

## **Ivanhoe Mines' drilling program extends depths of rich zinc and copper zones at the Kipushi Mine in D.R. Congo**

### **Review of previous drill holes indicates that tonnage and grade of the Big Zinc Discovery were understated in historical estimate**

LUBUMBASHI, THE DEMOCRATIC REPUBLIC OF CONGO — Robert Friedland, Executive Chairman of Ivanhoe Mines (TSX: IVN), and Lars-Eric Johansson, Chief Executive Officer, announced today that early results from the company's underground diamond-drilling program at the Kipushi copper-zinc-germanium-lead and precious-metals mine have established significant down-dip extensions of the unmined high-grade Big Zinc Discovery.

Ivanhoe's drilling has extended the Big Zinc mineralization to a depth of approximately 1,700 metres below surface, which is an additional 200 metres deeper than the previous lowest level of the Big Zinc Discovery's historical Measured and Indicated Resources as they were recorded 20 years ago, before the Kipushi Mine was placed on care and maintenance by its former owner in 1993.

"Based on the initial indications we have seen to date, this has been a very encouraging start to our long anticipated exploration of the principal, known mineralized assets at Kipushi," said Mr. Friedland.

The drilling has been designed to confirm and update Kipushi's estimated historical Resources and to further expand the mineralization on strike and at depth.

#### **Highlights from the first holes of Ivanhoe's current drilling program**

- Drilling to date has been conducted from 1,220-metre level and from a drill station at the 1,252-metre level. Three holes have been drilled on the southern end of the Big Zinc, testing down-plunge continuity and extensions to the south. Details of holes KPU001, KPU002 and KPU003 are shown in the accompanying cross-section diagrams.
- Hole KPU001, drilled at -67 degrees on a bearing of 298 degrees, drilled through massive sphalerite and dolomite from 46.4 metres to 399.36 metres. This approximately 353-metre intersection extends to a depth below surface of 1,550 metres.
- Hole KPU002, drilled on the same azimuth as KPU001 but at an inclination of -61 degrees, also intersected the Big Zinc from 32.05 metres to 372.4 metres (total intersection length of approximately 340 metres) to a depth of 1,590 metres below surface.
- Hole KPU003, drilled on a bearing of 273 degrees, aimed to test the southern plunge of the Big Zinc. This hole successfully intersected massive sphalerite and dolomite from 31 metres to a drilled depth of 550 metres down-hole, or 1,700 metres below surface. Importantly, the hole also intersected significant copper mineralization (chalcopyrite and bornite) from 194.4 metres to 225 metres down hole and a breccia-hosted zone of copper mineralization (chalcopyrite) from 439 metres to 461.6 metres.

- Drill testing of the Serie Recurrente copper-mineralized zone on the northern limb of the Kipushi mineralized system also is ongoing. The first hole, KPU004, drilled at an angle of -45 degrees on a bearing of 005 degrees, successfully intersected a copper-rich mineralized zone from 56.5 metres to 71.5 metres down-hole, including zones of massive chalcopyrite from 58.4 to 59.4 metres and from 60.0 to 62.1 metres.

Ivanhoe cautions that the presence of mineralization observed in the drilling to date at Kipushi is not presented to confirm historical assay results. It confirms only the presence of mineralization similar in style to that observed in historical holes drilled by state-owned mining company Gécamines (La Générale des Carrières et des Mines). Assays for copper, zinc, lead, germanium and precious metals are pending for the four initial Ivanhoe Mines drill holes reviewed in this release.

Two drill rigs are in operation; a third rig has arrived at the site and soon will start drilling. Dewatering at the mine is ongoing and access to the important 1,272-metre-level hanging wall drift is expected this month, which will allow Ivanhoe to begin the drill program's phase of twinning the historical drilling.

"Drilling at Kipushi continues to identify thick intersections of strong sphalerite and chalcopyrite mineralization," said Mr. Johansson.

"We will continue to carry out more extensional drilling to enable us to identify potential high-grade material down-plunge below the 1,500-metre level. Given the close proximity of Kipushi to several copper smelters in neighboring Zambia, the intersections of copper-rich chalcopyrite and bornite mineralization encountered in the drill holes below the former mine workings are highly encouraging."

