

# Advanced Metallurgical Programme confirms Canyon's very high grade bauxite product specifications

## Highlights

- **Advanced metallurgical test programme** shows consistent **+90% available alumina** from total alumina in samples from the Minim Martap bauxite deposit, significantly differentiating the Project from many other high grade bauxites.
- Consistently high conversion results across the initial mining plateaux with high levels of statistical confidence - confirmed by SGS laboratories;
  - **91% conversion** from Low Temperature Microdigestion based on average Total **Al<sub>2</sub>O<sub>3</sub> of 53.6%** and Total **SiO<sub>2</sub> of 1.6%**
  - **91% conversion** from Low Temperature Autoclave digestion based on average Total **Al<sub>2</sub>O<sub>3</sub> 56.9%** and Total **SiO<sub>2</sub> 0.8%**
  - **90% conversion** from FTIR analysis based on average Total **Al<sub>2</sub>O<sub>3</sub> 52.7%** and Total **SiO<sub>2</sub> 1.8%**
- The test work **highlights Gibbsite as the most dominant mineral** within all high grade bauxite occurrences, confirming the Minim Martap bauxite as suitable for low temperature alumina refining.
- **Results support** those presented in the Bauxite Technical Specification data sheet<sup>1</sup> which provides a basis for **commercial and technical progression of bauxite offtake agreements**.

Canyon Resources Limited (**ASX: CAY**) (**Canyon** or **Company**) is pleased to provide a summary of the outcomes of the Advanced Metallurgical Programme which has been completed by Canyon to further understand the digestion properties of the high grade bauxite at the Minim Martap Project (**Project**). The outcomes of the testing confirm the very high grade of the Minim Martap Bauxite and the high rates of conversion from total alumina to available alumina at low temperature digestion conditions, with all tests achieving 90% alumina conversion or better.

The results from the Advanced Metallurgical Programme support the properties detailed in the previously released Bauxite Technical Specification data sheet, and reflect excellent conversion results of greater than 90% in all cases.

Director of Projects, Mr James Durrant, said, "The testing confirms that not only would an off-take company receive a very high alumina content in their bauxite, but that the extractable alumina portion is also very high, at over 90%. This is a double bonus to any off-taker and one they can improve upon even further by optimising the digestion conditions from the laboratory conditions we've used in these standardised tests. Canyon's laboratory partners for the metallurgical work, SGS Perth, are very pleased with the data correlation of the tests and the FTIR data-sets we've been building now give us a fast and effective test for metallurgical performance. The FTIR test methodologies are aligned to how the major bauxite and alumina producers are operating, which will support us now, through the development phase, and as an operating miner."

<sup>1</sup> ASX announcement 08 July 2020. The Company is not aware of any new information or data that materially affects the information included in that announcement and all material assumptions and technical parameters underpinning the Bauxite Technical Specifications in that announcement continue to apply and have not materially changed.

The Advanced Metallurgical Programme complements the completed Basic Metallurgical Programme<sup>4</sup> and the Physical Properties Programme<sup>5</sup>.

Samples for the Advanced Metallurgical Programme were randomly selected across material within the ore specifications as defined within the Ore Reserve estimate<sup>2</sup> with a focus on the priority plateaux featured within the previously released Pre-Feasibility Study (PFS)<sup>3</sup>. In addition, bulk samples were collected from an ultra-high grade region and work is now underway to determine if there are additional large zones of the ultra-high grade bauxite to integrate within mine scheduling and product profiling.

The programmes, over the past seven months, largely aimed to define the refining properties of various plateaux from the Minim Martap Bauxite Project, with a particular focus on the priority plateaux which underpin the Minim Martap PFS and the 20-year mine life modelled.

The metallurgical test work programmes have been sourced in three phases with a small sample set prepared initially from the Alice and Beatrice Plateaux (Basic Metallurgical Programme)<sup>4</sup>, a larger sample set from the Beatrice and Raymonde Plateaux (Advanced Metallurgical Programme)<sup>5</sup>, and a sample obtained from a high grade location within the Raymonde Plateau<sup>6</sup>. Additionally, the Physical Properties Programme<sup>7</sup>, which was also used for bulk density and bulk sampling, was completed and complimented the results.

### Test work

Three different types of digestion test work were completed throughout these programmes to provide Canyon with a more detailed understanding of the bauxite product specifications and to be able to utilise planning and mining scheduling optimisation opportunities determined by a more integrated approach to processability and digestion capacity of all potential bauxite ores.

