

ORVANA

MINERALS CORP.

Orvana Announces Completion of Preliminary Feasibility Study for the Upper Mineralized Zone, Don Mario Mine

TORONTO, ONTARIO, October 20, 2006 -- Orvana Minerals Corp. (TSX:ORV) ("Orvana" or the "Company") is pleased to announce the results of the Preliminary Feasibility Study (the "Study") for the Don Mario Mine's Upper Mineralized Zone ("UMZ") completed by NCL Ingenieria y Construccion S.A. ("NCL"). Orvana had retained NCL, one of Chile's largest mining engineering consulting companies, with particular expertise in copper-gold deposits, to complete the Study.

Carlos Mirabal, Orvana's President and Chief Executive Officer, commented: "We are pleased to report that the Don Mario Mine's life could be extended to ten years, depending on how and when Orvana decides to develop the UMZ deposit. We will now be considering steps to advance the UMZ deposit towards a production decision, including the preparation of a full Feasibility Study. Orvana plans to assess its options with respect to developing the project in the most efficient and risk-effective way possible."

Dollar amounts in the remainder of this news release are in United States dollars unless stated otherwise, and fine troy ounces are referred to as "ounces".

Highlights of the Study

- Completion of a mineral reserve estimate for the UMZ deposit, reporting *National Instrument 43-101 – Standards of Disclosure for Mineral Projects* ("NI 43-101") compliant proven and probable reserves totaling 5.45 million tonnes at average grades of 1.50% copper, 1.42 grams per tonne ("g/t") gold and 46.6 g/t silver.
- The mineral reserves would support a mine life of seven years at a maximum production rate of 875,000 tonnes per annum (tpa).
- Payable metal production over the life-of-mine for the UMZ deposit would be approximately 72,500 tonnes (160 million pounds) of copper (with approximately 49% of the copper in the form of copper cathodes, the balance being in the form of copper concentrates), 236,600 ounces of gold and 7,058,800 ounces of silver. Annual payable metal production would average 33,800 ounces of gold, 1,000,000 ounces of silver and 10,300 tonnes of copper.
- The pre-production capital costs to modify and expand the existing process plant and infrastructure and to develop the new open pit mine are estimated to be approximately \$65.0 million, including engineering design and related activities and a contingency.

- Average mine site direct operating costs are estimated to be approximately \$19.10 per tonne of ore. Unit cash costs (mine site direct operating costs plus general and administrative costs, and transportation, smelting and refining charges) are estimated to average approximately \$25.80 per tonne of ore. Expressed in terms of equivalent metal content, unit cash costs would average approximately \$184.00 per ounce of gold equivalent, or \$0.49 per pound of copper equivalent. The equivalent metal contents were calculated by multiplying the life-of-mine payable quantities of gold, silver and copper by their respective prices (\$1.20 per pound for copper, \$450.00 per ounce for gold and \$7.00 per ounce for silver), summing the results and then dividing the total by the price of gold or the price of copper, as the case may be.
- Project economics, using the metal prices set forth above, are summarized as follows:
 - A 7-year operating life with an estimated after-tax NPV of \$43.1 million at a 10% discount rate.
 - An estimated payback and after-tax IRR of 2.4 years and 30% respectively.

Background

The UMZ Project is located at the Don Mario Mine site in San Juan Canton, Chiquitos Province, Department of Santa Cruz in eastern Bolivia. The mine site is about 480 kilometers northeast of the city of Santa Cruz de la Sierra, Bolivia. The Don Mario Mine consists of the UMZ and the Lower Mineralized Zone (“LMZ”) ore deposits. The LMZ gold deposit is presently being mined by underground methods, and processed at the on-site carbon-in-leach (“CIL”) plant at a rate of approximately 700 tonnes per day. The mine site is accessed by air, road or a combination of rail/road from Santa Cruz de la Sierra.

The development of the UMZ deposit was the focus of the Study. The UMZ mineral reserves would support a 7-year open pit mine life. The NI 43-101 compliant mineral reserves have been estimated as follows:

Ore Type	Proven Reserves					Probable Reserves					Total Reserves				
	Tonnes [kt]	Au [g/t]	Cu _T [%]	Ag [g/t]	Cu _S [%]	Tonnes [kt]	Au [g/t]	Cu _T [%]	Ag [g/t]	Cu _S [%]	Tonnes [kt]	Au [g/t]	Cu _T [%]	Ag [g/t]	Cu _S [%]
Oxides	664	1.43	1.75	56.5	1.19	1,513	1.51	1.77	45.6	1.22	2,177	1.49	1.77	48.9	1.21
Transition	273	1.49	1.45	57.7	0.64	1,616	1.45	1.35	50.3	0.70	1,889	1.46	1.37	51.3	0.69
Sulphides	134	1.25	1.28	38.2	0.16	1,247	1.25	1.27	36.2	0.17	1,382	1.25	1.27	36.4	0.17
Total	1,071	1.42	1.62	54.5	0.92	4,377	1.42	1.47	44.6	0.73	5,448	1.42	1.50	46.6	0.77

