

27 April 2017

EXPLORATION UPDATE - DRILLING UNDERWAY ON HIGH-PRIORITY TARGETS AT OYUT ULAAN

HIGHLIGHTS

- Exploration drilling underway at Oyut Ulaan;
- Drilling to test several near-surface high-priority copper-gold and gold targets;
- Reporting of drill results will commence by late May;
- Planning underway for deeper drilling at Kharmagtai to extend the recently reported high-grade tourmaline breccia mineralisation.

Xanadu Mines Ltd (**ASX: XAM** – “Xanadu” or “Company”) is pleased to announce, following a highly successful exploration program in 2016, diamond drilling is underway on several near-surface high-priority gold-rich porphyry copper and high-grade epithermal gold targets at its 90% owned Oyut Ulaan copper-gold district located within the Dornogovi Province of southern Mongolia, approximately 420km southeast of Ulaanbaatar (Figure 1).

Xanadu's Managing Director & Chief Executive Officer, Dr Andrew Stewart, said “We are pleased to report that diamond drilling has recommenced at our Oyut Ulaan project. Our exploration team is keen to pick-up from where we finished off last year and believe further drilling will continue to unlock the true potential of this highly mineralised and underexplored porphyry copper-gold district. Over the winter months we committed substantial time in the preparation and planning for our upcoming drill programme at Oyut Ulaan. With multiple near surface drill targets, this well considered and prioritised drill program will go a long way to maximise the chance of making the significant discovery we believe exists within the large Oyut Ulaan district.”

HIGHLIGHTS – PREVIOUS EXPLORATION AT OYUT ULAAN

Xanadu's previous exploration programs at Oyut Ulaan delivered excellent results. Oyut Ulaan consists of a cluster of porphyry prospects on the flanks of the Oyut Ulaan Intrusive Complex (OUIIC) (Figure 2). Previous exploration including surface mapping, trenching and limited drilling has identified numerous copper-gold porphyry centres including two quartz-chalcopyrite stockwork zones which are approximately 3 kilometres apart.

Diorite Porphyry Prospect is a broad zone of strong quartz stockwork veining with copper mineralisation ranging from 0.3 to 1.5% copper, and is associated with high-grade gold mineralisation ranging from 0.5 to >5g/t gold. The stockwork mineralisation is approximately 40 to 80 metres wide, at least 550 metres long and at least 200 metres deep. The mineralisation is characterised by high gold grades, with per cent copper to grams/tonne gold ratios typically exceeding 1:2. Previously drill results from Diorite Porphyry include:

- **OUDDH026:**
 - 236m @ 0.46g/t Au and 0.28% Cu (0.58% eCu) from surface
 - including 24m @ 1.53g/t Au and 0.57% Cu (1.55% eCu) from 6m
 - and 11.4m @ 1.08g/t Au and 0.9% Cu (1.59% eCu) from 103m.

Stockwork Porphyry Prospect consists of a narrow, discontinuous zone of quartz veining with mineralisation in the range of 0.1 to 0.8% copper and 0.3 to 0.6g/t gold. Mineralisation at Stockwork Porphyry is at least 800 metres long, 150 metres wide and at least 200 metres deep. Previous drill results from Stockwork Porphyry include:

- **OUDD001:**
 - 64m @ 0.5% Cu and 0.16g/t Au (0.61% eCu) from 44m
 - Including 28m @ 0.82 % Cu and 0.3g/t Au (1% eCu) from 58m.

The recent discovery of potentially significant gold vein mineralisation broadens the range of targets at Oyut Ulaan and opens-up a whole new area for exploration. Given the bonanza grades and significant strike; this style of mineralisation is a very attractive target. Previous trench results from Bavuu include:

- **OUSC003 31.5m @ 26.75g/t Au**
- **OUSC004 12m @ 42.83g/t Au.**

Copper grades within the samples from the Bavuu zone average 0.3% Cu, which supports the possibility that the precursor sulphide mineralisation is at least partially chalcopyrite. The presence of low grade copper suggests a likely link to the porphyry copper mineralisation along strike or at depth. The zonation seen world-wide for this association includes upwards transitions from copper-gold porphyry veins to shallow level gold systems.