Crews have been upgrading underground and surface infrastructure to support the start of the drilling program since access was restored to the mine's principal working level at 1,150 metres below the surface in December 2013.

The Kipushi Mine is on the Central African Copperbelt in southern Katanga Province, approximately 30 kilometres southwest of the provincial capital of Lubumbashi and less than one kilometre from the international border with Zambia.

The idled mine flooded in early 2011 due to a lack of pumping maintenance over an extended period. After acquiring a 68% interest in Kipushi from Gécamines in November 2011, Ivanhoe Mines assumed responsibility for ongoing rehabilitation and pumping, which now has dewatered to the 1,265-metre level. Gécamines continues to hold a 32% interest in Kipushi.

### **Big Zinc's grade and tonnage potentially are higher than previously estimated, new review indicates**

Mr. Johansson also reported that Ivanhoe recently received the findings of an independent review conducted by MSA Group (Pty.) Ltd., of Johannesburg, based on results of a comprehensive re-sampling program of historical Kipushi core from drilling by Gécamines into the Big Zinc Discovery in the early 1990s.

A total of 384 historical quarter-core (NQ sized) samples were collected and dispatched to Bureau Veritas Minerals Pty. Ltd.'s laboratory in Australia. A total of 457 samples, including quality-control samples, were submitted to Bureau Veritas and analyzed for gold by fire assay, and for multi-elements, including zinc and copper, by sodium peroxide fusion and ICP-AES/MS finish. The re-sampling program was conducted over eight complete drill intersections of the Big Zinc from eight separate section lines and represented 18% of the total samples in the Big Zinc's historical assay database.

MSA's review of the recent re-sampling revealed that the zinc assay results generally report higher – and averaged 5.5% higher – than the assay results originally reported by Gécamines. MSA also concluded that density applied by Gécamines for estimating the tonnage in the Big Zinc Discovery was understated by an average of 9%. Despite the low bias, the review confirms that historical assay values reported by Gécamines are reasonable and can be replicated within a reasonable level of error by international accredited laboratories under strict QA/QC control. This is an important milestone for Ivanhoe as part of its program to establish current resource estimates for its Kipushi Project.

### **Known resources at Kipushi's currently identified deposits**

Previous mining at Kipushi was conducted to a below-surface depth of 1,207 metres on the Kipushi Fault, a deposit of high-grade, copper-zinc-lead mineralization that has a strike length of 600 metres. The Fault Zone mineralization is known to extend to at least 1,800 metres below surface, based on previous drilling reports prepared by Gécamines.

The Big Zinc Discovery, adjacent to the Fault Zone on the footwall side, was discovered shortly before the mine suspended production in 1993 and never has been mined.

Accessible from existing underground workings, the Big Zinc has a strike length of at least 100 metres, a true thickness calculated at 40 to 80 metres, and is open to depth. Gécamines also reported that multiple, steeply-dipping, Big Zinc exploratory holes intersected exceptionally high-grade zinc mineralization, grading 42% to 45% zinc, between the 1,375-metre and 1,600-metre levels, with estimated, apparent thicknesses of between 60 and 100 metres.

### **Kipushi's 68 years of production history**

Following its start-up in 1924 as the Prince Léopold Mine, Kipushi produced a total of 6.6 million tonnes of zinc and 4.0 million tonnes of copper – from 60 million tonnes of ore grading 11% zinc and approximately 7% copper – until political instability prompted the suspension of operations in 1993. The mine also produced 278 tonnes of germanium between 1956 and 1978.

In addition to the recorded production of copper, zinc, lead and germanium, historical Gécamines mine-level plans for Kipushi also reported the presence of precious metals. There is no formal record of gold and silver production; the mine's concentrate was shipped to Belgium and any recovery of precious metals was not disclosed during the colonial era.

Figure 1: Kipushi cross-section showing mine infrastructure, Big Zinc Discovery and Kipushi Fault Zone.

