

05 September 2014

# DRILLING RESULTS DEMONSTRATE SIGNIFICANT WIDTH TO EAST ALTAN TOLGOI DISCOVERY

#### **HIGHLIGHTS**

- East Altan Tolgoi is a significant new discovery at the Kharmagtai project with recent drilling results demonstrating significant width (up to 300m) to the high-grade tourmaline breccia mineralisation.
- The Altan Tolgoi system has an overall strike length of over 800m and remains open to the west, east and at depth.
- KHDDH350 intersected copper-gold mineralisation hosted in a broad zone of tourmaline breccia mineralisation including:
  - o 268.0m @ 0.46% Cu & 0.52g/t Au (0.79% CuEq) from 182.0m, including
  - o 119.6m @ 0.62% Cu & 0.67g/t Au (1.04% CuEq) from 296.40m.
- KHDDH351 intersected two zones of copper-gold mineralisation hosted in a zone of tourmaline breccia mineralisation including:
  - o 32.0m @ 0.47% Cu & 0.45g/t Au (0.75% CuEq) from 208.0m; and
  - 46.0m @ 0.50% Cu & 0.40g/t Au (0.75% CuEq) from 264.0m.
- KHDDH352 and KHDDH353 (results pending) were collared 50m to the north of KHDDH346 and KHDDH343 respectively and continue to define the broad zones of visual copper sulphide mineralisation at East Altan Tolgoi.
- KHDDH354 has intersected visible copper sulphides from 70m to the current hole depth of 348m. KHDDH354 is a 50m step-out to the east of KHDDH350.
- KHDDH355 has intersected visible copper sulphides from 24m to the current hole depth of 126m. KHDDH355 is a 60m step-out to the south of KHDDH347 and extends the width of the Altan Tolgoi system.

#### **RESULTS & INTERPRETATION**

Xanadu Mines Ltd (**ASX: XAM** – "**Xanadu**") is pleased to announce the complete assay results for diamond drill hole KHDDH350 (80m to the south of KHDDH343 and drilled to a final depth of 581.0m) and diamond drill hole KHDDH351 (a 190m step-out to the southeast of KHDDH346 and drilled to a final depth of 488.8m) at the Kharmagtai project. Drill hole details are shown in Table 1 and Figures 1 to 3. Assay results are presented in Table 2.

The results for KHDDH350 confirm the discovery of broad zones of very significant high-grade, copper-gold mineralisation (greater than 1% CuEq) hosted in tourmaline breccias at East Altan Tolgoi. KHDDH350 has been assayed to a down-hole depth of 581m and provides further confirmation of the continuity and width (up to 300m wide) of the recently discovered East Altan Tolgoi mineralisation.



The results for KHDDH351 confirm that the discovery remains open along strike to the east under shallow cover. KHDDH351 intersected hang-wall tourmaline breccia mineralisation and subsequently failed to intersect the core of the tourmaline breccia system. A hole is currently being planned that steps north of KHDDH351 targeting the core of the tourmaline breccia system.

The tourmaline breccias at East Altan Tolgoi overprint stockwork mineralisation. The copper mineralisation occurs predominantly as matrix infill comprising chalcopyrite, pyrite and trace bornite. The style of mineralisation indicates the breccias are zoned around a high-grade core characterised by potassic alteration. Hematite dusting is a common alteration product in the high-grade mineralisation giving breccias and the host rocks a distinctive pink-orange colour. These newly discovered tourmaline breccias are regarded as part of a major copper-gold mineralised system with significant exploration potential. The total extent of tourmaline breccia may be related to a large geophysical anomaly extending up to 3.5km to the east. Exploration drilling will continue to target the mineralisation both along strike to the east and west as well as at depth beneath the current intercepts.

Xanadu's Managing Director, Mr George Lloyd, said: "KHDDH350 demonstrates that the Altan Tolgoi tourmaline breccia system is up to 300m wide. This is a significant discovery adjacent to the shallow, gold-rich Altan Tolgoi stockwork and gives us the confidence to continue exploring under cover."

## ALTAN TOLGOI DRILL HOLES IN PROGRESS

KHDDH352 (drilled to a final depth of 567.0m) and KHDDH353 (drilled to a final depth of 645.0m) were collared 50m to the north of KHDDH346 and KHDDH343 respectively. Assay results are pending with both holes continue to define the broad zones of visual copper sulphide mineralisation at East Altan Tolgoi.

