Level 5 52 Phillip Street Sydney NSW 2000



ASX code: ABX

Quarterly Activities Report – June 2020 Released 3 August 2020 Page 1

#### **QUARTERLY REPORT AND ACTIVITY STATEMENT FOR THREE MONTHS TO 30 JUNE 2020**

#### Corporate

- Group available cash at the end of the quarter was \$0.54 million and is currently about \$0.5 million, excluding incoming funds exceeding \$2.3 million which are due in coming weeks
- 4.26 million shares were approved by shareholders at the 2020 Annual General Meeting and were issued to directors in lieu of outstanding director fees. The company has no plans for a capital raising at this time
- The company has changed its head office address to Level 5, 52 Phillip Street, Sydney NSW 2000

#### **Sales & Operations**

- Production and transport of 35,000 tonnes of cement-grade bauxite to port from the Bald Hill mine near Campbell Town Tasmania completed ahead of the sales timetable so that early ship-loading can commence within a week.
- Delivered on-time an urgent order of 778 tonnes of fertiliser grade bauxite from the Bald Hill mine at Campbell Town as part of an on-going contract to regularly supply bauxite to the fertiliser plant operated by Impact Fertilisers in Hobart, Tasmania.
- New orders received for fertiliser grade bauxite as agricultural fertiliser demand rises as droughts break
- **Binjour Bauxite Project inland from Bundaberg**, **QLD:** the proposed mining leases, transport, port & shipping arrangements that have been presented to government and other stakeholders over past months are now under consideration by the Office of the Co-ordinator General for early review

# ALEORE Project

- ABx's 89%-owned subsidiary, ALCORE Limited has continued achieving milestones in its laboratory:
  - i. produced many samples of commercial chemical grade aluminium fluoride (AIF<sub>3</sub>) which is a highpriced ingredient in aluminium smelters and is used in new generation lithium ion batteries
  - ii. produced AIF<sub>3</sub> by refining aluminium smelters' by-product waste materials: a saleable grade AIF<sub>3</sub> was made from 30% dross waste and 70% gibbsite material
  - iii. refined an aluminium smelter waste product to produce the fluorine-based reactants used in the Alcore method for producing saleable grade  $AIF_3$
- Alcore's method is the world's first production of AlF<sub>3</sub> from the recycling of smelter waste and lowgrade bauxite and uses the aluminium-related parts of the CORE Technology (patent pending)
- Alcore has now proven it can:
  - ✓ Make AIF<sub>3</sub> of acceptable saleable grade from aluminium oxide minerals in bauxite and other aluminiumrich material that can be amenable to treatment by Alcore. Multiple tests are underway confirming repeatability
  - $\checkmark$  Make AIF<sub>3</sub> in the crystalline form that is needed for use in aluminium smelting
  - ✓ Remove deleterious elements by adjusting re-agent mix and processing conditions
  - ✓ Manufacture saleable Corethane gas-substitute by reducing ash content in coal from 28% to 0.3%, thus making an ideal, ultra-clean substitute for coke and ideal for industrial heating as a substitute for gas and diesel
- Several potential AIF<sub>3</sub> customers have visited the Alcore Research Centre to observe the production of AIF<sub>3</sub> from aluminium smelter by-products and are continuing to discuss future joint plans

#### Covid-19 Pandemic Response

- ABx's strict health safety protocols are enforced on arrival and during operations at all facilities within the ABx-Alcore group in compliance with the national response to the Covid-19 virus pandemic. Whilst 2 staff members are teleworking from Melbourne, ABx continues to operate with its full workforce.
- The Alcore research centre operated by ABx's 89%-owned subsidiary, ALCORE Limited is continuing its vital research without losing a shift
- ABx Group is taking all appropriate steps to protect employees, contractors and customers, the safety of which is paramount. We regularly monitor updates from relevant authorities to keep ahead of potential pandemic threats and have registered the Alcore lab to NSW Health if needed
- Contingency plans to support our business and employees until the Covid-19 virus threat passes are in place. Dedicated work by staff is succeeding despite the COvid-19 restrictions in place.



During the June Quarter, the Company conducted mining activities at its Bald Hill mine in Tasmania. Direct mining expenditure during the quarter is reported as \$138,000 in the Appendix 5B cashflow statement excluding senior staff, marketing, rehabilitation and administration costs. Mining activities continue to increase in the following quarter. On-ground exploration was curtailed by COVID-19 travel restrictions, but senior staff and exploration lab research work continued. Direct research and development costs totalling \$43,000 was recorded in Appendix 5B for ALCORE Limited's research into Aluminium Fluoride technology, bauxite beneficiation and exploration, excluding staff and other administration costs.



