# New Drilling Intersects Significant Copper Sulphides

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TORONTO, April 20, 2021 - Xanadu Mines Ltd. (ASX: XAM, TSX: XAM) ("Xanadu" or "the Company") is pleased to provide an update of on-going drilling at the Stockwork Hill deposit on the Company's Kharmagtai porphyry copper and gold project in the South Gobi region of Mongolia.

Highlights

- Partial results and visual logs reported from two diamond drill holes (KHDDH564 & KHDDH565) due to delays in Ulaanbaatar assay lab related to COVID-19 restrictions.
- Visual logs of copper in two drill holes highlight the potential for significant strike and depth extension to high-grade bornite zone at Stockwork Hill.
- KHDDH565 expands the strike length of recently reported high-grade bornite zones, intersecting a >680 metre interval of mineralised diorite and intrusive breccia, demonstrating significant potential growth in the mineralised volume under Stockwork Hill.
- KHDDH564 intersects a new zone of mineralisation representing a repeat (offset block) of the high-grade bornite zone
- Drilling continues uninterrupted at Xanadu's Kharmagtai project with two diamond drill rigs.

Xanadu's Chief Executive Officer, Dr Andrew Stewart, said *"While our drilling continues uninterrupted, following a temporary assay lab slowdown, we've decided to share some encouraging partial assays and visual copper sulphide results from Stockwork Hill. These two holes expand the recently discovered high-grade bornite zone, intersecting significant zones of visual copper sulphide mineralisation. KHDDH565, still in progress, is very significant, having intersected over 680 metres of visual copper mineralisation so far and still within mineralisation. KHDDH564 looks to have intersected the upper zone in new down thrown block of mineralisation. These show that Xanadu continues to move toward our high grade target of a >100Mt, 0.8%CuEq block, which would underpin future development at Kharmagtai.*

*We support the Government of Mongolia in its actions to manage COVID-19 as it completes its well progressed vaccination program."*

KHDDH565 In Progress

Drill hole KHDDH565 was designed as a long-strike or long section drill hole to provide the following:

- Target offsets - information about the faults at the eastern and western ends of the high-grade bornite zone.
- Grade continuity - detailed information along the strike of the high-grade bornite zone.
- Maximise data - reduce the amount of drilling required to incorporate the high-grade bornite zone into the next mineral resource estimate update.
- Extend west - assist in understanding the western extensions of the high-grade bornite zone where little drilling has occurred.
- Evaluate shallow, eastern targets - test tourmaline breccia targets suggested by broad spaced drilling to the east of Stockwork Hill.

Assays have been returned to 604m, just above where the hole entered the high-grade bornite zone. Interim assay results show that a new tourmaline breccia zone has been discovered along strike from the existing tourmaline breccia at Stockwork Hill (Figures 3, 4, 5 and 6).

This new tourmaline breccia zone has returned: 159m @ 0.31% Cu and 0.21 g/t Au (0.41% eCu) from 323m

Including 66m @ 0.52% Cu and 0.37g/t Au (0.7% eCu) from 361m

Including 26m @ 0.77% Cu and 0.56g/t Au (1.06% eCu) from 369m

Including 8m @ 1.18% Cu and 0.64g/t Au (1.51% eCu) from 369m

Including 6m @ 0.83% Cu and 0.83g/t Au (1.26% eCu) from 389m

Including 16m @ 0.48% Cu and 0.40g/t Au (0.68% eCu) from 409m

Including 8m @ 0.83% Cu and 0.37g/t Au (1.02% eCu) from 445m

KHDDH565 remains in progress at a depth of 1,300m. Final assays for the remainder of the drill hole are expected in mid-May.

KHDDH564 Partial Results

Drill hole KHDDH564 was designed as a large-scale step out (400m to the south), targeting a repeat of the high-grade bornite zone at Stockwork Hill (Figure 1). The hole has been completed and assays have been returned to 1,305m (Figure 1 and 2).

The visual mineralisation reported in March (please see ASX/TSX Announcement dated 23 March 2021) has returned assays showing that KHDDH564 has tagged the top of the next major discovery at Kharmagtai.

KHDDH564 intersects 31m @ 0.53% Cu and 0.12 g/t Au (0.59% eCu) from 1176m

Including 18m @ 0.79% Cu and 0.15g/t Au (0.86% eCu) from 1183m

Including 4m @ 1.22% Cu and 0.24g/t Au (1.35% eCu) from 1183m

And 3m @ 1.14g/t Au from 1052m

Final assays from KHDDH564 are expected in mid-May 2021. Additional drill holes are being planned to target this new zone of mineralisation.