FORWARD PLAN AT OYUT ULAAN

During the winter months Xanadu's highly experienced geology team completed a systematic and detailed review of all existing exploration data across the entire Oyut Ulaan district. This data was combined with new geophysical data, and modelled in three dimensions generating 47 priority ranked targets ready for drilling in 2017 (Figure 2). Initial drilling will focus on the first four most promising shallow targets followed by testing of some exceptional large scale porphyry targets.

TABLE 1: High-priority shallow targets.

Target Name	Target Style	Geology	Au in Soil	Cu in Soil	Best Previous Results	Comments
Target 46	Porphyry	High density stock work veining in volcanoclastics	0.56g/t Au	0.1% Cu	No drilling or trenching. Malachite and chalcopyrite in veining	Outcropping porphyry target with good size potential
Target 4	Porphyry	Broad intervals of stock work veining hosted in monzodiorite and volcanoclastics with associated pink feldspar alteration. Deeper magnetic target beneath target 4 indicatives of causative intrusive	1.45g/t Au	0.39% Cu	Trench OUSC030A - 188m @ 0.18g/t Au and 0.24% Cu (0.35%eCu)	Outcropping porphyry target with significant size potential
Target 10	Epithermal	High grade gold-quartz-hematite veins from trenches hosted within basalts and volcanoclastics	2.11g/t Au	0.16% Cu	Trench OUSC028D - 14m @ 2.15g/t Au	Several shallow drill holes to test for gold 15 to 30m beneath high grade trench results
Target 19	Skarn-Porphyry	Magnetite epidote skarn hosted within carbonate units within volcanoclastic units. Skarn mineralisation interpreted to be vector to a larger porphyry	0.35g/t Au	0.74% Cu	Trench OUDDH030 - 40.1m @ 0.26g/t Au and 1% Cu (1.17% eCu)	Potential for shallow high grade copper and link to larger porphyry below skarn

Reporting of drill results will commence by late May and will continue at regular intervals through June and July.

KHARMAGTAI EXPLORATION UPDATE

Drill planning is underway to extend the high-grade Cu-Au tourmaline breccia mineralisation at Altan Tolgoi. This work looks to expand the size of the current resource and locate the potential higher grade bornite zone below the current zone of chalcopyrite mineralisation.

Additionally, recent bedrock drilling at Kharmagtai identified widespread near surface copper-gold mineralisation and assisted in the identification of six potential porphyry clusters containing 19 individual porphyry and epithermal targets. Initial follow-up drilling at one of these new targets has discovered broad zones of near surface gold-rich porphyry mineralisation such as 20m at 1.73g/t gold and 0.18% copper (1.08% CuEq) at the new Altan Burged porphyry target. Follow-up drilling is underway at Altan Burged and the other new porphyry/epithermal targets and an exploration update will be available shortly.

