

20th April 2021

ASX: DEV | ACN: 009 799 553

# Strong Off-Hole DHEM Conductor at Wilga Downs **Copper-Gold Project, NSW**

Compelling near-term drill target for 'Cobar-style' massive sulphide copper-gold mineralisation

#### **HIGHLIGHTS**

- Large 150m long x 250m deep off-hole conductor (Conductor A) identified by a follow-up down-hole electromagnetic (DHEM) survey at the Wilga Downs Project, located within the well-endowed Cobar Basin of NSW.
- The DHEM survey was designed to test a single diamond drill hole which intersected a narrow zone of massive sulphides with copper and gold mineralisation - considered to be a "near-miss" situation.
- This conductor, Conductor A, is now the primary drill target at Wilga Downs, and DevEx is planning to drill test it, along with additional near-hole Conductor B.
- A Moving Loop Electromagnetic (MLEM) survey is also currently underway to test the entire prospect for additional conductors.
- The target displays similarities to other gold-polymetallic deposits in the prolific Cobar region, including Glencore's CSA Copper Mine and other nearby mines such as the Peak and Great Cobar Copper-Gold Mines.

DevEx Resources Limited (ASX: DEV "DevEx" or "the Company") is pleased to advise that it has identified a compelling near-term drill target at the Wilga Downs Copper-Gold Project in the Cobar Basin of NSW after a down-hole electromagnetic (DHEM) geophysical survey confirmed the presence of a large off-hole EM conductor 40m east of a recently drilled diamond drill-hole (Figure 1, Conductor A).

The DHEM survey was designed to follow up diamond hole 20WD001, which targeted a strong magnetic/gravity high exhibiting several similarities to other major, gold-polymetallic deposits in the Cobar Basin region.

The hole intersected a narrow zone of copper-gold bearing semi-massive pyrrhotite (magnetic iron sulphide) and chalcopyrite returning an intercept of 1m @ 0.7% copper and 0.7g/t gold from 551m.

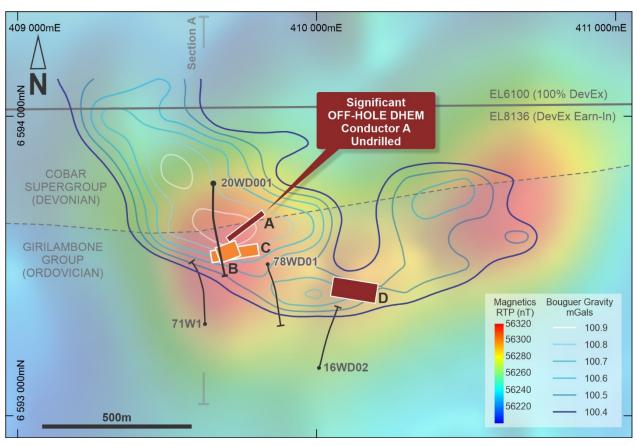
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Importantly, the levels of magnetic susceptibility recorded through the hole were insufficient to explain the magnetic anomaly, suggesting excellent potential for a significant body of magnetic, copper-bearing massive sulphide (pyrrhotite) mineralisation close by.

Both in-hole and near-hole DHEM conductors (Conductors C and B) are also modelled and appear to be associated with the semi-massive pyrrhotite and chalcopyrite zone discussed above.

The larger off-hole DHEM conductor (Conductor A) is modelled as a steeply dipping 150m long x 250m deep plate with the closest edge 40m from hole 20WD001. This is now the primary target.



**Figure 1:** Location of modelled DHEM Conductors surrounding hole 20WD001 and the coincident RTP Airborne Magnetic image and Bouguer Gravity highs (blue contours). The coincident anomalies lie on a fault contact between the Cobar Supergroup and the older Girilambone Group – a primary exploration target horizon within the Cobar Basin.

