

30<sup>th</sup> July 2018

## **Quarterly Activities Report**

## For Period Ended 30 June 2018

#### Dobsina Project:

- Gotthard Adit made accessible and initial reconnaissance performed
  - Mapping has identified extensive secondary and sulphide hosted cobalt-nickel-copper mineralisation
  - Channel sampling commenced & IP geophysical survey planned
  - Refurbishment planning commenced to facilitate underground drilling
- Joremeny Adit refurbishment program underway- entire adit accessible post end of Quarter
- Underground diamond drilling commenced in Joremeny Adit
- IP survey commenced across Zemberg Vein System

#### Kotlinec & Medzev Projects:

- Two projects acquired, proximal to EUC's flagship Dobsina Project
- Kotlinec Historical adit rock chip results reported cobalt grades of:
  - KOM4: 7.1% Co<sup>1</sup>
  - o KOM9: 7.1% Co<sup>1</sup>
  - KOM1: 3.1% Co<sup>1</sup>
  - KOM2: 3.1% Co<sup>1</sup>
  - KOM5: 2.1% Co<sup>1</sup>
  - KOM6: 1.1% Co<sup>1</sup>
- Kotlinec recent rock chip sampling of waste dumps reported grades of:
  - GV-245: 0.72% Co & 437 g/t Ag<sup>1</sup>
  - o GV-248: 0.55% Co<sup>1</sup>
  - o GV-244: 0.49% Co<sup>1</sup>
- Medzev recent rock chip sampling of waste dumps reported:
  - GV-234: 2,460g/t Ag & 1.11g/t Au<sup>1</sup>
  - GV-235: 0.38% Co & 667g/t Ag<sup>1</sup>
  - GV-236: 0.742% Co & 436g/t Ag<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Full listing of results available in ASX Release "Acquisition of Two Slovak Co-Cu-Ag Mines", 22<sup>nd</sup> May 2018



#### **TECHNICAL DOBSINA**

#### **Gotthard Adit Access**

The Gotthard Adit is located within the Zemberg Vein System and historically exploited cobalt, nickel and copper mineralisation. Historic reports on Pavol-Gotthard adit system are somewhat scarce. Similar to the Joremeny-Langenberg adit system, Pavol-Gotthard adits represents historic underground workings located south of Gugl hill and belong to Zemberg Vein System. Gotthard has not previously been accessed for geological investigation in the modern era. Information on the mining history including the respective tonnages and grades is not presently available. However, it is known that Gotthard and Pavol were connected together since both were exploited on the same altitude.



Figure 1: Plan view of the Gotthard Adit, with Lidar DTM background

Based on the historic report of Woldrich (1913), the Pavol adit is described as quartzsiderite vein and quartz vein with arsenopyrite and erythrite on cracks. Cobalt-Nickel secondary minerals are described east of a major fault which offsets the siderite-



quartz and quartz vein towards west. It is also indicated that this part of the vein was not broadly exploited and is preserved in the ground. From the initial mapping completed the mineralisation geometry appears to be relatively straight forward. Mineralisation ranges in thickness from 0.3m through to 1.3m.



Figure 2: Section View of the Gotthard Adit, looking east



Figure 3: Erythrite (Pink) cobalt mineralisation exposed in the Gotthard Adit

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#### Joremeny Adit Refurbishment

During the Quarter, the underground refurbishment of the Joremeny Adit progressed through predominantly collapsed ground. Mineralisation was first observed proximal to the cross cut whereby chalcopyrite-tetrahedrite-erythrite was identified. The ground conditions experienced during the quarter impeded the rate of refurbishment. Post quarter end, access was attained for the entire length of adit development.



#### Figure 4: Joremeny Adit and mapped/interpreted Co-Ni-Cu vein<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> For full listing of results please refer to ASX Release "High Grade Cobalt-Nickel Results at Dobsina" 26<sup>th</sup> June 2017

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Figure 5: Stockpiled chalcopyrite-tetrahedrite-erythrite mineralisation

#### Joremeny Adit Underground Drilling

Joremeny Adit underground drilling commenced on 11<sup>th</sup> May utilising a single diamond rig, on a single shift in the western extent of Joremeny Adit. The drilling underway is aiming to define the geometry and extent of chalcopyrite-tetrahedrite-erythrite (Cu-Sb-Ag-Co) mineralisation within Langengberg and Joremeny Adits.

Post completion of the quarter, the eastern extent of the Joremeny Adit, where historically channel sampling was conducted and reported significant grades of cobalt-nickel mineralisation was made accessible. Upon services and additional ground support being installed along the development, multiple underground diamond rigs running 24 hours a day will be implemented.