KHDDH354 has been collared 50m to the east of KHDDH350 (Figure 1). The purpose of this drill hole is to test the width of the newly discovered high-grade tourmaline breccia mineralisation. It is at a current hole depth of 348m and continues to intersect visible copper sulphides from a depth of 72m. The copper sulphide mineralisation predominantly comprises stockwork mineralisation hosted in strongly epidote-magnetite altered quartz monzodiorite porphyry.

KHDDH355 has been collared 60m to the east of KHDDH347 (Figure 1). The purpose of this drill hole is to test the width of the newly discovered high-grade tourmaline breccia mineralisation. It has intersected visible copper sulphides from a depth of 24m to the current depth of 126m. The copper mineralisation is primarily hosted in tourmaline breccias and minor dissemination in strongly epidote-magnetite altered quartz monzodiorite porphyry.

The continuous strike length of the entire Altan Tolgoi system has been demonstrated to be over 800m on results to date including KHDDH351. The prospect remains open to the west, east and at depth.

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#### KHARMAGTAI PROJECT & THE MONGOL METALS JV

Xanadu and its joint venture partner, Mongol Metals LLC, announced the acquisition of a 90% interest in the Kharmagtai porphyry copper-gold project from Turquoise Hill Resources in February 2014. Under the Mongol Metals LLC joint venture terms, Xanadu has the right to earn an 85% interest in Mongol Metals LLC, equivalent to a 76.5% effective project interest, by funding acquisition and exploration costs.

The Kharmagtai project is located in the under-explored South Gobi porphyry copper province which hosts the world-class Oyu Tolgoi copper-gold operation, the Tsagaan Survaga porphyry copper-molybdenum development and Xanadu's Oyut Ulaan copper-gold exploration project. The Kharmagtai project is located within the Omnogovi Province, approximately 420km south southwest of Ulaanbaatar and 60km north of the Tavan Tolgoi coal deposit.

The Kharmagtai project is an advanced exploration project consisting of multiple co-genetic gold-rich porphyry copper centres and tourmaline breccia pipes occurring within the Lower Carboniferous Kharmagtai Igneous Complex. Exploration has identified significant shallow high-grade porphyry copper-gold mineralisation. A majority of the mineralised porphyry complex lies under un-explored shallow sediments. The large licence area has only been partially explored and the potential for further discoveries remains high.

#### COMPETENT PERSONS STATEMENT

The information in this report relating to Exploration Results is based on information compiled or reviewed by Dr. Andrew Stewart, who is an employee of Xanadu and is a Member of the Australasian Institute of Geoscientists. Dr. Andrew Stewart has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as the "Competent Person" as defined in the 2012 Edition of the "Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves". Dr. Andrew Stewart consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

#### **TABLE 1: DRILL COLLARS**

Set out below are the details for recent drill collars at Kharmagtai.

|   | Hole     | Prospect          | East   | North   | RL   | Azimuth | Incline | Depth<br>(m) |
|---|----------|-------------------|--------|---------|------|---------|---------|--------------|
| 1 | KHDDH350 | East Altan Tolgoi | 592700 | 4877806 | 1285 | 176     | -80     | 581.00       |
| ) | KHDDH351 | East Altan Tolgoi | 593010 | 4877750 | 1284 | 176     | -77     | 488.80       |
|   | KHDDH352 | East Altan Tolgoi | 592849 | 4877900 | 1298 | 172.5   | -80     | 567.00       |
| ) | KHDDH353 | East Altan Tolgoi | 592723 | 4877940 | 1280 | 175     | -77     | 645.00       |
|   | KHDDH354 | East Altan Tolgoi | 592750 | 4877820 | 1280 | 176     | -80     | In Progress  |
|   | KHDDH355 | East Altan Tolgoi | 592636 | 4877829 | 1276 | 176     | -80     | In Progress  |

