9 June 2016

# LATEST DRILLING RESULTS UNDERPIN SIGNIFICANT GOLD DISCOVERY AT OYUT ULAAN

## HIGHLIGHTS

- **Diamond drilling at Oyut Ulaan has intersected significant high-grade near-surface gold mineralisation, including 6.0m grading 21.57 g/t Au from surface (OUDDH040) and 6.3m grading 6.67 g/t Au from 15m (OUDDH035);**
- **Exploration has now discovered at least four areas of gold mineralisation within a prospective area that is 4.5km long and 300m wide;**
- **Drilling at the 'Breccia Pipe' prospect has intersected significant shallow high-grade tourmaline breccia mineralisation, including 69m grading 2.0% Cu from surface which includes 12.5m grading 5.35% Cu from 26m (OUDDH036);**
- **Systematic and cost effective exploration continues at Oyut Ulaan.**

Xanadu Mines Ltd (**ASX: XAM – "Xanadu")** is pleased to announce that it has received the first assay results from diamond drilling targeting recently discovered shallow gold mineralisation from its 90% owned Oyut Ulaan copper-gold project located within the Dornogovi Province of southern Mongolia, approximately 420km southeast of Ulaanbaatar (Figure 1).

Following the discovery of multiple zones of potentially significant outcropping quartz-pyrite vein mineralisation, the Company continues its program of systematic and cost effective exploration work designed to understand the geological controls on high-grade mineralisation within this shallow gold system that occurs peripheral to know gold-rich porphyry copper and tourmaline breccia copper mineralisation at Oyut Ulaan.

Recent exploration has discovered at least four areas of gold mineralisation that occur within a prospective area of mineralisation that is 4.5km long and 300m wide (Stockwork Zone, Bavuu Zone, Diorite Zone and Hulan Zone; Figures 2 to 4). Gold mineralisation is hosted by pyritic quartz veins, which occur as multiple stacked arrays, which generally trend northeast and dip shallowly to the northwest, making them potentially amendable to open pit mining. The veins are narrow but very high grade, with gold assays ranging from 1 g/t to >30 g/t gold over widths of 50cm-1.5m.

Exceptional new trench samples received from the newly discovered Diorite Vein Zone reported here have delivered exceptional gold results confirming the discovery of a new zone of shallow continuous sub-outcropping high-grade gold mineralisation.

The diamond drilling continues to test a combination of targets which includes outcropping gold-rich porphyry mineralisation and tourmaline breccia copper mineralisation within the highly prospective 40 km² area of interest which has yielded outstanding results to date.

Xanadu's Chief Executive Officer, Dr Andrew Stewart, said *"Exploration at Oyut Ulaan continues to return impressive intersections of shallow gold mineralisation. We are delighted that the first diamond drill results have provided significant advances in our understanding of the gold system and indicate that not only does high-grade gold mineralisation occur over significant widths it also occurs within multiple stacked lodes that extend below the current depth of shallow drilling. We plan to accelerated exploration of this exciting new discovery at Oyut Ulaan work where initial work is starting to indicate the potential for a modest scale gold "starter" project."*

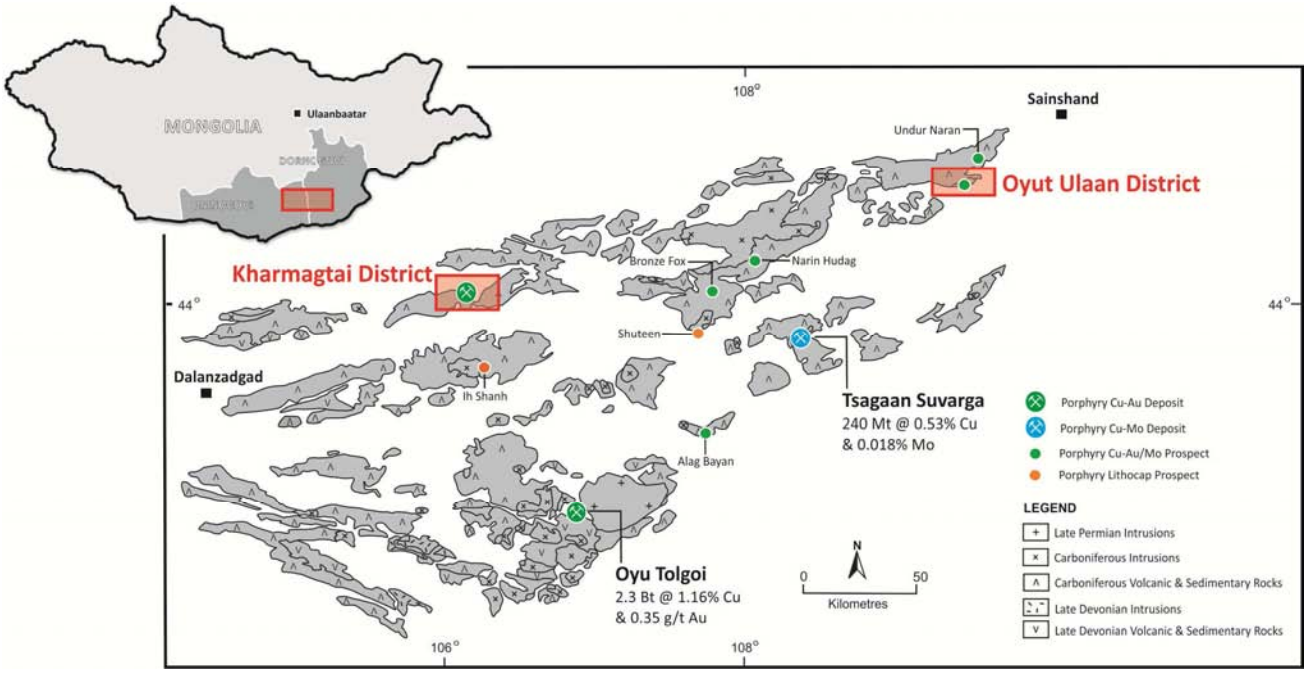



**FIGURE 1:** South Gobi copper province, showing location of Oyut Ulaan and Kharmagtai.

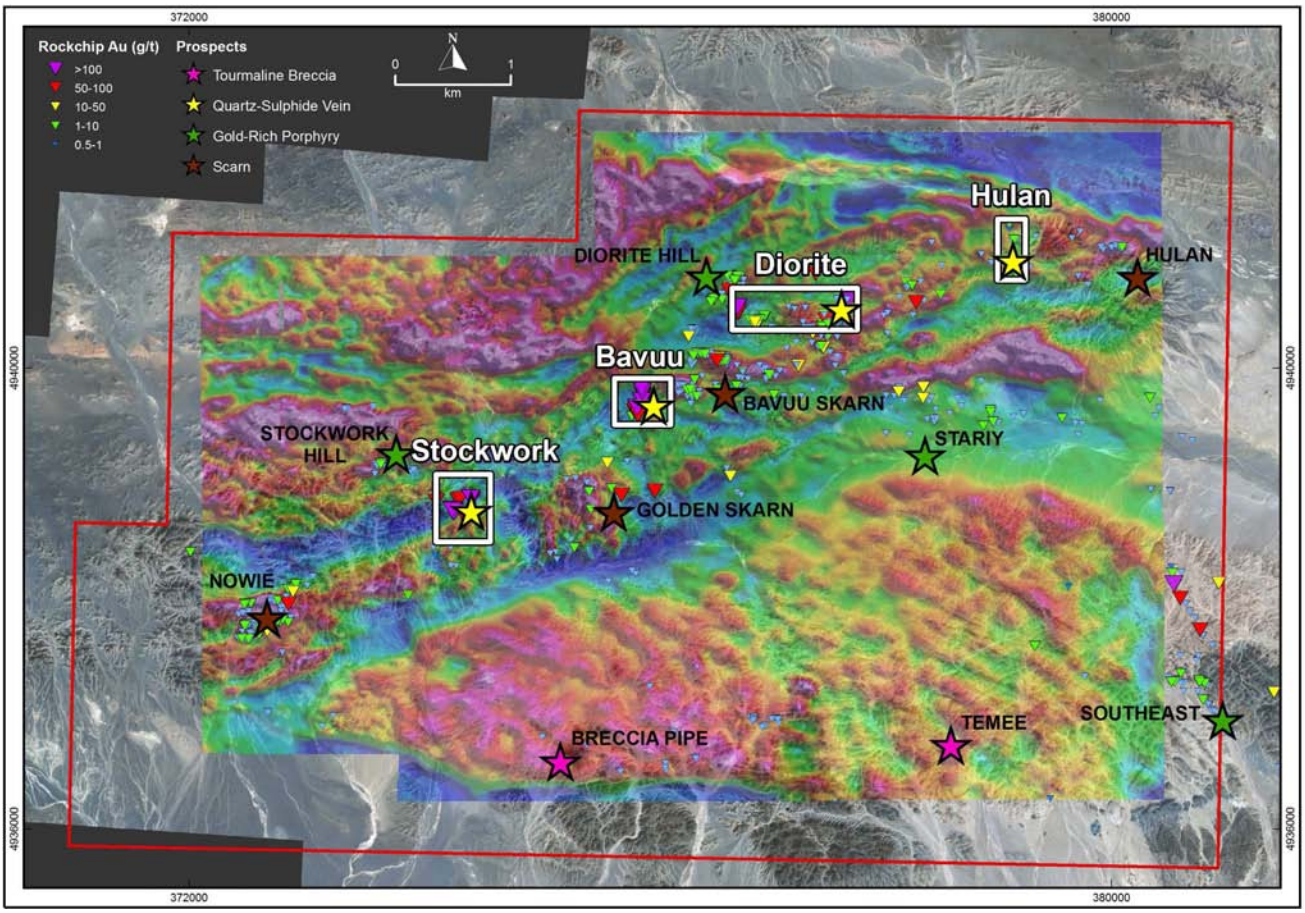



**FIGURE 2:** Oyut Ulaan copper-gold project, showing main prospects and location of new gold mineralisation at Stockwork Zone, Bavuu Zone, Diorite Zone, and Hulan Zones.

