

17 April 2019

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QUARTERLY ACTIVITIES REPORT

FOR THE QUARTER ENDED 31 MARCH 2019

Xanadu Mines Ltd (**ASX: XAM, TSX: XAM**) (**Xanadu** or the **Company**) is pleased to provide shareholders with an update on exploration and associated activities undertaken during the quarter ended 31 March 2019.

HIGHLIGHTS

Kharmagtai open pit scoping study completed

- Scoping Study confirms the Company's strategy to explore for high-value large copper porphyry systems in Mongolia;
- Based on results, the Company will progress additional drilling at the project and proceed with more advanced mining studies;
- The Scoping Study was focussed on open pit mining only and should be considered an interim study leaving a great deal of potential upside development opportunity; and
- The Scoping Study identifies important opportunities for further upside both from extending the life of the open pit mine, assessing higher-grade underground options and evaluating oxide gold potential near surface at several locations;

Significant new zone of bornite gold-rich porphyry mineralisation at Stockwork Hill

- Drill hole KHDDH488 discovered a significant new zone of high-grade mineralisation outside the current open pit resource returning
 - KHDDH488 returns 126m @ 0.88% Cu & 1.39g/t Au (1.77% eCu or 2.77g/t eAu) from 550m;
 including 78m @ 1.14% Cu & 2.06g/t Au (2.45% eCu or 3.85g/t eAu) from 594m;
 - KHDDH488a returns 102m @ 0.55% Cu & 0.72g/t Au (1.01% eCu or 1.58g/t eAu) from 260.5m; and
 - KHDDH488b returns 127m @ 0.6% Cu & 0.81g/t Au (1.12% eCu or 1.75g/t eAu) from 243.1m.

Excellent oxide gold recoveries at Kharmagtai complement existing copper-gold resources

- Excellent gold recoveries up to 92.56% achieved in gravity and leach tests for Golden Eagle;
- The Exploration Target confirms the presence of a substantial oxide gold system measuring approximately ~500m in strike and up to 375m in width at surface, which is mineralised to at least 200m depth and remains open;
- Seven other zones also contain significant shallow oxide gold mineralisation and provide project optionality and support for the company's ongoing exploration strategy at Kharmagtai;
- Oxide gold may provide additional and or alternative options for the development of the project; and
- Further development of metallurgical performance will be targeted with additional test work.

Corporate activities

• Cash balance of A\$3.1 million as at 31 March 2019.





EXPLORATION ACTIVITIES

Xanadu's Managing Director & Chief Executive Officer, Dr Andrew Stewart, said "The open pit Scoping Study clearly demonstrates that the Kharmagtai copper-gold Project is one of the leading development assets globally today. The Scoping Study indicates the potential to develop a low-strip ratio open pit mining operation in an accelerated time frame, with rapid payback of the life-of-mine infrastructure for future open pit and underground mining operations. Whatever lens you look through, whether it is value, strip ratio, cost, mine life, production profile or scalability, we believe Kharmagtai has the potential to be an outstanding project.

Importantly, the Scoping Study identifies many opportunities for further upside that will improve project economics both from extending the life of the open pit mine and targeting the high-grade Stockwork Hill and Copper Hill underground Resources which represent a clear and compelling path to value creation and the ability to expand into a larger resource. Excellent oxide gold recoveries at Golden Eagle complement the existing copper-gold resources and represent the opportunity for a low cost, high-value gold leach operation which could be run early in the development life of Kharmagtai, injecting significant cash into the project to offset the cost of developing a large-scale copper-gold deposit.

Whilst the current Resource provides an excellent platform for the Company to join the ranks of copper producers in the coming years, we believe that the exploration potential holds significant value for shareholders. We are excited with recent drilling (KHDDH488) below the Stockwork Hill deposit which has demonstrated the existence of a significant new zone of bornite gold-rich porphyry mineralisation along strike and at depth of the current open pit resource. In addition, we are currently having success with our Mineral Resource evaluation drilling at the new Zaraa discovery and Golden Eagle oxide gold prospect. We are very confident that these results will provide the basis for a significant increase in the size and grade of the overall Kharmagtai deposit and have a positive impact on ongoing economic studies".

KHARMAGTAI COPPER-GOLD PROJECT

The Kharmagtai copper-gold Project is located within the South Gobi porphyry copper province of Mongolia, approximately 440km south-southwest of Ulaanbaatar and 120km north of Rio Tinto's Oyu Tolgoi copper-gold mine (Figure 1). Access from the capital to Kharmagtai is via sealed highway for 450km and then for 70km along a well-used gravel road. Activities during the quarter ended 31 March 2019 focused on completion of the first open pit Scoping Study at Kharmagtai, metallurgical test work on oxide gold mineralisation at Golden Eagle, diamond drilling at Stockwork Hill to expand the high-grade bornite zone and drilling to expand the White Hill Deposit. A total of 3,618.5m of diamond drilling was conducted at Kharmagtai during the quarter within four drill holes (Figure 2).



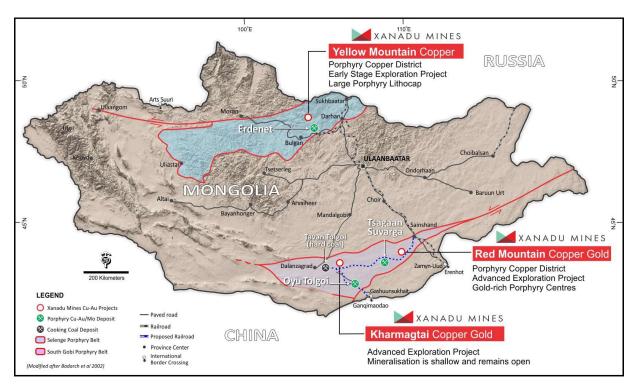


FIGURE 1: Location of the Kharmagtai Project in the South Gobi porphyry copper belt.

