Huakan International Mining Inc. Provides J&L Metallurgical Test Work Results

25.02.2014 | Newsfile

Vancouver, Feb. 25, 2014 - Huakan International Mining Inc. (TSXV: HK) (the "Company") is pleased to provide the updated metallurgical testing results for the J&L project, the Company's 100% owned precious and polymetallic advanced exploration property, located near Revelstoke, BC. Since last reporting on the J&L metallurgical test work in January 2013, the Company has continued laboratory studies for confirmation purposes, ongoing process optimization, and variability testing.

Over the last year the test work has focused on the two most critical aspects of the circuit design, consisting of base metal flotation and leach pre-treatment for improving precious metal recovery. The differential flotation investigated variability samples of different grades and spatial locations, including samples from both the Main and Yellowjacket Zones. This included locked cycle flotation tests. Additionally, precious metals recovery was further evaluated in response to treatment for on-site doré production of the gold and silver that does not report to either of the lead or zinc concentrates. The majority of the test work has been performed at Inspectorate Exploration and Mining Laboratories located in Richmond BC, under the supervision of the Company's independent QP, Frank Wright, P.Eng.

Summary

- The results of the metallurgical test work program support the advancement of the J&L project metallurgy and have better defined the process flowsheet. Overall concentrate grades and recovery of gold, silver, lead and zinc continue to be promising for all of the J&L ore zones tested, using conventional technology.
- While further testing is planned with project development, a successful concept for processing the Main Zone material consists of dense media (DMS) sinks going to differential flotation to produce separate lead and zinc concentrates both having precious metal credits. Further recovery of the remaining precious metals in the Main Zone can be accomplished on site using pressure oxidation (POX), followed by cyanidation in order to produce doré.
- The Yellowjacket material can incorporate portions of a similar flowsheet without the need for DMS and with the elimination of the POX and leach circuits.
- The metallurgical testing assumed an average grade of the mill head from the Main Zone at 9 g/t Au, 67 g/t Ag, 2.5% Pb, and 4.2% Zn; and from the Yellowjacket Zone at 0.1 g/t Au, 55 g/t Ag, 2.0% Pb, and 7.9% Zn.
- **For the Main Zone, the current results indicate average metal recoveries can be expected to be 93% Au, 70% Ag, 74% Pb and 80% Zn.**
- **For the Yellowjacket Zone, the current results indicate average metal recoveries can be expected to be 94% Ag, 88% Pb and 93% Zn.**

Main Zone - Lead/Zinc Flotation and Gold Circuit

The Main Zone consists of the majority of the current J&L resource tonnage, with the primary metal value in gold. The historical metallurgical response has been shown to be complex with intimate mineral associations of the value metals (Au, Ag, Pb, Zn) being exhibited, and with the gold being refractory to conventional leaching procedures.

Based on six underground bulk samples of varying grade taken for the study, the test work over the last year supported a number of earlier findings, as well as provided some new direction for detailed flowsheet development.

Important findings were:

- Main Zone remained positive to dense media separation (DMS) techniques at a nominal 50 mm (2") particle size for all six variability samples tested. A media SG of 2.85, simulated with heavy organic liquid, resulted in greater than 99% recovery of Au and Pb and greater than 96% recovery of Ag and Zn, with a mass rejection of between 8% to 42%, depending on the grade and mineralogy of the feed. Further optimization is planned in future testing.
- Improved flotation procedures over earlier methods were developed to allow for higher recoveries of lead and zinc to their respective concentrates.
- Rejection of arsenic from base metal concentrates exceeded 95% to as high as 99% depending on the head grade. However, the arsenic content remained elevated, at between 3.0% to 4.2% in the lead concentrate and less than 1.5% in the zinc concentrate. Owing to presence of lead antimony minerals, antimony grades are elevated in the lead concentrate ranging from 0.9% to 4.3%.
- A fine primary grind requirement of 80% passing (P80) ~34 microns was confirmed from the 2013 test work, with related costs being offset by the encouraging DMS pre-concentration and the relatively soft nature of the feed material identified in previously performed comminution studies.
- Some of the gold and, typically a majority of the silver, reports to the lead and zinc concentrates. Remaining gold values are important and are associated primarily with arsenopyrite and, to a lesser extent, pyrite, which is mostly rejected during base metal flotation.
- Gold responds poorly to direct cyanide leaching, so that pre-treatment is required. The test program over the last year resulted in a decision to forward pressure oxidation (POX) rather than with bio-oxidation, based on the response and anticipated related capital and operating costs of the two technologies.