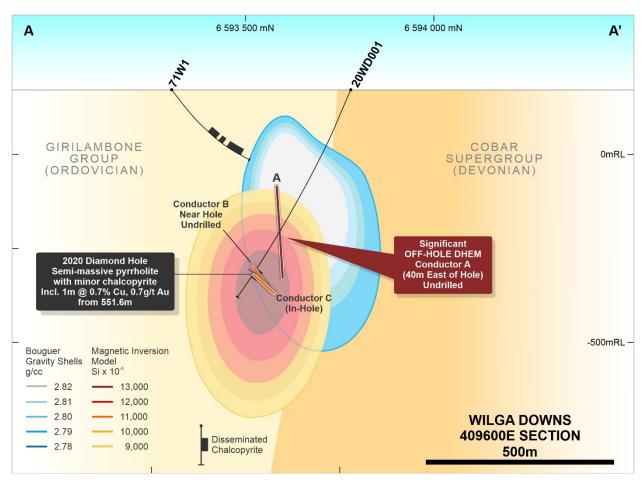
This exploration target is similar to those associated with other gold-polymetallic deposits in the south of the region, including Glencore's CSA Copper Mine and other nearby mines such as the Peak and Great Cobar Copper-Gold Mines (Figure 4).

Many of these deposits form discrete magnetic highs which typically map pyrrhotite alteration either surrounding or directly associated with the copper-gold mineralisation.

In addition, the Company has reviewed the previous 2016 DHEM geophysical survey carried out on diamond hole 16WD02. A poorly constrained off-hole conductor (Conductor D) can be modelled to lie 160m to the north of hole 16WD02. Modelling of this conductor's location is inconclusive as the entire anomaly was not adequately defined in the DHEM.



DevEx has initiated a ground-based moving loop electromagnetic survey (MLEM) over the entire prospect which is designed to test both Conductor D and the undrilled magnetic anomaly further to the east.



**Figure 2:** Section A showing DHEM Conductors A, B and C from diamond hole 20WD001 and associated modelled magnetic and gravity highs – Conductor A is a large off-hole conductor with its nearest edge located 40m away from the hole. Conductors B (near-hole) and C (in-hole) appear to be associated with the zone of copper-gold bearing semi-massive pyrrhotite and chalcopyrite. Diamond drilling is planned to test both Conductors A and B – see Figure 1 for section location.





**Figure 3:** Diamond core from hole 20WD001 at 552.3m showing semi-massive pyrrhotite (bronze colour) and chalcopyrite (yellow) mineralisation.

Both DHEM and MLEM surveys are designed to look for conductors associated with massive sulphide mineralisation containing target commodities including base metals and gold. Conductors can also be related to graphitic shales, and barren massive iron sulphides. Only the copper-gold bearing semi-massive pyrrhotite zone seen in hole 20WD001 was conductive and no graphic shales were noted.

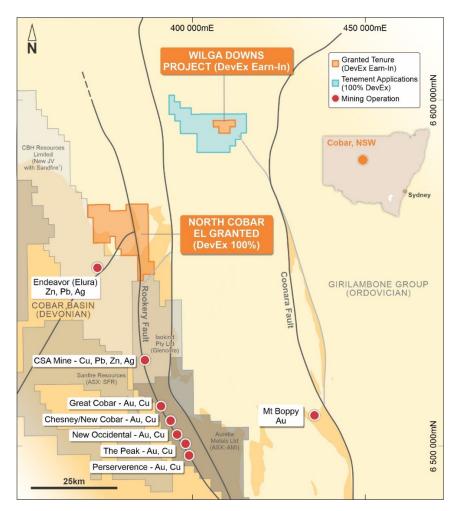
The Company is currently exploring the Wilga Downs Project as part of an Earn-In Agreement with Thomson Resources Limited. DevEx can earn 80% in the Project by expenditure of \$290,000 within 4 years. Key terms of the Earn-In agreement are discussed in the Company's Announcement on 16th September 2020.

#### **Next Steps and Management Comment**

A Moving Loop Electromagnetic (MLEM) Survey is currently underway which will test the entire prospect, including the area where Conductor D is modelled, and also the eastern magnetic anomaly where no exploration has taken place.

