



MINFILE Detail Report
BC Geological Survey
Ministry of Energy, Mines and Petroleum Resources

Location/Identification

MINFILE Number: 094E 021 **National Mineral Inventory Number:** 094E2 Cu4

Name(s): **KEMESS NORTH**
NEW KEMESS 1-2, CENTRAL CIRQUE, EAST CIRQUE, GOLDEN EAGLE, KEMESS NORTH OFFSETT, KN
OFFSETT, KEMESS UNDERGROUND

Status: Developed Prospect **Mining Division:** Omineca
Electoral District: Peace River North
Resource District: Mackenzie Natural Resource District

Regions: British Columbia

BCGS Map: 094E007

NTS Map: 094E02W **UTM Zone:** 09 (NAD 83)

Latitude: 57 03 36 N **Northing:** 6326309

Longitude: 126 45 34 W **Easting:** 635877

Elevation: 1694 metres

Location Accuracy: Within 500M

Comments: Kemess North deposit, located 2.5 kilometres east of Duncan Lake and 4.5 kilometres south of Attycelley Creek, approximately 271 kilometres north of the community of Smithers.

Mineral Occurrence

Commodities: Copper, Gold, Silver, Molybdenum

Minerals **Significant:** Chalcopyrite, Molybdenite, Digenite
Significant Comments: Molybdenite is minor.
Associated: Quartz, Pyrite, Orthoclase, Magnetite, Hematite
Alteration: Quartz, Sericite, Pyrite, Chlorite, Epidote, Albite, Jarosite, Kaolinite, Calcite, Laumontite
Alteration Comments: Whole rock date was determined from quartz-sericite-pyrite altered volcanic rocks (CIM Bulletin, Volume 73, pages 94-99).
Alteration Type: Sericitic, Propylitic, Zeolitic, Leaching
Mineralization Age: Lower Jurassic

Isotopic Age: 182 +/- 6 Ma **Dating Method:** Whole Rock **Material Dated:** Whole Rock

Deposit **Character:** Stockwork, Disseminated
Classification: Porphyry
Type: L04: Porphyry Cu +/- Mo +/- Au

Host Rock

Dominant Host Rock: Volcanic

Stratigraphic Age	Group	Formation	Igneous/Metamorphic/Other
Lower Jurassic	Hazelton	Toodoggone	-----
Upper Triassic	Stuhini	-----	-----
Lower Jurassic	-----	-----	Black Lake Suite

Isotopic Age	Dating Method	Material Dated
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Lithology: Augite Andesite Porphyry, Feldspar Porphyritic Andesite Flow, Andesite, Basaltic Flow, Basaltic Tuff, Basalt, Feldspar Porphyry, Feldspar Porphyry Tuff Breccia, Quartz Monzonite, Granodiorite, Gossan

Geological Setting

Tectonic Belt: Intermontane **Physiographic Area:** Omineca Mountains

Terrane: Stikine, Plutonic Rocks

Metamorphic Type: Regional, Contact

Grade: Greenschist, Hornfels

Inventory

Ore Zone: KEMESS NORTH

Year: 2016

Category: Combined

Report On: Y

Quantity: 107,400,000 tonnes

NI 43-101: Y

Commodity	Grade
Silver	1.99 grams per tonne
Gold	0.54 grams per tonne
Copper	0.27 per cent

Comments: An updated resource estimate for the Kemess Underground deposit.

Reference: Assessment Report 36283.

Ore Zone: KEMESS NORTH

Year: 2012

Category: Indicated

Report On: Y

Quantity: 65,432,000 tonnes

NI 43-101: Y

Commodity	Grade
Silver	1.81 grams per tonne
Gold	0.41 grams per tonne
Copper	0.24 per cent

Comments: Calculated at a \$13 net smelter return cut-off.

Reference: Press Release - AuRico Gold Inc., March 25, 2013.

