



# QUARTERLY ACTIVITIES REPORT

FOR THE QUARTER ENDING 31 DECEMBER 2013

Xanadu Mines Ltd is an exploration company that has assembled a significant exploration portfolio across Mongolia's porphyry belts.

These belts are part of the larger Central Asian Orogenic Belt - one of the last great exploration frontiers known to host large copper porphyry deposits – and Mongolia is emerging as a globally significant copper province.

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## HIGHLIGHTS

- Oyut Ulaan copper-gold project:
  - acquisition completed
  - drilling extends Diorite Hill mineralisation
  - trenching validates license prospectivity identifying several drill targets
- Mongol Metals joint venture formed with director and substantial shareholder, Mr Ganbayar Lkhagvasuren, to pursue new business development opportunities
- Xanadu continues to implement its copper strategy and staged exit from coal

Xanadu Mines Ltd (**ASX: XAM** – “**Xanadu**”) is pleased to provide shareholders with an update of operations for the three months to 31 December 2013.

## OYUT ULAAN COMPLETION

On 22 November 2013, at the company’s Annual General Meeting, Xanadu shareholders approved issue of shares and performance share options to complete the acquisition of a 90% interest in Vantage LLC. Vantage LLC owns 100% of the Oyut Ulaan porphyry copper-gold project, located in the Dornogovi Province of southern Mongolia.

Xanadu has subsequently completed the acquisition including:

- payment of cash consideration of US\$600,000;
- the issue of 5,000,000 Xanadu shares to Aberdeen International Inc; and
- the issue of Series A & B performance share options contingent on the recognition of a JORC resource of up to 900,000 tonnes contained copper equivalent.

Aberdeen International Inc is an investment company and merchant bank listed on the Toronto Stock Exchange. Aberdeen has a broad investment mandate in the resources sector with a depth of sector experience and an association with Forbes & Manhattan.

## OYUT ULAAN EXPLORATION

Xanadu reported on exploration results at Oyut Ulaan on 9 and 15 October 2013. The exploration program included drilling along strike of previously discovered mineralisation at the Diorite Hill prospect and new mapping and trenching across the license (Figure 1).

The Diorite Hill prospect is a broad zone of strong quartz stockwork veining and associated high-grade copper-gold mineralisation (0.3 to 1.5% copper; 0.5 to >5 g/t gold) that is now at least 600m long, 40 to 80m wide, and at least 200m deep and remains open in all directions. This most recent drilling (Appendix 2) significantly extended and confirmed the continuity of shallow high-grade porphyry copper-gold mineralisation, including;

- OUDDH015 intersected (from 83m) 51m grading 1.46g/t Au and 0.64% Cu (including (from 98m) 28m grading 2.31g/t Au and 0.93% Cu)

The mineralisation is characterised by high gold grades, with per cent copper to grams/tonne gold ratios typically exceeding 1:2. Mineralisation at Diorite Hill resulted in the formation of quartz-sulphide-magnetite veins and minor breccias tightly focused along a controlling structure adjacent to a felsic pluton. The principle ore minerals are bornite, chalcopyrite and gold. The high gold grades well correlated with bornite. Bornite-rich cores