COMPETENT PERSON STATEMENT

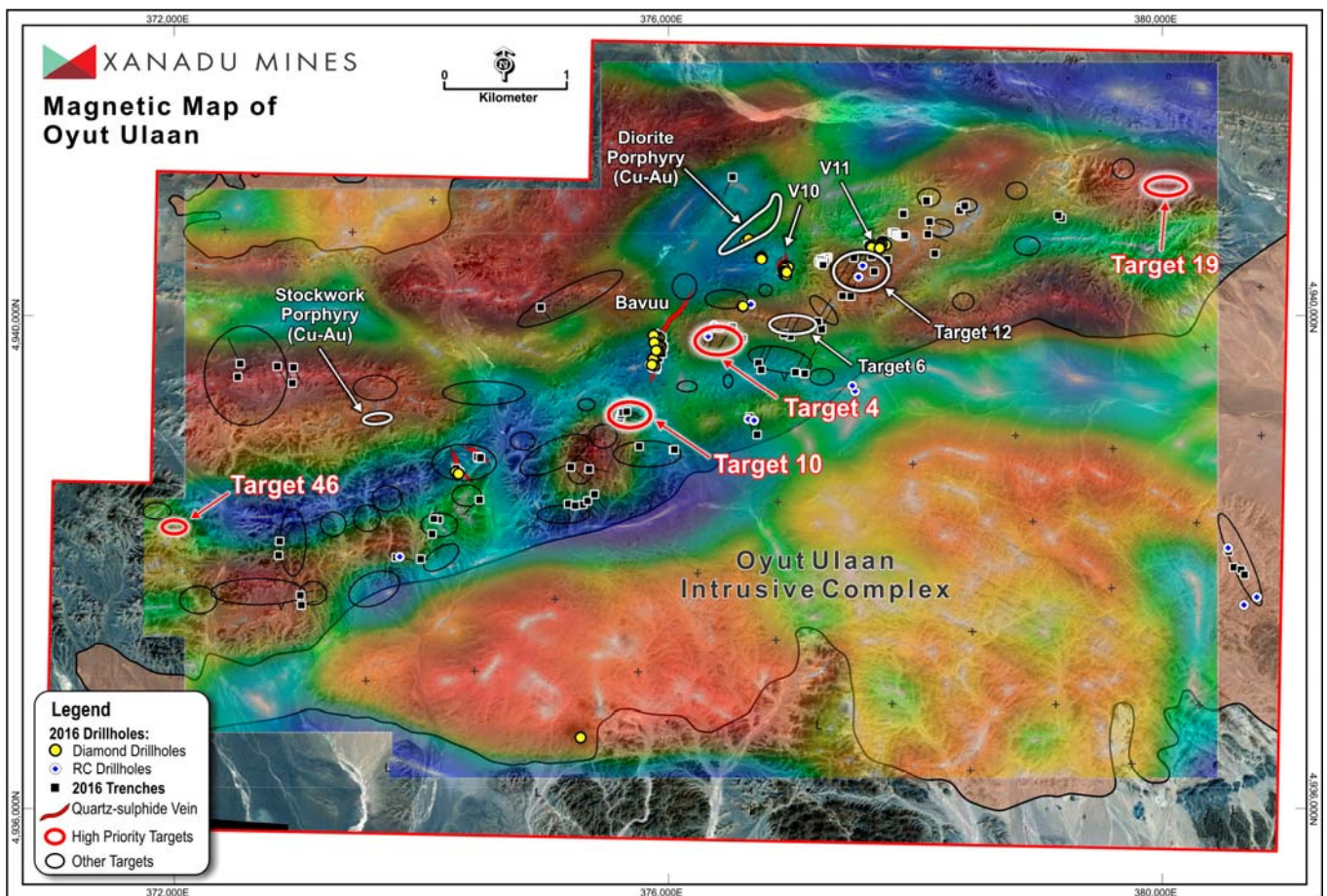
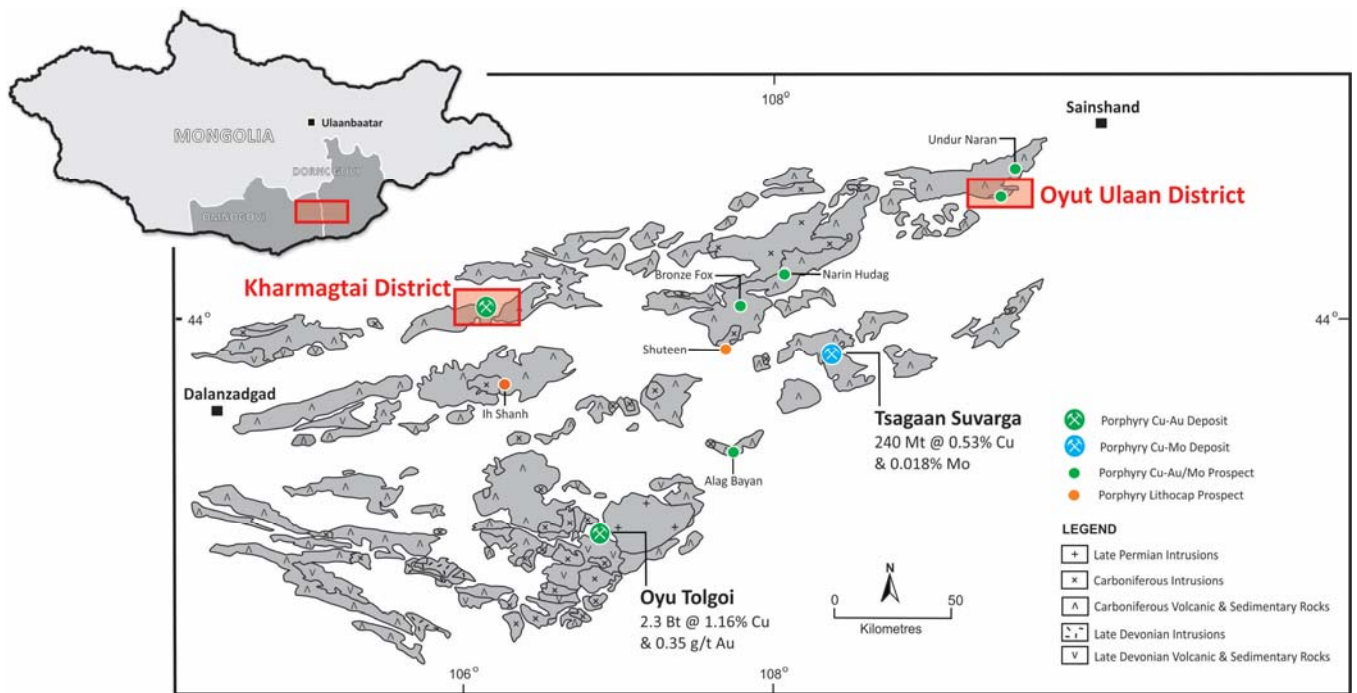
The information in this announcement that relates to exploration results is based on information compiled by Dr Andrew Stewart who is responsible for the exploration data, comments on exploration target sizes, QA/QC and geological interpretation and information. Dr Stewart, who is an employee of Xanadu and is a Member of the Australasian Institute of Geoscientists, 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 Stewart consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