DevEx is now planning to mobilise a diamond drill rig to test Conductors A and B along with any new conductors identified in the MLEM survey (including Conductor D).





**Figure 4:** Generalised Geology Map of the central Cobar Mining District after David (2006)<sup>1</sup>, showing location of Wilga Downs Project and the Company's recent tenement applications.

DevEx Managing Director Brendan Bradley said the identification of a strong off-hole conductor from the "near-miss" drill hole 20WD001 together with another near-hole conductor had significantly upgraded the prospectivity of the Wilga Downs Project.

"The proximity of this DHEM conductor to the narrow massive sulphide intercept reported earlier this year, plus the geological context of the gold-polymetallic deposits of the Cobar Basin – which often form discrete magnetic highs which map pyrrhotite alteration either surrounding or associated with the mineralisation – gives us great hope that we have a genuine discovery opportunity at Wilga Downs," he said.

"We are aiming to mobilise a diamond drill rig to test these new conductors as soon as possible and, in the meantime, we are looking forward to seeing the results of the MLEM survey, which should help to further refine the targets and potentially identify additional drilling opportunities."



This announcement has been authorised for release by the Board.

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#### **REFERENCES**

<sup>1</sup> Source: David, V. 2006, Cobar Superbasin System Metallogenisis. Mines and Wines Conference

### **COMPETENT PERSON STATEMENT**

The information in this report that relates to Exploration Results is based on information compiled by DevEx Resources Limited and reviewed by Mr Brendan Bradley who is the Managing Director of the Company and a member of the Australian Institute of Geoscientists. Mr Bradley has sufficient experience that is relevant to the styles of mineralisation, the types of deposits under consideration and to the activities undertaken 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 Bradley consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

The Information in this report that relates to previous exploration activities within the Wilga Downs Project is extracted from the ASX announcement titled "Encouraging initial drill results at Wilga Downs Project" released on 4<sup>th</sup> February 2021 which is available at <a href="https://www.devexresources.com.au">www.devexresources.com.au</a>.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

#### FORWARD LOOKING STATEMENT

This announcement contains forward-looking statements which involve a number of risks and uncertainties. These forward looking statements are expressed in good faith and believed to have a reasonable basis. These statements reflect current expectations, intentions or strategies regarding the future and assumptions based on currently available information. Should one or more of the risks or uncertainties materialise, or should underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this announcement. No obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments.



# Appendix B: JORC Table 1

# **Section 1 Sampling Techniques and Data**

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	Drilling No new drilling reported.  Down Hole Electromagnetics (DHEM)  2021 Survey Contractor: Fender Geophysics Tx Loop Size: 400m x 400m Transmitter: Zonge ZT-30 Receiver: Smartem24 Sensor: Geonics BH43-3 Station Spacing: 10m from 20m to 410m depth, 5m from 410m to 580m depth Tx Freq: 1Hz Current: 80 Amps  2016 Survey Contractor: Fender Geophysics Tx Loop Size: 200m x 200m Transmitter: TerraTX-50 Receiver: TerraTEM Sensor: Monex Geoscope Magpie B-Field Sensor Station Spacing: 10m from 40m to 420m depth Tx Freq: 12.5Hz Current: ~39-45 Amps
Drilling techniques  Drill sample recovery	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).      Method of recording and assessing core and chip sample recoveries and results assessed.	No new drilling is reported.      No new drilling is reported.
,	<ul> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.  Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.  The total length and percentage of the relevant intersections logged.	No new drilling is reported.
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	No new drilling is reported.



Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	No new drilling is reported.
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	No new drilling is reported.
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	No new drilling is reported.
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	Drilling  No new drilling is reported.  Geophysics  Modelling of Airborne Magnetics, surface Gravity, and down hole magnetic susceptibility were previously reported in Company's Announcement 4th February 2021.
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	No new drilling is reported.
Sample security	The measures taken to ensure sample security.	No new drilling is reported.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits have been completed.

