

# Option to acquire copper-gold projects in the Appalachian Belt, Canada

- Killi enters into an Option to Purchase Agreement to acquire two highly prospective coppergold projects in the Appalachian metallogenic belt of Canada.
- The projects cover over 3,000ha of the Appalachian belt in Quebec and New Brunswick.
- The **Bigfoot Project** is along strike from the Gaspe porphyry copper mine owned by Osisko Metals (inferred resource of 456Mt for 1.4M metric tonnes of copper<sup>1</sup>).
- The Yeti Project is within the same porphyry copper-gold belt as the Gaspe deposits.
- Both projects have the potential for a **new major porphyry style copper-gold discovery**.
- The acquisition will complement Killi's current portfolio, primarily focused on the exploration for new copper-gold systems.

Killi Resources Limited ('**Killi**' or the '**Company**') (ASX: KLI) is pleased to advise it has executed an Option to Purchase Agreement relating to two copper-gold projects within the highly prospective Appalachian volcanic belt in Canada.

The two projects are located within the New Brunswick and Quebec jurisdictions of Canada covering >3,000ha. Rich deposits for copper, base metals and gold are in the region, despite no systematic modern exploration occurring.

The recent acquisition of the Green Bay copper-gold mine, by Firefly Metals Ltd (ASX: FFM) signals renewed activity in this highly prospective region.

These types of systems present significant opportunity for a new Tier-1 mineral discovery.

Chief Executive Officer, Kathryn Cutler said:

"These projects present an exciting opportunity for the Company located in a mineral belt which is host to some of the largest copper, gold and base metal resources in the region for major resource companies.

"The projects are in an underexplored region with a high potential for a new discovery. Previous explorers have not used modern techniques and have never explored for porphyry systems, but there is renewed interest in recent months and we are undertaking further due diligence to assess the prospectivity of these projects.

"The jurisdiction is extremely positive for explorers and miners, the geology is exceptional, and we believe this is an excellent deal for Killi shareholders.

"We will take our learnings from our Mt Rawdon West Project, where we have recently identified two new exciting copper-gold targets. These Canadian projects could present a strategic fit for the Company, complementing the existing portfolio of assets and our exploration strategy".

# Overview of the Bigfoot and Yeti Projects

The **Bigfoot** and **Yeti** Projects are prospective for porphyry copper and gold systems, however very little exploration has considered this style of mineralisation, providing an opportunity for Killi to use existing exploration information and data and look through a different lens for opportunity. With both projects located within the Devonian sediments and intrusives, host to the Gaspe porphyry copper mine, Figure 1.



**Figure 1.** Regional plan of the Appalachian Belt and project locations in relation to nearby major mineral deposits, Gaspe Copper Mine<sup>1</sup>, Brunswick 12 base metal deposit<sup>2</sup>, Green Bay copper-gold mine<sup>3</sup>, and the Clarence Stream gold deposit<sup>4</sup>.

# **Bigfoot Project Overview and Strategy**

The Bigfoot Project is located 35kms along strike from the Gaspe copper porphyry mine, previously owned and operated by Glencore, now held by Osisko Metals with a current inferred resource of 456Mt @ 0.4%Cu<sup>1</sup>. The project covers an area of the Puma Porphyry Intrusive Complex within the main structural corridor from Gaspe to the south-west. The Puma Complex is a ring-like structure identified in magnetics, Figure 2.

Copper occurrences have been documented and recorded by the Quebec Geological Survey, which have never been followed up with drilling, which includes rock chips up to 0.3% Cu, that were not assayed for gold at the time. Drilling at the Mount Sterling deposit, 800m south of the rock chip, recorded up to 1.4% Cu over 0.3m within the mineral claim.

There are three existing holes on the project, drilled in 1966, which recorded alteration and brecciation downhole including intrusive dykes and intervals logged of observed pyrite and chalcopyrite. These holes were not assayed at the time, as they were looking for copper-skarn mineralisation, rather that porphyry style systems, *Table 2*.

The strategy for this project is to build the geological framework around the potential for a porphyry system, generate targets from existing data, and test them via drilling.



