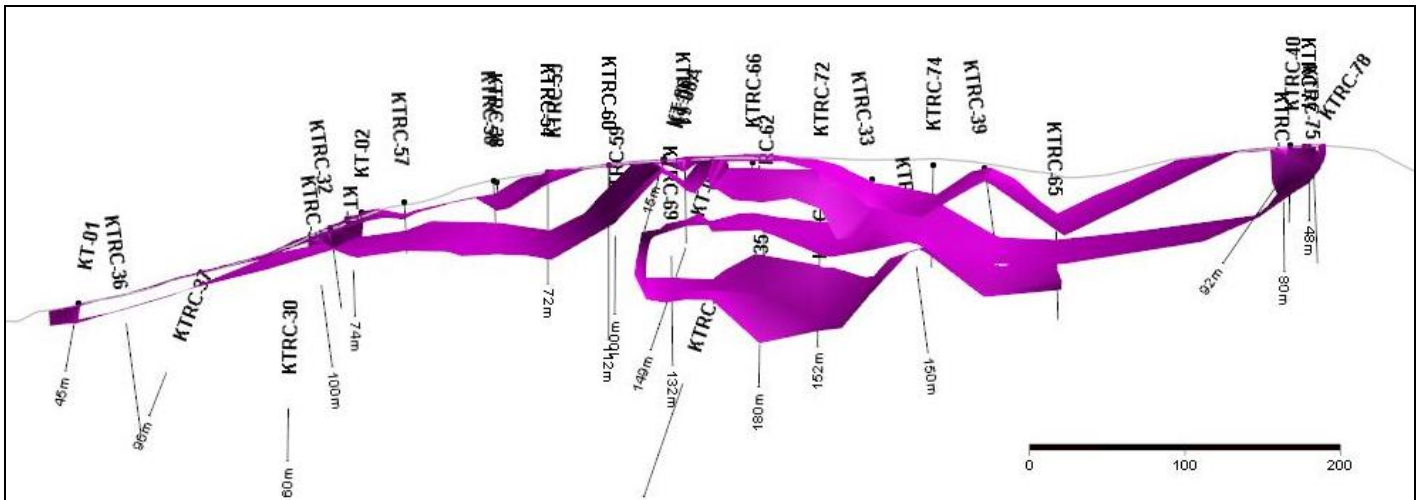


**Figure 7: Kavaklitepe Kuzey Zone Preliminary Cross Section A-A'– (Refer to Figure 1 for Location of Cross Section)**



**Figure 8: Kavaklitepe Kuzey Zone Preliminary Cross Section B-B'– (Refer to Figure 1 for Location of Cross Section)**





**Figure 9: Kavaklitepe Kuzey 3D View of Gold Zones Looking North West (Revised Preliminary Interpretation)**

Deeper drill results previously reported (5th October 2016) from the Kuzey Zone include: hole KT-09; an overall 67.7m gold mineralised zone from 46.2 to end of hole at 113.9m (true width unknown) including several zones of higher grade: 18.7m @ 1.7 g/t Au from 50.2m, 16.0m @ 4.7 g/t Au from 82.1m, (including 8.0 m @ 7.1 g/t Au) and 8.8m @ 1.0 g/t Au with the drill hole ending in mineralisation at 113.9m and hole KT-08; an overall 76.0m gold mineralised zone from 12.5m to 88.5m including: 13.4m @ 1.0 g/t Au from 16.1m, 1.5m @ 1.3 g/t Au from 33.0m, 2.0m @ 3.0 g/t Au from 48.8m, and 9.5m @ 1.2 g/t Au from 56.8m.

RC drill testing in late 2018 (KTRC-26 to KTRC-40) returned thick high-grade gold intersections at the Kuzey zone including: 21m @ 3.29 g/t Au within 26m @ 2.89 g/t, 14m @ 6.09 g/t Au and 8m @ 2.29 g/t Au (ZNC ASX Release 11th December 2018 and 23rd April 2019).

In addition, continuous rock chip sampling at the Kuzey Prospect has previously returned wide zones of high-grade gold mineralisation at surface, including: 54.0m @ 3.33 g/t Au (including 21.5m @ 7.2 g/t Au) and 44.0m @ 3.37 g/t Au (ZNC ASX Release 23rd April 2019).

The 3700m, 2019 RC drill program operated and funded by JV partner Teck Anadolu Madencilik Sanayi v. Ticaret A.S. ("Teck") a Turkish subsidiary of Teck Resources Limited, commenced in late-April 2019 and was designed to follow-up on results from the 2016 & 2018 drilling and surface sampling programs.