Figure 1 Bald Hill Bauxite Project Campbell Town, Northern Tasmania

Extracting bauxite that meets the grade and physical characteristics required by customers, with surgery precision using the 85-tonne excavator

#### Figure 2 Loading the bauxite product at Bald Hill Bauxite Project

Road trucks made multiple trips to and from Bell Bay port. The truck being loaded has a payload of 45 tonnes





#### Figure 3 Bauxite shipping stockpile at Ball Bay Port, Northern Tasmania

Product homogenisation occurs during sequential production, transport, transport, port stockpiling and shiploading

# ABX ALCORE Project

• AIF<sub>3</sub> is an essential electrolyte ingredient in aluminium smelters and global demand for AIF<sub>3</sub> increases as aluminium smelter production increases and the use of AIF<sub>3</sub> in next-generation batteries increases



Figure 4 Prices & demand for aluminium fluoride AIF<sub>3</sub> exported from China since 2011. Customers pay shipping costs in addition to these prices.

- AIF<sub>3</sub> markets remain positive for Alcore's predicted cost structure
- The Alcore business plan targets long-established, broad industrial markets with many potential buyers
- Alcore will be the first Australian supplier of AIF<sub>3</sub> to the Australasian Aluminium Smelters and for export
- Australian AIF<sub>3</sub> imports from China in the last 12 months totalled 25,000 tonnes averaging US\$1,340 (A\$1,860) per tonne FOB China. AIF3 is a strategically essential mineral product for aluminium smelters
- Location of first plant at Bell Bay, Tasmania: Alcore is targeting industrial sites adjacent to the Bell Bay aluminium smelter in northern Tasmania for the first production plant
- Discussions continue with governments and supportive major companies in the aluminium industry
- Alcore processes are relatively low-risk because they operate at ambient temperatures and pressures
- Initial production will be simple design and later production modules more sophisticated to produce a full suite of products, designed to capitalise on "Refine and Recycle" advantages see Figure 5



#### Figure 5 Summary of the AL€€€E "Refine & Recycle" Business Strategy

This process has the strong potential to be the simplest and lowest cost method to make AIF<sub>3</sub>. It provides an economically attractive way to utilise the aluminium-rich and fluoride-rich by-product waste streams from many aluminium smelters.

When smelters close-down, the Refine & Recycle processing is at its best, helping to recycle waste and by-products into saleable product rather than become expensive waste requiring disposal.



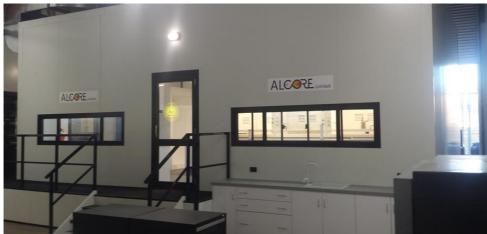


Figure 6

The \$2.5 million Alcore Laboratory built inside the Alcore Research Centre

The Core Lab is a climatecontrolled laboratory constructed inside the Alcore Research Centre for the refining of bauxite and its components to produce test samples of AIF<sub>3</sub> and coproducts. It will become a research centre for testing its technology on many ores.



Figure 7 Ore Preparation & Analytical Lab with XRF & furnaces



Figure 8

Alcore test lab, fume cabinets with hi-tech fume scrubbers, showers, microscopes & Draegar air monitor (far wall)

Figure 9: Exterior support systems a) Air purification and atmosphere control system.

b) Liquids processing & neutralisation plant

c) Duplicated secure LPG gas supply

d) Gas-fired Standby-Backup Generator



Figure 10: Commercial-grade and well-crystallised AIF<sub>3</sub> samples made at the Alcore Research Centre in June

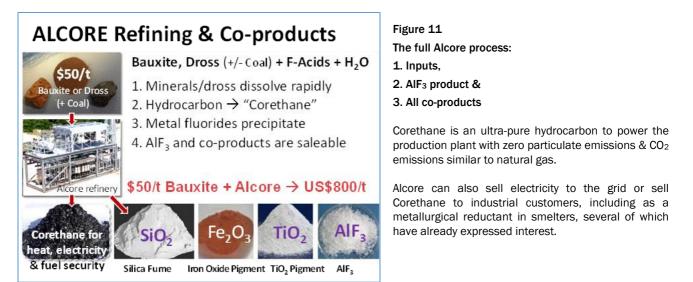
# ABx

# ALEGRE : CORETHANE - SUCCESSFULLY PRODUCED

Alcore's business plan is to produce Aluminium Fluoride (AIF<sub>3</sub>) for aluminium smelting and other co-products including Silica Fume for Eco-cement and the gas-substitute Corethane for energy security.