## **TABLE 2: ASSAY RESULTS**

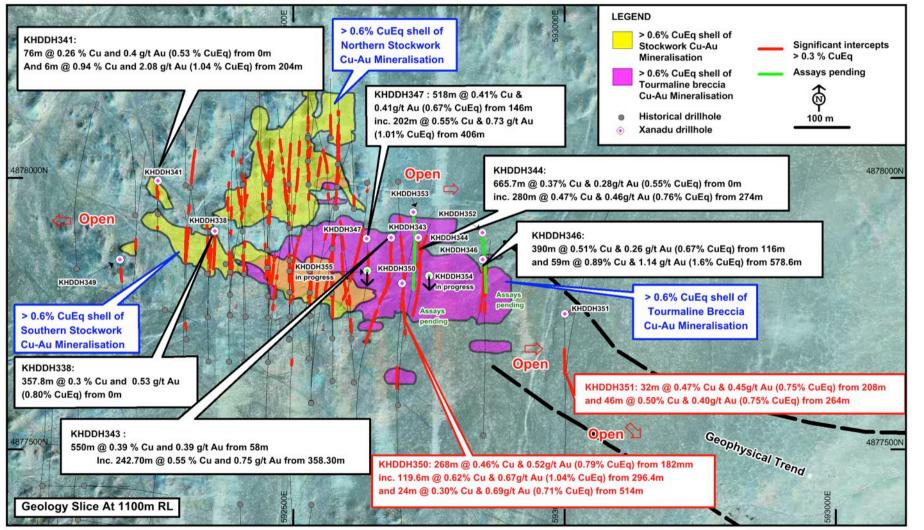
Below is a summary of significant intercepts for KHDDH350 and KHDDH351 at Kharmagtai.

|   | Hole      | Prospect          | From<br>(m) | To<br>(m) | Interval<br>(m) | Cu<br>(%) | Au<br>(g/t) | CuEq<br>(%) |
|---|-----------|-------------------|-------------|-----------|-----------------|-----------|-------------|-------------|
| ) | KHDDH350  | East Altan Tolgoi | 182.0       | 450.0     | 268.0           | 0.46      | 0.52        | 0.79        |
| ) | including |                   | 296.4       | 416.0     | 119.6           | 0.62      | 0.67        | 1.04        |
| ] | and       |                   | 514.0       | 538.0     | 24.0            | 0.30      | 0.69        | 0.71        |
| ) | KHDDH351  | East Altan Tolgoi | 208.0       | 240.0     | 32.0            | 0.47      | 0.45        | 0.75        |
|   | including |                   | 208.0       | 216.0     | 8.0             | 0.89      | 0.67        | 1.31        |
|   | and       |                   | 264.0       | 310.0     | 46.0            | 0.50      | 0.40        | 0.75        |

The copper equivalent (CuEq) calculation represents the total metal value for each metal, multiplied by the conversion factor, summed and expressed in equivalent copper percentage. Grades have not been adjusted for metallurgical or refining recoveries and the copper equivalent grades are of an exploration nature only and intended for summarising grade. The copper equivalent calculation is intended as an indicative value only. The following copper equivalent conversion factors and long-term price assumptions have been adopted: Copper Equivalent Formula (CuEq) = Cu% + (Au (ppm) x 0.6284); Price assumptions: Cu (US3.20b) and Au (US1.375oz).



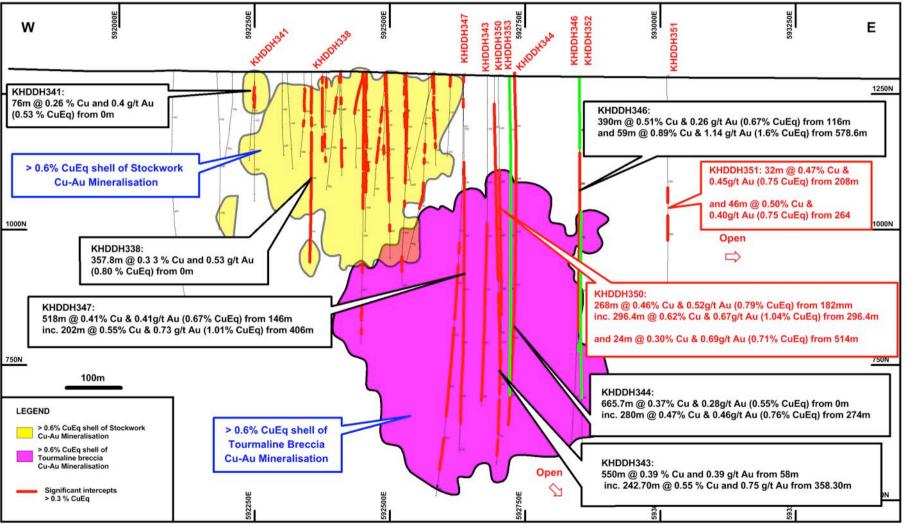
#### FIGURE 1: ALTAN TOLGOI PLAN



Plan of Altan Tolgoi showing location of recently completed drill holes KHDDH350 and KHDDH351. Also shown are KHDDH352 and KHDDH353 which have been completed with assay results pending and KHDDH354 and KHDDH355 which are in progress.