The company completed three different types of testing;

- Microdigestion (Low Temp (LT) 148°C / High Temp (HT) 235°C).
- Autoclave Digestion.
- FTIR Analysis.

These tests are designed to highlight the different properties of the bauxite and give a complete view of bauxite metallurgical properties and processability.

Microdigestion is small scale digestion test where bauxite is tumbled in a heated, enclosed, vessel with caustic soda and the resulting solution and solids analysed and compared to the feed material. Autoclave digestion is more advanced and involves an internally agitated, 3.5 litre vessel with larger volumes of bauxite allowing for more detailed digestion profile analysis and is considered more representative of full scale refineries than microdigestion tests. FTIR is an inexpensive and quick test which, when calibrated to the resource by digestion trials, gives an accurate proxy for metallurgy. FTIR is rapidly becoming the metallurgical test of choice by the major bauxite producers.

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<sup>2</sup> ASX announcement 10 August 2020. The Company is not aware of any new information or data that materially affects the information included in that announcement and all material assumptions and technical parameters underpinning the Ore Reserve estimate in that announcement continue to apply and have not materially changed.

<sup>3</sup> ASX announcement 01 July 2020. The Company is not aware of any new information or data that materially affects the information included in that announcement and all material assumptions and technical parameters underpinning the Pre Feasibility Study in that announcement continue to apply and have not materially changed.

<sup>4</sup> ASX announcement 25 August 2020. The Company is not aware of any new information or data that materially affects the information included in that announcement and all material assumptions and technical parameters presented in that announcement continue to apply and have not materially changed.

<sup>5</sup> Included within this announcement.

<sup>6</sup> Included within this announcement.

<sup>7</sup> ASX announcement 25 August 2020.

## Microdigestion

A total of 61 samples were analysed by microdigestion for Total Available Alumina (TAA) and Reactive Silica (RSi) at Low Temperature (148°C), with 22 samples also analysed at High Temperature (235°C) by SGS Laboratories (Perth, Western Australia). Samples were from two metre composites taken from existing pulps used for geochemical analysis, and were selected to represent various depths and locations within the respective Plateaux that meet the ore specifications used within the 20-year schedule as per the Ore Reserve estimate cut-off grades<sup>8</sup>. The results are presented in Table 1.

Table 1 Microdigestion results summary.

Low Temperature Digestion (148°C)				Average Grade			
Plateau	Num. of Samples	Alumina Conversion %	Silica Conversion %	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %	Fe <sub>2</sub> O <sub>3</sub> %	LOI %
Alice	10	92.1	71.0	55.4	1.9	9.2	29.1
Beatrice	22	90.9	82.0	55.3	1.6	8.9	28.6
Raymonde	29	89.8	71.6	51.6	1.5	14.3	27.7
Weighted Average	61	90.6	75.2	53.6	1.6	11.5	28.3

High Temperature Digestion (235°C)				Average Grade			
Plateau	Num. of Samples	Alumina Conversion %	Silica Conversion %	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %	Fe <sub>2</sub> O <sub>3</sub> %	LOI %
Alice	10	92.9	77.7	55.4	1.9	9.2	29.1
Beatrice	12	92.8	90.8	56.4	1.3	7.1	28.7
Weighted Average	22	92.8	84.8	55.9	1.6	8.1	28.9

Results from plateaux Alice, Beatrice and Raymonde were predominantly consistent with the Low Temperature digestions having the TAA conversion rate of ~90% and a RSi conversion rate being ~70-80% from a very low base value (1.6% SiO<sub>2</sub>). High Temperature digestions were only completed on earlier samples and not continued due to the similar nature and consistency of the results, indicating only a minor gain in TAA and a higher gain in RSi, which was expected.

A high grade bauxite sample was uniquely tested from a test pit to provide a comprehensive mineralogical and processability component to the physical tests completed upon a series of bulk samples. The TAA conversion rate was 98.3% with a sample head grade of 57.6% Al<sub>2</sub>O<sub>3</sub> (available alumina recovered 56.6%). This information provides support for the premise that the high grade ores from the Minim Martap bauxite province are world class and similar ores may be able to be defined through spatial analysis so as to add value to the mining reserves.

## Autoclave Digestions

A small number of autoclave digestions (3) were completed by SGS Laboratories (Perth, Western Australia) to provide more detailed analysis of the digestive capabilities of ores from Beatrice and Raymonde plateaux. Table 2 summarises the recoveries and the grade of the ores, recognising all three samples were high grade and low in silica.

Table 2 Autoclave digestion results summary.