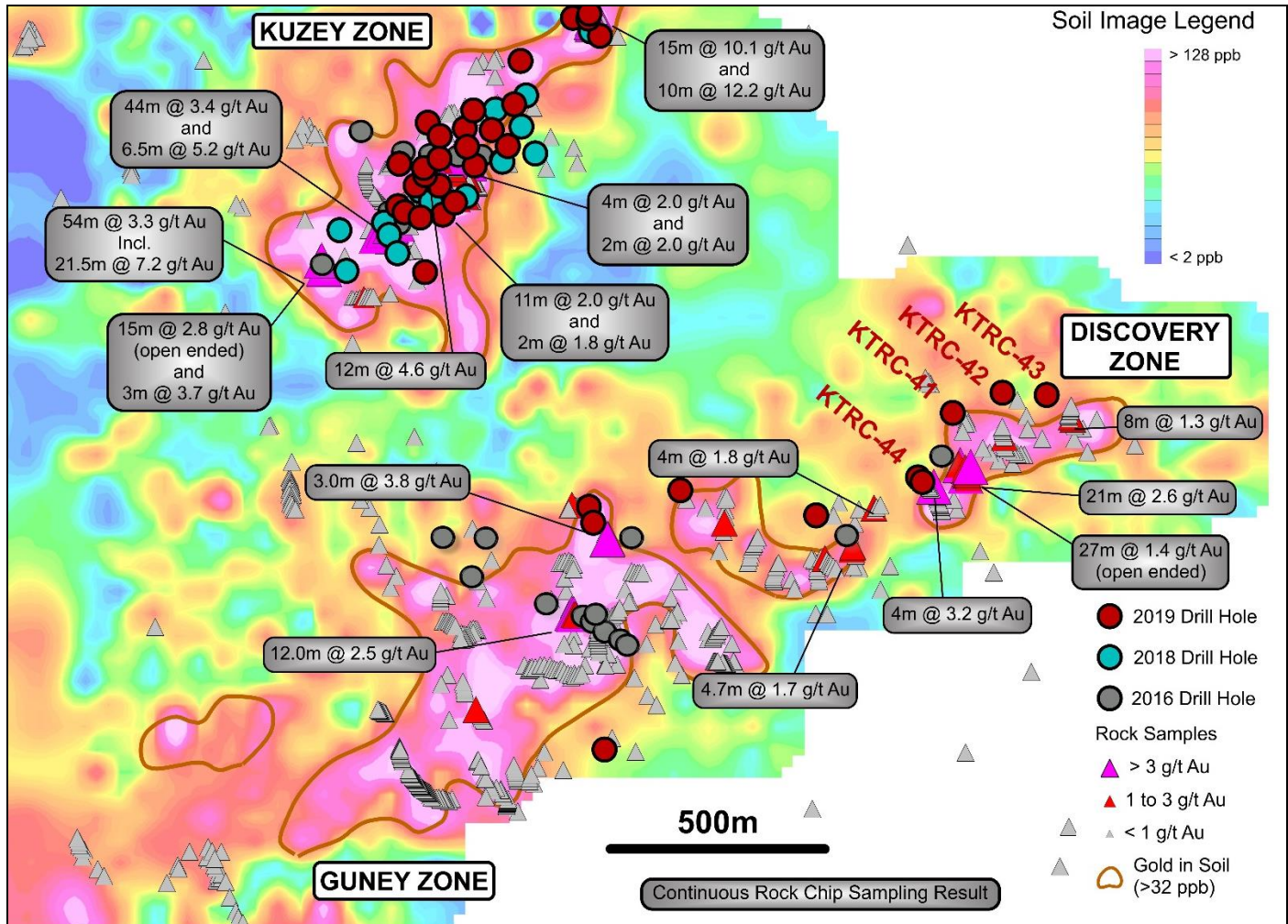
### Discovery and Guney Zones

In 2016 drilling at the Discovery Zone (2 holes (KT-18A and KT-23) intersected gold mineralisation over a 23.5m interval from 22.5m to 46.0m depth with results including: 9.4m @ 1.5 g/t Au and 3.5m @ 2.1 g/t Au (true width intervals). The near surface gold mineralisation dips to the northwest and is 60m down dip of previously reported continuous roadside surface sample results that include: 21.0m @ 2.7 g/t Au and 27.0m @ 1.4 g/t Au (Figure 10). The roadside sampling was conducted as an initial test of the 400m long gold-in-soil anomaly at the Discovery Zone.

Drilling at the Guney Zone (2016 - 11 holes (KT-12 to KT-17 & KT-19 to KT-22 & KT-24 to KT-25) has been technically difficult, intersecting a thick, flat-lying, massive sequence of calc-silicate rocks which contained multiple underground cavities up to 4 metres deep that caused several holes to fail at shallow depths and provided locally only very poor diamond drill core sample recoveries. Hole KT-12 returned 1.2m @ 1.4 g/t Au from 12.5m and 1.3m @ 0.6 g/t Au from 17.2m before being abandoned in a cavity and drill hole KT-21 drilled on the northern part of the prospect intersected a wide zone (30.7 m) of silicified and altered breccia crosscutting a meta-siltstone rock sequence from 54.9m to 85.6m with associated higher concentrations of trace elements arsenic, antimony and silver more similar to those returning significant gold intersections at the Kuzey and Discovery zones.

RC drilling undertaken in 2019 at the Discovery and Guney Zones (Figure 10) was completed to follow-up on the previous drill results as well as test bedrock targets where rock traverse sampling along drill access tracks in 2018

returned gold results, including: 8m @ 1.77 g/t Au, 8m @ 1.74 g/t Au, including 4m @ 3.17 g/t Au (ZNC ASX release 23rd April 2019), supported by new sampling completed in 2019 detailed in this release, including: 8.0m @ 1.28 g/t Au, 4.0m @ 3.17 g/t Au and 4.0m @ 1.81 g/t Au.



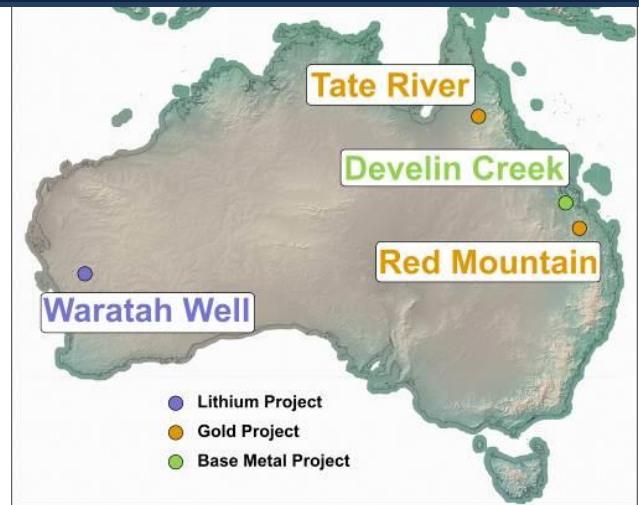
**Figure 10: Plan Showing Kavaklitepe Project Gold Geochemistry & Location of Drill Holes in Discovery Zone with Significant Drill Results**

#### Planned Activities

Upon receipt of the 1 metre sample results the Kavaklitepe JV partners will be in a better position to comment on the significance of the gold mineralisation defined in the recent RC drill campaign and future work on the project.

## OTHER AUSTRALIAN EXPLORATION PROJECTS

The Company is continuing to explore projects that possess strong technical merit. The Company's focus is advancing its project portfolio of high-quality lithium, gold and base metals projects.



### DEVELIN CREEK COPPER-ZINC-GOLD-SILVER PROJECT – QUEENSLAND (Zenith 100%)

- Inferred Mineral Resource (JORC 2012) of: 2.57Mt @ 1.76% copper, 2.01% zinc, 0.24g/t gold and 9.6g/t silver (2.62% CuEq) released to ASX on the 15<sup>th</sup> February 2015.
- Upside to resource grades with Zenith RC hole twinning previous 1993 percussion hole returning significantly higher copper, zinc, gold and silver grades (300% to 700% higher);
- Initial metallurgical testwork results show positive first stage “rougher” recoveries of 90%;
- Highly prospective host rock extends for up to 50km north - south in Develin Creek tenure;
- Gossans discovered at new zinc soil anomalies defined in Jan 2019;
- Drilling planned to test new targets and twin historical potentially ineffective drill holes.