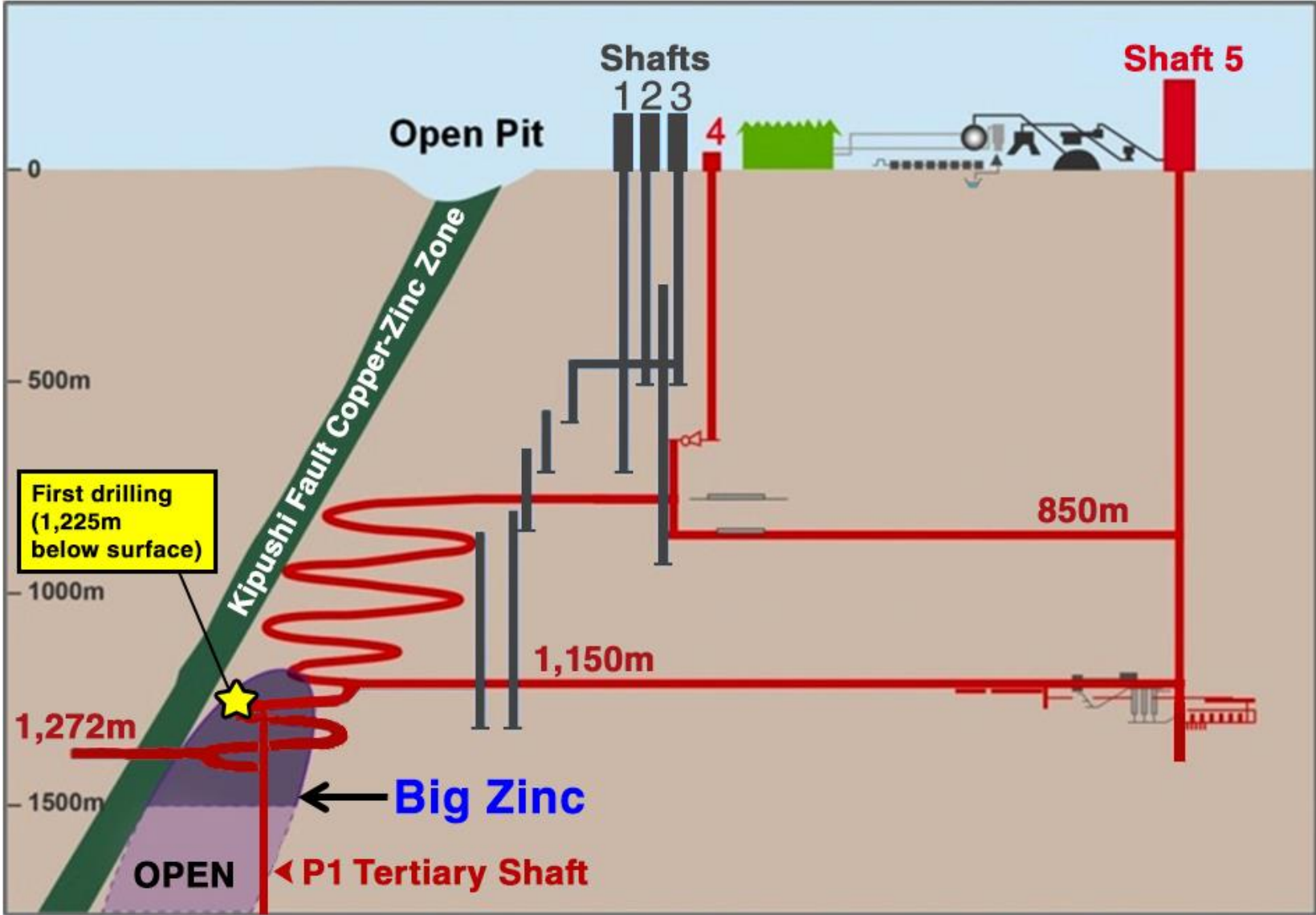


Figure 2: Kipushi cross-section showing Ivanhoe drill holes KPU001 and KPU002.