Low Temperature Digestion (148°C)				Average Grade			
Plateau	Num. of Samples	Alumina Conversion %	Silica Conversion %	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %	Fe <sub>2</sub> O <sub>3</sub> %	LOI %
Beatrice	1	93.7	93.5	58.4	0.6	4.8	31.3
Raymonde	2	89.5	73.9	56.2	0.9	9.2	30.1
Weighted Average	3	90.9	80.4	56.9	0.8	7.7	30.5

The autoclave digestions have clearly shown that the very high grade ores located within the Minim Martap bauxite province do not have a significant percentage of aluminium oxide hydroxide (Boehmite) within the high grade ores but are clearly dominated by aluminium hydroxide (Gibbsite) which are digestible through the Bayer process at a lower temperature digestion.

<sup>8</sup> ASX announcement 10 August 2020.

## FTIR Analysis

Fourier Transform Infrared Spectroscopy, also known as FTIR Analysis or FTIR Spectroscopy, is an analytical technique used to identify organic, polymeric, and, in some cases, inorganic materials. The FTIR analysis method uses infrared light to scan test samples and observe and measure chemical properties. It has been a recent addition to the testing of bauxite through its capacity to quickly identify and quantify all major minerals and this relationship equates to determined digestion capacity through the application of recoveries to every mineral component for both Al and Si (where applicable) and defining a recovery percentage. This value is then compared against known digestion standards as well as digestions completed from the same regional bauxite to provide a calibration and ensuring accuracies.

A total of 275 samples which were spatially spread and met the ore specifications used within the 20-year schedule were tested using the FTIR method, with an algorithm defined from standards and digests completed within the Minim Martap bauxite province. The predicted digestion values proved to be very consistent with the known digestion values from both the Beatrice and Raymonde plateaux. The conversion to TAA values averaged ~90% and RSi is ~70% (Table 3) which is comparable to the primary microdigestion and autoclave test work completed to date. Further FTIR test work is ongoing to determine if this methodology could be applied to all metre by metre samples so as to provide a further level of information for mine planning and scheduling.

Table 3 FTIR results summary.

Plateau	Low Temperature Digestion (148°C)			Average Grade			
	Num. of Samples	Alumina Conversion %	Silica Conversion %	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %	Fe <sub>2</sub> O <sub>3</sub> %	LOI %
Beatrice	129	90.7	72.6	53.3	1.9	11.6	28.3
Raymonde	146	89.3	67.7	52.2	1.7	13.4	27.9
Weighted Average	275	90.0	70.0	52.7	1.8	12.6	28.1

## Sample locations

Figure 1 shows the locations of samples used in the Advanced Metallurgical Programme.