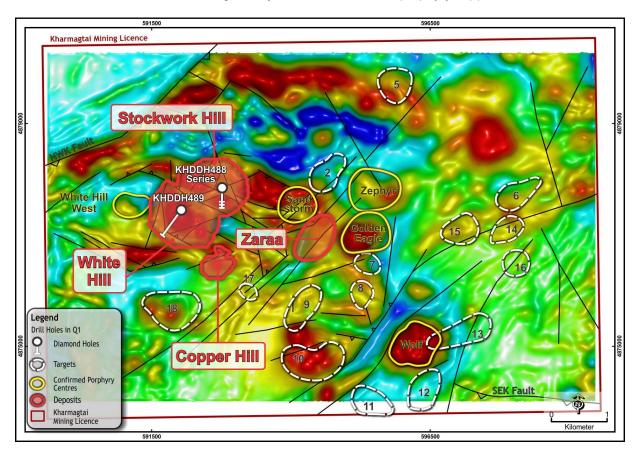


FIGURE 2: The Kharmagtai District showing ground magnetic data and location of the Kharmagtai Deposits (Stockwork Hill, White Hill and Copper Hill), porphyry centres, targets and location of drilling during Q1 2019.





Summary - Kharmagtai open pit project

The Scoping Study commissioned to assess the economic viability of the near-surface copper and gold mineralisation from the Company's Kharmagtai Project in Mongolia. The Scoping Study is based upon the current Indicated and Inferred Mineral Resources.

The Study was commissioned to assess the potential economics of a standalone open cut mine accessing value from the Mineral Resource Estimate as it now exists. It does not consider any value that may be generated using underground mining techniques, or oxide gold potential (refer to Xanadu's ASX/TSX Announcement dated 20 March 2019) nor from possible expansion in the resource stemming from the current evaluation drilling programmes. The project economics are highly encouraging and highlight Xanadu's Kharmagtai Project's potential to become a robust, high margin, rapid payback, long life and low strip ratio copper-gold mine in Mongolia at 10-year average copper and gold prices.

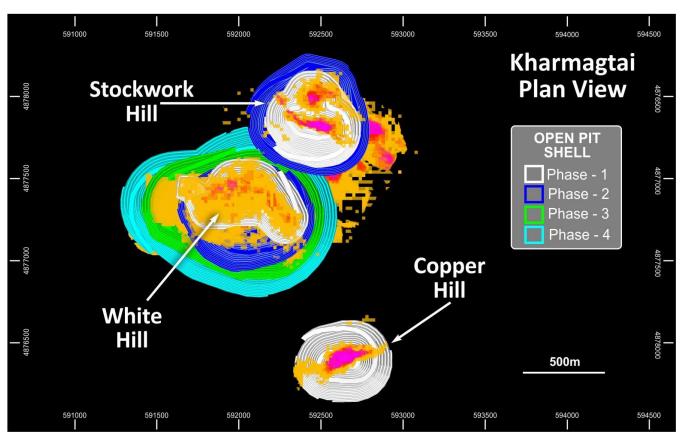
The Scoping Study was prepared by CSA Global Pty Ltd ("CSA Global") with input from reputable industry consultants O2 Mining Limited and the Company. The findings of the Scoping Study are positive with a recommendation that the Project be progressed to the Preliminary Feasibility Study (PFS) level.

The Scoping Study suggests that mining could occur in three deposit areas; Stockwork Hill, Copper Hill and White Hill. The deposits have been optimised using the Lerch-Grossman algorithm and initially will be mined as three separate pits but will ultimately result in two large open pits (Figure 3). The optimised open pit designs extend to a maximum vertical depth of approximately 380m and the largest final pit (Stockwork Hill and White Hill combined) would be 2.1km in length and 1.3km in width. The project was modelled assuming a processing facility of 20 million tonnes per annum ("Mtpa") capacity would be constructed at site to process the mineralisation.

The Scoping Study is based on Indicated Mineral Resources and Inferred Mineral Resources. It should be noted there is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target will be realised.

The Kharmagtai open pit Scoping Study indicates there is the potential to economically extract approximately 51% of mineralisation from within the Indicated and Inferred Mineral Resources (refer to Xanadu's ASX/TSX Announcement dated 31 October 2018) using open cut mining and the material assumptions (Table 1) used in the Scoping Study. The Company notes that all three currently defined deposits are open at depth and along strike and are the subject of current and planned drilling programs.





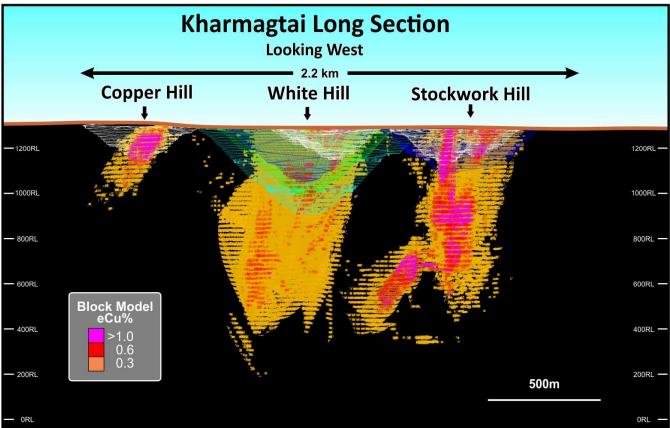


FIGURE 3: Open Pit design from 2019 Scoping Study (colour coded by phase).



Table 1: Key Scoping Study Input Assumptions

Parameters	Units	Estimated Values
Processing		
Maximum processing constraint	Mtpa	20
Metal Recovery		
Copper (average)	%	86.6
Gold (average)	%	70.9
Concentrate transport cost	US\$/t	25
Payablity Cu	%	96
Payability Au	%	90
Smelting Charge Cu	US\$.dmt	90
Refining Charge Au	US\$/Payable Oz	5
Preproduction Capital Cost Estimates		
Open pit mining capital (mining fleet, pre-strip)	US\$ million	115
Surface Infrastructure (camp, workshop, power, magazine, water, tailings)	US\$ million	61
Processing	US\$ million	209
Indirects (owner cost, EPCM)	US\$ million	44
Contingency	US\$ million	55
Total Initial Capital	US\$ million	484
Sustaining Capital	US\$ million	194
Environmental	US\$ million	5
Total Capital	US\$ million	683

NOTES:

- Estimates are based upon the Kharmagtai open pit mining operations only. The Scoping Study excludes the production potential from the Zaara copper-gold deposit, Golden Eagle Oxide, underground sources of mineable material, and further near surface open pit resources. Estimates presented in Table 1 are on the basis of a 100% project interest. Xanadu holds a 76% participating interest in the project through a 1.
- 2.
- The Mineral Resource Estimate reported in accordance with JORC (2012) and NI 43-101 and announced by the Company on 31 October 2018 3. forms the basis of the mining and financial estimates referred to in the Announcement.
- 4. Technical and economic estimates in the Scoping Study are based on low level technical and economic assessments (+/- 35% accuracy) that are not sufficient to support the estimation of Ore Reserves.