**Figure 2.** Location of the Bigfoot Project, in relation Gaspe porphyry copper mine in Quebec. Two intrusive porphyry complexes have been determined in the prospective porphyry corridor, the Puma and Gaspe intrusive complexes.

# Yeti Project Overview and Strategy

Located 140kms north-west of Saint John in the Miramichi-antoclinorium geological terrain, the project was pegged for the interpreted intrusive units, identified by the New Brunswick Geological Survey, as well as the location of several drillholes on the staked claims, underneath an old copper mine working.

Fourteen drillholes were completed in 1971, where the previous exploration company was exploring for skarn-style copper mineralisation<sup>2</sup>, which logged potassic and phyllic alteration, a characteristic to porphyry-style copper systems, over a 100m interval from near surface in DDH9. Of the fourteen holes, only five were selectively assayed.

Close inspection of the historical drill logs identified a downhole intersection close to surface of **52.3m @ 0.42% Cu from 41.8m** (DDH9). Only certain sections of the drill hole were sent for analysis based on sulphide characterisation, and only assayed for copper, not gold, Figure 3, *Table 2*.

Killi believes this project has strong near-term exploration potential, as the existing drillholes have intercepted copper mineralisation close to the surface with potential extensions for further drill testing.



**Figure 3.** Cross-section of drillhole DDH9 at the Yeti Project, where economic copper mineralisation has been intersected and reported, 470254. Sampling is incomplete, with only specific zones sent for analysis, and assays only completed for copper, <u>not gold</u>.

## **Option to Purchase**

The Company has entered an option to purchase agreement with Henry Renou (the **Vendor**) pursuant to which it has an exclusive option over the acquisition of the Yeti and Bigfoot Projects (for a period of 60 days) in consideration for a cash option fee payment of AUD\$20,000. During this exclusivity period, Killi will complete due diligence including a field trip to locate historical drillholes and core, old workings as well as collect rock chips on the Projects to determine whether to proceed with the proposed acquisitions on the commercial terms outlined below.

Subject to completing satisfactory due diligence Killi is proposing to acquire 100% of the exploration licenses covering the Projects for the following consideration:

- <u>Initial consideration</u> AUD\$200,000 worth of fully paid ordinary shares in Killi (Shares) to be issued to the Vendor following the execution of a Binding Term Sheet, with the Shares to be subject to voluntary escrow; and
- <u>Deferred consideration</u> based on achievement of two milestones related to new mineralisation determined at surface in rock chip assays and the return of copper/gold mineralisation in assays in a drill hole >100m @ 1% Cu equivalent, the issue of \$100,000 Shares on the announcement of each milestone.

Project	Hole ID	Easting	Northing	Grid	Dip	Azimuth	Depth	Year	Report
							(m)		
YETI	DDH9	610,988	5,104,827	NAD83 Zone 20	-40	346	196	1971	470254
YETI	DDH4	611,055	5,104,865	NAD83 Zone 20	-45	69	136.6	1971	470254
YETI	DDH1	610962	5104851	NAD83 Zone 20	-45	69	153	1971	470254
YETI	DDH13	610978	5104983	NAD83 Zone 20	-45	69	182.9	1971	470254
Bigfoot	Hole 1-A	717,979	5,411,195	NAD83 Zone 19	-45	270	394	1966	GM19501
Bigfoot	GA-01	717,908	5,410,760	NAD83 Zone 19	-87	270	753	1990	GM50901
Bigfoot	67 4	716,123	5,411,664	NAD83 Zone 19	-90	1	163	1966	GM1117

## Table 1. Significant Drillholes on the Yeti and Bigfoot Projects

## Table 2. Significant drill intercepts, from historical drill holes on Yeti and Bigfoot Projects

Project	Hole ID	From (m)	To (m)	Interval (m)	Cu (%)
YETI	DDH9	4.9	6.4	1.5	0.36
				1.8	1.37
		41.8	111.6	69.8	0.20
		41.8	94	34.6	0.30
	Incl.	41.8	43.6	1.8	1.37
	And	59.4	71.5	12	0.60
		109.1	111.6	2.5	0.29
		123.7	124.9	1.2	0.13
YETI	DDH4	68	69.2	1.2	1.39
YETI	DDH1	23.2	28.5	5.3	0.28
YETI	DDH13	5.6	9.8	4.1	0.59
YETI	DDH13	25.3	27.7	2.4	0.42
Bigfoot	67 4	113.7	114	0.3	1.4