Ore Zone: KEMESS NORTH

Year: 2012

Category: Inferred

Report On: Y

Quantity: 9,969,000 tonnes

NI 43-101: Y

Commodity	Grade
Silver	1.57 grams per tonne
Gold	0.39 grams per tonne
Copper	0.21 per cent

Comments: Calculated at a \$13 net smelter return cut-off.

Reference: Press Release - AuRico Gold Inc., March 25, 2013.

Ore Zone: KEMESS NORTH

Year: 2012

Category: Probable

Report On: Y

Quantity: 100,373,000 tonnes

NI 43-101: Y

Commodity	Grade
Silver	2.05 grams per tonne
Gold	0.56 grams per tonne
Copper	0.28 per cent

Comments: Calculated at a \$13 net smelter return cut-off.

Reference: Press Release - AuRico Gold Inc., March 25, 2013.

Ore Zone: KEMESS NORTH

Year: 2011

Category: Inferred
Quantity: 6,000,000 tonnes

Report On: Y
NI 43-101: Y

Commodity	Grade
Silver	1.65 grams per tonne
Gold	0.42 grams per tonne
Copper	0.22 per cent

Comments: Calculated at a \$15 net smelter return cut-off.
Reference: Stockwatch News Release - February 15, 2011.

Ore Zone: KEMESS NORTH
Category: Indicated
Quantity: 136,500,000 tonnes

Year: 2011
Report On: Y
NI 43-101: Y

Commodity	Grade
Silver	2.105 grams per tonne
Gold	0.558 grams per tonne
Copper	0.29 per cent

Comments: Calculated at a \$15 net smelter return cut-off.
Reference: Stockwatch News Release - February 15, 2011.

Capsule Geology

The Kemess North occurrence is located at an elevation of approximately 1700 metres in the southeastern headwaters of a northwest trending creek and valley which enters Duncan Lake approximately 3 kilometres to the northwest, about 271 kilometres north of the community of Smithers. The Cheni mine extension of the Omineca Mining Road passes about 12 kilometres west of the property. See also Kemess South (094E 094).

The Toodoggone district lies within the eastern margin of the Intermontane Belt and is underlain by a northwesterly trending belt of Paleozoic to Paleogene sediments, volcanics and intrusions covering a 90 by 25 kilometre area. The basement rocks are Proterozoic metasedimentary equivalents of the Hadrynian Ingenika Group. These rocks are unconformably overlain by volcanic and sedimentary units of the Devonian to Permian Asitka Group, which are in turn overlain by Upper Triassic basaltic to andesitic flows, volcanoclastics and minor limestone of the Stuhini Group. Volcanoclastic rocks of the Lower Jurassic Hazelton Group and rhyolitic to dacitic flows, intrusions and volcanoclastics of the Lower Jurassic Toodoggone Formation (Hazelton Group) overlie the Stuhini Group. Further west, nonmarine sediments of the Cretaceous Sustut Group overlie the volcanic strata and form the western margin of the district.

The Early Jurassic Black Lake Suite, of quartz monzonitic to granodioritic composition, has intruded the older strata in the central and eastern parts of the region and forms the eastern margin of the Toodoggone district. Within the district, syenomonzonitic and quartz feldspar porphyritic dikes may be feeders to the Toodoggone Formation.

The southern part of the Kemess North occurrence area is underlain by intercalated andesitic flows and pyroclastics of the Stuhini Group. Augite andesite underlies the western portion of the property whereas feldspar porphyritic andesite flows and breccias dominate the eastern portion. The volcanic rocks are massive, but the trend of the Stuhini Group is indicated by local limestone lenses that strike southeast and dip 60 degrees southwest. Local basaltic dikes intrude these units with north-northwest and north strikes.

The central portion of the area is underlain by intermediate pyroclastic rocks of the Toodoggone Formation that dip gently southward. The major units are lithic and crystal tuffs and tuffaceous breccia.

