# Lydian Reports Positive Metallurgical Test Results From the Amulsar Gold Project, Armenia

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TORONTO, ONTARIO--(Marketwired - Oct 22, 2013) - Lydian International Ltd. (TSX:LYD) ("Lydian" or "the Company"), a gold-focused mineral exploration and development company, announces the results of cyanide bottle roll tests and column leach tests on sample composites from the Erato pit at its Amulsar gold project in Armenia. The results returned gold recoveries ranging from 88% to 95% in this phase of work. In addition, the results from a cold climate test showed only a minor reduction in the rate of recovery and that overall gold recovery was not affected by a cold temperature.

The tests consisted of further confirmation testing for the Amulsar gold project, and were conducted on sample metallurgical composites from four drill holes from the Erato deposit at the Company's Amulsar gold project (see Figure 1 in appendix). The samples were used for test work that included head analyses, head screen analyses with assays by size fraction (crushed to 100% passing 12.5 millimeters), bottle roll leach test work, cyanide soluble analyses, and column leach test work. In addition to these samples, portions of previously tested core material from the Tigranes/Artavasdes deposits were combined to generate a single composite, which was used to test the metallurgical effects of "cold climate" leach kinetics. All of the test work referenced herein was performed by Kappes, Cassidy & Associates (KCA) at its metallurgical laboratory located in Reno, Nevada.

As part of the test work requirements for Erato, KCA carried out a metallurgical test work program consisting of fine cyanidation bottle roll leach (simulating conventional CIL), and column leach tests (simulating heap leaching). The program was conducted on master composites prepared from selected intervals taken from half core, representing Erato drill holes located within the starter and final pit shells.

The fine bottle roll cyanidation leach tests were conducted at 80% passing 75µm. Cyanide bottle roll tests were completed on crushed portions of each sample. Each leach test was run for a period of ninety-six hours with solution sampling performed at 2, 4, 8, 24, 48, 72 and 96 hours.

Results of the fine bottle roll cyanidation leach tests are summarized in Table 1.

**Table 1: Fine Cyanidation Leach Tests**

| KCA Sample No. | KCA Test No. | Description | Target P80 Size mm | Calcu-lated Head, gms Au/MT | Au Extrac-ted, % | Leach Time, hours | Consum-ption NaCN, kg/MT | Addition $Ca(OH)_2$, kg/MT |
|---|---|---|---|---|---|---|---|---|
| 62544 | 62562 A | DDAM - 130/148* | 0.075 | 0.952 | 95 | 96 | 0.96 | 1.50 |
| 62544 | 62579 A | DDAM - 130/148* | 0.075 | 0.964 | 96 | 96 | 1.14 | 1.50 |
| 62558 | 62562 B | DDA 103 | 0.075 | 0.710 | 94 | 96 | 0.86 | 1.50 |
| 62559 | 62562 C | DDA 350 | 0.075 | 1.001 | 97 | 96 | 0.72 | 1.50 |
| 62559 | 62579 B | DDA 350 | 0.075 | 1.018 | 96 | 99 | 0.79 | 1.50 |
| 62560 | 62562 D | DDA 358 | 0.075 | 1.241 | 96 | 96 | 0.10 | 1.50 |
| 62561 | 62563 A | DDA 367 | 0.075 | 1.154 | 96 | 96 | 0.65 | 1.50 |

* Tigranes/Artavasdes ore blend

Table 1 shows the bottle roll leach test work with gold extractions ranging from 94% to 97% based on calculated heads which ranged from 0.710 to 1.241 grams per metric tonne. Consumption of both sodium cyanide and the blended hydrated lime were low throughout.

The results from the column leach test work are summarized in Table 2.

