Occurrence Details

Occurrence Number: 105G 117
Occurrence Name: Kudz Ze Kayah
Occurrence Type: Hard-rock
Status: Deposit
Date printed: 8/5/2025 8:27:04 AM

General Information

Primary Commodities: copper, gold, lead, silver, zinc
Aliases: Abm, Kzk, Tag
Deposit Type(s): Volcanogenic Massive Sulphide (VMS) Kuroko Cu-Pb-Zn
Location(s): 61°27'29" N - -130°36'36" W
NTS Mapsheet(s): 105G07
Hand Samples Available: Yes
Last Reviewed: Nov 25, 2016

Capsule

WORK HISTORY

Cominco's interest in the Finlayson Lake area was heightened in 1992 when soil and silt geochemical sample results from a reconnaissance program confirmed and expanded upon an anomalous silt sample collected during a Geological Survey of Canada regional stream sediment and water geochemical survey for NTS map sheet 105G (Hornbook and Friske, 1988).

A follow up program, in 1993, within the anomalous drainage led to the discovery of a mineralized sulphide cobble by A.B. Mawer of Cominco, for whom the deposit is named. The company immediately carried out a reconnaissance ground UTEM geophysical survey over the projected trace of the suspected host stratigraphy, thereby outlining an EM conductor. Staking of the first Tag claims (cl 1-30, (YB46227) over the conductor was accompanied by a ground magnetic survey. Further magnetic and horizontal loop EM and soil surveys were completed later, that fall defining a compelling drill target.

In 1994 Cominco flew an airborne magnetic/electric magnetic (EM) survey over the property and followed up identified anomalies with ground magnetics and gravity surveys, regional and detailed mapping and additional soil sampling. The company also collared 53 diamond drill holes (8,500 m) on and around the main ABM zone/deposit, staked more than 1,591 claims and released a preliminary historic mineral reserve estimate for the ABM deposit at the end of the year.

In 1995 Cominco drilled 133 diamond drill holes (16,178 m), and carried out additional soil sampling, ground HLEM, magnetic and gravity geophysical surveys and geological mapping. The company also constructed an all-weather tote road to the property, collected a 40 tonne bulk sample and initiated various engineering, metallurgical, geotechnical, heritage, environmental and archaeological studies. An updated historical mineral resource estimate was released at the end of 1995.

In 1996 Cominco carried out regional geological mapping outside the immediate area of the ABM deposit and ground HLEM magnetic and gravity geophysical and soil sampling surveys over the northeast portion of the property. The company also upgraded the tote road, completed minor diamond drilling (99 m) in the southwest corner of the property and continued the various studies initiated the previous year. In 1997, Cominco completed ground UTEM and magnetic geophysical surveys on the Kudz Ze Kayah property and collared 17 diamond drill holes (5,360 m).

In 1998 Cominco carried out additional soil sampling and ground geophysical surveys and collared 11 diamond drill holes(1,755 m) on and around the GP4F zone (Minfile Occurrence 105G 143), located approximately 5 km to the southeast. In addition the company flew an airborne EM and magnetic survey over the eastern half of the R-15 land claim block (a block of land under interim Land Claim protection and claimed by the Ross River Dena Council) located approximately 5.5 km to the southeast. At the end of the year the company released an initial historical mineral resource estimate for the newly named GP4F deposit.

During the 1999 exploration season Cominco carried out ground In-Loop UTEM and HLEM/magnetic geophysical surveys over and around the GP4F deposit. Other than minor environmental monitoring and site remediation, no further physical work was carried out on the property until its sale in 2015.

In Mar/2000 Cominco announced an agreement in principal to sell the Kudz Ze Kayah and the neighboring GP4F deposits and surrounding mineral claims to Expatriate Resources Ltd. During 2000 Expatriate completed a pre-feasibility study (Hatch Associates Ltd, 2000), the emphasis of which was the co-development of both companies' deposits located within the Finlayson Lake region. A revised resource and mineable reserve for Kudz Ze Kayah was released, based on a mining scenario that included both the Kudz Ze Kayah and the Wolverine deposits.

In Jul/2001 Cominco merged with Teck Corp to form Teck Cominco Ltd. In Sep/2001, Expatriate terminated its agreement and returned all mineral properties to Teck Cominco. Despite the termination of the agreement, both companies pushed for the creation of an "area play" to bring the regions various properties into production. In 2004 Cominco signed a Socio-Economic Participation Agreement with the Ross River Dena Council on behalf of the Kaska Nation.

In December 2004, Expatriate reorganized and changed its name to Yukon Zinc Corporation.

In Apr/2009 Teck Cominco Ltd changed its name to Teck Resources Ltd.

On January 24, 2015 BMC Minerals (No. 1) Ltd, a private British based company purchased the Kudz Ze Kayah property including the GP4F zone. At the time of purchase the company released a historical mineral resource estimate based on Cominco's last publicly reported estimate (2009).

Prior to commencement of the 2015 field season BMC Minerals rehabilitated the tote road, constructed a new camp, initiated a data compilation program and began re-logging historic diamond drill core. Upon the start of the field program the company carried out an airborne Li-DAR survey and GPS surveyed the position of the tote road and all historic drill collars. BMC Minerals flew an airborne EM and magnetic survey over the property and carried out ground gravity geophysical surveys over the ABM and GP4F deposits and the Rhyolite Peak area. Down-hole EM surveys were completed on seven diamond drill holes in the GP4F area and one exploration hole.