Extension to the Stockwork Hill deposit discovered

Drilling is targeting mineralisation below chalcopyrite-gold mineralisation to test for a higher-grade bornite core in the root zones for the causative porphyry intrusion (Figure 4). High-grade mineralisation may manifest as bornite-gold-cemented breccia or as bornite-gold stockwork mineralisation in the causative intrusive. Significant drill hole intersections from assay results received are summarised in Tables 4 and 5.

Drill hole KHDDH488 has returned:

352m @ 0.41% Cu & 0.58g/t Au (0.78% eCu or 1.22g/t eAu) from 448m; including 102m @ 1.00% Cu and 1.67g/t Au (2.06% eCu or 3.23g/t eAu) from 572m; including 78m @ 1.14% Cu and 2.06g/t Au (2.45% eCu or 3.85g/t eAu) from 594m; including 14m @ 1.51% Cu and 3.36g/t Au (3.66% eCu or 5.73g/t eAu) from 622m; and and 10m @ 2.24% Cu and 5.28g/t Au (5.60% eCu or 8.78g/t eAu) from 658m.

Wedge drill hole (KHDDH488A) was collared at a depth of 299m down KHDDH488 targeting the same zone of high-grade mineralisation approximately 50m vertically above KHDDH488. KHDDH488A encountered the gold rich zone (where Au:Cu is greater than 2) from 321.5m downhole returning 102m @ 0.55% Cu and 0.72g/t Au (1.01% eCu or 1.58g/t eAu) from 260.5m.

A second wedge hole (KHDDH488B) was collared at 306m down hole within KHDDH488. This returned 127m @ 0.6% Cu and 0.81g/t Au (1.12% eCu or 1.75g/t eAu) from 243.1m including 65m @ 0.72% Cu and 1.14g/t Au (1.44% eCu or 2.26g/t eAu) from 303.1m.

The high-grade bornite zone as currently drilled, appears to be the tip of a wedge of mineralisation that could broaden significantly at depth. Drilling will focus on expanding this wedge of mineralisation in the coming months.

Expanding White Hill Deposit

A single diamond drill hole (KHDDH489) was drilled at White Hill, targeting the extensions to mineralisaiton to the south west of the main deposit (Figure 5). KHDDH489 expanded known mineralisaiton some 540m towards the southwest and at depth from the previous limits of drilling.

KHDDH489 returned:

735.1m @ 0.33% Cu and 0.12g/t Au (0.4% eCu or 0.63g/t eAu) from 603.7m, including 316m @ 0.47% Cu and 0.19g/t Au (0.59% eCu or 0.92g/t eAu) from 674m.



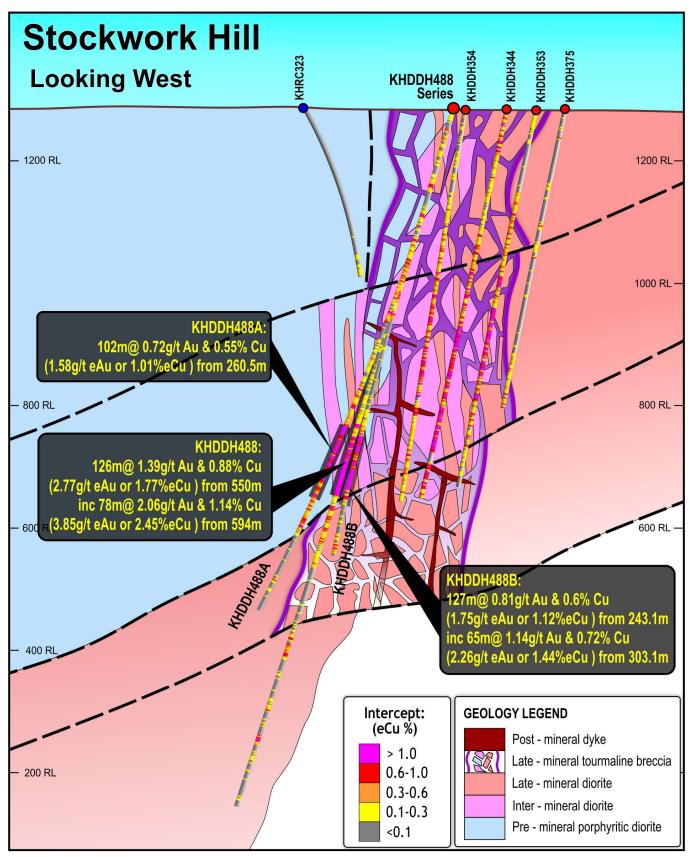


FIGURE 4: Cross section through Stockwork Hill showing Drill Holes KHDDH488, KHDDH488A and KHDDH488B.



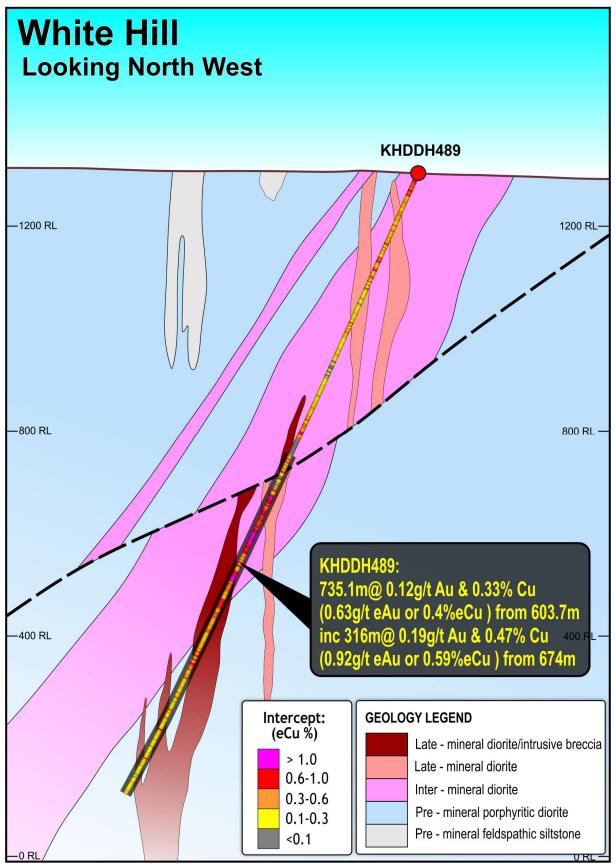


FIGURE 5: Cross section through White Hill showing Drill Hole KHDDH489.