KHDDH566 New Drilling

Xanadu has recently commended drill hole KHDDH566, which has been designed as a scissor hole, like KHDDH563 (see ASX/TSX Announcement dated 23 March 2021). KHDDH566 will intersect the high-grade bornite zone 70-100m along strike from KHDDH563 and is currently at 450m (Figure 1). The high-grade bornite zone is expected around 600m. Assays for KHDDH566 are expected late-May.

Zaraa Drilling

Three diamond drill holes were completed at Zaraa in March, but assays were delayed as Stockwork Hill drill holes took priority at the laboratory. These holes (KHDDH560, 561, 562) were designed to fill gaps in the drill pattern at Zaraa to allow it to be added to the next Mineral Resource Upgrade. All holes returned low to medium grade porphyry mineralisation indicative of the edges of the Zaraa system. Hole details can be found in Table 1.

Figure 1. is available at

https://www.globenewswire.com/NewsRoom/AttachmentNg/2bb9f47d-1d7d-4662-ace3-31b7c379661d

Figure 2. is available at
https://www.globenewswire.com/NewsRoom/AttachmentNg/e4c270c6-3098-4554-838d-b59a02cb313b

Figure 3. is available at
https://www.globenewswire.com/NewsRoom/AttachmentNg/1265d46b-3144-457b-922a-2adc902e7ff6

Figure 4. is available at
https://www.globenewswire.com/NewsRoom/AttachmentNg/cbf49715-779c-4f2d-8bc2-95575e224ce3

Figure 5. is available at
https://www.globenewswire.com/NewsRoom/AttachmentNg/c56c6953-6e60-4953-8f13-66d7cc34276e

Figure 6. is available at
https://www.globenewswire.com/NewsRoom/AttachmentNg/59c0c747-6c67-42e1-99f3-0fcd9c75e510

About Xanadu Mines

Xanadu is an ASX and TSX listed Exploration company operating in Mongolia. We give investors exposure to globally significant, large scale copper-gold discoveries and low-cost inventory growth. Xanadu maintains a portfolio of exploration projects and remains one of the few junior explorers on the ASX or TSX who control an emerging Tier 1 copper-gold deposit in our flagship Kharmagtai project. For information on Xanadu visit: www.xanadumines.com.

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This Announcement was authorised for release by Xanadu's Board of Directors.

Appendix 1: Drilling Results

Table 1: Drill hole collar

| Hole ID | Prospect | East | North | RL | Azimuth (?) | Inc (?) | Depth (m) |
|---|---|---|---|---|---|---|---|
| KHDDH559B | Stockwork Hill | 592867 | 4878060 | 1163 | 211 | -35 | 1120.1 |
| KHDDH560 | Zaraa | 594600 | 4876067 | 1289 | 315 | -65 | 1296.5 |
| KHDDH561 | Zaraa | 594547 | 4877457 | 1270 | 135 | -70 | 1330.7 |
| KHDDH562 | Zaraa | 594530 | 4877299 | 1271 | 135 | -70 | 1045.5 |
| KHDDH563 | Stockwork Hill | 592690 | 4877190 | 1296 | 0 | -60 | 951.0 |
| KHDDH564 | Stockwork Hill | 592668 | 4876649 | 1299 | 0 | -60 | 1405.0 |
| KHDDH565 | Stockwork Hill | 593133 | 4877888 | 1280 | 233 | -55 | 1200.0 |