Cu_T is the total copper assay for the ore type, while Cu_S is the acid soluble copper assay for the ore type

The UMZ mineral reserves estimate was prepared by NCL using Gemcom and Whittle 4X pit optimization software. The estimate used the following metal prices: \$1.00/lb copper, \$400.00/oz gold and \$6.00/oz silver.

The qualified persons responsible for the preparation of the NI 43-101 Technical Report that will be filed on SEDAR are Edwin Bentzen III, Senior Project Manager and Metallurgist for Resource Development Inc. (RDI) and Karl M. Kolin, P. E., Principal Mine Engineer for Gustavson

Associates LLC. Both individuals are associates of NCL and both visited the project site on June 15 and 16, 2006 before completing their assignment at NCL's offices in Santiago, Chile. Both individuals are qualified persons in accordance with definitions set out in NI 43-101, and both are members of the American Institute of Mining, Metallurgical and Petroleum Engineers.

Mine Plan and Processing

The production schedule developed for the Study contemplates that the open pit mine would produce a maximum of 875,000 tonnes per annum of ore. The waste to ore ratio would be on the order of 0.53 tonnes of waste mined per tonne of ore mined. The Study was prepared on the basis that mining would be done by a contractor, as the equipment needed for an operation of this size is readily available to contractors in Bolivia.

Three ore types exist in the UMZ: oxide, transition and sulphide ores – with each requiring a different processing method. The flowsheet described below was developed by NCL, based upon the results of comprehensive testwork on the three ore types carried out at the Centro de Investigaciones Minero Metalurgico laboratories in Santiago, Chile. The flowsheet incorporates the existing processing facilities, which consist of a primary crusher, semi-autogeneous grinding (“SAG”) mill, and a CIL circuit for the recovery of gold and silver. However, the existing facilities would have to be substantially modified and expanded in order to accommodate the three different UMZ ore types.

The ore mined from the UMZ deposit would be fed to the existing primary crushing plant, which has a capacity of 2,500 tonnes per day. From the crushed ore bin, a new by-pass system would be installed to divert the oxide and transition ores to a new fine crushing plant for secondary cone crushing and screening. After being crushed in the primary crushing plant, sulphide ores would be sent to the existing SAG mill.

Heap Leaching

After primary crushing, the oxide and transition ores would be crushed to minus ½” or ¾” in the new fine crushing plant and then sent to a new acid heap leaching facility. The pregnant leach solution containing the acid soluble copper extracted from the ores would be processed in a new solvent extraction/electrowinning (“SX/EW”) plant to produce copper cathodes.

Acid for heap leaching would be provided by a new acid plant, capable of producing 150 tonnes per day of sulphuric acid.

Grinding, Flotation and Recovery of Precious Metals

Spent oxide ores would be ground in a new ball mill and then sent directly to an expanded CIL circuit for gold and silver recovery. To increase free gold recovery, a new centrifugal Knelson concentrator would be installed in the underflow hydrocyclone.

Spent transition ore from the leach pads, containing sulphide copper, gold and silver would be re-ground to a minus 100 mesh size in the new ball mill and would be fed into a new flotation plant with rougher, regrinding and cleaner stages to recover copper sulphide minerals in a copper

concentrate. Transition ore tailings would be sent to the expanded CIL circuit for gold and silver recovery.

After undergoing primary crushing, sulphide ore would be fed to the existing SAG mill, then further ground in the new ball mill, followed by flotation. Concentrate and tailings from the sulphide ores would follow the same process route as the spent transition ore, to produce a copper concentrate containing gold and silver, and a gold-silver dore.