BMC Minerals collared 99 diamond drill holes (21,279.7 m) in 2015 considered exploration in nature. Fifty-nine hole targeted the ABM deposit, 30 holes tested targets proximal to the deposit and 10 holes tested the GP4F deposit. The company also drilled 29 diamond drill holes (3,406 m) for metallurgical testing, 9 geotechnical drill holes (955 m) and 11 shallow hydrological holes (325 m). BMC Minerals also restarted hydrological, environmental, heritage other studies previously implemented by Cominco.

On January 18, 2016 BMC Minerals released a JORC compliant (Australasian Code for Reporting Results, Mineral Resources and Ore Reserves) updated mineral resource estimate for the

ABM and GP4F deposits.

During the 2016 exploration season BMC Minerals carried out an additional 19,000 m of diamond drilling. On November 2016 the company released a JORC compliant (Australasian Code for Reporting Results, Mineral Resources and Ore Reserves) updated mineral resource estimate. The new resource estimate will form the basis of a Prefeasibility Study due to be released in late 2016.

CAPSULE GEOLOGY

The Kudz Ze Kayah property lies within Yukon-Tanana terrane near the center of the Finlayson Lake area. It hosts the ABM and GP4F (Minfile Occurrence 105G 143), volcanogenic massive sulphide (VMS) deposits. Volcanic massive sulphide mineralization is hosted by felsic volcanic and variably carbonaceous sedimentary rocks assigned to the Kudz Ze Kayah Formation, part of the Upper Devonian to Lower Mississippian (?) Grass Lakes Succession. The deposits are hosted by different stratigraphic levels of this formation.

The host metavolcanic complex is a thick felsic fragmental and sill/flow sequence with minor mafic sills and flows and rare interlayered metasedimentary rocks (Schultze and Hall, 1997). The metavolcanic sequence has been structurally thickened to about 1000 m and is made up dominantly of felsic tuffs, felsic flows, feldspar + quartz metaintrusive rocks, feldspar augen crystal tuff, and undifferentiated mafic metavolcanic rocks. Felsic metatuffs are most abundant. Metarhyolite flows and associated dikes and sills are thickest, most abundant and best exposed on the ridge west of the deposit. They are typically dense, siliceous and aphanitic and locally contain up to 70%, 5 - 25 mm diameter spherulites. Feldspar augen crystal metatuffs exposed on ridges southeast of the deposit are apparently on strike with the metarhyolite unit. Ribboned, thinly banded siliceous felsic meta-ash tuff rocks are rare in outcrop and appear to be proximal to the deposit.

Presently the ABM deposit consists of the ABM zone and the Krakatoa zone which are separated by the north-northeast striking East Fault. The ABM lens is defined as a massive sulphide and stringer-style sulphide mineralization primarily hosted within a package of felsic volcanic rocks that occurs in the immediate hanging wall to a chlorite altered mafic schist while the Krakatoa zone is primarily hosted at or near the lower contact of the mafic schist.

The ABM lens consists of polymetallic massive and stringer type mineralization that measures up to 39 m in true thickness, strikes approximately 290° and has a minimum strike length of 700 m. It consists of a series of stacked lenses that coalesce into a single mineralized horizon at its eastern end. The lens dips at approximately 35° to the north with a 400 m down dip extent, with a flexure occurring around 200 m down dip that flattens the dip to 10 to 15°. Sulphide mineralization is dominated by pyrite, sphalerite, pyrrhotite, galena and chalcopyrite, with gangue minerals consisting of chlorite, magnetite, quartz, iron-carbonate, calcite, sericite, cordierite, albite, celsian and barite. Mineralized lenses typically occur within an envelope of chlorite and muscovite alteration and are subdivided into massive and stringer/disseminated sulphide styles. The mineralization responds well to magnetic and electromagnetic surveys but geochemical response is somewhat erratic due to the glacial till cover.

The Krakatoa zone was delineated by the 2015 diamond drilling program and lies south of the ABM deposit, in between the East and Sunda faults. The zone is predominantly hosted within a pre-mineralized mafic sill that intrudes the felsic volcanic package. Mineralization also occurs in the hanging wall to the mafic sill at Krakatoa in what is interpreted to be the equivalent of the ABM mineralized position. Only minor mineralization occurs in the mafic unit stratigraphically beneath the ABM zone. The Krakatoa zone lies under about 30 m of glacial overburden and is up to 22 m in true thickness and remains open to depth. BMC Minerals 2016 updated mineral resource estimate elevated the zone to deposit status.

The UTEM, magnetic and HLEM geophysical and soil surveys completed in 1993 successfully defined a drill target. The target was drilled in Apr/94 and the first hole intersected 22.5 m of sulphides in two zones which returned a weighted average grade of 0.5% copper, 2.8% lead, 10% zinc, 278 g/t silver and 2.9 g/t gold. The company collared an additional 51 diamond drill holes in 1994 the results of which were used to calculate a historical estimate released in Feb/2005.