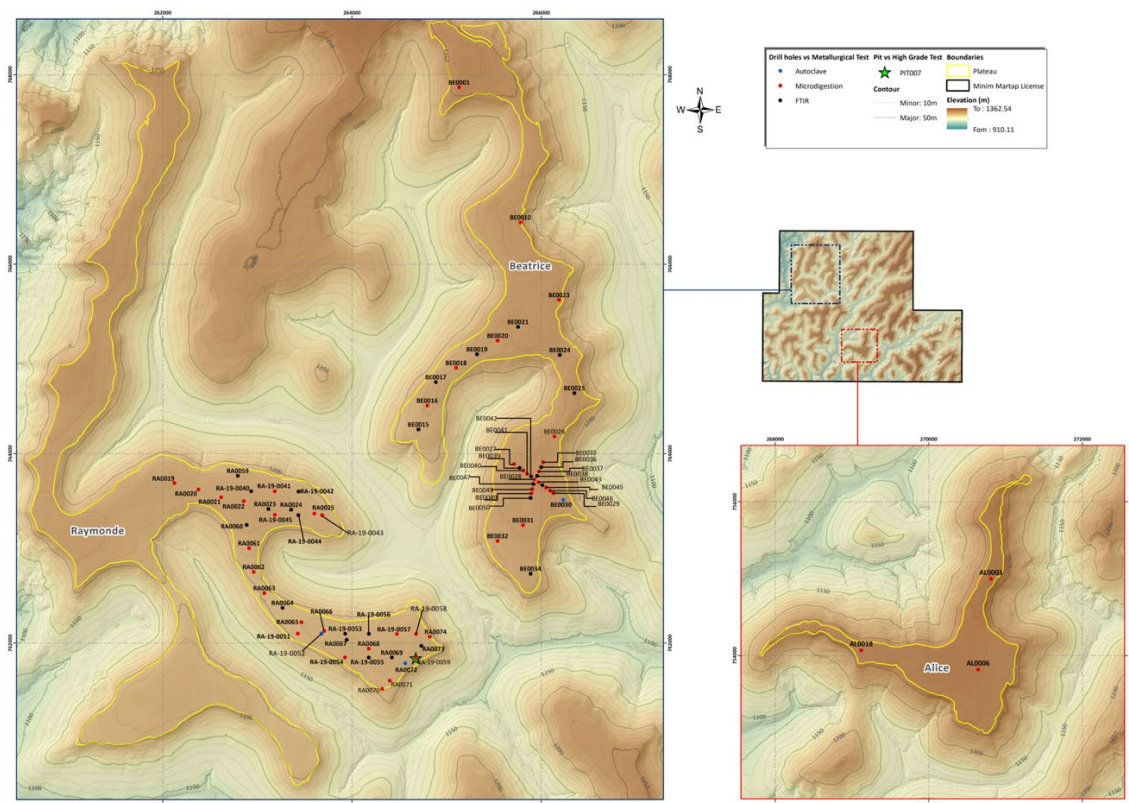


Figure 1 Sample locations. Note: FTIR was conducted on samples from all locations.

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### Conclusions

The significant Advanced Metallurgical Programme completed over the past 7 months has shown a consistency of TAA (90%) and RSi (70-80%) recoveries in ore samples taken from within the Minim Martap bauxite field.

The test work has highlighted the consistency of the high grade mineralogy with the presence of aluminium hydroxide (Gibbsite) as the most dominant mineral within all high grade bauxite occurrences.

The advanced metallurgical testing allows Canyon to provide potential offtake partners with more detailed data on the performance of the bauxite, particularly regarding the high alumina recoveries and the optimal refinery conditions for the refining of the Minim Martap bauxite.