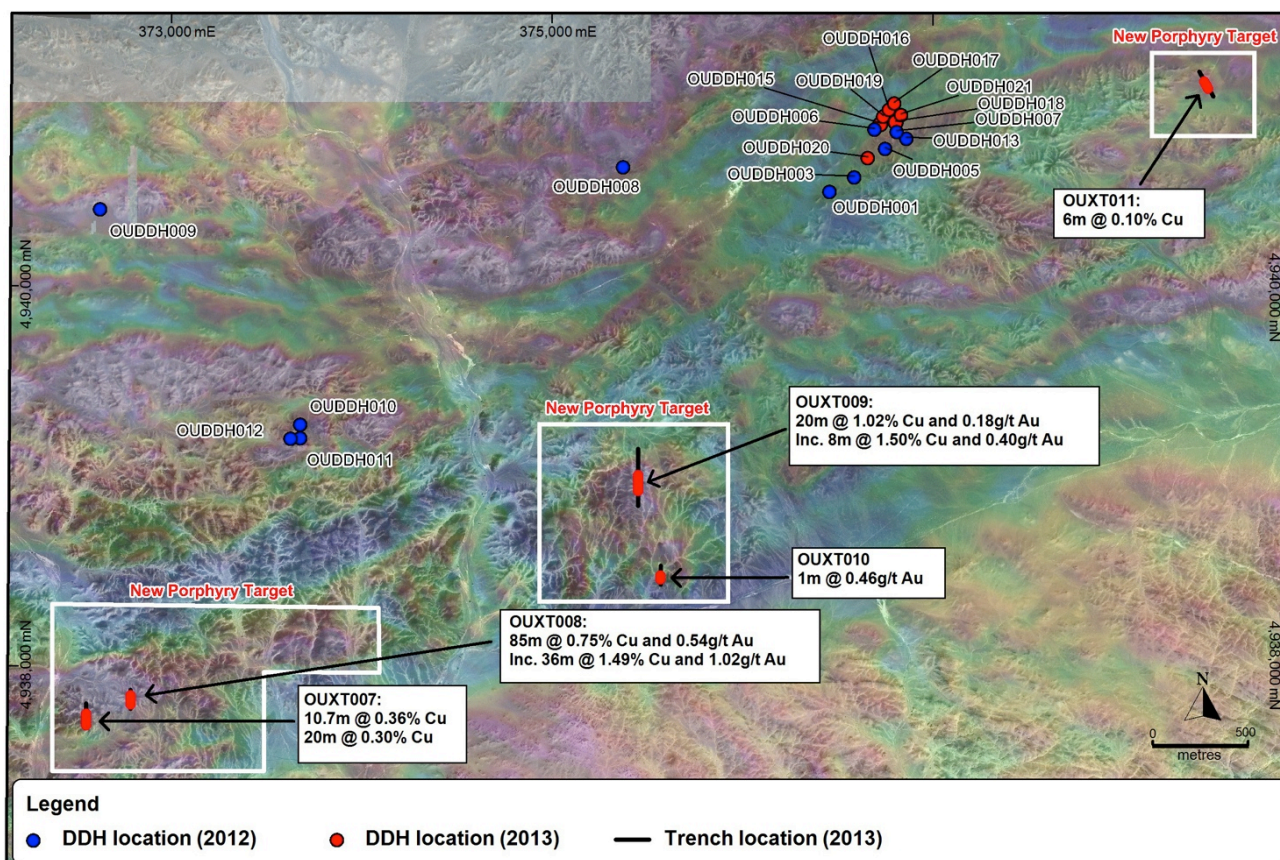
are typically found in other gold-rich porphyry deposits such as the Ridgeway and North Parkes copper-gold deposits in NSW, Australia.

This most recent drilling at the Diorite Hill prospect has only tested a relatively small part of the system with much of it remaining under shallow cover. There is potential for further mineralisation along the main structure (magnetic high) at Diorite Hill and the likelihood that mineralisation extends (and could amalgamate) at depth. Malachite stained outcrops and quartz stockwork zones indicate that the Diorite Hill prospect may continue for 2 kilometers along strike to the northeast of current drilling.

Outcrop throughout the Oyut Ulaan area is sparse and an initial program of reconnaissance trenching (Appendix 3) was highly successful, resulting in the discovery of several new porphyry centres, including;

- OUXT008 intersected 85m grading 0.75% Cu and 0.53g/t Au (including 33m grading 1.49% Cu and 1.02g/t Au)

Mineralisation intersected in the trenches is characterised by high gold grades, and is similar to that identified in drilling at Diorite Hill.



**Figure 1: Oyut Ulaan 2013 drilling and trenching program**

Xanadu will continue its systematic, low cost exploration program at Oyut Ulaan over 2014. The next phase of exploration commencing in February will focus on delineating potential shallow, high-grade mineralisation by exploring along strike from existing intersections and test the many geophysical and geochemical anomalies which remain within the Oyut Ulaan area district. There is a strong possibility of discovering additional mineralised porphyry centres concealed under shallow cover.

JORC Table 1 is attached for the Oyut Ulaan project as required under the recently effective JORC 2012 Code.

