

Sydney, 15 December 2014

MUMBWA PROJECT: KITUMBA INFILL DRILLING ASSAY RESULTS

KEY POINTS

- **Assay results received for 11 holes from the Phase 8 drilling program**
- **Highlights include:**
 - **KITDD_055: 339m @ 2.47% Cu from 197 – 536m, including:**
 - **17m @ 9.22% Cu from 333 – 350m**
 - **KITDD_045: 181m @ 2.8% Cu from 230 – 411m, including**
 - **10m @ 10.37% Cu from 251 – 261m**
 - **19m @ 6.07% Cu from 350 – 369m**
 - **KITDD_046: 214m @ 1.76% Cu from 233 – 447m, including:**
 - **15m @ 6.32% Cu from 264 – 279m**
 - **KITDD_042A: 82m @ 2.29% Cu from 342 – 424m.**
- **2014 soil geochemical sampling complete**
- **Two IP surveys complete with a third underway to be finished before the end of the year**
- **Phase 8 drilling for metallurgical samples, resource definition, and geotechnical and hydrological analysis is now complete with the camp to move to care and maintenance during the wet season**
- **A full interpretation of new geochemical and geophysical data to be integrated and ranked against existing targets during the wet season**

Intrepid Mines Limited (ASX: 'IAU') ("Intrepid", or the "Company") has received assay results for the following drill holes from the Phase 8 drilling program:

- KITDD_042A
- KITDD_043
- KITDD_044
- KITDD_045
- KITDD_046
- KITDD_047
- KITDD_048
- KITDD_049
- KITDD_050
- KITDD_051
- KITDD_055

The location of these drill holes is shown in Figure 1 below.

CEO, Mr Mark Mitchell said:

"We are pleased to report on the first batch of assay results from our recently completed Phase 8 drilling program on our Kitumba Project. The Phase 8 drilling campaign was completed on schedule and within budget and has provided the necessary samples for key datasets to be used in the DFS. This includes approximately 4 tonnes of material to be used for metallurgical studies.

We are also pleased to advise that in parallel to work on Kitumba we have been advancing targets on our wider Mumbwa Project and are encouraged about results from our recent geophysical and soil geochemical surveys. The results of which will be assessed in detail over the current wet season to identify targets for our 2015 drilling season."

Phase 8 Drilling Program Update

Drilling restarted at Kitumba in June 2014 and was completed in November 2014. A total of 33 diamond holes were completed for a total of 12,849 meters. The drill pattern was designed to focus on the collection of material for metallurgical analysis including; a series of variability samples representative of ore-feed (and gangue) from a conceptual mining schedule, comminution samples and feed for a pilot plant.