#### Activities During the Quarter

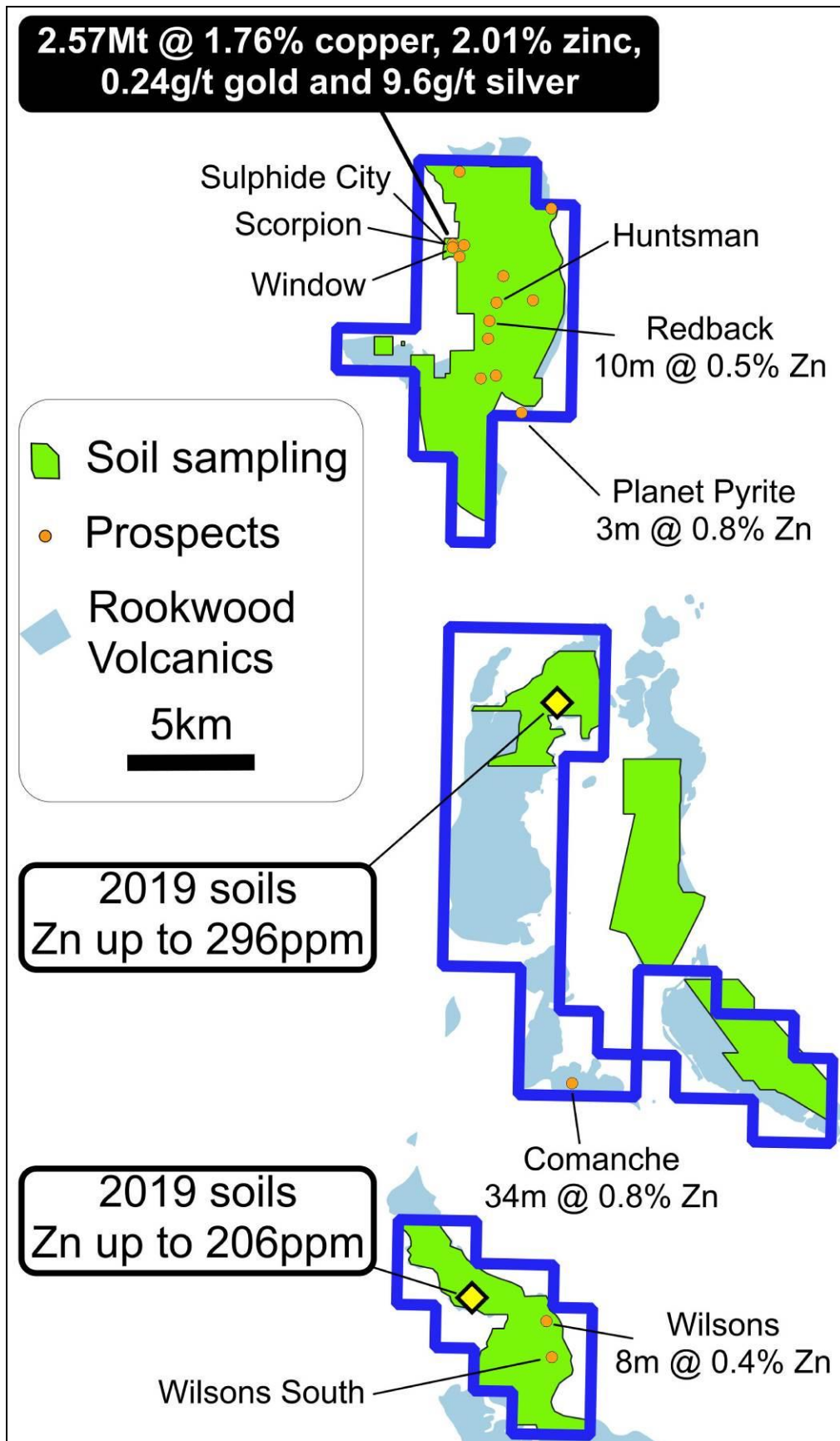
Field follow-up and assessment of the new zinc soil anomalies reported in the previous quarter has returned encouraging gossanous rock samples from both anomaly areas (Figure 11).

Gossanous quartz veins within an area of subdued outcrop located 4km north east of the Wilsons prospect returned anomalous gold, arsenic, bismuth, copper, lead and antimony, whilst gossanous basalt samples taken 20km north of the Comanche prospect returned encouraging, anomalous levels of copper, bismuth, antimony and zinc. The metal associations from both these areas are consistent with those from gossans overlying the known base metal deposits owned by Zenith including Widow and Scorpion.

#### Planned Activities

Further follow-up mapping and infill soil sampling is planned to better define these targets.





**Figure 11: Develin Creek Prospects and New Geochemical Anomalies**



## TATE RIVER GOLD PROJECT – QLD (Zenith Earning up to 70%)

- Widespread bedrock gold mineralisation confirmed by Zenith excavator trenching program at the Guppy Strike prospect: with results including: 5m @ 3.92g/t Au, 3m @ 1.72 g/t Au, 3m @ 1.09 g/t Au and 2m @ 0.82g/t Au. Wide zones of strongly anomalous gold i.e. Trench GT12 (entire length average 166m @ 0.14g/t Au) indicate large scale gold mineralised system.
- Setting and geochemical association is indicative of an intrusion related gold system. Nearby deposits of this type include Mungana / Red Dome gold mine that had gold endowment of 2.7Moz Au.
- Large gold prospective landholding, significant results including:
  - North East Target – rock chip samples to 2.1 g/t Au with associated high arsenic and antimony in colloform banded quartz veins and quartz breccia hosted by rhyolite, and schist whilst wide spaced (400m x 100m) soil sampling returned high-order gold results up to 0.2g/t gold;
  - Far North prospect rock samples up to 1.7g/t gold also with strong arsenic & antimony hosted in quartz veins; and
  - Guppy Strike West – rock samples to 1.17g/t gold in association with strong bismuth & tellurium.

### Activities During the Quarter

The Company is seeking a joint venture partner to advance this large prospective landholding (Figure 12).

