

QUARTERLY ACTIVITIES REPORT

ACTIVITIES FOR THE QUARTER ENDING 30 SEPTEMBER 2016

HIGHLIGHTS

Exploration drilling continues testing wider porphyry targets at Kharmagtai

- Drilling underway to expand high-grade tourmaline breccia mineralisation at Altan Tolgoi;
- Exciting new porphyry targets being tested across the entire Kharmagtai district;
- New drilling results provide significant advances in our understanding of mineralisation;
- Undercover exploration initiative to unlock the potential of the basin underway;
- Preliminary flotation test work on high-grade tourmaline breccia samples produces excellent recoveries; and
- Exploration activities will ramp-up at Kharmagtai over the next quarter.

Exploration activities ramp up at Oyut Ulaan

- Trenching continues to identify widespread zones of shallow high-grade gold mineralisation which have not yet been tested with drilling;
- Nature and geology are indicative of it being part of a big gold system above multiple buried porphyry systems;
- Multiple new porphyry copper-gold targets identified in surface mapping and geochemistry displaying broad zones of visual copper mineralisation;
- First follow up drill holes return encouraging results at the Bavuu target including an intercept of 1.3m @ 8.98g/t Au from 15m depth;
- Drill holes at prospects V10 and V11 fail to intersect material grades and widths of mineralisation due to structural complexity. Shallow high-grade oxide gold still exists at these prospects to 10m depth; and
- A second batch of assays due soon from additional holes drilled within the shallow oxide zone of mineralisation.

Strong financial position and seamless transition of the succession plan

- Well-funded with A\$9.8 million cash and A\$0.9 million cash receivables at the quarter's end; and
- Appointment of Dr Andrew Stewart as Managing Director and Chief Executive Officer.

ASX XAM

ABN 92 114 249 026

COMPANY DIRECTORS

Mark Wheatley

Non-Executive Chairman

Andrew Stewart

Managing Director & CEO

Ganbayar Lkhagvasuren

Executive Director

Hannah Badenach

Non-Executive Director

Darryl Clark

Non-Executive Director

Barry Lavin

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Xanadu Mines Ltd (ASX: XAM – “Xanadu” or “Company”) is pleased to provide shareholders with an update of exploration results from a strong third quarter.

EXPLORATION ACTIVITIES

Exploration activities continued to focus on the Company’s South Gobi copper-gold and gold projects at Kharmagtai and Oyut Ulaan (Figure 1) by exploring for a new high-grade gold-rich porphyry centre under cover at the Kharmagtai project and drilling targeted recently discovered high-grade epithermal gold mineralisation at the Oyut Ulaan project. Across both projects 42 reverse circulation and 31 diamond drill holes have been completed for a total of 4559m of drilling. A significant volume of the work conducted through-out the quarter has assays and interpretation still underway. The market will be updated once these assays have been returned and appropriately interpreted.

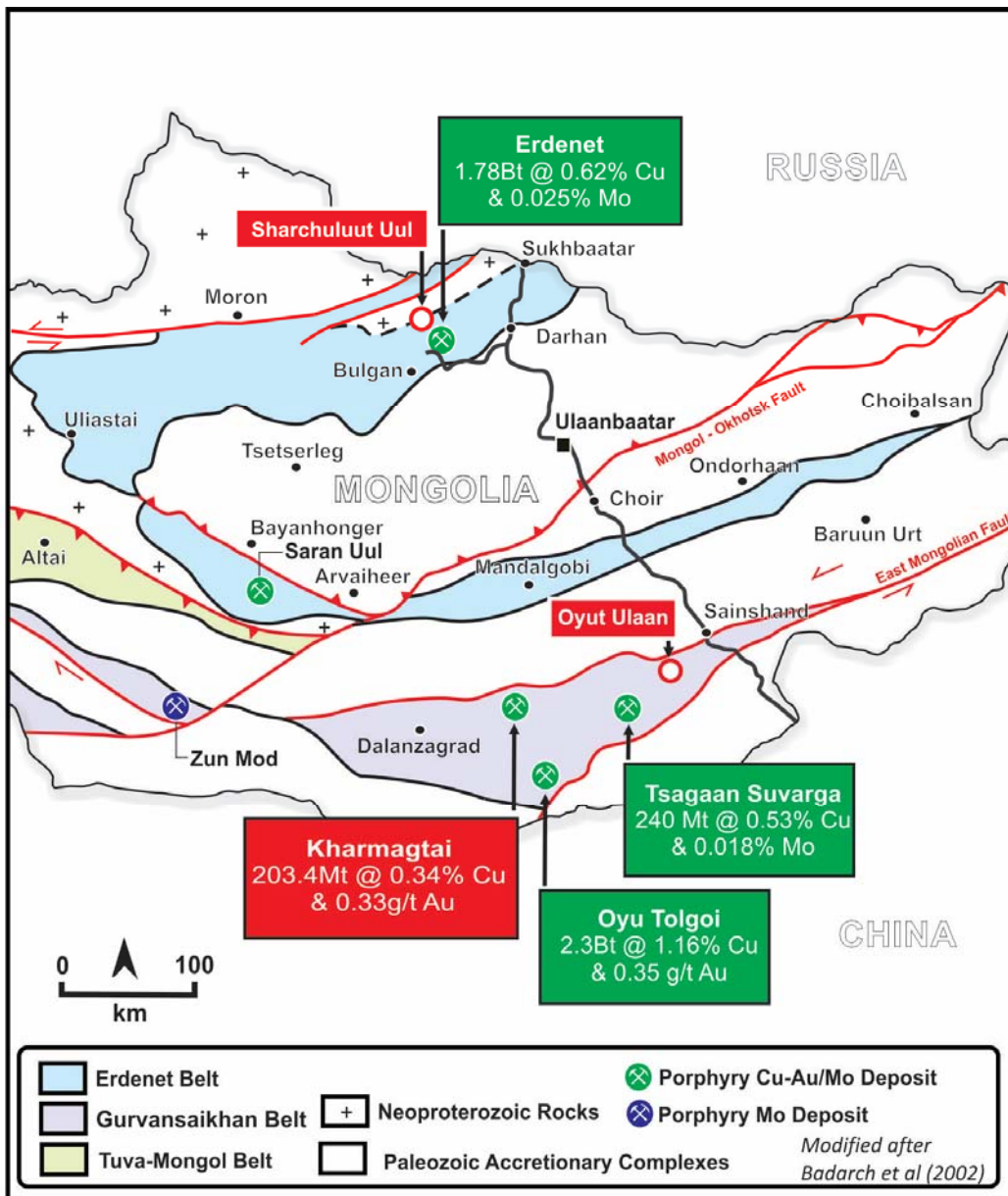


Figure 1: Location of Xanadu’s copper-gold projects, with Kharmagtai and Oyut Ulaan within Mongolia’s South Gobi Copper Belt (Gurvansaikhan Belt).

Kharmagtai Copper-Gold Project

The Kharmagtai copper-gold project is located within the South Gobi porphyry copper province of Mongolia, approximately 420km south-southwest of Ulaanbaatar (Figure 1), and is one of the most advanced porphyry copper-gold projects in Asia. Exploration drilling at the Kharmagtai project continues to test a combination of targets which includes high level gold-rich porphyry mineralisation and deeper high-grade tourmaline breccia mineralisation within the highly prospective 25 km² area of interest (Figure 2) which has yielded outstanding results to date.

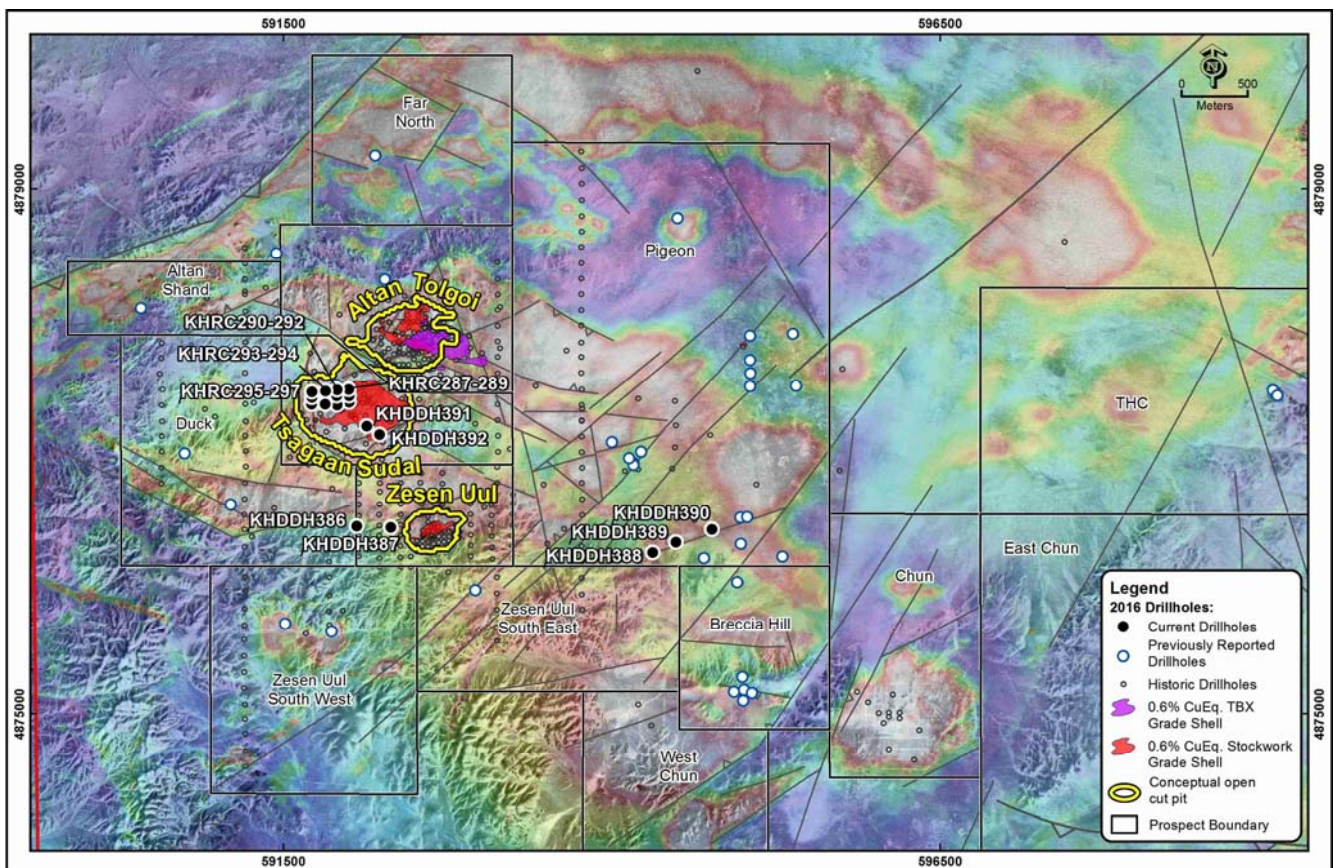


Figure 2: Kharmagtai porphyry copper-gold district showing Altan Tolgoi, Tsagaan Sudal and Zesen Uul deposits. At a district scale the emplacement of the known porphyry and tourmaline breccia mineralisation lies on the intersection of NNE-trending arc-parallel faults and WNW-trending transverse (reverse) faults.