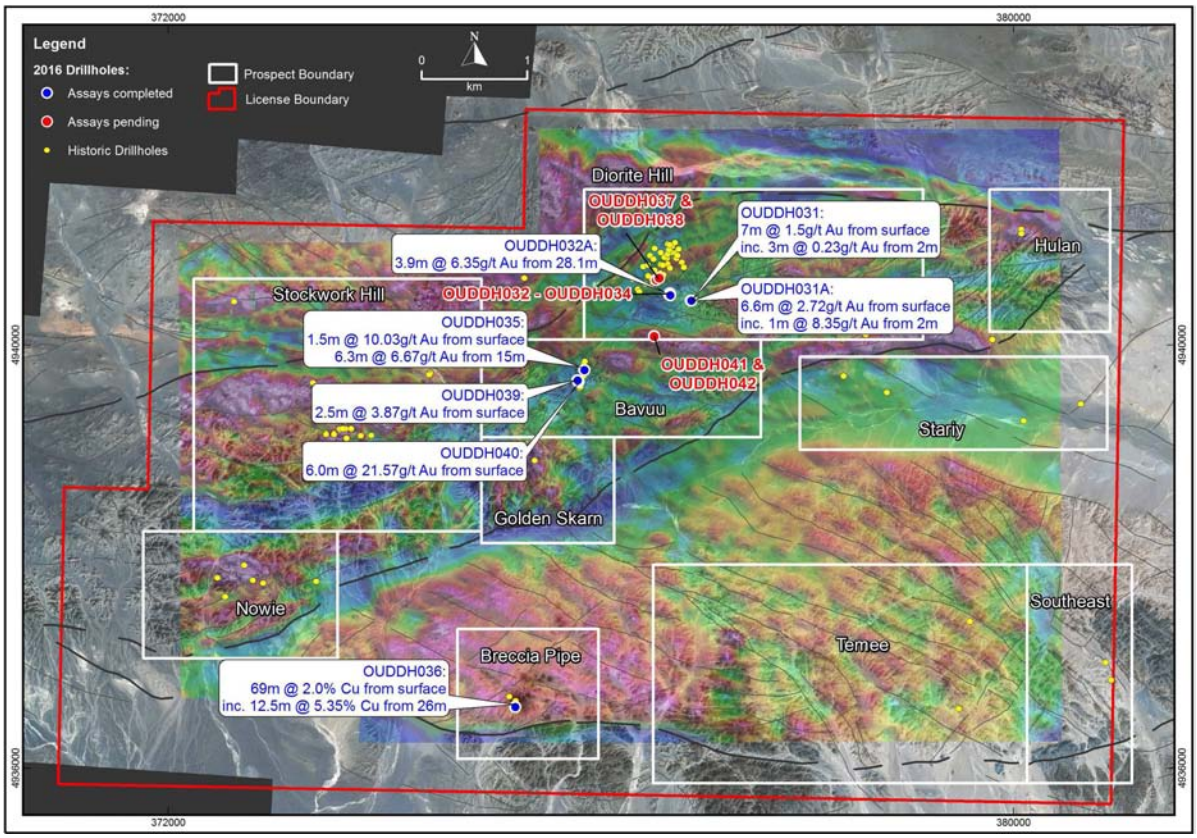



**FIGURE 3:** Map showing current diamond drill hole locations and significant assay results.

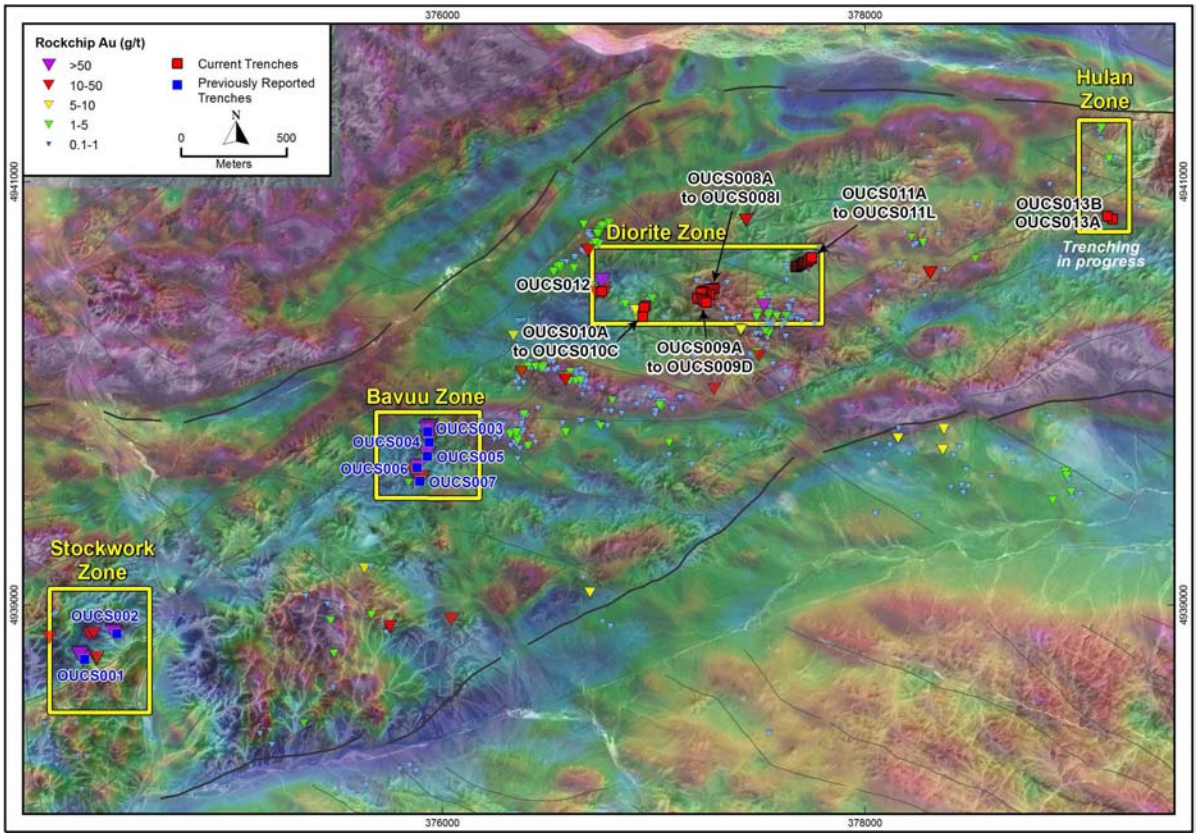



**FIGURE 4:** Ground magnetic map of the Oyut Ulaan showing gold-rich vein zones, Stockwork and Bavuu Zone and newly discovered Diorite and Hulan Zone.