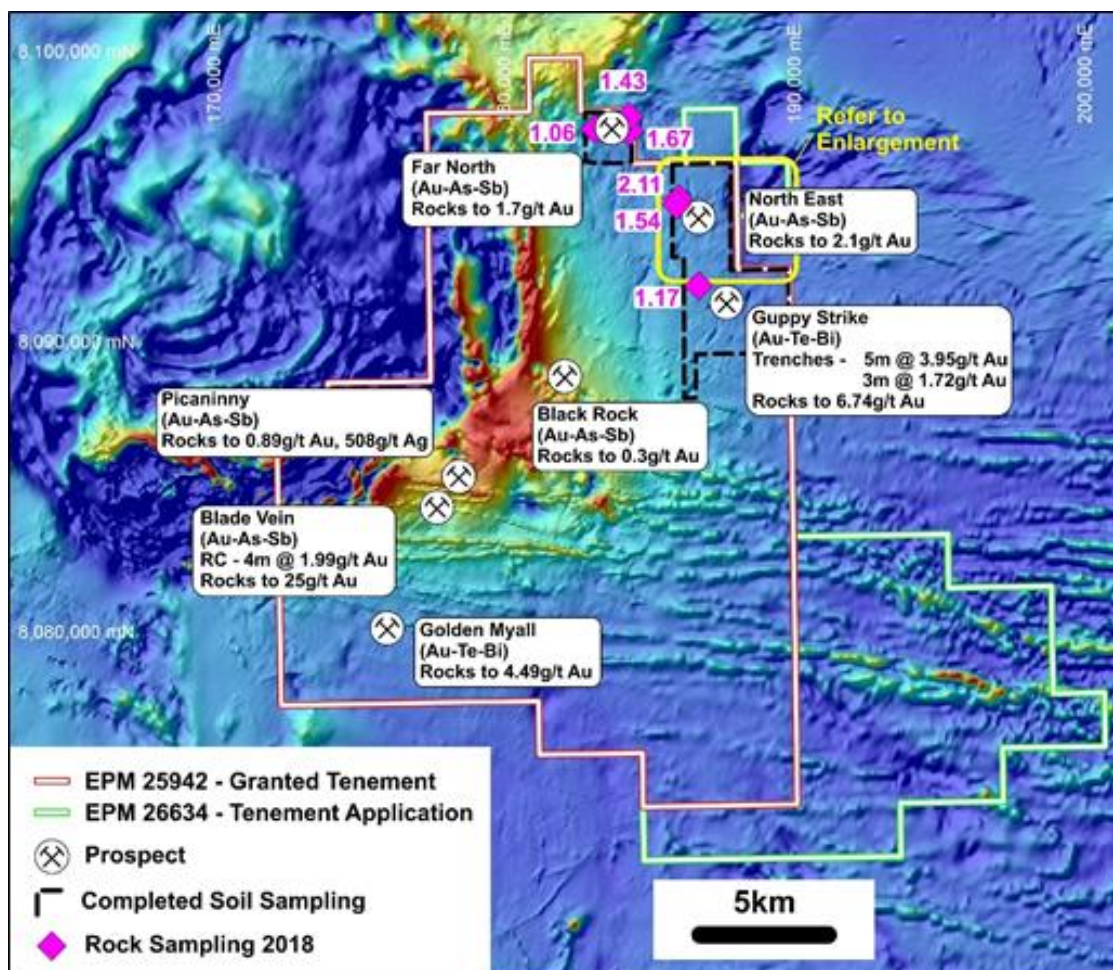


Figure 12: Tate River Prospect Locations and North East & Far North Targets

## RED MOUNTAIN GOLD-SILVER PROJECT – QLD (Zenith 100%)

- Work by Zenith has returned highly encouraging silver and gold rock chip sample results up to 114 g/t silver and 2.01 g/t gold;
- Large (2km by 1.5km) zoned soil anomaly, peak gold soil result of 1.6 g/t Au & peak silver value 2.1 g/t Ag;
- Red Mountain host rocks, alteration and geochemical association similar to that at nearby operating Mt Rawdon gold mine, providing a potential geological model to assist targeting;
- Mineralisation hosted in felsic volcanic sequence that has not been previously recognized in this area and does not appear on regional government geological maps.

### Activities During the Quarter

Zenith's maiden exploration program in 2017 at Red Mountain returned rock chip sample results up to 0.69 g/t gold and 114g/t silver. Field work in mid-2019 by Zenith to follow-up these results returned further highly encouraging silver and gold rock chip sample results up to 2.01 g/t gold and 52.5 g/t silver around 800 metres north of the best results from 2017 sampling (Zenith ASX Release 19<sup>th</sup> July 2019). In addition, systematic geochemical sampling has now defined a large 2km by 1.5km zoned soil anomaly with peak soil gold result of 1.6 g/t Au and peak silver soil value 2.1 g/t Au (Figure 13).

Based on preliminary reconnaissance mapping, mineralisation is hosted within felsic volcanic rocks including flow banded rhyolite, felsic tuff and volcanic breccia close to the contact with granite. Much of the area is obscured by soil cover.

The large soil geochemical anomaly is distinctly zoned with a Cu-Mo-S-Ba-Mn core lying predominantly over the felsic rocks surrounded by an annular shaped gold-silver-Pb-Zn-As-Te-Bi-Sb-Se-Ni-Co +/- Hg-Mn-U anomaly that is generally close to the felsic rock – granite contact.

The Red Mountain host rocks, alteration and geochemical association are interpreted as having similarities to that at the nearby operating Mt Rawdon gold mine based on comparison to research published by Evolution Mining geologist Howard (2015) – refer to Zenith ASX Release 19<sup>th</sup> July 2019 for additional details. The similarity is encouraging and provides Zenith with a geological model to assist in targeting gold and silver mineralisation at Red Mountain.

### Planned Activities

Detailed geological mapping is planned along with trenching and/or drilling to test the true thickness of the poorly exposed gold-silver zones and to track mineralisation where it extends beneath shallow soil cover.