## FIGURE 2: ALTAN TOLGOI LONG SECTION

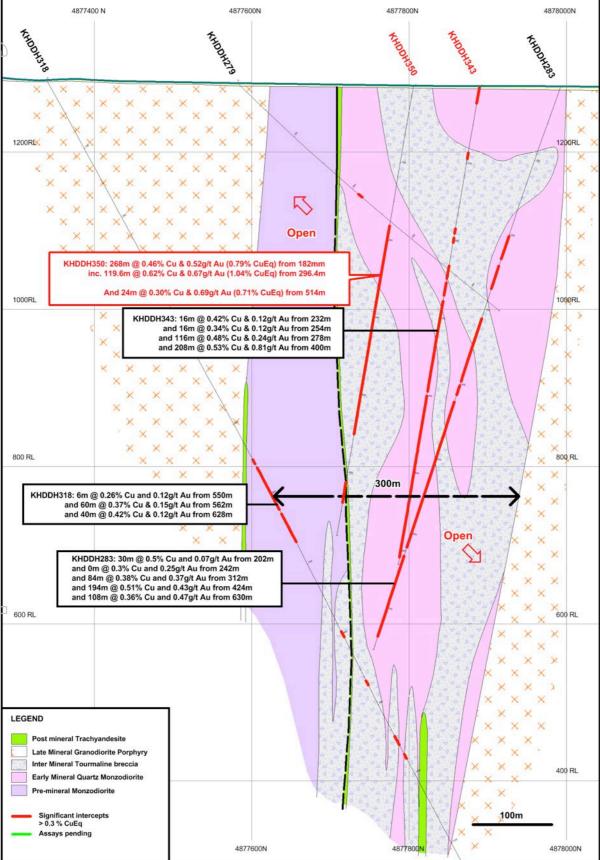


Altan Tolgoi long section showing recently completed drill holes KHDDH350 and KHDDH351. Also shown are KHDDH352 and KHDDH353 which have been completed with assay results pending.









Altan Tolgoi cross section showing recently completed drill hole KHDDH351.



#### APPENDIX 1: KHARMAGTAI TABLE 1 (JORC 2012)

Set out below is Section 1 and Section 2 of Table 1 under the JORC Code, 2012 Edition for the Kharmagtai project. Data provided by Turquoise Hill and Xanadu. This Table 1 updates the JORC Table 1 disclosure dated 25 August 2014.

## 1.1 JORC TABLE 1 - SECTION 1 - SAMPLING TECHNIQUES AND DATA

(Criteria in this section apply to all succeeding sections).