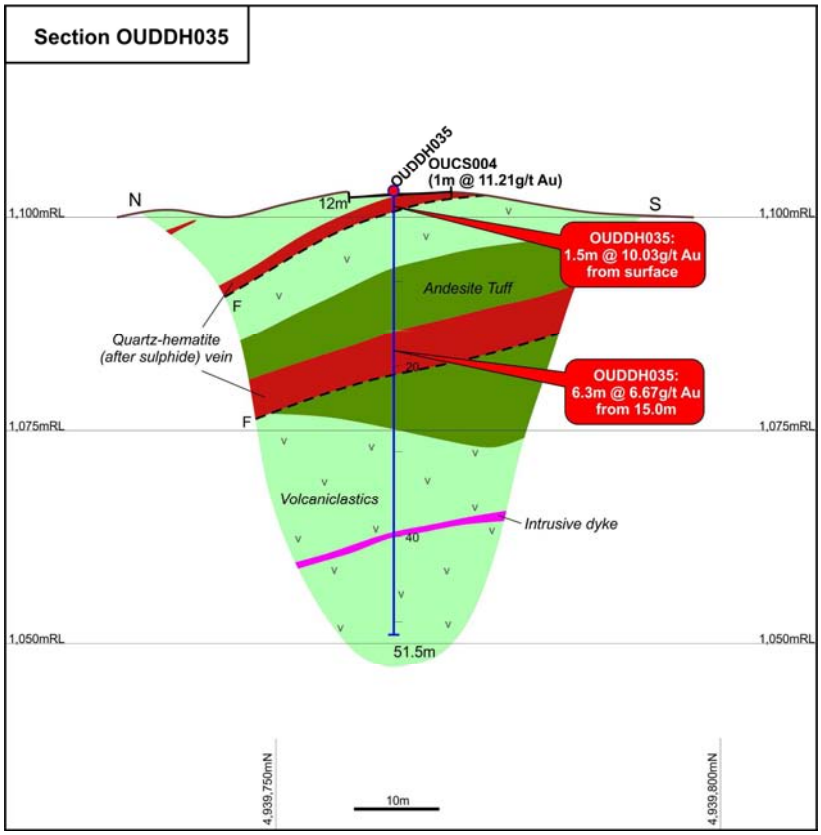



**FIGURE 5:** Geological section of OUDDH035. The drill hole intersected two shallow dipping quartz-hematite veins.

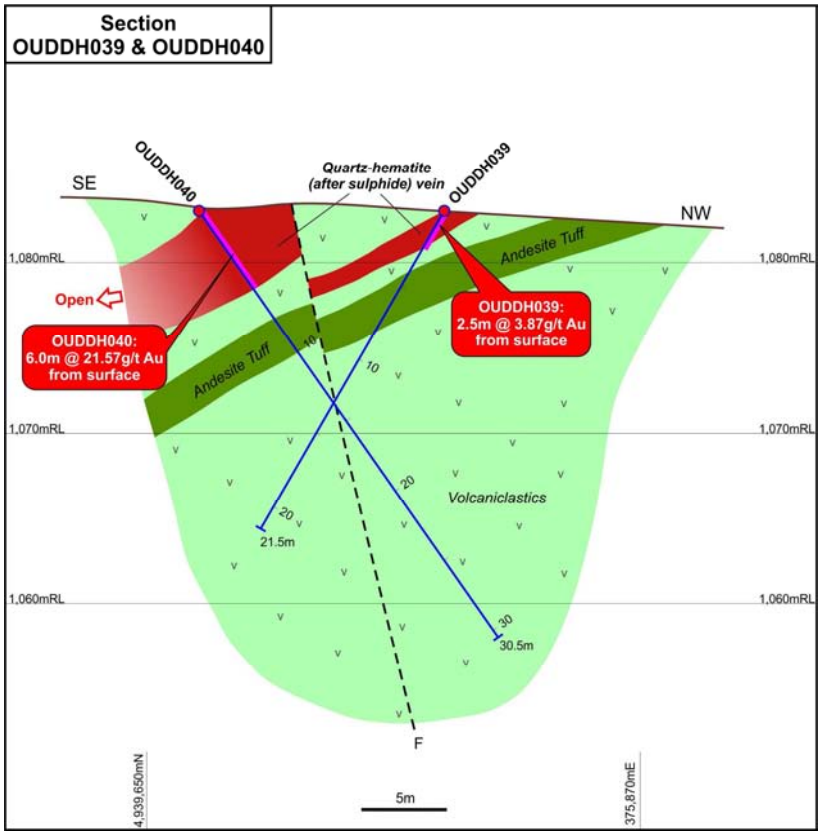



**FIGURE 6:** Geological section of OUDDH039 and OUDDH040.


**FIGURE 7:** Quartz-hematite vein at the Diorite Vein Zone. OUDDH031a-2.8m: from a one metre intersection of 8.35 g/t gold and 0.28 % copper

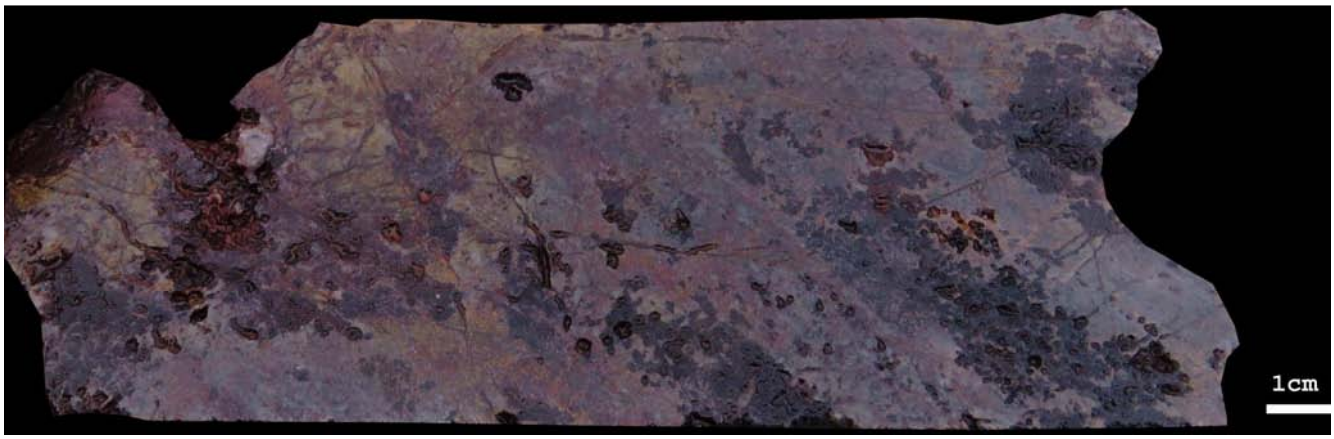



**FIGURE 8:** Quartz-hematite vein from the Diorite Vein Zone. OUDDH32a-29.5metre: from a two metre intersection of 8.45 g/t gold and 0.34 % copper.


**FIGURE 9:** Strongly chlorite-hematite altered wall rock. Drilling demonstrates zones of lower grade gold mineralisation (up to 1.5 g/t Au) in the chlorite-sericite altered wall-rock demonstrating continuity over intervals of several metres

## SHALLOW GOLD MINERALISATION

Exploration at the Oyut Ulaan copper-gold project continues to identify zones of potentially significant outcropping gold mineralisation (also see XAM's ASX announcement – 28 April 2016). The Company continues its program of systematic exploration which has successfully defined at least four parallel shear structures that occur within a 4.5km long and 300m wide (Stockwork Zone, Bavuu Zone, Diorite Zone and Hulan Zone) and continues uncover new zones of mineralisation.

Initial scout diamond drilling within the Diorite and Bavuu Vein Zones targeted extensions of outcropping high-grade quartz-hematite veining recently discovered in surface trenching. Drill hole details are shown in Table 1 and Figure 3. Assay results are presented in Table 2.

**TABLE 1:** Diamond Drill hole details.

| Hole ID | Prospect | East | North | RL | Azimuth (°) | Inc (°) | Depth (m) |
|---|---|---|---|---|---|---|---|
| OUDDH031 | Diorite | 376950.85 | 4940419.26 | 1078.50 | 125 | -45 | 11 |
| OUDDH031a | Diorite | 376951.20 | 4940419.50 | 1078.50 | 125 | -45 | 21 |
| OUDDH032 | Diorite | 376750.00 | 4940488.00 | 1080.00 | 210 | -56 | 27.5 |
| OUDDH032a | Diorite | 376749.36 | 4940486.85 | 1080.00 | 230 | -72.5 | 44.7 |
| OUDDH033 | Diorite | 376744.00 | 4940478.00 | 1081.00 | 36 | -70 | 54.5 |
| OUDDH034 | Diorite | 376753.58 | 4940472.16 | 1082.28 | 355 | -70 | 41.5 |
| OUDDH035 | Bavuu | 375938.00 | 4939763.00 | 1090.00 | 0 | -90 | 51.5 |
| OUDDH036 | Breccia pipe | 375285.00 | 4936581.00 | 1079.00 | 20 | -78 | 166.5 |
| OUDDH037 | Diorite | 376622.86 | 4940616.76 | 1080.00 | 300 | -65 | 48.5 |
| OUDDH038 | Diorite | 376648.00 | 4940633.00 | 1080.00 | 305 | -62 | 180.5 |
| OUDDH039 | Bavuu | 375876.25 | 4939665.86 | 1083.00 | 140 | -80 | 23.9 |
| OUDDH039a | Bavuu | 375877.93 | 4939663.40 | 1082.70 | 140 | -60 | 21.5 |
| OUDDH040 | Bavuu | 375884.77 | 4939653.45 | 1082.20 | 320 | -55 | 30.5 |
| OUDDH041 | Diorite | 376601.00 | 4940084.00 | 1085.00 | 30 | -40 | 17.5 |
| OUDDH042 | Diorite | 376600.80 | 4940082.90 | 1085.00 | 30 | -70 | 15.5 |

**TABLE 2:** Diamond drill hole significant assay results.

| Hole ID | Prospect | From (m) | To (m) | Interval (m) | Au (g/t) | Cu (%) |
|---|---|---|---|---|---|---|
| OUDDH031 | Diorite | 0 | 7 | 7 | 1.5 | 0.32 |
| *including* | | 2 | 5 | 3 | 0.23 | 2.5 |
| OUDDH031A | Diorite | 0 | 6.6 | 6.6 | 2.72 | 0.32 |
| *including* | | 2 | 3 | 1 | 8.35 | 0.28 |
| OUDDH032 | Diorite | 5.5 | 6 | 0.5 | 0.17 | |
| *and* | | 8 | 10 | 2 | 0.36 | |
| *and* | | 14 | 16 | 2 | 0.56 | |
| *and* | | 24 | 26 | 2 | 0.11 | |
| OUDDH032A | Diorite | 22 | 24 | 2 | 0.13 | |
| *and* | | 28.1 | 32 | 3.9 | 6.35 | 0.24 |
| OUDDH033 | Diorite | 16 | 18 | 2 | 0.37 | 0.04 |
| OUDDH034 | Diorite | 12 | 14 | 2 | 0.31 | |
| *and* | | 22 | 24 | 2 | 0.1 | |

| Hole ID | Prospect | From (m) | To (m) | Interval (m) | Au (g/t) | Cu (%) |
|---|---|---|---|---|---|---|
| OUDDH035 | Bavuu | 0 | 1.5 | 1.5 | 10.03 | 0.41 |
| *including* | | 0.5 | 1 | 0.5 | 21 | 0.41 |
| *and* | | 13 | 21.3 | 8.3 | 5.73 | 0.1 |
| *including* | | 15 | 16.3 | 1.3 | 11.78 | 0.02 |
| *including* | | 20.8 | 21.3 | 0.5 | 20.8 | 0.09 |
| OUDDH036 | Breccia Pipe | 0 | 69 | 69 | 0.04 | 2.0 |
| *including* | | 26 | 38.5 | 12.5 | 0.02 | 5.35 |
| *including* | | 57 | 59.1 | 2.1 | 0.03 | 5.24 |
| OUDDH039 | Bavuu | 0 | 2.5 | 2.5 | 3.87 | |
| OUDDH040 | Bavuu | 0 | 6 | 6 | 21.57 | |

