

# Intrepid Mines Limited: Kitumba Technical Report-Further Technical Information

14.10.2014 | [Marketwired](#)

BRISBANE, AUSTRALIA--(Marketwired - Oct 14, 2014) - [Intrepid Mines Ltd.](#) (ASX:IAU) ("Intrepid" or the "Company") provides, further to the filing of the report entitled "Kitumba Copper Project Optimised Pre-Feasibility Study NI 43-101 Technical Report" dated 25 September 2014 ("Report"), on SEDAR ([www.sedar.com](http://www.sedar.com)) on 9 October 2014, the following additional technical background to the Report.

On 28 August 2014, Intrepid announced its intention to merge with [Blackthorn Resources Ltd.](#) ("Blackthorn") by way of a scheme of arrangement. Blackthorn's assets include the Kitumba Copper Project in Zambia and associated regional exploration assets in Zambia.

The Report, prepared by independent consultants Lycopodium Minerals Pty Ltd, MSA Group Pty Ltd, AMC Consultants Pty Ltd, and Knight Piésold Pty Ltd provides an independent technical report on the Kitumba Project, based on the outcomes of an Optimised Pre-Feasibility Study ("OPFS") completed in May 2014, in accordance with Canadian National Instrument 43-101 requirements and also reports on the associated regional exploration assets.

## Proposed Kitumba Development

The OPFS proposes an underground mine utilising sub-level caving ("SLC") and truck haulage to surface, combined with a 3.0 Mtpa capacity process plant utilising flotation, pressure oxidation ("POX"), atmospheric leaching and solvent extraction / electrowinning ("SX/EW") technology to produce nominally 60,000 tpa of cathode copper. A peak output of 70,000 tpa copper may be achieved by increasing the electrowinning current density.

Life of mine underground production will be 31.5 Mt of process plant feed that will be supplemented with purchased third party concentrates during some years to provide additional feed for the POX circuit.

Estimated initial capital cost is US\$680.3 million with peak funding requirements of US\$696.8 million. C1 cash costs are estimated at US\$1.57/lb copper and all in cash costs including royalties, sustaining and deferred capital of US\$1.89/lb copper.

After tax economics assuming a US\$3.50/lb copper price indicate an IRR of 21.2% and NPV (discounted at 8%) of US\$458.7 million.

## Qualified Person

The technical report has been prepared by the following Independent Qualified Persons:

- Christopher Gorden Waller, MAusIMM(CP), Manager of Studies with Lycopodium Minerals Pty Ltd of Level 5, 1 Adelaide Terrace, East Perth, Western Australia 6004
- Michael James Robertson, Pr.Sci.Nat, Principal Consulting Geologist with The MSA Group Pty Ltd of 20B Rothesay Avenue, Craighall Park, Johannesburg, South Africa 2196
- Jeremy Charley Witley, Pr.Sci.Nat. Principal Resource Consultant with The MSA Group Pty Ltd of 20B Rothesay Avenue, Craighall Park, Johannesburg, South Africa 2196
- Glen Carthew, BEng (Mining) (Hons) MAusIMM (CP) Senior Mining Engineer with AMC Consultants of 9 Havelock Street, West Perth, Western Australia 6005
- David John Toomey Morgan, MAusIMM(CP) Civil Engineer with Knight Piésold Pty. Ltd of 184 Adelaide Terrace, East Perth, Western Australia 6004,

each of whom has certified that by reason of their education, affiliation with a professional association and

past relevant work experience they fulfil the requirements to be an Independent Qualified Person as defined in the Canadian National Instrument 43-101 (Standards of Disclosure for Mineral Projects) and that they consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.

### **Sample Preparation Analysis and Security**

All core handling, logging, sampling, assaying and QAQC was carried out in accordance with standard operating procedures documented for the Kitumba Project ("Project"). An unbroken chain of custody was observed through all phases of the exploration campaign.

Various sample preparation and analytical laboratories have been used over the consecutive phases of work on the Project. Samples were analysed by four-acid digest and ICP finish for multi-elements, fire assay and AAS finish for gold, and sulphuric acid leach and AAS finish for determination of acid soluble copper. Ore grade analyses were carried out as routine, once the high grade core of the deposit had been defined.

Best practice QAQC measures were observed including the routine insertion of duplicates, certified blanks and certified reference materials to monitor assay quality. External QC samples in this form comprise approximately 15% of the assay database. A selected 5% of samples were routinely submitted to a second laboratory for check assay. Ongoing QC monitoring and failure criteria were set up and observed, with QC failures being re-assayed together with several samples on either side.

The QP considers the sample preparation, security and analytical procedures employed to be appropriate and adequate for an exploration program of this nature. No aspect of the sample preparation or analysis was conducted by an employee, officer, director or associate of Blackthorn. Sufficient reference materials were used to control analytical processes, appropriate analytical procedures were used that take rock matrices into account and provide acceptable levels of precision, and sufficient checking work was carried out to demonstrate that the data are unbiased and acceptable for use in geological modelling and Mineral Resource estimation.