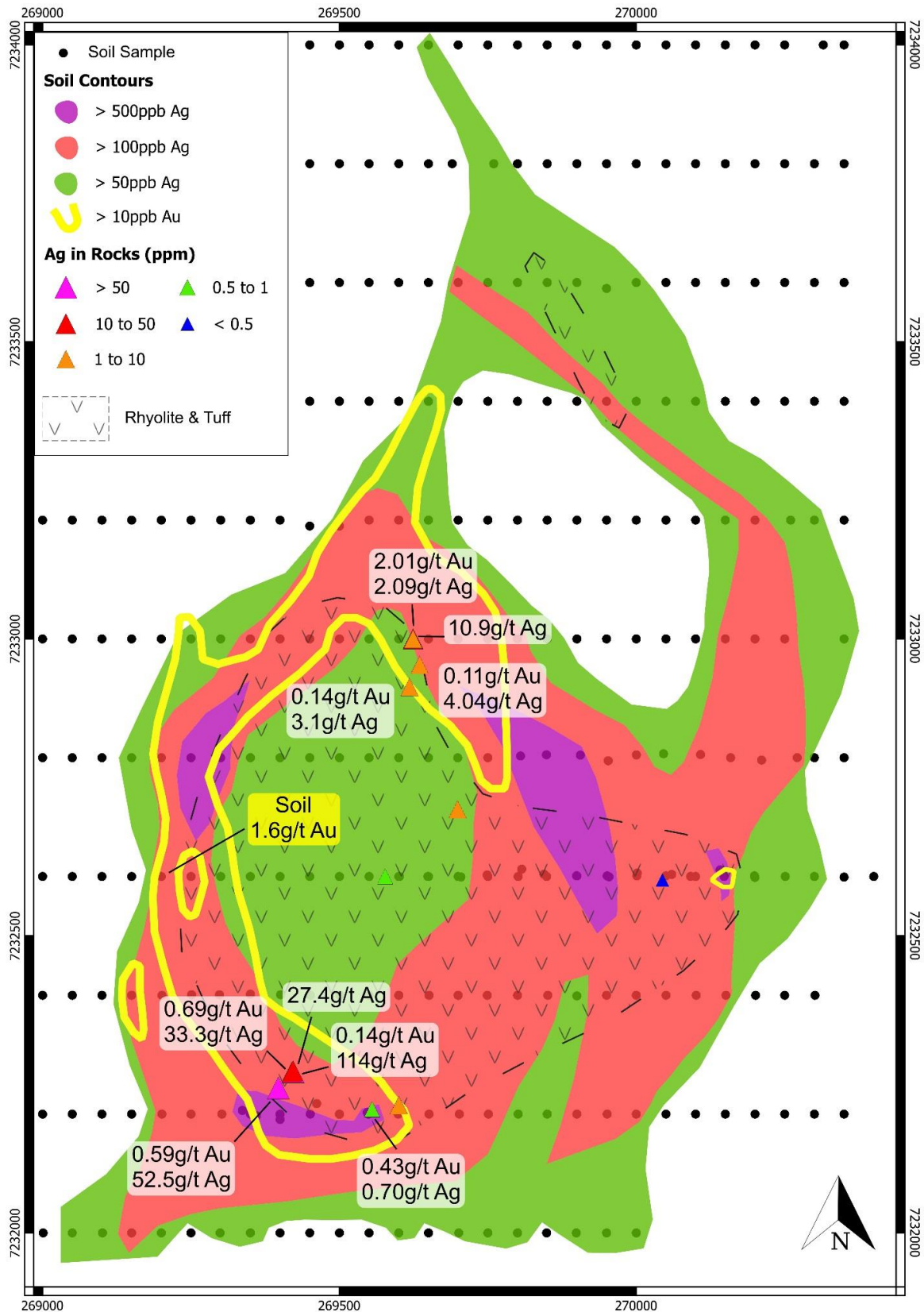


Figure 13: Red Mountain Geochemical Results – Summary Map



## WARATAH WELL LITHIUM-TANTALUM PROJECT – WA (Zenith 100%)

- Waratah Well Project covers area of extensive outcropping pegmatites (3km x 2km) in area where no reported previous exploration for lithium;
- Widespread, high-grade tantalum up to 1166ppm Ta<sub>2</sub>O<sub>5</sub> and lithium up to 1.75% Li<sub>2</sub>O (ZNC ASX release - 27/04/18);
- Initial tantalum department study confirms the potential for a marketable tantalum product;
- Conceptual lithium target beneath tantalum bearing pegmatites.

### Activities During the Quarter

Nil this quarter.

### Planned Activities

The Company is seeking a partner to progress the evaluation and potential development of this high-grade tantalum opportunity.

## OTHER JOINT VENTURES & OPTIONS ON ZENITH PROPERTIES

The Company has continued to implement its strategy of being an exploration project generator. Projects are either advanced by the Company's experienced team applying innovative exploration techniques or by partners which have the technical and financial capability, depending on how the Board believes shareholders' best interests are served.

In addition to the Kavaklitepe and American Lithium JV's, the Company has three Australian projects being funded under option by partners:

- Earahedy Zinc;
- Vivash Iron; and
- Talga Fault Cobalt



## EARAHEEDY ZINC PROJECT – WA (Zenith 100%, ASX: RTR option to acquire 75%)

- Wide spaced drilling defined stratiform zinc and lead mineralisation over 20km of strike within carbonate sediments of the Earahedy Basin in Western Australia.
- Historical drilling intercepted high-grade zinc up to 18.6% within an intersection 3.3m @ 11.2% Zn, and 0.93% Pb from 150m. Other drill-holes include 2m @ 8.23% Zn and 2.77% Pb from 103m.
- Coarse grain sphalerite (Zn) and galena (Pb) with pyrite and marcasite occurs as breccias, veins and replacement zones within carbonates.
- Mineralisation style like Mississippi Valley Type (MVT) large, high-grade base metal deposits that include the Devonian Lennard Shelf deposits of the Kimberley Region of Western Australia.
- Gravity survey outlined several non-magnetic and non-topographic related gravity anomalies and trends that lies close to both northwest (basement faults) and northeast (cross faults) that provide potential new target zones structures;
- Drill testing in progress – results awaited.

### Activities During the Quarter

Diamond drilling commenced at the **Earahedy Zinc** project (ZNC ASX Release dated 10<sup>th</sup> April 2019). Drilling will test high-order gravity targets outlined by Zenith's partner Rumble Resources Limited (RTR) that are associated with widespread (20km x 3.5km) zinc mineralisation defined by historic drilling. Better historic drill intersections include: **11.3m @ 4.34% zinc including 2.3m @ 14.42% Zn, 1.15% Pb** from 150.2m.



### Planned Activities

Two diamond core holes will test gravity targets EG1 and EG3 with contingency holes for gravity targets EG4 and EG6 (Figures 14 & 15).