COPPER EQUIVALENT CALCULATIONS

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) = $\text{Cu\%} + (\text{Au (ppm)} \times 0.6378)$. Based on a copper price of \$2.60/lb and a gold price of \$1,300/oz.

For further information, please contact:

Andrew Stewart
Managing Director & Chief Executive Officer
T: +612 8280 7497
M: +976 9999 9211
andrew.stewart@xanadumines.com
www.xanadumines.com



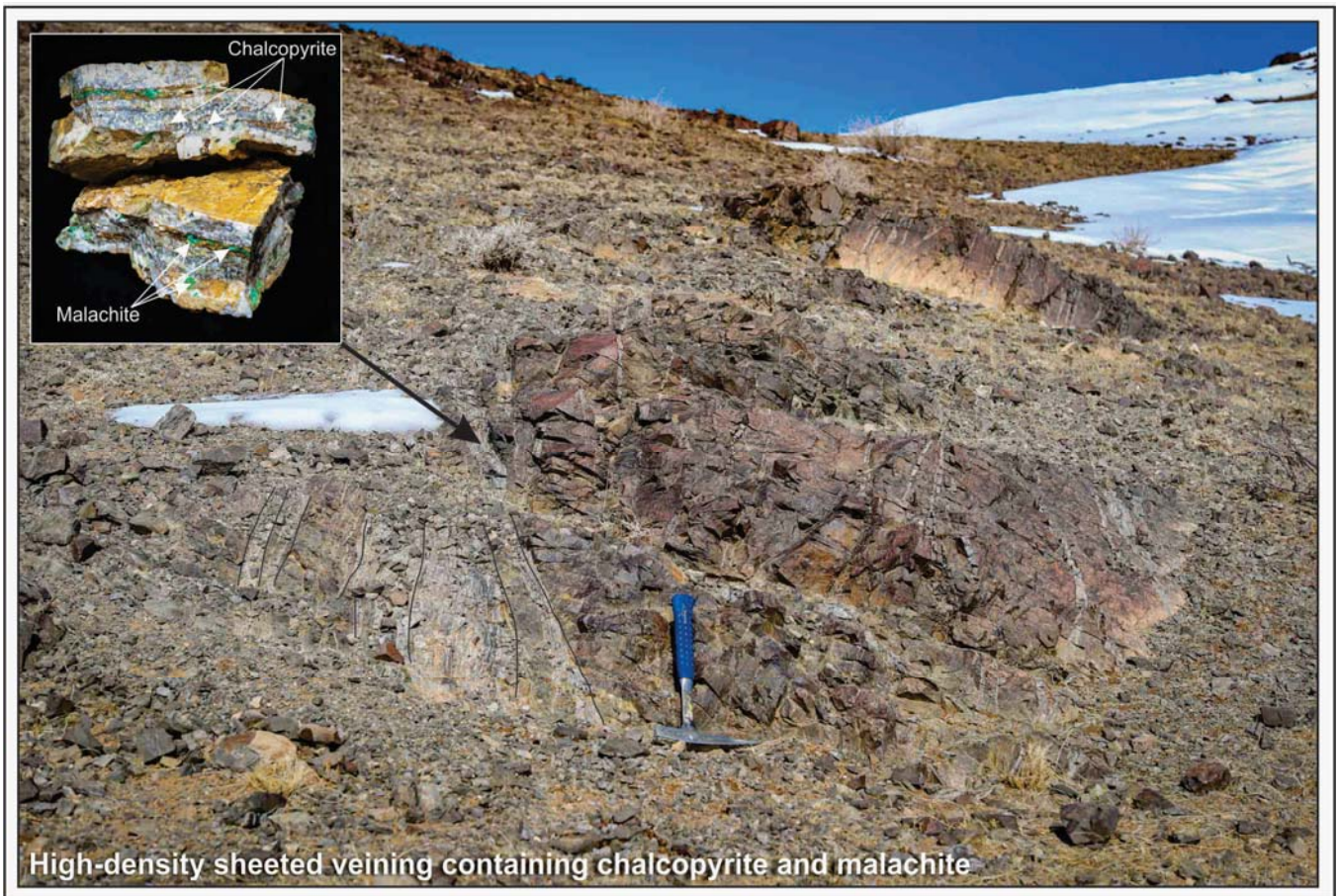


FIGURE 3: Target 46 high density stock work veining exposed at surface.

APPENDIX 1: OYUT ULAAN TABLE 1 (JORC 2012)

Set out below is Section 1 and Section 2 of Table 1 under the JORC Code, 2012 Edition for the Oyut Ulaan project. Data provided by Xanadu. This Table 1 updates the JORC Table 1 disclosure 24 August 2016.

Criteria	JORC Code Explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling and assaying. Measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. 	<ul style="list-style-type: none"> The results displayed are based on diamond drilling, reverse circulation and trenching. For diamond drilling, representative samples are taken from halved HQ core. Sample intervals are dictated by the geologist and are based on lithological units. The maximum sample interval for diamond drilling is 2m the minimum sample interval for diamond drilling is 10cm. For reverse circulation drilling, samples are taken from one meter intervals using a 75:25 ratio splitter. Maximum reverse circulation samples are 2m intervals, minimum are 1m. For trenching, samples are taken as rock-chips from the toe of the trench wall (10cm above the floor) collected in plastic tray. Maximum sample interval is 2m, the minimum sample interval is 30cm. Only assay result results from recognised, independent assay laboratories were presented after QAQC was verified.
Drilling techniques	<ul style="list-style-type: none"> Drill type and details. 	<ul style="list-style-type: none"> Diamond Drilling is conducted via HQ triple tube. RC drilling is conducted using a 4 3/8 inch face sampling bit.
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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. 	<ul style="list-style-type: none"> DDH core recoveries have been good, averaging between 96.6% and 99%. HQ triple tube has been utilised to ensure minimum sample loss and the maintenance of sample coherency. RC samples were weighed before splitting to measure recovery. Average RC recoveries ranged between 98.43% and 100% Analysis of recovery results vs. grade indicates no significant trends. Indicating bias of grades due to diminished recovery and / or wetness of samples. The methodology used for measuring recovery is standard industry practice.
Logging	<ul style="list-style-type: none"> 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, 	<ul style="list-style-type: none"> Drill samples are logged for lithology, mineralisation and alteration and geotechnical aspects using a standardised logging system, including the recording of visually estimated volume percentages of major minerals. Drill core was photographed after being