Cominco released annual historical resource estimates covering the years 1995 through 1999 which were slightly less than the historical resource estimate released for 1994. The decrease likely reflects that the 1994 figure included open pit and underground resources while the latter figures reflects an open pit mineable historical resource estimate. In addition the 1994 figure was classified as a "Possible Reserves" while the latter figures were classified as "Measured and Indicated Reserves". The 1995 Yukon Exploration and Geology volume reports a slightly lower historical resource figure but similar grades to the annual reports. This likely reflects a reporting error. In 1998 Cominco published a historical estimate for the GP4F deposit (see Minfile Occurrence 105G 143), which some mining publications have included within the ABM deposit.

The 2000 Hatch Canada report prepared for Expatriate Resources Ltd was published as a Pre-Feasibility study for the Finlayson Project, which envisioned mining the Kudz Ze Kayah and neighboring Wolverine (Minfile Occurrence 105G 072) deposits as one. Various preliminary mining, milling and tailing disposal studies were undertaken to prepare a preliminary cost estimate for the project under the assumption that project costs would be cheaper if both deposits were developed at the same time. The study assumed the Kudz Ze Kayah deposit would be mined as an open pit mine. The study calculated a historical Indicated mineral resource estimate based on overall resources and a lower historical Probable reserve based on a preliminary mining plan. The lower Probable reserve resulted from some of the mineral resources being remove because they existed outside of the mine plan. As this report was completed before the release of National Instrument 43-101 regulations all reserve and resource figure are considered Historical Estimates.

Although the Hatch mineral resource figures were widely published, Cominco continued to publish the 1998 Historical Indicated and Inferred mineral resource figures in their annual reports. In the 2006 annual report Cominco changed all the resource figures to Inferred mineral resources and included the GP4F resource. This change likely resulted from the realization that the co-development of the Kudz Ze Kayah and Wolverine mines would not go forward thus assumptions used by Hatch in 2000 were invalid. It appears that Teck stop publicly reporting a mineral resource for the property after the end of the 2009 fiscal year.

In its January 24, 2015 news release announcing the purchase of the Kudz Ze Kayah property from Cominco, BMC Minerals released a Historical estimate of 12,800,000 tonnes of ore. This figure which is not NI 43-101 compliant, copies the 2006 resource estimate published in Teck Cominco's 2006 annual report and likely includes resources assigned to the GP4F deposit.

BMC Minerals spent the late winter and spring of 2015 compiling historical data, re-logging historic drill core interpreting geophysical data and planning for the field season. The diamond drill program focused on increasing reserves and obtaining metallurgical samples and engineering and hydrogeological data.

On January 22, 2016, BMC Minerals released a JORC Code compliant (Australasian Code for Reporting Results, Mineral Resources and Ore Reserves) mineral resource estimate for the Kudz Ze Kayah property. JORC Code is derived from the Joint Ore Reporting Committee, an independent mineral industry body from Australian based industry professional associates while NI 43-101 code is derived from Canadian Securities Authorities.

The new resource estimate included the newly identified Krakatoa deposit located immediately adjacent to the existing ABM deposit. The company broke the resource estimate down by zone, Indicated/Inferred and by massive and stockwork mineralization. The new figures do not include a cut-off grade as mineralization was modeled primarily by logged massive, semi and stockwork sulphide lithologies. These zones correlate d to significant grades of copper, lead, zinc, gold and silver. On this basis the company deemed that no cut-off grade was required (see News Release January 22, 2016 for details concerning resource estimate). The company also included an Inferred mineral resource estimate for the GP4F deposit.

Metallurgical studies released in July 2016 confirmed that the deposit could be processed using a simple circuit design and conventional flotation processing to produce separate copper, lead and zinc concentrates carrying precious metal credits. The ore carries low amount of deleterious elements and penalties associated with such elements are considered minimal. Preliminary discussions with metal traders determined the project would produce a marketable concentrate.

Upon completion of the 2016 drill program BMC Minerals released an updated JORC Code compliant mineral resource for the Kudz Ze Kayah property. Total tonnes report were slightly less than the figure released in January 2016, however 95% of the resource was classified upwards into the Indicated class. The company also included a separate updated JORC Code compliant mineral resource for the GP4F deposit in which most of the mineral resource was classified upwards into the Indicated class.

The ABM Deposit (ABM and Krakatoa zones) currently hosts (November 2016) a total resource (Indicated and Inferred) of 19,200,000 tonnes. BMC Minerals plans to release a Prefeasibility Study by the end of 2016.