The extreme northwest and south portions of the property are underlain by stocks of granodioritic and quartz monzonitic composition of the Black Lake Suite. These stocks intrude both the Stuhini and Toodoggone rocks. Locally, porphyritic stocks and dikes, comagmatic with an underlying granitic pluton, intrude volcanic rocks. The most dominant of these intrusions is a syenitic porphyry dike.

Stuhini Group rocks are generally composed of augite porphyry, basaltic flows and tuffs, bladed feldspar porphyry, bladed feldspar porphyry tuff breccia, and basaltic dikes.

The Black Lake Suite is composed of quartz monzonite; granodiorite, feldspar-quartz-biotite porphyry, feldspar hornblende porphyry and crowded feldspar hornblende porphyry, quartz plagioclase porphyry, and leucocratic feldspar hornblende porphyry. The Stuhini rocks have undergone intense structural deformation. Brittle fracturing is the dominant structural style. Myriad small-scale fractures of many generations are evident. Earlier

fractures are healed by quartz, carbonates, zeolites or gypsum whereas some later fractures are still open. Numerous faults, shears and fractures cut and displace the strata to a much greater degree than the intrusions. Based on the distribution and trend of the lithologies and structural data, major normal and transcurrent faulting occurs commonly in an east-northeast direction (070 degrees).

There are four recognized types of alteration: quartz-sericite-pyrite, propylitic, zeolitic and hornfelsic. The alteration appears to occur only within the volcanic and pyroclastic rocks.

Pervasive quartz-sericite-pyrite alteration occurs as a large central zone and appears as envelopes surrounding veinlets of pyrite and microfractures. It is characterized by pale bleached rock with abundant boxwork, commonly lined with jarosite after pyrite. Plagioclase is altered to quartz and muscovite, and sericite may form approximately 15 per cent of the rock. Chlorite and kaolinite form approximately 30 per cent of the rock. Rutile(?) occurs as disseminated bright orange grains. The abundance of sericite and sulphide boxwork decreases with a decrease in the intensity of alteration, and sulphides (pyrite) and goethite become increasingly more common. Only quartz-sericite-pyrite alteration is known to be directly associated with the mineralization.

Propylitic alteration occurs as an elongate east-west zone parallel to and south of the central quartz-sericite-pyrite zone. Propylitized rocks are green and are characterized by local albitization and variable epidote, chlorite and calcite.

Zeolitic alteration is most common in an area north of the quartz-sericite-pyrite zone, however, it is found locally throughout the property. Laumontite has been identified by x-ray diffraction and often occurs as fracture fillings up to 3 millimetres thick in local shear zones. It is common in the Stuhini Group.

Hornfels alteration forms an irregular zone of variable intensity primarily within a crystal tuff unit. This zone seems to parallel the quartz monzonite and granodiorite intrusive contacts. Intensely hornfelsed rocks are massive, fine grained and pale grey to brown. Alteration products include quartz, andalusite(?), epidote, sericite and chlorite. Pyrite occurs locally as microveinlets and fine-grained disseminations with this alteration facies.

A well developed gossanous zone caps the disseminated pyrite mineralization. This gossan forms an elongate east-west zone measuring approximately 3300 metres long by 800 metres wide. Drilling results show that there is a 10 to 20 metre leached cap over the known copper mineralization, and assay results show that beneath this cap the mineralization is enriched for a thickness of up to 30 metres (Assessment Report 19962). The deposit remains open in all lateral directions.

The known mineralization, in order of abundance, includes pyrite, chalcopyrite, magnetite, hematite, molybdenite and digenite. Pyrite occurs as microveinlets and disseminations within the gossan zone. Its abundance varies from 0.5 to 10 per cent and is directly proportional to the intensity of the fracturing and alteration. Chalcopyrite occurs in north-trending veinlets, microveinlets or, more commonly, as disseminations with pyrite, magnetite-hematite and gangue minerals of quartz and orthoclase. Digenite rims chalcopyrite grains where supergene mineralization occurs. Molybdenite has also been found to be spatially associated with the quartz-sericite-pyrite alteration zone as fracture fillings.