Reconnaissance exploration drilling continues to test wider porphyry potential

Exploration drilling continues to provide significant advances in our understanding of the Kharmagtai project and continues to indicate potential for a large-scale mineralised breccia system along-side the established Mineral Resource and is transforming the Company's view of the growth potential of Kharmagtai.

A total of 11 reverse circulation and 7 diamond drill holes have been completed during the quarter for approximately 2,557m. Drill hole details are set out in Table 1 and significant assay results in Table 2. Initial results for reverse circulation drilling at Tsagaan Sudal returned positive results with an increase in grade of shallow material in the area drilled. This drilling is focused on defining the higher-grade core

to mineralisation at Tsagaan Sudal and improving the economics for current open pit resource. Full assay results will be interpreted and reported within the next quarterly report.

At Tsagaan Sudal, there is good potential to increase the volume of higher-grade material (+0.6% CuEq) in the core of the deposit significantly. A grid of shallow RC drill holes were drilled into Tsagaan Sudal where high-grade (+1%Cu) results were returned in 2015 from trenching. This drilling was designed to increase the grade of the open pit material at Tsagaan Sudal and therefore improve the economics of the open pit project at Kharmagtai. The assay results from this drilling are mostly returned and while the grades encountered in the trenches were higher than that displayed in the RC drilling, the grade of material in the drilled area will have been increased. The market will be updated once these results have been fully returned, run through QAQC and interpreted

During the quarter, preparation was undertaken to deepen two previously drilled holes within the Altan Tolgoi tourmaline breccia mineralisation (TBX). A structural interpretation indicated that additional high-grade TBX should be encountered by deepening drill holes KHDDH358 and KHDDH338. Both holes have subsequently been drilled and have extended mineralisation although assays are awaited.

Two drill holes tested targets along strike from the Zesen Uul deposit (Figure 2). Both holes encountered low-grade porphyry style mineralisation with increasing grade and porphyry vein density with depth within a strongly altered porphyritic monzodiorite. Once assays are returned the results from this drilling will be interpreted and reported in the next quarterly report.

Three drill holes were pre-collared to 100m during the quarter to test a high-quality porphyry target in the southern portion of the Pigeon area (Figure 2). Two of these have been drilled to date with both holes encountering porphyry style mineralisation in the form of disseminated chalcopyrite and chalcopyrite bearing B veins associated with monzodiorite dykes. In particular drill hole KHDDH390 has encountered indications of higher-grade mineralisation (Figure 3) and alteration that could potentially help vector to the location of the fourth porphyry centre at Kharmagtai.

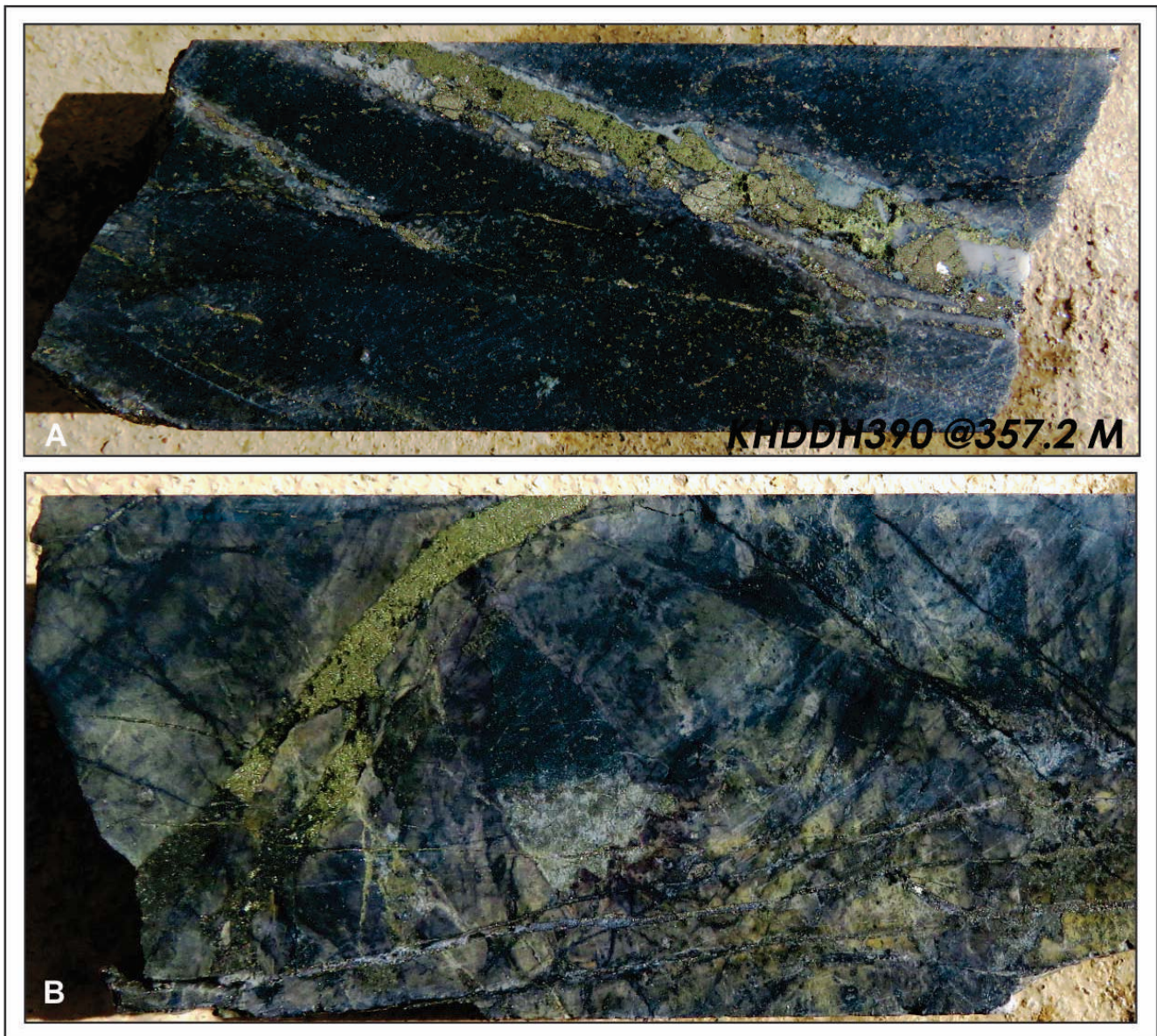


Figure 3: Examples of porphyry style mineralisation from recent drilling at Pigeon KHDDH390. (A) chalcopyrite bearing B-veins and strong disseminated chalcopyrite in monzodiorite. (B) Chalcopyrite bearing massive sulphide veins in brecciated wall-rock. These styles of veins typically occur in the margins of a porphyry deposits at Kharmagtai. The brown to khaki wall-rock alteration seen in this sample is similar to the alteration seen at the margins of the Altan Tolgoi and Zesen Uul deposits.

Positive metallurgical results from Kharmagtai

During the quarter, a test work program on mineralised tourmaline breccia samples from the Altan Tolgoi prospect to assess the response to flotation and provide initial data on grinding energy requirements was completed. A single 30kg composite of the coarse reject samples for flotation testing and half core sample were selected for Bond Ball Mill Work Index (BBMWi) determination. The assay head grade of the master composite was 4.37% Cu, 1.86g/t Au and 14.1g/t Ag, which compared reasonably well with the expected grades from the average of the interval assays (sample composite taken from drill hole KHDDH371 between 387m to 403.8m depth).

Highlights of the test work include:

- Copper recoveries into a rougher concentrate ranging between 93.6 to 95.3% Cu;
- Gold recoveries into the rougher concentrate ranging between 93.4 to 95.4% Au;
- Silver recoveries into the rougher concentrate ranging between 86.7 to 89.9% Ag;
- Exceptional recoveries from simple flotation testing using low collector addition;
- Simple ore mineralogy with vast majority of copper as chalcopyrite; and
- Indicative grinding power requirements (Bwi 18.9 kWh/t) average for this rock type.

The sample produced from the material provided responded very well to simple flotation testing with low collector dosage. Overall results are summarised in the table below.

TABLE 3: Kharmagtai flotation sighter test results

FT1-125µm Grind			
	Feed Grade	Recovery to Rougher Concentrate	Concentrate Grade
Cu	4.07	95.3	18.9
Au	1.83	93.4	8.33
Ag	12.7	86.7	53.7
FT2-150µm Grind			
	Feed Grade	Recovery to Rougher Concentrate	Concentrate Grade
Cu	3.99	94.8	18.2
Au	1.62	95.1	7.37
Ag	11.4	89.6	48.9
FT3-180µm Grind			
	Feed Grade	Recovery to Rougher Concentrate	Concentrate Grade
Cu	4.13	93.6	17.5
Au	1.69	95.4	7.28
Ag	11.6	89.9	47.2

Sequential copper analysis confirmed that copper is almost exclusively present as chalcopyrite. Full details are provided in the Company's ASX announcement on 1 September 2016.

Exploration activities are set to ramp-up at Kharmagtai over the winter months

A detailed exploration plan has been developed to expand the high-grade tourmaline breccia mineralisation discovered at Altan Tolgoi and to discover the fourth porphyry centre within the Kharmagtai district. To achieve this a multidisciplinary approach is being taken with ground gravity being expanded across the entire tenement and top of basement geological and geochemical data being acquired over the next quarter to provide vectoring data for targeting within the basin area where shallow cover obscures the extensions of the Kharmagtai Igneous Complex.

