

## NEWS RELEASE

March 4, 2002

### **ORVANA ANNOUNCES COMMENCEMENT OF DEVELOPMENT AT DON MARIO GOLD PROJECT AND EXECUTIVE APPOINTMENTS**

TORONTO, ON – (ORV-TSE) Mr. Jaime Urjel, President of Orvana Minerals Corp. (“Orvana”) is pleased to announce that Orvana’s wholly-owned subsidiary, Empresa Minera Paititi, S.A. (“Paititi”) has completed as scheduled its purchase of a mining concession with associated gold mill plant and equipment from Compania Minera del Sur S. A. (“Comsur”). Several pieces of mobile equipment acquired in that purchase are now on the Don Mario site in eastern Bolivia, and construction crews have started dismantling the gold mill plant in anticipation of relocating the plant to the Don Mario site.

On completion, the Don Mario project will include underground mining operations; a 600 tonnes per day processing plant with ore crushing, milling, agitated leaching of the ground ore in cyanide solution to dissolve gold, and the recovery of gold from solution using activated carbon and electrowinning; a tailings disposal facility; water storage and distribution facilities; office, camp, and warehouse buildings; and a natural gas-fired plant for the generation of electrical power. The project is expected to be completed within the next 15 months.

Engineering, procurement and construction management services are being provided by Comsur. Comsur’s engineers have completed the design of a three compartment shaft measuring 5 meters by 2.5 meters to access the orebody, which will be mined with trackless equipment using a sub-level stope mining method. Mining-related activities have started, and shaft-sinking will commence shortly. The shaft is expected to reach the 104 level, 225 meters below surface, by March 2003, giving access at that level to the main ore reserve area of the deposit. A contract for the supply of natural gas is being negotiated.

As previously reported, the ore reserves at Don Mario, as estimated by independent engineering consultants to Orvana, were calculated to be 848,000 tonnes grading 15.55 grams gold per tonne of ore. The attached Appendix sets out additional information on the procedures used to estimate the ore reserves. For planning purposes, Comsur has assumed that over the initial six years of operation, Don Mario will mine and process approximately 1,172,000 tonnes grading 10.24 grams gold per tonne of ore, at an average cash production cost estimated to be in the range of U.S. \$25 to \$30 per tonne, to recover 346,000 ounces of gold.

Mr. Urjel is also pleased to announce the following executive appointments at Orvana:

Mr. Gonzalo Sanchez de Lozada as Chairman of the Board of Directors. Mr. de Lozada has had almost 40 years of experience as a mining entrepreneur in Bolivia and Argentina. Mr. de Lozada is active in Bolivian politics. He is the controlling shareholder of Minera S.A., a holding company with extensive mining, processing and smelting assets in Bolivia and Argentina. Comsur is a subsidiary of Minera S.A.

Mr. Jaime Urjel as Director, President and Chief Executive Officer. Mr. Urjel, an engineer by background, is currently President and CEO of Minera S.A., and Comsur. He has had 30 years of experience, including service as Mine Manager, Operations Manager and General Manager of the group mining companies.

Mr. George Hamilton as Director. Mr. Hamilton, a chartered accountant by profession, is a retired associate with the consulting firm of Cap Gemini Ernst & Young in Toronto. Prior to his retirement as a partner in the consulting practice of Ernst & Young LLP in 1998, Mr. Hamilton was a senior practitioner in that firm's process reengineering/cost management practice.

Mr. Joseph F. Conway as Director. Mr. Conway is President and CEO of Repadre Capital Corporation, Toronto and a director of several other mining companies. He holds a B.Sc. Degree from Memorial University in Newfoundland, and an MBA from Dalhousie University. Prior to his appointment as President of Repadre, Mr. Conway was a Vice President and Director of Nesbitt Burns.

Mr. Robert A. Watts as Director. Mr. Watts, a chartered accountant by profession, is a financial and management consultant to the mining industry. He was one of the founders of Orvana, and its first president. Mr. Watts is a director of several publicly-listed mining companies.

Mr. Donald R. French as a special advisor to the Board of Directors. Mr. French has been involved in the exploration and financing of the Don Mario project since its discovery in the early 1990s. Mr. French was a member of the investor group that financed the initial development of the 4 million ounce Kori Kollo gold deposit in Bolivia, and subsequently joint ventured that project with Battle Mountain Gold Company (now Newmont Gold Company).