## **Section 2 Reporting of Exploration Results**

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.  The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	<ul> <li>The project lies within EL 8136, held by Thomson Resources Limited (Thomson) and is managed by DevEx Resources wholly owned subsidiary TRK Resources Pty Ltd as part of the Earn-In Agreement. Under an Earn-In Agreement with Thomson, the Company can earn 80% in EL8136 by expenditure of \$290,000 within 4 years. Key terms of the Earn-In agreement are discussed in the Company's Announcement on 16th September 2020.</li> <li>An access agreement is in place over the main target area.</li> <li>Native Title does not apply.</li> <li>The tenement is considered to be in good standing and no impediments to operate are known.</li> <li>The Company have made two additional applications in the Cobar District. Application ELA 6076 was recently granted.</li> <li>ELA6076 lies within the North Cobar Mineral Allocation area, and following an Expression of Interest made by the Company, the Minister has granted the Company permission to make an application within this area.</li> </ul>



Criteria	JORC Code explanation	Commentary
		Both tenements will require the Company to enter into Land Access Agreements with the relevant stakeholders/land owners.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Exploration drilling conducted in the past was carried out by AMAX, CRAE and Silver City Minerals.</li> <li>The Company have reviewed previous geophysics including 1970's IP, and more recent Gravity, Magnetics, EM techniques and view the Gravity and Magnetics key to target definition.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	A strong, coincident magnetic and gravity high has been identified at Wilga Downs, and is consistent with other gold-polymetallic deposits in the south of the region including Glencore's CSA Copper Mine and Aurelia Metals' Peak and Great Cobar Copper-Gold Mines. The prospectivity of this target is further supported by historical anomalous copper, lead and zinc intercepts from historical drilling in the 1970's at the prospective fault contact between outcropping Cobar Supergroup (Devonian) and the Girilambone Group (Ordovician). This is supported by the Government 1:100,000 Byrock Geology Map which map this contact is sufficient detail.
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:     easting and northing of the drill hole collar     elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar     dip and azimuth of the hole     down hole length and interception depth     hole length.  If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	<ul> <li>Drill hole details for hole 20WD001 were previously report – see Company announcement 4th February 2021.</li> <li>This report refers to historical open-file drilling drill holes by AMAX, and CRAE. Later drilling by Silver City targeted away from the main magnetic anomaly.</li> <li>All historical drill holes found within open file reports are presented in the figure and were previously reported in detailed (including historical assay results) – see Company announcement 16 September 2020.</li> </ul>
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	Drill hole details for hole 20WD001 were previously report – see Company announcement 4 <sup>th</sup> February 2021.
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	Drill hole details for hole 20WD001 were previously report – see Company announcement 4th February 2021.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Refer to figures in the body of text.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	<ul> <li>Drill hole details for hole 20WD001 were previously report – see Company announcement 4th February 2021.</li> <li>The magnetic and gravity model is depicted on the plan and cross section figures to provide context to hole 20WD001 and the new DHEM Anomalies.</li> </ul>
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological	The DHEM data was processed and modelled by the Company's consultant, RAMA Geoscience, using EMIT's



Criteria	JORC Code explanation	Commentary
	observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Maxwell software package. The modelling matches the EM response of multi-filament plates to the measured DHEM data.      The information presented in this report combines in display using figures - previous explorers' geological observations, alteration and interpretations provided to the Company by Thomson Resources Ltd.      Company modelling of DHEM, gravity and magnetics is also displayed in plan and sections to explain the exploration target in context to hole 20WD001, historical drilling and geological interpretation which has been extrapolated from the Government 1:100,000 Byrock Geology Map.
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	A Moving Loop Electromagnetic (MLEM) Survey is currently underway. The MLEM survey will test the entire prospect, including the area where Conductor D is reported, and also the eastern magnetic anomaly where no exploration has taken place.  DevEx is now planning to mobilise a diamond drill rig to test Conductors A and B and any new conductors identified in the MLEM survey (including Conductor D).