The Alcore laboratory processed a representative sample of Hunter Valley black coal containing a relatively elevated level of ash at 28% ash. After processing, the ash content in this coal was reduced to the target level of 0.3% ash with relative ease. This low level of ash is the equivalent ash content of air. The processed coal was analysed by Bureau Veritas Minerals Pty Ltd laboratories, Cardiff, Newcastle NSW.

This refined coal would be a cleaner substitute for more expensive metallurgical coal & coke for smelting. More importantly, the exceptionally low ash level allows the coal to be milled without abrasion into a very fine powder (finer than cigarette smoke particles) to create a fuel called "CORETHANE" that can be atomised to create a high-energy gas that burns clean, like natural gas but produces lower cost heat energy, lower cost electricity and low-cost liquid fuels.



#### Summary

Alcore's bauxite refining has the potential to convert a tonne of bauxite valued at US\$50 per tonne into a suite of products worth in excess of **US\$800** representing a **10-times** increase in net value. It can also convert aluminium smelter by-products into AIF3 using a simplified, lower-cost, higher-profit "Refine & Recycle" version of the Alcore Process.

An Alcore project can be located anywhere in the world, importing bauxite from bauxite producers for less than the \$US50 per tonne which is being conservatively assumed in Alcore's economic studies. It can also be located adjacent to aluminium smelters to Refine & Recycle aluminium smelter by-products.

Therefore, the Alcore Technology is not constrained by resource supply and can be located near its major customers, near sources of low-cost feedstock such as recyclable waste materials from aluminium smelting.

#### **Risk management**

The Alcore business plan is designed to minimise both the financial and technical risks as follows:

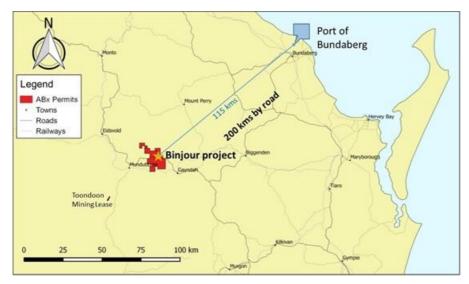
- 1. Alcore technology operates at low temperatures & low pressures
- 2. Alcore's main products in the start-up years 1 to 5 are designed to be AIF<sub>3</sub>, silica fume and high-grade bauxite. These products have deep, well-established markets with many customers.

This plan for Alcore's initial products avoids the market risks of targeting high-purity products which can take several years of process improvements to achieve and often have very few buyers.



#### Binjour Project, QLD - located 115kms inland from Bundaberg Port, Queensland

- ABx's board of directors approved the lodgement of mining lease application and related project strategy for the Binjour Bauxite Project in early 2020.
- The Binjour Bauxite Project pre-production and working capital costs are fully funded by ABx's marketing partner, Rawmin Mining and Industries of India.
- Tripartite Memorandum of Understanding (**MoU**) between ABx, Rawmin Mining and Industries of India and Tianshan Aluminium of China is for the sale of 0.5 to 1.5 million tonnes of bauxite from Binjour to Tianshan's new low temperature refinery in southern China which was due to commence production in late 2020 but is delayed by the COVID-19 effects on global demand. The recently announced stimulation package in China is expected to stimulate bauxite demand needed for the Binjour project.
- ABx considers Binjour to be the best source of gibbsite-trihydrate (THA) bauxite in Queensland that is suitable for processing in low-temperature Bayer-technology alumina refineries and sweetener circuits
- Bauxite resources total 40.5 million tonnes comprising 37 million tonnes of thick bauxite at Binjour plateau and 3.5 million tonnes in the granted mining lease at Toondoon, located 46 kms south of Binjour <sup>1</sup>
- Binjour bauxite is 3 to 15 metres thick and comprises 10.4 million tonnes suitable for simple bulk mining and shipping as "DSO Bauxite 1" and 26.6 million tonnes to be upgraded by ABx's proprietary TasTech technology to achieve the long-term sales grade of 44% to 45% Al<sub>2</sub>O<sub>3</sub> & 5% SiO<sub>2</sub> which is ideal "metallurgical bauxite" for producing aluminium metal via the low-temperature Bayer alumina refineries