Table 2: Significant drill results

| Hole ID | Prospect | From (m) | To (m) | Interval (m) | Au (g/t) | Cu (%) | CuEq (%) | AuEq (g/t) |
|---|---|---|---|---|---|---|---|---|
| KHDDH559B | Stockwork Hill | 218 | 226 | 8 | 0.14 | 0.11 | 0.18 | 0.35 |
| *and* | | 236 | 248 | 12 | 0.09 | 0.06 | 0.10 | 0.20 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| *and* | | 284 | 564 | 280 | 0.36 | 0.46 | 0.64 | 1.26 |
| *including* | | 290 | 294 | 4 | 0.19 | 0.28 | 0.38 | 0.74 |
| *including* | | 308 | 554 | 246 | 0.40 | 0.51 | 0.71 | 1.39 |
| *including* | | 318 | 336 | 18 | 0.28 | 0.67 | 0.81 | 1.58 |
| *including* | | 346 | 472 | 126 | 0.50 | 0.70 | 0.96 | 1.87 |
| *including* | | 346 | 360 | 14 | 1.23 | 2.36 | 2.99 | 5.84 |
| *including* | | 370 | 374 | 4 | 0.53 | 1.11 | 1.37 | 2.69 |
| *including* | | 392 | 414 | 22 | 0.74 | 0.73 | 1.11 | 2.17 |
| *including* | | 510 | 518 | 8 | 0.97 | 0.27 | 0.76 | 1.49 |
| *including* | | 534 | 546 | 12 | 0.34 | 0.41 | 0.58 | 1.14 |
| *and* | | 611.8 | 838 | 226.2 | 1.43 | 0.68 | 1.41 | 2.75 |
| *including* | | 615 | 790 | 175 | 1.83 | 0.84 | 1.78 | 3.47 |
| *including* | | 617 | 637 | 20 | 2.09 | 1.09 | 2.16 | 4.22 |
| *including* | | 617 | 635 | 18 | 2.28 | 1.15 | 2.32 | 4.53 |
| *including* | | 649 | 783 | 134 | 2.04 | 0.89 | 1.93 | 3.77 |
| *including* | | 651 | 712 | 61 | 3.76 | 1.43 | 3.36 | 6.57 |
| *including* | | 756 | 763 | 7 | 1.67 | 1.07 | 1.92 | 3.76 |
| *and* | | 848 | 908 | 60 | 0.05 | 0.09 | 0.11 | 0.22 |
| *and* | | 928 | 938 | 10 | 0.05 | 0.08 | 0.11 | 0.21 |
| *and* | | 970.3 | 994 | 23.7 | 0.13 | 0.10 | 0.16 | 0.32 |
| *and* | | 1115 | 1120.1 | 5.1 | 1.13 | 0.05 | 0.62 | 1.22 |
| KHDDH560 | Zaraa | 239 | 243 | 4 | 0.06 | 0.18 | 0.21 | 0.40 |
| *and* | | 255 | 259 | 4 | 0.06 | 0.29 | 0.32 | 0.63 |
| *and* | | 1003.2 | 1017 | 13.8 | 0.09 | 0.05 | 0.10 | 0.19 |
| *and* | | 1105 | 1109 | 4 | 0.03 | 0.17 | 0.19 | 0.37 |
| *and* | | 1282.6 | 1296.5 | 13.9 | 0.03 | 0.12 | 0.13 | 0.26 |
| KHDDH561 | Zaraa | 21 | 35 | 14 | 0.18 | 0.03 | 0.12 | 0.24 |
| *and* | | 45 | 55 | 10 | 0.20 | 0.04 | 0.14 | 0.28 |
| *and* | | 67 | 137 | 70 | 0.07 | 0.07 | 0.10 | 0.20 |
| *and* | | 147 | 177 | 30 | 0.20 | 0.12 | 0.22 | 0.43 |
| *including* | | 159 | 163 | 4 | 0.47 | 0.36 | 0.60 | 1.18 |
| *and* | | 189 | 259 | 70 | 0.15 | 0.12 | 0.19 | 0.38 |
| *and* | | 269 | 512 | 243 | 0.21 | 0.19 | 0.30 | 0.59 |
| *including* | | 297 | 299 | 2 | 0.12 | 0.28 | 0.34 | 0.67 |
| *including* | | 315 | 358 | 43 | 0.24 | 0.25 | 0.37 | 0.72 |
| *including* | | 371 | 401 | 30 | 0.36 | 0.23 | 0.41 | 0.81 |
| *including* | | 411 | 421 | 10 | 0.27 | 0.20 | 0.33 | 0.65 |
| *including* | | 453.5 | 504.2 | 50.7 | 0.32 | 0.29 | 0.45 | 0.88 |
| *including* | | 463 | 475 | 12 | 0.39 | 0.33 | 0.53 | 1.04 |
| *and* | | 532 | 1256 | 724 | 0.07 | 0.15 | 0.19 | 0.37 |
| *including* | | 532 | 548 | 16 | 0.19 | 0.14 | 0.24 | 0.46 |
| *including* | | 562 | 572 | 10 | 0.35 | 0.17 | 0.35 | 0.69 |
| *including* | | 582 | 594 | 12 | 0.14 | 0.23 | 0.30 | 0.58 |
| *including* | | 680 | 686 | 6 | 0.14 | 0.23 | 0.30 | 0.59 |
| *including* | | 778 | 795 | 17 | 0.13 | 0.22 | 0.29 | 0.56 |
| *including* | | 934 | 952 | 18 | 0.09 | 0.24 | 0.29 | 0.57 |
| *including* | | 1028 | 1045 | 17 | 0.11 | 0.31 | 0.37 | 0.72 |
| *including* | | 1057 | 1079 | 22 | 0.11 | 0.23 | 0.28 | 0.55 |
| *including* | | 1185 | 1195 | 10 | 0.10 | 0.31 | 0.36 | 0.71 |
| *and* | | 1281 | 1325 | 44 | 0.10 | 0.11 | 0.16 | 0.32 |
| *including* | | 1289 | 1297 | 8 | 0.30 | 0.16 | 0.31 | 0.61 |
| KHDDH562 | Zaraa | 32 | 54 | 22 | 0.18 | 0.04 | 0.13 | 0.26 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| *and* | | 72 | 86 | 14 | 0.12 | 0.04 | 0.10 | 0.20 |