Criteria	JORC Code Explanation	Commentary
	<ul style="list-style-type: none"> channel, etc) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> logged by a geologist. The entire interval drilled has been logged by a geologist. Trench walls and floors are mapped by a geologist for lithology, mineralisation and alteration using standardised mapping system.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 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. Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> DDH Core is cut in half with a diamond saw, following the line marked by the geologist. The rock saw is regularly flushed with fresh water. Sample intervals are defined by geological contacts to ensure representative sampling of mineralised units. Routine sample preparation and analyses of DDH samples were carried out by ALS Mongolia LLC (ALS Mongolia), who operates an independent sample preparation and analytical laboratory in Ulaanbaatar. All samples were prepared to meet standard quality control procedures as follows: Drill core, RC and chip samples. Crush to 70% less than 2mm, riffle split off 500g, pulverize split to better than 85% passing 75 microns. Certified reference materials (CRMs), blanks and pulp duplicate were randomly inserted to manage the quality of data. Sample sizes are well in excess of standard industry requirements.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 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. 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. 	<ul style="list-style-type: none"> All samples were routinely assayed by ALS Mongolia for gold, copper, silver, lead, zinc, arsenic and molybdenum. Au is determined using a 50g fire assay fusion, cupelled to obtain a bead, and digested with Aqua Regia, followed by an atomic absorption spectroscopy (AAS) finish, with a lower detection (LDL) of 0.01 ppm. Cu, Ag, Pb, Zn, As and Mo. A prepared sample (0.25 g) is digested with perchloric, nitric, hydrofluoric and hydrochloric acids. The residue is topped up with dilute hydrochloric acid and the resulting solution is analyzed by inductively coupled plasma-atomic emission spectrometry. Results are corrected for spectral interelement interferences. Over range results for important metals were re-analysed using Ore Grade 12 Elements Package by Four Acid Digestion with ICP-AES Quality assurance was provided by introduction of known certified standards, blanks and duplicate samples on a routine basis.

Criteria	JORC Code Explanation	Commentary
		<ul style="list-style-type: none"> Assay results outside the optimal range for methods were re-analysed by appropriate methods. Ore Research Pty Ltd certified copper and gold standards have been implemented as a part of QAQC procedures, as well as coarse and pulp blanks, and certified matrix matched gold and copper-gold standards. Gold standards matched to the style of mineralisation were used across a range of low-medium and high-grades. QAQC monitoring is an active and ongoing processes on batch by batch basis by which unacceptable results are re-assayed as soon as practicable.
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> All assay data QAQC is checked prior to loading into the Geobank data base. The data is managed XAM geologists. The data base and geological interpretation is collectively managed by XAM.
Location of data points	<ul style="list-style-type: none"> 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. Specification of the grid system used. Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> All DDH's have been surveyed with a differential global positioning system (DGPS) to within 10cm accuracy. All DDH's have been down hole surveyed to collect the azimuth and inclination at specific depths. Two principal types of survey method have been used over the duration of the drilling programs including Eastman Kodak and Flexit. UTM WGS84 49N grid. The DTM is based on 1 m contours with an accuracy of ± 0.01 m.
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. 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. Whether sample compositing has been applied. 	<ul style="list-style-type: none"> Drilling has been completed on sections that range between 10-25m in spacing dependant on the target vein width and continuity. Vertical spacing of intercepts on the mineralised zones similarly commences at 10-20m spacing. Drilling has predominantly occurred with angled holes approximately 70° to 60° inclination below the horizontal and depending on the dip of the target mineralised zone. Each mineralised zone is drilled to increase the likelihood of true width intersections. Holes have been drilled to 80m vertical depth The data spacing and distribution is sufficient to establish geological and grade continuity appropriate for the Mineral Resource estimation procedure and has been taken into account in 3D space when

Criteria	JORC Code Explanation	Commentary
		determining the classifications to be applied.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 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. 	<ul style="list-style-type: none"> Drilling has predominantly occurred with angled holes approximately 70° to 60° inclination below the horizontal and depending on the dip of the target mineralised zone. Each mineralised zone is drilled to increase the likelihood of true width intersections. 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.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Samples are dispatched from site through via company employees and secure company vehicles to the Laboratories. Samples are signed for at the Laboratory with confirmation of receipt emailed through. Samples are then stored at the lab and returned to a locked storage site.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data 	<ul style="list-style-type: none"> Internal audits of sampling techniques and data management on a regular basis, to ensure industry best practice is employed at all times.

