

# As Part the Ongoing Definitive Feasibility Study, Orsu Announces an Increased Pit-Constrained Mineral Resource for Its Karchiga Project

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**Mineral Resource comprising an Indicated Mineral Resource of 10.8Mt of combined sulphide and oxide mineralisation grading 1.73% Cu for 187,200t (412.7 Mlb) of contained Cu and an Inferred Mineral Resource of 0.02Mt of sulphide mineralisation grading 1.28% Cu for 300t (0.7 Mlb) of contained Cu**

LONDON, UNITED KINGDOM -- ([Marketwire](#) - Dec. 8, 2011) - [Orsu Metals Corporation](#) ("Orsu" or the "Company") (TSX: OSU) (AIM: OSU), the London-based precious and base metals exploration company, is pleased to announce an increased mineral resource estimate for its 94.75% owned Karchiga Volcanogenic Massive Sulphide ("VMS") copper project, northeast Kazakhstan (the "Karchiga Project"). The reported mineral resource estimate is constrained by an optimised open pit, has been reported according to Canadian Institute of Mining, Metallurgy and Petroleum Standards on Mineral Resources and Reserves (the "CIM Standards") and forms part of the ongoing Definitive Feasibility Study ("DFS") which is expected to be completed in January 2012.

The new pit-constrained mineral resource estimate (the "SRK December 2011 Mineral Resource Estimate") has been prepared by our lead DFS consultant SRK Consulting (UK) Limited, Cardiff, UK ("SRK") and relates to oxide and sulphide mineralisation in both the Central and North East lodes of the Karchiga deposit.

The new estimate reflects a 28% increase in the sulphide hosted Indicated Mineral Resource tonnage, and a 23% increase in the copper metal contained within this, compared to that reported by SRK in May of this year. This has been achieved not only through the upgrading of practically all previously reported Inferred Mineral Resources to the Indicated category, but also through the addition of 0.8 Mt of sulphide mineralisation in the North East which had not previously been delineated. The most significant difference, however, is the increase in the oxide Mineral Resource. Specifically SRK has reported a 137% increase in tonnage and a 109% increase in contained copper metal in comparison with Mineral Resource Estimates for oxide mineralisation completed by Wardell Armstrong International in March 2010 ("WAI 2010 Estimate"; see Company's press-release dated March 22, 2010).

Mineralisation at Karchiga occurs in a Central and a North East lode. The VMS style mineralisation in both lodes is hosted along the contacts between shallow dipping alternating amphibolite and quartz mica schist units. The two lodes have a strike length in excess of 1km and have been intersected down to depths of 200m below surface.

In the Central lode, the mineralisation is located within a series of shallow-dipping massive and disseminated sulphide bodies stacked at four stratigraphic levels and primarily consists of chalcopyrite-pyrrhotite and pyrite mineralisation. Above the sulphide mineralisation of the Central lode is a zone of oxide mineralisation (containing malachite, chrysocolla and native copper) which is separated from the sulphide mineralisation by a transition zone of secondary sulphides (comprising chalcocite, covellite and native copper) (see Company's press-release dated September 29, 2011).

In the North East lode, the mineralisation primarily consists of chalcopyrite-pyrrhotite and pyrite, with minor sphalerite, and is located within two subparallel shallow-dipping and moderately folded massive and disseminated sulphide lenses.

## SRK December 2011 Mineral Resource Estimate

Table 1 presents the SRK December 2011 Mineral Resource Estimate which comprises an Indicated Mineral Resource of 10.8Mt of combined sulphide and oxide mineralisation with a mean grade of 1.73% Cu for 187,200t of contained Cu and Inferred Mineral Resources of 0.02Mt of sulphide mineralisation grading 1.28% Cu for 300t of contained Cu. These Mineral Resources have been constrained by two optimised pits and are reported at a cut-off grade of 0.3% copper for mineralisation considered to be amenable to flotation

("FL") and at a cut-off grade of 0.7% copper for mineralisation considered to be amenable to heap leaching ("HL").

**Table 1: SRK December 2011 Mineral Resource Estimate:  
Indicated Mineral Resources**

Lode	Type	Cut-off			
Cu (%)	Tonnes				
(Mt)	Grade				
Cu (%)	Metal Cu				
(Kt)	Metal Cu				
(Mlb)	Grade				
Au (g/t)	Metal Au				
(t)	Metal Au				
(koz)					
Central	Oxide HL	0.7		1.5	
Central	Transition HL		0.7		0.1
Central	Sulphide HL		0.7		0.2
Central	Total HL	0.7		1.8	
Central	Oxide FL	0.3		0.3	
Central	Transition FL		0.3		0.1
Central	Sulphide FL		0.3		3.8
North					
East	Sulphide FL		0.3	4.9	
Total	FL	0.3		9.1	1.80
Total	All material			10.8	
Inferred Mineral Resources					
Lode	Type	Cut-off			
Cu (%)	Tonnes				
(Mt)	Grade Cu (%)				
Cu (Kt)	Metal				
Cu (Mlb)	Grade				
Au (g/t)	Metal				
Au					
(t)	Metal				
Au					
(Koz)					
North					
East	Sulphide	0.3		0.02	

\* Some figures may not sum exactly due to rounding.