| *and* | | 120 | 138 | 18 | 1.21 | 0.05 | 0.67 | 1.31 |
| *including* | | 120 | 124 | 4 | 1.42 | 0.05 | 0.78 | 1.52 |
| *including* | | 134 | 138 | 4 | 3.55 | 0.12 | 1.93 | 3.78 |
| *and* | | 148 | 204 | 56 | 0.17 | 0.05 | 0.13 | 0.26 |
| *and* | | 219 | 772.4 | 553.4 | 0.19 | 0.22 | 0.32 | 0.62 |
| *including* | | 441 | 447 | 6 | 0.26 | 0.24 | 0.37 | 0.73 |
| *including* | | 467 | 491 | 24 | 0.16 | 0.20 | 0.28 | 0.55 |
| *including* | | 507 | 550 | 43 | 0.24 | 0.24 | 0.36 | 0.70 |
| *including* | | 566 | 772.4 | 206.4 | 0.31 | 0.36 | 0.52 | 1.02 |
| *including* | | 572.7 | 623 | 50.3 | 0.50 | 0.45 | 0.70 | 1.37 |
| *including* | | 659 | 663 | 4 | 0.34 | 0.57 | 0.74 | 1.45 |
| *including* | | 720 | 755 | 35 | 0.37 | 0.42 | 0.61 | 1.18 |
| *and* | | 782 | 1045.5 | 263.5 | 0.17 | 0.22 | 0.31 | 0.60 |
| *including* | | 784 | 842 | 58 | 0.24 | 0.34 | 0.46 | 0.90 |
| *including* | | 784 | 810.6 | 26.6 | 0.33 | 0.41 | 0.58 | 1.13 |
| *including* | | 865 | 869 | 4 | 0.32 | 0.49 | 0.66 | 1.28 |
| *including* | | 888 | 922 | 34 | 0.32 | 0.38 | 0.54 | 1.06 |
| *including* | | 888 | 902 | 14 | 0.47 | 0.53 | 0.77 | 1.51 |
| *including* | | 969 | 982.4 | 13.4 | 0.10 | 0.20 | 0.25 | 0.48 |
| *including* | | 1002 | 1006 | 4 | 0.75 | 0.18 | 0.57 | 1.11 |
| KHDDH563 | Stockwork Hill | 322 | 332 | 10 | 0.06 | 0.12 | 0.15 | 0.29 |
| *and* | | 648.6 | 830 | 181.4 | 1.78 | 0.68 | 1.59 | 3.11 |
| *including* | | 651 | 820 | 169 | 1.91 | 0.72 | 1.70 | 3.32 |
| *including* | | 664 | 668 | 4 | 0.40 | 0.52 | 0.72 | 1.41 |
| *including* | | 680 | 785.6 | 105.6 | 2.89 | 0.99 | 2.46 | 4.82 |
| *including* | | 686 | 778 | 92 | 3.23 | 1.06 | 2.71 | 5.30 |
| *and* | | 860 | 937.1 | 77.1 | 0.10 | 0.19 | 0.24 | 0.47 |
| *including* | | 888 | 892 | 4 | 0.07 | 0.30 | 0.34 | 0.66 |
| *including* | | 906 | 936 | 30 | 0.16 | 0.27 | 0.35 | 0.69 |
| *including* | | 928 | 934 | 6 | 0.38 | 0.42 | 0.62 | 1.20 |
| *and* | | 947.5 | 951 | 3.5 | 0.05 | 0.35 | 0.38 | 0.74 |
| KHDDH564 | Stockwork Hill | 45 | 95 | 50 | 0.05 | 0.13 | 0.16 | 0.31 |
| *and* | | 129 | 286.2 | 157.2 | 0.05 | 0.17 | 0.20 | 0.39 |
| *including* | | 129 | 136 | 7 | 0.06 | 0.26 | 0.29 | 0.57 |
| *including* | | 242 | 246 | 4 | 0.09 | 0.31 | 0.35 | 0.69 |
| *including* | | 257 | 265 | 8 | 0.08 | 0.26 | 0.30 | 0.59 |
| *and* | | 965 | 971 | 6 | 0.04 | 0.14 | 0.16 | 0.32 |
| *and* | | 1052 | 1055 | 3 | 1.14 | 0.03 | 0.61 | 1.19 |
| *and* | | 1176 | 1207 | 31 | 0.12 | 0.53 | 0.59 | 1.15 |
| *including* | | 1183 | 1201 | 18 | 0.15 | 0.79 | 0.86 | 1.68 |
| *including* | | 1183 | 1187 | 4 | 0.24 | 1.22 | 1.35 | 2.63 |
| *Assays pending* | | | | | | | | |
| KHDDH565 | Stockwork Hill | 69 | 79 | 10 | 0.12 | 0.05 | 0.12 | 0.23 |
| *and* | | 183 | 215 | 32 | 0.19 | 0.12 | 0.22 | 0.43 |
| *including* | | 197 | 211 | 14 | 0.32 | 0.17 | 0.33 | 0.65 |
| *and* | | 247 | 263 | 16 | 0.05 | 0.07 | 0.10 | 0.19 |
| *and* | | 323 | 482 | 159 | 0.21 | 0.31 | 0.41 | 0.81 |
| *including* | | 361 | 427 | 66 | 0.37 | 0.52 | 0.70 | 1.38 |
| *including* | | 369 | 395 | 26 | 0.56 | 0.77 | 1.06 | 2.07 |
| *including* | | 369 | 377 | 8 | 0.64 | 1.18 | 1.51 | 2.94 |
| *including* | | 389 | 395 | 6 | 0.83 | 0.83 | 1.26 | 2.46 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *including* | 409 | 425 | 16 | 0.40 | 0.48 | 0.68 | 1.33 |
| *including* | 445 | 453 | 8 | 0.37 | 0.83 | 1.02 | 2.00 |
| *including* | 445 | 451 | 6 | 0.40 | 0.97 | 1.17 | 2.30 |
| *and* | 522 | 538 | 16 | 0.33 | 0.23 | 0.40 | 0.78 |
| *including* | 526 | 538 | 12 | 0.41 | 0.29 | 0.50 | 0.99 |
| *and* | 558 | 604 | 46 | 0.03 | 0.10 | 0.11 | 0.22 |
| *Assays pending* | | | | | | | |