IP Survey Across Zemberg Vein System



Figure 6: 3D inversion model & adits (Red: Metal Factor >6, Green: IP(>20mV/V) & Purple: Resistivity <4750hms), Lines 1, 2, 3

Four Induced Polarisation ("IP") survey lines were completed across the Joremeny-Pavol-Josef-Gotthard Adits. The survey aimed to determine the effectiveness of utilising IP to identify areas of known mineralisation. The high degree of correlation between the IP/resistivity anomalies and historical workings with mapped mineralisation strongly supports the efficacy of this method. In addition to the correlation with known mineralisation, further targets outside of areas of previous adit development have been identified and warrant further investigation.

The compelling results of the initial four IP lines completed has justified the extension of the survey to cover the entire northern extent of the Dobsina Licence across the Zemberg-Terezian Vein System. IP lines will be completed on a nominal 100m spacing across the defined mineralised trend. Where required IP survey lines will be extended further south in order to appropriately close off anomalies.





Figure 7: IP survey lines, adit pierce points, IP chargeability at 75m below surface, Lidar background

Detailed underground mapping inclusive of measurements of the geometry of mineralisation observed in Joremeny and Gotthard adits will be used to refine the geophysical targeting model.



#### KOTLINEC & MEDZEV PROJECTS:

During the quarter, EUC acquired two additional historical cobalt-silver-copper mines. The Kotlinec and Medzev Projects are located 20 and 30 km south east of EUC's flagship Dobsina Project.



#### Figure 8: EUC's Slovakian Project Portfolio

#### Kotlinec Project

The Kotlinec Project represents the southwest extension of the previous Volcanogenic Massive Sulphide (VMS) type copper project located 4-5km northeast. Kotlinec area and its rocks were later altered and mineralised including siderite-sulphide veins. Pyrite is considered as the Co-Ni minerals host.

The first production reports were published in 1888. Mining was initially focussed on the production of sulphur through mining of pyrite. Production history of pyrite mining is incomplete.

In the period prior and during the war period, these mines were abandoned. These mines were subsequently reopened in 1951. Between 1951 and 1953, 1,460m of



historical mining works were refurbished and 255m of new development was established.



Figure 9: Kotlinec tenure and rock chip sampling plan

Significant rock chip results from Kotlinec adits include:

- KOM1: 3.1% Co<sup>3</sup>
- KOM2: 3.1% Co<sup>3</sup>
- KOM4: 7.1% Co<sup>3</sup>
- KOM5: 2.1% Co<sup>3</sup>
- KOM6: 1.1% Co<sup>3</sup>
- KOM9: 7.1% Co<sup>3</sup>

Recent rock chip sampling across waste dumps at Kotlinec was undertaken and the following significant results were reported:

<sup>&</sup>lt;sup>3</sup> For full list of results please refer to ASX Release "Acquisition of two Slovak Co-Cu-Ag Mines" 22/05/2018

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- GV-244: 0.488% Co & 0.63g/t Au<sup>3</sup>
- GV-245: 0.723% Co, 437 g/t Ag, 0.55 g/t Au<sup>3</sup>
- GV-246: 0.189% Co & 1.12 g/t Au<sup>3</sup>
- GV-248: 0.554% Co & 3.55 g/t Au<sup>3</sup>

Medzev Project:

• GV-250: 0.134% Co, 0.89g/t Au & 1.51% Cu<sup>3</sup>

<sup>3</sup> For full list of results please refer to ASX Release "Acquisition of two Slovak Co-Cu-Ag Mines" 22/05/2018

### 488000 400000 **Fichtelhubel Gu** nune 0.71% @ .74% Co, 436 g/t Ag, 0.44% At o/t Ag, 0.44/ Au **Cobalt** vein 398000 Medzev Project Tenement Chip Sample Mineralised Vein 488000 490000 491000



The Medzev Project consists of multiple historical copper and iron mines. The most significant structure within the Project area is the Fichtenhubel deposit which consists of the Kornelius, Konstantia, Kristof, Michal I, Michal II, Daniel I and Daniel II Veins. All of these veins have a classical siderite-sulphide mineralisation typical of the region with abundant chalcopyrite which has been the dominant focus of mining since the Middle Ages. Of particular interest is the occurrence of the Cobalt (Kobaltova) Vein

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located SE of Cu-siderite veins. Kobaltova Vein might extend towards East where similar Co-Ni veins are known including Co-Ni Vein Pri Krizi. No systematic work regarding the Co distribution within the area is known. Co-Ni quartz vein is emplaced along schist (porphyroid) and phyllite. The hill located NE of Kobaltova Vein is named 'Cobalt' hill on the old maps.

Some veins in the area are 200 -700m along strike and of variable thickness 0.3 - 5m and opened for exploration on the depth, dipping subvertical. For example, vertical feeder of Konstanci Vein was explored down to a depth of 650m.