Excellent oxide gold recoveries at Kharmagtai complement existing copper-gold resources

Preliminary testwork on diamond core from shallow oxide gold mineralisation at the Kharmagtai copper-gold project has returned excellent results. Gold mineralisation at Golden Eagle is hosted in the oxide cap above a deeper and significantly larger copper-gold porphyry (refer to Xanadu's ASX Announcement – 16 January 2017). A new Exploration Target and metallurgical tests confirm the presence of significant, leachable oxide gold at Golden Eagle, one of eight zones known to contain significant shallow oxide gold mineralisation.

The aim of this test program was to assess the suitability of Golden Eagle mineralisation for gravity concentration and/or cyanidation processes. Three composite samples were selected for the work, based on grade ranges across a variety of rock types within a conceptual 20Mt open pit. Each composite consisted of 10 individual two-metre sample intervals of drill core and coarse reject material from previous assays representing mineralisation of the following grades (2.35g/t Au, 1.32g/t Au and 0.5g/t Au).

Gravity separation and bottle roll leach test work was conducted on three composite samples from Golden Eagle during the quarter returning excellent recoveries (up to 92.56%).

Each composite sample represented a specific grade range (0.5g/t Au, 1.32g/t Au and 2.35g/t Au) and were made up of ten individual samples from across the deposit, within a conceptual 20Mt open pit shell. Each composite was tested for commination, gravity concentration and bottle roll cyanidation tests at different grind sizes. Table 1 shows a summary of the integrated results.

Table 2: Integrated Gravity Concentration and Cyanidation Results

Composite	Au	Gravity	Gravity Tailings Recove	ery Total
ID	Recovery by	Tails P ₈₀ ,	Au %	recovery,
	gravity (%)	μm	Au 70	%
		150	92.23	90.76
GE-01	22.86	100	92.63	91.05
		70	94.68	92.56
		150	85.98	81.27
GE-02	5.36	100	90.57	85.32
		70	92.56	87.08
		150	80.00	77.41
GE-03	14.68	100	79.17	76.75
		70	81.63	78.69

These preliminary metallurgical test work results provide a very good indication of the viability of a simple and efficient gold recovery process at Golden Eagle using SAG or ball milling to a grind of approximately 80% -100µm whilst using gravity concentration to recover the larger gold grains and then using cyanidation (Carbon in Pulp) to extract the finer gold. The test work suggests gold recoveries in the range of 76% to 92%.

Shallow Gold Exploration Target defined for Kharmagtai

A review of the shallow gold potential of the Kharmagtai lease has been conducted with the aim of assessing the potential for a low-cost, high-value gold project to deliver cash into the early stages of a larger scale copper-gold development.

Eight gold targets across the lease have been reviewed in detail and exploration targets developed for each of these prospects. This work informs a decision point for drilling and further metallurgical work. These targets include sparsely drilled oxide gold above the existing resources at Copper Hill and Stockwork Hill, oxide gold potential above Golden Eagle, disseminated free gold and electrum within Golden Eagle and numerous carbonate base metal



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epithermal gold veins previously drilled while targeting porphyry mineralisation (Table 3). The location of each target is summarised in Figure 6.

For full details please consult ASX/TSX Announcement dated 20th March 2019.

The Exploration Target is conceptual in nature as there has been insufficient exploration to define a Mineral Resource. It is uncertain if further exploration will result in the determination of a Mineral Resource under The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, the JORC Code" (JORC 2012). The Exploration Target is not being reported as part of any Mineral Resource or Ore Reserve.

TABLE 3: Kharmagtai oxide gold Exploration Targets

Target	Gold	Length*	144°-141.*2	D11-*4	D	Tonnage	Grade	Metallurgical	Potential Oz Range including metallurgical
Name	Style*1		Width*3	Depth*4	Density*5	Range*6	Range*7	Recoveries*8	factor*9
	Oxide gold								
	cap and								
Golden	disseminat								
Eagle (0.3	ed free								
to 0.6g/t	gold and	400 to	300 to			66Mt to	0.3 to		1MOz to
Au)	electrum	500m	375m	200m	2.76	103Mt	0.6g/t Au	77 to 92% (average 85%)	1.32MOz
	Oxide gold								
	cap and								
	disseminat								
Golden	ed free								
Eagle (0.6	gold and	200 to	75 to			6.2Mt to	0.6 to 1g/t		170KOz to
to 1g/t Au)	electrum	350m	100m	150m	2.76	14.5Mt	Au	78 to 92% (average 85%)	240KOz
	Oxide gold								
Copper Hill	cap above	150 to	50 to			0.62Mt to	1 to 2g/t	No metallurgy assumes	34KOz to
Oxide Gold	Copper Hill	200m	100m	30m	2.75	1.65Mt	Au	85%	45KOz
	Oxide gold								
Stockwork	cap above								
Hill Oxide	Stockwork	200 to	85 to			1.4Mt to	1 to 2g/t	No metallurgy assumes	77KOz to
Gold	Hill	400m	100m	30m	2.75	3.3Mt	Au	85%	90KOz
							Vein one		
							2.5 to		
	C.B.M	2 X 200					18g/t Au		
Zaraa Vein	Oxide	to					Vein Two		
One and	Epithermal	400m				99.5Kt to	1 to 3g/t	No metallurgy assumes	15KOz to
Two	Gold	veins	2 to 3m	45	2.75	195Kt	Au	85%	32.75KOz
	C.B.M								
Wolf Vein	Oxide	2 x 400							
One and	Epithermal	to				148Kt to	2 to 4.5g/t	No metallurgy assumes	16KOz to
Two	Gold	500m	1.5 to 2m	45	2.75	248Kt	Au	85%	22KOz
-	C.B.M				-				
	Oxide								
Badger	Epithermal	280 to				52Kt to	2.8 to	No metallurgy assumes	9.5KOz to
Vein	Gold	500m	1.5 to 2m	45	2.75	124Kt	5.7g/t Au	85%	10KOz
• • • • • • • • • • • • • • • • • • • •	C.B.M	300111	2.5 to 2.11		2.75	12 1111	3.76/ C. N	03/0	101102
Seventeen	Oxide	2 X 400							
One and	Epithermal	to				128Kt to		No metallurgy assumes	5.2KOz to
	•	500m	15 to 2m	45	2.75	248Kt	1 to 1 Ea/+	85%	6.8KOz
Two	Gold	500111	1.5 to 2m	40	2./3	Z46Nl	1 to 1.5g/t	0370	U.ONUZ
	C.B.M								
	Oxide	400 +-				100//+ + -	1 += 2=/:	Nie westellewere east or -	
Tausal T	Epithermal	400 to	2+-2	45	2.75	100Kt to	1 to 3g/t	No metallurgy assumes	EKO-+: 0.340
Target Two	Gold	500m	2 to 3m	45	2.75	185Kt	Au vithin metallurgica	85%	5KOz to 8.2KOz