Appendix 2: Statements and Disclaimers

Mineral Resources and Ore Reserves Reporting Requirements

The 2012 Edition of the *Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves* (the JORC Code 2012) sets out minimum standards, recommendations and guidelines for Public Reporting in Australasia of Exploration Results, Mineral Resources and Ore Reserves. The Information contained in this Announcement has been presented in accordance with the JORC Code 2012.

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* and the *National Instrument 43-101*. Dr Stewart consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

Copper Equivalent Calculations

The copper equivalent (eCu) calculation represents the total metal value for each metal, multiplied by the conversion factor, summed and expressed in equivalent copper percentage with a metallurgical recovery factor applied. The copper equivalent calculation used is based off the eCu calculation defined by CSA in the 2018 Mineral Resource Upgrade.

Copper equivalent (eCu) grade values were calculated using the following formula:

eCu = Cu + Au * 0.62097 * 0.8235,

Where Cu = copper grade (%); Au = gold grade (gold per tonne (g/t)); 0.62097 = conversion factor (gold to copper); and 0.8235 = relative recovery of gold to copper (82.35%).

The copper equivalent formula was based on the following parameters (prices are in USD): Copper price = 3.1 $/lb (or 6,834 $ per tonne ($/t)); Gold price = 1,320 $ per ounce ($/oz); Copper recovery = 85%; Gold recovery = 70%; and Relative recovery of gold to copper = 70% / 85% = 82.35%.