## **MONGOL METALS FORMATION**

On 13 December 2013, Xanadu advised that it has established a joint venture company, Mongol Metals LLC, through a wholly-owned subsidiary. The joint venture partner is Mr Ganbayar Lkhagvasuren, director and substantial shareholder of Xanadu. The joint venture company is the vehicle for Xanadu and Mr Ganbayar to jointly pursue potential new business development opportunities.

The joint venture recognises the importance of Mongolian partners whose interests are aligned with those of the company and is evidence of the strength of the business relationship between Xanadu and Mr Ganbayar despite the challenges of the last 18 months.

## **OPERATIONS REVIEW**

Calendar 2013 was a challenging year for Xanadu. The company has weathered an acute contraction in global liquidity for minerals and metals exploration projects. Our projects have been impacted by uncertainty with respect to Mongolia's stance towards mining and foreign investment and a reassessment by investors of the role Mongolian coals will play in supplying China. Xanadu remains highly committed to Mongolia and believes in its potential as an emerging copper province.

Xanadu has vigorously pursued its copper strategy and the completion of the Oyut Ulaan acquisition is a key step in its implementation. Xanadu continues to evaluate new copper opportunities in Mongolia. Both management and the board have a high level of conviction regarding Mongolia's copper potential.

Xanadu continues to implement its staged exit from coal. The company has also entered agreements to dispose of its thermal coal projects.

With effect from 31 December 2013, Xanadu is required to provide summary information of its mining tenements under ASX Listing Rule 5.3.3. This information is provided in Appendix 4 of this Quarterly Report. The following table sets out Xanadu's tenement



position taking in to account the completion of the Oyut Ulaan acquisition (held in Vantage LLC) and assuming the completion of the thermal coal divestments discussed above.

<b>Tenement No.</b>	<b>Project Name</b>	<b>Location</b>	<b>Pro-forma % interest</b>
MV-017129	Oyut Ulaan	Dornogovi Province	90%
13670x	Sharchuluut	Bulgan Province	100%
13703x	Elgen Uul	Dornogovi Province	80%
13711x	Zos Uul	Dornogovi Province	80%
13958x	Nuurstei	Northern Mongolia	30%
13580x	Nuurstei	Northern Mongolia	30%
15352x	Khus	Dornogovi Province	50%
14160x	Khurem	Southern Mongolia	100%

## CORPORATE

Xanadu had \$2.8 million of cash on hand as at 31 December 2013. The net decrease in cash over the period was \$1.7 million. This reflects an increased level of corporate activity including due diligence and transaction costs in relation to a material acquisition and related funding arrangements (including payments of US\$450,000 by Xanadu to parties associated with the acquisition). Transaction costs were also incurred for the completion of the Oyut Ulaan project acquisition and the divestment of coal assets.

## COMPETENT PERSON

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

## APPENDIX 1: JORC TABLE 1

### SECTION 1 - SAMPLING TECHNIQUES AND DATA

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

Criteria	JORC Code Explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Nature and quality of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> </ul>	<ul style="list-style-type: none"> <li>Representative 2 metre samples were taken from trenches (costeans) excavated through colluvial cover to bedrock.</li> <li>Representative 2 meter samples were taken from ½ PQ, HQ and NQ diameter diamond drill core.</li> <li>Visual checks by geologists of sampling confirm sample intervals.</li> <li>Only assay result results from recognised, independent assay laboratories were used in reporting after QAQC was verified.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Drill type and details.</li> </ul>	<ul style="list-style-type: none"> <li>Diamond drilling of PQ, HQ and NQ diameters with standard and triple tube sample recovery has been the primary drilling method.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Diamond core recoveries averaged 98% overall in mineralised zones.</li> <li>In localised areas of faulting and/or fracturing the recoveries decrease; however this is a very small percentage of the overall mineralised zones.</li> <li>Analysis of recovery results vs. grade indicates no significant trends. Indicating bias of grades due to diminished recovery and / or wetness of samples</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> </ul>	<ul style="list-style-type: none"> <li>Diamond drill core samples and trenches are logged for geology, alteration and mineralisation using a standardised logging system.</li> <li>Rock quality data (RQD) is collected from all diamond drill core.</li> <li>Diamond drill core and trenches were photographed after being logged by a</li> </ul>

