First Pass Drilling Intersects Wide Zones of Shallow Oxide Gold at Kharmagtai - Updated

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TORONTO, Aug. 16, 2019 - Xanadu Mines Ltd. (ASX: XAM, TSX: XAM) (“Xanadu” or “the Company”) is pleased to announce the first batch of assay results from its oxide gold drilling program at its flagship Kharmagtai Project in southern Mongolia (Figures 1 and 2). These results form part of the Company’s current 2019 drilling program, with significant progress made towards defining a shallow oxide gold resource.

HIGHLIGHTS

- Significant shallow oxide gold intersects include:

  Drill hole KHDDH491 returns 40m at 2.30g/t Au from surface

  including 19m @ 2.83g/t Au from 5m

  Drill hole KHDDH490 returns 40m at 0.81g/t Au from surface

  including 7m @ 1.21g/t Au from 6m
- Results are very encouraging and demonstrate excellent potential for a shallow oxide resource
- Assay results from a further six diamond holes drilled as part of the program are pending
- Follow-up drilling is underway.

The new results have significantly increased the Company’s confidence in the emerging oxide gold opportunity at Kharmagtai. Stockwork Hill is the first prospect to be drilled outside and above the Kharmagtai copper-gold deposit, highlighting the under-explored nature of the broader project. The first-pass diamond drill program is designed to extend the both strike and depth to the significant shallow oxide gold mineralisation at Kharmagtai.

Xanadu’s Chief Executive Officer, Dr Andrew Stewart, said *“We are very pleased by these initial drill results from the mineralised oxide zone above the Stockwork Hill deposit. Assays from the first two drill holes in the eight-hole program confirm our belief that previous drilling within the oxide zone above the sulphide deposits has underestimated the gold contained. These outstanding gold intercepts generated at Stockwork Hill show just how underexplored the broader Kharmagtai Project is for oxide gold mineralisation and validates the current plan of developing a low-cost, high-value gold starter project at Kharmagtai.*

Our long running objective is to develop Mongolia’s next large-scale open pit copper and gold deposit. However, given Kharmagtai sits on a granted mining lease with a registered water resource and an established power supply nearby, we have the ability to move quickly on an oxide gold project and our current strategy of seeking high-return options via an oxide gold project is focused on providing the capital needed to advance that larger scale copper and gold project.”

HIGH-GRADE OXIDE RESULTS FROM STOCKWORK HILL

An eight-hole drill program is underway to quickly and economically test one of the main oxide gold targets at Kharmagtai to confirm the expected gold grades and characterise the gold deportment. The eight vertical PQ drill holes have been designed to test several sections across the oxide cap and several holes to test beneath high-grade gold at surface along strike (Figure 3 and 4).

Drill results from the first two drill holes have been received, returning results either in line with expectations or better than expected (Figure 5 and 6).

KHDDH490 has returned 40m @ 0.81g/t Au from surface

including 7m @ 1.21g/t Au from 6m

and 5m @ 1.01g/t Au from 16m

KHDDH491 has returned 40m @ 2.30g/t Au from surface

including 19m @ 2.83g/t Au from 5m

and 10m @ 2.37g/t Au from 30m

Table 1 contains the calculated assay intervals and Table 2 contains the drill hole collar locations.

ABOUT THE STOCKWORK HILL OXIDE ZONE

Previous drilling at Stockwork Hill has been focused on the sulphide copper and gold mineralisation. The oxide gold potential was highlighted in the recently completed scoping study (refer to Xanadu’s ASX/TSX announcement dated 11 April 2019). The initial development of an oxide gold operation would be focused exclusively on mining and processing near-surface resources. The low-cost drill program is the first step towards this goal. Subject to further technical, environmental and social studies, the development of Kharmagtai’s extensive, deeper copper-gold resources is expected to take place in the future.

Surface data at Stockwork Hill, combined with the stepped off drilling data suggests the zone of oxide gold mineralisation is between 200 to 400m in length, 75 to 100m in width and will extend to between 30 and 40m in depth. This zone is open in all directions and only includes material above the Southern Stockwork Zone. The Northern Stockwork Zone is yet to be assessed.