#### Figure 12

Locations of Binjour bauxite project and transport infrastructure in Queensland

- Bulk sampling & processing testwork confirmed ABx's decision to committing to project development. This work confirmed that Binjour bauxite screens well (ASX: 30 May 2019). It also discovered that an extensive deep bauxite layer grading more than 48% Al<sub>2</sub>O<sub>3</sub> and less than 3% SiO<sub>2</sub> that is the highest quality gibbsite-trihydrate bauxite in eastern Australia which was obscured by an overlying red mud layer that conceals the bauxite.
- Mining simulation: Bulk sampling tested production parameters including dilution from red mud overburden, mining behaviour, screening and handling characteristics.
- **Grades:** Results show that bulk-mined, bulk-screened bauxite from Binjour can meet the required DSO grades to be marketable.
- **Operations:** Information about operating methods, dust and noise management, environmental issues, and rehabilitation options was also learned.
- **Rehabilitation:** ABx always examines post-mining reinstatement of the land at the outset of all mining projects. This important planning work commenced in November-December 2019 and several attractive options exist to leave the land significantly better than we found it. We only operate where welcomed.

#### Bulk dry-screening of Binjour bauxite

A 28 tonne bulk sample was mined and mixed onto a stockpile from Pits 10 & 11, using methods that are expected to be used during production. This sample was trucked to Gympie and screened using a rotating trommel with a 10mm aperture screen.



#### Figure 13

# Screening & environmental measurements at Gympie

This bulk-screening testwork in late September confirmed the laboratory tests in mid 2019 that Binjour bauxite is ideal for dry-screening to remove fine fractions that must be minimised for safe shipping.

Dust-carry was measured to help decide the location and size of any mining lease application(s).

#### Selection of an Initial Mining Lease Application Area at Binjour

- Based on the evidence from bulk sampling, ABx has assessed the results from its 1,000 drillholes at Binjour and has identified sites that:
  - a. Are on freehold land titles, with no strategic cropping or environmental issues
  - b. Are ideally located for transport, processing, environmental and community issues; and
  - c. Contain the high quality layer of bauxite which will be in great demand.
- **Coordinated production:** The Binjour Bauxite Project will maximise production during the Queensland dry season from April to November and ABx's Tasmanian mines will maximise production in summer from December to May. Rawmin's mines in north western India will maximise production in the Indian dry season from November to May but cease shipments in monsoon months June to September. Coordinated production and shipments will achieve all-year delivery to the customer of bauxite at a consistent specification
- Memorandum of Understanding Agreement for access to the preferred stockpile site at the Port of Bundaberg was finalised and executed during 2019

#### Penrose bauxite types in strong demand

ABx's Penrose bauxite deposit located in a pine plantation 90km inland of Port Kembla NSW (see Figure 14) contains a bottom layer grading 55% Al<sub>2</sub>O<sub>3</sub> and very low iron content suitable for refractory bauxite applications. The strategy for Penrose is to sell each layer to separate customers but a primary customer-partner is needed.

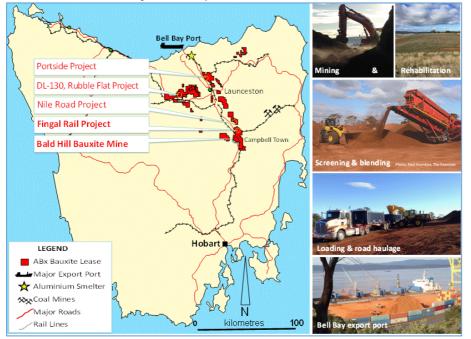
ABx has concluded that whilst Penrose bauxite is ideal feedstock for the Alcore bauxite refining technology, it is best for the manufacture of an Australia building product and separate sale of other layers.

#### Search of other low-iron grey-white bauxite deposits

Prior to making an offer to the "primary partner" for ABx's grey-white bauxite, ABx has searched its large database for other deposits of this type of bauxite and has found low-iron bauxite in Tasmania, Binjour in QLD and in the Taralga project area located north of Goulburn NSW. ABx has drafted a business proposal but this work has been impacted by the COVID-19 pandemic.



#### Bald Hill Bauxite Project, Campbell Town, Northern Tasmania



#### Figure 14

Locations of ABx bauxite mines, projects and transport infrastructure in Tasmania

#### Rehabilitation on schedule



#### Figure 15

Rehabilitated land in the foreground and bottom right is now being cropped with good yields.

Pre-mining, the rocky ridge was only suited to grazing but stoneremoval by rock-picking machines and reseeding to landholder specifications has resulted in an improved outcome.

ABx's paramount policy is to implement best practices on agricultural land and strive to leave land and environment better than we find it.

We only operate where welcomed.

Mine operators are waiting for optimum weather for seeding and weed suppression.

#### Corporate skills in rehabilitating agricultural lands post-mining:

Unlike several other bauxite producers which operate in remote tropical savannah regions, ABx has considerable experience dealing with the rehabilitation of good quality agricultural land. This experience will be important when ABx commences mining and rehabilitation operations in Binjour 115kms inland from Bundaberg, QLD.