Most of the exploration at Kharmagtai to date has focused on the three outcropping porphyry deposits Altan Tolgoi, Tsagaan Sudal and Zesen Uul (Figure 2). Very little work has been done to unlock the portions of the Kharmagtai Igneous Complex that lie beneath shallow cover immediately east of the drilled deposits. The drilling that has been completed in the basin area has been targeted using geophysics alone. Previous drilling has intersected very broad widths (+800m) of low-grade porphyry

mineralisation (+0.1% Cu and 0.1g/t Au) showing that there is a very good probability for a fourth porphyry centre undercover, but not providing the vectors towards that next centre.

Robust targeting requires layers of data; geology, structure, geochemistry and geophysics. A program has been designed to obtain this data. Gravity data will be acquired during the first two weeks of November. This gravity data will help define the intrusive centres and guide top of basement sampling. A top of basement sampling drill program has been designed to obtain lithological, geochemical, density and magnetic susceptibility data for the potentially mineralised basement rocks. This data, in conjunction with previous geophysics and previous basin drilling will be used to develop a portfolio of high quality, ranked exploration targets across the entire lease for drilling in spring and summer in 2017.

Oyut Ulaan Copper-Gold Project

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). This large and underexplored porphyry district (covering approximately 40km²) and consists of multiple co-genetic porphyry copper-gold centres, mineralised tourmaline breccia pipes copper-gold/base metal magnetite skarns and epithermal gold veins, which occur within the central part of Mining Licence 17129A (Oyut Ulaan; Figure 3). Previous exploration at Oyut Ulaan delivered good results from several different prospects with a spectrum of mineralisation styles, any combination of which could possibly transform Oyut Ulaan into a significant mining camp.

Consistently good exploration results at Oyut Ulaan, particularly over the past three months have considerably elevated its status to a highly attractive project.

Drilling at the Oyut Ulaan during the third quarter focused on shallow, high-grade oxide gold occurrences at the Bavuu, V10 and V11 prospects (Figure 4). Initial drill results have confirmed that there is high-grade gold mineralisation there but it is in a complex geological setting that requires further work to define adequately and determine its likely economic significance. While the results returned to date from two of the three drilled prospects did not return expected results, there is still significant potential for contiguous high-grade gold mineralisation within the Oyut Ulaan lease with over 46 new gold targets identified.

A total of 11 reverse circulation and seven diamond drill holes have been completed in the last quarter of exploration for a total of 2,557m. Assay results from this program are still being returned and interpreted and the market will be updated when these results have been returned and interpreted. Third quarter drill hole details are set out in Table 4 and significant assay results in Table 5.

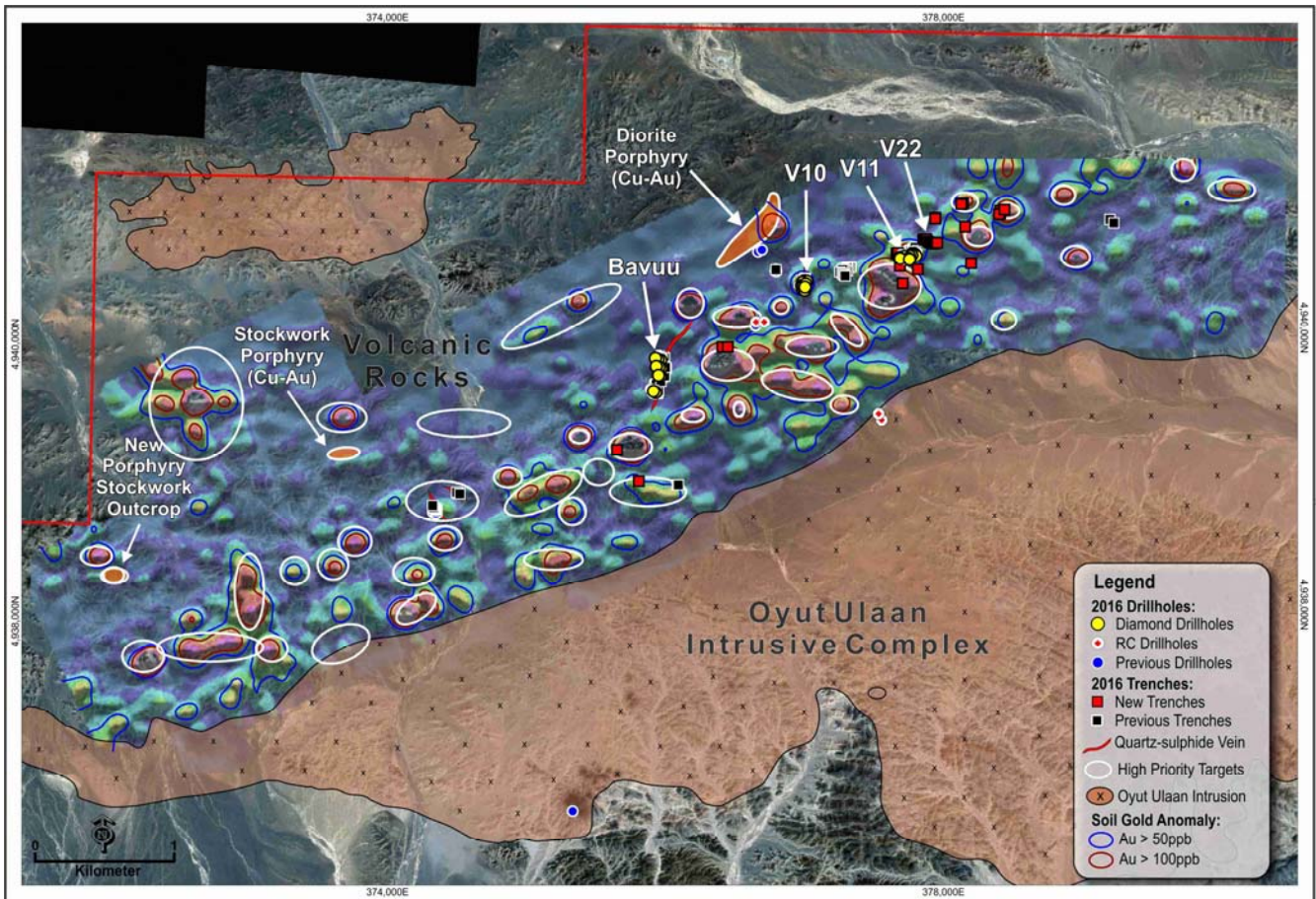


Figure 4: Oyut Ulaan district with gold in soil anomalism and current prospect and target locations.

At Bavuu, drilling was conducted to test the continuity and grade of high-grade gold in quartz hematite veins. Vein continuity was shown to be excellent with nearly all drill holes encountering the mineralised veins, with numerous narrow zones of >1g/t gold mineralisation intersected over a strike of 300m. Drilling was conducted to a maximum depth of 25m vertically and tested approximately 300m in strike. While grades intersected ranged up to 17.4 g/t Au strong variability was noted between intercepts (Figure 5).

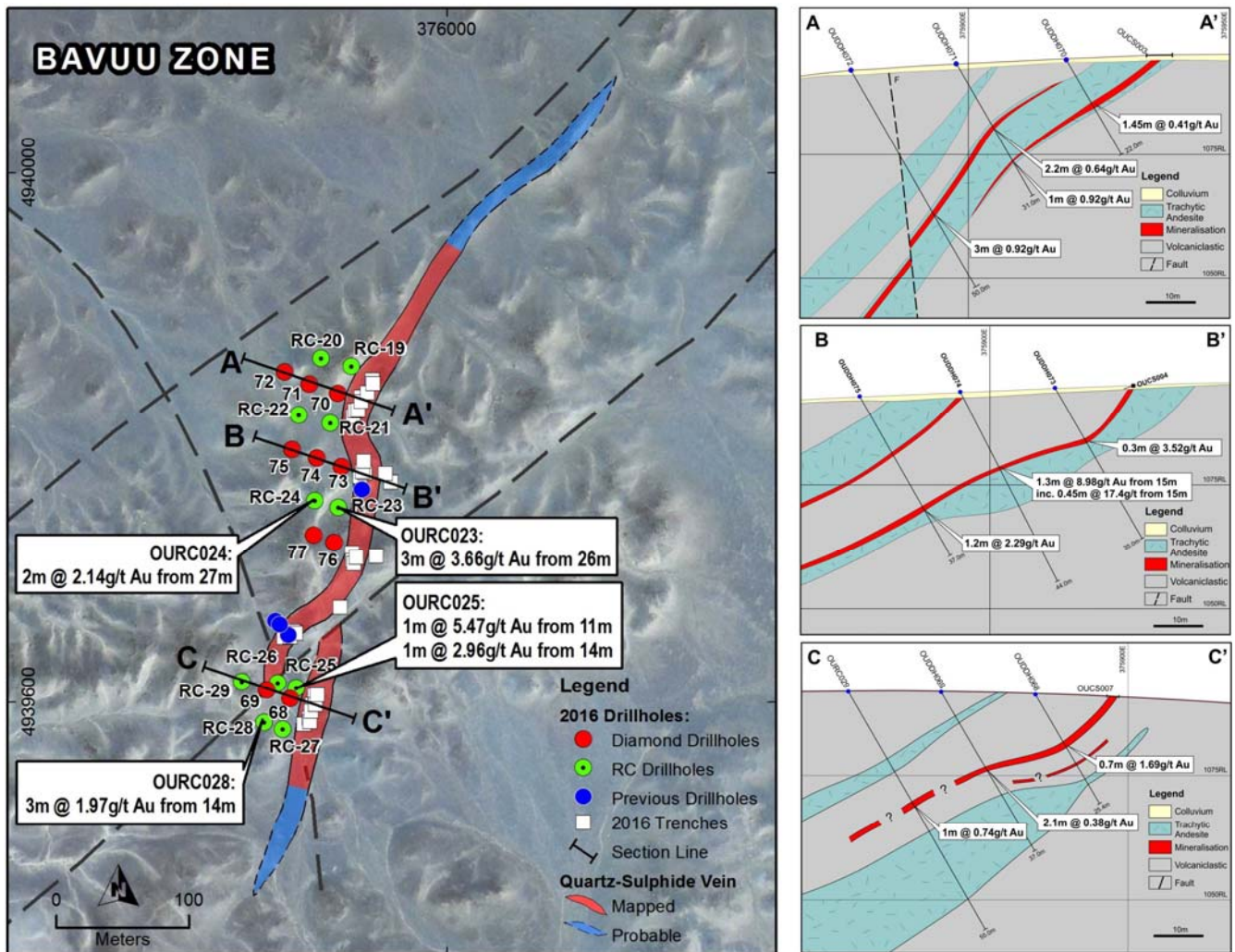


Figure 5: A summary of drilling at the Bavuu Zone, Oyut Ulaan.