OXIDE GOLD METALLURGICAL RESULTS FROM KHARMAGTAI

Excellent gold recoveries up to 92.56% achieved in gravity and leach tests on composite samples from Golden Eagle (refer to Xanadu’s ASX/TSX announcement dated 20 March 2019) have provided the Company with metallurgical confidence, with drilling underway to expand the resource by targeting shallow gold mineralisation above the current copper and gold resources. Standard crushing, grinding and leaching is all that will be required to extract gold from the oxide cap mineralisation at Golden Eagle.

While further drilling is required across the resource as the project advances, previous intersections of significant widths of shallow oxide mineralisation in bedrock drilling highlight the potential and show that Xanadu has literally just scratched the surface in terms of the broader resource potential. Further, it represents the opportunity for a low cost, high-value gold leach operation that 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 mine.

Additional metallurgical work is planned for each of the oxide gold zones at Kharmagtai to optimise these results and assess the potential for heap leach processing, rather that carbon-in-pulp (CIP).

A photos accompanying this announcement are available at:

https://www.globenewswire.com/NewsRoom/AttachmentNg/b52daa88-0362-40cb-b088-878c16f035fc

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COMPETENT-QUALIFIED PERSON STATEMENT

The information in this announcement that relates to exploration results is based on information compiled by Dr Andrew Stewart who is responsible for the exploration data, comments on exploration target sizes, QA/QC and geological interpretation and information. Dr Stewart, who is an employee of Xanadu and is a Member of the Australasian Institute of Geoscientists, has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as the “Competent Person” as defined in the 2012 Edition of the “Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves” and the National Instrument 43-101. Dr Stewart consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

Table 2: Currently returned assay intercepts for Stockwork Hill

Hole ID	Prospect	From (m)	To (m)	Interval (m)	Au (g/t)	Cu (%)
KHDDH490	Stockwork Hill	0	40	40	0.81	0.39
including		4	13	9	1.04	0.56
including		25	38	13	0.87	0.41
KHDDH491	Stockwork Hill	0	40	40	2.30	0.65

Table 3: Drill hole collar location

Hole ID	Prospect	East	North	RL	Azimuth (°)	Inc (°)	Depth (m)
KHDDH490	Stockwork Hill	592529	4877805	1287	0	-90	40.0
KHDDH491	Stockwork Hill	592525	4877825	1287	0	-90	40.0

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APPENDIX 1: KHARMAGTAI TABLE 1 (JORC 2012)

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

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 31 July 2018.

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

Criteria	JORC Code explanation

Sampling techniques	● *Nature and quality of sampling (e.g. cut channels, random c* ● *Include reference to measures taken to ensure sample repre* ● *Aspects of the determination of mineralisation that are Mate* ● *In cases where ‘industry standard’ work has b*
Drilling techniques	● *Drill type (e.g. core, reverse circulation, open-hole hammer,*
Drill sample recovery	● *Method of recording and assessing core and chip sample re* ● *Measures taken to maximise sample recovery and ensure re* ● *Whether a relationship exists between sample recovery and*
Logging	● *Whether core and chip samples have been geologically and* ● *Whether logging is qualitative or quantitative in nature. Core* ● *The total length and percentage of the relevant intersections*
Sub-sampling techniques and sample preparation	● *If core, whether cut or sawn and whether quarter, half or all* ● *If non-core, whether riffled, tube sampled, rotary split, etc. a* ● *For all sample types, the nature, quality and appropriateness* ● *Quality control procedures adopted for all sub-sampling stag* ● *Measures taken to ensure that the sampling is representativ* ● *Whether sample sizes are appropriate to the grain size of th*
Quality of assay data and laboratory tests	● *The nature, quality and appropriateness of the assaying and* ● *For geophysical tools, spectrometers, handheld XRF instrum* ● *Nature of quality control procedures adopted (e.g. standards*
Verification of sampling and assaying	● *The verification of significant intersections by either indepen* ● *The use of twinned holes.* ● *Documentation of primary data, data entry procedures, data* ● *Discuss any adjustment to assay data.*
Location of data points	● *Accuracy and quality of surveys used to locate drill holes (co* ● *Specification of the grid system used.* ● *Quality and adequacy of topographic control.*