#### **Qualifying statements**

#### General

The information in this report that relate to Exploration Information and Mineral Resources are based on information compiled by Jacob Rebek and Ian Levy who are members of The Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr Rebek and Mr Levy are qualified geologists and Mr Levy is a director of Australian Bauxite Limited.

#### Mainland

The information relating to Mineral Resources on the Mainland was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

Mr Rebek and Mr Levy have sufficient experience, which 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 2004 Edition of the Australasian Code for Reporting of exploration Results, Mineral Resources and Ore Reserves. Mr Rebek and Mr Levy have consented in writing to the inclusion in this report of the Exploration Information in the form and context in which it appears.

#### Tasmania

The information relating to Exploration Information and Mineral Resources in Tasmania has been prepared or updated under the JORC Code 2012.

Mr Rebek and Mr Levy have sufficient experience, which 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. Mr Rebek and Mr Levy have consented in writing to the inclusion in this report of the Exploration Information in the form and context in which it appears.

#### **Disclaimer Regarding Forward Looking Statements**

This ASX announcement (Announcement) contains various forward-looking statements. All statements other than statements of historical fact are forward-looking statements. Forward-looking statements are inherently subject to uncertainties in that they may be affected by a variety of known and unknown risks, variables and factors which could cause actual values or results, performance or achievements to differ materially from the expectations described in such forward-looking statements.

ABx does not give any assurance that the anticipated results, performance or achievements expressed or implied in those forward-looking statements will be achieved.

#### Patent

As advised previously, Refined Ore Industries Ltd (ROIL) was the owner of the CORE process technology via ROIL's intellectual property company, Berkeley Process Technologies Pty. Ltd which issued a global exclusive licence for the aluminium-related portion of the CORE process technology to ABx in November 2017 and ABx has issued a global exclusive sub-licence to Alcore Limited when Alcore was incorporated on 1 July 2018. After a company restructure and expansion of the patent definition to cover isolation and extraction of mineral compounds, metals, metalloids, alloys and elements from waste streams, mineral ores, recyclable commodities, industrial by-products and mixed substances, the holding company is now named Core Refining Limited (CRL) and the intellectual property company is Core Intelligence Australia Pty Ltd (CIAL) which holds the Patent Application No. 2019904311 and the global exclusive licences to ABx and Alcore continue in force.

CRL's CORE process technology involves the refining of a wide range of ore types using a combination of fluorine acids and related thermal energy process steps. The technology that is licensed to ABx and Alcore by CRL is part of CRL's broader Core technology.

Tenement No.	Location
New South Wales	
EL 6997	Inverell
EL 7357	Taralga
EL 8600	Penrose Quarry
Queensland	
Queensland EPM 18014	Binjour
-	Binjour Binjour Extension
EPM 18014	

Tasmania	
EL 7/2010	Conara
EL 9/2010	Deloraine
EL 18/2014	Prosser's Road
ML 1961 P/M	Bald Hill Bauxite

**Notes:** During the quarter, one exploration tenement was relinquished.

All tenements are in good standing, 100% owned and not subject to any Farm-in or Farm-out agreements, third-party royalties nor are they encumbered in any way

Table 4: Tenement information required under LR 5.3.3



#### **Resource Statement**

Tabulated below are the Mineral Resources for each ABx Project. The initial ASX disclosure for these Resources is given in the footnotes to the table. Refer to these announcements for full details of resource estimation methodology and attributions.