Forward-Looking Statements

Certain statements contained in this Announcement, including information as to the future financial or operating performance of Xanadu and its projects may also include statements which are 'forward‐looking statements' that may include, amongst other things, statements regarding targets, estimates and assumptions in respect of mineral reserves and mineral resources and anticipated grades and recovery rates, production and prices, recovery costs and results, capital expenditures and are or may be

based on assumptions and estimates related to future technical, economic, market, political, social and other conditions. These 'forward-looking statements' are necessarily based upon a number of estimates and assumptions that, while considered reasonable by Xanadu, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies and involve known and unknown risks and uncertainties that could cause actual events or results to differ materially from estimated or anticipated events or results reflected in such forward‐looking statements.

Xanadu disclaims any intent or obligation to update publicly or release any revisions to any forward‐looking statements, whether as a result of new information, future events, circumstances or results or otherwise after the date of this Announcement or to reflect the occurrence of unanticipated events, other than required by the *Corporations Act 2001 (Cth)* and the Listing Rules of the Australian Securities Exchange (ASX) and Toronto Stock Exchange (TSX). The words 'believe', 'expect', 'anticipate', 'indicate', 'contemplate', 'target', 'plan', 'intends', 'continue', 'budget', 'estimate', 'may', 'will', 'schedule' and similar expressions identify forward‐looking statements.

All 'forward‐looking statements' made in this Announcement are qualified by the foregoing cautionary statements. Investors are cautioned that 'forward‐looking statements' are not guarantee of future performance and accordingly investors are cautioned not to put undue reliance on 'forward‐looking statements' due to the inherent uncertainty therein.

For further information please visit the Xanadu Mines' Website at www.xanadumines.com.

Appendix 3: 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 Xanadu. This Table 1 updates the JORC Table 1 disclosure dated 11 April 2019.

JORC TABLE 1 - SECTION 1 - SAMPLING TECHNIQUES AND DATA

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

| Criteria | JORC Code explanation |
|---|---|
| *Sampling techniques* | ● *Nature and quality of sampling (e.g. cut channels, random c*<br>● *Include reference to measures taken to ensure sample repre*<br>● *Aspects of the determination of mineralisation that are Mate*<br>● *In cases where 'industry standard' work has been done this* |
| *Drilling techniques* | ● *Drill type (e.g. core, reverse circulation, open-hole hammer,* |
| *Drill sample recovery* | ● *Method of recording and assessing core and chip sample re*<br>● *Measures taken to maximise sample recovery and ensure re*<br>● *Whether a relationship exists between sample recovery and* |
| *Logging* | ● *Whether core and chip samples have been geologically and*<br>● *Whether logging is qualitative or quantitative in nature. Core*<br>● *The total length and percentage of the relevant intersections* |

| | |
|---|---|
| *Sub-sampling techniques and sample preparation* | ● *If core, whether cut or sawn and whether quarter, half or all*<br>● *If non-core, whether riffled, tube sampled, rotary split, etc. a*<br>● *For all sample types, the nature, quality and appropriateness*<br>● *Quality control procedures adopted for all sub-sampling stag*<br>● *Measures taken to ensure that the sampling is representativ*<br>● *Whether sample sizes are appropriate to the grain size of th* |
| *Quality of assay data and laboratory tests* | ● *The nature, quality and appropriateness of the assaying and*<br>● *For geophysical tools, spectrometers, handheld XRF instrum*<br>● *Nature of quality control procedures adopted (e.g. standards* |
| *Verification of sampling and assaying* | ● *The verification of significant intersections by either indepen*<br>● *The use of twinned holes.*<br>● *Documentation of primary data, data entry procedures, data*<br>● *Discuss any adjustment to assay data.* |
| *Location of data points* | ● *Accuracy and quality of surveys used to locate drill holes (co*<br>● *Specification of the grid system used.*<br>● *Quality and adequacy of topographic control.* |
| *Data spacing and distribution* | ● *Data spacing for reporting of Exploration Results.*<br>● *Whether the data spacing and distribution is sufficient to est*<br>● *Whether sample compositing has been applied.* |
| *Orientation of data in relation to geological structure* | ● *Whether the orientation of sampling achieves unbiased sam*<br>● *If the relationship between the drilling orientation and the ori* |
| *Sample security* | ● *The measures taken to ensure sample security.* |
| *Audits or reviews* | ● *The results of any audits or reviews of sampling techniques* |