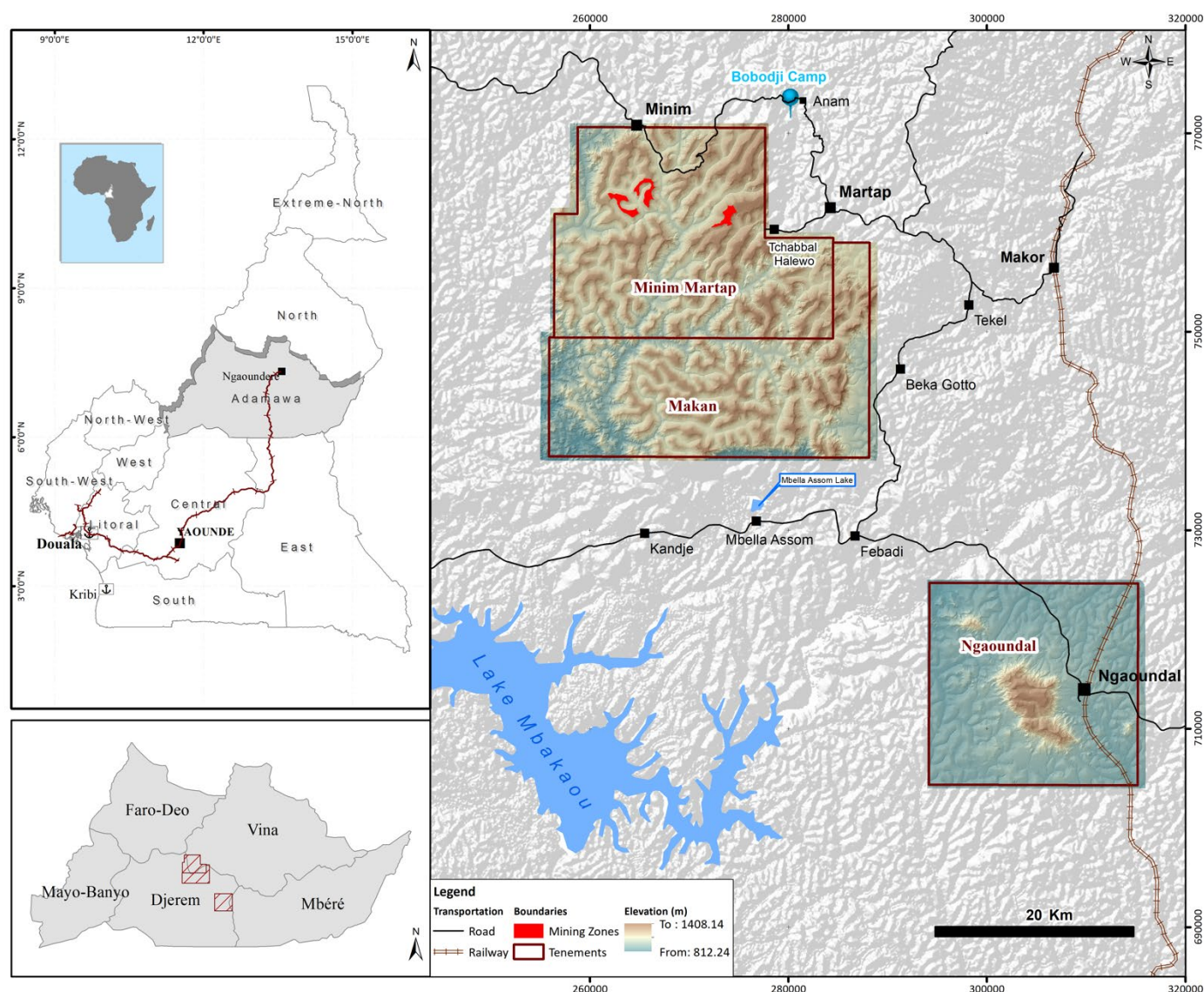


## About Canyon Resources

### Summary

Canyon Resources is focussed on the development of the 100% owned Minim-Martap Bauxite Project, a direct shipping ore (DSO) project development opportunity in central Cameroon. The Project is situated adjacent to the main rail line linking the region to the Atlantic port of Douala. The rail line is currently underutilised and coupled with the existing port of Douala, supports a low capex, low opex solution to deliver high grade, low contaminant, seaborne bauxite to market to fuel the large and growing aluminium industry as described in the 2020 Pre-Feasibility Study<sup>9</sup>. The country is planning a rail extension and is undergoing rail line debottlenecking upgrades giving longer term potential for export through the newly built, deep-water port of Kribi.

Canyon is planning the development of the bauxite Project in a 2 Stage, 2 Port execution programme with initial production exported through the port of Douala utilising the existing rail and port infrastructure and Stage 2 unlocking tonnes and reducing costs by utilising the port of Kribi.



<sup>9</sup> ASX announcement 01 July 2020.

## Resources and Reserves

The Project is validated by the **Ore Reserve estimate**, (ASX announcement 10 August 2020), prepared by a Competent Person, in accordance with the JORC Code (2012) and is presented as:

Reserve			
Classification	Tonnes (Mt)	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>
Proven	-	-	-
Probable	97.3	51.1%	2.3%
Total Ore Reserves	97.3	51.1%	2.3%

The underlying **Mineral Resource estimate** (ASX announcement: 27 September 2019) prepared by a Competent Person, in accordance with the JORC Code (2012) is stated as:

Resource (35% Al <sub>2</sub> O <sub>3</sub> cut-off)			
	Tonnes (Mt) ore	Alumina	Silica
Total	892	45.1% Al <sub>2</sub> O <sub>3</sub>	2.8% SiO <sub>2</sub>
Indicated	839	45.2% Al <sub>2</sub> O <sub>3</sub>	2.8% SiO <sub>2</sub>
Inferred	53	43.8% Al <sub>2</sub> O <sub>3</sub>	3.1% SiO <sub>2</sub>
Contained High Grade Resource (45% Al <sub>2</sub> O <sub>3</sub> cut-off)			
	Tonnes (Mt) ore	Alumina	Silica
Total	431	48.8% Al <sub>2</sub> O <sub>3</sub>	2.6% SiO <sub>2</sub>
Indicated	410	48.9% Al <sub>2</sub> O <sub>3</sub>	2.6% SiO <sub>2</sub>
Inferred	21	47.4% Al <sub>2</sub> O <sub>3</sub>	2.0% SiO <sub>2</sub>

## Competent Person's Statement – Ore Reserves

The information in this report that relates to Ore Reserves is based on information compiled or reviewed by Mr John Battista, a Competent Person who is a Member and Chartered Professional (Mining) of the Australasian Institute of Mining and Metallurgy and is currently employed by Mining Plus (UK) Ltd. Mr Battista has sufficient experience 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 the Reporting of Exploration Results, Mineral Resources, and Ore Reserves (JORC Code).

Mr Battista consents to the disclosure of information in this report in the form and context in which it appears.

## Competent Person's Statement – Mineral Resources

The information in this announcement that relates to mineral resources is based on information compiled or reviewed by Mr Mark Gifford, an independent Geological expert consulting to Canyon Resources Limited. Mr Mark Gifford is a Fellow of the Australian Institute of Mining and Metallurgy and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code).