Criteria	JORC Code Explanation	Commentary
	<ul style="list-style-type: none"> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<p>geologist.</p> <ul style="list-style-type: none"> <li>All diamond drill cores and trenches have been logged by a competent geologist.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>Trench channel samples are taken from the base of the trench wall (about 10cm above the floor). Samples are approximately 3 kg. The sample is collected with a plastic sheet and tray.</li> <li>Diamond drill core is cut in half with a diamond saw, following the line marked by the geologist.</li> <li>The rock saw is regularly flushed with fresh water.</li> <li>Sample intervals are a constant 2m interval down-hole in length.</li> <li>Routine sample preparation and analyses of diamond drill core and trench samples were carried out by ALS Mongolia LLC (ALS Geochemistry Mongolia) who operates an independent sample preparation and analytical laboratory in Ulaanbaatar.</li> <li>All samples were prepared to meet standard quality control procedures as follows: crushed to 70% less than 2mm, riffle split off 1kg, pulverize split to better than 85% passing 200 mesh (75 microns) and split to 150g.</li> <li>Certified reference materials (CRMs), blanks and pulp duplicate were randomly inserted to manage the quality of data.</li> <li>Sample sizes are well in excess of standard industry requirements.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors</li> </ul>	<ul style="list-style-type: none"> <li>All samples were routinely assayed by ALS Mongolia for precious and base metals.</li> <li>Gold is determined using 30g fire assay with aqua regia digestion, followed by an atomic absorption spectroscopy (AAS) finish, with a lower detection (LDL) of 0.01 ppm.</li> </ul>

Criteria	JORC Code Explanation	Commentary
	<p>applied and their derivation, etc.</p> <ul style="list-style-type: none"> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>48 elements by four-acid-digestion, ICP-MS and ICP-AES (ME-MS61 and ME-MS61m).</li> <li>Four acid digestion is considered near total digestion.</li> <li>Quality assurance was provided by introduction of known certified standards, blanks and duplicate samples on a routine basis.</li> <li>Assay results outside the optimal range for methods were re-analysed by appropriate methods.</li> <li>Ore Research Pty Ltd certified copper and gold standards have been implemented as a part of QAQC procedures, as well as coarse and pulp blanks, and certified matrix matched copper-gold standards.</li> <li>QAQC monitoring is an active and ongoing process on batch by batch basis by which acceptable results is re-assayed as soon as practicable.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>All assay data QAQC is checked prior to loading into the data base.</li> <li>The data is managed XAM geologists.</li> <li>No twinned drill holes exist, given the early stage of the exploration project.</li> <li>The data base and geological interpretation is collectively managed by XAM.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>All drill hole collars and trenches have been surveyed with a differential global positioning system (DGPS) to within 10cm accuracy.</li> <li>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.</li> </ul>



Criteria	JORC Code Explanation	Commentary
		<ul style="list-style-type: none"> <li>• UTM WGS84 49N grid.</li> <li>• The DTM is based on 1 m contours with an accuracy of <math>\pm 0.01</math> m.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• Data spacing for reporting of Exploration Results.</li> <li>• 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.</li> <li>• Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>• Trenching has been completed on nominal northwest-southeast and north-south trending sections on widely spaced lines. Channel sampling every 2m of the 1m wide trench.</li> <li>• Drilling has been completed on nominal northwest-southeast and north-south trending sections, on 100m spacing within mineralised zones.</li> <li>• Vertical spacing of intercepts on the mineralised zones similarly commences at 100m spacing for mineralised zones.</li> <li>• 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.</li> <li>• Holes have been drilled to 400m vertical depth.</li> <li>• The data spacing and distribution is not sufficient to establish geological and grade continuity appropriate for the a Mineral Resource estimation.</li> <li>• Samples have not been composited.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>• If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>• Drilling and trenching has been predominantly completed on northwest trending section lines across the strike of the known mineralised zones and from either the north or the south depending on the dip.</li> <li>• Vertical dipping mineralised zones were predominantly drilled to the northwest or north.</li> <li>• Scissor drilling (drilling from both north and south) has been used in key mineralised zones to achieve unbiased sampling of possible structures and mineralised zones.</li> </ul>