JORC TABLE 1 - SECTION 2 - REPORTING OF EXPLORATION RESULTS

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

| Criteria | Commentary |
|---|---|
| Mineral tenement and land tenure status | ● The Project comprises 2 Mining Licences (MV-17129A Oyut Ulaan and (MV-17387A Kha<br>● Xanadu now owns 90% of Vantage LLC, the 100% owner of the Oyut Ulaan mining<br>● The Kharmagtai mining license MV-17387A is 100% owned by Oyut Ulaan LLC. Xa<br>● The Mongolian Minerals Law (2006) and Mongolian Land Law (2002) govern exploration |
| Exploration done by other parties | ● Previous exploration at Kharmagtai was conducted by Quincunx Ltd, Ivanhoe Mines Ltd.<br>● Previous exploration at Red Mountain (Oyut Ulaan) was conducted by Ivanhoe Mines. |
| Geology | ● The mineralisation is characterised as porphyry copper-gold type.<br>● Porphyry copper-gold deposits are formed from magmatic hydrothermal fluids typically as |
| Drill hole Information | ● Diamond drill holes are the principal source of geological and grade data for the Project.<br>● See figures in this ASX/TSX Announcement. |
| Data Aggregation methods | ● The CSAMT data was converted into 2D line data using the Zonge CSAMT processing s<br>● A nominal cut-off of 0.1% eCu is used in copper dominant systems for identification of po<br>● A nominal cut-off of 0.1g/t eAu is used in gold dominant systems like Golden Eagle for id<br>● Maximum contiguous dilution within each intercept is 9m for 0.1%, 0.3%, 0.6% and 1% e<br>● Most of the reported intercepts are shown in sufficient detail, including maxima and subin<br>● Informing samples have been composited to two metre lengths honouring the geological<br><br>The copper equivalent (eCu) calculation represents the total metal value for each metal, multip<br><br>Copper equivalent (CuEq or eCu) grade values were calculated using the following formula:<br><br>eCu or CuEq = Cu + Au * 0.62097 * 0.8235,<br><br>Gold Equivalent (eAu) grade values were calculated using the following formula:<br><br>eAu = Au + Cu / 0.62097 * 0.8235.<br><br>Where:<br><br>Cu - copper grade (%)<br><br>Au - gold grade (g/t)<br><br>0.62097 - conversion factor (gold to copper)<br><br>0.8235 - relative recovery of gold to copper (82.35%)<br><br>The copper equivalent formula was based on the following parameters (prices are in USD):<br><br>● Copper price - 3.1 $/lb (or 6834 $/t)<br>● Gold price - 1320 $/oz<br>● Copper recovery - 85%<br>● Gold recovery - 70%<br>● Relative recovery of gold to copper = 70% / 85% = 82.35%. |
| Relationship between mineralisation on widths and intercept lengths | ● Mineralised structures are variable in orientation, and therefore drill orientations have bee<br>● Exploration results have been reported as an interval with 'from' and 'to' stated in tables o |

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| Diagrams | ● See figures in the body of the report. |
| Balanced reporting | ● Resources have been reported at a range of cut-off grades, above a minimum suitable fo |
| Other substantive exploration data | ● Extensive work in this area has been done and is reported separately. |
| Further Work | ● The mineralisation is open at depth and along strike.<br>● Current estimates are restricted to those expected to be reasonable for open pit mining. I<br>● Exploration on going. |

JORC TABLE 1 - SECTION 3 - ESTIMATION AND REPORTING OF MINERAL RESOURCES

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

| Criteria | Commentary |
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| Database integrity | ● The database is a Geobank data base system.<br>● Data is logged directly into an Excel spread sheet logging system with drop down field list<br>● Validation checks are written into the importing program ensures all data is of high quality<br>● Digital assay data is obtained from the Laboratory, QAQC checked and imported<br>● Geobank exported to Access and connected directly to the GemcomSurpac Software.<br>● Data was validated prior to resource estimation by the reporting of basic statistics for eac |
| Site visits | ● Andrew Vigar of Mining Associates Pty Ltd visited the site from 24 and 25 October 2014.<br>● The site visit included a field review of the exploration area, an inspection of core, sample |
| Geological interpretation | ● Mineralisation resulted in the formation of comprises quartz-chalcopyrite-pyrite-magnetite<br>● The principle ore minerals of economic interest are chalcopyrite, bornite and gold, which<br>● The ore mineralised zones at Stockwork Hill, White Hill and Copper Hill are associated wi<br>● Sulphide mineralisation is zoned from a bornite-rich core that zone outwards to chalcopyr<br>● Drilling indicates that the supergene profile has been oxidised to depths up to 60 metres |
| Dimensions | ● Stockwork Hill comprises two main mineralised zones, northern and southern stockwork z<br>● The SH-S is at least 550 metres long, 600 metres deep and contains strong quartz-chalco<br>● The SH-N consists of a broad halo of quartz that is 250 metres long, 150 metres wide lon<br>● WH consists of a broad halo of quartz veins that is 850 metres long, 550 metres wide lon<br>● CH forms a sub vertical body of stockwork approximately 350 ? 100 metres by at least 20 |