As part of its work, SRK produced updated geological models for both the Central and North East lodes primarily based on a geological cut-off of 0.1% Cu and capped high grades where it considered this to be appropriate based on a statistical analysis of the available assay results.

SRK also remodeled the footwall of the oxide mineralisation and in addition to this has modeled a transition zone between the sulphide and oxide mineralisation based on an updated drillhole database and acid solubility data. Notwithstanding this, the resulting Mineral Resource Estimate has been reported using a 40% acid solubility threshold which assumes that material which has an acid solubility greater than 40% will be processed using heap leaching and that which has an acid solubility of less than 40% will be processed in the flotation concentrator.

A total of four domains have been modeled in the Central lode, and two in the North East lode. 3D wireframes were created from 2D sections which were spaced at a 25m interval in the Central and North East lodes. No more than 2m of waste was included in the 2D sections used to produce the 3D wireframes. SRK and Orsu previously interpreted four post-mineralisation faults which strike across the deposit but only one of these is now thought to have an effect on the mineralisation, offsetting it in the northern portion of the Central lode by some 120m. Further, the more recent drilling information does not suggest that the mineralisation is terminated by these faults as previously thought.

The grade interpolation was carried out on 2m downhole composited drillhole samples from within the 0.1% Cu grade wireframe. SRK used a block size of 25m (X) by 25m (Y) by 5m (Z). Cu, and Au grades were interpolated into the blocks using an Ordinary Kriging algorithm based upon the results of geostatistical

modelling completed for the relevant sulphide and oxide data sets.

Specific gravity measurements were carried out for the different material types collected from Karchiga diamond drill core and an in-situ bulk density value assigned to the block model based on the relationship between grade and bulk density below the oxide mineralisation revealed by a regression analysis. Data from the 2008, 2010 and 2011 drilling has enabled separate density regression plots to be established for the sulphide mineralisation in the Central and North East lodes.

Table 2 shows the pit optimisation parameters that were used to define a pit outline which was then used to constrain the SRK December 2011 Estimates to material with reasonable prospects for economic extraction. The slope angle parameters are the result of the geotechnical study undertaken by SRK. The Mining, Processing, and Operating Cost and the NSR parameters have been derived based on on-going technical work as part of the DFS by SRK. A long term price of US\$3.25/lb Cu was assumed based on market consensus forecasts, previously a price of US\$3.00/lb Cu had been used by SRK in May 2011 and Micon's May 2010 PEA. Currently the Company is working towards completing its DFS and thereby reporting Mineral Reserves.

**Table 2: Pit Optimization Parameters**

Parameter	Value	
Overall slope angle		
Central Pit:		
Hanging Wall	49°	
Footwall	47°	
North East Pit:		
Hanging Wall	51°	
Footwall	45°	
Northern Wall	47°	
Mining & Processing		
Mining Recovery	95.0%	
Mining Dilution	5.0%	
Fresh Cu Processing Recovery		94.00%
Oxide Cu Processing Recovery		55.00%
Costs		
Mining Cost		
Ore	\$1.80/t	
Oxide	\$1.30/t	
Waste	\$1.60/t	
Fresh Processing Cost		\$9.00/t ore
Oxide Processing Cost		\$22.57/t ore
General & Administrative Cost		\$5.00/t ore
Royalty	5.7% of RoM Metal Value	
(above 0.7% Cu head grade)		
Price		
Cu Selling Price		7,200 USD/t Cu (3.25 USD/lb)
NSR	83%	

### Quality Assurance / Quality Control

The reported Mineral Resource estimates are based on historical drilling performed in Soviet times as well as drilling undertaken by Orsu since 2007, including in-fill drilling completed in 2011 (see Company's press-releases dated September 1, 2011). Assays for the 2011 in-fill drilling programme have been completed for Cu, Zn, Pb, and Au in the laboratory of the Eastern Institute for Base Metals, based in Ust-Kamenogorsk, Eastern Kazakhstan, which is independent from Orsu and SRK. Standard, blank, and duplicate samples were inserted after approximately every twenty ordinary core samples. The ordinary half core samples have been taken from visually mineralised intervals and 5 m of visually unmineralised material below and above the mineralized intervals. The remaining half core samples are stored at the Orsu facility in Ust-Kamenogorsk, Kazakhstan. The SRK December 2011 Estimate used all data available at the end October 2011.