| Criteria                    | JORC Code Explanation   | Commentary  |
|-----------------------------|---|---|
| Sampling<br>techniques      | <ul> <li>Nature and quality of sampling and<br/>assaying.</li> </ul>  | The resource estimate is based on drill<br>samples only.  |
| )                           | <ul> <li>Measures taken to ensure sample<br/>representivity and the appropriate<br/>calibration of any measurement tools or</li> </ul>  | <ul> <li>Representative 2 metre samples were<br/>taken from ½ NQ or HQ) or diamond.</li> </ul>  |
|                             | systems used.   | Only assay result results from recognised,<br>independent assay laboratories were   |
|                             | <ul> <li>Aspects of the determination of<br/>mineralisation that are Material to the<br/>Public Report.</li> </ul>  | used in Resource calculation after QAQC was verified.   |
| Drilling<br>techniques      | Drill type and details.   | DDH drilling has been the primary drilling method.  |
| Drill sample<br>recovery    | <ul> <li>Method of recording and assessing core<br/>and chip sample recoveries and results<br/>assessed.</li> </ul>   | • DDH core recoveries have been very good, averaging between 97% and 99% for all of the deposits. In localized areas of faulting and/or fracturing the recoveries   |
| )                           | <ul> <li>Measures taken to maximise sample<br/>recovery and ensure representative<br/>nature of the samples.</li> </ul>   | decrease; however this is a very small<br>percentage of the overall mineralised<br>zones.   |
|                             | <ul> <li>Whether a relationship exists between<br/>sample recovery and grade and whether<br/>sample bias may have occurred due to<br/>preferential loss/gain of fine/coarse<br/>material.</li> </ul>                                  | <ul> <li>Recovery measurements were collected<br/>during all DDH programs. The<br/>methodology used for measuring<br/>recovery is standard industry practice.</li> </ul>  |
| 1                           |   | <ul> <li>Analysis of recovery results vs. grade<br/>indicates no significant trends. Indicating<br/>bias of grades due to diminished recovery<br/>and / or wetness of samples.</li> </ul>   |
| Logging                     | <ul> <li>Whether core and chip samples have<br/>been geologically and geotechnically<br/>logged to a level of detail to support<br/>appropriate Mineral Resource estimation,<br/>mining studies and metallurgical studies.</li> </ul> | <ul> <li>Drill samples are logged for lithology,<br/>mineralisation and alteration and<br/>geotechnical aspects using a<br/>standardised logging system, including<br/>the recording of visually estimated volume<br/>percentages of major minerals.</li> </ul> |
|                             | <ul> <li>Whether logging is qualitative or<br/>quantitative in nature. Core (or costean,<br/>channel, etc) photography.</li> </ul>  | <ul> <li>Drill core was photographed after being logged by a geologist.</li> </ul>  |
|                             | <ul> <li>The total length and percentage of the relevant intersections logged.</li> </ul>   | <ul> <li>The entire interval drilled has been logged<br/>by a geologist.</li> </ul>   |
| Sub-sampling techniques and | • If core, whether cut or sawn and whether quarter, half or all core taken.   | DDH Core is cut in half with a diamond<br>saw, following the line marked by the   |

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| Criteria   | JORC Code Explanation  | Commentary   |
|--|--|--|
| sample<br>preparation                            | <ul> <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</li> </ul>   | <ul> <li>geologist. The rock saw is regularly flushed with fresh water.</li> <li>Sample intervals are a constant 2m interval down-hole in length.</li> </ul>   |
|  | <ul> <li>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</li> </ul>  | <ul> <li>Routine sample preparation and analyses<br/>of DDH samples were carried out by SGS<br/>Mongolia LLC (SGS Mongolia), who<br/>operates an independent sample<br/>preparation and analytical laboratory in<br/>Ulaanbaatar.</li> <li>All samples were prepared to meet<br/>standard quality control procedures as</li> </ul>   |
|  | <ul> <li>Whether sample sizes are appropriate to<br/>the grain size of the material being</li> </ul>   | follows: Crushed to 90% passing 3.54<br>mm, split to 1kg, pulverised to 90% - 95%<br>passing 200 mesh (75 microns) and split<br>to 150g.   |
|  | sampled.   | <ul> <li>Certified reference materials (CRMs),<br/>blanks and pulp duplicate were randomly<br/>inserted to manage the quality of data</li> </ul>   |
|  |  | <ul> <li>Sample sizes are well in excess of<br/>standard industry requirements.</li> </ul>   |
| Quality of assay<br>data and<br>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> | <ul> <li>All samples were routinely assayed by<br/>SGS Mongolia for gold, copper, silver,<br/>lead, zinc, arsenic and molybdenum.</li> <li>Au is determined using a 30g fire assay<br/>fusion, cupelled to obtain a bead, and<br/>digested with Aqua Regia, followed by an<br/>atomic absorption spectroscopy (AAS)<br/>finish, with a lower detection (LDL) of 0.01<br/>ppm.</li> <li>Cu, Ag, Pb, Zn, As and Mo were routinely<br/>determined using a three-acid-digestion<br/>of a 0.3g sub-sample followed by an AAS<br/>finish (AAS21R). Samples are digested<br/>with nitric, hydrochloric and perchloric<br/>acids to dryness before leaching with<br/>hydrochloric acid to dissolve soluble salts<br/>and made to 15ml volume with distilled<br/>water. The LDL for copper using this<br/>technique was 2ppm. Where copper is<br/>over-range (&gt;1% Cu), it is analysed by a<br/>second analytical technique (AAS22S),<br/>which has a higher upper detection limit<br/>(UDL) of 5% copper.</li> </ul> |
|  |  | <ul> <li>Quality assurance was provided by<br/>introduction of known certified standards,<br/>blanks and duplicate samples on a<br/>routine basis.</li> </ul>  |

• Assay results outside the optimal range for methods were re-analysed by appropriate methods.