Work History

Date	Work Type	Comment
12/31/2000	Studies	Hatch, 2000. Plan to mine Kudz Ze Kayah and Wolverine deposits together.
12/31/1998	Geology	
12/31/1998	Geochemistry	Additional sampling.
12/31/1997	Drilling	17 holes (5,360 m).
12/31/1997	Studies	
12/31/1997	Ground Geophysics	Also UTEM survey.
12/31/1996	Ground Geophysics	Also HLEM survey.
12/31/1996	Drilling	1 hole (99 m).
12/31/1996	Studies	
12/31/1996	Lab Work/Physical Studies	
12/31/1996	Development, Surface	Upgraded road.
12/31/1996	Geology	Working away from main deposit area.
12/31/1995	Drilling	133 holes (16,178 m).
12/31/1995	Development, Surface	
12/31/1995	Geochemistry	Additional sampling.
12/31/1994	Drilling	53 holes, (8,500 m) on main target.
12/31/1994	Geology	Detailed mapping over drill target, reconnaissance mapping elsewhere.
12/13/2016	Studies	Two, January and November, prepared using JORC rules.
12/13/2015	Pre-existing Data	Also digitized data.
12/13/2015	Airphotography	Also Lidar survey. Also GPS survey.
12/13/2015	Drilling	99 holes (21,279.7 m) collared for exploration, metallurgical, geotechnical and hydrological purposes.
12/13/2015	Lab Work/Physical Studies	Some drill holes collared for metallurgical samples.
12/13/2015	Airborne Geophysics	Also magnetic survey.
12/13/2015	Lab Work/Physical Studies	Various tests carried out on samples.
12/13/2015	Studies	Restart of testing conducted by Cominco, i.e. hydrological, environmental etc.
12/13/2000	Studies	Updated mineral resource estimate based on mining both properties together.
12/13/1999	Studies	Continued site remediation, and environmental monitoring.
12/13/1996	Geochemistry	Working outward from main area.
12/13/1995	Ground Geophysics	Also HLEM and gravity surveys.
12/13/1995	Geology	
12/13/1994	Studies	Preliminary mineral resource estimate.
12/13/1994	Geochemistry	Additional sampling.
12/13/1994	Ground Geophysics	Also gravity survey.
12/13/1994	Airborne Geophysics	Also EM survey.
12/13/1993	Geochemistry	Mineralized sulphide cobble discovered.
12/13/1993	Geochemistry	Gris sampling over geophysical anomaly.
12/13/1993	Geochemistry	Follow-up survey.
12/13/1993	Ground Geophysics	Also EM and UTEM surveys undertaken.
12/13/1992	Geochemistry	Reconnaissance soil and silt sampling to confirm Geological Survey of Canada's identified anomaly.

12/13/1988	Geochemistry	Release of Geological Survey of Canada's regional stream sediment survey.
1/1/1995	Studies	Updated mineral resource estimate. Also various engineering, metallurgical, geotechnical, heritage and environmental studies.

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
097150	2017	2017 Geological, Geochemical, Geophysical, Diamond Drilling and Geotechnical Report o the Kudz Ze Kayah (KZK) Property	Diamond - Drilling, Soil - Geochemistry, Bedrock Mapping - Geology, EM - Ground Geophysics	48	4928.70
096997	2016	2016 Geological, Geophysical, Diamond Drilling and Geotechnical Program Report on the Kudz Ze Kayah (KZK) Property	Magnetic - Airborne Geophysics, VTEM - Airborne Geophysics, Orthophoto - Airphotography, Diamond - Drilling, Downhole Survey - Ground Geophysics, Petrographic - Lab Work/Physical Studies, Research/Summarize - Pre-existing Data, LIDAR - Remote Sensing, Environmental Assessment/Impact - Studies	53	16897.98
096898	2015	2015 Geological, Geophysical, Diamond Drilling and Environmental Report on the Kudz Ze Kayah Property	Electromagnetic - Airborne Geophysics, Magnetic - Airborne Geophysics, Diamond - Drilling, Historical Drill Core - Geochemistry, Downhole Survey - Ground Geophysics, Gravity Survey - Ground Geophysics, Surveying - Other, Data Compilation - Pre-existing Data, Process/Interpret - Pre-existing Data, LIDAR - Remote Sensing	99	21279.70
093848	1997	1997 Assessment Report Tag Property (KZK Project) and Cobb Property Diamond Drilling and Minor Geological Mapping and Soil/Rock Geochemistry	Diamond - Drilling, Soil - Geochemistry, Bedrock Mapping - Geology, EM - Ground Geophysics, Gravity Survey - Ground Geophysics, Magnetics - Ground Geophysics, Line Cutting - Other	17	3566
093712	1996	1996 Assessment Report Kudz Ze Kayah Property Linecutting, Soil Geochemistry, Geological Mapping, Geophysical Surveying and Diamond Drilling	Diamond - Drilling, Regional Bedrock Mapping - Geology, EM - Ground Geophysics, Gravity Survey - Ground Geophysics, Magnetics - Ground Geophysics, Line Cutting - Other, Prospecting - Other	1	99.20

Related References

Number	Title	Page(s)	Reference Type	Document Type
YEG1995-pg29	Summary of the Kudz Ze Kayah Project, Volcanic Hosted Massive Sulphide Deposit, Yukon Territory	p. 29-32.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report Paper
YEG1996-pg35	Massive Sulphide Deposits in the Yukon-Tanana and Adjacent Terranes	p. 35-45.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report Paper
YEG2001_18	Finlayson Lake Targeted Geoscience Initiative (southeastern Yukon), Part 2: Quaternary geology and till geochemistry	p. 189-217.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report Paper
YEG1999_06	Syn-mineralization faults and their re-activation, Finlayson Lake massive sulphide district, Yukon-Tanana Terrane, southeastern Yukon		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report Paper
12	Volcanic-associated massive sulphide (VMS) mineralization in the Yukon-Tanana Terrane and coeval strata of the North American miogeocline, in the Yukon and adjacent areas		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Bulletin
1999-4	Geological map of parts of Finlayson Lake area (105G/7, 8, and parts of 1, 2 and 9) and Frances Lake (parts of 105H/5 and 12) map areas, southeastern Yukon		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Open File (Geological - Bedrock)
2001-33	Preliminary bedrock geological map of northern Finlayson Lake area (NTS 105G) Yukon Territory (1:100 000 scale)		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Open File (Geological - Bedrock)
YEG1994	Yukon Exploration and Geology 1994	p. 6, 11-12.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report
YEG1995	Yukon Exploration and Geology 1995	p. 9, 16, 29-32.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report
YEG1996	Yukon Exploration and Geology 1996	p. 18, 31.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report
YEG1997	Yukon Exploration and Geology 1997	p. 11, 36, 38.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report
YEG1998_OV	Yukon Mining & Exploration Overview 1998	p. 8, 20, 28, 30.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report
YEG1999_OV	Yukon Mining & Exploration Overview 1999	p. 21, 30.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report
YEG2000_OV	Yukon Mining & Exploration Overview 2000	p. 7-9, 25.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report
YEG2015_OV2	Yukon Hard Rock Mining, Development and Exploration Overview 2015	p. 38, 45, 46.	Yukon Geological Survey	Annual Report Paper