⁻ each style of gold mineralisation will manifest (size, shape, ganque minerals) differently and perform differently within metallurgical plant

^{2* -} length of the exploration target is defined as a conservative maximum and minimum length estimation based off the distances over which drill intercepts are observed and geological or geophysical characteristics associated with the mineralisation are observed

3* - width of the exploration targets is taken from drill intercepts and expressed as a range

4* - depth information is gained from drill intercepts. the oxide/weathering zone is often taken from geochemical data from drilling, i.e. sulphur often helps define the base of oxidation as it is

^{4 -} depit infloritation is gained from that intercepts, the oxide-weathering poine is often taken from good-intercept ada from drilling, i.e. supplied to the header of oxidation is interpreted to be the depth that sulphur appears within the drill hole 5* - density data is taken from drilling or assumed to be the average rock density in the Kharmagtai dataset (2.75) 6* - tonnage range is estimated as a calculation of the maximum and minimum length, width and depth.

7* - grade range is taken directly from drill results

8* - metallurgical factor is either taken from existing metallurgical results or assumed to be 85%.

9* - potential oz range is estimated from a calculation of tonnage ranges and grade ranges. larger tonnage with lesser grade range and smaller tonnage with higher grade range.



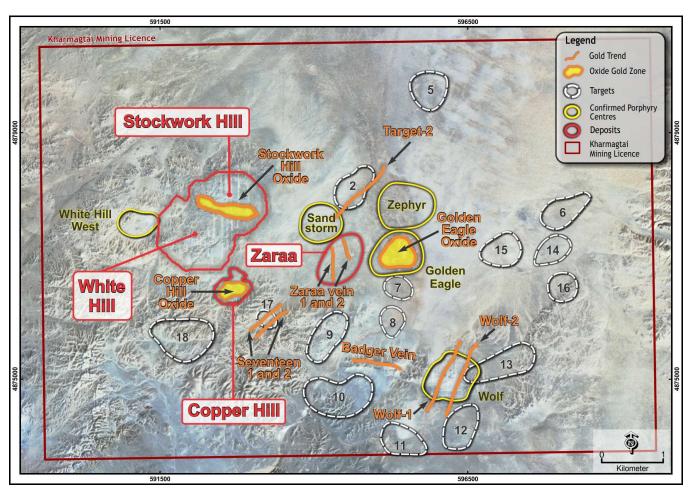


FIGURE 6: Location of shallow gold exploration targets and Kharmagtai.

CORPORATE ACTIVITIES

On 26 March 2019, the Company announced changes to its Board to reflect a renewed focus on the Australian retail market. The following changes to the Board will be effective as from the conclusion of the Annual General Meeting (AGM) to be held on 30 April 2019:

- Xanadu's Chairman Kevin Tomlinson will stand down from the Board;
- Non-executive director Marcus Englebrecht will not be standing for re-election at the upcoming AGM;
- MD and CEO Dr Andrew Stewart currently based in Mongolia will be relocated shortly to Australia to take up the position of CEO;
- Melbourne based Non-Executive Director Darryl Clark will assume the position Executive Chairman; and
- Following the above changes, the Board will comprise Darryl Clark as Executive Chairman; Andrew Stewart as CEO, Ganbayar Lkhagvasuren as Executive Director, Michele Muscillo as an independent Non-Executive Director and; Hannah Badenach will remain as a Non-Executive Director and nominee of Noble Resources International Pte. Ltd.

Share Capital

As at 31 March 2019, the Company had 648,044,131 fully paid shares, 20,000,000 performance rights, and 29,411,759 unlisted options.



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On 14 January 2019, 35,000,000 options, issued pursuant to the Red Mountain Project acquisition terms, expired. The vesting of 15,000,000 Series A Options was contingent on recognition of a JORC resource of at least 300,000 tonnes contained copper equivalent and the vesting of 20,000,000 Series B Options was contingent on the recognition of a JORC resource of at least 900,000 tonnes contained copper equivalent.

Financial Position

As at 31 March 2019, the Company had A\$3.1 million cash.

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

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Andrew.stewart@xanadumines.com

COMPETENT PERSON STATEMENT

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

The information in this Announcement that relates to Mineral Resources is based on information compiled by Dmitry Pertel who is responsible for the Mineral Resource Estimate. Mr Pertel is a full-time employee of CSA Global and is a Member of the Australian 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 "Qualified Person" as defined in the CIM Guidelines and National Instrument 43-101. Mr Pertel consents to the inclusion in the Scoping Study report of the matters based on this information in the form and context in which it appears.

The information in this report that relates to the Scoping Study is based, and fairly reflects, information compiled by Gordon Zurowski, P.Eng is a registered Professional Engineer in Ontario, Canada. Mr Zurowski is employed by CSA Global, independent resource industry consultants. Mr Zurowski has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of *The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves*. Mr Zurowski consents to the inclusion in the Scoping Study report of the matters based on his information in the form and context in which it appears.

The information in this announcement that relates to metallurgical test work is based on a summary of results compiled by Andrew Holloway who is responsible for metallurgical and process engineering aspects of the project. Mr. Holloway, who is a principal of AGP Mining Consultants Inc. (Toronto, Canada) and is a Professional Engineer in Ontario, Canada, has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as the "Competent Person" as defined in the 2012 Edition of *The Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves* and the National Instrument 43-101. Mr Holloway consents to the inclusion in the Scoping Study report of the matters based on this information in the form and context in which it appears.

The information in this Announcement that relates to exploration results is based on information compiled by Dr Andrew Stewart who is responsible for the exploration data, comments on exploration target sizes, QA/QC and geological interpretation and information. Dr Stewart, who is an employee of Xanadu and is a Member of the Australasian Institute of Geoscientists, has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as the "Competent Person" as defined in



the 2012 Edition of *The Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves* and the National Instrument 43-101. Dr Stewart consents to the inclusion in the Scoping Study report of the matters based on this information in the form and context in which it appears.