**Table 2: KCA - Column Leach Tests**

| KCA Sample Number | KCA Test Number | Description | Crush Size mm | Calculated Head Assay, g/t | | Extraction, % | | Days of Leach | Reagent Consumption, kg/t | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Au | Ag | Au | Ag | | NaCN | $Ca(OH)_2$ |
| 62544 A | 62564 | DDAM - 130/148* | 12.5 | 1.064 | 0.89 | 92 | 35 | 73 | 0.46 | 2.51 |
| 62558 A | 62567 | DDA 103 | 12.5 | 0.756 | 0.82 | 88 | 52 | 59 | 0.61 | 2.00 |
| 62559 A | 62570 | DDA 350 | 12.5 | 1.182 | 1.56 | 94 | 52 | 59 | 0.43 | 2.00 |
| 62560 A | 62573 | DDA 350 | 12.5 | 1.331 | 2.34 | 95 | 53 | 59 | 0.53 | 2.00 |
| 62561 A | 62576 | DDA 358 | 12.5 | 1.233 | 1.23 | 94 | 24 | 59 | 0.40 | 2.00 |

* Tigranes/Artavasdes ore blend

Table 2 shows results for the column leach test work, gold extraction ranged from 88% to 95% (see Figure 2 in appendix). When refrigerated at a temperature of 3°C, sample number 62544A had an average extraction time of 73 days, 14 days longer than the similar column tests conducted at ambient temperature. However, although the colder temperature resulted in slower leach kinetics, the final gold leach recovery was eventually the same for columns conducted at 3°C as those conducted at ambient temperature. Management of the Company believes that this result provides further support for its determination that a heap leach recovery method is appropriate for the Amulsar gold project.

These results are consistent with previous work conducted by the company and demonstrate that, although the leach performance at Amulsar will vary depending on the climatic conditions, ultimate recovery appears to be independent of temperature. The tests suggest that leach kinetics would slow in winter and then rise in the spring as the temperature increases, providing a "slug" of gold from the heap in the spring, ultimately resulting in approximately the same leach recovery point as determined by column leach tests conducted at constant ambient temperature.

Marc Leduc, Chief Operating Officer of the Company, commented "The latest metallurgical results reinforce the suitability of the Company's current Amulsar project model, including the use of heap leach technology. We are now focused on incorporating these latest results and lower reagent consumption rates in an updated feasibility study that is targeted for completion in the second quarter of 2014."

Gary Anthony Patrick, BSc (Chemistry/Extractive Metallurgy), MAusIMM CP (Met) is a qualified person as defined by National Instrument 43-101 (NI 43-101) and oversees the Company's metallurgical testwork programs. Mr. Patrick has reviewed and approved the scientific and technical information, contained in this press release.

**About Lydian International**

Lydian is a gold-focused mineral exploration and development company with expertise employing "first mover" strategies in emerging exploration environments. Currently Lydian is focused on Eastern Europe and, in particular, developing its flagship Amulsar gold project in Armenia. Lydian also has a pipeline of promising early-stage gold and base metal exploration projects in the Caucasus regions.

Lydian's management team has a track record of success in grassroots discovery, in acquiring and developing undervalued assets, and in building companies. Lydian has a strong social agenda and a unique understanding of the complex social and political issues that characterise emerging environments. The Company's significant shareholders include the International Finance Corporation which is a member of the World Bank Group and the European Bank for Reconstruction and Development. More information can be found on Lydian's web site at www.lydianinternational.co.uk.

**Caution regarding forward-looking information:**

This news release may contain certain information that constitutes forward-looking statements. Forward-looking statements are frequently characterised by words such as "plan," "expect," "project,"

"intend," "believe," "anticipate" and other similar words, or statements that certain events or conditions "may" or "will" occur and include statements regarding the Company's intended planned exploration. Forward-looking statements are based on the opinions and estimates of management at the date the statements are made, and are subject to a variety of risks and uncertainties and other factors that could cause actual events or results to differ materially from those projected in the forward-looking statements. These factors include the inherent risks involved in the exploration and development of mineral properties, mine site planning and development, the uncertainties involved in interpreting drilling results and other geological data, fluctuating metal prices, permitting and licensing and other factors described above and in the Company's most recent annual information form under the heading "Risk Factors", which has been filed electronically by means of the Canadian Securities Administrators' website located at www.sedar.com. The Company disclaims any obligation to update or revise any forward-looking statements if circumstances or management's estimates or opinions should change. The reader is cautioned not to place undue reliance on forward-looking statements.

Appendix

To view Figure 1: Erato Metallurgical Sample Drill Hole Location Map, please visit the following link: http://media3.marketwire.com/docs/905989_fig_1.pdf.

To view Figure 2: Gold Leach Curves, please visit the following link: http://media3.marketwire.com/docs/905989_fig_2.pdf.

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