Criteria	JORC Code Explanation	Commentary
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Samples are dispatched from site through via company employees to the Laboratories.</li> <li>Samples are signed for at the Laboratory with confirmation of receipt emailed through.</li> <li>Samples are then stored at the lab and returned to a locked storage site.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data</li> </ul>	<ul style="list-style-type: none"> <li>Internal audits of sampling techniques and data management on a regular basis, to ensure industry best practice is employed at all times.</li> </ul>

## SECTION 2 – REPORTING OF EXPLORATION RESULTS

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

Criteria	JORC Code Explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, over riding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The Project comprises 1 Mining Licences (MV-17129A).</li> <li>Xanadu now owns 90% of Vantage LLC, the 100% owner of the Oyut Ulaan mining license.</li> <li>The Mongolian Minerals Law (2006 and Mongolian Land Law (2002) govern exploration, mining and land use rights for the project.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Previous exploration was conducted by Ivanhoe Mines Ltd and Vantage LLC including surface mapping and geochemistry, diamond drilling and geophysics.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The mineralisation is characterised as porphyry copper-gold type.</li> <li>Porphyry copper-gold deposits are formed from magmatic hydrothermal fluids typically associated with felsic intrusive stocks that have deposited metals as sulphides both within the intrusive and the intruded host rocks. Quartz stockwork veining is typically associated with sulphides occurring both within the quartz veinlets and disseminated 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 prospects at Oyut Ulaan are atypical in that they are associated with intermediate intrusions of diorite to quartz diorite composition, however the deposits are in terms of contained gold significant, and similar gold-rich porphyry deposits globally.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all material drill holes: easting and northing of the drill</li> </ul>	<ul style="list-style-type: none"> <li>See results above.</li> </ul>

Criteria	JORC Code Explanation	Commentary
	<p>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.</p> <ul style="list-style-type: none"> <li>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.</li> </ul>	
<b>Data Aggregation methods</b>	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>A nominal cut-off of 0.1% Cu is used for identification of potentially significant intercepts for reporting purposes.</li> <li>Most of the reported intercepts are shown in sufficient detail to allow the reader to make an assessment of the balance of high and low grades in the intercept.</li> <li>The copper equivalent (CuEq) calculation represents the total metal value for each metal, multiplied by the conversion factor, summed and expressed in equivalent copper percentage. Grades have not been adjusted for metallurgical or refining recoveries and the copper equivalent grades are of an exploration nature only and intended for summarising grade. The copper equivalent 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 <math>(CuEq) = Cu\% + Ag (g/t) \times 0.012 + Au (g/t) \times 0.625</math> Assumptions- Cu (US\$7,500/t), Ag (US\$30/oz) and Au (US\$1,500/oz).</li> </ul>
<b>Relationship between mineralisation on widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>Exploration results have been reported as an interval with 'from' and 'to' stated in tables of significant economic intercepts.</li> </ul>

Criteria	JORC Code Explanation	Commentary
	hole length, true width not known').	<ul style="list-style-type: none"> <li>• Tables clearly indicate that true widths will generally be narrower than those reported.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• Refer to ASX releases.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• Exploration results have been reported at a range of grades, predominantly above a minimum for potentially significant intercepts for reporting purposes.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>• Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul style="list-style-type: none"> <li>• Extensive work in this area has been done, and is reported separately</li> <li>• Detailed geological mapping</li> <li>• Surface geochemistry (1,253 rock-chip samples).</li> <li>• Geophysics includes ground magnetics (332 km).</li> <li>• Diamond drill includes 17 holes (5000 metres).</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>• The nature and scale of planned further work.</li> <li>• Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive</li> </ul>	<ul style="list-style-type: none"> <li>• The mineralisation is open at depth and along strike.</li> <li>• A multi-disciplinary exploration program is planned to test areas previously drilled with high-grade, near-surface results, which have the potential to host further mineralisation at depth and along strike; and test the many untested geophysical and geochemical anomalies remain within the Oyut Ulaan area district, as there is a strong possibility of discovering additional mineralised porphyry centres.</li> <li>• Exploration on going.</li> </ul>