Gold is hosted by pyritic quartz veins, which occur as multiple stacked arrays, which generally trend northeast and dip shallowly to the northwest, making them potentially amendable to open pit mining. Gold veins are typically narrow (but very high grade, with gold assays ranging from 1 g/t to >30 g/t Au over 50cm up to 1.5m wide (Figures 5 to 6; Table 2) and are hosted by intensely chlorite-sericite-pyrite altered host volcanic rocks. The wall-rock is mostly stained red by hematite from weathering of sulphide in the rock. Some of the original sulphide in the quartz veins is pyrite (but other gossan in the cores of the veins may be from chalcopyrite; Figures 7 to 9). Drilling demonstrates zones of lower grade gold mineralisation (up to 1.5 g/t Au) in the chlorite-sericite altered wall-rock demonstrating continuity over intervals of several metres (Figure 5).

High-grade gold mineralisation in the newly discovered Diorite Zone is typically associated with a series of discontinuous shallow dipping quartz-sulphide (now gossan) veins that range from 1.5m up to 4.5m wide (Figures 10 and 11) and are hosted by intensely chlorite-sericite-pyrite altered host volcanic rocks (Figure 12). The wall-rock is mostly stained red by hematite from weathering of sulphide in the rock, which is easily visible in the trenches. Some of the original sulphide in the quartz veins is pyrite (but other gossan in the cores of the veins may be from chalcopyrite). The Diorite Zone vein strikes at least 90m and the vein orientation is north-northwest, and dip from approximately 20 to 45 degrees west to northwest. At several locations in the trench fault gouge was removed either by erosion or by ancient mining and was subsequently backfilled by sand prior to the current transported cover. Mineralisation remains open along strike.

Continued exploration success here is evidence of our increasing understanding of mineralisation and reinforces the view that gold mineralisation has potential to host a modest scale gold starter project. Surface exploration continues define additional new target areas of mineralisation and the potential for the discovery of additional mineralised structures remains high (Figure 10).

A detailed review of trench and drill results will be provided in the June Quarterly Report.

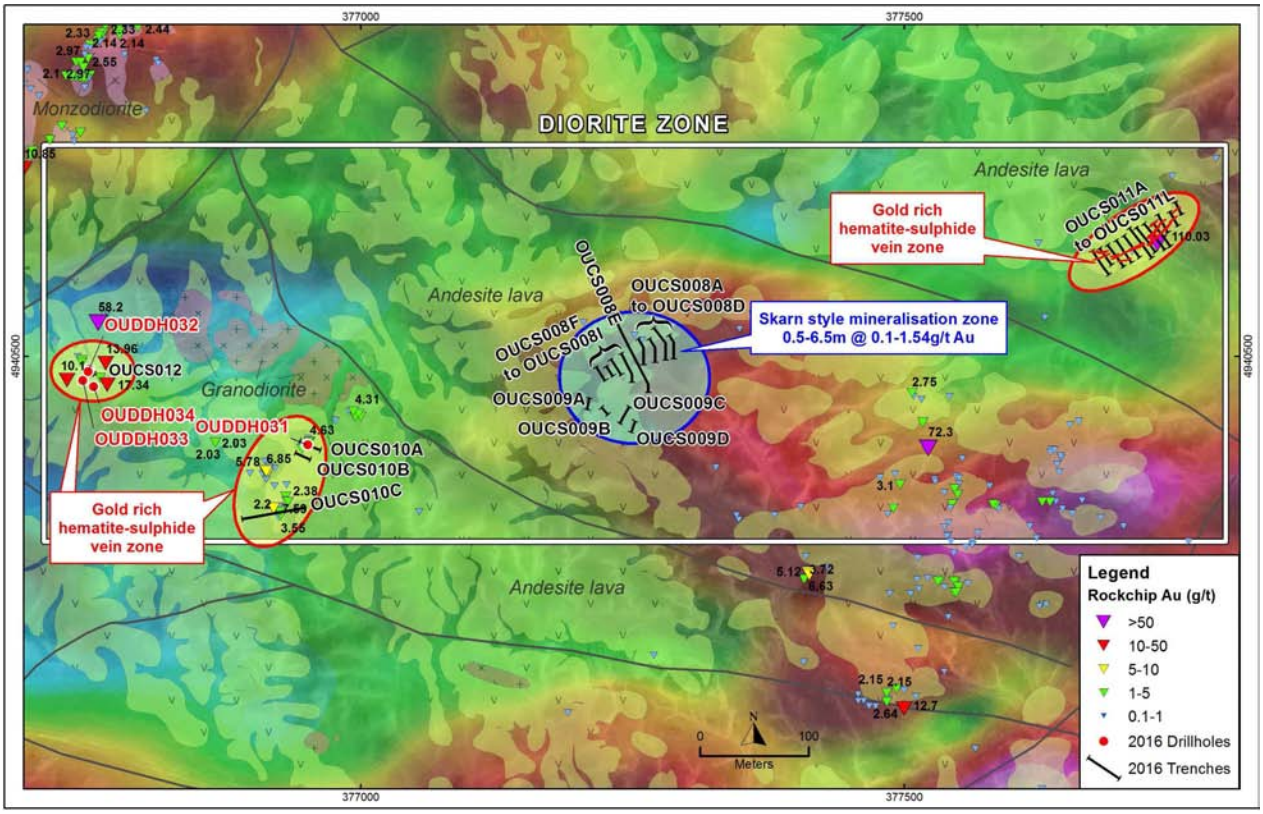



**FIGURE 10:** Geology map of the Diorite Vein Zone showing gold-rich quartz-sulphide vein mineralisation associated with zones of magnetic destruction and peripheral porphyry-related skarn mineralisation zone.