Three of the variability bulk samples representing the envisioned typical Main Zone head grade range were submitted for locked cycle test work. A summary of the locked cycle response is given in Table 1.

Table 1: Main Zone Variability Testwork- Range of Head Grade and Flotation Concentration Response

	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)
Head Grade	6 - 16	45 - 123	2.0 - 4.8	1.6 - 8.9
Metal Recovery	Au (%)	Ag (%)	Pb (%)	Zn (%)
to Pb Conc	6 - 23	35 - 80	68 - 90	5 - 20
to Zn Conc	0.5 - 17	5 - 10	2 - 12	74 - 84
Concentrate Grade				
in Pb Conc	5 - 20	650 - 725	44 - 59	3 - 14
in Zn Conc	0.5 - 9	5 - 250	1 - 9	50 - 59

The results showed that even with lower grade feeds, the lead and zinc concentrate recoveries and grades remained satisfactory. Losses of zinc to the lead circuit increased with higher grade zinc content, which should be alleviated in developing more specific operating procedures for higher grade feed. The current results indicate average lead and zinc metal recoveries of 74% Pb and 80% Zn can be expected. Furthermore, although the gold and silver grades and recoveries in both flotation concentrates were variable, a notable portion of the precious metal recovery reports to the lead concentrate.

The majority of the gold and some of the silver reports to the zinc tailing, which were subjected to pressure oxidation pre-treatment followed by cyanidation testwork.

From the above testwork, an overall distribution of the gold and silver recovery for typical Main Zone material is estimated and highlighted in Table 2. Overall gold and silver recoveries are expected to average 93% for Au and 70% for Ag with the envisioned treatment circuit. Silver recovery can be further improved with a lime boil procedure following POX, but this step is currently not included in the proposed treatment circuit as it does not appear to be justified by the projected operating costs.

Table 2: Main Zone Average Feed Type - Estimated Precious Metal Distribution

	Au % Distribution	Ag % Distribution
Dense Media (DMS) Sinks	99	98
Lead Concentrate	10	50

Zinc Concentrate	1	5
Cyanide Leach (after POX)	95	35
Estimated TOTAL Recovery	93	70

Yellowjacket Zone

For the Yellowjacket Zone, the laboratory test work has shown conventional mineral processing procedures resulted in an excellent flotation response. While gold is a minor consideration in the Yellowjacket Zone, it responded well, along with silver, to direct flotation with most credits reporting with the lead concentrate.

Preliminary testing indicated DMS is less beneficial to Yellowjacket than the Main Zone, although a coarser primary grind at P80 ~65 microns was accommodated. A further coarsening of the grind may be available with additional optimization evaluation. The corresponding locked cycle data from the Yellowjacket master composite sample that was tested is provided in Table 3.

Table 3: Yellowjacket Zone - Flotation Response

	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)
Metal Grades				
Mill Head	0.11	55	2.04	7.97
Lead Conc.	1.6	1090	43.3	10.4
Zinc Conc.	0.25	56	1.1	61.9
Metal Recovery	Au (%)	Ag (%)	Pb (%)	Zn (%)
to Pb Conc.	58.3	81.9	87.5	5.4
to Zn Conc.	27.5	12.3	6.7	93.1

Further benefits of decreasing zinc losses to the lead concentrate and increasing lead content for the concentrate are anticipated to be available. While the gold head grade is low in the Yellowjacket Zone, an overall flotation recovery of 85% was still achieved. The current results indicate average metal recoveries can be expected to be 94% Ag, 88% Pb and 93% Zn.