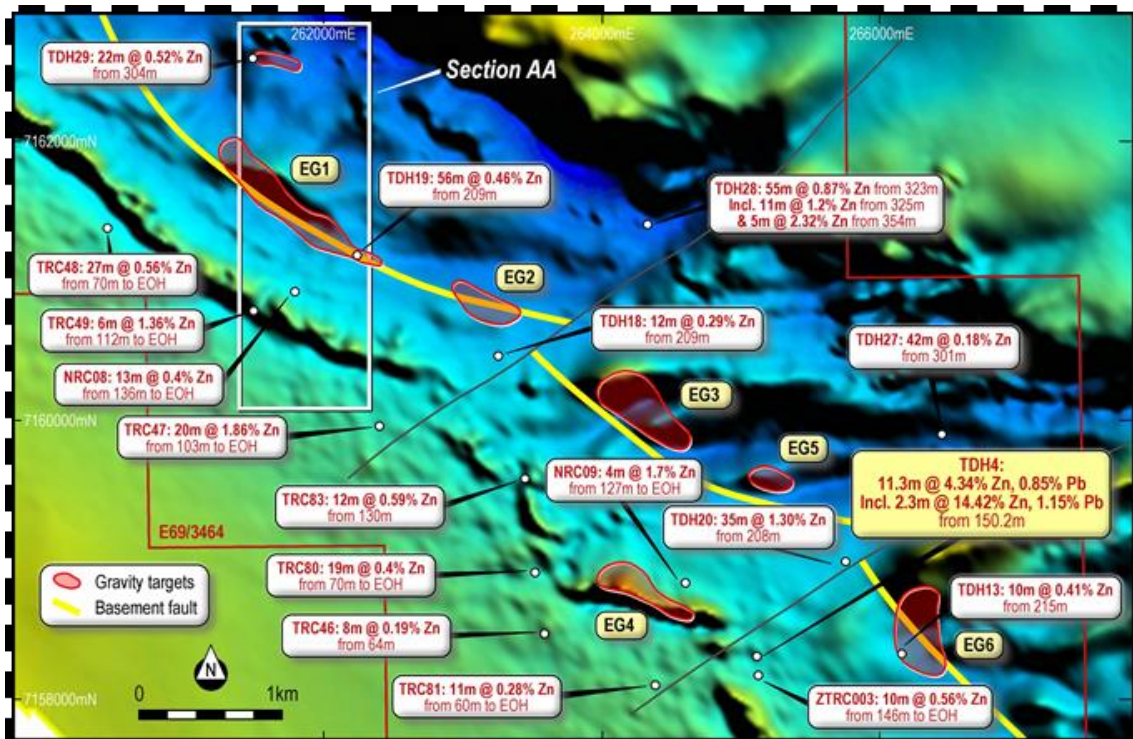


Figure 14: Area of Exploration Focus Showing Gravity Targets and Historic Drill Intersections

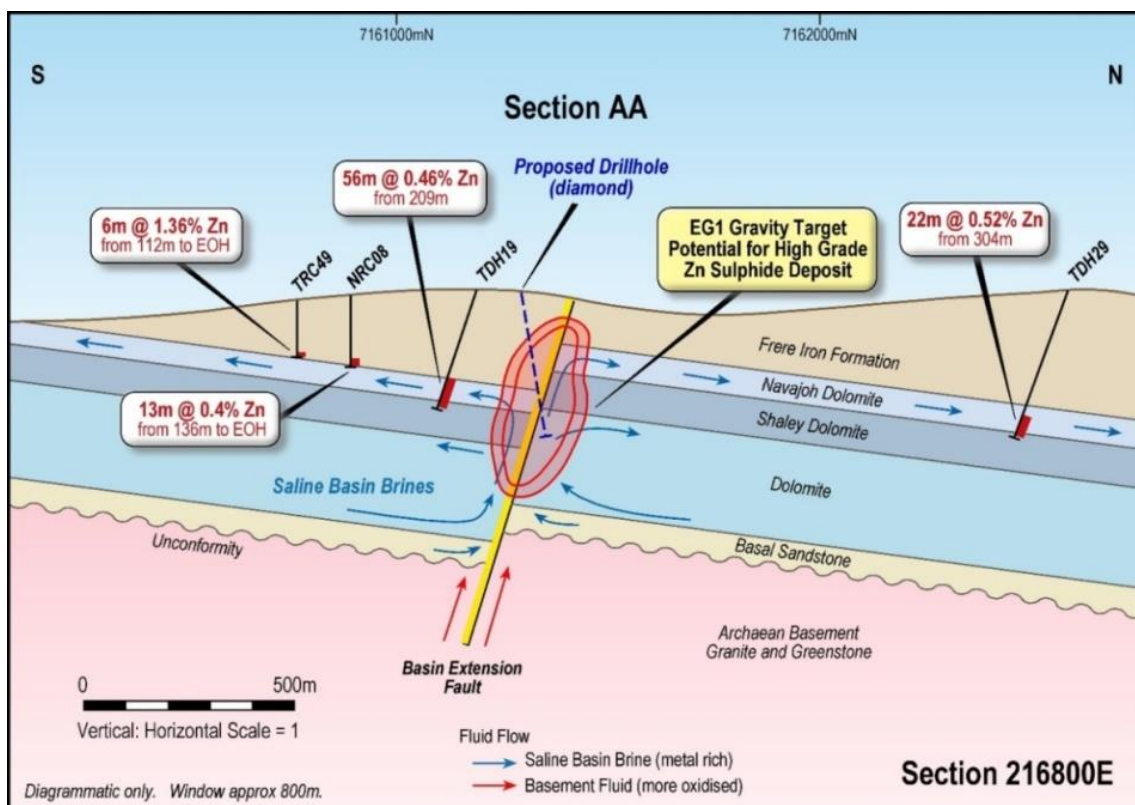


Figure 15: Section AA (see Figure 14 for location of target) – Mineralisation Model and location of EG1 Gravity Target drill hole (same size target as the Pillara Zn-Pb Deposit)

### Rumble Resources Limited Transaction

An option agreement was executed with Rumble Resources Limited (RTR) over the Earraheedy Zinc project, as announced to the ASX by RTR on the 12<sup>th</sup> October 2017. Zenith received RTR shares worth \$50,000 as an initial option payment. RTR may purchase a 75% interest in the Earraheedy Zinc project for \$550k in shares within 2 years, subject to a 2-year extension (for a further payment of \$200k cash/shares at ZNC's election). Upon exercise of option to purchase the Earraheedy Zinc project by RTR, ZNC is then free carried at 25% to the end of a BFS.

## VIVASH GORGE IRON PROJECT – WA (ZENITH 100%, OPTION TO RTX)

- The Vivash Gorge project covers areas of prospective Brockman and Marra Mamba iron formations along strike of Rio Tinto Iron Ore's Brockman 4 operating iron ore mine in the Pilbara region of Western Australia.
- RTX planning to drill test in 2019.

### Activities During the Quarter

Planning of final site access arrangements, following the receipt of heritage clearance of 17 potential drill pads and access tracks in the March quarter.

### Planned Activities

Site access arrangements being finalised ahead of initial RC drill program planned for the 2019 field season (now likely in December quarter) to test a concealed Brockman iron ore target.

### Background on Vivash Gorge Iron Project

The Vivash Gorge Iron Project (exploration licence E47/3071) is situated approximately 80km west of Tom Price in the Pilbara region of Western Australia. The project covers approximately 8km of strike of prospective Brockman and Marra Mamba iron formations along trend of Rio Tinto Iron Ore's Brockman 4 operating iron ore mine.