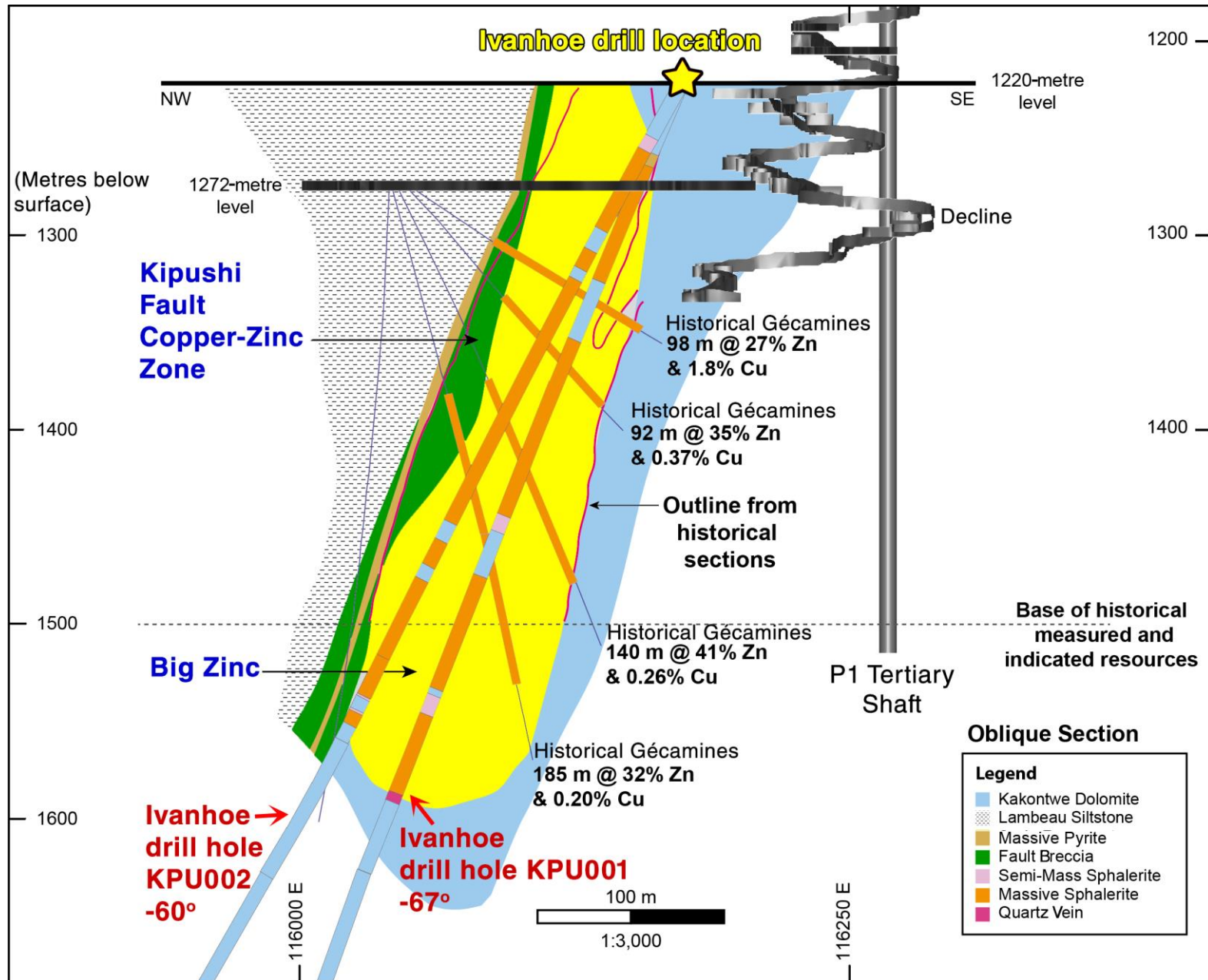


Figure 3: Kipushi cross-section showing Ivanhoe drill hole KPU003.