Mr Gifford consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

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### Mineral Resource estimate

The data in this announcement that relates to the Mineral Resource<sup>10</sup> estimates for the Minim Martap Bauxite Project is based on information in the Resources announcement of 27 September 2019 and available to view on the Company's website and ASX.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the original market announcement continue to apply and have not materially changed. The Company confirms that the form and the context in which the Competent Person's findings are presented have not been materially modified from the original market announcement

### Pre-Feasibility Study

The data in this announcement that relates to the Pre-Feasibility Study<sup>11</sup> for the Minim Martap Bauxite Project and associated production targets and forecast financial information, is based on information in the PFS announcement of 01 July 2020. and available to view on the Company's website and ASX.

The Company confirms that all the material assumptions underpinning the production target and forecast financial information derived from the production target continue to apply and have not materially changed.

### Ore Reserve estimate

The data in this announcement that relates to the Ore Reserve estimate<sup>12</sup> estimates for the Minim Martap Bauxite Project is based on information in the maiden Ore Reserve announcement of 10 August 2020 and available to view on the Company's website and ASX.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the original market announcement continue to apply and have not materially changed. The Company confirms that the form and the context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

## About Cameroon

Canyon Resources Ltd is exploring and developing high grade bauxite reserves in Cameroon, a central-west African country between Nigeria and Equatorial Guinea with Yaounde as the capital. The country has enjoyed the development of industry and infrastructure, particularly agriculture, roads, railways and ports and including a hydro-electric powered aluminium smelter at Edea, currently utilising imported alumina. Cameroon is a producer, consumer and exporter of gas, having exported 6,262,113 million BTU by the end of May 2020, and crude oil and has rich deposits of cobalt, iron ore, gold, diamonds and vast high grade bauxite ore reserves. Revenues from the extractive industries accounted for 5.43% of GDP and 33.23% of total exports in 2015. Cameroon has the fundamental infrastructure and mineral deposits to support a significant mining industry and the population is generally highly skilled in the technical vocations commensurate to exploration, construction and mining.

## Forward looking statements

All statements other than statements of historical fact included in this announcement including, without limitation, statements regarding future plans and objectives of Canyon, are forward-looking statements. When used in this announcement, forward-looking statements can be identified by words such as 'anticipate', 'believe', 'could',

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<sup>10</sup> ASX announcement 27 September 2019

<sup>11</sup> ASX announcement 01 July 2020

<sup>12</sup> ASX announcement 10 August 2020



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"estimate", "expect", "future", "intend", "may", "opportunity", "plan", "potential", "project", "seek", "will" and other similar words that involve risks and uncertainties.

These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions regarding future events and actions that are expected to take place. Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company, its directors and management of Canyon that could cause Canyon's actual results to differ materially from the results expressed or anticipated in these statements.

Canyon cannot and does not give any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in this announcement will actually occur and investors are cautioned not to place undue reliance on these forward-looking statements. Canyon does not undertake to update or revise forward-looking statements, or to publish prospective financial information in the future, regardless of whether new information, future events or any other factors affect the information contained in this announcement, except where required by applicable law and stock exchange listing requirements.

**This announcement has been approved for release by the Board**

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## Appendix 1 – JORC Code 2012 Table 1