Mr. Carlos Mirabal as Vice President and Chief Operating Officer. Mr. Mirabal, a graduate of the Colorado School of Mines, is a metallurgical engineer with approximately 30 years of experience in the industry, including senior management positions with Minera and Comsur.

Mr. Jorge Szasz as Vice President and Chief Financial Officer. Mr. Szasz is a chartered accountant and is an active participant in the Audit and Accounting Standards Committee of Bolivia. He is primarily responsible for the financial and commercial aspects of the operations of Minera and Comsur.

Mr. Chris Mitchell as Corporate Secretary. Mr. Mitchell is a registered professional engineer and holds an MBA (Finance) degree from the University of British Columbia. He has had over 30 years experience as a mining executive, with responsibility for the management and direction of the financial and administration functions for several publicly-listed mining companies. Mr. Mitchell has served as Orvana's Corporate Secretary since mid-1996.

For further information, contact J. C. Mitchell, Corporate Secretary, at 303 863 3923.

APPENDIX  
to accompany Press Release March 4, 2002

The information summarized in this Appendix concerning mineral resources and mineral reserves for the Lower Mineralized Zone ("LMZ") of the Don Mario gold-copper project, Bolivia was prepared in 1999 and 2000 by parties at arm's-length to Orvana Minerals Corp. (the "Company"). Section 2.4 – *Disclosure of Historical Estimates* of National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* ("NI 43-101") exempts disclosure of an estimate of mineral resources or mineral reserves made before NI 43-101 came into effect on February 1, 2001 from the provisions of NI 43-101.

As part of a study completed in May 1999 (the "1999 draft Feasibility Study") on the feasibility of developing open pit and underground mines to develop the LMZ ore deposit, the Company engaged MRDI-Canada ("MRDI" – a wholly-owned subsidiary of AMEC) to prepare geologic models and estimates of mineral resources and mineral reserves for the LMZ. MRDI is a minerals engineering and consulting firm headquartered in Vancouver, British Columbia. It has an international clientele, for whom it has completed similar studies on projects throughout Canada and overseas.

The resource estimates presented in the 1999 draft Feasibility Study by MRDI were generated from the drilling and assaying programs carried out by Orvana in 1996 and 1998. All assaying and check-assaying for those programs was performed by internationally-recognized analytical laboratories at arm's-length to Orvana. The estimates also incorporated the results of drilling and assaying programs completed by other companies prior to Orvana acquiring the Don Mario project in early 1996. As part of its responsibilities, MRDI reviewed the quality control and quality assurance programs implemented and carried out by Orvana to ensure the integrity and reliability of the sampling and assaying procedures.

MRDI investigated the validity of aspects of the proposed LMZ geological model through statistical analysis of the assay data. The analysis, supported by visual inspection of a drift 145 meters in length in the mineralized vein structure, demonstrated that gold mineralization within the LMZ is located in favourable areas within the structure. The three and six grams/tonne ("g/t") gold mineralized envelopes are distinct, with the latter indicating the presence of a core of higher-grade gold mineralization.

The LMZ assay data includes several very high-grade assays, including one assay of 9,150 g/t gold. Although few in number, such assays could pose a substantial risk of overestimating the grade of the deposit, unless the contribution of the highest grades is discounted. MRDI's analysis indicated that the risk could be ameliorated by capping extreme grades at 150 g/t. The geologic mineral resource estimate was calculated on this basis, using MEDSYSTEM® mine planning software to generate a computer-based geologic model.

To classify the estimated resource into the categories of "measured", "indicated" and "inferred", MRDI used a statistical approach to guide the development of a classification scheme. Requirements from the *Australasian Code for Reporting of Identified Mineral Resources and Ore Reserves* were used as a basis for the statistical criteria chosen, namely: (a) for resources to be classified as "measured", the *quarterly* production grade and tonnage should be known to at least  $\pm 15$  percent with 90 percent confidence, and (b) for resources to be classified as "indicated", the *annual* production grade and tonnage should be known to at least  $\pm 15$  percent with 90 percent confidence. MRDI's resultant resource estimate and ore classifications are shown in the following table:

### LMZ Measured and Indicated Resources – MRDI 1999

Ore Zone	Category	Tonnes x1000	Gold (g/t)
3 gram envelope	Measured	19	2.75
	Indicated	866	2.67
	<b>Subtotal</b>	<b>885</b>	<b>2.67</b>
	Inferred	50	0.55
6 gram envelope	Measured	24	19.88
	Indicated	648	20.96
	<b>Subtotal</b>	<b>672</b>	<b>20.92</b>
	Inferred	28	14.71
<b>Total Measured and Indicated</b>		<b>1,557</b>	<b>10.55</b>

In late 1999, Orvana completed a small drilling program (18 shallow core holes) to obtain additional information as to the character and extent of the LMZ mineralization within the planned limits of the proposed open pit. As the feed to the processing plant during the first year of operation was scheduled to be supplied from the open pit, Orvana management considered it prudent to increase the drilling density within the pit. The drilling and assay data were turned over to MRDI for the preparation of an updated resource calculation. Existing surface trench sample results were also incorporated into MRDI's updated calculation, which involved only the pit area of the Don Mario deposit.

MRDI prepared an revised open pit mineable ore reserve estimate for the year 2000 update to the 1999 draft Feasibility Study (the "Year 2000 Update"), based on its updated resource calculation and a revised mine design using updated break-even external and internal cutoff grades for the pit. These updated break-even cutoff grades were 3 g/t gold and 2.75 g/t gold, respectively, calculated using a gold sales price of US \$300 per ounce, and updated estimates for mining, processing and G&A costs, selling expenses and gold recoveries. The updated mineable ore reserve estimate for the open pit as calculated by MRDI was 246,000 tonnes of ore at an average grade of 10.19 g/t gold, with a waste:ore ratio of 10.27:1.

The underground mine plan proposed by MRDI in the 1999 draft Feasibility Study was based on self-mining using a "cut and fill" mining method. The Year 2000 Update evaluated using a combination of "long-hole stoping" for the thicker core of the deposit, and "shrinkage stoping" for the narrower areas in the upper and lower extremities of the deposit. The evaluation was performed by Procon Mining and Tunneling ("Procon"), an underground mining contractor based in Burnaby, British Columbia. Procon has had extensive experience in operating underground mines in remote areas of Canada. It was assumed that Procon's crews would mine the deposit on a contract basis, and capital and operating cost estimates were developed by Procon on that premise. In addition, using MRDI's resource model for the underground mine, Procon prepared a revised underground mine design and ore production schedule, which resulted in a mineable reserve of 602,000 tonnes at an average grade of 17.74 g/t gold.

The total mineable ore reserve estimate for Don Mario, consisting of MRDI's estimate for the open pit mine, and Procon's estimate for the underground mine, is shown in the following table:

### LMZ Mineable Reserve Estimate – Year 2000 Update

<b>Category</b>	<b>Tonnes</b>	<b>Gold (g/t)</b>	<b>Oz. Gold</b>
Open pit (by MRDI)	246,000	10.19	80,530
Underground (by Procon)	602,000	17.74	343,450
<b>Total</b>	<b>848,000</b>	<b>15.55</b>	<b>423,980</b>

**Comsur conducted its own internal assessment of the Don Mario deposit in 1997.**

**The 1997 evaluation of the LMZ resources used the following criteria:**

- The influence of the high grade samples in determining the grade of the deposit was reduced by lowering the grade of such samples to three times the average grade of the adjacent values.
- A cutoff grade of 4 g/t gold was used.
- A minimum mining width of two meters was used.

Comsur conducted a second internal assessment of the deposit in late 1999, after Orvana had carried out additional diamond drilling and developed the 145 meter drift. The criteria were similar to those used in the 1997 assessment, but with the following modifications:

- The cutoff grades for the “Mini-Pit” and the underground portions of the deposit were set at 2 g/t gold and 3 g/t gold, respectively.
- The minimum mining width was increased to 3 meters.

#### **LMZ Mineable Reserve Estimate – Comsur 2000**

<b>Category</b>	<b>Tonnes</b>	<b>Gold (g/t)</b>	<b>Oz. Gold</b>
Open pit	324,700	8.81	92,000
Underground	847,300	10.79	294,000
<b>Total</b>	<b>1,172,000</b>	<b>10.24</b>	<b>386,000</b>

**Comsur has advised the Company that it has categorized the figures reported above as a proven and probable reserve estimate, and that it intends to use this estimate for production planning purposes.**