The area has been explored in conjunction with the nearby Kemess South past-producing mine (094E 094) located 6 kilometres south, since the 1960s.

During 1966 through 1971, Kennco Explorations Ltd. completed programs of geochemical sampling, geological mapping and eight diamond-drill holes totalling 242 metres on the area as the Kemess 1-100 claims. This work identified a zone of disseminated pyrite covering approximately 3353 by 610 metres with copper mineralization indicated over an area of 1829 by 366 metres. Two 25.6-metre-long drillholes, located on the eastern end of the mineralized zone, were reported to have yielded 0.21 and 0.27 per cent copper with 0.007 and 0.02 per cent molybdenum, respectively (Assessment Report 16333).

In 1975, Getty Mining Pacific Ltd. completed four diamond-drill holes totalling 513.0 metres on the area as the New Kemess 1-2 claims. Diamond drilling yielded intercepts up to 0.179 per cent copper, 0.006 per cent molybdenum, 3.0 grams per tonne silver and 0.45 gram per tonne gold over 57 metres in hole K-75-1, and 0.222 per cent copper, 0.004 per cent molybdenum, 2.7 grams per tonne silver and 0.42 gram per tonne gold over 69 metres in hole K-75-3 (Assessment Report 5748).

In 1976, Getty completed a further five diamond-drill holes totalling 964.0 metres on the New Kemess claims. Diamond drilling yielded intercepts of up to 0.222 per cent copper, 0.005 per cent molybdenum, 3.6 grams per tonne silver and 0.48 gram per tonne gold over 183 metres in hole K-76-5, and 0.171 per cent copper, 0.008 per cent molybdenum, 4.2 grams per tonne silver and 0.35 gram per tonne gold over 309 metres in hole K-76-3 (Assessment Report 6069).

In 1986, El Condor Resources Ltd. completed a program of rock and soil sampling, geological mapping and a 14.1 line kilometre ground magnetic survey on the area. In 1987 and 1988, programs of rock and soil sampling, geological mapping, ground electromagnetic and induced polarization surveys and trenching were completed. In 1989, a further five diamond-drill holes totalling 732.02 metres were completed. Drilling yielded the best gold values, 0.250 to 0.650 gram per tonne gold, in holes K-89-03 and -04 from the southwestern side of the east cirque and the best copper-silver values, 0.100 to 0.220 per cent copper and 1.0 to 4.6 grams per tonne silver, from holes K-89-01, -03 and -05, located in the central cirque

In 1990, a program of rock sampling was completed on the New Kemess 1-3 and Nek 1-4 claims. In 1991, El Condor completed an extensive program of geological mapping, geochemical sampling, a 201.0 line kilometre induced polarization survey and 13 diamond-drill holes totalling 4063.9 metres on the North Kemess (Golden Eagle) occurrence. Drilling yielded intercepts including 0.44 gram per tonne gold and 0.174 per cent copper over 203.9 metres in hole No. 47, 0.36 gram per tonne gold and 0.185 per cent copper over 136.0 metres in hole No. 37, and 0.34 gram per tonne gold with 0.183 per cent copper over 97.8 metres in hole No. 50 (Assessment Report 22280).

In 1992, preliminary estimates of reserves of the Kemess North deposit were 116,108,800 tonnes grading 0.19 per cent copper and 0.37 gram per tonne gold at a cutoff grade of 0.40 per cent copper equivalent (Northern Miner - January 20, 1992). A later report from the same year reported geological reserves of 75,363,682 tonnes grading 0.51 gram per tonne gold and 0.21 per cent copper (George Cross News Letter No. 213 (November 4), 1992).

In 1993 and 1994, El Condor conducted programs of test pitting on the area.