Resource/Reserve

Year	Zone	Type	Commodity	Grade	Tonnage	Amount	Reported Amount	43-101 Compliant	Cut-off
2016	KRAKATOA ZONE - UPDATED INFERRED (Open Pit)	Inferred	copper	.8 %	500,000		No	Yes	None

Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	ABM ZONE - UPDATED INFERRED (Open Pit)	Inferred	copper	1.5 %	400,000		Yes	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	ABM ZONE - UPDATED INDICATED (Open Pit)	Indicated	copper	1 %	14,600,000		No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KRAKATOA ZONE - UPDATED INDICATED (Open Pit)	Indicated	copper	.6 %	3,700,000		No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KRAKATOA ZONE - UPDATED INFERRED (Open Pit)	Inferred	zinc	8.9 %	500,000		No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	ABM ZONE - UPDATED INFERRED (Open Pit)	Inferred	zinc	4.2 %	400,000		No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KRAKATOA ZONE - UPDATED INDICATED (Open Pit)	Indicated	zinc	7.2 %	3,700,000		No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	ABM ZONE - UPDATED INDICATED (Open Pit)	Indicated	zinc	6.1 %	14,600,000		No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KRAKATOA ZONE - UPDATED INFERRED (Open Pit)	Inferred	silver	161 g/t	500,000	80500000	No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	ABM ZONE - UPDATED INFERRED (Open Pit)	Inferred	silver	107 g/t	400,000	42800000	No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KRAKATOA ZONE - UPDATED INDICATED (Open Pit)	Indicated	silver	211 g/t	3,700,000	780700000	No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	ABM ZONE - UPDATED INDICATED (Open Pit)	Indicated	silver	132 g/t	14,600,000	1927200000	No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KRAKATOA ZONE - UPDATED INFERRED (Open Pit)	Inferred	gold	1.2 g/t	500,000	600000	No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	ABM ZONE - UPDATED INFERRED (Open Pit)	Inferred	gold	1 g/t	400,000	400000	No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KRAKATOA ZONE - UPDATED INDICATED (Open Pit)	Indicated	gold	1.8 g/t	3,700,000	6660000	No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	ABM ZONE - UPDATED INDICATED (Open Pit)	Indicated	gold	1.3 g/t	14,600,000	18980000	No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KRAKATOA ZONE - UPDATED INFERRED (Open Pit)	Inferred	lead	1.7 %	500,000		No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									

2016	ABM ZONE - UPDATED INFERRED (Open Pit)	Inferred	lead	1.4 %	400,000		No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KRAKATOA ZONE - UPDATED INDICATED (Open Pit)	Indicated	lead	3.1 %	3,700,000		No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	ABM ZONE - UPDATED INDICATED (Open Pit)	Indicated	lead	1.6 %	14,600,000		No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - ABM ZONE (Open Pit)	Inferred	copper	1.1 %	400,000		No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - KRAKATOA ZONE (Open Pit)	Inferred	copper	.6 %	3,000,000		No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - ABM DEPOSIT TOTAL INFERRED (Open Pit)	Inferred	copper	.7 %	3,400,000		No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - ABM ZONE (Open Pit)	Indicated	copper	1 %	146,000,000		No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - KRAKATOA ZONE (Open Pit)	Indicated	copper	.5 %	2,100,000		No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - ABM DEPOSIT TOTAL INDICATED (Open Pit)	Indicated	copper	.9 %	16,700,000		No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - ABM ZONE (Open Pit)	Inferred	zinc	4.7 %	400,000		No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - KRAKATOA ZONE (Open Pit)	Inferred	zinc	7.4 %	3,000,000		No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - ABM DEPOSIT TOTAL INFERRED (Open Pit)	Inferred	zinc	7.1 %	3,400,000		No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - ABM ZONE (Open Pit)	Indicated	zinc	6 %	14,600,000		No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - KRAKATOA ZONE (Open Pit)	Indicated	zinc	7.6 %	2,100,000		No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - ABM DEPOSIT TOTAL INDICATED (Open Pit)	Indicated	zinc	6.2 %	16,700,000		No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - ABM ZONE (Open Pit)	Inferred	silver	101 g/t	400,000	40400000	No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - KRAKATOA ZONE (Open Pit)	Inferred	silver	202 g/t	3,000,000	606000000	No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis									