Data spacing and distribution	● *Data spacing for reporting of Exploration Results.* ● *Whether the data spacing and distribution is sufficient to est* ● *Whether sample compositing has been applied.*
Orientation of data in relation to geological structure	● *Whether the orientation of sampling achieves unbiased sam* ● *If the relationship between the drilling orientation and the ori*
Sample security	● *The measures taken to ensure sample security.*
Audits or reviews	● *The results of any audits or reviews of sampling techniques*

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

Criteria	JORC Code explanation
Mineral tenement and land tenure status	● *Type, reference name/number, location and ow* ● *The security of the tenure held at the time of re*
Exploration done by other parties	● *Acknowledgment and appraisal of exploration b*
Geology	● *Deposit type, geological setting and style of mi*

Drill hole Information	● *A summary of all information material to the un*
	  ● *easting and northing of the drill hole colla*
	  ● *elevation or RL (Reduced Level –*
	  ● *dip and azimuth of the hole*
	  ● *down hole length and interception depth*
	  ● *hole length.*
	● *If the exclusion of this information is justified or*

Data aggregation methods	● *In reporting Exploration Results, weighting ave* ● *Where aggregate intercepts incorporate short l* ● *The assumptions used for any reporting of met*
Relationship between mineralisation widths and intercept lengths	● *These relationships are particularly important i* ● *If the geometry of the mineralisation with respe* ● *If it is not known and only the down hole length*

Diagrams	● *Appropriate maps and sections (with scales) ar*
Balanced reporting	● *Where comprehensive reporting of all Explorati*
Other substantive exploration data	● *Other exploration data, if meaningful and mate*
Further work	● *The nature and scale of planned further work (e* ● *Diagrams clearly highlighting the areas of poss*

1.4 JORC TABLE 1 – SECTION 3 ESTIMATION AND REPORTING OF MINERAL RESOURCES

Criteria	JORC Code explanation
Database integrity	● *Measures taken to ensure that data has not been corrupted by, for e* ● *Data validation procedures used.*
Site visits	● *Comment on any site visits undertaken by the Competent Person an* ● *If no site visits have been undertaken indicate why this is the case.*
Geological interpretation	● *Confidence in (or conversely, the uncertainty of) the geological interp* ● *Nature of the data used and of any assumptions made.* ● *The effect, if any, of alternative interpretations on Mineral Resource e* ● *The use of geology in guiding and controlling Mineral Resource estim* ● *The factors affecting continuity both of grade and geology.*
Dimensions	● *The extent and variability of the Mineral Resource expressed as leng*

Estimation and modelling techniques	● *The nature and appropriateness of the estimation technique(s) applie* ● *The availability of check estimates, previous estimates and/or mine p* ● *The assumptions made regarding recovery of by-products.* ● *Estimation of deleterious elements or other non-grade variables of ec* ● *In the case of block model interpolation, the block size in relation to t* ● *Any assumptions behind modelling of selective mining units.* ● *Any assumptions about correlation between variables.* ● *Description of how the geological interpretation was used to control t* ● *Discussion of basis for using or not using grade cutting or capping.* ● *The process of validation, the checking process used, the compariso*
Moisture	● *Whether the tonnages are estimated on a dry basis or with natural m*
Cut-off parameters	● *The basis of the adopted cut-off grade(s) or quality parameters applie*
Mining factors or assumptions	● *Assumptions made regarding possible mining methods, minimum mi*
Metallurgical factors or assumptions	● *The basis for assumptions or predictions regarding metallurgical ame*
Environmental factors or assumptions	● *Assumptions made regarding possible waste and process residue di*
Bulk density	● *Whether assumed or determined. If assumed, the basis for the assu* ● *The bulk density for bulk material must have been measured by meth* ● *Discuss assumptions for bulk density estimates used in the evaluatio*
Classification	● *The basis for the classification of the Mineral Resources into varying* ● *Whether appropriate account has been taken of all relevant factors (* ● *Whether the result appropriately reflects the Competent Person&rsqu*
Audits or reviews	● *The results of any audits or reviews of Mineral Resource estimates.*

Discussion of relative accuracy/ confidence	● *Where appropriate a statement of the relative accuracy and confiden* ● *The statement should specify whether it relates to global or local esti* ● *These statements of relative accuracy and confidence of the estimat*

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

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