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| Estimation and modelling techniques | ● The estimate Estimation Performed using Ordinary Kriging.<br>● Variograms are reasonable along strike.<br>● Minimum & Maximum Informing samples is 5 and 20 (1st pass), Second pass is 3 and 20<br>● Copper and Gold Interpreted separately on NS sections and estimated as separate doma<br>● Halo mineralisation defined as 0.12% Cu and 0.12g/t Au Grade.<br>● The mineralised domains were manually digitised on cross sections defining mineralisatio<br>● Cut off grades applied are copper-equivalent (CuEq) cut off values of 0.3% for appropriat<br>● A set of plans and cross-sections that displayed colour coded drill holes were plotted and<br>● The faulting interpreted to have had considerable movement, for this reason, the fault sur<br>● Six metre down-hole composites were chosen for statistical analysis and grade estimatio<br>● A total of 4,428 measurements for specific gravity are recorded in the database, all of whi<br>● Primary grade interpolation for the two metals was by ordinary kriging of capped 6m comp<br>● The Mineral Resource Estimate meets the requirements of JORC 2012 and has been rep<br>● The copper equivalent (eCu) calculation represents the total metal value for each metal, r<br>● Copper equivalent (CuEq or eCu) grade values were calculated using the following formu<br><br>eCu or CuEq = Cu + Au * 0.62097 * 0.8235,<br>Gold Equivalent (eAu) grade values were calculated using the following formula:<br>eAu = Au + Cu / 0.62097 * 0.8235.<br>Where:<br>Cu - copper grade (%)<br>Au - gold grade (g/t)<br>0.62097 - conversion factor (gold to copper)<br>0.8235 - relative recovery of gold to copper (82.35%)<br><br>The copper equivalent formula was based on the following parameters (prices are in USD):<br>Copper price - 3.1 $/lb (or 6834 $/t)<br>Gold price - 1320 $/oz<br>Copper recovery - 85%<br>Gold recovery - 70%<br>Relative recovery of gold to copper = 70% / 85% = 82.35%. |
| Moisture | ● All tonnages are reported on a dry basis. |
| Cut-off parameters | ● Cut off grades applied are copper-equivalent (CuEq) cut off values of 0.3% for possible o |
| Mining factors or assumptions | ● No mining factors have been applied to the in-situ grade estimates for mining dilution or l<br>● The deposit is amenable to large scale bulk mining.<br>● The Mineral Resource is reported above an optimised pit shell. (Lerch Grossman algorith |
| Metallurgical factors or assumptions | ● No metallurgical factors have been applied to the in-situ grade estimates. |
| Environmental factors or assumptions | ● An environmental baseline study was completed in 2003 by Eco Trade Co. Ltd. of Mongo |
| Bulk density | ● A total of 4,428 measurements for specific gravity are recorded in the database, all of whi<br>● The average density of all samples is approximately 2.74 t/m3. In detail there are some d<br>● There is no material impact on global tonnages, but it should be noted that density is a fu |
| Classification | ● The Mineral Resource classification protocols, for drilling and sampling, sample preparati<br>● The Mineral Resource statement relates to global estimates of in situ tonnes and grade<br>● The Mineral Resource Estimate has been classified in accordance with the JORC Code, |
| Audits or reviews | ● Xanadu's internal review and audit of the Mineral Resource Estimate consisted of data an<br>● Good correlation of geological and grade boundaries was observed<br>● 2013 - Mining Associates Ltd. was engaged to conduct an Independent Technical Report |

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| Discussion of relative accuracy/ confidence | ● An approach to the resource classification was used which combined both confidence in g<br>● Resource categories were constrained by geological understanding, data density and qua<br>● Resources estimates have been made on a global basis and relates to in situ grades.<br>● Confidence in the Indicated Mineral Resources is sufficient to allow application of Modifyi<br>● The deposits are not currently being mined.<br>● There is surface evidence of historic artisanal workings.<br>● No production data is available. |

JORC TABLE 1 - SECTION 4 - ESTIMATION AND REPORTING OF ORE RESERVES

Ore Reserves are not reported so this is not applicable to this announcement.