### Comparison with Previous Estimates

Table 3 shows a comparison between the SRK December 2011 Mineral Resource Estimate and that previously completed by SRK in May 2011 for sulphide mineralisation ("SRK May 2011 Mineral Resource Estimate") and by Wardell Armstrong International for oxide mineralisation ("WAI 2010 Mineral Resource Estimate").

**Table 3: Comparison of Pit-Constrained Mineral Resource Estimates for Karchiga Project**

**Indicated Mineral Resources**

Estimate	Cut-off	Cu(%)	Lode	Type	Tonnes(Mt)	Grade Cu(%)	Metal Cu (Kt)	Metal Cu (Mlb)
SRK May 2011			0.3			Central & North East		Sulphide
SRK December 2011				0.3		Central & North East		
Variance, %							28.17	
WAI 2010			0.7		Central		Oxide	HL
SRK December 2011				0.7		Central		136.84
Variance, %								

**Inferred Mineral Resources**

Estimate	Cut-off	Cu(%)	Lode	Type	Tonnes(Mt)	Grade Cu(%)	Metal Cu(t)	Metal Cu(Mlb)
SRK May 2011			0.3			North East		Sulphide
SRK December 2011				0.3		North East		Sulphide
Variance, %								-98.33

*\* Some figures may not sum exactly due to rounding. All heap leachable ("HL") and flotation ("FL") recoverable material is reported here with oxide and sulphide resources, respectively, for comparison purposes.*

The reported results are part of the ongoing DFS for the Karchiga Project, the completion of which is expected in January 2011.

Dr Alexander Yakubchuk, COO and Director of Exploration of Orsu, commented: "We are very pleased with both the successful conversion of the previously reported inferred mineral resources to the indicated mineral resources and the additional growth of our sulphide mineral resource. In addition, a greater than expected growth of indicated mineral resources was achieved for both the tonnage of oxide mineralisation and its contained copper metal of 137% and 109%, respectively.

We are looking forward to completing a Mineral Reserve estimates for Karchiga as part of the DFS, with an expected life of mine in excess of eleven years."

**GLOSSARY of technical terms:**

Amphibolite - a metamorphic rock composed mainly of amphibole, formed by the regional metamorphism of basic igneous rocks

Au - a chemical symbol for gold

Chalcopyrite - a copper-bearing sulphide mineral (CuFeS<sub>2</sub>)

Cu - a chemical symbol for copper

Indicated Mineral Resource - that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.

Inferred Mineral Resource - that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

Lode - a mineralised body

Massive sulphide - a large, usually stratiform, conformable orebody composed mainly of iron sulphide, usually pyrite +/- pyrrhotite, and other base metal sulphides, such as chalcopyrite, along interfaces between volcanic units and sediments

Mineral Resource - a concentration or occurrence of natural, solid, inorganic or fossilized organic material in

or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge. Ordinary Kriging - a geostatistical approach to the interpolation of assay data where the weighting of data points is determined based on the spatial correlation between the data in the particular deposit to which it is applied

Oxide Mineral Resource - A Mineral Resource comprising mineralisation formed by the chemical interaction of an element or elements with oxygen, usually affected by surface waters

Pyrite - the most common iron-bearing sulphide mineral ( $\text{FeS}_2$ )

Pyrrhotite - a common ferromagnetic sulphide mineral

Quartz mica schist - metamorphosed sedimentary rock

Sphalerite - a zinc-iron sulphide mineral ( $(\text{Zn,Fe})\text{S}$ )

Sulphide - a mineral composed of a chemical compound between a metal and sulphur

## Notes to Editors:

1. Alexander Yakubchuk, PhD, Director of Exploration and Chief Operating Officer for Orsu and a "qualified person" as such term is defined in National Instrument 43-101 and for the purposes of the AIM Guidance Note for Mining, Oil & Gas Companies, has prepared and reviewed the contents of this press release and has verified the data disclosed in this press release (including sampling, analytical and test data underlying the information), other than with respect to the pit-constrained mineral resource estimates noted above.

2. Dr Mike Armitage, CEng, CGeol, Group Chairman and Corporate Consultant (Resource Geology) with SRK, Ms Tracey Laight, MSc, CGeol, FGS, Senior Consultant (Mining Geology), both qualified persons as such term is defined in National Instrument 43-101, have reviewed the contents of this press release. Ms Tracey Laight is the person responsible for the Mineral Resource estimates for Karchiga Project referred to above.