At the V10 target drilling targeting replacement gold mineralisation associated with narrow, high-grade feeder structures. While very shallow holes encountered visible mineralisation it appears the replacement mineralisation at V10 does not extend any significant distance from the feeder structures.

At V11 drilling targeted high-grade trench results associated with 1-2m wide hematite alteration zones centred around narrow quartz hematite veins. Drilling showed that the mineralised zone has been stoned out below 10m by a late monzodiorite intrusion.

Soil survey identifies widespread gold anomalism

Xanadu has completed a detailed soil sampling program on a 100m x 50m grid over approximately 20km² which has successfully pinpointed additional areas with anomalous gold (Figure 4). Extensive gold anomalism is mostly located on the edges of magnetic anomalies, which are thought to highlight the link between the structures controlling gold mineralisation and deeper porphyry copper mineralisation hosted in porphyry stocks.

Initial gold results were interpreted and 46 gold targets were identified within the survey area. These targets were ranked by comparing the gold anomalism, geology, alteration, magnetic response and IP

chargeability response. To date 12 of these targets have been trenched returning both gold and copper-gold porphyry style visual mineralisation but limited assay results have been returned.

A growing large scale porphyry picture at Oyut Ulaan

When the multi-element soil geochemistry is interpreted several large scale porphyry signatures are seen. Copper anomalism in the eastern portion of the sample grid at Oyut Ulaan describes a large (+3km long) copper anomaly above 500ppm Cu. This anomaly also displays a strong depletion and halo of Zn and Mn which is a characteristic geochemical signature of porphyry systems (Figure 6). Trenches currently being dug on gold targets within this porphyry target are routinely displaying alteration patterns which grade outward from K-feldspar, quartz, copper oxide altered monzodiorite, into clay alteration, into epidote, chlorite alteration with sheeted veins on the shoulders of the intrusive (Figure 7). One of these trenches (OUCS030A) has just returned assays across this zone of 188m @ 0.35% CuEq (Figure 8). These results highlight the potential scale of porphyry mineralisation at Oyut Ulaan project.

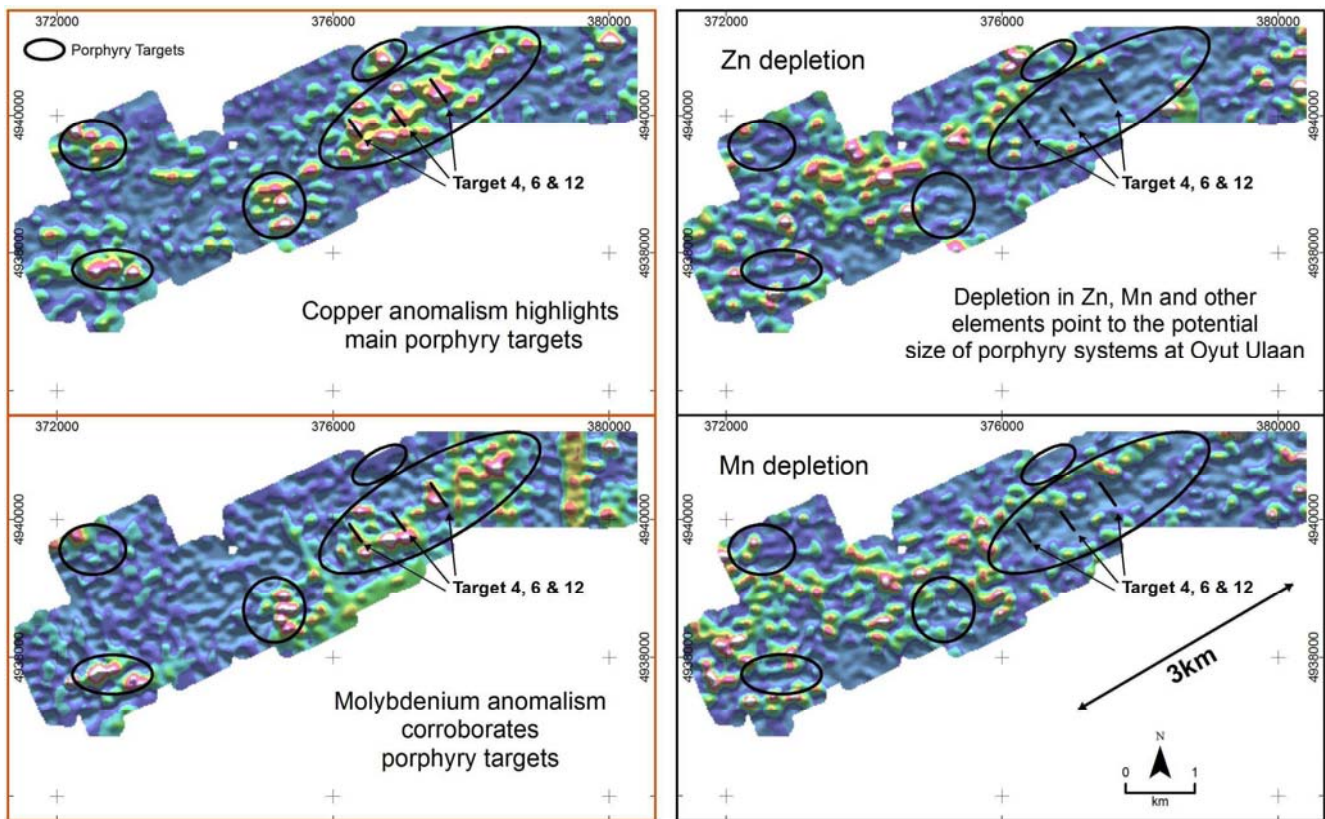


Figure 6: Multi-element geochemical patterns at Oyut Ulaan point to a significant porphyry system.

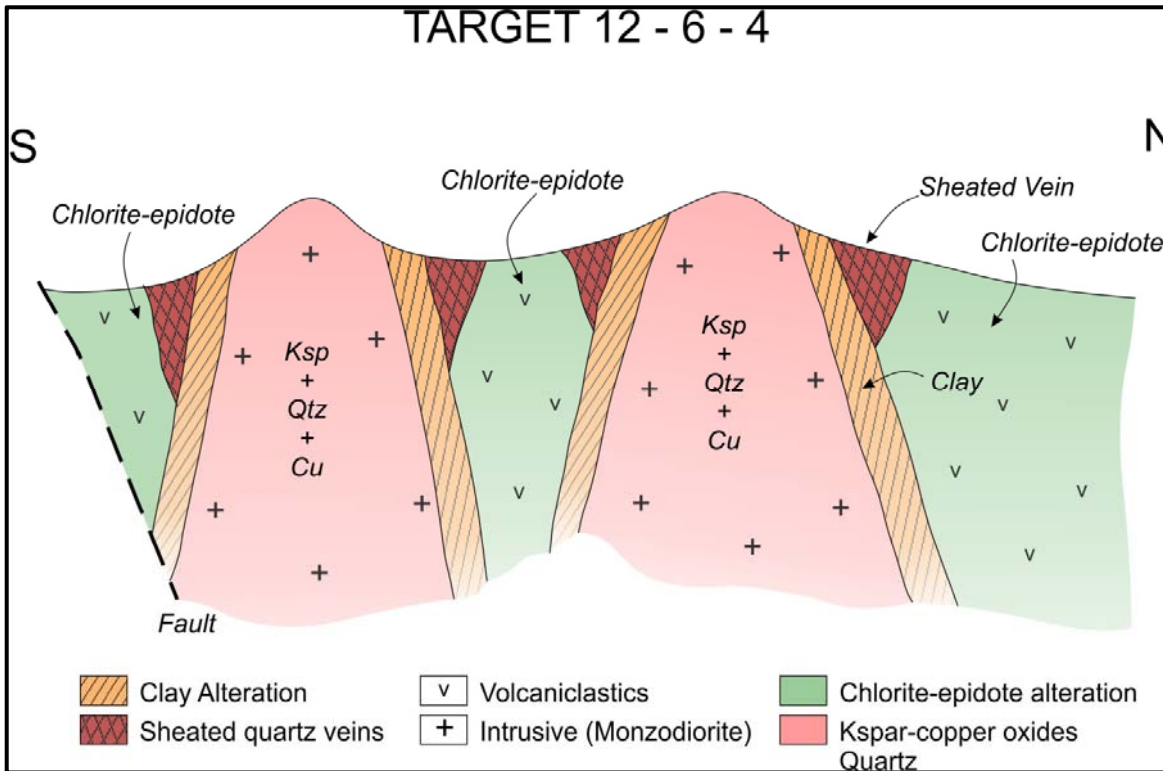


Figure 7: A schematic diagram showing the porphyry style mineralisation and alteration being encountered during trenching at Oyut Ulaan with Targets 12, 6 and 4).