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|               | Criteria                                    | JORC Code Explanation  | Commentary   |
|---------------|---|--|--|
|               | D   |  | <ul> <li>Ore Research Pty Ltd certified copper<br/>and gold standards have been<br/>implemented as a part of QAQC<br/>procedures, as well as coarse and pulp<br/>blanks, and certified matrix matched<br/>coppergold standards.</li> </ul> |
| )             |   |  | <ul> <li>QAQC monitoring is an active and<br/>ongoing process on batch by batch basis<br/>by which an acceptable results are re-<br/>assayed as soon as practicable.</li> </ul>  |
| 15)           | Verification of<br>sampling and<br>assaying | <ul> <li>The verification of significant intersections<br/>by either independent or alternative<br/>company personnel.</li> </ul>  | All assay data QAQC is checked prior to loading into the GeoBank data base.  |
| á             |   | The use of twinned holes.  | The data is managed XAM geologists.  |
| 5             |   | <ul> <li>Documentation of primary data, data<br/>entry procedures, data verification, data<br/>storage (physical and electronic)<br/>protocols.</li> </ul>                                     | <ul> <li>The data base and geological<br/>interpretation is collectively managed by<br/>XAM.</li> </ul>  |
|               |   | Discuss any adjustment to assay data.  |  |
| D             | Location of data<br>points                  | locate drill holes (collar and down-hole surveys), trenches, mine workings and   | <ul> <li>All DDH's have been surveyed with a<br/>differential global positioning system<br/>(DGPS) to within 10cm accuracy.</li> </ul>   |
| $\sum$        |   | <ul><li>other locations used in Mineral Resource<br/>estimation.</li><li>Specification of the grid system used.</li></ul>  | <ul> <li>All DDH's have been down hole surveyed<br/>to collect the azimuth and inclination at<br/>specific depths. Two principal types of</li> </ul>   |
| $\mathcal{O}$ |   | <ul> <li>Quality and adequacy of topographic<br/>control.</li> </ul>   | survey method have been used over the duration of the drilling programs including Eastman Kodak and Flexit.  |
|               |   |  | UTM WGS84 48N grid.  |
| 5             |   |  | <ul> <li>The DTM is based on 1 m contours with<br/>an accuracy of ±0.01 m.</li> </ul>  |
|               | Data spacing<br>and distribution            | <ul> <li>Data spacing for reporting of Exploration<br/>Results.</li> <li>Whether the data spacing and distribution<br/>is sufficient to establish the degree of</li> </ul>                     | <ul> <li>Drilling has been completed on nominal<br/>north-south sections, commencing at<br/>100m spacing and then closing to 50m for<br/>resource estimation.</li> </ul>   |
| $\bigcirc$    |   | is sufficient to establish the degree of<br>geological and grade continuity<br>appropriate for the Mineral Resource and<br>Ore Reserve estimation procedure(s) and<br>classifications applied. | <ul> <li>Vertical spacing of intercepts on the<br/>mineralised zones similarly commences<br/>at 100m spacing and then closing to 50m<br/>for resource estimation.</li> </ul>   |
|               |   | <ul> <li>Whether sample compositing has been applied.</li> </ul>   | • Drilling has predominantly occurred with angled holes approximately 70° to 60° inclination below the horizontal and either drilling to north or south, depending on the dip of the target mineralised zone.                              |
|               |   |  | <ul> <li>Holes have been drilled to 1000m vertical<br/>depth</li> </ul>  |
|               |   |  | <ul> <li>The data spacing and distribution is<br/>sufficient to establish geological and<br/>grade continuity appropriate for the</li> </ul>   |