COPPER EQUIVALENT CALCULATIONS

The copper equivalent (**CuEq**) calculation for drill intercepts 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 \$1,300/oz.

FORWARD-LOOKING STATEMENTS

Certain statements contained in this Announcement release, including information as to the future financial or operating performance of Xanadu and its projects may also include statements which are 'forward-looking statements' that may include, amongst other things, statements regarding targets, estimates and assumptions in respect of mineral reserves and mineral resources and anticipated grades and recovery rates, production and prices, recovery costs and results, capital expenditures and are or may be based on assumptions and estimates related to future technical, economic, market, political, social and other conditions. These 'forward-looking statements' are necessarily based upon a number of estimates and assumptions that, while considered reasonable by Xanadu, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies and involve known and unknown risks and uncertainties that could cause actual events or results to differ materially from estimated or anticipated events or results reflected in such forward-looking statements.

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

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

Table 4: Kharmagtai drill hole details from the first quarter

Hole ID	Prospect	East	North	RL	Azimuth (°)	Inc (°)	Depth (m)
KHDDH488	Stockwork Hill	592741	4877800	1284	180	-73	1214.4
KHDDH488A	Stockwork Hill	592742	4877714	998	180	-72	598.8
KHDDH488B	Stockwork Hill	592742	4877712	990	18	-72	463.7
KHDDH489	White Hill	592007	4877402	1303	215	-65	1338.8



Table 5: Kharmagtai significant drill results from the fourth quarter

Hole ID	Prospect	From (m)	To (m)	Interval (m)	Au (g/t)	Cu (%)	CuEq (%)	AuEq (g/t)
KHDDH488	Stockwork Hill	3.4	29	25.6	0.06	0.09	0.13	0.20
and		39	103	64	0.14	0.10	0.19	0.29
including		53	59	6	0.26	0.25	0.42	0.66
and		117	148	31	0.10	0.24	0.30	0.47
including		134	140	6	0.24	0.57	0.72	1.13
and		170	372.1	202.1	0.22	0.21	0.35	0.55
including		178	191.2	13.2	0.27	0.35	0.52	0.82
including		186	191.2	5.2	0.41	0.54	0.80	1.26
including		201	207	6	0.28	0.22	0.40	0.62
including		227	251	24	0.27	0.21	0.39	0.60
including		229	241	12	0.37	0.25	0.49	0.76
including		261	345	84	0.28	0.26	0.43	0.68
including		263	271	8	0.14	0.45	0.54	0.85
including		321	331	10	0.53	0.31	0.65	1.01
including		355	369	14	0.44	0.27	0.55	0.86
including		357	363	6	0.66	0.35	0.77	1.21
and		394	400	6	0.03	0.11	0.13	0.21
and		412	426	14	0.04	0.10	0.13	0.20
and		448	800	352	0.58	0.41	0.78	1.22
including		530	540	10	0.09	0.22	0.28	0.43
including		550	676	126	1.39	0.88	1.77	2.77
including		550	555.9	5.9	0.55	0.77	1.12	1.76
including		572	674	102	1.67	1.00	2.06	3.23
including		572	584	12	0.38	0.59	0.83	1.30
including		594	672	78	2.06	1.14	2.45	3.85
including		690	736	46	0.31	0.24	0.44	0.69
including		710	732	22	0.26	0.25	0.41	0.65
including		748	758	10	0.25	0.25	0.41	0.64
including		782	798.6	16.6	0.18	0.12	0.24	0.38
and		891	959	68	0.05	0.26	0.29	0.46
including		914	955	41	0.06	0.38	0.42	0.66
including		920	933	13	0.04	0.36	0.39	0.61
including		947	953	6	0.12	0.66	0.74	1.15
and		979	993	14	0.01	0.08	0.08	0.13
and		1026	1050	24	0.03	0.20	0.22	0.34
including		1042	1050	8	0.06	0.35	0.39	0.60
and		1062	1076	14	0.08	0.11	0.17	0.26
and		1090	1108	18	0.48	306.38	0.15	0.10
including		1094	1100	6	0.84	0.45	0.98	1.54



Hole ID	Prospect	From (m)	To (m)	Interval (m)	Au (g/t)	Cu (%)	CuEq (%)	AuEq (g/t)
and		1118	1140	22	0.08	0.06	0.11	0.18
and		1195.5	1204	8.5	0.05	0.06	0.09	0.15
KHDDH488A	Stockwork Hill	0	86.5	86.5	0.27	0.17	0.34	0.53
including		0	44.5	44.5	0.26	0.18	0.35	0.55
including		56.5	84.5	28	0.37	0.20	0.44	0.69
including		74.5	84.5	10	0.40	0.10	0.36	0.56
and		106.5	468.5	362	0.32	0.32	0.53	0.83
including		134.5	154.5	20	0.03	0.30	0.32	0.50
including		188.5	210.5	22	0.17	0.33	0.44	0.69
including		220.5	451.5	231	0.47	0.41	0.71	1.11
including		224.5	230.5	6	0.40	0.57	0.82	1.29
including		260.5	362.5	102	0.72	0.55	1.01	1.58
including		260.5	276.5	16	1.03	0.78	1.43	2.25
including		288.5	333.5	45	0.69	0.57	1.01	1.59
including		344.5	358.5	14	0.90	0.50	1.07	1.68
including		404.5	412.5	8	0.19	0.39	0.51	0.80
including		428.5	444.5	16	0.35	0.39	0.62	0.97
and		533.4	547.5	14.1	0.07	0.17	0.21	0.34
and		557.5	573.5	16	0.03	0.06	0.08	0.13
KHDDH488B	Stockwork Hill	1.1	59.3	58.2	0.37	0.21	0.44	0.69
including		1.1	25.1	24	0.58	0.30	0.67	1.05
including		3.1	25.1	22	0.61	0.31	0.69	1.09
including		41.1	59.3	18.2	0.33	0.21	0.42	0.65
and		107.1	113.1	6	0.11	0.10	0.17	0.27
and		191.1	414.1	223	0.48	0.38	0.69	1.08
including		243.1	370.1	127	0.81	0.60	1.12	1.75
including		256.1	287.1	31	0.70	0.67	1.12	1.75
including		256.1	268.1	12	0.72	0.62	1.08	1.70
including		278.1	287.1	9	0.86	0.94	1.49	2.33
including		303.1	368.1	65	1.14	0.72	1.44	2.26
including		304	352.1	48.1	1.44	0.82	1.74	2.73
and		426.1	460.1	34	0.24	0.17	0.32	0.51
including		444.1	458.1	14	0.46	0.27	0.56	0.88
including		444.1	452.1	8	0.64	0.31	0.72	1.12
KHDDH489	White Hill	2.2	570.2	568	0.16	0.20	0.30	0.47
including		2.2	248	245.8	0.25	0.23	0.39	0.61
including		4	17.1	13.1	0.53	0.41	0.75	1.17
including		181.5	190	8.5	0.50	0.36	0.68	1.07
including		310.1	350	39.9	0.13	0.21	0.30	0.46
including		374	390	16	0.11	0.19	0.26	0.40
including		498	504	6	0.07	0.32	0.36	0.57