### Option Terms

- RTX paid Zenith an initial option fee of \$50k for a 1-year option period (post land access, including heritage clearances) to exclusively explore the Vivash Gorge iron project;
- RTX able to extend the option period by a further 2 years by paying Zenith \$50k/annum;
- RTX able to exercise option to acquire 100% of the Vivash Gorge iron project before the end of the option period by paying Zenith a once off cash payment of \$500k;
- RTX to pay a success fee to Zenith of a further \$1.0m when RTX expends more than \$7.5m on the Vivash Gorge iron project, excluding tenement rents, rates & native title related costs;
- Should RTX on-sell the Vivash Gorge project to a third party within 5 years of acquiring it, an on-sale payment of 10% of the consideration would be payable to Zenith; and other terms and conditions that are of an industry standard nature.

## TALGA FAULT COBALT PROJECT – WA (ZENITH 100%, OPTION TO ASX:GPP)

- The Talga Fault project covers areas prospective for cobalt mineralisation.
- Historic surface sampling returned up to 0.80% cobalt.
- Airborne VTEM geophysical anomalies associated with geochemical targets.

### Activities During the Quarter

Preparation for site visit including completion of native title heritage access agreements.

### Planned Activities

Site visit to assess 3 primary VTEM geophysical targets along with historic cobalt-copper rock chip and soil sample anomalies.

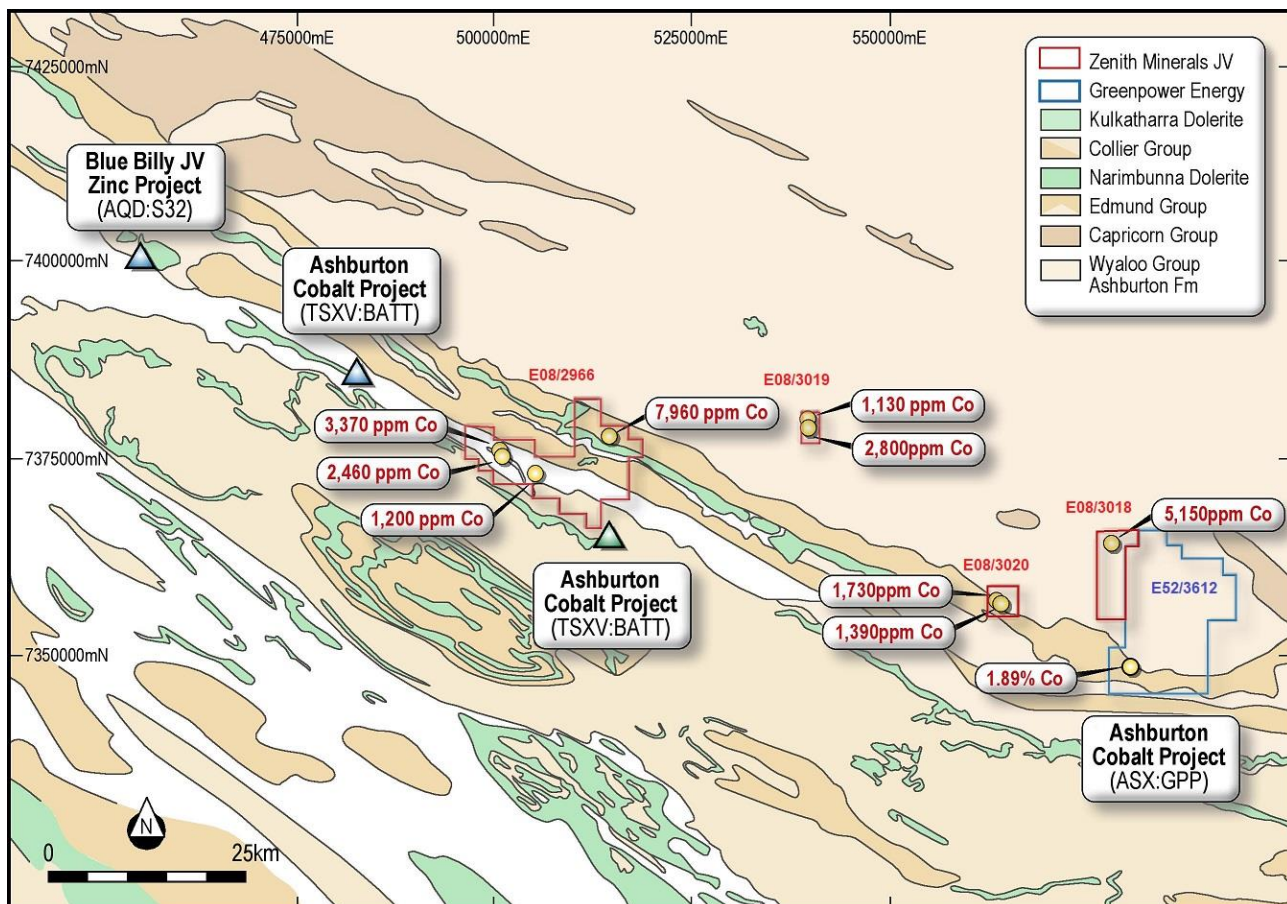
### Background on Talga Fault Cobalt Project

The Ashburton cobalt project area is focused on the northern limit of the Bangemall Basin, around the Talga Fault where the basin abuts the Ashburton Basin. Historic exploration activities in 2008 – 2009 reported high cobalt values adjacent to the Talga Fault zone (Figure 16), including: 0.52% Co, 0.28% Co, 0.17% Co & 0.80% Co

In addition, historic exploration data on E08/2966 has outlined strong surface cobalt anomalies occurring in both Collier and Edmund Basins. These soil anomalies overlie interpreted carbonate and sedimentary rock units and interpreted Kulkatharra Dolerite where it intrudes the Talga Fault Zone (GPP ASX Release 30<sup>th</sup> October 2018).

### Option Terms

- \$60k cash up-front, non-refundable for a 1-year option to purchase 70%;
- Can extend for further 1 year for an additional \$30k cash & \$30k scrip;
- Can extend for a further 2 years for \$150K cash or scrip at Zenith's election.
- \$100k minimum expenditure, keeping the project in good standing
- Ion can exercise the option and purchase 70% interest for \$300K in scrip at any time during option period.
- Zenith can then convert remaining 30% to GPP equity or contribute on a pro rata basis.