The projected average life-of-mine recoveries by ore type for the proposed flowsheet are summarized in the following table:

AVERAGE LIFE-OF-MINE RECOVERIES BY ORE TYPE			
ORE TYPE	Copper	Gold	Silver
OXIDE	91.7%	95.5%	92.0%
TRANSITION	88.5%	97.5%	94.7%
SULPHIDE	90.5%	83.5%	82.8%

Production Summary

The summary of the payable products by year is as follows:

YEAR	1	2	3	4	5	6	7	TOTAL
Au (ounces)	36,074	36,118	34,525	42,060	35,170	29,287	23,314	236,546
Ag (ounces)	1,149,928	1,075,208	1,483,521	894,674	991,988	925,592	537,862	7,058,771
Cu (tonnes)	10,332	11,172	12,329	11,756	9,920	10,025	6,950	72,486

The main products that would be transported and the quantities per year are illustrated in the following table:

	YEAR	1	2	3	4	5	6	7
BULLION	Kilograms	19,419	17,288	18,790	10,257	8,064	6,022	2,492
COPPER CATHODES	Tonnes	6,976	7,018	7,044	7,089	4,512	2,439	286
COPPER CONCENTRATES	Dry Tonnes	9,165	11,464	14,731	13,385	16,441	24,550	20,157

A marketing analysis of the UMZ products was carried out by a metal trading consultant on behalf of NCL, and the conclusions were as follows:

- Copper concentrates: It is assumed that copper concentrates would be sold to one of the smelters located in northern Chile or in Perú, because the quantities produced are insufficient to meet minimum tonnages needed for overseas shipments at frequent intervals at reasonable cost. It is also assumed that concentrate would be transported from the mine to the smelter by a combination of truck and train.
- Cathodes: It is assumed that cathodes would be sold to Brazilian buyers because a reasonable premium over the LME grade A copper price would be paid and freight charges within Brazil

would be paid by the buyers. It is also assumed that cathodes would be transported by a combination of truck and train.

- Bullion: It is assumed that the gold-silver bullion would be shipped and sold by the same means as production from the LMZ is today.

Capital Costs

The pre-production capital costs for the plant upgrade, infrastructure modifications and preparation of the open pit mine are estimated to be approximately \$65.0 million. However, management intends to assess the possibility that the development of the UMZ deposit might proceed in stages, in order to permit the deferral of certain capital costs.

The UMZ would operate through Orvana's wholly-owned Bolivian subsidiary Empresa Minera Paititi S.A. ("Paititi"). Paititi currently operates the LMZ mine and is subject to taxation under the mining and income tax laws of Bolivia. A royalty of 3% is payable to a third party on all metals produced and sold from the Don Mario Mine.

The Study assumes that the current gold recovery facility would be an integral part of the UMZ operation, and as a result, processing of the UMZ ores cannot commence until after the exhaustion of the LMZ deposit, after which time the current CIL plant would be available to treat ore from the UMZ. Based on the current reserve position, the LMZ deposit is likely to be exhausted at the end of calendar 2009. Since some modifications would have to be made to the existing crushing and milling circuits, it is assumed that the UMZ project would be able to commence production in the second quarter of 2010.

Project Economics

The project's economics using \$1.20/lb copper, \$450.00/oz gold and \$7.00/oz silver are shown in the table below:

Cumulative cashflow	\$'000	92,293
Pre-production capital costs	\$'000	65,824
NPV @ 10% discount rate	\$'000	43,133
NPV @ 7% discount rate	\$'000	54,844
IRR	%	30
Pay back period	Years	2.4

It is expected that the project could achieve an after-tax NPV of \$43.1 million at a 10% discount rate, a 2.4-year payback and an after-tax IRR of 30%. The project's economics are most sensitive to revenue (grade, recovery, metal price), the most relevant parameter being metal prices, as NCL does not foresee significant changes in grade or recovery. Labour, power and sulphuric acid costs do have an impact on sensitivities, however, the effect of changes in these costs on the project's economics is moderate compared to the effect of changes in metal prices.

Infrastructure and Utilities

The Don Mario Mine is already well served with utilities, in particular, the natural gas pipeline. The primary modifications that would be made to the existing infrastructure facilities include:

- Power: The expansion of the current power plant consisting of four 875 kVA gas-fired generators, by installing four additional 2,300 kVA gas-fired generators.

- Sulphuric Acid Plant: The construction of a sulphuric acid plant with a nominal output capacity of 150 tonnes per day. The plant would be supplied with high quality sulphur from the Altiplano of Bolivia.
- Tailings: The proposed solution for tailings disposal would be to expand the existing facility from its current elevation of 281 metres above sea level (“masl”) to 290 masl.
- Camp: Minor upgrades would be required.
- Roads: Due to the increased requirement for land transportation of supplies and products, the access road from the village of Taperas (on the railroad between Santa Cruz de la Sierra and the Brazilian border) to the minesite would be upgraded.

When constructed and in full production, the UMZ operation would require an estimated 370 employees and contractors. According to Bolivian environmental legislation, the existence of the current operation means the UMZ project would only require an update of the current Environmental License and not the development of a new Environmental Impact Study. The Study suggests that much of the existing workforce would be retained, with additional manpower being sourced from communities within the Department of Santa Cruz.