Hole ID	Prospect	From (m)	To (m)	Interval (m)	Au (g/t)	Cu (%)	CuEq (%)	AuEq (g/t)
including		517.2	570.2	53	0.11	0.35	0.42	0.66
and		603.7	1338.8	735.1	0.12	0.33	0.40	0.63
including		608.7	642	33.3	0.12	0.33	0.41	0.64
including		674	990	316	0.19	0.47	0.59	0.92
including		690	744	54	0.34	0.54	0.76	1.19
including		756	816	60	0.23	0.64	0.79	1.24
including		772	792	20	0.28	0.82	1.00	1.56
including		854	882	28	0.24	0.72	0.88	1.37
including		860	874	14	0.30	0.96	1.15	1.80
including		918	930	12	0.19	0.53	0.65	1.02
including		1004	1086.7	82.7	0.07	0.35	0.40	0.62
including		1044	1055	11	0.11	0.49	0.56	0.88
including		1152	1180.4	28.4	0.07	0.23	0.28	0.43
including		1194	1202	8	0.10	0.34	0.40	0.62
including		1258	1270	12	0.08	0.25	0.30	0.47

Table 6: Tenements held as at 31 March 2019

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

Tenement No.	Tenement Name	Location	Change in % Interest	% Interest as at 31 March 2019
MV17387A1	Kharmagtai	Umnugovi Province	-	76.5% ¹
MV017129	Red Mountain	Dornogovi Province	-	90%
13670x	Yellow Mountain	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 85% as at 31 March 2019 (an effective 76.5% 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 dated 11 April 2019.

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

Criteria	JORC Code (Section 1) Explanation	Commentary
Sampling techniques	 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. 	 Representative 2 metre samples were taken from ½ HQ diamond core. Only assay result results from recognised, independent assay laboratories were used after QAQC was verified.
Drilling techniques	Drill type and details.	Diamond Drill Hole ("DDH") drilling has been the primary drilling method. Some RC (reverse circulation) is conducted. RC holes are denoted by the KHRC prefix. Diamond Drill Holes are denoted by the KHDDH prefix.
Drill sample recovery	 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. 	 DDH core recoveries have been very good, averaging between 95% 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 and RC 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	 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. 	 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.



Criteria	JORC Code (Section 1) Explanation	Commentary
Sub-sampling techniques and sample preparation	 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 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. 	 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 generally a constant 2m interval down-hole in length unless subdivided at geological contacts. 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: 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.
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 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. 	 All samples were routinely assayed by ALS Mongolia for gold Au is determined using a 25g 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 limit ("LDL") of 0.01 ppm. All samples were submitted to ALS Mongolia for the package ME-ICP61 using a four acid digest. Where copper is over-range (>1% Cu), it is analysed by a second analytical technique (Cu-OG62), 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 Quality Assurance and Quality Control ("QAQC") procedures, as well as coarse and pulp blanks, and certified matrix matched copper-gold standards. QAQC monitoring is an active and ongoing processes on batch by batch basis by which unacceptable results are re-assayed as soon as practicable.



Criteria	JORC Code (Section 1) Explanation	Commentary
Verification of sampling and assaying	 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. 	 All assay data QA/QC is checked prior to loading into the Geobank data base. The data is managed by Xanadu geologists. The database and geological interpretation is collectively managed by Xanadu.
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	 Diamond drill holes 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 digital terrain model ("DTM") is based on 1m contours with an accuracy of ±0.01m.
Data spacing and distribution	 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. 	 Holes spacings range from 50m spacings within the core of mineralization to +500m spacings for exploration drilling. Hole spacings can be determined using the sections and drill plans provided Holes range from vertical to an inclination of -60 degrees depending on the attitude of the target and the drilling method. The data spacing and distribution is sufficient to establish anomalism and targeting for both porphyry, tourmaline breccia and epithermal target types.
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	Drilling is conducted in a predominantly regular grid to allow unbiased interpretation and targeting.
Sample security	The measures taken to ensure sample security.	Samples are dispatched from site through via company employees and secure company vehicles to the Laboratories.



Criteria	JORC Code (Section 1) Explanation	Commentary
		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	The results of any audits or reviews of sampling techniques	• Internal audits of sampling techniques and data management on a regular basis, to
reviews	and data	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 (Section 2) Explanation	Commentary	
Mineral tenement and land tenure status	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, 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 license to operate in the area. 	 The Project comprises 1 Mining Licence (MV 17387A). 100% owned by Oyut Ulaan LLC. Xanadu and its joint venture partner, Mongol Metals LLC has a 90% interest in the Kharmagtai porphyry copper-gold Project. The remaining 10% is owned by Quincunx Ltd. The Mongolian Minerals Law (2006) and Mongolian Land Law (2002) govern exploration, mining and land use rights for the project. 	
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Previous exploration was conducted by Quincunx Ltd, Ivanhoe Mines Ltd and Turquoise Hill Resources Ltd including extensive drilling, surface geochemistry, geophysics, mapping.	
Geology	Deposit type, geological setting and style of mineralisation.	 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 thought out the wall rock. Porphyry deposits are typically large tonnage deposits ranging from low to high grade and are generally mined by 	



Criteria	JORC Code (Section 2) Explanation	Commentary	
		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.	
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar. elevation or RL Reduced Level – elevation above sea level in metres) of the drill hole collar. dip and azimuth of the hole down hole length and interception depth hole length. 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. 	Diamond drill holes are the principal source of geological and grade data for the Project. See figures in ASX/TSX Announcement.	
Data Aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. 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. 	 A nominal cut-off of 0.1% eCu is used in copper dominant systems for identification of potentially significant intercepts for reporting purposes. Higher grade cut-offs are 0.3%, 0.6% and 1% eCu. A nominal cut-off of 0.1g/t eAu is used in gold dominant systems like Altan Burged for identification of potentially significant intercepts for reporting purposes. Higher grade cut-offs are 0.3g/t, 0.6g/t and 1g/t eAu. Maximum contiguous dilution within each intercept is 9m for 0.1%, 0.3%, 0.6% and 1% eCu. 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. 	