3. The technical report related to the Scoping Study referred to in this press release entitled "Preliminary Assessment of The Karchiga Copper Project, East Kazakhstan Region, Kazakhstan", dated May 25, 2010 and prepared by L S Carroll, MIMMM CGeol FGS, G Harris, MAusIMM, M L Owen, CGeol EurGeol FGS, all of Wardell Armstrong International Limited, J Steedman, MAusIMM and D Wells, MIMMM CEng of Micon International Co. Limited is available under the Company's profile on SEDAR ([www.sedar.com](http://www.sedar.com)).

4. The indicated and inferred mineral resource estimates (March 22, 2010) referred to in this press release are contained in the technical report entitled "Updated Report on the Karchiga Property held by Orsu Metals Corporation, Kazakhstan", dated March 22, 2010 and prepared by M L Owen and L S Carroll of Wardell Armstrong International Limited, which is available under the Company's profile on SEDAR ([www.sedar.com](http://www.sedar.com)).

## FORWARD-LOOKING INFORMATION

*This press release contains forward-looking information which is not comprised of historical facts. Forward-looking information involves risks, uncertainties and other factors that could cause actual events, results, performance and opportunities to differ materially from those expressed or implied by such forward-looking information. Forward-looking information contained (or referred to) in this press release includes, but may not be limited to: statements relating to mineral resource estimates; the Company's expectations with respect to updating and upgrading current mineral resource estimates and the possible increase in tonnage; the timing for the completion of an updated NI 43-101 compliant resource estimate; and the timing of the Company's receipt of results from and timely completion of the ongoing Definitive Feasibility Study.*

*Factors that could cause actual results to differ materially from those described in such forward-looking information include, but are not limited to, risks normally incidental to exploration and development of mineral properties, uncertainties in the interpretation of drill and test results, the possibility that future exploration, development and/or mining results will not be consistent with expectations (including the possibility that gold may not be able to be economically recoverable from the North East lode), uncertainty of mineral resources estimates, the Company's inability to obtain, maintain, renew and/or extend required licences, permits, authorizations and/or approvals from the appropriate regulatory authorities and other risks relating to the regulatory framework in Kazakhstan, adverse changes in the political environment in Kazakhstan and the laws governing the Company, its subsidiaries and their respective business activities, adverse changes in commodities prices, as well as certain other risks set out in the Company's public documents, including its annual information form dated March 24, 2010, filed under the Company's profile on SEDAR at [www.sedar.com](http://www.sedar.com).*

*The forward-looking information in this press release reflects the current expectations, assumptions and/or beliefs of the Company based on information currently available to the Company. In connection with the forward-looking information contained in this press release, the Company has made assumptions about; the Company's business, the economy and the mineral exploration industry in general; the Company's ability to raise any required additional financing, as needed; the regulatory framework in Kazakhstan with respect to, among other things, the Company's ability to obtain, maintain, renew and/or extend required permits, licences, authorizations and/or approvals from the appropriate regulatory authorities; the political environment in Kazakhstan; and the Company's ability to continue to obtain qualified staff and equipment in a timely and cost-efficient manner to meet the Company's demand. The Company has also assumed that no unusual geological or technical problems occur, plant and equipment work as anticipated and no significant events occur outside of the Company's normal course of business. Although the Company believes that the assumptions inherent in the forward-looking information are reasonable, forward-looking information is not a guarantee of future performance and accordingly undue reliance should not be put on such information due to the inherent uncertainty therein.*

*The mineral resource figures contained and/or referred to in this press release are estimates only and no assurances can be given that the indicated levels of minerals will be produced. Such estimates are expressions of judgment based on knowledge, mining experience, analysis of drilling results and industry practices. Valid estimates made at a given time may significantly change when new information becomes available. While the Company believes that the mineral resource estimates contained and referenced herein are well established, by their nature, mineral resource estimates are imprecise and depend, to a certain extent, upon statistical inferences which may ultimately prove unreliable. If such mineral resource estimates are inaccurate or are reduced in the future, this could have a material adverse impact on the Company. Due to the uncertainty that may be attached to inferred mineral resources, it cannot be assumed that all or any part of an inferred mineral resource will be upgraded to an indicated or measured mineral resource as a result of continued exploration. Inferred mineral resources are estimated on limited information not sufficient to verify geological and grade continuity or to allow technical and economic parameters to be applied. Inferred mineral resources are too speculative geologically to have economic considerations applied to them to enable them to be categorized as mineral reserves. Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no certainty that mineral resources can be upgraded to mineral reserves through continued exploration.*

*Any forward-looking information speaks only as of the date on which it is made and, except as may be required by applicable securities laws, the Company disclaims any intent or obligation to update any forward-looking information, whether as a result of new information, future events or results or otherwise.*

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