"The positive results of the metallurgical test work program on the J&L Main and Yellowjacket Zones clearly support the ongoing advancement of our J&L project," said Mr. Guixin Zhao, Company CEO.

For further information please contact:

Huakan International Mining Inc.
Paul Cowley, VP Exploration
(604) 694-2344

Neither the TSX Venture Exchange nor its Regulations Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

Frank Wright, P.Eng., independent metallurgical consultant, is the Qualified Person as defined in National Instrument 43-101, who has reviewed and approved the technical content of this news release.

CAUTIONARY STATEMENTS REGARDING FORWARD LOOKING INFORMATION

Certain of the statements made and information contained herein may contain forward-looking statements or forward-looking information within the meaning of applicable securities laws. Such forward-looking statements or forward-looking information include, but are not limited to, statements concerning the results of metallurgical testwork programs. Forward-looking statements or information include statements regarding the expectations and beliefs of management. Often, but not always, forward-looking statements and forward-looking information can be identified by the use of words such as "plans", "expects", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates", or "believes" or the negatives thereof

or variations of such words and phrases or statements that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved. Forward-looking statements or information include, but are not limited to, statements or information with respect to known or unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements or information.

Forward-looking statements or information are subject to a variety of risks and uncertainties which could cause actual events or results to differ from those reflected in the forward-looking statements or information, including, without limitation, risks and uncertainties relating to: completion of announced transactions, history of losses; requirements for additional capital; dilution; loss of its material properties; interest rates increase; global economy; limited history of production; speculative nature of exploration activities; periodic interruptions to exploration, development and mining activities; environmental hazards and liability; industrial accidents; failure of processing and mining equipment; labour disputes; supply problems; commodity price fluctuations; uncertainty of production and cost estimates; the interpretation of drill results and the estimation of mineral resources and reserves; legal and regulatory proceedings and community actions; title matters; regulatory restrictions; permitting and licensing; volatility of the market price of common shares; insurance; competition; hedging activities; currency fluctuations; and loss of key employees. Should one or more of these risks and uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described in forward-looking statements or information. Accordingly, readers are advised not to place undue reliance on forward-looking statements or information. The Company disclaims any intent or obligation to update forward-looking statements or information except as required by law, and you are referred to the full discussion of the Company's business contained in the Company's reports filed with the securities regulatory authorities in Canada.

Dieser Artikel stammt von Rohstoff-Welt.de
Die URL für diesen Artikel lautet:
https://www.rohstoff-welt.de/news/167251--Huakan-International-Mining-Inc.-Provides-JundL-Metallurgical-Test-Work-Results.html

Für den Inhalt des Beitrages ist allein der Autor verantwortlich bzw. die aufgeführte Quelle. Bild- oder Filmrechte liegen beim Autor/Quelle bzw. bei der vom ihm benannten Quelle. Bei Übersetzungen können Fehler nicht ausgeschlossen werden. Der vertretene Standpunkt eines Autors spiegelt generell nicht die Meinung des Webseiten-Betreibers wieder. Mittels der Veröffentlichung will dieser lediglich ein pluralistisches Meinungsbild darstellen. Direkte oder indirekte Aussagen in einem Beitrag stellen keinerlei Aufforderung zum Kauf-/Verkauf von Wertpapieren dar. Wir wehren uns gegen jede Form von Hass, Diskriminierung und Verletzung der Menschenwürde. Beachten Sie bitte auch unsere AGB/Disclaimer!

Die Reproduktion, Modifikation oder Verwendung der Inhalte ganz oder teilweise ohne schriftliche Genehmigung ist untersagt!
Alle Angaben ohne Gewähr! Copyright © by Rohstoff-Welt.de -1999-2025. Es gelten unsere AGB und Datenschutzrichtlinen.