In 2000, Kemess Mines Inc. completed 12 diamond-drill holes totalling 4100 metres on the Kemess North zone. Highlights of drilling include intercepts of 0.217 per cent copper and 0.38 gram per tonne gold over 379.2 metres in hole KN-00-05; 0.177 per cent copper and 0.33 gram per tonne gold over 451.1 metres in hole KN-00-08; 0.194 per cent copper and 0.33 gram per tonne gold over 379.5 metres in hole KN-00-09; and 0.217 per cent copper with 0.40 gram per tonne gold over 483.0 metres in hole KN-00-12 (Assessment Report 26486). The year's drill program incorporated previous drilling results and outlined a geological resource for the North Kemess zone of approximately 360 million tonnes grading 0.154 per cent copper and 0.299 gram per tonne gold with a drill-indicated resource of approximately 74 million tonnes grading 0.188 per cent copper and 0.343 gram per tonne gold (Assessment Report 26486).

In 2001, Northgate Exploration Ltd. completed a 16-hole, 8200 metre diamond-drill hole program, which defined a significantly larger and higher grade inferred mineral resource, at a depth of 200 metres below surface, estimated to be 442 million tonnes grading 0.4 gram per tonne gold and 0.23 per cent copper using a gold equivalent cutoff grade of 0.6 gram per tonne; within this inferred resource is a higher grade core estimated to contain 170 million tonnes grading 0.5 gram per tonne gold and 0.29 per cent copper using a gold equivalent cutoff grade of 0.8 gram per tonne (Assessment Report 26784). Highlights of diamond drilling included intercepts of up to 0.386 per cent copper and 0.868 gram per tonne gold over 309.81 metres in hole KN-01-10 and 0.395 per cent copper with 0.912 gram per tonne gold over 248.00 metres in hole KN-01-11 (Assessment Report 26784).

In 2002, Northgate continued drilling with 58 holes totalling 33 686.3 metres on the Kemess property and intersected a deeper zone of mineralization in the Central Cirque area. A 206 metre intercept starting at 407 metres downhole assayed 0.29 gram per tonne gold and 0.54 per cent copper. As of December 31, 2002, the indicated resource of Kemess North was 407,000,000 tonnes grading 0.409 gram per tonne gold and 0.224 per cent copper with an inferred resource of 107,000,000 tonnes grading 0.36 gram per tonne gold and 0.18 per cent copper (www.northgateexploration.ca, January 8, 2004).

In 2003, Northgate Exploration Ltd. continued its detailed appraisal of the bulk tonnage of Kemess North porphyry gold-copper. Work included 25 diamond-drill holes of exploration and condemnation drilling, totalling 7264.7 metres, oriented core, geotechnical and environmental studies in support of prefeasibility and feasibility studies required by government as the project entered the environmental assessment process. The proposed development schedule called for infrastructure development in 2005, pre-stripping of the deposit in 2006 and mining of ore by the end of 2006. The Kemess North and Kemess South deposits would be mined concurrently until reserves at Kemess South were exhausted in 2009. Mining at Kemess North would continue until 2019. The advanced work identified a 'mineable resource' for the Kemess North deposit of 369 million tonnes grading 0.34 gram per tonne gold and 0.18 per cent copper (Exploration and Mining in British Columbia 2003, page 18).

Northgate also conducted grassroots exploration on its claims. The Archie occurrence, located northwest of Duncan Ridge, is a narrow quartz-magnetite vein with visible gold. The company also staked the Bear claim group, which covers a 70 square kilometre area immediately south of and adjoining its existing tenure. Data from an airborne geophysical survey completed over the new claims will assist in guiding future exploration.

In 2004, Northgate completed 7561 metres of drilling on the Kemess North and area as the project progressed through a joint federal-provincial panel review. Seven holes were drilled into the Nugget porphyry gold-copper zone in an attempt to expand on encouraging near-surface mineralization intersected in 2003. The Kemess Centre porphyry gold-copper prospect, Duncan Ridge polymetallic skarn target and Hilda structurally-hosted gold occurrence were also drilled with mixed results. The Bear claim group covers a large area immediately south and adjoining the Kemess South property. Approximately 64 line kilometres of induced polarization (IP) surveying were completed over the claims. Follow-up diamond drilling is expected in 2005.