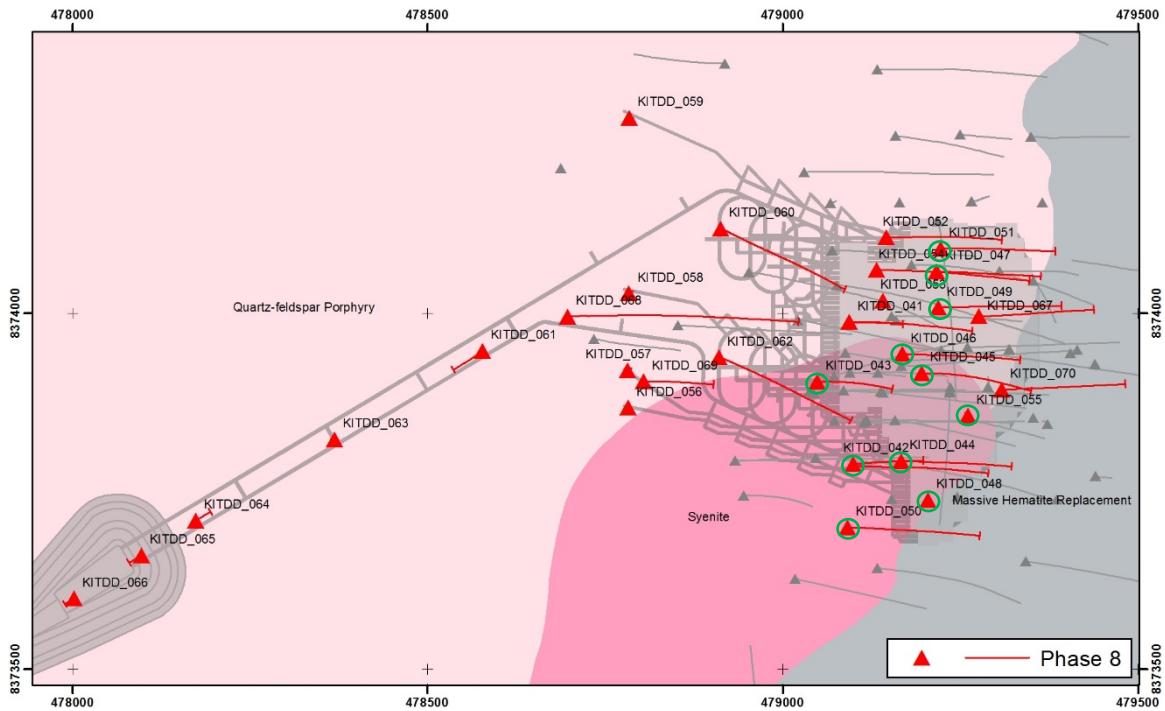


Figure 1. Phase 8 drill hole location plan, showing collar locations and planned development as presented in the Optimised PFS. Drillholes presented here are shown with green circles

Table 1. Completed Phase 8 drill holes

ID	Easting	Northing	Elevation	Azimuth	Dip	EOH (m)
KAKDD_004	474960	8375409	1,267	90	-70	548
KAKDD_005	476000	8375000	1,278	90	-60	550
KAKDD_006	476247	8374300	1,272	90	-57	341
KITDD_041A	479091	8373991	1,405	90	-75	599
KITDD_042A	479092	8373797	1,417	90	-70	539
KITDD_043	479044	8373908	1,409	90	-78	468
KITDD_044	479160	8373797	1,431	90	-70	459
KITDD_045	479189	8373921	1,408	90	-75	543
KITDD_046	479160	8373950	1,409	90	-70	455
KITDD_047	479212	8374067	1,420	90	-66	358
KITDD_048	479200	8373742	1,447	0	-90	542
KITDD_049	479217	8374017	1,427	90	-70	500
KITDD_050	479087	8373702	1,424	90	-70	468
KITDD_051	479215	8374098	1,424	85	-70	423
KITDD_052	479140	8374113	1,415	90	-70	444

ID	Easting	Northing	Elevation	Azimuth	Dip	EOH (m)
KITDD_053	479172	8374024	1,415	0	-90	497
KITDD_054	479127	8374068	1,410	90	-70	551
KITDD_055	479256	8373862	1,450	0	-90	603
KITDD_056	478777	8373870	1,386	0	-90	196
KITDD_057	478777	8373921	1,384	0	-90	196
KITDD_058	478777	8374034	1,396	0	-90	329
KITDD_059	478777	8374284	1,389	0	-90	214
KITDD_060	478905	8374127	1,408	115	-70	522
KITDD_061	478572	8373954	1,380	239	-70	141
KITDD_062	478902	8373946	1,393	115	-70	500
KITDD_063	478363	8373829	1,359	0	-90	85
KITDD_064	478167	8373714	1,373	59	-70	71
KITDD_065	478090	8373664	1,378	239	-70	61
KITDD_066	477998	8373604	1,379	239	-70	46
KITDD_067	479275	8374000	1,439	88	-65	402
KITDD_068	478690	8374000	1,387	87	-55	539
KITDD_069	478800	8373910	1,390	90	-70	249
KITDD_070	479300	8373900	1,433	88	-65	414
						12,849

Metallurgical holes were also designed to fill gaps in the existing resource and to inform an updated Mineral Resource Estimate. It is expected the Company will be in a position to report this to the market in Q2 2015.