### JORC Code 2012 - Table 1, Section 1

#### Sampling techniques and data.

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<p><i>Nature and quality of sampling (e.g. 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.</i></p> <p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></p> <p><i>In cases where 'industry standard' work has been done this would be relatively simple (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.</i></p>	<p>Sampling of the Cameroon Bauxite Resource grade was completed by two series of drill programmes completed in 2009 and 2019. The drilling techniques used were predominantly Aircore and Auger drilling. All samples were split at site and prepared in country before being delivered to a registered laboratory facility. The drill pulps prepared for the 2019 drill programme were utilized in the digestion test work completed at SGS (Perth) laboratory facilities during 2020.</p> <p>SGS (Perth) laboratories while completing the digestion tests upon the bauxite pulps completed a large series of repeats and standards so as to provide support for the results and so as to aid in the interpretation of the results and algorithms.</p> <p>Bauxite mineralization is a surface ore formed by the transformation of usually Al rich rocks and sediments through a lateritic process to form bauxite. Mineralisation usually occurs in areas of plateau due to the nature of the formation process, and as such the areal extent can be defined by the field mapping of outcropping bauxite in many regions. The Cameroon Bauxite Resource has clearly defined bauxite rich plateaux surfaces that are mapped and defined and have been subsequently tested by drilling across their respective surfaces.</p> <p>All drill samples were split from a primary sample of ~5kg down to 1-1.5kg and clearly labelled and bagged for drying and sample preparation. The total sample was crushed to &lt;2mm and then split to a ~4-500g charge for pulverizing, and once pulverized a 100g pulp was sub-sampled and forwarded to an accredited laboratory for assaying.</p> <p>A selection of pulps remnant from the assaying completed for the resource were compiled and forwarded to SGS laboratory facilities (Perth) for digestion test work.</p>
<b>Drilling techniques</b>	<p><i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. 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).</i></p>	<p>Three drilling techniques were used aircore, auger, and rotary air blast, with the majority of the samples collected via aircore techniques. All drilling rigs used NQ sized rods. The NQ Diamond Drilling was used in geotechnical test work and did not form part of the estimation process.</p>
<b>Drill sample recovery</b>	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p> <p><i>Whether a relationship exists between sample recovery and</i></p>	<p>Sample recovery was determined by weight of the cuttings retrieved. The bauxite occurrence caps the plateau and as such forms a continuous layer from which the drilling was penetrating. Sampling was relatively consistent due to the consistency of returns, with only the occasional voids encountered providing limited or nil sample returns.</p> <p>All samples were checked by professional geological staff on the drill rigs during the drill programmes in both 2009 and 2019. All drill holes were logged and monitored for recoveries and accuracy prior</p>

	<i>grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i>	<p>to sample splitting and logging. Hole reaming and clearing of the drill holes from remnant samples is relatively easy within bauxite terrain due to the hard and brittle nature of the material ensuring a "clean" drill hole with little sample dilution from materials above the cutting plane.</p> <p>Sample recovery was very high for all samples. Most of the samples were predominantly "made" from the primary mineral that formed the bauxite (Gibbsite), thus the relative grade loss/gain from any dilution or addition could only be minor (if present at all), due to the similar grade of the primary sample to any dilutants or additional material, so as to in effect provide no material difference.</p>
<b>Logging</b>	<p><i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged.</i></p>	<p>All samples were geologically and geotechnically logged, but the logging was not material to the Mineral Resource estimation, and as such not used.</p> <p>Logging is qualitative in nature and was used to confirm the presence of bauxite to depth and to give some approximations of the geotechnical parameters of the ore (predominantly hardness). Logging was completed on a metre by metre basis for all of the estimation drilling logging. All drill samples were logged.</p>
<b>Sub-sampling techniques and sample preparation</b>	<p><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></p> <p><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></p> <p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p> <p><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></p> <p><i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second- half sampling.</i></p> <p><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></p>	<p>Sampling of the core was for geotechnical work and the core was sawn post some minor density test work sampling.</p> <p>All aircore and auger samples were riffle split after being collected from the drill rig and were sub sampled at their natural moisture levels.</p> <p>The bauxite samples that formed the primary ore were very accurately sub sampled as shown by a very high level of repeatability noted in the repeat assay results shown from all drill programmes. Samples taken from material outside of the mineralized zones (clay and saprolitic rocks) did have a noted increase in variance, but these samples were not part of the estimated ore values within the bauxite. Sample preparation in the laboratory was proved to also be highly repeatable due to the repeats being field duplicates and as such underwent the identical pulp preparation process. Weights and relative sizing as a percentage of the primary bauxite sample were appropriate with between 30-40% of all primary samples pulped (&lt;75um) and then sub-sampled for assaying.</p> <p>The riffle splitter used on each of the drill rigs during exploration was cleaned by the use of compressed air between the taking of each sample. All equipment used in sample preparation was also cleaned by compressed air and "washed" by crushing and separating abrasive quartz between each sample to ensure no cross-contamination at any point through the pulp preparation process.</p> <p>All repeats used in the assay stream were field duplicates, thus the repeats were representative of the total field and laboratory practice used within the Cameroon Bauxite Resource project.</p> <p>The sample sizes and distribution appear appropriate due to the "ground" nature of the primary drill cuttings which ensured consistent and accurate riffle splitting, prior to the drying and pulp preparation. Having a very high proportion of the primary split sample (~40%) pulverized also ensured good consistency of</p>