In 2005, drilling by Northgate Minerals Corporation immediately east of the proposed Kemess North pit development (and east of the East Creek fault) identified a possible extension to the deposit. The zone, termed Kemess North Offset, was first intersected by drillhole KN-05-24, which intersected 307.6 metres averaging 0.31 gram per tonne gold and 0.24 per cent copper (Exploration and Mining in British Columbia 2005, page 44). Additional holes confirmed the presence of a major new bulk tonnage target and established the zone as a priority drilling target for 2006. The company also tested several other targets on claims that enclose the Kemess North area, including the Kemess East and Nugget porphyry gold-copper

prospects, the Hilda structurally-controlled gold zone, and the Duncan Ridge and Nor 1 skarn prospects. South of the Kemess mine, Northgate continued to evaluate its Bear claims. A total of 17 core holes totaling 5786 metres were drilled to test anomalies suggestive of buried porphyry systems that had been defined by an earlier airborne magnetic and radiometric survey and an IP survey. Work in 2005 delineated a resource of 720 million tonnes grading 0.15 per cent copper and 0.30 gram per tonne gold (Exploration in British Columbia 2010, page 4), with proven and probable resources of 414 million tonnes grading 0.307 gram per tonne gold and 0.16 per cent copper (Exploration and Mining in British Columbia 2005, page 44).

In 2006, Northgate Minerals Corporation continued to explore its large tenure package, which encompasses the Kemess mine, with a program of rock and soil sampling, geological mapping, an induced polarization survey and eight diamond-drill holes totalling 3812.3 metres. Most of the drilling was focussed east of the Kemess North area and targeted the deep KN Offset and Kemess East zones. The Kemess East zone is essentially a continuation of KN Offset. A deep-penetrating IP geophysical (Titan) survey was performed over the Kemess North deposit and surrounding areas. The survey outlined the known mineralized zones and identified several new targets, including an intriguing buried target east of KN Offset. A proven and probable mineable reserve of 424 million tonnes grading 0.30 gram per tonne gold and 0.155 per cent copper was reported for the Kemess North deposit (Exploration and Mining in British Columbia 2006, page 61).

In 2007, Northgate completed a program of 25 diamond-drill holes totalling 16016.6 metres and a ground induced polarization survey on the Kemess property. In September 2007, the Canada-BC Joint Review Panel concluded that “development of the...Kemess North Project in its present form would not be in the public interest.” Northgate had proposed to dispose of tailings from Kemess North in nearby Duncan (Amazay) Lake, and the panel had found this especially problematic, even though it met the formal environmental requirements. Subsequently, and without waiting for a Ministerial response to the recommendation, Northgate suspended exploration activity and wrote down its investment in the project. Kemess North proven and probable reserves, as of the end of 2006, were 423.9 million tonnes grading 0.30 gram per tonne gold and 0.16 per cent copper (Exploration in British Columbia 2007, page 4).

In 2010, Northgate Minerals Corp. reactivated work on the Kemess North deposit to evaluate potential for a block-cave underground mine. More closely-spaced drilling in part of the deposit identified higher gold and copper grades. The core of the Kemess North was estimated to comprise 70 million tonnes containing 0.65 gram per tonne gold and 0.3 to 0.4 per cent copper (Exploration in British Columbia 2010, page 4). This area was targeted in a 16,439-metre drill program to define the resource block and assess its geotechnical characteristics for possible block-cave mining. Results indicated that the deposit was of higher grade in the northeast quadrant than predicted.

Northgate Minerals Corp. released updated resource amounts following the 2010 diamond drill program, with an indicated resource of 136,500,000 tonnes grading 0.558 gram per tonne gold, 0.29 per cent copper and 2.105 grams per tonne silver and an additional inferred resource of 6,000,000 tonnes grading 0.42 gram per tonne gold, 0.22 per cent copper and 1.65 grams per tonne silver (Stockwatch News Release - February 15, 2011).