Criteria	JORC Code (Section 2) Explanation	Commentary
		 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% + (Au g/t x 0.6378) AuEq = Au g/t + (Cu% / 0.6378) Formula is based on a \$2.60/lb copper price and a \$1,300/oz gold price. A gold recovery factor of 78.72% was used.
Relationship between mineralisation on widths and intercept lengths	 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'). 	 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.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	See figures in ASX/TSX Announcement.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Resources have been reported at a range of cut-off grades, above a minimum suitable for open pit mining, and above a minimum suitable for underground mining.
Other substantive exploration data	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.	Extensive work in this area has been done and is reported separately.



Criteria	JORC Code (Section 2) Explanation	Commentary
Further work	 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. 	• Current estimates are restricted to those expected to be reasonable for open pit mining. Limited drilling below this depth (-300m RLI) shows widths and grades potentially suitable for underground extraction.

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	 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. 	 The database is a Geobank data base system. Data is logged directly into an Excel spread sheet logging system with drop do field lists. Validation checks are written into the importing program ensures all data is of h quality. Digital assay data is obtained from the Laboratory, QAQC checked and imported. Geobank exported to Access, and connected directly to the GemcomSur Software. Data was validated prior to resource estimation by the reporting of basic statist for each of the grade fields, including examination of maximum values, and vision checks of drill traces and grades on sections and plans. Andrew Vigar of Mining Associates visited site from 24 and 25 October 2014. 	
Site visits	 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. 	 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. 	



Criteria	JORC Code (Section 3) Explanation	Commentary	
Geological interpretation	 Confidence in (or conversely, the uncertainty of the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. 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. 	 Mineralisation resulted in the formation of comprises quartz-chalcopyrite-pyrite-magnetite stockwork veins and minor breccias. 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 Stockwork Hill, White Hill and Copper Hill 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. Sulphide mineralisation 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. 	
Dimensions	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.	 Stockwork Hill comprises two main mineralised zones, northern and southern stockwork zones (SH-N and SH-S) which are approximately 100 metres apart and hosted in diorite and quartz diorite porphyries. The SH-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 SH-N consists of a broad halo of quartz that is 250 metres long, 150 metres wide long and at least 350 metres deep. WH 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. 	



Criteria JORC Code (Section 3) Explanation Commentary		Commentary
		CH forms a sub vertical body of stockwork approximately 350 × 100 metres by at least 200 metres and plunges to the southeast.
Estimation and modelling techniques	 The nature and appropriateness of the estimation technique(s) applied and key 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. 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. 	 The estimate Estimation Performed using Ordinary Kriging. 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 halos. Composite files for individual domains were created by selecting those samples within domain wireframes, using a fix length and 50% minimum composite length.



Criteria **JORC Code (Section 3) Explanation** Commentary • 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 different rock types, but since the model does not include geological domains a single pass Inverse Distance ("ID2") interpolation was applied. • 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; 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. • Whether the tonnages are estimated on a dry basis or with • All tonnages are reported on a dry basis. natural moisture, and the method of determination of the Moisture moisture content. • The basis of the adopted cut-off grade(s) or quality Cut-off • Cut off grades applied are copper-equivalent (CuEq) cut off values of 0.3% for parameters possible open pit and 0.5% for underground. parameters applied. • Assumptions made regarding possible mining methods, • 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. minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the • The deposit is amenable to large scale bulk mining. Mining process of determining reasonable prospects for eventual • The Mineral Resource is reported above an optimised pit shell. (Lerch Grossman factors or economic extraction to consider potential mining methods, but algorithm), mineralisation below the pit shell is reported at a higher cut-off to reflect assumptions the assumptions made regarding mining methods and the increased costs associated with block cave underground mining parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be



Criteria	JORC Code (Section 3) Explanation	Commentary	
	reported with an explanation of the basis of the mining assumptions made.		
Metallurgical factors or assumptions	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 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.	No metallurgical factors have been applied to the in situ grade estimates.	
Environmental factors or assumptions	 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. 	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").	
Bulk density	 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. 	 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 domain, an 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). 	



Criteria	JORC Code (Section 3) Explanation	Commentary
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	
Classification	 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. 	 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 ASX/TSX Announcement above 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 competent person's view of the Kharmagtai Copper Gold Project.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	 Xanadu'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	 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 	 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 Mineral Resources 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.



Criteria	JORC Code (Section 3) Explanation	Commentary
	 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. 	 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.

+Rule 5.5

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

ABN Quarter ended ("current quarter") 92 114 249 026 31 March 2019

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (3 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation	(828)	(828)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(544)	(544)
	(e) administration and corporate costs	(793)	(793)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	2	2
1.5	Interest and other costs of finance paid	-	-
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	(2,163)	(2,163)
		T	
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	-	-

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Cons	solidated statement of cash flows	Current quarter \$A'000	Year to date (3 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)	-	-
2.6	Net cash from / (used in) investing activities	-	-
3.	Cash flows from financing activities		
3.1	Proceeds from issues of shares	-	-
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	-	-
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	-	-
4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	5,225	5,225
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(2,163)	(2,163)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	-	-
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	-
4.5	Effect of movement in exchange rates on cash held	22	22
4.6	Cash and cash equivalents at end of period	3,084	3,084

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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	3,084	3,084
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)	3,084	3,084

6.	Payments to directors of the entity and their associates	Current quarter \$A'000		
6.1	Aggregate amount of payments to these parties included in item 1.2	225		
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			
N/A				
7.	Payments to related entities of the entity and their associates	Current quarter \$A'000		
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
N/A	

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8.	Financing facilities available Add notes as necessary for an understanding of the position	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
8.1	Loan facilities	-	-
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.

N/A			

9.	Estimated cash outflows for next quarter	\$A'000
9.1	Exploration and evaluation	330
9.2	Development	-
9.3	Production	-
9.4	Staff costs	550
9.5	Administration and corporate costs	310
9.6	Other (loan repayment)	-
9.7	Total estimated cash outflows	1,190

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			

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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: Date: 17 April 2019

Print name: Phil Mackey

Notes

- 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.

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