it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - ABM DEPOSIT TOTAL INFERRED (Open Pit)	Inferred	silver	191 g/t	3,400,000	649400000	No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - ABM ZONE (Open Pit)	Indicated	silver	131 g/t	14,600,000	1912600000	No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - KRAKATOA ZONE (Open Pit)	Indicated	silver	230 g/t	2,100,000	483000000	No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - ABM DEPOSIT TOTAL INDICATED (Open Pit)	Indicated	silver	144 g/t	16,700,000	2404800000	No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - ABM ZONE (Open Pit)	Inferred	gold	.9 g/t	400,000	360000	No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - KRAKATOA ZONE (Open Pit)	Inferred	gold	1.6 g/t	3,000,000	74075320.09	No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - ABM DEPOSIT TOTAL INFERRED (Open Pit)	Inferred	gold	1.5 g/t	3,400,000	5100000	No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - ABM ZONE (Open Pit)	Indicated	gold	1.3 g/t	14,600,000	18980000	No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - KRAKATOA ZONE (Open Pit)	Indicated	gold	2 g/t	2,100,000	4200000	No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - ABM DEPOSIT TOTAL INDICATED (Open Pit)	Indicated	gold	1.4 g/t	16,700,000	23380000	No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - ABM ZONE (Open Pit)	Inferred	lead	1.5 %	400,000		No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - KRAKATOA ZONE (Open Pit)	Inferred	lead	2.9 %	3,000,000		No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - ABM DEPOSIT TOTAL INFERRED (Open Pit)	Inferred	lead	2.8 %	3,400,000		No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - ABM ZONE (Open Pit)	Indicated	lead	1.6 %	14,600,000		No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - KRAKATOA ZONE (Open Pit)	Indicated	lead	3.7 %	2,100,000		No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - ABM DEPOSIT TOTAL INDICATED (Open Pit)	Indicated	lead	1.8 %	16,700,000		No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - ABM DEPOSIT (Open Pit)	Inferred	copper	.9 %	13,683,000		No	Yes	None

Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - TOTAL RESOURCE (Open Pit)	Inferred	copper	.8 %	15,402,000		No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - ABM DEPOSIT (Open Pit)	Inferred	zinc	6.1 %	13,683,000		No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - TOTAL RESOURCE (Open Pit)	Inferred	zinc	6.1 %	15,402,000		No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - ABM DEPOSIT (Open Pit)	Inferred	silver	140 g/t	13,863,000	1940820000	No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - TOTAL RESOURCE (Open Pit)	Inferred	silver	133 g/t	15,402,000	2048466000	No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - ABM DEPOSIT (Open Pit)	Inferred	gold	1.4 g/t	13,683,000	19156200	No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - TOTAL RESOURCE (Open Pit)	Inferred	gold	1.4 g/t	15,402,000	21562800	No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - ABM DEPOSIT (Open Pit)	Inferred	lead	1.6 %	13,683,000		No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2016	KUDZ ZE KAYAH - TOTAL RESOURCE (Open Pit)	Inferred	lead	1.7 %	15,402,000		No	Yes	None
Based on 2015 and 2016 drilling programs conducted by BMC Ltd. Press release November 10, 2016. Prepared in accordance with JORC Code (2012). The Mineral Resource has not been reported above a cut-off grade as the mineralization was modeled primarily by logged massive, semi and stockwork lithologies. These zones correlated to significant grades of copper, lead, zinc, gold and silver. On this basis it was deemed that no cut-off grade was required.									
2006	KUDZ ZE KAYAH - ABM & GP4F DEPOSITS (Open Pit)	Historical Estimate	copper	.81 %	12,800,000		No	No	Unknown