## APPENDIX 2: OYUT ULAAN DIAMOND DRILL HOLE DATA

**Table 1: Holes completed at Oyut Ulaan in September 2013:**

Hole ID	Prospect	UTM Easting	UTM Northing	Depth	Angle	Azimuth
OUDDH015	Diorite Hill	376723	4940861	250.00	-70	120
OUDDH016	Diorite Hill	376771	4940940	174.50	-65	120
OUDDH017	Diorite Hill	376797	4940970	177.50	-65	120
OUDDH018	Diorite Hill	376804	4940869	250.00	-70	300
OUDDH019	Diorite Hill	376736	4940898	195.50	-70	120
OUDDH020	Diorite Hill	376657	4940682	204.50	-65	120
OUDDH021	Diorite Hill	376832	4940907	250.00	-70	300

**Table 2: Significant drill intercepts from at Oyut Ulaan in September 2013:**

Hole ID	Depth From (m)	Depth To (m)	Interval (m)	Gold (g/t)	Copper (%)	CuEq (%)
OUDDH015	43.0	62.0	19.0	0.19	0.31	0.43
	83.0	134.0	51.0	1.46	0.64	1.55
including	98.0	126.0	28.0	2.31	0.93	2.37
OUDDH016	77.0	95.0	18.0	0.39	0.41	0.65
OUDDH017	99.0	110.1	11.1	0.23	0.24	0.38
OUDDH018	123.0	152.0	29.0	0.72	0.44	0.89
OUDDH019	103.1	161.3	58.2	0.44	0.28	0.55
including	103.0	131.0	28.0	0.61	0.37	0.75
OUDDH021	74.0	96.0	22.0	0.36	0.39	0.61
	150.0	194.0	44.0	0.51	0.35	0.67

The copper equivalent (CuEq) calculation represents the total metal value for each metal, multiplied by the conversion factor, summed and expressed in equivalent copper percentage. Grades have not been adjusted for metallurgical or refining recoveries and the copper equivalent grades are of an exploration nature only and intended for summarising grade. The copper equivalent calculation is intended as an indicative value only. The following copper equivalent conversion factors and long term price assumptions have been adopted: Copper Equivalent Formula (CuEq) = Cu% + Ag (g/t) x 0.012 + Au (g/t) x 0.625  
Assumptions- Cu (US\$7,500/t), Ag (US\$30/oz) and Au (US\$1,500/oz).

## APPENDIX 3: OYUT ULAAN TRENCHING DATA

**Table 1:** Trenches completed at Oyut Ulaan in September 2013:

Trench ID	Start Easting	Start Northing	Finish Easting	Finish Northing	Length	Azimuth
OUCT007	372548	4937803	372549	4937673	130	180
OUCT008	372782	4937875	372784	4937775	100	180
OUCT009	375450	4939145	375455	4938845	300	180
OUCT010	375570	4938530	375570	4938430	100	180
OUCT011	378400	4941131	378477	4940998	150	150

**Table 2:** Significant trench intervals from at Oyut Ulaan in September 2013:

Trench ID	From (m)	To (m)	Interval (m)	Copper (%)	Gold (g/t)	CuEq (%)
OUCT007	28.0	38.7	10.7	0.36	-	0.36
	46.0	66.0	20.0	0.30	-	0.30
OUCT008	5.0	90.0	85.0	0.75	0.54	1.09
Including	32.0	68.0	36.0	1.49	1.02	2.12
OUCT009	204.0	224.0	20.0	1.02	0.18	1.13
Including	204.0	212.0	8.0	1.50	0.40	1.75
OUCT010	36.0	38.0	1.0	-	0.46	-
OUCT011	52.0	58.0	6.0	0.10	-	0.10

The mineralisation occurs as both oxides and sulphides.

Trench samples taken at 2 metre intervals.

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 (g/t) x 0.625 Assumptions- Cu (US\$7,500/t) and Au (US\$1,500/oz).

## APPENDIX 4: TENEMENTS HELD AS AT 31 DECEMBER 2013

Set out below is the relevant information in relation to Xanadu's mining tenements as required under ASX Listing Rule 5.3.3 (effective 31 December 2013).