Region	Resource	Million	Thickness	$Al_2O_3$	SiO <sub>2</sub>	A/S	Fe <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	LOI	Al <sub>2</sub> O <sub>3</sub> Avi	Rx SiO <sub>2</sub>	Avl/Rx	% Lab	O'Burden	Int.Waste
	Category	Tonnes	(m)	%	%	ratio	%	%	%	@143°C %	%	ratio	Yield	(m)	(m)
CAMPBELL TOWN	Inferred	1.3	3.0	42.6	3.5	12	25.4	3.5	24.6	36.7	3.0	12	50	2.1	0.1
AREA TASMANIA <sup>7</sup>	Indicated	1.4	3.2	42.5	3.2	14	26.4	3.0	24.5	36.2	2.8	14	55	1.8	0.1
	Total	2.7	3.1	42.5	3.3	13	25.9	3.3	24.5	36.5	2.9	13	52	2.0	0.1
Fingal Rail Cement-	Inferred	2.4	3.3	30.9	19.5		35.4	3.9	16.7					1.9	0.1
Grade Bauxite <sup>8</sup>	Indicated	3.9	3.8	31.1	19.0		35.2	4.0	16.9					1.7	0.1
	Total	6.3	3.6	31.0	19.2		35.3	4.0	16.8					1.8	0.1
DL-130 AREA TAS <sup>1</sup>	Inferred	5.7	3.8	44.1	4.3	10	22.8	3.1	25.0	37.6	3.2	12	55	1.5	0.1
	Total Tas	14.7	3.6	38.2	10.5	n.a.	28.7	3.5	21.4	n.a.	n.a.	n.a.	54	1.7	0.1
BINJOUR OLD <sup>2</sup>	Inferred	14.2	4.3	40.7	7.3	6	24.7	4.3	22.1	32.3	6.7	5	80	8.5	0.3
DSO, Screen & Cement	Indicated	22.8	4.0	33.5	19.2	2	24.9	4.2	16.8	15.8	17.4	1	63	6.6	0.3
	Total	37.0	4.1	36.2	14.6	3	24.9	4.2	18.8	22.1	13.3	2	69	7.3	0.3
TOONDOON QLD <sup>3</sup>	Inferred	3.5	4.9	40.2	7.2	6	25.3	4.9	21.7	32.8	5.2	6	67	1.5	0.0
TARALGA S. NSW <sup>4</sup>	Inferred	9.9	3.1	40.4	5.7	7	24.6	4.1	22.2	35.2	1.9	18	54	0.1	0.2
	Indicated	10.2	3.7	41.3	5.3	8	25.9	4.0	22.9	36.1	1.9	19	55	0.7	0.4
	Total	20.1	5.6	40.8	5.5	7	25.3	4.0	22.6	35.7	1.9	19	55	0.5	0.3
PDM-DS0*	Inferred	7.6	2.5	37.0	6.0	6	38.4	3.5	13.3	22.1*	1.3	17	72	0.2	0.1
	Indicated	10.3	3.1	37.6	3.9	10	40.4	3.7	13.5	22.4*	1.1	20	71	0.7	0.4
	Total	17.8	5.8	37.3	4.8	8	39.6	3.6	13.5	22.3*	1.2	18	72	0.5	0.3
	Total Taralga	37.9	5.7	39.2	5.2	8	32.0	3.8	18.3	35.4	1.6	23	63	0.5	0.3
INVERELL N. NSW <sup>5</sup>	Inferred	17.5	4.7	39.8	4.8	8	27.7	4.3	22.2	31.0	4.2	7	61	2.3	
	Indicated	20.5	4.8	40.6	4.7	9	26.9	4.1	22.5	32.0	4.0	8	60	2.4	
	Total	38.0	4.8	40.2	4.7	9	27.3	4.2	22.4	31.6	4.1	8	61	2.4	
GUYRA N. NSW <sup>6</sup>	Inferred	2.3	4.2	41.4	3.6	12	26.2	3.3	24.6	35.0	2.8	13	56	3.4	
	Indicated	3.8	5.9	43.1	2.6	16	27.3	3.9	24.5	37.4	2.0	18	61	4.4	
	Total	6.0	5.3	42.5	3.0	14	26.9	3.7	24.5	36.5	2.3	16	59	4.0	
GRAND TOTAL A	SRAND TOTAL ALL AREAS 137.1 * PDM is Al <sub>2</sub> O <sub>3</sub> spinel. Al <sub>2</sub> O <sub>3</sub> AvI at 225°C is >35%														

Explanations: All resources 100% owned & unencumbered. Resource tonnage estimates are quoted as in-situ, pre mined tonnages. All assaying done at NATA-registered ALS Laboratories, Brisbane. Chemical definitions: Leach conditions to measure available alumina "Al2O3 Avl" & reactive silica "Rx SiO2" is 1g leached in 10ml of 90gpl NaOH at 143°C for 30 minutes. LOI = loss on ignition at 1000°C. "Avl/Rx" ratio is (Al2O3 Avl)/(Rx SiO2) and "A/S" ratio is Al2O3/SiO2. Values above 6 are good, above 10 are excellent Tonnage is for bauxite in-situ. Lab Yield is for drill dust samples screened by ALS lab at 0.26mm. Production yields are not directly related and are typically between 60% and 75%. Tonnages requiring no upgrade will have 100% yield. Resource estimates exclude large tonnages of potential extensions, overburden & interburden detrital bauxite and underlying transitional bauxite mineralisation. Production will clarify these materials.