Select metallurgical/infill holes were also used for geotechnical and hydrological purposes.

Drilling that was specifically designed for geotechnical purposes only (no mineralisation expected), was also completed. These holes were drilled into areas of planned development (box cut, decline, air shafts). Geotechnical holes have been probed with an Acoustic Televiwer (ATV) for the collection of detailed-high resolution structural and engineering data. Geotechnical samples for laboratory analysis have been collected and planned testwork includes; unconfined compressive strength, direct shear, triaxial, cherchar abrasivity index, slake durability and petrographic analysis.

Additional drilling outside the Kitumba resource has included sterilisation drilling on areas slated for planned infrastructure (KAKDD_04, 05 and 06 on Table 1) and percussion (PCD) and reverse circulation (RC) drilling of groundwater monitoring bores.

Other Mumbwa Project Area Activities

Targets generated during 2014 are shown against the exploration licences in Figure 2.

Limited RC drilling on Induced Polarisation (IP) targets at Target F and Target H was completed prior to the onset of the wet season, results on these are pending. Further drilling on a range of targets including Kakozhi will be conducted during the next field season.

The Company plans to use the break in field operations to conduct a full target review and ranking exercise incorporating all new data including IP surveys at Kakozhi, Target H and Kantonga (currently underway) as well as over 2,500 soil geochemical samples collected over all five Mumbwa Project tenements.

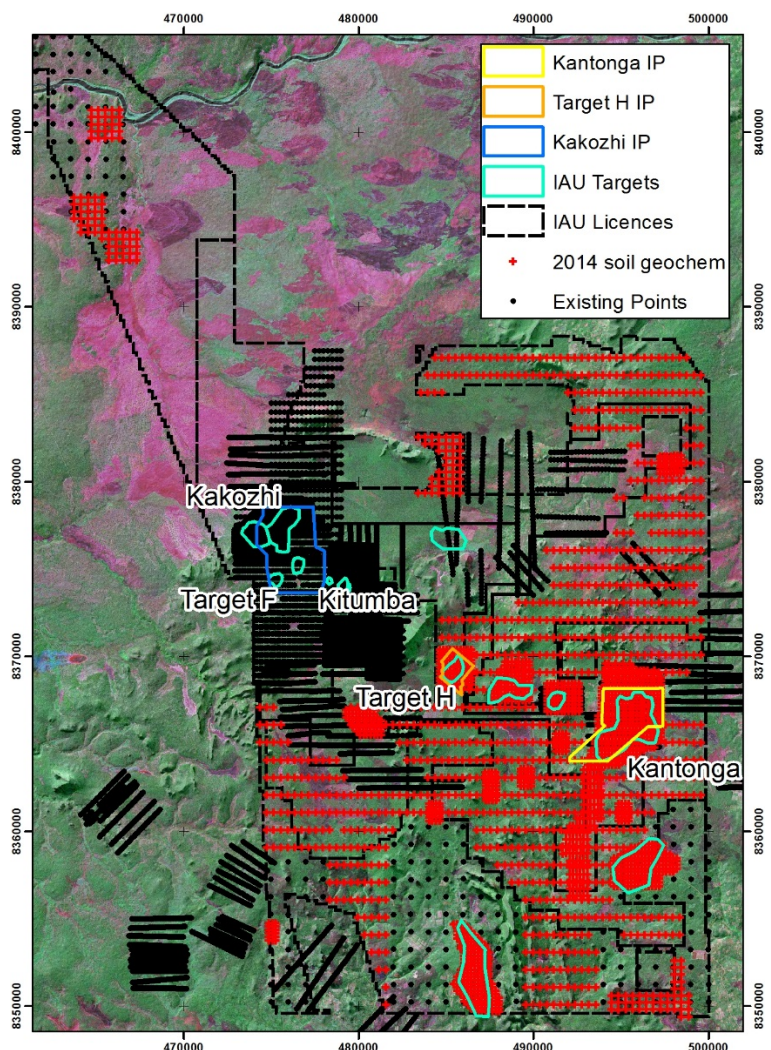


Figure 2. 2014 soil geochemistry and IP survey locations

KITDD_042A – Assay Results

KITDD_042A was drilled on an azimuth of 090, inclined 70 degrees to a depth of 539 meters. This hole was drilled to collect metallurgical samples as well as for resource definition. **Intercepts of note include 82 m @ 2.29% Cu from 342 – 424 meters.**