Tenement No.	Tenement Name	Location	Change in interest (%)	Interest as at 31 Dec. (%)
MV-017129	Oyut Ulaan	Dornogovi Province	-	25%*
13670x	Sharchuluut	Bulgan Province	-	100%
13703x	Elgen Uul	Dornogovi Province	-	80%
13711x	Zos Uul	Dornogovi Province	-	80%
14451x	Suuj	Dornogovi Province	-	80%
15004x	Wild Horse	Dornogovi Province	-	80%
14160x	Khurem	Southern Mongolia	-	100%
MV-016871	Khar Tarvarga	Kov Province	-	100%
MV-017279	Galshar	Dornogovi Province	-	100%
MV-017280	Galshar	Dornogovi Province	-	100%
MV-017294	Galshar	Dornogovi Province	-	100%
13958x	Nuurstei	Northern Mongolia	-	30%
13580x	Nuurstei	Northern Mongolia	-	30%
15352x	Khus	Dornogovi Province	-	50%
15142x	Khavsgait	Northern Mongolia	(50%) **	-
15259x	Argalant	Dornogovi Province	(51%) **	-
15157x	Amgalant	Dornogovi Province	(51%) **	-

\* As announced on 16 January 2014, Xanadu's interest in Oyut Ulaan is now 90%.

\*\* Change is a result of cancellation of licences

## 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, 01/05/2013

Name of entity

**XANADU MINES LTD**

ABN

92 114 249 026

Quarter ended ("current quarter")

31 December 2013

### Consolidated statement of cash flows

		Current quarter \$A'000	Year to date ( 6 months) \$A'000
<b>Cash flows related to operating activities</b>			
1.1	Receipts from product sales and related debtors	-	-
1.2	Payments for (a) exploration & evaluation	(339)	(757)
	(b) development	-	-
	(c) production	-	-
	(d) administration	(721)	(1,305)
1.3	Dividends received	-	-
1.4	Interest and other items of a similar nature received	31	104
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Other (provide details if material)	-	9
<b>Net Operating Cash Flows</b>		(1,029)	(1,949)
<b>Cash flows related to investing activities</b>			
1.8	Payment for purchases of: (a) prospects	(689)	(689)
	(b) equity investments	-	-
	(c) other fixed assets	-	-
1.9	Proceeds from sale of: (a) prospects	-	-
	(b) equity investments	-	-
	(c) other fixed assets	-	-
1.10	Loans to other entities	-	-
1.11	Loans repaid by other entities	-	-
1.12	Other (provide details if material)	-	-
<b>Net investing cash flows</b>		(689)	(689)
1.13	Total operating and investing cash flows (carried forward)	(1,718)	(2,638)

+ See chapter 19 for defined terms.

**Appendix 5B****Mining exploration entity and oil and gas exploration entity quarterly report**

1.13	Total operating and investing cash flows (brought forward)	(1,718)	(2,638)
	<b>Cash flows related to financing activities</b>		
1.14	Proceeds from issues of shares, options, etc.	-	-
1.15	Proceeds from sale of forfeited shares	-	-
1.16	Proceeds from borrowings	-	-
1.17	Repayment of borrowings	-	-
1.18	Dividends paid	-	-
1.19	Other (provide details if material)	-	-
	<b>Net financing cash flows</b>	-	-
	<b>Net increase (decrease) in cash held</b>	(1,718)	(2,638)
1.20	Cash at beginning of quarter/year to date	4,598	5,642
1.21	Exchange rate adjustments to item 1.20	(39)	(163)
1.22	<b>Cash at end of quarter</b>	2,841	2,841

**Payments to directors of the entity, associates of the directors, related entities of the entity and associates of the related entities**

		Current quarter \$A'000
1.23	Aggregate amount of payments to the parties included in item 1.2	164
1.24	Aggregate amount of loans to the parties included in item 1.10	-

1.25 Explanation necessary for an understanding of the transactions

Payment of Director's fees and salaries

**Non-cash financing and investing activities**

2.1 Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows

Not Applicable.

+ See chapter 19 for defined terms.



**Appendix 5B**

**Mining exploration entity and oil and gas exploration entity quarterly report**

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- 2.2 Details of outlays made by other entities to establish or increase their share in projects in which the reporting entity has an interest

Not Applicable.