Figure quoted in Teck Cominco and later Teck Annual Reports and Northern Miner volumes. Includes GP4F resource. Same as 1998 resource figure but includes GP4F tonnage. Used from 2006 to 2015 and quoted in BMC Ltd's news release (January 24, 2015) announcing purchase of property. Reported as Inferred resource but figure was never updated to meet NI 43-101 compliance.									
2006	KUDZ ZE KAYAH - ABM & GP4F DEPOSITS (Open Pit)	Historical Estimate	zinc	5.9 %	12,800,000		No	No	Unknown
Figure quoted in Teck Cominco and later Teck Annual Reports and Northern Miner volumes. Includes GP4F resource. Same as 1998 resource figure but includes GP4F tonnage. Used from 2006 to 2015 and quoted in BMC Ltd's news release (January 24, 2015) announcing purchase of property. Reported as Inferred resource but figure was never updated to meet NI 43-101 compliance.									
2006	KUDZ ZE KAYAH - ABM & GP4F DEPOSITS (Open Pit)	Historical Estimate	gold	1.38 g/t	12,800,000	17664000	No	No	Unknown
Figure quoted in Teck Cominco and later Teck Annual Reports and Northern Miner volumes. Includes GP4F resource. Same as 1998 resource figure but includes GP4F tonnage. Used from 2006 to 2015 and quoted in BMC Ltd's news release (January 24, 2015) announcing purchase of property. Reported as Inferred resource but figure was never updated to meet NI 43-101 compliance.									
2006	KUDZ ZE KAYAH - ABM & GP4F DEPOSITS (Open Pit)	Historical Estimate	lead	1.7 %	12,800,000		No	No	Unknown
Figure quoted in Teck Cominco and later Teck Annual Reports and Northern Miner volumes. Includes GP4F resource. Same as 1998 resource figure but includes GP4F tonnage. Used from 2006 to 2015 and quoted in BMC Ltd's news release (January 24, 2015) announcing purchase of property. Reported as Inferred resource but figure was never updated to meet NI 43-101 compliance.									
2000	KUDZ ZE KAYAH - ABM OPEN PIT RESERVES (OPEN PIT)	Historical Estimate	copper	.85 %	11,110,000		No	No	Unknown
Hatch Ltd - Pre-Feasibility Study Volume 1 for Finlayson Project. Prepared for Expatriate Resources. Assumed that Kudz Ze Kayah and Wolverine deposits would be jointly mined to reduce costs. This figure = minable reserve based on pit shell outline and other parameters. Reported Indicated Reserve was higher.									
2000	KUDZ ZE KAYAH - ABM OPEN PIT RESERVES (OPEN PIT)	Historical Estimate	zinc	5.61 %	11,110,000		No	No	Unknown
Hatch Ltd - Pre-Feasibility Study Volume 1 for Finlayson Project. Prepared for Expatriate Resources. Assumed that Kudz Ze Kayah and Wolverine deposits would be jointly mined to reduce costs. This figure = minable reserve based on pit shell outline and other parameters. Reported Indicated Reserve was higher.									
2000	KUDZ ZE KAYAH - ABM OPEN PIT RESERVES (OPEN PIT)	Historical Estimate	silver	136.9 g/t	11,110,000	1520959000	No	No	Unknown
Hatch Ltd - Pre-Feasibility Study Volume 1 for Finlayson Project. Prepared for Expatriate Resources. Assumed that Kudz Ze Kayah and Wolverine deposits would be jointly mined to reduce costs. This figure = minable reserve based on pit shell outline and other parameters. Reported Indicated Reserve was higher.									
2000	KUDZ ZE KAYAH -ABM OPEN PIT RESERVES (OPEN PIT)	Historical Estimate	gold	1.33 g/t	11,110,000	14776300	No	No	Unknown
Hatch Ltd - Pre-Feasibility Study Volume 1 for Finlayson Project. Prepared for Expatriate Resources. Assumed that Kudz Ze Kayah and Wolverine deposits would be jointly mined to reduce costs. This figure = minable reserve based on pit shell outline and other parameters. Reported Indicated Reserve was higher.									
2000	KUDZ ZE KAYAH - ABM OPEN PIT RESERVES (OPEN PIT)	Historical Estimate	lead	1.56 %	11,110,000		No	No	Unknown
Hatch Ltd - Pre-Feasibility Study Volume 1 for Finlayson Project. Prepared for Expatriate Resources. Assumed that Kudz Ze Kayah and Wolverine deposits would be jointly mined to reduce costs. This									