		sampling repeatability, also indicating the appropriate nature of the sample prep.
<b>Quality of assay data and laboratory tests</b>	<p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></p> <p><i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></p> <p><i>Nature of quality control procedures adopted (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established.</i></p>	<p>The laboratory procedures applied by SGS Laboratories (Perth) so as to determine the digestion characteristics of the primary ore samples were appropriate and standardized. The tests represented total digestions and Total Available Alumina (TAA) and Reactive Silica (RSi) were reported at the temperature upon which they were digested at.</p> <p>All testing was completed within accredited laboratory facilities. Standards were used by SGS during the test work and reported. The accuracy of the digestion determinations were compared against standards and duplicates were also reported.</p>
<b>Verification of sampling and assaying</b>	<p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p> <p><i>Discuss any adjustment to assay data.</i></p>	<p>Bauxite is a resource which does not lend itself to "significant intersections" due to the large areal extent of the resource. The independent author of the Cameroon Bauxite Resource report completed a field trip and "pulled" from the sample storage facility a number of drill cutting samples and confirmed the gibbsite present and the nature of the bauxite mineralization.</p> <p>Twin holes have not been used to confirm grade in this project due to presence of close spaced drilling patterns on most plateaux tested. The close spaced drilling has confirmed the continuous nature of the mineralization and the consistency of grade.</p> <p>All data was received as both fixed and electronic copies. All work was reviewed and signed off by the appropriate laboratory technician.</p> <p>There was no adjustment to any of the data received.</p>
<b>Location of data points</b>	<p><i>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.</i></p> <p><i>Specification of the grid system used.</i></p> <p><i>Quality and adequacy of topographic control.</i></p>	<p>Drill hole locations were determined by hand-held GPS to an accuracy of +/- 2 m. A detailed survey of all drill collars will be conducted in the near future.</p> <p>Drilling was conducted on a 250 m by 250 m north/south and east/west orientated grid.</p> <p>The grid system used is WGS84 Cameroon UTM Zone 33N for easting, northing and RL.</p> <p>A high resolution LiDAR and orthophoto survey of the three permit areas within the Project was conducted in December 2018. The LiDAR data has been processed using ArcGIS v 10.7 into a DEM which has been used for topographic control and projection of the drill data.</p>
<b>Data spacing and distribution</b>	<p><i>Data spacing for reporting of Exploration Results.</i></p> <p><i>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.</i></p>	<p>Samples for the digestion test work were collected throughout a series of plateaux within the Minim Martap bauxite province</p> <p>The spacing of the samples was spread spatially throughout the total drilling pattern so as to provide a large representative sample of the potential ores encountered within the plateaux.</p> <p>Samples used in the digestion test work were composited into 1x 2m sample pulps from 2x 1m sample pulps so as to provide enough material to complete the digestion test work allocated to the sample as well as provide a sample for geochemical reanalysis.</p>



	<i>Whether sample compositing has been applied.</i>	
<b>Orientation of data in relation to geological structure</b>	<p><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></p> <p><i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></p>	<p>Bauxite is a deposit that forms as a remnant laterite and as such is not dependent on structures for formation due to the residual nature of its development. The sampling of the drill holes is solely from vertical drilling and as such all samples relate to each other on the horizontal. There is no bias from any geological features apart from large regional overprints and the delineation of the Minim Martap provinces did conclude that the western plateau were to geostatistically combined separately to the more eastern plateau – it is assumed that there may be a slight change in the underlying granites and metamorphosed sediments in these two regions and separation did improve statistical analyses.</p> <p>Individual drill hole orientation was vertical and does not influence any key mineralized structures which are regional in character.</p>
<b>Sample security</b>	<i>The measures taken to ensure sample security.</i>	<p>All samples were secured from the drill rig through to the assay laboratory through a ticket tagging system and a limited number of handling points. Each sample was assigned a number at the point of collection and this sample number is added to the sample and stapled onto the outside of the sample bag. It is collated with other samples for drying and pulp preparation where the sample number is continued through to the assigned pulp, and the pulp is then forwarded to the assay laboratory with the primary sample number. Assays are reported with the primary sample number and assays collated electronically against the primary dataset. There has been no recorded occurrences of sample theft or interference during the development of the project. Pulps provided for the digestion test work were brought from laboratory storage and forwarded to SGS (Perth) upon which they were combined and tested using three digestion methodologies. Accurate records have been kept and were forwarded with the results as part of the reporting process.</p>
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	<p>An audit of the sample preparation laboratory has been completed indicating the competency of the operator, and this was confirmed by the Competent Person during a visit in July 2019. Continuous review of the repeat and standards / blanks data has shown an extremely close relationship between the field sample repeats, and the standards grades for all laboratories used in the development of the said resource. Digestion test work has undergone significant review by the SGS laboratory facilities so as to improve the accuracy and methodology associated with proving the TAA and RSi estimates within the varying digestion processes being applied.</p>