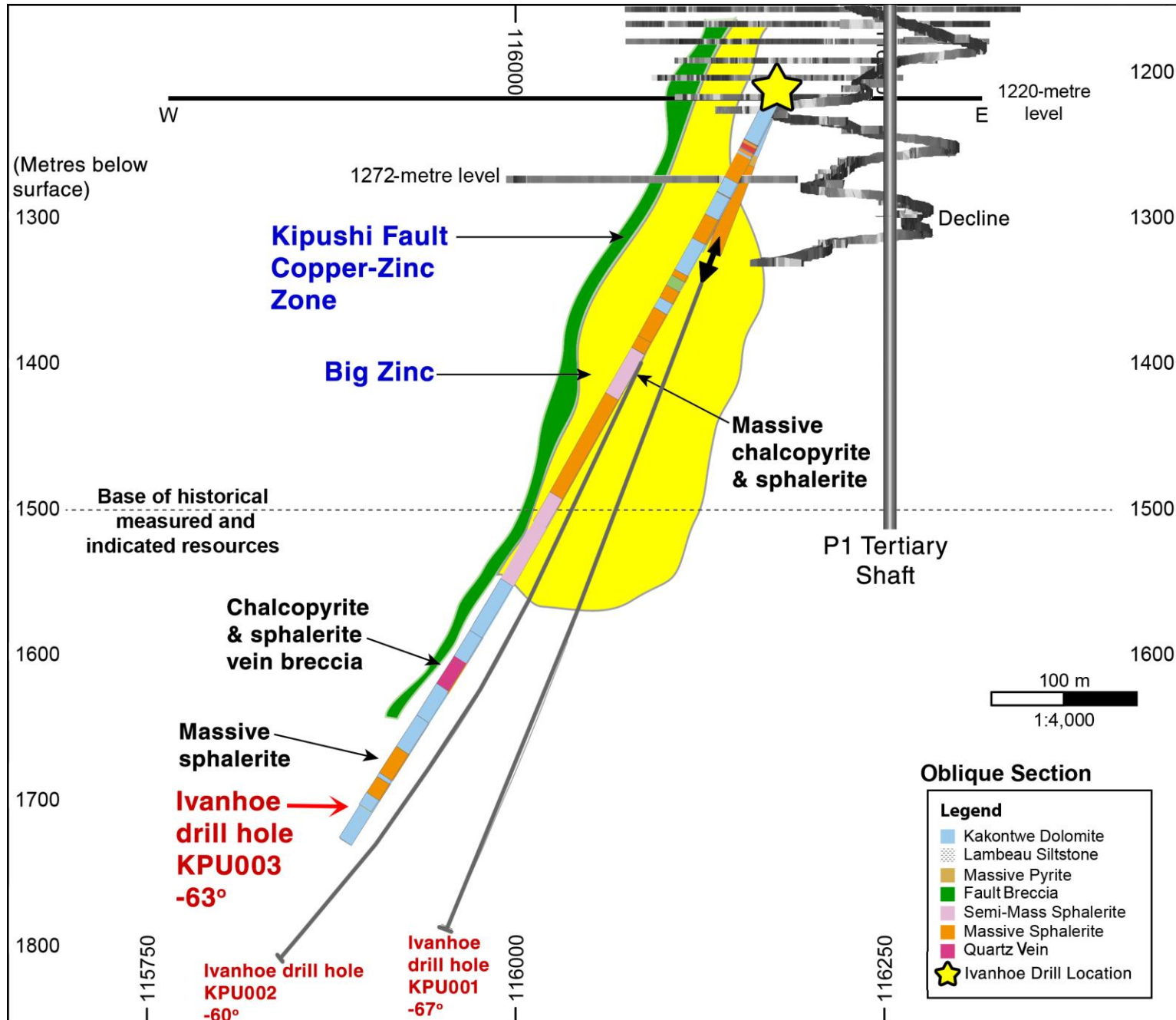
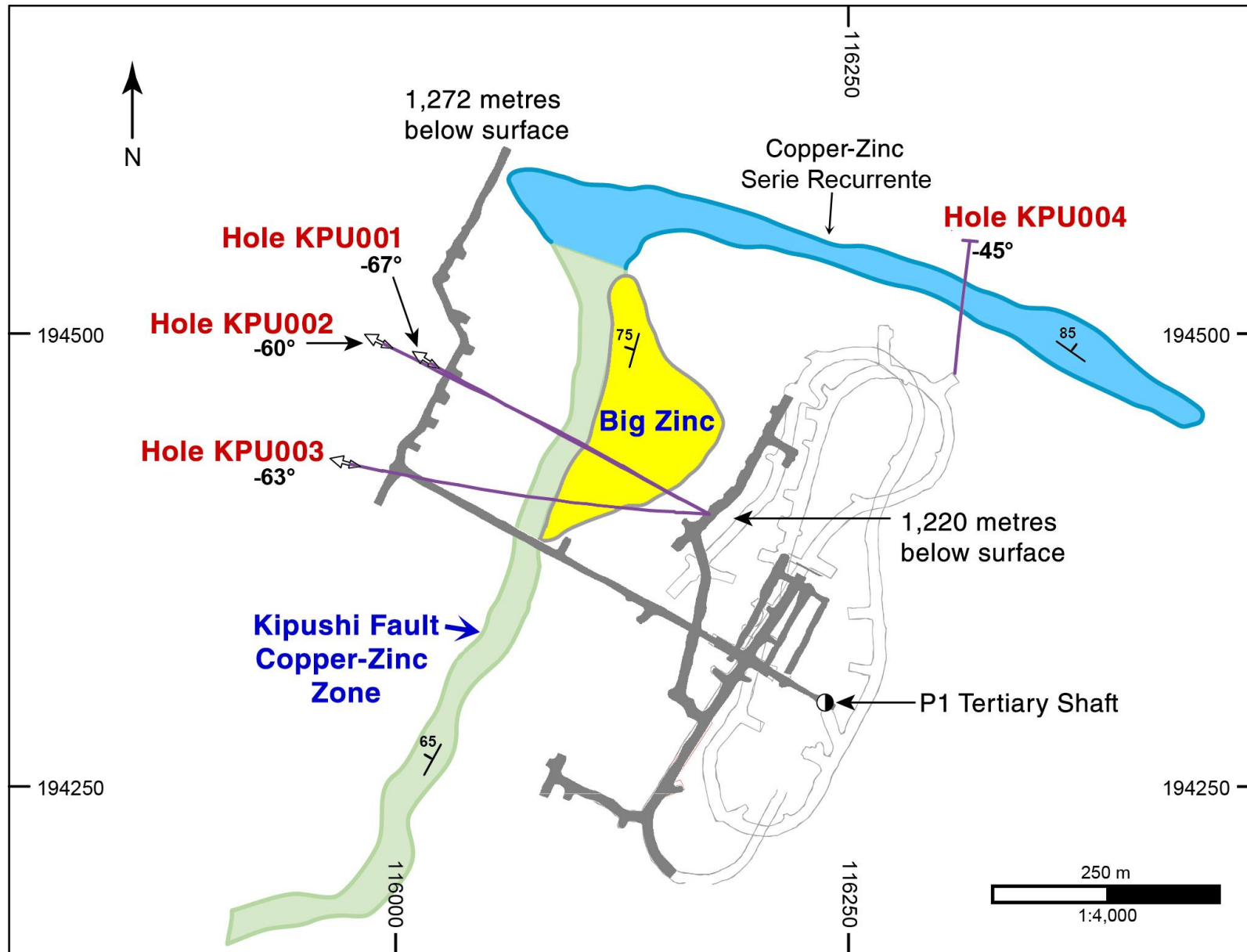