A series of 459 samples, including quality control samples, were submitted to the laboratory for analysis.

Final results having passed QA/QC are summarised here.

Table 2. Summary of assay results for drill hole KITDD_042A (azi 090, dip 70 EOH 539 m)

From	To	Interval	Cu %
60	94	34	0.44
98	104	6	0.34
110	112	2	0.27
116	118	2	0.26
124	126	2	0.29
132	138	6	0.48
148	173	25	0.40
176	189	13	0.33
200	202	2	1.40
207	211	4	0.40
221	224	3	0.87
240	248	8	0.66
258	267	9	1.10
275	296	21	0.67
302	307	5	0.82
310	338	28	0.56
342	424	82	2.29
426	437	11	0.37
453	469	16	0.50

KITDD_043 – Assay Results

KITDD_043 was drilled on an azimuth of 090, inclined 78 degrees to a depth of 468 meters. This hole was drilled to collect metallurgical samples as well as for resource definition. **Intercepts of note include 143 m @ 0.85% Cu from 203-346 meters.**

A series of 304 samples, including quality control samples, were submitted to the laboratory for analysis.

Final results having passed QA/QC are summarised here.

Table 3. Summary of assay results for drill hole KITDD_043 (azi 090, dip 78 EOH 468 m)

From	To	Interval	Cu %
189	193	4	0.34
195	203	8	0.41
203	346	143	0.85
350	352	2	0.25
380	403	23	0.60
416	418	2	0.34
421	444	23	0.49
464	466	2	0.39

KITDD_044 – Assay Results

KITDD_044 was drilled on an azimuth of 090, inclined 70 degrees to a depth of 459 meters. This hole was drilled to collect metallurgical samples as well as for resource definition. **Intercepts of note include 60 m @ 1.17% Cu from 253 – 313 meters.**

A series of 283 samples, including quality control samples, were submitted to the laboratory for analysis.

Final results having passed QA/QC are summarised here.

Table 4. Summary of assay results for drill hole KITDD_044 (azi 090, dip 70 EOH 459 m)

From	To	Interval	Cu %
146	158	12	0.76
162	179	17	1.90
183	185	2	2.67
192	200	8	0.99
214	232	18	1.06
241	248	7	1.41
253	313	60	1.17
316	328	12	1.34
334	400	66	0.63
406	408	2	0.38
412	418	6	0.33

KITDD_045 – Assay Results

KITDD_045 was drilled on an azimuth of 090, inclined 75 degrees to a depth of 543 meters. This hole was drilled to collect metallurgical samples as well as for resource definition.

Intercepts of note include 181 m @ 2.8% Cu from 230 – 411 meters.

A series of 449 samples, including quality control samples, were submitted to the laboratory for analysis.

Final results having passed QA/QC are summarised here.

Table 5. Summary of assay results for drill hole KITDD_045 (azi 090, dip 75 EOH 543m)

From	To	Interval	Cu %
98	144	46	0.41
181	223	42	0.82
230	411	181	2.80
Including			
251	261	10	10.37
350	369	19	6.07
420	454	34	1.29
457	469	12	0.46
474	480	6	0.37
486	515	29	2.93
526	538	12	0.30

KITDD_046 – Assay Results

KITDD_046 was drilled on an azimuth of 090, inclined 70 degrees to a depth of 455 meters. This hole was drilled to collect metallurgical samples as well as for resource definition. **Intercepts of note include 214 m @ 1.76% Cu from 233 – 447 meters.**

A series of 412 samples, including quality control samples, were submitted to the laboratory for analysis.