Outlook

Given the results of the Preliminary Feasibility Study, Orvana will be considering steps to advance the UMZ project towards production, including the preparation of a full Feasibility Study.

An NI 43-101 Technical Report based on the Preliminary Feasibility Study will be filed on SEDAR within 45 days following this news release. All other information previously released on the UMZ project is also available on the Orvana website.

For further information, please contact Dan Barnholden at 416-625-2334 or by e-mail to dbarnholden@orvana.com.

Forward-Looking Statements

Certain statements in this press release constitute forward-looking statements or forward-looking information within the meaning of applicable securities laws (“forward-looking statements”). Any statements that express or involve discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions, potentials, future events or performance (often, but not always, using words or phrases such as “believes”, “expects” or “does not expect”, “is expected”, “anticipates” or “does not anticipate”, or “intends” or stating that certain actions, events or results “may”, “could”, “would”, “might” or “will” be taken or achieved) are not statements of historical fact, but are “forward-looking statements”. Such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements of Orvana, or developments in Orvana’s business or in its industry, to differ materially from the anticipated results, performance, achievements or developments expressed or implied by such forward-looking statements. Forward-looking statements include all disclosure regarding possible events, conditions or results of operations that are based on assumptions about future conditions, courses of action and consequences. Forward-looking statements may also include, without limitation, any statement relating to future events, conditions or circumstances. Orvana cautions you not to place undue reliance upon any such forward-looking statements, which speak only as of the date they are made. Forward-looking statements relate to, among other things, all aspects of the possible development of the UMZ deposit and of its potential operation and production, mineral resource and mineral reserve estimates, the realization of mineral reserve estimates, estimates of future capital expenditures and timing of development and production and estimates of the outcome and timing of decisions with respect to whether and how to proceed with such development and production, permitting time lines, statements and information regarding future feasibility studies and their results, production forecasts, future transactions, the successful completion of reclamation projects, future gold prices, the ability to achieve additional growth and geographic diversification, future production costs, accounting estimates and assumptions, future tax benefits, the renewal or renegotiation of agreements, future financial performance, including the ability to increase cash flow

and profits, future financing requirements, mine development plans, and possible changes in the regulatory, political, social and economic environment in Bolivia. A variety of inherent risks, uncertainties and factors, many of which are beyond the Company's control, affect the operations, performance and results of the Company and its business, and could cause actual results to differ materially from current expectations of estimated or anticipated events or results. Some of these risks, uncertainties and factors include the impact or unanticipated impact of: the need to recalculate estimates of reserves and resources based on actual production experience; the failure to achieve production estimates; variations in the grade of ore mined; variations in the cost of operations; fluctuations in the price of gold; the availability of qualified personnel; risks generally associated with mineral exploration and development, including the Company's ability to develop the UMZ deposit if it determines to do so and to acquire and develop other mineral properties; the Company's ability to obtain additional financing when required on terms that are acceptable to the Company; challenges to the Company's interests in its property and mineral rights; conclusions of economic evaluations; changes in project parameters as plans continue to be refined; the failure of plant, equipment or processes to operate as anticipated; delays in obtaining government approvals, financing or in the implementation or completion of development and construction projects; the uncertainties involved in interpreting drilling results and other geological data; current, pending and proposed legislative or regulatory developments or changes in political, social, economic or regulatory conditions in Bolivia; general economic conditions worldwide and the risks identified in Orvana's Management's Discussion and Analysis for the third quarter 2006 under the heading "Risks and Uncertainties". This list is not exhaustive of the factors that may affect any of the Company's forward-looking statements and reference should also be made to the Company's Annual Information Form for a description of additional risk factors. Forward-looking statements are based on management's current plans, estimates, projections, beliefs and opinions, and the Company does not undertake any obligation to update forward-looking statements should assumptions related to these plans, estimates, projections, beliefs and opinions change. Readers are cautioned not to put undue reliance on forward-looking statements.

Non-GAAP Measures

The Company has used Non-GAAP measures including direct mine operating costs, cash operating costs, total cash costs and total production costs, and related unit cost information, because it understands that certain investors use this information to determine the Company's ability to generate earnings as cash flow for use in investing and other activities. The Company believes that conventional measures of performance prepared in accordance with GAAP do not fully illustrate the ability of its operating mine to generate cash flow. Non-GAAP measures do not have any standardized meaning prescribed under Canadian GAAP, should not be construed as an alternative to GAAP reporting of operating expenses, and may not be comparable to similar measures presented by other companies. The measures are not necessarily indicative of cost of sales as determined under Canadian GAAP. Cash costs are determined in accordance with the former Gold Institute's Production Cost Standard.