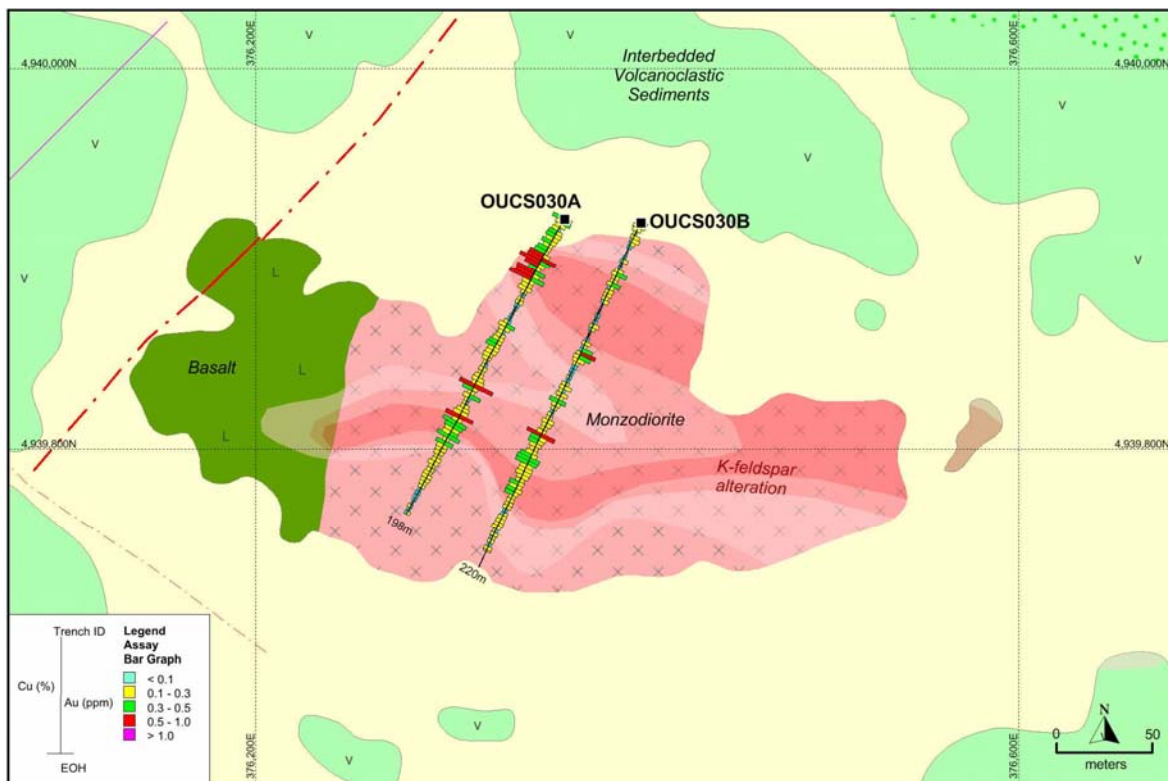


Figure 8: Target 4 trench locations, geology and preliminary geochemistry.

The initial results at its Oyut Ulaan have confirmed that there is widespread high-grade epithermal gold mineralisation; however it is associated with a complex geological setting that requires further work to define adequately and determine its likely economic significance.

With potentially multiple near surface gold deposits at the Oyut Ulaan project, Xanadu continues to believe there is still high potential for discovering significant, shallow gold deposits, which could be amenable to relatively simple, low cost early stage mining operation to generate meaningful cash flow that can be used to advance the Company's exploration of its highly prospective areas at Oyut Ulaan and Kharmagtai.

CORPORATE ACTIVITIES

On 24 October 2016, Dr Andrew Stewart was appointed as Managing Director and Chief Executive Officer. Mark Wheatley resumed his Non-Executive Chairmanship role. These changes were made in line with the Company's long standing and well prepared succession plan.

Dr Stewart has been CEO since 18 March 2015 and prior to that had been Chief Geologist of the Company. Dr Stewart has already made significant contributions to the Company and this promotion to Managing Director and Chief Executive Officer is in recognition of Dr Stewart's development, performance and leadership over the last 18 months. Dr Stewart will continue to be based in Mongolia until the end of this financial year and will then move to Sydney as soon as possible after 1 July 2017.

Over the next few months, a highly experienced Chief Geologist will be appointed to ensure a seamless transition of the Company's succession plan. This will complete a reorganisation of Xanadu's exploration team in Mongolia to ensure focus on exploration success continues and strengthen in-country capacity to support the Company's well-funded ongoing exploration programs across multiple projects. The future move to Australia by the Managing Director will assist with promotion of the Company and provide easier and more regular access to important stakeholders and capital investment markets.

Discussions with strategic investors are taking place. Continued exploration success at Kharmagtai over the past year indicates it is one of the most promising copper-gold projects globally, and recent discovery of the tourmaline breccia mineralisation ranks it as one of the highest grade porphyry discoveries in last 12 months. Xanadu is funded to progress exploration but the Company's strategy is also to keep a healthy dialogue open with potential strategic partners as an option for future collaboration.

Share Capital

As at 30 September 2016, the Company had 511,218,639 fully paid shares, 2,616,667 performance rights and 35,000,000 options issued pursuant to the restructure of the Oyut Ulaan acquisition terms.

Financial position

As at 30 September 2016, the Company had A\$9.8 million cash and A\$0.9 million cash receivables.



For further information please visit www.xanadumines.com or contact:

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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, which is incorporated in the database that was provided to Mining Associates for undertaking a resource estimate. 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) = Cu% + (Au (ppm) x 0.6378). Based on a copper price of \$2.60/lb and a gold price of \$1300/oz.

Table 1: Kharmagtai drill hole details from the third quarter.

Hole ID	Prospect	East	North	RL	Azimuth (°)	Inc (°)	Depth (m)
KHDDH386	Duck	592056	4876430	1314	0	-60	385.0
KHDDH387	Zesen Uul	592316	4876423	1307	0	-60	430.0
KHDDH388	Pigeon	594311	4876230	1287	0	-60	100.0
KHDDH389	Pigeon	594487	4876309	1285	0	-60	88.0
KHDDH390	Pigeon	594762	4876405	1279	0	-60	86.0
KHDDH391	Tsagaan Sudal	592133	4877193	1302	0	-70	415.0
KHDDH392	Tsagaan Sudal	592230	4877128	1300	0	-70	190.0
KHRC287	Tsagaan Sudal	592000	4877376	1304	0	-60	100.0
KHRC288	Tsagaan Sudal	591998	4877425	1302	0	-60	101.0
KHRC289	Tsagaan Sudal	591997	4877474	1301	0	-60	50.0
KHRC290	Tsagaan Sudal	591907	4877354	1304	0	-60	100.0
KHRC291	Tsagaan Sudal	591905	4877424	1300	0	-60	54.0
KHRC292	Tsagaan Sudal	591908	4877470	1299	0	-60	60.0
KHRC293	Tsagaan Sudal	591816	4877360	1302	0	-60	102.0
KHRC294	Tsagaan Sudal	591819	4877460	1301	0	-60	55.0
KHRC295	Tsagaan Sudal	591712	4877360	1303	0	-60	100.0
KHRC296	Tsagaan Sudal	591715	4877412	1304	0	-60	81.0
KHRC297	Tsagaan Sudal	591715	4877456	1304	0	-60	60.0

Table 2: Kharmagtai significant drill intercepts from the third quarter.

Hole ID	Prospect	From (m)	To (m)	Interval (m)	Cu (%)	Au (g/t)	CuEq (%)
KHRC287	Tsagaan Sudal	0	100	100	0.26	0.28	0.44
	<i>including</i>	72	80	8	0.43	0.47	0.74
KHRC288	Tsagaan Sudal	2	101	99	0.33	0.29	0.52
	<i>including</i>	16	30	14	0.34	0.44	0.62
	<i>including</i>	79	82	3	0.65	0.33	0.85
KHRC289	Tsagaan Sudal	0	50	50	0.25	0.17	0.37
	<i>including</i>	36	44	8	0.41	0.22	0.54
KHRC290	Tsagaan Sudal	0	100	100	0.23	0.2	0.36
	<i>including</i>	4	12	8	0.39	0.21	0.52

Table 3: Oyut Ulaan drill hole and trench details from the third quarter.

Hole ID	Prospect	East	North	RL	Azimuth (°)	Inc (°)	Depth (m)
OUIDH047	Trench-11	377742	4940605	1078	320	-60	27.5
OUIDH048	Trench-11	377733	4940605	1078	320	-60	28
OUIDH049	Trench-11	377748	4940597	1078	320	-60	40
OUIDH050	Trench-11	377756	4940588	1077	320	-60	61
OUIDH051	Trench-11	377724	4940592	1078	320	-60	31
OUIDH052	Trench-11	377692	4940580	1079	320	-60	31
OUIDH053	Trench-11	377708	4940586	1079	320	-60	31
OUIDH054	Trench-11	377671	4940583	1080	320	-60	30
OUIDH055	Trench-11	377633	4940577	1081	320	-60	30.7
OUIDH056	Trench-11	377699	4940571	1079	320	-60	40
OUIDH057	Trench-11	377642	4940566	1080	320	-55	49
OUIDH058	Trench-11	377707	4940562	1078	320	-55	67.7
OUIDH059	Trench-10	376954	4940406	1093	290	-60	17.5
OUIDH060	Trench-10	376969	4940401	1093	290	-60	24.5
OUIDH061	Trench-10	376936	4940393	1092	290	-60	18
OUIDH062	Trench-10	376930	4940372	1091	290	-60	22.8
OUIDH063	Trench-10	376936	4940345	1089	290	-60	22.3
OUIDH064	Trench-10	376942	4940367	1091	290	-60	24.5
OUIDH065	Trench-10	376960	4940384	1094	290	-60	31.15
OUIDH066	Trench-10	376951	4940338	1092	290	-60	25
OUIDH067	Trench-10	376956	4940362	1092	290	-60	31
OUIDH068	Bavuu	375882	4939603	1096	110	-60	25
OUIDH069	Bavuu	375864	4939609	1095	110	-60	37
OUIDH070	Bavuu	375918	4939834	1091	110	-60	22
OUIDH071	Bavuu	375897	4939840	1091	110	-60	31
OUIDH072	Bavuu	375878	4939849	1091	110	-60	50
OUIDH073	Bavuu	375921	4939778	1096	110	-60	35
OUIDH074	Bavuu	375903	4939784	1092	130	-60	44
OUIDH075	Bavuu	375883	4939791	1090	125	-60	37
OUIDH076	Bavuu	375915	4939720	1094	110	-60	34
OUIDH077	Bavuu	375899	4939726	1094	110	-60	40
OURC001	Trench-11	377755	4940616	1078	320	-60	19
OURC002	Trench-11	377747	4940614	1078	320	-60	19
OURC003	Trench-11	377730	4940597	1078	320	-60	25
OURC004	Trench-11	377713	4940591	1079	320	-60	13
OURC005	Trench-11	377697	4940587	1077	320	-60	16
OURC006	Trench-11	377679	4940585	1079	320	-60	16
OURC007	Trench-11	377650	4940586	1081	320	-60	27
OURC008	Trench-11	377655	4940576	1079	320	-60	30