### Financing facilities available

*Add notes as necessary for an understanding of the position.*

	Amount available \$A'000	Amount used \$A'000
3.1 Loan facilities	Nil	Nil
3.2 Credit standby arrangements	Nil	Nil

### Estimated cash outflows for next quarter

	\$A'000
4.1 Exploration and evaluation	28
4.2 Development	901
4.3 Production	-
4.4 Administration	649
<b>Total</b>	<b>1,578</b>

### Reconciliation of cash

Reconciliation of cash at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts is as follows.	Current quarter \$A'000	Previous quarter \$A'000
5.1 Cash on hand and at bank	941	798
5.2 Deposits at call	1900	3,800
5.3 Bank overdraft	-	-
5.4 Other (provide details)	-	-
<b>Total: cash at end of quarter (item 1.22)</b>	<b>2,841</b>	<b>4,598</b>

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+ See chapter 19 for defined terms.

### Changes in interests in mining tenements and petroleum tenements

	Tenement reference and location	Nature of interest (note (2))	Interest at beginning of quarter	Interest at end of quarter
6.1	Interests in mining tenements and petroleum tenements relinquished, reduced or lapsed	15259X Joint Venture, Licence Cancelled 15157X Joint Venture, Licence Cancelled 15142X Joint Venture, Licence Cancelled	51% 51% 50%	Nil Nil Nil
6.2	Interests in mining tenements and petroleum tenements acquired or increased			

### Issued and quoted securities at end of current quarter

Description includes rate of interest and any redemption or conversion rights together with prices and dates.

	Total number	Number quoted	Issue price per security (see note 3) (cents)	Amount paid up per security (see note 3) (cents)
7.1	<b>Preference securities</b> (description)			
7.2	Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs, redemptions			
7.3	<b>*Ordinary securities</b>	200,256,390	200,256,390	
7.4	Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs	1,000,000	1,000,000	\$0.06
7.5	<b>*Convertible debt securities</b> (description)			

+ See chapter 19 for defined terms.

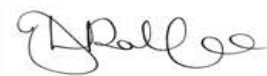
**Appendix 5B**

**Mining exploration entity and oil and gas exploration entity quarterly report**

7.6	Changes during quarter (a) Increases through issues (b) Decreases through securities matured, converted				
7.7	<b>Options</b> (description and conversion factor)	14,000,000 5,240,000 1,000,000 1,000,000 1,000,000 1,000,000 1,000,000 3,300,000 1,300,000 4,000,000		Exercise price \$0.50 \$0.50 \$0.60 \$1.20 \$1.80 \$0.70 \$1.00 )Nil subject to )share price )hurdle	Expiry date 31/12/2014 19/12/2014 30/06/2016 30/06/2016 30/06/2016 31/12/2014 31/12/2014 21/5/2016 21/5/2016 26/2/2016
7.8	Issued during quarter				
7.9	Exercised during quarter				
7.10	Expired during quarter				
7.11	<b>Debentures</b> (totals only)				
7.12	<b>Unsecured notes</b> (totals only)				

## Compliance statement

- 1 This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act or other standards acceptable to ASX (see note 5).
- 2 This statement does /does not\* (*delete one*) give a true and fair view of the matters disclosed.



Sign here:

Company secretary

Date: 31 January 2014

Print name: Janine Rolfe

+ See chapter 19 for defined terms.

## 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 wanting to disclose additional information is encouraged to do so, in a note or notes attached to this report.
- 2 The "Nature of interest" (items 6.1 and 6.2) includes options in respect of interests in mining tenements and petroleum tenements acquired, exercised or lapsed during the reporting period. If the entity is involved in a joint venture agreement and there are conditions precedent which will change its percentage interest in a mining tenement or petroleum tenement, it should disclose the change of percentage interest and conditions precedent in the list required for items 6.1 and 6.2.
- 3 **Issued and quoted securities** The issue price and amount paid up is not required in items 7.1 and 7.3 for fully paid securities.
- 4 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.
- 5 **Accounting Standards** ASX will accept, for example, the use of International Financial Reporting Standards for foreign entities. If the standards used do not address a topic, the Australian standard on that topic (if any) must be complied with.

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