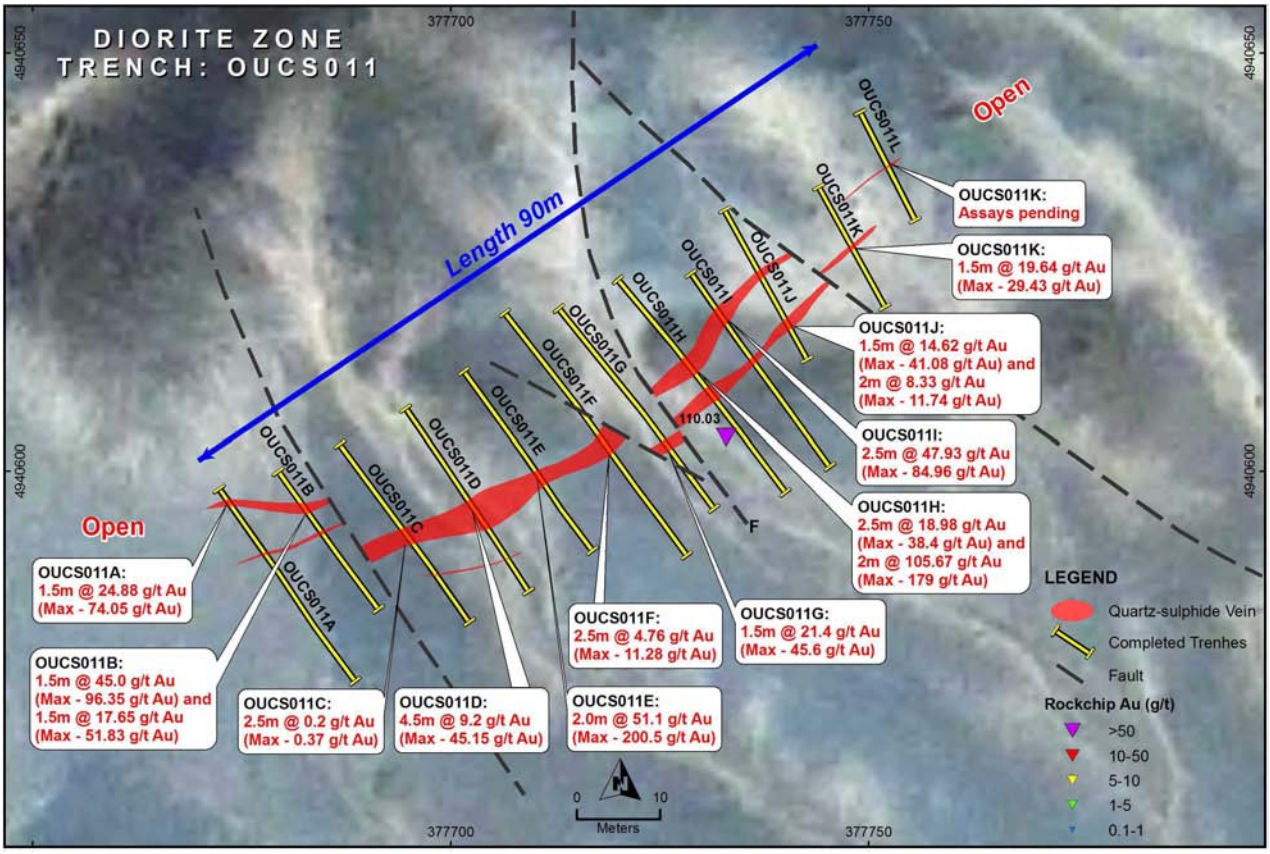



**FIGURE 11:** Newly discovered Diorite Vein Zone, showing cross-trenches and assay results.

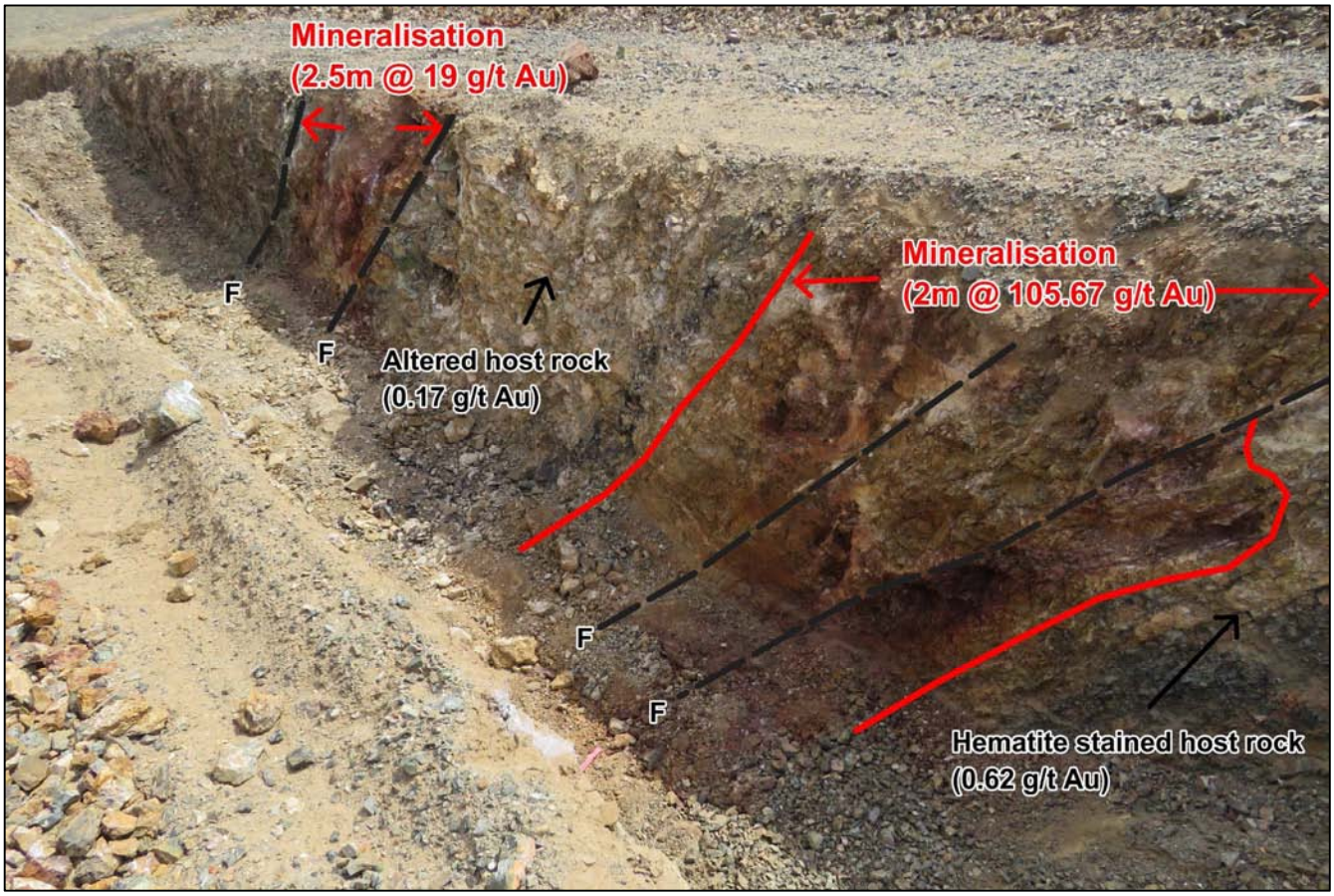
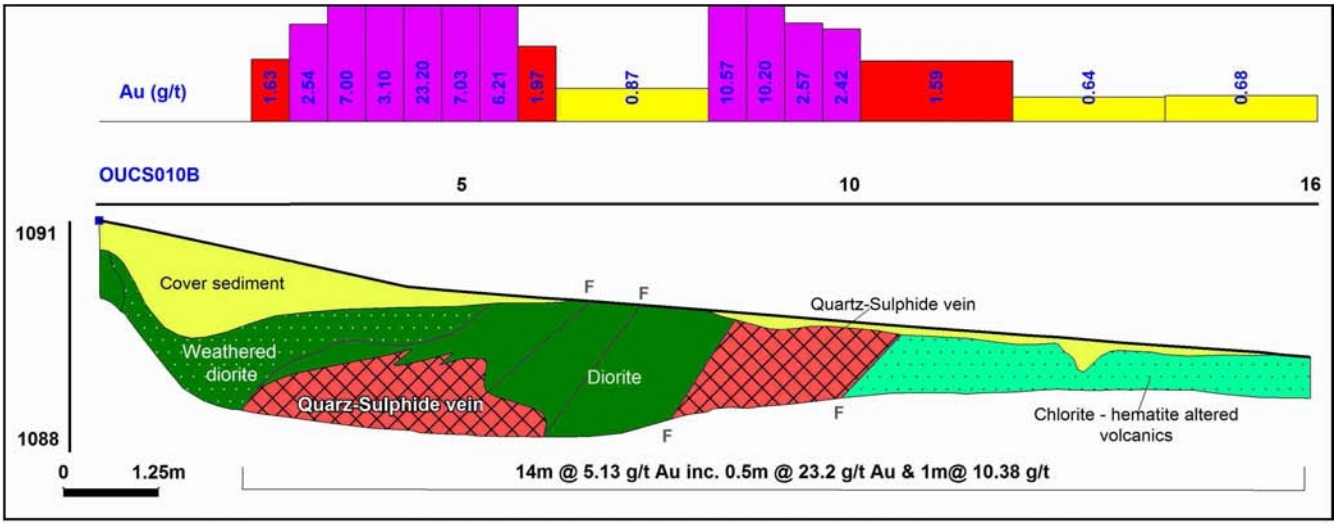



**FIGURE 12:** Trench image of the Diorite Vein Zone, showing the high-grade shallow dipping sub-parallel quartz-sulphide vein zone and low grade, hematite stained host rock.



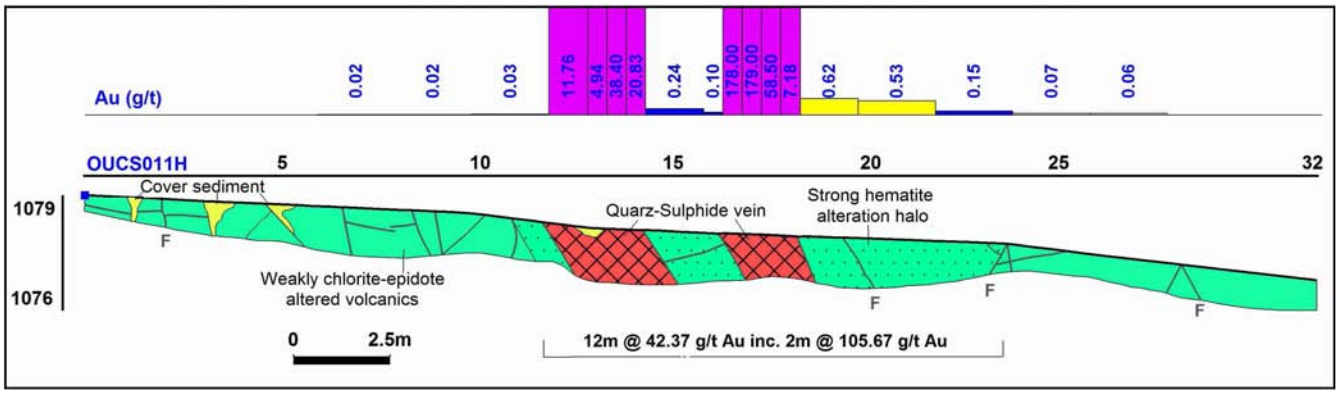



**FIGURE 13:** Trench map of the Diorite Vein Zone, showing trench wall sections (OUCS011H and OUCS010B). Two sub-parallel shallow dipping quartz-sulphide vein intersected and hosted in strongly sericite-chlorite-hematite altered volcanic rocks.

## TOURMALINE BRECCIA MINERALISATION

Exploration at the Oyut Ulaan copper-gold project continues to identify potentially significant porphyry and tourmaline breccia hosted copper and copper-gold mineralisation.

Diamond drill hole OUDDH036 intersects high grade copper mineralisation hosted in a broad zone of porphyry related tourmaline breccia mineralisation (Figure 14). This represents the highest grade copper mineralisation discovered to date within the Oyut Ulaan project. The hole tested the depth extension of surface copper oxide mineralisation and intersected strongly altered granodiorite breccia cemented by tourmaline-chalcopyrite-chalcocite. The hole intersected 69 metres @ 2.0% Cu from surface, including 12.5m grading 5.35% Cu from 26m.