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| Criteria   | JORC Code Explanation  | Commentary  |
|--|--|---|
| D  |  | Mineral Resource estimation procedure<br>and has been taken into account in 3D<br>space when determining the<br>classifications to be applied.  |
| Orientation of<br>data in relation<br>to geological<br>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> | <ul> <li>Drilling has been predominantly completed on north-south section lines along the strike of the known mineralised zones and from either the north or the south depending on the dip.</li> <li>Vertical to South dipping ore bodies were predominantly drilled to the north.</li> <li>Scissor Drilling, (drilling from both north and south), as well as vertical drilling, has been used in key mineralised zones to achieve unbiased sampling of possible structures and mineralised zones.</li> </ul> |
| Sample security  | <ul> <li>The measures taken to ensure sample security.</li> </ul>  | <ul> <li>Samples are dispatched from site through via company employees to the Laboratories.</li> <li>Samples are signed for at the Laboratory</li> </ul>   |
|  |  | <ul><li>with confirmation of receipt emailed<br/>through.</li><li>Samples are then stored at the lab and<br/>returned to a locked storage site.</li></ul>   |
| Audits or<br>reviews   | <ul> <li>The results of any audits or reviews of<br/>sampling techniques and data</li> </ul>   | <ul> <li>Internal audits of sampling techniques<br/>and data management on a regular basis,<br/>to ensure industry best practice is<br/>employed at all times.</li> </ul>   |
|  |  | <ul> <li>External review and audit have been<br/>conducted by the following groups</li> </ul>   |
|  |  | <ul> <li>2012 – AMC Consultants Pty Ltd. was<br/>engaged to conduct an Independent<br/>Technical Report which reviewed drilling<br/>and sampling procedures. It was<br/>concluded that sampling and data record<br/>was appropriate for use in resource<br/>estimation including that required by the<br/>NI 43-101 standards.</li> </ul>   |
|  |  | <ul> <li>2013 - Mining Associates Ltd. was<br/>engaged to conduct an Independent<br/>Technical Report to review drilling,<br/>sampling techniques, QAQC and previous<br/>resource estimates. Methods were found<br/>to conform to international best practice.</li> </ul>   |

## **1.2 JORC TABLE 1 - SECTION 2 - REPORTING OF EXPLORATION RESULTS**

(Criteria in this section apply to all succeeding sections).



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| Criteria   | JORC Code Explanation  | Commentary   |
|--|--|--|
| Mineral<br>tenement and<br>land tenure<br>status | <ul> <li>Type, reference name/number, location<br/>and ownership including agreements or<br/>material issues with third parties such as<br/>joint ventures, partnerships, overriding<br/>royalties, native title interests, historical<br/>sites, wilderness or national park and<br/>environmental settings.</li> <li>The security of the tenure held at the time<br/>of reporting along with any known<br/>impediments to obtaining a licence to<br/>operate in the area.</li> </ul> | <ul> <li>The Project comprises 1 Mining Licences (MV 17387A).</li> <li>100% owned by Oyut Ulaan LLC. THR Oyu Tolgoi Ltd (a wholly owned subsidiary of Turquoise Hill Resources Ltd owns 90% of Oyut Ulaan LLC. The remaining 10% is owned by Quincunx Ltd, which in turn is owned by an incorporated joint venture between Kerry Holdings Ltd. and MCS Holding LLC.</li> <li>The Mongolian Minerals Law (2006 and Mongolian Land Law (2002) govern exploration, mining and land use rights for the project.</li> </ul>   |
| Exploration<br>done by other<br>parties          | <ul> <li>Acknowledgment and appraisal of<br/>exploration by other parties.</li> </ul>  | • Previous exploration was conducted by<br>Quincunx Ltd, Ivanhoe Mines Ltd and<br>Turquoise Hill Resources Ltd including<br>extensive drilling, surface geochemistry,<br>geophysics, mapping and mineral<br>resource estimation to NI 43-101<br>standards.   |
| Geology  | Deposit type, geological setting and style of mineralisation.  | <ul> <li>The mineralisation is characterised as porphyry copper-gold type.</li> <li>Porphyry copper-gold deposits are formed from magmatic hydrothermal fluids typically associated with felsic intrusive stocks that have deposited metals as sulphides both within the intrusive and the intruded host rocks. Quartz stockwork veining is typically associated with sulphides occurring both within the quartz veinlets and disseminated thought out the wall rock. Porphyry deposits ranging from low to high grade and are generally mined by large scale open pit or underground bulk mining methods. The deposits at Kharmagtai are atypical in that they are associated with intermediate intrusions of diorite to quartz diorite composition, however the deposits are in terms of contained gold significant, and similar gold-rich porphyry deposits.</li> </ul> |
| Drill hole<br>information                        | <ul> <li>A summary of all information material to<br/>the understanding of the exploration<br/>results including a tabulation of the<br/>following information for all Material drill<br/>holes:         <ul> <li>easting and northing of the drill hole<br/>collar.</li> <li>elevation or RL Reduced Level –<br/>elevation above sea level in metres)<br/>of the drill hole collar .</li> </ul> </li> </ul>   | <ul> <li>Diamond drill holes are the principal<br/>source of geological and grade data for<br/>the Project.</li> <li>See Table 1 in main report.</li> </ul>  |