#### Table 3. Significant rock chip sample on the Bigfoot Project

-		-	-			
Project	Sample ID	Easting	Northing	Grid	Cu %	Year
Bigfoot	1987030440	715,948	5,412,397	NAD83Zone 19	0.31	1987

Enquires Kathryn Cutler Chief Executive Officer +61 8 9322 7600 admin@killi.com.au

#### References

<sup>1</sup> Osisko Metals market announcement, April 28 2022 (TSX-V: OM; OTCQX: OMZNF; FRANKFURT: 0B51). <u>OSISKO METALS</u> <u>ANNOUNCES MAIDEN RESOURCE AT GASPÉ COPPER - INFERRED RESOURCE OF 456MT GRADING 0.31% COPPER - Osisko Metals</u>

<sup>2</sup> Luff, 1993, The Brunswick No. 12 and No. 6 Mines, Guide Book to the Metallogeny of the Bathurst Camp.

<sup>3</sup> Firefly Metals ASX Announcement, August 31 2023, <u>https://wcsecure.weblink.com.au/pdf/AUT/02705676.pdf</u>

<sup>4</sup> Galway Metals market announcement, April 25 2022 (TSX-V: GWM; OTCQB: GAYMF).

<sup>5</sup>1966, Laduboro Oil Limited, Report GM19501- Energy and Natural Resources Quebec.

<sup>6</sup> 1971, Imperial Oil Enterprises Ltd, Report on the Diamond Drilling carried out on the Silvermaque options, Woodstock Area, New Brunswick, Report 470254 – New Brunswick Mines Department.

<sup>7</sup> 1967, Laduboro Oil Ltd, A Report on Drilling, Gaspe Quebec, Report GM21117 - Energy and Natural Resources Quebec.

<sup>8</sup> 1990, G. Gasse, Rapport de forage Propriere Mont-Sterling Gaspesie, Quebec- Report GM50901.

#### **Competent Person's Statement**

The information in this report that relates to Exploration Results is based on information compiled by Ms Kathryn Cutler. Ms Cutler is a Member of The Australasian Institute of Mining and Metallurgy. Ms Cutler has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Ms Cutler consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

#### **About Killi Resources Limited**

Killi Resources (ASX: KLI) is a gold, copper and rare earth explorer with wholly owned assets in Western Australia and Queensland, Figure 4.

The Company is focussed on exploring and finding a new major mineral discovery. The projects are belt-scale land holdings, located in well-endowed mineral provinces, that are significantly underexplored and amenable to a large-scale new discovery.



Figure 4. Location of Killi Resources Limited gold, copper and rare earth projects in Australia.

#### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Bigfoot Project:</li> <li>Diamond drilling is an appropriate sampling method for porphyry style mineralisation, with all information obtained from the Quebec Geological Survey, report GM19501.</li> <li>The diamond core (Hole1-A) was thoroughly logged, for lithology, alteration, structures, minerals and sulphides, which were appropriately recorded in hardcopy and scanned by the geological department.</li> <li>Drilling was completed using a P-6 Perkins diesel, using AX size casing, and a AXL bit.</li> <li>Holes were drilled to test anomalous geochemical and geophysics (magnetics).</li> <li>The diamond core was not sent for analysis.</li> <li>Yeti Project:</li> <li>Diamond drilling (DDH9), all information was acquired from the New Brunswick Geological Survey report 470254. The diamond core was thoroughly logged, for colour, lithology, alteration, structures, minerals and sulphides, which were appropriately recorded in hardcopy and scanned by the geological department.</li> </ul>
		as logged by the geologist. Drilled to test an IP anomaly.
		Surface rock chip samples are an adequate technique for mineral identification in this region.
Drilling techniques	<ul> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc)</li> </ul>	Diamond drilling has been completed on both projects. P-6 Perkins diesel, using AX size casing, and a AXL bit on the Bigfoot Project. The diamond holes completed at the Yeti Project were also completed using conventional AX Drilling equipment.
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	Core was recovered, representing 90-100% of the sample, core recovery was not recorded, however if any core was lost, it was recorded in logging sheets.
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	All diamond core was thoroughly logged, for colour, lithology, alteration, structures, minerals and sulphides, which were appropriately recorded in hardcopy and scanned by the geological department.
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being</li> </ul>	We are unable to ascertain whether the core samples were half core or full core samples.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<ul> <li>sampled.</li> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	The diamond holes completed at Bigfoot were not sent for analysis, and therefore no assays reported in this announcement. The assays from the diamond core analysed at Yeti, are adequately recorded and reported in the Geological Survey Report 470254.
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	The diamond holes reported are the first holes into the region and require further drilling to confirm results further. However, no reason at this point to consider assays as inappropriate.
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	All drill hole co-ordinates have been adequately recorded on paper for each drillhole and checked via current aerial imagery, GIS positioning systems to be in the appropriate location, on current co- ordinate systems and grids. NAD83/UTM Zone 20N. Location of drillholes was completed using a historical local mine grid at the Project.
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	Drill hole locations and spacing is appropriate for this style of mineralisation. No sample compositing was applied.
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	From the historical information we do not believe there is any bias to the sampling or drilling orientation.
Sample security	• The measures taken to ensure sample security.	The method of transport has not been recorded in the reports. However we do not believe this to be an issue with the samples being diamond core.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	N/A

### Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation		Commentary
Mineral tenement and land tenure status	(a)	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	Mineral Claims 11114, 11113, 11112 are 100% owned by H. Renou, at the Yeti Project in New Brunswick. Mineral Claims CDC2801110 to CDC2801129 are 100% owned by H. Renou, at the Bigfoot Project in Quebec.

Criteria	JORC Code explanation			Commentary		
	(b)	The securi any known area.	ty of the tenure held at the time of reporting along with i impediments to obtaining a licence to operate in the			
Exploration done by other parties	(c)	Acknowled	dgment and appraisal of exploration by other parties.	Previous explored in the 1960's by Ladubaro Oil Limited, and then in the early 1970's be Imperial Oil Enterprises Ltd, with minimal work by G. Gasse in 1990.		
Geology	(d)	Deposit ty <sub>l</sub>	pe, geological setting and style of mineralisation.	The Company believes the project is highly prospective for copper-gold porphyry-style mineralisation. Existing mines 20-30km along strike in the same regional sub-basin, such as Gaspe Copper Mine are this style of mineralisation.		
Drill hole Information	(e)	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:		Found in the Text of the Announcement, Table 1, 2 & 3.		
		(i)	easting and northing of the drill hole collar			
		(ii)	elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar			
		(iii)	dip and azimuth of the hole			
		(iv)	down hole length and interception depth			
		(V)	hole length.			
	(f)	If the exclu informatio from the u should cle	usion of this information is justified on the basis that the n is not Material and this exclusion does not detract nderstanding of the report, the Competent Person arly explain why this is the case.			
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.		n Results, weighting averaging techniques, maximum e truncations (eg cutting of high grades) and cut-off erial and should be stated.	No weighting or compositing was applied.		
			cepts incorporate short lengths of high-grade results ow-grade results, the procedure used for such stated and some typical examples of such e shown in detail.			
	The assumptions used for any reporting of metal equivalent values should be clearly stated.					
Relationship between	These relationships are particularly important in the reporting of Exploration Results.			There are no enough drillholes to determine bias at this stage. The orientation the drillholes were drilled are appropriate for this style of mineralisation.		
mineralisation widths and intercent	lf the geor known, its	netry of the nature shou	mineralisation with respect to the drill hole angle is ld be reported.			
Intercept lengths	lf it is not k a clear sta	nown and o tement to th	nly the down hole lengths are reported, there should be is effect (eg 'down hole length, true width not known').			
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.			All maps, plan view and cross-sections are provided in the text of the document.		

Criteria	JORC Code explanation		Commentary		
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.		All intervals of interest have been reported, low and higher grades.		
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.		N/A		
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).		Due Diligence on the project will be completed to ensure appropriate understanding of the projects.		
	(g)	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.			