Final results having passed QA/QC are summarised here.

Table 6. Summary of assay results for drill hole KITDD_046 (azi 090, dip 70 EOH 455m)

From	To	Interval	Cu %
103	180	77	1.15
Including			
117	128	11	3.90
185	188	3	0.33
192	203	11	0.31
206	231	25	0.41
233	447	214	1.76
Including			
264	279	15	6.32

KITDD_047 – Assay Results

KITDD_047 was drilled on an azimuth of 090, inclined 66 degrees to a depth of 358 meters. This hole was drilled on the extremities of the resource for any potential resource extension as well as to collect metallurgical samples.

A series of 149 samples, including quality control samples, were submitted to the laboratory for analysis.

Final results having passed QA/QC are summarised here.

Table 7. Summary of assay results for drill hole KITDD_047 (azi 090, dip 66 EOH 358m)

From	To	Interval	Cu %
128	130	2	0.57
134	138	4	0.31
144	148	4	0.40
178	180	2	0.36
335	338	3	1.89

KITDD_048 – Assay Results

KITDD_048 was drilled vertically to a depth of 542 meters. This hole was drilled to collect metallurgical samples as well as for resource definition. **Intercepts of note include 42 m @ 1.73% Cu from 340 – 382 meters.**

A series of 502 samples, including quality control samples, were submitted to the laboratory for analysis.

Final results having passed QA/QC are summarised here.

Table 8. Summary of assay results for drill hole KITDD_048 (vertical, EOH 542 m)

From	To	Interval	Cu %
70	72	2	0.43
76	78	2	0.29
84	112	28	0.33
118	140	22	1.33
154	161	7	0.38
181	187	6	0.29
198	221	23	0.70
227	229	2	0.32
232	241	9	1.37
255	263	8	0.75
270	273	3	0.86
276	281	5	0.75
286	293	7	0.50
298	300	2	1.08
323	330	7	0.70
336	382	46	1.61
394	411	17	1.08
417	431	14	1.83
438	442	4	0.99
445	454	9	0.86
457	529	72	0.58
538	542.44	4.44	0.39

KITDD_049 – Assay Results

KITDD_049 was drilled on an azimuth of 090, inclined 70 degrees to a depth of 500 meters. This hole was drilled to collect metallurgical samples as well as for resource definition. **Intercepts of note include 82 m @ 1.37% Cu from 263 – 345 meters.**

A series of 92 samples, including quality control samples, were submitted to the laboratory for analysis.

Final results having passed QA/QC are summarised here.

Table 9. Summary of assay results for drill hole KITDD_049 (azi 090, dip 70 EOH 500m)

From	To	Interval	Cu %
78	84	6	0.25
90	92	2	0.34
104	108	4	0.37
118	158	40	0.34
170	174	4	0.28
263	345	82	1.37
349	354	5	0.46
364	380	16	0.47
384	386	2	0.49
451	458	7	1.08
464	480	16	0.92
493	495	2	0.47

KITDD_050 – Assay Results

KITDD_050 was drilled on an azimuth of 090, inclined 70 degrees to a depth of 468 meters. This hole was drilled on the extremities of the resource for any potential resource extension as well as to collect metallurgical samples.

A series of 291 samples, including quality control samples, were submitted to the laboratory for analysis.

Final results having passed QA/QC are summarised here.

Table 10. Summary of assay results for drill hole KITDD_050 (azi 090, dip 70 EOH 468 m)

From	To	Interval	Cu %
60	68	8	0.28
72	74	2	0.37
180	182	2	0.36
220	225	5	0.32
230	235	5	0.91
272	274	2	0.58
307	311	4	0.55
314	318	4	0.30
321	333	12	0.53
341	344	3	0.50
349	353	4	0.87
359	366	7	0.58
386	392	6	0.75

KITDD_051 – Assay Results

KITDD_051 was drilled on an azimuth of 085, inclined 70 degrees to a depth of 423 meters. This hole was drilled on the extremities of the resource for any potential resource extension as well as to collect metallurgical samples.