**Figure 16: Ashburton Project Location**



## MINERAL RESOURCES IN RETENTION

The Company has secured retention licences over the Earahedy Manganese deposits. The retention licence/status allows Zenith to hold the Mineral Resources but negates any ongoing Department of Mines statutory annual expenditure requirements for those licences for an extended period.

The Company regularly assesses the manganese market conditions to determine if a development review of these assets is warranted.



### EARAHEEDY MANGANESE PROJECT – WA (Zenith 100%)

Manganese Mineral Resources at Red Lake and Lockeridge are retained under retention licences pending an improvement in market conditions. Refer to the Company's website [www.zenithminerals.com.au](http://www.zenithminerals.com.au) for further details.

### MT ALEXANDER IRON PROJECT – WA (Zenith 100%)

Zenith completed the sale of its 100% owned Mt Alexander magnetite iron project located in Western Australia to a private Australian company (Zenith ASX Release 26<sup>th</sup> Jun 2019). Zenith received cash of \$250,000 and will receive ten annual payments of \$250,000 each (total \$2.5 million) once the project reaches commercial production, for a total consideration of \$2.75 million (refer to Zenith ASX release dated

## NEW OPPORTUNITIES

Zenith is currently assessing a rare earth (REE) exploration play in the USA.

## CORPORATE

Nil

## COMPETENT PERSONS STATEMENTS

*The information in this report that relates to Zenith Exploration Results and Exploration Targets 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.*

*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.*





**Zenith Minerals Limited**

**31<sup>st</sup> July 2019**

**For further information contact;**

**Directors Michael Clifford or Mike Joyce**

**Phone 08 9226 1110**

## Appendix 5B

# Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

### Name of entity

Zenith Minerals Limited

### ABN

96 119 397 938

### Quarter ended ("current quarter")

30 June 2019

Consolidated statement of cash flows		Current Quarter \$A'000	Year to Date (12 months) \$A'000
<b>1.</b>	<b>Cash flows from operating activities</b>		
1.1	Receipts from customers	23	162
1.2	Payments for		
	(a) exploration & evaluation	(42)	(711)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(158)	(605)
	(e) administration and corporate costs	(67)	(357)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	1	4
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	(12)
1.7	Research and development refunds	-	-
1.8	Other (provide details if material)	-	-
<b>1.9</b>	<b>Net cash from / (used in) operating activities</b>	<b>(243)</b>	<b>(1,519)</b>

<b>2.</b>	<b>Cash flows from investing activities</b>		
2.1	Payments to acquire:		
	(a) property, plant and equipment	(2)	(10)
	(b) tenements (see item 10)	(3)	(10)
	(c) investments	-	(141)
	(d) other non-current assets	-	-

<b>Consolidated statement of cash flows</b>		<b>Current Quarter \$A'000</b>	<b>Year to Date (12 months) \$A'000</b>
2.2	Proceeds from the disposal of:		
	(a) property, plant and equipment	-	-
	(b) tenements (see item 10)	250	250
	(c) investments	-	11
	(d) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
<b>2.6</b>	<b>Net cash from / (used in) investing activities</b>	<b>245</b>	<b>100</b>

<b>3.</b>	<b>Cash flows from financing activities</b>		
3.1	Proceeds from issues of shares	-	-
3.2	Proceeds from issue of convertible notes	-	-
3.3	Proceeds from exercise of share options	-	-
3.4	Transaction costs related to issues of shares, convertible notes or options	-	-
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
<b>3.10</b>	<b>Net cash from / (used in) financing activities</b>	<b>-</b>	<b>-</b>

<b>4.</b>	<b>Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1	Cash and cash equivalents at beginning of period	1,056	2,450
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(243)	(1,519)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	245	100
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	-
4.5	Effect of movement in exchange rates on cash held	5	32
<b>4.6</b>	<b>Cash and cash equivalents at end of period</b>	<b>1,063</b>	<b>1,063</b>



5. <b>Reconciliation of cash and cash equivalents</b> at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1 Bank balances	1,048	1,041
5.2 Call deposits	15	15
5.3 Bank overdrafts	-	-
5.4 Other (provide details)	-	-
<b>5.5 Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>1,063</b>	<b>1,056</b>

**6. Payments to directors of the entity and their associates**

- 6.1 Aggregate amount of payments to these parties included in item 1.2
- 6.2 Aggregate amount of cash flow from loans to these parties included in item 2.3
- 6.3 Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2

**Current quarter  
\$A'000**

104

-

Reimbursement to directors of administration and exploration expenses incurred on behalf of the Company and for the payment of director services.

**7. Payments to related entities of the entity and their associates**

- 7.1 Aggregate amount of payments to these parties included in item 1.2
- 7.2 Aggregate amount of cash flow from loans to these parties included in item 2.3
- 7.3 Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2

**Current quarter  
\$A'000**

-

-

**8. Financing facilities available**

*Add notes as necessary for an understanding of the position*

- 8.1 Loan facilities
- 8.2 Credit standby arrangements
- 8.3 Other – Credit Card Facility

**Total facility amount  
at quarter end  
\$A'000**

**Amount drawn at  
quarter end  
\$A'000**

15

0

- 8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.


Credit Card Facility with ANZ bank which is secured by a term deposit with a right of set off to the total limit of the credit card facility.

<b>9. Estimated cash outflows for next quarter</b>	<b>\$A'000</b>
9.1 Exploration and evaluation	150
9.2 Development	-
9.3 Production	-
9.4 Staff costs	130
9.5 Administration and corporate costs	70
9.6 Other (provide details if material)	-
<b>9.7 Total estimated cash outflows</b>	<b>350</b>

<b>10. Changes in tenements (items 2.1(b) and 2.2(b) above)</b>	<b>Tenement reference and location</b>	<b>Nature of interest</b>	<b>Interest at beginning of quarter</b>	<b>Interest at end of quarter</b>
10.1 Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced	R08/01	WA - RL	100%	Nil
	E08/1987	WA - EL	100%	Nil
	E08/1972	WA - EL	100%	Nil
10.2 Interests in mining tenements and petroleum tenements acquired or increased	E08/2966	Subject to ASX:GPP option to purchase	Nil	100%
	E08/3019			
	P77/4506	WA - EL	Nil	100%
	P77/4508	WA - EL	Nil	100%
	P77/4509	WA - EL	Nil	100%
	P77/379	WA - EL	Nil	100%
	E74/634	WA - EL	Nil	100%

### Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Sign here:  .....

(Director /Company secretary)

Date: 31<sup>st</sup> July 2019

Print name: **Melinda Nelmes**

### Notes

1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
2. If this quarterly report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly report

+ See chapter 19 for defined terms

1 September 2016

has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.

3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.