The information above relates to Mineral Resources previously reported according to the JORC Code (see Competent Person Statement) as follows:

- <sup>1</sup> Maiden Tasmania Mineral Resource, 5.7 million tonnes announced on 08/11/2012
- <sup>2</sup> Binjour Mineral Resource, 37.0 million tonnes announced on 18/06/2018
- <sup>3</sup> QLD Mining Lease 80126 Maiden Resource, 3.5 million tonnes announced on 03/12/2012
- <sup>4</sup> Goulburn Taralga Bauxite Resource Increased by 50% to 37.9 million tonnes announced on 31/05/2012
- <sup>5</sup> Inverell Mineral Resource update, 38.0 million tonnes announced on 08/05/2012
- <sup>6</sup> Guyra Maiden Mineral Resource, 6.0 million tonnes announced on 15/08/2011
- <sup>7</sup> Initial resources for 1<sup>st</sup> Tasmanian mine, 3.5 million tonnes announced on 24/03/2015
- <sup>8</sup> Resource Upgrade for Fingal Rail Project, Tasmania announced on 25/08/2016

Tabulated Resource numbers have been rounded for reporting purposes. The Company conducts regular reviews of these Resources and Reserve estimates and updates as a result of material changes to input parameters such as geology, drilling data and financial metrics.

#### Global Mineral Resources total 137.1 million tonnes.



#### About Australian Bauxite Limited ASX Code ABX

Australian Bauxite Limited (ABx) has its first bauxite mine in Tasmania & holds the core of the Eastern Australian Bauxite Province. ABx's 11 bauxite tenements in Queensland, New South Wales & Tasmania totalled 662 km2. All tenements are 100% owned, unencumbered & free of third-party royalties. ABx's bauxite is gibbsite trihydrate (THA) bauxite that can be processed into alumina at low temperature.

ABx has committed a large proportion of its expenditure into Research and Development to find ways to capitalise on the main strengths of its bauxite type which is very clean, free of all deleterious elements and partitioned into layers, nodules, particles and grains of different qualities that can be separated into different product streams using physical, chemical and geophysical methods.

ABx has declared large Mineral Resources in northern NSW, southern NSW, Binjour in central QLD & in Tasmania, confirming that ABx has discovered significant bauxite deposits.

ABx's first mine commenced at Bald Hill near Campbell Town, Tasmania in December 2014 – the first new Australian bauxite mine for more than 35 years.

ABx aspires to identify large bauxite resources in the Eastern Australian Bauxite Province, which is a globally significant bauxite province. ABx has created significant bauxite developments in 3 states - Queensland, New South Wales and Tasmania. Its bauxite deposits are favourably located for direct shipping of bauxite to both local and export customers.

ABx endorses best practices on agricultural land, strives to leave land and environment better than we find it.

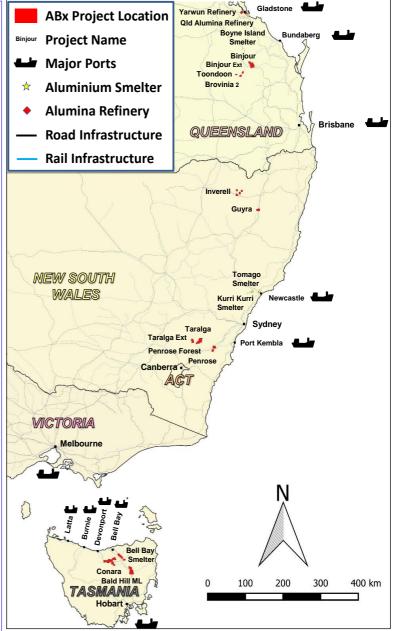
We only operate where welcomed.

#### About Alcore Limited

Australian Bauxite Limited (ABx) has incorporated Alcore Limited as a majority-owned subsidiary to fund and manage the Alcore Project, to lead to the construction of an Alcore Production Plant to produce Aluminium Fluoride (AIF<sub>3</sub>) and valuable co-products, using patent application new technology. The Alcore Technology is designed to convert low grade bauxite worth \$50 per tonne into a suite of valuable products worth more than \$800 per tonne. Site construction works for Stage 1 of the Alcore project commenced on 1 July as planned at Alcore's pre-approved Research Centre in Berkeley Vale, Central Coast NSW.

Stage 1 is designed to produce  $AIF_3$  test samples for prequalified aluminium smelter customers & then produce Corethane, which is pure hydrocarbon powder refined from low-value coals and has been used to provide thermal and electrical power with low  $CO_2$  emissions when used as a gassubstitute to fuel large gas turbine. Corethane has also been used as a diesel substitute for fuel security purposes and is ideally suited for use as a sulphur-free bunker fuel.