1.2 JORC TABLE 1 - SECTION 2 – REPORTING OF EXPLORATION RESULTS

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

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> 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 style="list-style-type: none"> The Project comprises 1 Mining Licences (MV-17129A). Xanadu now owns 90% of Vantage LLC, the 100% owner of the Oyut Ulaan mining licence. The Mongolian Minerals Law (2006 and Mongolian Land Law (2002) govern exploration, mining and land use rights for the project.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Previous exploration was conducted by Ivanhoe Mines Ltd and Vantage LLC including surface mapping and geochemistry, diamond drilling and geophysics.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> The mineralisation is characterised as porphyry copper-gold type and epithermal gold. Porphyry copper-gold deposits are formed

Criteria	JORC Code Explanation	Commentary
		<p>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 throughout the wall rock. Porphyry deposits are typically large tonnage 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.</p> <ul style="list-style-type: none"> • Epithermal Au deposits commonly form within the porphyry environment and take the form of narrow, high grade Au in quartz sulphide veins. Epithermal deposits are typically low to moderate tonnage, moderate to high grade deposits mined from either open pit or underground methods. At Oyut Ulaan the majority of drilled high-grade Au mineralisation is shallow and within the oxide environment and as such contains free gold within banded quartz hematite after sulphide.
Drill hole Information	<ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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 style="list-style-type: none"> • Diamond drill holes are the principal source of geological and grade data for the Project. • See figures in main report.
Data Aggregation methods	<ul style="list-style-type: none"> • 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. • Where aggregate intercepts incorporate 	<ul style="list-style-type: none"> • A nominal cut-off of 0.1% Cu and or 0.1g/t Au is used for identification of potentially significant intercepts for reporting purposes. • Most of the reported intercepts are shown in sufficient detail, including maxima and

Criteria	JORC Code Explanation	Commentary
	<p>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.</p> <ul style="list-style-type: none"> The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<p>subintervals, to allow the reader to make an assessment of the balance of high and low grades in the intercept.</p> <ul style="list-style-type: none"> 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). Metal equivalents used the following formula: $\text{CuEq} = \text{Cu\%} \times (\text{Aug/t} \times 0.6378)$ Formula is based on a \$2.60/lb copper price and a \$1,300/oz gold price. A gold recovery factor of 78.72% was used.
Relationship between mineralisation on widths and intercept lengths	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 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'). 	<ul style="list-style-type: none"> Mineralised structures are variable in orientation, and therefore drill orientations have been adjusted from place to place in order to allow intersection angles as close as possible to true widths. 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. Resource estimation, as reported later, was done in 3D space.
Diagrams	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> See figures in main report.
Balanced reporting	<ul style="list-style-type: none"> 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 style="list-style-type: none"> Resources have been reported at a range of cut-off grades, above a minimum suitable for open pit mining, and above a minimum suitable for underground mining.
Other substantive exploration data	<ul style="list-style-type: none"> Other exploration data, if meaningful and material, should be reported including (but not limited to): geological 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. 	<ul style="list-style-type: none"> Extensive work in this area has been done, and is reported separately.
Further work	<ul style="list-style-type: none"> The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future 	<ul style="list-style-type: none"> The mineralisation is open at depth and along strike. Current estimates are restricted to those expected to be reasonable for open pit mining. Limited drilling below this depth (-300m rl) shows widths and grades potentially suitable for underground

Criteria	JORC Code Explanation	Commentary
	drilling areas, provided this information is not commercially sensitive	extraction. • Exploration on going.