The new hole at the Breccia Pipe prospect reaffirms our belief in the potential for this mineral system to host a large scale high-grade copper-gold deposit. Follow-up drilling beneath the zone of copper mineralisation is required to test whether the breccia transitions downwards into high-grade stockwork and/or replacement-style porphyry mineralisation.

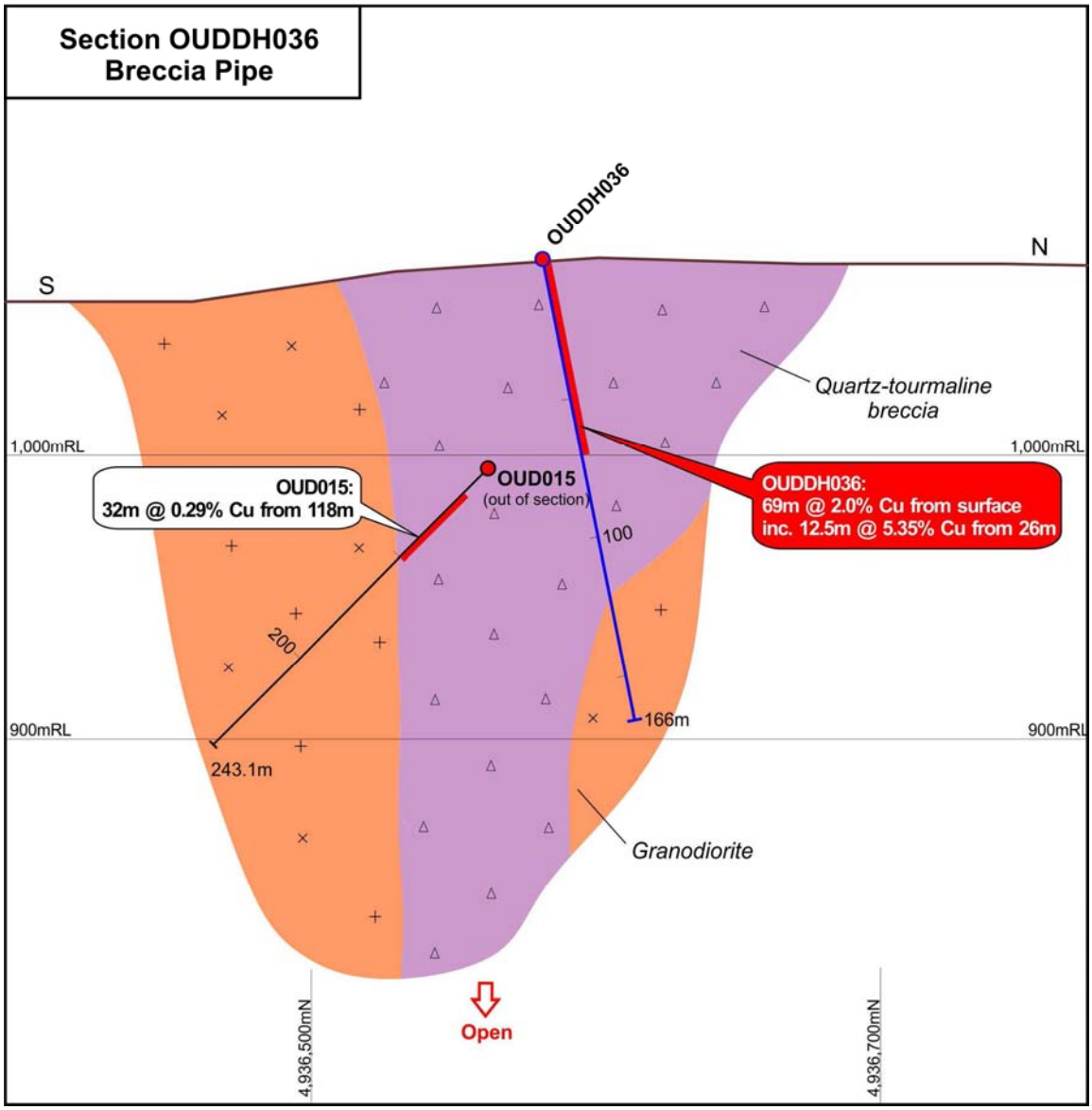



**FIGURE 14:** Geological section OUDDH036 which intersected 69 metres @ 2.0% Cu from surface, including 12.5m grading 5.35% Cu from 26m.

**FIGURE 15:** Chalcocite-chalcopyrite cemented breccia at the Breccia Pipe prospect. OUDDH036-26m: from a 2 metre intersection of 6.6% Cu.

**TABLE 3:** Oyut Ulaan trench details.

| Trench ID | Start East | Start North | RL | Azimuth ($^0$) | Length (m) | Number of Samples |
|---|---|---|---|---|---|---|
| OUCS008A | 377287.71 | 4940497.20 | 1088.71 | 326 | 24 | 17 |
| OUCS008B | 377280.25 | 4940496.30 | 1082.22 | 322 | 34 | 31 |
| OUCS008C | 377270.67 | 4940494.20 | 1084.86 | 327 | 38 | 30 |
| OUCS008D | 377260.07 | 4940492.07 | 1081.98 | 330 | 26 | 22 |
| OUCS008E | 377264.11 | 4940466.43 | 1086.18 | 333 | 72 | 44 |
| OUCS008F | 377249.36 | 4940475.49 | 1084.31 | 333 | 30 | 17 |
| OUCS008G | 377239.65 | 4940482.34 | 1077.10 | 332 | 18 | 13 |
| OUCS008H | 377231.93 | 4940481.27 | 1081.72 | 332 | 12 | 10 |
| OUCS008I | 377224.87 | 4940477.29 | 1079.12 | 332 | 16 | 15 |
| OUCS009A | 377207.84 | 4940450.28 | 1085.70 | 16 | 14 | 12 |
| OUCS009B | 377227.52 | 4940445.90 | 1087.80 | 324 | 10 | 11 |
| OUCS009C | 377237.78 | 4940438.49 | 1088.88 | 36 | 18 | 12 |
| OUCS009D | 377248.42 | 4940430.06 | 1088.77 | 25 | 12 | 9 |
| OUCS010A | 376963.13 | 4940414.03 | 1071.50 | 295 | 22 | 19 |
| OUCS010B | 376953.92 | 4940405.32 | 1071.02 | 298 | 16 | 16 |
| OUCS011A | 377672.47 | 4940597.71 | 1070.22 | 150 | 28 | 18 |
| OUCS011B | 377678.54 | 4940599.93 | 1066.70 | 149.5 | 20 | 17 |
| OUCS011C | 377682.96 | 4940602.74 | 1070.70 | 148.5 | 26 | 20 |
| OUCS011D | 377695.69 | 4940608.50 | 1071.45 | 150.5 | 26 | 15 |
| OUCS011E | 377701.71 | 4940611.72 | 1072.35 | 149 | 26 | 16 |
| OUCS011F | 377706.60 | 4940618.74 | 1072.58 | 147 | 36 | 17 |
| OUCS011G | 377713.04 | 4940619.28 | 1071.44 | 146 | 30 | 17 |
| OUCS011H | 377728.92 | 4940623.43 | 1073.43 | 145 | 32 | 18 |
| OUCS011I | 377720.17 | 4940622.70 | 1069.03 | 150 | 28 | 23 |
| OUCS011J | 377732.87 | 4940631.02 | 1071.70 | 151 | 20 | 16 |
| OUCS011K | 377744.11 | 4940633.81 | 1069.31 | 151 | 16 | 11 |
| OUCS011L | 377749.12 | 4940642.71 | 1065.51 | 153 | 14 | 10 |
| OUCS012 | 376754.08 | 4940481.65 | 1075.00 | 339 | 6 | 12 |
| OUCS013A | 379174.74 | 4940824.85 | 1060.02 | 170 | 15 | 14 |
| OUCS013B | 379147.36 | 4940837.91 | 1058.91 | 20 | 20 | 14 |
| OUCS010C | 376949.00 | 4940361.00 | 1073.00 | 260 | 60 | |