Figure 4: Plan view of drill holes KPU001 to KPU004.



Note: Mineralized zones depicted with their approximate position and geometry on the 1,220-metre level.

Figure 5: Core from Ivanhoe drill hole KPU001 showing massive red-brown sphalerite and pyrite.





Figure 6: Core from Ivanhoe drill hole KPU003 showing massive orange sphalerite and pyrite.



Figure 7: Hole KPU003 massive chalcopyrite-pyrite-sphalerite-galena intercept from depth of 207.8 to 215.4 metres (not true width).



Figure 8: Core sample of chalcopyrite intercept from 59.7 to 62.0 metres in Hole KPU004.



Figure 9: One of the compact rigs conducting Ivanhoe's underground drilling program.



## Previous estimate of historical resources

IMC Group Consulting, which prepared the current Kipushi Technical Report, considers the historical estimate prepared by Techpro Mining and Metallurgy in 1997 to be the most relevant and reliable.

Techpro reported the following resources:

Resource Category	Tonnes	Copper %	Zinc %
Measured	8,899,979	2.53	9.99
Indicated	8,029,127	2.09	24.21
Total	16,929,106	2.32	16.76
Inferred	9,046,352	1.93	23.32
<b>Totals shown above include the following Big Zinc resources:</b>			
Measured	793,086	1.16	33.52
Indicated	3,918,366	0.68	39.57
Measured & Indicated	4,711,452	0.76	38.55

IMC is of the opinion that the Techpro estimate generally is fair and reasonable for demonstrated Measured plus Indicated resources and that Inferred mineral resource estimates largely represent the projection of Kipushi's Fault Zone mineralization from the 1,500-metre level to the 1,800-metre level.