Figure 11: Kobatolva waste dump sample (pyrite-glaucodot sulphide vein)

Four rock chip samples were taken from Medzev and submitted for geochemical analysis in order to gain an understanding towards the tenor of mineralisation. Waste dump material composition is historically described as quartz, arsenopyrite,

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glaucodot, Co-Ni arsenide, cobaltite, chalcopyrite, pyrite, marcasite, tetrahedrite, sphalerite, and native Bi.

- GV-234: 2,460g/t Ag & 1.11g/t Au<sup>3</sup>
- GV-235: 0.38% Co & 667g/t Ag<sup>3</sup>
- GV-236: 0.742% Co & 436g/t Ag<sup>3</sup>

<sup>3</sup> For full list of results please refer to ASX Release "Acquisition of two Slovak Co-Cu-Ag Mines" 22/05/2018

#### AFTER JUNE QUARTER ACTIVITIES

Post completion of the quarter, access to the entire length of previous development of the Joremeny Adit was made available. Visual confirmation of the historical channel sampling sites and their associated mineralisation was observed.



#### **APPENDIX 1: TENEMENT SCHEDULE**

In line with obligations under ASX Listing Rule 5.3.3, European Cobalt Ltd provides the following information with respect to its Mining Tenement holdings as at 30 June 2018.

Project	Country	Tenement	Status	% Held	Change During Quarter
Dobsina	Slovakia	2466/2017-5.3	Granted	100%	-
Rejdova	Slovakia	7007/2017-5.3	Granted	100%	-
Rakovec	Slovakia	7586/2017-5.3	Granted	100%	-
Gapel	Slovakia	7926/2017-5.3	Granted	100%	-
Kolba	Slovakia	4207/2017-5.3	Granted	100%	-
Kotlinec	Slovakia	4314/2018-5.3	Granted	100%	100% Acquisition
Medzev	Slovakia	4316/2018-5.3	Granted	100%	100% Acquisition
Jouhineva	Finland	ML2017:0030	Granted	100%	-
Basinge	Sweden	Basinge nr 1	Granted	100%	-
Ekedalsgruvan	Sweden	Ekedalsgruvan nr 1	Granted	100%	-
Frustuna	Sweden	Frustuna nr 1	Granted	100%	-
Ruda	Sweden	Ruda nr 3	Granted	100%	-
Havsmon	Sweden	Havsmon nr 1	Granted	100%	-
Kila	Sweden	Kila nr 1	Granted	100%	-
Mt Howe	Australia, WA	E39/1878	Granted	100%	-
Mt Howe	Australia, WA	E39/1879	Granted	100%	-
Defiance	Australia, WA	E38/3062	Granted	100%	-
Unknown	Australia, WA	P27/2005	Granted	100%	_

No Mining Tenements are subject to any farm-in or farm-out agreements.



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#### DISCLAIMER

Forward-looking statements are statements that are not historical facts. Words such as "expect(s)", "feel(s)", "believe(s)", "will", "may", "anticipate(s)" and similar expressions are intended to identify forward-looking statements. These statements include, but are not limited to statements regarding future production, resources or reserves and exploration results. All of such statements are subject to certain risks and uncertainties, many of which are difficult to predict and generally beyond the control of the Company, that could cause actual results to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements. These risks and uncertainties include, but are not limited to: (i) those relating to the interpretation of drill results, the geology, grade and continuity of mineral deposits and conclusions of economic evaluations, (ii) risks relating to possible variations in reserves, grade, planned mining dilution and ore loss, or recovery rates and changes in project parameters as plans continue to be refined, (iii) the potential for delays in exploration or development activities or the completion of feasibility studies, (iv) risks related to commodity price and foreign exchange rate fluctuations, (v) risks related to failure to obtain adequate financing on a timely basis and on acceptable terms or delays in obtaining governmental approvals or in the completion of development or construction activities, and (vi) other risks and uncertainties related to the Company's prospects, properties and business strategy. Our audience is cautioned not to place undue reliance on these forward-looking statements that speak only as of the date hereof, and we do not undertake any obligation to revise and disseminate forward-looking statements to reflect events or circumstances after the date hereof, or to reflect the occurrence of or non-occurrence of any events.

#### **COMPETENT PERSONS STATEMENT:**

The information in this announcement that relates to the Exploration Results for Dobsina, Medzev & Kotlinec Projects is based on information compiled and fairly represented by Mr Robert Jewson, who is a Member of the Australian Institute of Geoscientists and Managing Director of European Cobalt Ltd. Mr Jewson has sufficient experience relevant to the style of mineralisation and type of deposit under consideration, and to the activity which he has undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Jewson consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.