In 2011, the Kemess Underground (formerly ‘Kemess North’) project was in the permitting process leading to production. Kemess Underground planned to use the same concentrator and tailings facility as Kemess South, and ore would be extracted by a block/panel cave operation over an approximate 12-year mine life. A preliminary economic assessment for the project was completed in 2011 and, based on its positive recommendation, a full feasibility study was to be completed in 2012. Over 6000 metres of drilling were completed as part of the engineering, geotechnical and environmental phases of the project.

Indicated resources at Kemess Underground are 136.5 million tonnes containing 73,710 kilograms gold and 390.4 million kilograms of copper. Within this is located a 10.3 million tonne ‘high-grade sector’ containing 12,760 kilograms of gold and 54 million kilograms of copper (Exploration and Mining British Columbia 2011, page 3). Mining by AuRico Gold Inc. planned to use the existing facilities from the Kemess mine to process ore and impound tailings.

In 2012, AuRico Gold Inc. completed four diamond-drill holes totalling 597.0 metres and awaited the results of a feasibility study for a decision on the Kemess Underground project. In 2012, AuRico Gold Inc. released National Instrument (NI) 43-101 compliant resource and mineral reserve estimates. The mineral reserve estimate showed probable reserves of 100,373,000 tonnes grading 0.28 per cent copper, 0.56 gram per tonne gold and 2.05 grams per tonne silver. The mineral resources estimate showed an indicated resource of 65,432,000 tonnes grading 0.24 per cent copper, 0.41 gram per tonne gold and 1.81 grams per tonne silver and an inferred resource of 9,969,000 tonnes grading 0.21 per cent copper, 0.39 gram per tonne gold and 1.57 grams per tonne silver (Press Release - AuRico Gold Inc., March 25, 2013).

In 2013, AuRico Gold completed a program of soil and silt sampling and nine diamond-drill holes totalling 13331.0 metres on the Kemess East property.

At the end of March 2013, intermediate gold producer AuRico Gold Inc. reported the results of a positive Feasibility Study on the Kemess Underground deposit. Proven and probable reserves are reported at 100.4 million tonnes grading 0.28 per cent copper, 0.56 gram per tonne gold and 2.05 grams per tonne silver containing 280,900,000 kilograms of copper, 51,029 kilograms of gold, and 187,106 kilograms of silver (Exploration and Mining in British Columbia 2013, page 12).

The resource, exclusive of reserves, is reported as 65.4 million tonnes grading 0.24 per cent copper, 0.41 gram per tonne gold and 1.81 grams per tonne

silver, containing 157,200,000 kilograms copper, 24,210 kilograms gold and 107,728 kilograms of silver (measured and indicated); and 10.0 million tonnes at 0.21 per cent copper, 0.39 gram per tonne gold and 1.57 grams per tonne silver, containing 20,900,000 kilograms copper, 3544 kilograms gold and 14,260 kilograms silver (inferred; Exploration and Mining in British Columbia 2013, page 12).

In 2014 and 2015, AuRico Gold continued exploration on the Kemess East property with programs of geological mapping, metallurgical sampling and 31 diamond-drill holes totalling 37,607.4 metres. In 2016, AuRico Gold released an updated feasibility study for the Kemess Underground deposit with a resource estimate of 107,400,000 tonnes grading 0.54 gram per tonne gold, 1.99 gram per tonne silver and 0.27 per cent copper (Assessment Report 36283).

In 2017, AuRico Metals Inc., formerly AuRico Gold Inc., completed a further eight diamond-drill holes totalling 11920.3 metres on the Kemess East property.

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Date Coded:	1985/07/24	Coded By:	BC Geological Survey (BCGS)	Field Check:	N
Date Revised:	2021/07/30	Revised By:	George Owsiacki (GO)	Field Check:	N