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| Criteria   | JORC Code Explanation   | Commentary  |
|--|---|---|
|  | <ul> <li>dip and azimuth of the hole</li> <li>down hole length and interception<br/>depth</li> <li>hole length.</li> <li>If the exclusion of this information is<br/>justified on the basis that the information<br/>is not Material and this exclusion does not<br/>detract from the understanding of the<br/>report, the Competent Person should<br/>clearly explain why this is the case.</li> </ul>   |   |
| Data<br>aggregation<br>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> | <ul> <li>A nominal cutoff of 0.1% Cu is used for identification of potentially significant intercepts for reporting purposes.</li> <li>Most of the reported intercepts are shown in sufficient detail, including maxima and subintervals, to allow the reader to make an assessment of the balance of high and low grades in the intercept.</li> <li>Informing Samples have been composited to two metre lengths honouring the geological domains and adjusted where necessary to ensure that no residual sample lengths have been excluded (best fit).</li> <li>The copper equivalent (CuEq) calculation represents the total metal value for each metal, multiplied by the conversion factor, summed and expressed in equivalent copper percentage. Grades have not been adjusted for metallurgical or refining recoveries and the copper equivalent grades are of an exploration nature only and intended for summarising grade. The copper equivalent conversion factors and long term price assumptions have been adopted: Copper Equivalent Formula (CuEq) = Cu% + (Au (ppm) x 0.6284); Price assumptions: Cu (US\$3.20lb) and</li> </ul> |
| Relationship<br>between<br>mineralization<br>on widths and<br>intercept<br>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>   | <ul> <li>Au (US\$1,375oz).</li> <li>Mineralised structures are variable in orientation, and therefore drill orientations have been adjusted from place to place ir order to allow intersection angles as close as possible to true widths.</li> <li>Exploration results have been reported as an interval with 'from' and 'to' stated in tables of significant economic intercepts. Tables clearly indicate that true widths will generally be narrower than those reported.</li> </ul>   |



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| Criteria                                 | JORC Code Explanation  | Commentary   |
|--|--|--|
|  |  | was done in 3D space.  |
| Diagrams                                 | <ul> <li>Appropriate maps and sections (with<br/>scales) and tabulations of intercepts<br/>should be included for any significant<br/>discovery being reported These should<br/>include, but not be limited to a plan view<br/>of drill hole collar locations and<br/>appropriate sectional views.</li> </ul>  | See figures in main report.  |
| Balanced<br>reporting                    | <ul> <li>Where comprehensive reporting of all<br/>Exploration Results is not practicable,<br/>representative reporting of both low and<br/>high grades and/or widths should be<br/>practiced to avoid misleading reporting of<br/>Exploration Results.</li> </ul>  | <ul> <li>Results have been reported at a range o<br/>cut-off grades, above a minimum suitable<br/>for open pit mining.</li> </ul>      |
| Other<br>substantive<br>exploration data | <ul> <li>Other exploration data, if meaningful and<br/>material, should be reported including<br/>(but not limited to): geological<br/>observations; geophysical survey results;<br/>geochemical survey results; bulk samples         <ul> <li>size and method of treatment;<br/>metallurgical test results; bulk density,<br/>groundwater, geotechnical and rock<br/>characteristics; potential deleterious or<br/>contaminating substances.</li> </ul> </li> </ul> | <ul> <li>Extensive work in this area has been<br/>done, and is reported separately.</li> </ul>   |
| Further work                             | The nature and scale of planned further<br>work (eg tests for lateral extensions or  | • The mineralisation is open at depth and along strike.  |
|  | depth extensions or large-scale step-out drilling).  | Current estimates are restricted to those expected to be reasonable for open pit   |
| •  | • Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is  | mining. Limited drilling below this depth (<br>300m rl) shows widths and grades<br>potentially suitable for underground<br>extraction. |
|  | not commercially sensitive   |  |