Although Gécamines' drilling confirmed that the Big Zinc continued down to at least the 1,640-metre level, the historical Measured and Indicated Resources for the Big Zinc were stated only to 1,500 metres.

A Qualified Person has not done sufficient work to classify the historical estimates as current Mineral Resources and Ivanhoe Mines is not treating such estimates as current Mineral Resources. The 1997 estimate was prepared in accordance with the JORC Code. Ivanhoe Mines will validate previous work through new drilling, sampling, assaying and other procedures to produce a mineral resource that is current for CIM purposes.

Further information relating to the historical resource estimate is included in the Kipushi NI 43-101 Technical Report, dated September 2012, prepared by IMC and available at [www.sedar.com](http://www.sedar.com) and at [www.ivanhoemines.com/i/pdf/Kipushi.pdf](http://www.ivanhoemines.com/i/pdf/Kipushi.pdf).

## Qualified Person, Quality Control and Assurance

The scientific and technical information in this release has been reviewed and approved by Stephen Torr, P.Geo., Ivanhoe Mines' Vice President, Project Geology and Evaluation, a Qualified Person under the terms of National Instrument 43-101. Mr. Torr has verified the technical data disclosed in this press release.

Ivanhoe Mines maintains a comprehensive chain of custody and QA-QC program on assays from its Kipushi Project. Half-split core is prepared at its preparation laboratory in Kolwezi before being shipped to Ultra Trace Geoanalytical Laboratories in Australia for external assay. Industry-standard certified reference materials and blanks are inserted into the sample stream prior to dispatch to Ultra Trace.

Ivanhoe Mines' QA-QC program has been set up in consultation with MSA Group (Pty.) Ltd., of Johannesburg, and is being independently monitored by them.

## **About Ivanhoe Mines**

Ivanhoe Mines, with offices in Canada, the United Kingdom and South Africa, is advancing and developing its three principal projects:

- The Kamo a copper discovery in a previously unknown extension of the Central African Copperbelt in the DRC's Katanga Province.
- The Platreef Discovery of platinum, palladium, nickel, copper, gold and rhodium on the Northern Limb of the Bushveld Complex in South Africa.
- The historic, high-grade Kipushi zinc-copper mine, also on the Copperbelt in the DRC, which now is being drilled and upgraded following an 18-year care-and-maintenance program that ended when Ivanhoe acquired its majority interest in the mine in 2011.

Ivanhoe is evaluating other opportunities as part of its objective to become a broadly based, international mining company.

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## **FORWARD-LOOKING STATEMENTS**

Statements in this release that are forward-looking statements are subject to various risks and uncertainties concerning the specific factors disclosed here and elsewhere in the company's periodic filings with Canadian securities regulators. When used in this document, the words such as "could," "plan," "estimate," "expect," "intend," "may," "potential," "should" and similar expressions, are forward-looking statements. Information provided in this document is necessarily summarized and may not contain all available material information.

Statements in this release that constitute forward-looking statements or information include, but are not limited to statements regarding the potential for Big Zinc grade and tonnage to be potentially higher than previous estimates; statements regarding the number of drill rigs and drilling progress; and statements regarding the timing of receipt of assays and similar analytical results.

Forward-looking statements involve significant risks and uncertainties, should not be read as guarantees of future performance or results, and will not necessarily be accurate indicators of whether or not such results will be achieved. All such forward-looking information and statements are based on certain assumptions and analyses made by Ivanhoe Mines' management in light of their experience and perception of historical trends, current conditions and expected future developments, as well as other factors management believe are appropriate in the circumstances. These statements, however, 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 information or statements including, but not limited to, unexpected changes in laws, rules or regulations, or their enforcement by applicable authorities; the failure of parties to contracts to perform as agreed; social or labour unrest; changes in commodity prices; and the failure of exploration programs or studies to deliver anticipated

results or results that would justify and support continued exploration, studies, development or operations. Other important factors that could cause actual results to differ from these forward-looking statements also include those described under the heading "Risk Factors" in the company's most recently filed MD&A as well as in the most recent Annual Information Form filed by Ivanhoe Mines. Readers are cautioned not to place undue reliance on forward-looking information or statements.