figure = minable reserve based on pit shell outline and other parameters. Reported Indicated Reserve was higher.									
1998	KUDZ ZE KAYAH - ABM DEPOSIT (Open Pit)	Historical Estimate	copper	.9 %	11,300,000		No	No	Unknown
Cominco and later Teck Cominco annual reports. Most volumes called this Indicated reserve. Some volumes (1998 forward) report 1,500.000 tonnes Inferred reserve which covers GP4F deposit located 5 km to southeast.									
1998	KUDZ ZE KAYAH - ABM DEPOSIT (Open Pit)	Historical Estimate	zinc	5.9 %	11,300,000		No	No	unknown
Cominco and later Teck Cominco annual reports. Most volumes called this Indicated reserve. Some volumes (1998 forward) report 1,500.000 tonnes Inferred reserve which covers GP4F deposit located 5 km to southeast.									
1998	KUDZ ZE KAYAH - ABM DEPOSIT (Open Pit)	Historical Estimate	silver	133 g/t	11,300,000	1502900000	No	No	Unknown
Cominco and later Teck Cominco annual reports. Most volumes called this Indicated reserve. Some volumes (1998 forward) report 1,500.000 tonnes Inferred reserve which covers GP4F deposit located 5 km to southeast.									
1998	KUDZ ZE KAYAH - ABM DEPOSIT (Open Pit)	Historical Estimate	gold	1.3 g/t	11,300,000	14690000	No	No	Unknown
Cominco and later Teck Cominco annual reports. Most volumes called this Indicated reserve. Some volumes (1998 forward) report 1,500.000 tonnes Inferred reserve which covers GP4F deposit located 5 km to southeast.									
1998	KUDZ ZE KAYAH - ABM DEPOSIT (Open Pit)	Historical Estimate	lead	1.5 %	11,300,000		No	No	Unknown
Cominco and later Teck Cominco annual reports. Most volumes called this Indicated reserve. Some volumes (1998 forward) report 1,500.000 tonnes Inferred reserve which covers GP4F deposit located 5 km to southeast.									
1995	KUDZ ZE KAYAH - ABM DEPOSIT (Open Pit)	Historical Estimate	copper	.9 %	11,300,000		No	No	unknown
Cominco Ltd. Annual report 2006. Also - Summary of the Kudz Ze Kayah Project, Volcanic Hosted Massive Sulphide Deposit, Yukon Territory, by H.C. Schultze - in Yukon Exploration and Geology 1995 p. 29, uses slightly lower tonnage figure, likely a misprint. Lower overall tonnage figure likely reflects loss of underground resources.									
1995	KUDZ ZE KAYAH - ABM DEPOSIT (Open Pit)	Historical Estimate	zinc	5.9 %	11,300,000		No	No	unknown
Cominco Ltd. Annual report 2006. Also - Summary of the Kudz Ze Kayah Project, Volcanic Hosted Massive Sulphide Deposit, Yukon Territory, by H.C. Schultze - in Yukon Exploration and Geology 1995 p. 29, uses slightly lower tonnage figure, likely a misprint. Lower overall tonnage figure likely reflects loss of underground resources.									
1995	KUDZ ZE KAYAH - ABM DEPOSIT (Open Pit)	Historical Estimate	silver	130 g/t	11,300,000	1469000000	No	No	unknown
Cominco Ltd. Annual report 2006. Also - Summary of the Kudz Ze Kayah Project, Volcanic Hosted Massive Sulphide Deposit, Yukon Territory, by H.C. Schultze - in Yukon Exploration and Geology 1995 p. 29, uses slightly lower tonnage figure, likely a misprint. Lower overall tonnage figure likely reflects loss of underground resources.									
1995	KUDZ ZE KAYAH - ABM DEPOSIT (Open Pit)	Historical Estimate	gold	1.3 g/t	11,300,000	14690000	No	No	unknown
Cominco Ltd. Annual report 2006. Also - Summary of the Kudz Ze Kayah Project, Volcanic Hosted Massive Sulphide Deposit, Yukon Territory, by H.C. Schultze - in Yukon Exploration and Geology 1995 p. 29, uses slightly lower tonnage figure, likely a misprint. Lower overall tonnage figure likely reflects loss of underground resources.									
1995	KUDZ ZE KAYAH - ABM DEPOSIT (Open Pit)	Historical Estimate	lead	1.5 %	11,300,000		No	No	unknown
Cominco Ltd. Annual report 2006. Also - Summary of the Kudz Ze Kayah Project, Volcanic Hosted Massive Sulphide Deposit, Yukon Territory, by H.C. Schultze - in Yukon Exploration and Geology 1995 p. 29, uses slightly lower tonnage figure, likely a misprint. Lower overall tonnage figure likely reflects loss of underground resources.									
1994	KUDZ ZE KAYAH -ABM DEPOSIT (OPEN PIT & UNDERGROUND)	Historical Estimate	gold	1.2 g/t	13,000,000		No	No	Unknown
Preliminary estimate of reserves based on results of 1994 exploration program. Different authors defined it differently, i.e. possible or inferred. Figure not supported by independent engineering report.; George Cross News Letter, 2 Feb/95, p. 2. Also Cominco Ltd 1994 Annual Report, Northern Miner, 30 Jan/95.									
1994	KUDZ ZE KAYAH - ABM DEPOSIT (OPEN PIT & UNDERGROUND)	Historical Estimate	copper	1 %	13,000,000		No	No	Unknown
Preliminary estimate of reserves based on results of 1994 exploration program. Different authors defined it differently, i.e. possible or inferred. Figure not supported by independent engineering report.; George Cross News Letter, 2 Feb/95, p. 2. Also Cominco Ltd 1994 Annual Report, Northern Miner, 30 Jan/95.									
1994	KUDZ ZE KAYAH - ABM DEPOSIT (OPEN PIT & UNDERGROUND)	Historical Estimate	zinc	5.5 %	13,000,000		No	No	Unknown
Preliminary estimate of reserves based on results of 1994 exploration program. Different authors defined it differently, i.e. possible or inferred. Figure not supported by independent engineering report.; George Cross News Letter, 2 Feb/95, p. 2. Also Cominco Ltd 1994 Annual Report, Northern Miner, 30 Jan/95.									
1994	KUDZ ZE KAYAH - ABM DEPOSIT (OPEN PIT & UNDERGROUND)	Historical Estimate	silver	125 g/t	13,000,000		No	No	Unknown
Preliminary estimate of reserves based on results of 1994 exploration program. Different authors defined it differently, i.e. possible or inferred. Figure not supported by independent engineering report.; George Cross News Letter, 2 Feb/95, p. 2. Also Cominco Ltd 1994 Annual Report, Northern Miner, 30 Jan/95.									
1994	KUDZ ZE KAYAH - ABM DEPOSIT (OPEN PIT & UNDERGROUND)	Historical Estimate	lead	1.3 %	13,000,000		No	No	Unknown
Preliminary estimate of reserves based on results of 1994 exploration program. Different authors defined it differently, i.e. possible or inferred. Figure not supported by independent engineering report.; George Cross News Letter, 2 Feb/95, p. 2. Also Cominco Ltd 1994 Annual Report, Northern Miner, 30 Jan/95.									

Drill core at YGS core library

Number	Property	Year Drilled	Core Size	Photos	Data
K15-254	Kudz Ze Kayah	2015	NQ3	12	4
K15-273	Kudz Ze Kayah	2015	NQ3	21	5
K15-297	Kudz Ze Kayah	2015	HQ3	71	5
94-23	Kudz Ze Kayah	1994	NQ	28	3
94-26	Kudz Ze Kayah	1994		28	3
94-33	Kudz Ze Kayah	1994	NQ	18	2
94-44	Kudz Ze Kayah	1994		36	3