A series of 257 samples, including quality control samples, were submitted to the laboratory for analysis.

Final results having passed QA/QC are summarised here.

Table 11. Summary of assay results for drill hole KITDD_051 (azi 085, dip 70 EOH 423 m)

From	To	Interval	Cu %
76	102	26	0.45
156	158	2	0.28
162	164	2	0.33
170	212	42	0.42
258	262	4	0.31
312	318	6	0.80
360	398	38	1.01

KITDD_055 – Assay Results

KITDD_055 was drilled vertically to a depth of 603 meters. This hole was drilled to collect metallurgical samples as well as for resource definition. **Intercepts of note include 339 m @ 2.47% Cu from 197 – 536 meters.**

A series of 543 samples, including quality control samples, were submitted to the laboratory for analysis.

Final results having passed QA/QC are summarised here.

Table 12. Summary of assay results for drill hole KITDD_055 (vertical, EOH 603 m)

From	To	Interval	Cu %
48	90	42	0.45
96	102	6	0.31
112	150	38	0.45
156	184	28	1.19
197	536	339	2.47
Including			
333	350	17	9.22
560	566	6	0.58
572	578	6	0.29
584	594	10	0.50
598	600	2	0.32

Notes:

Sampling and assaying of the drill core collected follows a standard site protocol with samples of half core being submitted to the Intertek Genalysis Laboratory preparation facility in Chingola, Zambia before being shipped to the Intertek Genalysis Laboratory in Perth, Australia for analysis (4-acid digest with an ICP finish).

A cut-off grade of 0.25% Cu, a maximum internal dilution of 2m (drilled thickness) and a drilled thickness of >1m are used as a guideline when delineating the drilled thickness intervals of mineralisation, with length-weighted average grades reported. True-widths are not quoted, as the mineralised zone is associated with a sub-vertical “pipe” shaped zone of brecciation. No upper limit has been applied to copper grades in these exploration results.

A total of 8 elements were analysed. Multi-element analyses (including copper) were performed using Inductively Coupled Plasma – Mass Spectrometry (ICP-MS) and Inductively Coupled Plasma – Optical Emission Spectroscopy (ICP-OES) analyses by the fully NATA accredited Intertek Genalysis Laboratory in Perth, Australia. Samples were analysed for total copper and Ca, Fe, K, Mn and S by 4-acid digest with an ICP-OES finish, U by 4-acid digest with an ICP-MS finish, and acid-soluble copper (ASCu) by cold acid leach with an AAS finish.

A Quality Assurance/Quality Control (QA/QC) program includes chain of custody protocol, a systematic submittal of 20% QA/QC samples including field duplicates, field blanks and certified reference samples into the flow of samples submitted to the laboratory and submission of samples for umpire analysis by a second accredited laboratory.

ATTRIBUTION

The information in this report which relates to exploration results at the Mumbwa Project in Zambia is based on information compiled by Mr Michael J Robertson, MSc, Pr.Sci.Nat., MSAIMM who is a member of the South African Institute of Mining and Metallurgy, which is a Recognised Professional Organisation (‘RPO’). Mr Robertson has more than 22 years’ experience in mineral exploration and is a full-time employee of the MSA Group. Mr Robertson has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which is being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’ and a Qualified Person as defined in the Canadian National Instrument 43-101 (Standards of Disclosure for Mineral Projects). Mr Robertson has consented to the inclusion in this report of the matters based on his information in the form and context in which it appears.

Should you require further information please contact:

Mark Mitchell

Chief Executive Officer
Ph: + 61 2 9357 9000

Forward-looking statement.

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.