### **Data Verification**

A number of data verification and QAQC procedures have been applied by Blackthorn during drilling, sampling, assay and data management through the various phases of exploration, in order to ensure the veracity of the data. The MSA Group and QP Michael Robertson have been involved in the Project since 2006 (pre-discovery), and apart from Phases 3B and 4 managed by BHP Billiton, have been responsible for turnkey exploration management of the project, which has included:

- Development of project-specific standard operating procedures (SOPs) covering all aspects of the exploration work programme and data management.
- Validation of all data on import into the MSA managed central project database.
- QAQC of assay results.
- Verification of mineralised intersections and Competent Person sign-off of News Releases under the AUSTRALIAN JORC Codes (2004 and 2012 Editions) on behalf of Blackthorn.
- Validation of all input data into the various Mineral Resource estimates undertaken by MSA.
- Numerous site visits by the QP between 2006 and 2014.
- An extensive core re-logging programme following Phase 6, in order to ensure standardisation in the database used in the Mineral Resource estimate.

Based on the data verification procedures applied over the history of the project, it is the QP's opinion that the quality of the drilling, sampling and assay data are considered to meet or exceed the standards required by the Australian JORC Code ("JORC") and NI 43-101 and are suitable for use in Mineral Resource estimation.

### **Block Classification**

The MSA Group (MSA) has completed a Mineral Resource Estimate for the Kitumba deposit.

The effective date of the Mineral Resource is 05 December 2013. It was originally reported by Blackthorn

under the guidelines of the 2012 edition of the JORC Code and represents an update to the April 2013 estimate completed by MSA, made possible by the Phase 7 infill drilling conducted during 2013. The April 2013 estimate was reported in accordance with the guidelines of the 2004 edition of the JORC Code.

The Mineral Resource was estimated by Ordinary Kriging of total copper, acid soluble copper, cobalt, gold, silver, uranium, iron, manganese, sulphur and density into a three dimensional block model. The estimate was guided by mineralisation domains (leached/low Cu, Supergene and Hypogene) as well as a low grade (0.3%) and a high grade (4.0%) total copper grade shell.

The Mineral Resource was classified into Measured, Indicated or Inferred categories in accordance with the guidelines of the 2012 edition of the JORC Code. It should be noted that there are no material differences between the Mineral Resource categories reported herein whether using those defined by JORC (2012) or the CIM Definition Standards on Mineral Resources and Reserves (CIM Definition Standards) adopted by CIM Council on May 10, 2014. The Mineral Resource, Mineral Reserve, and Mining Study definitions as described in the CIM Definition Standards are incorporated, by reference, into National Instrument 43-101 - Standards of Disclosure for Mineral Projects (NI 43-101).

A summary of the December 2013 Mineral Resource, at a base case cut-off grade of 1% total Cu, is reported by class and mineralisation domain is shown in the table below:

Category	Tonnes (Millions)	Cu (%)
Supergene Domain		
Measured	6.1	3.44
Indicated	15.2	2.07
Measured and Indicated	21.3	2.46
Inferred	0.2	1.12
Hypogene Domain		
Measured	4.4	2.23
Indicated	9.0	1.93
Measured and Indicated	13.4	2.03
Inferred	3.9	1.39
Combined Domain		
Measured	10.5	2.93
Indicated	24.2	2.02
Measured and Indicated	34.7	2.29
Inferred	4.1	1.38

It should be noted that the cut-off grades applied are not the result of detailed economic analysis and therefore Mineral Resources that are not Mineral Reserves have not demonstrated economic viability. There are no known legal, political, environmental, or other risks that could materially affect the potential development of the Mineral Resources.

### Forward-looking statements

This announcement contains certain forward-looking statements, relating to, but not limited to Intrepid's expectations, intentions, plans and beliefs.

Forward-looking information can often be identified by forward-looking words such as 'anticipate', 'believe', 'expect', 'goal', 'plan', 'intend', 'estimate', 'may' and 'will' or similar words suggesting future outcomes, or other expectations, beliefs, plans, objectives, assumptions, intentions or statements about future outcomes, or statements about future events or performance.

Forward-looking information may include reserve and resource estimates, estimates of future production, unit costs, costs of capital projects, and timing of commencement of operations and is based on current expectations that involve a number of business risks and uncertainties. Factors that could cause actual results to differ materially from any forward-looking statement include, but are not limited to, failure to establish estimated resources and reserves, the grade and recovery of ore which is mined varying from estimates, capital and operating costs varying significantly from estimates, delays in obtaining or failures to obtain required governmental, environmental or other project approvals, inflation, changes in exchange

rates, fluctuations in commodity prices, delays in the development of projects and other factors.

Forward-looking statements are subject to a variety of known and unknown risks, uncertainties and other factors that could cause actual events or results to differ materially from those expressed or implied.

Shareholders and potential investors are cautioned not to place undue reliance on forward-looking information. By its nature, forward-looking information involves numerous assumptions, inherent risks and uncertainties, both general and specific, that contribute to the possibility that the predictions, forecasts, projections and various future events will not occur. Intrepid undertakes no obligation to update publicly or otherwise revise any forward-looking information whether as a result of new information, future events or other such factors which affect this information, except as required by law.

ABN: 11 060 156 452

## Contact

[Intrepid Mines Ltd.](#)

Scott Lowe

Chief Executive Officer, Brisbane, Australia

+61 7 3007 8000

[slowe@intrepidmines.com](mailto:slowe@intrepidmines.com)

---

Dieser Artikel stammt von [GoldSeiten.de](#)

Die URL für diesen Artikel lautet:

<https://www.goldseiten.de/artikel/222110--Intrepid-Mines-Limited--Kitumba-Technical-Report-Further-Technical-Information.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 GoldSeiten.de 1999-2025. Es gelten unsere [AGB](#) und [Datenschutzrichtlinien](#).