Directors of ABx	Officers
Paul Lennon Chairman	Leon Hawker COO
lan Levy CEO & MD	Jacob Rebek Chief Geologist
Ken Boundy Director	Paul Glover Marketing, Exploration
Henry Kinstlinger	Dr Mark Cooksey, GM Alcore
Company Secretary	Nathan Towns, Operations Mgnr



#### Figure 16 above

ABx Project Tenements & Major Infrastructure in ABx's major bauxite project areas nearest export ports in Eastern Australia as follows, from south to north:

- 1. Northern Tasmania, south of Bell Bay Port
- 2. Southern NSW Taralga & Penrose pine forest west of Pt Kembla
- 3. Central Queensland based on the major Binjour Bauxite Project, southwest of Port of Bundaberg which is a port that has no impact on the Great Barrier Reef.

This release has been approved for release by the Board of ABx.

### Appendix 5B

## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

#### Name of entity

Australian Bauxite Limited					
ABN Quarter ended ("current quarter")					
14 139 494 885	30 June 2020				

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date ( 6 months) \$A'000	
1.	Cash flows from operating activities			
1.1	Receipts from customers	31	31	
1.2	Payments for			
	(a) exploration & evaluation (if expensed)	(20)	(168)	
	(b) development	(43)	(276)	
	(c) production	(138)	(148)	
	(d) staff costs	(33)	(68)	
	(e) administration and corporate costs	(65)	(134)	
1.3	Dividends received (see note 3)	-	-	
1.4	Interest received	1	2	
1.5	Interest and other costs of finance paid	-	-	
1.6	Income taxes paid	-	-	
1.7	Government grants and tax incentives	-	-	
1.8	Other (Government package)	158	158	
1.9	Net cash from / (used in) operating activities	(109)	(603)	
2.	Cash flows from investing activities			
2.1	Payments to acquire:			
	(a) entities			
	(b) tenements	-	-	
	(c) property, plant and equipment	-	-	
	(d) exploration & evaluation (if capitalised)	-	-	
	(e) investments	-	-	
	(f) other non-current assets	-	-	

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date ( 6 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	Net cash from / (used in) investing activities	-	-

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	-
3.2	Proceeds from issue of convertible debt securities	70	175
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	-
3.5	Proceeds from borrowings	-	150
3.6	Repayment of borrowings	(91)	(91)
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	(21)	234

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	670	909
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(109)	(603)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	-	-
4.4	Net cash from / (used in) financing activities (item 3.10 above)	(21)	234

#### Appendix 5B Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date ( 6 months) \$A'000	
4.5	Effect of movement in exchange rates on cash held	-	-	
4.6	Cash and cash equivalents at end of period	540	540	

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	32	75
5.2	Call deposits	153	180
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	355	415
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	540	670

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	99
6.2	Aggregate amount of payments to related parties and their associates included in item 2	Nil

6.3 Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2

\$99,000 shares of controlled entity were issued in lieu of director fee to Paul Lennon for his service rendered.

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments

7.	Financing facilities Note: the term "facility' includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity.	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1	Loan facilities	880	450
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	Total financing facilities	880	450

0

7.5	Unused financing facilities available at quarter end	430	
7.6	Include in the box below a description of each facility above, including rate, maturity date and whether it is secured or unsecured. If any addi facilities have been entered into or are proposed to be entered into af include a note providing details of those facilities as well.	secured. If any additional financing be entered into after quarter end,	
	Lender: Justevian Pty Ltd Facilities: \$450,000 fully withdrawn Interest: 8.0% p.a. Security: Australian Bauxite Ltd RD refund		
	Lender: Others Facilities: \$430,000 available in July 2020 Interest: 8.0% p.a.		

Securities: Australian Bauxite Ltd RD refund

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (Item 1.9)	(109)
8.2	Capitalised exploration & evaluation (Item 2.1(d))	-
8.3	Total relevant outgoings (Item 8.1 + Item 8.2)	(109)
8.4	Cash and cash equivalents at quarter end (Item 4.6)	540
8.5	Unused finance facilities available at quarter end (Item 7.5)	430
8.6	Total available funding (Item 8.4 + Item 8.5)	970
8.7	Estimated quarters of funding available (Item 8.6 divided by Item 8.3)	8.8

8.8 If Item 8.7 is less than 2 quarters, please provide answers to the following questions:

Does the entity expect that it will continue to have the current level of net operating 1. cash flows for the time being and, if not, why not?

Answer:

2. Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

Answer:

#### Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer:

3.

#### **Compliance statement**

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: 31/07/2020

Authorised by: Ian Levy, Managing Director and CEO (Name of body or officer authorising release – see note 4)

#### Notes

- 1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
- 2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
- 3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
- 4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
- 5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.