Appendix1: JORC Code, 2012 Edition

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (eg, cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg, 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg, submarine nodules) may warrant disclosure of detailed information. 	<ul style="list-style-type: none"> All holes were diamond drilled. A total of 33 drill holes were drilled in phase 8 for a total of 12,849 m. 11 are presented here. Holes were drilled at various inclinations from vertical through to 55 degrees, predominantly angled towards 090 at between 60 and 115 degrees. Select geotechnical drill holes were drilled at 239 degrees. Diamond core only was used to sample the Kitumba deposit. Core was logged for lithology, regolith state, alteration, mineralisation, structure, density and magnetic susceptibility. Core was half split (HQ) or quarter split (PQ) and sampled following BTR protocols and QAQC procedures as per industry best practice. Sampled on nominal 1m intervals varied in order to respect geological boundaries in mineralised zone, 2m outside. Sample is dried, crushed (~2mm), milled and 200g split taken for four acid digest followed by ICP-MS and , ICP-OES finish, and cold leach with an AAS finish.
Drilling techniques	<ul style="list-style-type: none"> Drill type (eg, core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	<ul style="list-style-type: none"> Diamond core only, HQ predominant with PQ pre-collars. Core was oriented using a Reflex ACT II.
Drill sample	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure 	<ul style="list-style-type: none"> Core recoveries are logged, core recoveries for phases 1-7 were 96%. Core is reconstructed on angle iron for measurement against driller's

Criteria	JORC Code explanation	Commentary
recovery	<p><i>representative nature of the samples.</i></p> <ul style="list-style-type: none"> • <i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i> 	<p>blocks, orientation lines and recording of driller's breaks.</p> <ul style="list-style-type: none"> • Diamond core has high recoveries.
Logging	<ul style="list-style-type: none"> • <i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i> • <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> • <i>The total length and percentage of the relevant intersections logged.</i> 	<ul style="list-style-type: none"> • All core has been logged for geological (lithology, mineralisation, alteration) and geotechnical (alpha/beta angles, RQD, defect count) information, all data is stored in a database. • Select holes have been logged using a down-hole acoustic televiewer for geotechnical information, all holes are logged and photographed. • The total length of logged data for phase 8 is 12,849. 5,358 m from 11 holes announced here.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> • <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> • <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> • <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> • <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> • <i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i> • <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> • All core is cut with purpose built core saws onsite, with half core (HQ and NQ size) collected for sampling, ensuring the same side of the core is consistently sampled. In the case of PQ size core, quarter core was cut and sampled. Field duplicates were submitted to monitor QC of sample preparation and laboratory assay precision. • Samples were submitted to the Intertek Genalysis Laboratory preparation facility in Chingola, Zambia and crushed to 85% <2mm with a 1,200g subsample split (rotary and riffler) for pulverising to 85% <75µm. Regular sizing checks were undertaken and reported. • Sample sizes are appropriate to the grain size of the material being sampled.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> • <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> • <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i> 	<ul style="list-style-type: none"> • Samples were submitted to a four acid digest (sulphuric, nitric, perchloric and hydrofluoric) and cold acid leach. • QA/QC procedures include; a chain of custody protocol, the systematic submittal of 20% QA/QC samples including field duplicates, field blanks and certified reference samples into the flow of samples submitted to the laboratory. Re-assaying of the mineralised zones and submission of samples for umpire analysis by a second