Hole ID	Prospect	East	North	RL	Azimuth (°)	Inc (°)	Depth (m)
OURC009	Trench-11	377682	4940571	1079	320	-60	23
OURC010	Trench-11	377656	4940550	1082	320	-60	80
OURC011	Trench-11	377764	4940606	1078	320	-60	19
OURC012	Trench-11	377732	4940583	1078	320	-60	12
OURC013	Trench-11	377717	4940577	1078	320	-60	10
OURC014	Trench-10	376931	4940384	1092	290	-60	21
OURC015	Trench-10	376933	4940360	1090	290	-60	18
OURC016	Trench-10	376918	4940365	1089	290	-60	16
OURC017	Bavuu skarn	376604	4940100	1092	200	-60	76
OURC018	Bavuu skarn	376664	4940100	1090	200	-60	67
OURC019	Bavuu	375926	4939854	1090	109	-60	23
OURC020	Bavuu	375905	4939859	1090	109	-60	30
OURC021	Bavuu	375912	4939811	1093	109	-60	24
OURC022	Bavuu	375889	4939817	1091	109	-60	40
OURC023	Bavuu	375920	4939748	1095	109	-60	46
OURC024	Bavuu	375901	4939754	1094	109	-60	40
OURC025	Bavuu	375889	4939610	1095	109	-60	18
OURC026	Bavuu	375872	4939616	1095	109	-60	31
OURC027	Bavuu	375877	4939581	1093	109	-60	15
OURC028	Bavuu	375862	4939588	1093	109	-60	20
OURC029	Bavuu	375847	4939615	1095	109	-60	55
OURC030	Stariy	377509	4939391	1061	0	-60	60
OURC031	Stariy	377486	4939438	1063	180	-60	55

Trench ID	Prospect	Start East	Start North	RL	Azimuth (°)	Length (m)
OUCS011N	Diorite Hill	377615	4940597	1084	326	34
OUCS011O	Diorite Hill	377627	4940600	1084	322	16
OUCS011P	Diorite Hill	377640	4940507	1080	155	16
OUCS021A	Khulan	377896	4940854	1067	117	12
OUCS021B	Khulan	377896	4940848	1067	120	10
OUCS022A	Khulan	377808	4940697	1077	177	50
OUCS022B	Khulan	377819	4940699	1075	177	52
OUCS022C	Khulan	377831	4940698	1075	177	52
OUCS022D	Khulan	377843	4940682	1074	177	30
OUCS022E	Khulan	377855	4940676	1074	177	32
OUCS022F	Khulan	377866	4940674	1074	177	34
OUCS022G	Khulan	377878	4940667	1074	177	20
OUCS022H	Khulan	377886	4940676	1075	176	48
OUCS022I	Khulan	377898	4940670	1074	174	32
OUCS022J	Khulan	377909	4940674	1075	170	34

Trench ID	Prospect	Start East	Start North	RL	Azimuth (°)	Length (m)
OUCS023A	Khulan	378094	4940956	1071	151	21
OUCS023B	Khulan	378084	4940952	1072	150	26
OUCS024A	Khulan	378363	4940904	1060	150	100
OUCS024B	Khulan	378363	4940884	1063	150	50
OUCS024C	Khulan	378353	4940877	1061	150	42
OUCS024D	Khulan	378395	4940913	1061	150	82
OUCS025	Khulan	377769	4940481	1072	147	66
OUCS026	Khulan	378152	4940526	1065	40	78
OUCS027	Khulan	377661	4940379	1074	150	56
OUCS028A	Goldenskarn	375604	4939180	1073	115	116
OUCS028B	Goldenskarn	375605	4939181	1073	66	22
OUCS029	Khulan	378110	4940789	1066	115	190
OUCS030A	Bavuu porphyry	376362	4939922	1080	214	198
OUCS030B	Bavuu porphyry	376402	4939920	1080	210	220
OUCS031	Goldenskarn	375761	4938953	1079	160	100

Table 4: Oyut Ulaan significant intercepts from the third quarter.

Hole ID	Prospect	From (m)	To (m)	Interval (m)	Au (g/t)	Cu (%)
OUIDDH047	Trench-11	9	9.6	0.6	3.67	0.32
OUIDDH048	Trench-11	6.45	6.65	0.2	2.69	0.46
OUIDDH052	Trench-11	19.45	20	0.55	3.23	1.32
OUIDDH055	Trench-11	12.7	14.85	2.15	0.44	0.13
OUIDDH056	Trench-11	3.6	4	0.4	0.1	0.58
OUIDDH059	Trench-10	1.8	6	4.2	0.5	0.68
OUIDDH064	Trench-10	5.7	7.8	2.1	2.72	5.07
OUIDDH068	Bavuu	11.8	12.5	0.7	1.69	0.15
OUIDDH069	Bavuu	16.1	18.2	2.1	0.38	0.01
OUIDDH070	Bavuu	9.8	11.25	1.45	0.41	0.04
OUIDDH071	Bavuu	14.8	17	2.2	0.64	0.12
<i>and</i>		21	22	1	0.92	0.1
OUIDDH072	Bavuu	32	35	3	0.92	0.06
OUIDDH073	Bavuu	12.6	12.9	0.3	3.52	0.09
OUIDDH074	Bavuu	15	16.3	1.3	8.98	0.22
<i>including</i>		15	15.45	0.45	17.4	0.33
OUIDDH075	Bavuu	18.9	20.1	1.2	2.29	0.11
OOURC023	Bavuu	26	29	3	3.66	0.65
OOURC024	Bavuu	27	29	2	2.14	0.12
OOURC025	Bavuu	11	12	1	5.47	0.18
<i>and</i>		14	15	1	2.96	0.12
OOURC028	Bavuu	14	17	3	1.97	0.1



Hole ID	Prospect	From (m)	To (m)	Interval (m)	Au (g/t)	Cu (%)
OURC029	Bavuu	20	21	1	0.74	0.02
Trench ID	Prospect	From (m)	To (m)	Interval (m)	Au (g/t)	Cu (%)
OUCS011N	Diorite Hill	0	4	4	0.35	0.33
	<i>and</i>	7	11	4	0.54	0.22
	<i>and</i>	24	26	2	0.15	0.12
OUCS011O	Diorite Hill	2	10	8	1.09	0.26
	<i>including</i>	5	6	1	3.04	0.54
OUCS022A	Khulan	44	46	2	2.28	0.01
OUCS022B	Khulan	45	45.5	0.5	0.59	-
OUCS022D	Khulan	7.5	9	1.5	0.42	0.03
OUCS022E	Khulan	5.5	6.5	1	0.37	0.02
	<i>and</i>	8.5	12	3.5	0.11	0.01
	<i>and</i>	16	19	3	0.11	0.13
OUCS022F	Khulan	7.5	10	2.5	0.68	0.06
OUCS022G	Khulan	4	8	4	0.35	0.06
	<i>and</i>	14	16	2	0.28	0.11
OUCS22H		13	14	1	0.27	0.02
	<i>and</i>	17.5	19	1.5	0.39	0.01
OUCS022I	Khulan	4	5.5	1.5	0.15	0.03
OUCS022J	Khulan	2	8.5	6.5	0.17	0.17
OUCS023A	Khulan	8.5	9	0.5	0.33	0.39
OUCS030A	Bavuu porphyry	0	188	188	0.18	0.24
	<i>including</i>	0	46	46	0.24	0.4
	<i>including</i>	62	162	100	0.2	0.23
OUCS030B	Bavuu porphyry	0	220	220	0.16	0.15
	<i>including</i>	28	48	20	0.2	0.12
	<i>including</i>	70	84	14	0.29	0.13

Table 5: Tenements held as at 30 September 2016

Set out below is the relevant information in relation to Xanadu's mining tenements as required under ASX Listing Rule 5.3.3.

Tenement No.	Tenement Name	Location	Change in % Interest	% Interest as at 30September
MV17387A1	Kharmagtai	Umnugovi Province	-	72% ¹
MV017129	Oyut Ulaan	Dornogovi Province	-	90%
13670x	Sharchuluut	Bulgan Province	-	100%

¹ The Kharmagtai project has been funded through Xanadu's interest in Mongol Metals LLC by a combination of equity and shareholder advances converted to equity periodically. Xanadu's interest in Mongol Metals LLC is equivalent to approximately 79.8% as at 30September 2016 (an effective 71.8% interest in the Kharmagtai project).

APPENDIX 1: KHARMAGTAI TABLE 1 (JORC 2012)

Set out below is Section 1 and Section 2 of Table 1 under the JORC Code, 2012 Edition for the Kharmagtai project. Data provided by Xanadu. This Table 1 updates the JORC Table 1 disclosure 29 April 2016.

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

Criteria	JORC Code (Section 1) 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 resource estimate is based on drill samples only. Representative 2 metre samples were taken from ½ NQ or HQ diamond core and chip channel samples from trenches. Only assay result results from recognised, independent assay laboratories were used in Resource calculation after QAQC was verified.
Drilling techniques	<ul style="list-style-type: none"> Drill type and details. 	<ul style="list-style-type: none"> DDH drilling has been the primary drilling method.
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 very good, averaging between 97% and 99% for all of the deposits. In localised areas of faulting and/or fracturing the recoveries decrease; however this is a very small percentage of the overall mineralised zones. Recovery measurements were collected during all DDH programs. The methodology used for measuring recovery is standard industry practice. Analysis of recovery results vs. grade indicates no significant trends. Indicating bias of grades due to diminished recovery and / or wetness of samples.
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, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> Drill and trench 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 logged by a geologist. The entire interval drilled and trenched has been logged by a geologist.
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. 	<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 a constant 2m interval down-hole in length. Trench chip channel samples taken close to the base of the trench wall (about 10cm above the floor). Samples are about 3kg.