**TABLE 4:** Cross-trench significant assay results at newly discovered Diorite Zone.

| Trench ID | Depth (m) | | Interval (m) | Au (g/t) | Cu (%) | As (ppm) | Ag (g/t) | Pb (ppm) | Zn (ppm) | Mo (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|
| | From | To | | | | | | | | |
| OUCS008A | 12 | 12.5 | 0.5 | 0.49 | 0.04 | 139 | | 16 | 27 | 16 |
| OUCS008B | 11.5 | 12 | 0.5 | 0.7 | 0.03 | 118 | | 21 | 31 | 18 |
| OUCS008C | 20.5 | 22 | 0.5 | 0.8 | 0.03 | 66.6 | | 5 | 20.66 | |
| *and* | 28.5 | 29 | 0.5 | 0.41 | 0.07 | 141.5 | | | 31 | |
| OUCS008D | 2 | 3.5 | 1.5 | 0.11 | | 35 | | 21 | 53 | |
| *and* | 4 | 4.5 | 0.5 | 0.57 | | 51 | | | 34 | 59 |

| Trench ID | Depth (m) | | Interval (m) | Au (g/t) | Cu (%) | As (ppm) | Ag (g/t) | Pb (ppm) | Zn (ppm) | Mo (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|
| | From | To | | | | | | | | |
| *and* | 18.5 | 19.5 | 1 | 0.27 | 0.07 | 181.5 | | 7 | 33 | 7 |
| *and* | 20 | 20.5 | 0.5 | 5.98 | 0.29 | 271 | | 7 | 33 | 9 |
| OUCS008E | 28 | 28.5 | 0.5 | 1.08 | | 240 | | 8 | 37 | 4 |
| *and* | 29.5 | 30 | 0.5 | 0.75 | 0.13 | 57 | | 9 | 39 | 9 |
| *and* | 36 | 42.5 | 6.5 | 0.44 | | 52.28 | | 6.1 | 34.28 | 6.16 |
| OUCS008F | 16.5 | 17 | 0.5 | 0.39 | | 31 | | 6 | 24 | 3 |
| OUCS008G | 9.5 | 10 | 0.5 | 0.35 | | 38 | | 4 | 26 | |
| OUCS008H | 4 | 7 | 3 | 0.12 | | 24 | | 3 | 34.5 | 7 |
| *and* | 7.5 | 8.5 | 1 | 0.64 | | 56.5 | | 2 | 30.5 | 4 |
| OUCS008I | 2.5 | 3 | 0.5 | 0.62 | 0.12 | 191 | | 14 | 61 | 9 |
| *and* | 14 | 14.5 | 0.5 | 0.71 | | 84 | | 4 | 24 | |
| OUCS009A | 10 | 14 | 4 | 0.37 | 0.06 | 110.8 | 2 | 5 | 40.8 | 16.66 |
| *including* | 10.5 | 11 | 0.5 | 1.13 | 0.08 | 198 | | 9 | 35 | 22 |
| OUCS009B | 6 | 10 | 4 | 0.18 | 0.01 | 144.3 | | 7 | 36 | 4.3 |
| OUCS009C | 6 | 8 | 2 | 0.36 | 0.12 | 189 | | 9 | 87.66 | 3.5 |
| OUCS009D | 0 | 2.5 | 2.5 | 0.36 | 0.15 | 92.25 | | 5 | 50 | 3 |
| *and* | 8 | 12 | 4 | 0.3 | 1.85 | 28 | 5 | 13.5 | 48.5 | |
| OUCS010A | 0 | 16 | 16 | 2.28 | 1 | 54.75 | 5.15 | 12.25 | 96.18 | 2 |
| *including* | 7 | 7.5 | 0.5 | 20.7 | 0.2 | 125 | 6 | | | 39 |
| OUCS010B | 2 | 16 | 14 | 5.13 | 0.29 | 348.5 | 5.72 | 3 | 70.75 | |
| *including* | 4 | 4.5 | 0.5 | 23.2 | 0.15 | 1204 | 3 | 4 | 22 | |
| *including* | 8 | 9 | 1 | 10.38 | 0.35 | 338 | 4.5 | | 42.5 | |
| OUCS0011A | 1 | 6 | 5 | 12.56 | 0.18 | 89.25 | 6 | 9.1 | 52 | 10 |
| *including* | 1.5 | 2 | 0.5 | 74.05 | 0.36 | 296 | 6 | 23 | 22 | 17 |
| *and* | 8.5 | 10.5 | 2 | 0.3 | 0.26 | 139.5 | | 9.75 | 37.75 | 15 |
| OUCS011B | 4.5 | 7 | 2.5 | 33.8 | 0.16 | 215.33 | 3 | 20.25 | 27.75 | 14.33 |
| *including* | 5.5 | 6 | 0.5 | 96.35 | | 311 | 4 | 31 | 31 | 18 |
| *and* | 8 | 12 | 4 | 22.35 | 0.2 | 167 | | 11.5 | 38 | 11 |
| *including* | 8.5 | 9 | 0.5 | 110 | 0.38 | 415 | | 30 | 25 | 9 |
| OUCS011C | 0 | 2 | 2 | 0.54 | 0.63 | 7 | | 10 | 57 | |
| *and* | 12 | 13 | 1 | 0.23 | 0.21 | 38.5 | | 7.5 | 46 | 12 |
| *and* | 13.5 | 16 | 2.5 | 0.27 | 0.14 | 114 | | 6.25 | 44.25 | 29.33 |
| OUCS011D | 6 | 8 | 2 | 0.8 | 0.38 | | | 5 | 50 | |
| *and* | 13.5 | 18 | 4.5 | 9.46 | 0.23 | 81 | | 8.8 | 35.6 | 24 |
| *including* | 14 | 14.5 | 0.5 | 46.3 | 0.32 | 192 | | 17 | 18 | 12 |
| OUCS011E | 14.5 | 16.5 | 2 | 73.82 | 0.25 | 153.3 | 39 | 23.5 | 37.5 | 31 |
| *including* | 15 | 15.5 | 0.5 | 200.5 | 0.17 | 389 | 39 | 64 | 38 | 31 |
| OUCS011F | 18 | 21 | 3 | 4.4 | 0.15 | 102.5 | | 21.66 | 31.33 | 21.66 |
| *including* | 20 | 21 | 1 | 9.46 | 0.16 | 154 | | 11 | 21 | 19 |
| OUCS011G | 12 | 16 | 4 | 0.2 | | 41 | | 3 | 96 | |
| *and* | 20 | 22 | 2 | 16.08 | 0.2 | 120 | 3 | 11.66 | 33.25 | 38.3 |
| *including* | 20.5 | 21 | 0.5 | 45.6 | 0.18 | 258 | 3 | 17 | 25 | 64 |

| Trench ID | Depth (m) | | Interval (m) | Au (g/t) | Cu (%) | As (ppm) | Ag (g/t) | Pb (ppm) | Zn (ppm) | Mo (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|
| | From | To | | | | | | | | |
| *and* | 24 | 26 | 2 | 0.12 | 0.05 | 52 | | 5 | 42.3 | 13.33 |
| OUCS011H | 12 | 24 | 12 | 42.37 | 0.27 | 132.84 | 17.75 | 21.61 | 55.61 | 15.16 |
| *including* | 16.5 | 17.5 | 1 | 178.5 | 0.33 | 460.5 | 29 | 88 | 119 | 3.5 |
| OUCS011I | 1 | 2 | 1 | 0.99 | 0.06 | 164.5 | | 12.5 | 11 | 30.5 |
| *and* | 5 | 7 | 2 | 59.73 | 0.23 | 218.25 | 5 | 20.75 | 24.5 | 14.5 |
| *including* | 6 | 7 | 1 | 84.96 | 0.16 | 291 | | 23 | 24 | 14 |
| *and* | 12 | 13 | 1 | 1.09 | 0.29 | 90 | | 8 | 42 | 5 |
| OUCS011J | 7 | 16 | 9 | 7.92 | 0.51 | 147.4 | | 20.6 | 34.3 | 36.88 |
| *including* | 8 | 8.5 | 0.5 | 41.08 | 0.19 | 248 | | 19 | 12 | 29 |
| OUCS011K | 2 | 4 | 2 | 0.66 | 0.03 | 60 | | 6 | 48 | 6 |
| *and* | 7 | 14 | 7 | 9.87 | 0.34 | 93.83 | | 11.8 | 31.8 | 32 |
| *including* | 7 | 8.5 | 1.5 | 19.63 | 0.66 | 165 | | 17.3 | 29 | 32 |
| OUCS0012 | 0 | 1 | 1 | 1.41 | | 77 | | 10.5 | 707.5 | |
| *and* | 1.5 | 2 | 0.5 | 0.48 | | 69 | | 11 | 305 | |
| *and* | 3.5 | 4 | 0.5 | 0.15 | | 55 | | 9 | 210 | |

## BACKGROUND GEOLOGY & POTENTIAL CONNECTION TO PORPHYRY MINERALISATION

The Oyut Ulaan copper-gold project is strategically located within the South Gobi Copper Belt (which hosts the world class Oyu Tolgoi copper-gold project) and 260km east of Xanadu's flagship Kharmagtai copper-gold project (Figure 1). The project comprises a large and underexplored porphyry district (covering approximately 40km$^2$) and consists of multiple co-genetic porphyry copper-gold centres, mineralised tourmaline breccia pipes and copper-gold/base metal magnetite skarns, which occur within the central part of Mining Licence 17129A (Oyut Ulaan; Figure 2).

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 considered to be a very attractive target. Copper grades within the samples from the Stockwork II 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.

The results of this first part of the trenching and drilling program are extremely encouraging and indicate Oyut Ulaan is developing into one of the most prospective districts in the South Gobi with a series of copper-gold and gold prospects at different stages of exploration. Recent exploration drilling has also intersected porphyry copper mineralisation within two quartz-chalcopyrite stockwork zones at the Diorite Hill and Stockwork Hill Prospects which are approximately 3 kilometres apart (Figure 3). Xanadu will continue its systematic, low cost exploration at Oyut Ulaan with further reconnaissance exploration, field mapping, and trenching ongoing.

There are numerous other targets remaining in the Oyut Ulaan area and most of the area lies under shallow cover and the potential for further discoveries remains high. So far we have identified the Pigeon prospect as a new porphyry centre and our exploration will focus on stepping out and establishing the extent of mineralisation, which is located in close enough proximity to make up a single mining operation.

## COMPETENT PERSON STATEMENT

The information in this report 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, Dr 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 Stewart consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

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## 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 dated 28 April 2016.