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie, lack of bias) and precision have been established. 	<p>accredited laboratory will be carried out prior to inclusion in any updated Mineral Resource Estimate.</p>
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> Significant intersections are reported by The MSA Group which is an independent contractor providing geological services to the company. KITDD_041 (318 m) and KITDD_042 (287 m) were not drilled to target depth due to difficult drilling conditions. KITDD_041A and KITDD_042A were drilled from surface on the same pad and confirmed logging and geochemical (KITDD_041A results are pending) results. Data entry and verification is undertaken by MSA following an established protocol, all data is stored in a digital database and regularly backed-up. No statistical adjustments to data have been applied.
Location of data points	<ul style="list-style-type: none"> Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> Hole collars have been surveyed by differential GPS, down hole surveys were collected every 6m (inclined holes) and 12m (vertical holes) using Reflex and Gyro instruments during different phases of the project. Appropriate QC procedures were applied to verify down hole surveys. The grid system for Kitumba is UTM WGS84, zone 35South. An airborne laser elevation survey was flown as part of the Falcon™ dataset acquired in 2006.
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	<ul style="list-style-type: none"> The nominal drill hole spacing varied between 20m and 40m in the high grade portion to between approximately 80m and 200m outside of this extending out to 200m x 200m on the margins. Not reported here. Results not composited.
Orientation	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering 	<ul style="list-style-type: none"> Holes are predominantly drilled towards 090 at a 60-80 degrees dip to intersect sub vertical N-S oriented mineralisation. Holes have been

Criteria	JORC Code explanation	Commentary
of data in relation to geological structure	<p><i>the deposit type.</i></p> <ul style="list-style-type: none"> <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i> 	<p>drilled towards 180 and 270 confirming the sub-vertical nature of the deposit.</p> <ul style="list-style-type: none"> No orientation based bias had been identified in the data to this point
Sample security	<ul style="list-style-type: none"> <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> An unbroken sample chain of custody was implemented, as follows: <ul style="list-style-type: none"> Sample polyweave bags were sealed with cable ties Sample shipments examined on arrival at the laboratory and the sample dispatch form signed and returned with a confirmation of the security seals and the presence of all samples comprising each batch.
Audits or reviews	<ul style="list-style-type: none"> <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> Audits of the sample preparation laboratories at AH Knight in Kitwe and Intertek Genalysis in Chingola and an audit of the Intertek Genalysis laboratory in Johannesburg were conducted by the CP.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	<ul style="list-style-type: none"> Kitumba is located entirely within the 100% owned Kitumba Mining licence 19820-HQ-LML. The mining licence was granted on the 21st of November, 2014 for a period of 25 years.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> The Mumbwa Project operated under joint venture with BHP Billiton from 2008-2011.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> The Kitumba deposit is recognised as having IOCG type characteristics; it is hosted in a hematite breccia complex within intrusives of the Hook Granitoid suite (Early Cambrian to Neoproterozoic). Mineralisation is supergene in nature (chalcocite, malachite, chalcocite, native copper) to 400+m, hypogene mineralisation consists primarily of chalcopyrite and pyrite.
Drill hole Information	<ul style="list-style-type: none"> A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. 	<ul style="list-style-type: none"> See Table 1.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	
Data aggregation methods	<ul style="list-style-type: none"> In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg, cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> Length-weighted average grades reported. No upper limit has been applied to copper grades in these exploration results. A cut-off grade of 0.25% Cu and a maximum internal dilution of 2m (drilled width) are used as a guideline when delineating the drilled thickness intervals of mineralisation. All metal grades reported are single element.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg, 'down hole length, true width not known'). 	<ul style="list-style-type: none"> True-widths are not quoted, as the mineralised zone is associated with a sub-vertical north-south oriented zone of brecciation.
Diagrams	<ul style="list-style-type: none"> Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	<ul style="list-style-type: none"> A plan map (Figure 1), is contained within this announcement.
Balanced reporting	<ul style="list-style-type: none"> Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	<ul style="list-style-type: none"> All results are reported.
Other	<ul style="list-style-type: none"> Other exploration data, if meaningful and material, should be reported 	<ul style="list-style-type: none"> There is no outstanding exploration data considered material that has

Criteria	JORC Code explanation	Commentary
substantive exploration data	<i>including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	not been previously reported or is not contained within this report.
Further work	<ul style="list-style-type: none"> • <i>The nature and scale of planned further work (eg, tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> • <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> • Future drilling at Kitumba will focus on sample collection for metallurgy, sterilisation and geotechnical drilling to satisfy requirements for a “DFS” and project development. Exploration work will concentrate on satellite prospects surrounding Kitumba within the Mumbwa Project area.