Criteria	JORC Code (Section 1) Explanation	Commentary
	<ul style="list-style-type: none"> • Quality control procedures adopted for all sub-sampling stages to maximize 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"> • Trench Sample collected with a plastic sheet or tray. • Routine sample preparation and analyses of DDH samples were carried out by SGS Mongolia LLC (SGS Mongolia), who operates an independent sample preparation and analytical laboratory in Ulaanbaatar. • All samples were prepared to meet standard quality control procedures as follows: Crushed to 90% passing 3.54 mm, split to 1kg, pulverised to 90% - 95% passing 200 mesh (75 microns) and split to 150g. • 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.
<p>Quality of assay data and laboratory tests</p>	<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 SGS Mongolia for gold, copper, silver, lead, zinc, arsenic and molybdenum. • Au is determined using a 30g 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 were routinely determined using a three-acid-digestion of a 0.3g sub-sample followed by an AAS finish (AAS21R). Samples are digested with nitric, hydrochloric and perchloric acids to dryness before leaching with hydrochloric acid to dissolve soluble salts and made to 15ml volume with distilled water. The LDL for copper using this technique was 2ppm. Where copper is over-range (>1% Cu), it is analysed by a second analytical technique (AAS22S), which has a higher upper detection limit (UDL) of 5% copper. • Quality assurance was provided by introduction of known certified standards, blanks and duplicate samples on a routine basis. • 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



Criteria	JORC Code (Section 1) Explanation	Commentary
		<p>coarse and pulp blanks, and certified matrix matched copper-gold standards.</p> <ul style="list-style-type: none"> • QAQC monitoring is an active and ongoing processes on batch by batch basis by which unacceptable results are re-assayed as soon as practicable.
<p>Verification of sampling and assaying</p>	<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.
<p>Location of data points</p>	<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"> • Diamond drill holes and trenches have been surveyed with a differential global positioning system (DGPS) to within 10cm accuracy. • 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. • UTM WGS84 48N grid. • The DTM is based on 1m contours with an accuracy of ± 0.01m.
<p>Data spacing and distribution</p>	<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 and trenching has been completed on nominal north-south sections, commencing at 120m spacing and then closing to 40m for resource estimation. • Vertical spacing of intercepts on the mineralised zones similarly commences at 100m spacing and then closing to 50m for resource estimation. • 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. • Holes have been drilled to 1,000m 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 determining the classifications to be applied.
<p>Orientation of data in relation to geological structure</p>	<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. 	<ul style="list-style-type: none"> • Drilling and trenching has been predominantly completed on north-south section lines along the strike of the known mineralised zones and from either the north or the south depending on the dip.

Criteria	JORC Code (Section 1) Explanation	Commentary
	<ul style="list-style-type: none"> 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"> Limited trenching has been completed along strike (subparallel) orientations to mineralisation - no conclusion regarding width and grade can be drawn from this data; Vertical to South dipping ore bodies were predominantly drilled to the north. 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. External review and audit have been conducted by the following groups. 2012 – AMC Consultants Pty Ltd. was engaged to conduct an Independent Technical Report which reviewed drilling and sampling procedures. It was concluded that sampling and data record was appropriate for use in resource estimation including that required by the NI 43-101 standards. 2013 - Mining Associates Ltd. was engaged to conduct an Independent Technical Report to review drilling, sampling techniques, QAQC and previous resource estimates. Methods were found to conform to international best practice.

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

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

Criteria	JORC Code (Section 2) 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. 	<ul style="list-style-type: none"> The Project comprises 1 Mining Licence (MV 17387A). 100% owned by Oyut Ulaan LLC. Xanadu and its joint venture partner, Mongol Metals can earn a 90% interest in the Kharmagtai porphyry copper-gold project. The remaining 10% is owned by



Criteria	JORC Code (Section 2) Explanation	Commentary
	<ul style="list-style-type: none"> 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. 	<p>Quincunx Ltd, which in turn is owned by an incorporated joint venture between Kerry Holdings Ltd. and MCS Holding LLC.</p> <ul style="list-style-type: none"> The Mongolian Minerals Law (2006) and Mongolian Land Law (2002) govern exploration, mining and land use rights for the project.
<p>Exploration done by other parties</p>	<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 Quincunx Ltd, Ivanhoe Mines Ltd and Turquoise Hill Resources Ltd including extensive drilling, surface geochemistry, geophysics, mapping and mineral resource estimation to NI 43-101 standards.
<p>Geology</p>	<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. 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 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>Drill hole Information</p>	<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.



Criteria	JORC Code (Section 2) Explanation	Commentary
<p>Data Aggregation methods</p>	<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 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. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> A nominal cut-off of 0.1% Cu is used for identification of potentially significant intercepts for reporting purposes. Most of the reported intercepts are shown in sufficient detail, including maxima and subintervals, to allow the reader to make an assessment of the balance of high and low grades in the intercept. 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: $\text{CuEq} = \text{Cu\%} \times (\text{Aug/t} \times 0.6378)$ <p>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.</p>
<p>Relationship between mineralisation on widths and intercept lengths</p>	<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. Limited trenching has been completed along strike (subparallel) orientations to mineralisation - no conclusion regarding width and grade can be drawn from this data; Resource estimation, as reported later, was done in 3D space.
<p>Diagrams</p>	<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.
<p>Balanced reporting</p>	<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.
<p>Other substantive exploration</p>	<ul style="list-style-type: none"> Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; 	<ul style="list-style-type: none"> Extensive work in this area has been done, and is reported separately.



Criteria	JORC Code (Section 2) Explanation	Commentary
data	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.	
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 drilling areas, provided this information is not commercially sensitive. 	<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 extraction. Exploration on going.

1.3 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	JORC Code (Section 3) Explanation	Commentary
Database integrity	<ul style="list-style-type: none"> Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used. 	<ul style="list-style-type: none"> The database is a Geobank data base system. Data is logged directly into an Excel spread sheet logging system with drop down field lists. Validation checks are written into the importing program ensures all data is of high quality. Digital assay data is obtained from the Laboratory, QAQC checked and imported Geobank exported to Access, and connected directly to the GemcomSurpac Software. Data was validated prior to resource estimation by the reporting of basic statistics for each of the grade fields, including examination of maximum values, and visual checks of drill traces and grades on sections and plans.
Site visits	<ul style="list-style-type: none"> Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	<ul style="list-style-type: none"> Andrew Vigar of Mining Associates visited site from 24 and 25 October 2014. The site visit included a field review of the exploration area, an inspection of core, sample cutting and logging procedures and discussions of geology and mineralisation with exploration geologists.
Geological interpretation	<ul style="list-style-type: none"> Confidence in (or conversely, the uncertainty of the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. 	<ul style="list-style-type: none"> Mineralisation resulted in the formation of comprises quartz-chalcopyrite-pyrite-magnetite stockwork veins and minor breccias.



Criteria	JORC Code (Section 3) Explanation	Commentary
	<ul style="list-style-type: none"> The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	<ul style="list-style-type: none"> The principle ore minerals of economic interest are chalcopyrite, bornite and gold, which occur primarily as infill within these veins. Gold is intergrown with chalcopyrite and bornite. The ore mineralised zones at Altan Tolgoi, Tsagaan Sudal and Zesen Uul are associated with a core of quartz veins that were intensely developed in and the quartz diorite intrusive stocks and/or dykes rocks. These vein arrays can be described as stockwork, but the veins have strong developed preferred orientations. Sulphidemineralisation is zoned from a bornite-rich core that zone outwards to chalcopyrite-rich and then outer pyritic haloes, with gold closely associated with bornite. Drilling indicates that the supergene profile has been oxidised to depths up to 60 metres below the surface. The oxide zone comprises fracture controlled copper and iron oxides; however there is no obvious depletion or enrichment of gold in the oxide zone.
<p>Dimensions</p>	<ul style="list-style-type: none"> The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource. 	<ul style="list-style-type: none"> Altan Tolgoi comprises two main mineralised zones, northern and southern stockwork zones (AT-N and AT-S) which are approximately 100 metres apart and hosted in diorite and quartz diorite porphyries. The AT-S is at least 550 metres long, 600 metres deep and contains strong quartz-chalcopyrite-pyrite stockwork veining and associated high grade copper-gold mineralisation. The stockwork zone widens eastward from a 20 to 70 metres wide high-grade zone in the western and central sections to a 200 metres wide medium-grade zone in the eastern most sections. Mineralisation remains open at depth and along strike to the east. The AT-N consists of a broad halo of quartz that is 250 metres long, 150 metres wide long and at least 350 metres deep. TS consists of a broad halo of quartz veins that is 850 metres long, 550 metres wide long and at least 500 metres deep, and forms a pipe like geometry. ZU forms a sub vertical body of stockwork approximately 350 × 100 metres by at least 200 metres and plunges to the southeast.
<p>Estimation and</p>	<ul style="list-style-type: none"> The nature and appropriateness of the estimation technique(s) applied and key 	<ul style="list-style-type: none"> The estimate Estimation Performed using Ordinary Kriging.



Criteria	JORC Code (Section 3) Explanation	Commentary
<p>modelling techniques</p>	<p>assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</p> <ul style="list-style-type: none"> • The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. • The assumptions made regarding recovery of by-products. • Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation). • In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. • Any assumptions behind modelling of selective mining units. • Any assumptions about correlation between variables. • Description of how the geological interpretation was used to control the resource estimates. • Discussion of basis for using or not using grade cutting or capping. • The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available. 	<ul style="list-style-type: none"> • Variograms are reasonable along strike. • Minimum & Maximum Informing samples is 5 and 20 (1st pass), Second pass is 3 and 20. • Copper and Gold Interpreted separately on NS sections and estimated as separate domains. • Halo mineralisation defined as 0.12% Cu and 0.12g/t Au Grade. • The mineralised domains were manually digitised on cross sections defining mineralisation. Three dimensional grade shells (wireframes) for each of the metals to be estimated were created from the sectional interpretation. Construction of the grade shells took into account prominent lithological and structural features. For copper, grade shells were constructed for each deposit at a cut-off of 0.12% and 0.3% Cu. For gold, wireframes were constructed at a threshold of 0.12g/t and 0.3 g/t. These grade shells took into account known gross geological controls in addition to broadly adhering to the above mentioned thresholds. • Cut off grades applied are copper-equivalent (CuEq) cut off values of 0.3% for appropriate for a large bulk mining open pit and 0.5% for bulk block caving underground. • A set of plans and cross-sections that displayed colour-coded drill holes were plotted and inspected to ensure the proper assignment of domains to drill holes. • The faulting interpreted to have had considerable movement, for this reason, the fault surface were used to define two separate structural domains for grade estimation. • Six metre down-hole composites were chosen for statistical analysis and grade estimation of Cu and Au. Compositing was carried out downhole within the defined mineralisation halos. Composite files for individual domains were created by selecting those samples within domain wireframes, using a fix length and 50% minimum composite length. • A total of 4,428 measurements for specific gravity are recorded in the database, all of which were determined by the water immersion method. The average density of all samples is 2.74 t/m³. In detail there are some differences in density between