## 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 techniques** | • Nature and quality of sampling.<br>• Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.<br>• Aspects of the determination of mineralisation that are Material to the Public Report. | • Representative 50cm metre samples were taken from trenches (costeans) excavated through colluvial cover to bedrock.<br>• Representative samples were taken from ½ PQ, HQ and NQ diameter diamond drill core.<br>• Visual checks by geologists of sampling confirm sample intervals.<br>• Only assay result results from recognised, independent assay laboratories were used in reporting after QAQC was verified. |
| **Drilling techniques** | • Drill type and details. | • Diamond drilling of PQ, HQ and NQ diameters has been the primary drilling method. |
| **Drill sample recovery** | • Method of recording and assessing core and chip sample recoveries and results assessed.<br>• Measures taken to maximise sample recovery and ensure representative nature of the samples.<br>• 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. | • Diamond core recoveries averaged 98% overall in mineralised zones.<br>• In localised areas of faulting and/or fracturing the recoveries decrease; however this is a very small percentage of the overall mineralised zones.<br>• Analysis of recovery results vs. grade indicates no significant trends. Indicating bias of grades due to diminished recovery and / or wetness of samples |
| **Logging** | • Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.<br>• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.<br>• The total length and percentage of the relevant intersections logged. | • Diamond drill core samples and trenches are logged for geology, alteration and mineralisation using a standardised logging system.<br>• Rock quality data (RQD) is collected from all diamond drill core.<br>• Diamond drill core and trenches were photographed after being logged by a geologist.<br>• All diamond drill cores and trenches have been logged by a competent geologist. |
| **Sub-sampling techniques and sample preparation** | • If core, whether cut or sawn and whether quarter, half or all core taken.<br>• If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.<br>• For all sample types, the nature, quality and appropriateness of the sample preparation technique.<br>• Quality control procedures adopted for all sub-sampling stages to maximise | • Trench channel samples are taken from the base of the trench wall (about 10cm above the floor). Samples are approximately 3 kg. The sample is collected with a plastic sheet and tray.<br>• Diamond drill core is cut in half with a diamond saw, following the line marked by the geologist.<br>• The rock saw is regularly flushed with fresh water. |

| Criteria | JORC Code Explanation | Commentary |
|---|---|---|
| | representivity of samples.<br>• 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.<br>• Whether sample sizes are appropriate to the grain size of the material being sampled. | • Sample intervals are a constant 2m interval down-hole in length.<br>• Routine sample preparation and analyses of diamond drill core and trench samples were carried out by SGS Mongolia LLC (SGS Mongolia) and ALS Mongolia LLC (ALS Geochemistry Mongolia) who operate independent sample preparation and analytical laboratories in Ulaanbaatar.<br>• All samples were prepared to meet standard quality control procedures as follows: crushed to 70% less than 2mm, riffle split off 1kg, pulverize split to better than 85% passing 200 mesh (75 microns) and split to 150g.<br>• Certified reference materials (CRMs), blanks and pulp duplicate were randomly inserted to manage the quality of data.<br>• Sample sizes are well in excess of standard industry requirements. |
| **Quality of assay data and laboratory tests** | • The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.<br>• 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.<br>• 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. | • All samples were routinely assayed by by SGS Mongolia LLC (SGS Mongolia) and ALS Mongolia LLC (ALS Geochemistry Mongolia) who operate independent sample preparation and analytical laboratories in Ulaanbaatar.<br>• Gold is determined using 30g fire assay with aqua regia digestion, followed by an atomic absorption spectroscopy (AAS) finish, with a lower detection (LDL) of 0.01 ppm.<br>• 48 elements by four-acid-digestion, ICP-MS and ICP-AES (ME-MS61 and ME-MS61m).<br>• Four acid digestion is considered near total digestion.<br>• Quality assurance was provided by introduction of known certified standards, blanks and duplicate samples on a routine basis.<br>• Assay results outside the optimal range for methods were re-analysed by appropriate methods.<br>• 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 copper-gold standards.<br>• QAQC monitoring is an active and ongoing process on batch by batch basis by which acceptable results is re-assayed as soon as practicable. |
| **Verification of sampling and assaying** | • The verification of significant intersections by either independent or alternative company personnel. | • All assay data QAQC is checked prior to loading into the data base.<br>• The data is managed XAM geologists. |

| Criteria | JORC Code Explanation | Commentary |
|---|---|---|
| | • The use of twinned holes.<br>• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.<br>• Discuss any adjustment to assay data. | • No twinned drill holes exist, given the early stage of the exploration project.<br>• The data base and geological interpretation is collectively managed by XAM. |
| **Location of data points** | • 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.<br>• Specification of the grid system used.<br>• Quality and adequacy of topographic control. | • All drill hole collars and trenches have been surveyed with a differential global positioning system (DGPS) to within 10cm accuracy.<br>• All diamond drill holes 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.<br>• UTM WGS84 49N grid.<br>• The DTM is based on 1 m contours with an accuracy of ±0.01 m. |
| **Data spacing and distribution** | • Data spacing for reporting of Exploration Results.<br>• 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.<br>• Whether sample compositing has been applied. | • Trenching has been completed on nominal northwest-southeast and north-south trending sections on widely spaced lines. Channel sampling every 2m of the 1m wide trench.<br>• Drilling has been completed on nominal northwest-southeast and north-south trending sections, on 100m spacing within mineralised zones.<br>• Vertical spacing of intercepts on the mineralised zones similarly commences at 100m spacing for mineralised zones.<br>• 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.<br>• Holes have been drilled to 400m vertical depth.<br>• The data spacing and distribution is not sufficient to establish geological and grade continuity appropriate for the a Mineral Resource estimation.<br>• Samples have not been composited. |
| **Orientation of data in relation to geological structure** | • Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.<br>• 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. | • Drilling and trenching has been predominantly completed on northwest trending section lines across the strike of the known mineralised zones and from either the north or the south depending on the dip.<br>• Vertical dipping mineralised zones were predominantly drilled to the northwest or north.<br>• Scissor drilling (drilling from both north and south) has been used in key mineralised zones to achieve unbiased sampling of possible structures and mineralised zones. |

| Criteria | JORC Code Explanation | Commentary |
|---|---|---|
| **Sample security** | • The measures taken to ensure sample security. | • Samples are dispatched from site through via company employees to the Laboratories.<br>• Samples are signed for at the Laboratory with confirmation of receipt emailed through.<br>• Samples are then stored at the lab and returned to a locked storage site. |
| **Audits or reviews** | • The results of any audits or reviews of sampling techniques and data | • 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** | • Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, over riding royalties, native title interests, historical sites, wilderness or national park and environmental settings.<br>• 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. | • The Project comprises 1 Mining Licences (MV-17129A).<br>• Xanadu now owns 90% of Vantage LLC, the 100% owner of the Oyut Ulaan mining licence.<br>• 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** | • Acknowledgment and appraisal of exploration by other parties. | • Previous exploration was conducted by Ivanhoe Mines Ltd and Vantage LLC including surface mapping and geochemistry, diamond drilling and geophysics. |
| **Geology** | • Deposit type, geological setting and style of mineralisation. | • The mineralisation is characterised as porphyry copper-gold type.<br>• 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 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 prospects at Oyut Ulaan 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 globally. |
| **Drill hole information** | • A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all material drill holes: easting and northing of the drill hole collar, elevation or RL Reduced Level – elevation above sea level in metres) of the drill hole collar, dip and azimuth of the hole, down hole length and interception depth, hole length.<br>• 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 | • No new drill hole data is reported. |

| Criteria | JORC Code Explanation | Commentary |
|---|---|---|
| | report, the Competent Person should clearly explain why this is the case. | |
| **Data aggregation methods** | • 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.<br>• 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.<br>• The assumptions used for any reporting of metal equivalent values should be clearly stated. | • A nominal cut-off of 0.1% Cu is used for identification of potentially significant intercepts for reporting purposes.<br>• Most of the reported intercepts are shown in sufficient detail to allow the reader to make an assessment of the balance of high and low grades in the intercept.<br>• 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% + Ag (g/t) x 0.012 + Au (g/t) x 0.625 Assumptions - Cu (US$7,500/t), Ag (US$30/oz) and Au (US$1,500/oz). |
| **Relationship between mineralisation on widths and intercept lengths** | • These relationships are particularly important in the reporting of Exploration Results.<br>• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.<br>• 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'). | • 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.<br>• Exploration results have been reported as an interval with 'from' and 'to' stated in tables of significant economic intercepts.<br>• Tables clearly indicate that true widths will generally be narrower than those reported. |
| **Diagrams** | • Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. | • See figures in main report. |
| **Balanced reporting** | • Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. | • Exploration results have been reported at a range of grades, predominantly above a minimum for potentially significant intercepts for reporting purposes. |
| **Other substantive exploration data** | • 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 | • Extensive work in this area has been done, and is reported separately<br>• Detailed geological mapping<br>• Surface geochemistry (1,253 rock-chip samples).<br>• Geophysics includes ground magnetics |

| Criteria | JORC Code Explanation | Commentary |
|---|---|---|
| | results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. | (332 km).<br>• Diamond drill includes 17 holes (5,000 metres). |
| **Further work** | • The nature and scale of planned further work.<br>• Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. | • The mineralisation is open at depth and along strike.<br>• A multi-disciplinary exploration program is planned to test areas previously drilled with high-grade, near-surface results, which have the potential to host further mineralisation at depth and along strike; and test the many untested geophysical and geochemical anomalies remain within the Oyut Ulaan area district, as there is a strong possibility of discovering additional mineralised porphyry centres.<br>• Exploration on going. |