Criteria	JORC Code (Section 3) Explanation	Commentary
		<p>different rock types, but since the model does not include geological domains a single pass ID2 interpolation was applied.</p> <ul style="list-style-type: none"> • Primary grade interpolation for the two metals was by ordinary kriging of capped 6m composites. A two-pass search approach was used, whereby a cell failing to receive a grade estimate in a previous pass would be resubmitted in a subsequent and larger search pass. • The Mineral Resource estimate meets the requirements of JORC 2012 and has been reported considering geological characteristics, grade and quantity, prospects for eventual economic extraction and location and extents. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories using relevant copper-equivalent cut-off values; $\text{CuEq} = \text{Cu}\% \times (\text{Aug}/\text{t} \times 0.6378)$ 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.
<p>Moisture</p>	<ul style="list-style-type: none"> • Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	<ul style="list-style-type: none"> • All tonnages are reported on a dry basis.
<p>Cut-off parameters</p>	<ul style="list-style-type: none"> • The basis of the adopted cut-off grade(s) or quality parameters applied. 	<ul style="list-style-type: none"> • Cut off grades applied are copper-equivalent (CuEq) cut off values of 0.3% for possible open pit and 0.5% for underground.
<p>Mining factors or assumptions</p>	<ul style="list-style-type: none"> • Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made. 	<ul style="list-style-type: none"> • No mining factors have been applied to the in situ grade estimates for mining dilution or loss as a result of the grade control or mining process. • The deposit is amenable to large scale bulk mining. • The Mineral resource is reported above an optimised pit shell. (Lerch Grossman algorithm), mineralisation below the pit shell is reported at a higher cut-off to reflect the increased costs associated with block cave underground mining
<p>Metallurgical factors or assumptions</p>	<ul style="list-style-type: none"> • The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the 	<ul style="list-style-type: none"> • No metallurgical factors have been applied to the in situ grade estimates.



Criteria	JORC Code (Section 3) Explanation	Commentary
	<p>assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</p>	
<p>Environmental factors or assumptions</p>	<ul style="list-style-type: none"> Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made. 	<ul style="list-style-type: none"> An environmental baseline study was completed in 2003 by Eco Trade Co. Ltd. of Mongolia in cooperation with Sustainability Pty Ltd of Australia. The baseline study report was produced to meet the requirements for screening under the Mongolian Environmental Impact Assessment (EIA) Procedures administered by the Mongolian Ministry for Nature and Environment (MNE).
<p>Bulk density</p>	<ul style="list-style-type: none"> Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	<ul style="list-style-type: none"> A total of 4,428 measurements for specific gravity are recorded in the database, all of which were determined by the water immersion method. The average density of all samples is approximately 2.74 t/m³. In detail there are some differences in density between different rock types, but since the model does not include geological domains a single estimation pass (ID2) was applied to a density attribute. There is no material impact on global tonnages, but it should be noted that density is a function of both lithology and alteration (where intense magnetite/sulphide is present).
<p>Classification</p>	<ul style="list-style-type: none"> The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	<ul style="list-style-type: none"> The mineral resource classification protocols, for drilling and sampling, sample preparation and analysis, geological logging, database construction, interpolation, and estimation parameters are described in the Main Report have been used to classify the 2015 resource. The Mineral Resource statement relates to global estimates of in situ tonnes and grade The Mineral Resource estimate has been classified in accordance with the JORC Code, 2012 Edition using a qualitative approach. The classifications reflect the



Criteria	JORC Code (Section 3) Explanation	Commentary
		competent person's view of the Kharmagtai Copper Gold Project.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of Mineral Resource estimates. 	<ul style="list-style-type: none"> XAM's internal review and audit of the Mineral Resource Estimate consisted of data analysis and geological interpretation of individual cross-sections, comparing drill-hole data with the resource estimate block model. Good correlation of geological and grade boundaries were observed 2013 - Mining Associates Ltd. was engaged to conduct an Independent Technical Report to review drilling, sampling techniques, QAQC and previous resource estimates. Methods were found to conform to international best practice.
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	<ul style="list-style-type: none"> An approach to the resource classification was used which combined both confidence in geological continuity (domain wireframes) and statistical analysis. The level of accuracy and risk is therefore reflected in the allocation of the measured, indicated and inferred resource categories. Resource categories were constrained by geological understanding, data density and quality, and estimation parameters. It is expected that further work will extend this considerably. Resources estimates have been made on a global basis and relates to in situ grades. Confidence in the Indicated resource is sufficient to allow application of Modifying Factors within a technical and economic study. The confidence in Inferred Mineral Resources is not sufficient to allow the results of the application of technical and economic parameters. The deposits are not currently being mined. There is surface evidence of historic artisanal workings. No production data is available.

1.4 JORC TABLE 1 – SECTION 4 ESTIMATION AND REPORTING OF ORE RESERVES

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



APPENDIX 2: 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 30 June 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 	<ul style="list-style-type: none"> Drill samples are logged for lithology, mineralisation and alteration and geotechnical aspects using a standardised logging system, including



	<p>appropriate Mineral Resource estimation, mining studies and metallurgical studies.</p> <ul style="list-style-type: none"> • Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. • The total length and percentage of the relevant intersections logged. 	<p>the recording of visually estimated volume percentages of major minerals.</p> <ul style="list-style-type: none"> • Drill core was photographed after being 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.
<p>Sub-sampling techniques and sample preparation</p>	<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.
<p>Quality of assay data and laboratory tests</p>	<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



		<p>Ore Grade 12 Elements Package by Four Acid Digestion with ICP-AES</p> <ul style="list-style-type: none"> • Quality assurance was provided by introduction of known certified standards, blanks and duplicate samples on a routine basis. • 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.
<p>Verification of sampling and assaying</p>	<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.
<p>Location of data points</p>	<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.
<p>Data spacing and distribution</p>	<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.

		<ul style="list-style-type: none"> • 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 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.



<p>Exploration done by other parties</p>	<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.
<p>Geology</p>	<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 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. • 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.
<p>Drill hole Information</p>	<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 	<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.



	<p>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.</p>	
<p>Data Aggregation methods</p>	<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 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. • The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<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 subintervals, to allow the reader to make an assessment of the balance of high and low grades in the intercept. • 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: CuEq = Cu% x(Aug/t x 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.
<p>Relationship between mineralisation on widths and intercept lengths</p>	<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.
<p>Diagrams</p>	<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.
<p>Balanced reporting</p>	<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.
<p>Other substantive exploration data</p>	<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 	<ul style="list-style-type: none"> • Extensive work in this area has been done, and is reported separately.



	method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	
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 drilling areas, provided this information is not commercially sensitive	<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 extraction.• Exploration on going.

1.1 JORC TABLE 1 – SECTION 4 ESTIMATION AND REPORTING OF ORE RESERVES

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

Appendix 5B

Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

Name of entity

XANADU MINES LIMITED	
ABN	Quarter ended ("current quarter")
92 114 249 026	30 September 2016

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (9 months) \$A'000
1. Cash flows from operating activities		
1.1 Receipts from customers	-	-
1.2 Payments for		
(a) exploration & evaluation	(1,261)	(2,347)
(b) development	-	-
(c) production	-	-
(d) staff costs	(498)	(1,512)
(e) administration and corporate costs	(348)	(927)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	9	26
1.5 Interest and other costs of finance paid	(94)	(295)
1.6 Income taxes paid	-	-
1.7 Research and development refunds	-	-
1.8 Other (provide details if material)	-	-
1.9 Net cash from / (used in) operating activities	(2,192)	(5,055)

2. Cash flows from investing activities		
2.1 Payments to acquire:		
(a) property, plant and equipment	-	-
(b) tenements (see item 10)	-	-
(c) investments	-	-
(d) other non-current assets	-	-

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (9 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) property, plant and equipment	-	-
	(b) tenements (see item 10)	-	-
	(c) investments	-	-
	(d) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	(4,129)
2.6	Net cash from / (used in) investing activities	-	(4,129)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of shares	-	11,266
3.2	Proceeds from issue of convertible notes	-	-
3.3	Proceeds from exercise of share options	-	-
3.4	Transaction costs related to issues of shares, convertible notes or options	(167)	(709)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	(167)	10,557

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	12,241	8,639
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(2,192)	(5,055)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	-	(4,129)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	(167)	10,557
4.5	Effect of movement in exchange rates on cash held	(98)	(228)
4.6	Cash and cash equivalents at end of period	9,784	9,784

5. Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1 Bank balances	9,784	12,241
5.2 Call deposits	-	-
5.3 Bank overdrafts	-	-
5.4 Other (provide details)	-	-
5.5 Cash and cash equivalents at end of quarter (should equal item 4.6 above)	9,784	12,241

6. Payments to directors of the entity and their associates

- 6.1 Aggregate amount of payments to these parties included in item 1.2
- 6.2 Aggregate amount of cash flow from loans to these parties included in item 2.3
- 6.3 Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2

**Current quarter
\$A'000**

161

-

N/A

7. Payments to related entities of the entity and their associates

- 7.1 Aggregate amount of payments to these parties included in item 1.2
- 7.2 Aggregate amount of cash flow from loans to these parties included in item 2.3
- 7.3 Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2

**Current quarter
\$A'000**

-

-

N/A

Mining exploration entity and oil and gas exploration entity quarterly report

8. Financing facilities available <i>Add notes as necessary for an understanding of the position</i>	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
8.1 Loan facilities	3,591	3,591
8.2 Credit standby arrangements	-	-
8.3 Other (please specify)	-	-
8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.		

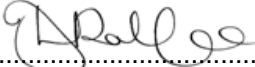
Secured loan facility by Noble Resources International Pte.Ltd at interest rate LIBOR + 10%.

9. Estimated cash outflows for next quarter	\$A'000
9.1 Exploration and evaluation	2,510
9.2 Development	-
9.3 Production	-
9.4 Staff costs	565
9.5 Administration and corporate costs	367
9.6 Other (provide details if material)	96
9.7 Total estimated cash outflows	3,538

10. Changes in tenements (items 2.1(b) and 2.2(b) above)	Tenement reference and location	Nature of interest	Interest at beginning of quarter	Interest at end of quarter
10.1 Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced	N/A			
10.2 Interests in mining tenements and petroleum tenements acquired or increased	N/A			

Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Sign here: 

Company secretary

Date: 31 October 2016

Print name: Janine Rolfe

Notes

1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
2. If this quarterly report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.