

ASX code: ABX

Quarterly Activities Report – December 2021 Released 28 January 2021 Page 1

QUARTERLY REPORT AND ACTIVITY STATEMENT FOR 3 MONTHS TO 31 DECEMBER 2020

Corporate

- Group available cash at the end of the quarter was \$0.90 million and is currently is about \$1.18 million
- Sales of cement and fertiliser grade bauxites totalled 33,915 tonnes worth in excess of \$2.4 million
- Dr Mark Cooksey, was permanently appointed CEO of ABx's 88%-owned technology subsidiary, ALCORE Limited (Alcore) and is leading Alcore's development and commercialisation of a new process for aluminium fluoride (AIF₃) production
- ABx issued 76,752 new shares for services rendered by a contractor to Alcore as a contractual success fee

Sales & Operations

- Mining Lease application lodged for the fully-funded Sunrise Bauxite Project at Binjour,115 kms southwest of Bundaberg QLD: The mining lease covers 437 hectares and its development costs estimated to total \$15 million are fully-funded by ABx's marketing partner Rawmin Mining of India, subject to final due diligence when travel restrictions are lifted. The Sunrise Bauxite Project is designed to sell 500,000 tonnes per year of gibbsite-rich trihydrate bauxite
- Commenced negotiations and product testwork for next sale of cement-grade bauxite
- Delivered 937 tonnes of fertiliser grade bauxite from the Bald Hill Bauxite Project at Campbell Town to the fertiliser plant operated by Impact Fertilisers in Hobart, Tasmania in mid December.
- New orders received for fertiliser grade bauxite as agricultural fertiliser demand continues to rise

AL۩RE Project

- Alcore's engineering due diligence for its pilot plant is well underway and coping with international and interstate travel restrictions
- Recent production of AIF₃ by Alcore have exceeded commercial specifications see Table 1.
- Commercial grade AIF₃ has been made by Alcore using fluorine extracted from smelter waste by-products from two Australian Aluminium Smelters

Table 1: Recent Alcore AIF₃ products (chemical analyses by CSIRO).

Product Properties	AIF ₃	Fe ₂ O ₃	SiO ₂	Na ₂ O	Ca0	P ₂ O ₅	Density
Commercial Specs	>90%	<0.05%	<0.28%	<0.60%	<0.09%	<0.04%	>0.7
Alcore Sample 1	96%	0.032%	0.005%	0.291%	0.081%	<0.005%	0.79
Alcore Sample 2	96%	0.035%	0.005%	0.223%	0.089%	<0.005%	0.77
Alcore Sample 3*	91%	0.029%	0.024%	0.185%	0.080%	<0.005%	0.85
Alcore Sample 4*	88%	0.037%	0.005%	0.137%	0.075%	<0.005%	0.79
Alcore's average	93%	0.033%	0.010%	0.209%	0.081%	<0.005%	0.80

- * Samples made with fluorine that was extracted from two Australian smelter waste by-products
- Testwork is now focussed on the increased product rates of the Alcore pilot plant
- Alcore's business plans are to:
 - i. Produce AIF₃, a high-priced ingredient in aluminium smelters and lithium ion batteries, by refining aluminium smelter waste materials, commercial gibbsite and ABx's gibbsite-rich, clean bauxite;
 - ii. Be Australia's first domestic producer of AlF₃ so as to increase security of supply for Australasian smelters and also to export additional tonnages to other smelters worldwide.
- Alcore's method is the world's first production of AIF₃ from the recycling of smelter waste and low-grade bauxite and uses the aluminium-related parts of the CORE Technology (patent application).

Alcore's results keep improving. Under Mark Cooksey's guidance over recent months, Alcore has demonstrated:

- Repeated recovery of fluorine from aluminium smelter waste provided by multiple suppliers
- Consistent production of AIF₃ with composition meeting commercial chemical and physical specifications (see Table 1). The chemical analysis was performed by CSIRO



- Prevention of key impurities in bauxite from reacting with fluorine acids, allowing the impurities to remain as solids that can be separated from the AIF₃ solution during processing
- Manufacture 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.

Current Alcore activities

- 1. Conducting engineering validation, which is likely to include a pilot plant for critical process steps, to:
 - Confirm process and product performance at a larger scale
 - Produce larger samples for evaluation by aluminium smelters
- 2. Conducting process verification experiments in the laboratory to:
 - Produce AIF₃ from bauxite and aluminium smelter waste of equivalent quality to that produced from aluminium hydroxide
 - Optimise the recovery of fluorine from aluminium smelter waste, including the separation and recovery of byproducts with potential commercial value

Government & Industry

- Discussions continue with governments, agencies, engineering experts and major companies in the aluminium industry. Alcore considers AIF₃ to be a strategically important mineral product.
- Alcore is now advancing from laboratory confirmation to an engineering validation program, to confirm
 process performance and product quality at a larger scale. The majority of the process steps are used in
 existing commercial processes and so will require limited verification. The few new process steps will involve
 more intensive testing, likely to involve international specialists and expertise.
- Several potential AIF₃ customers have visited the Alcore Research Centre to observe the production of AIF₃ from aluminium smelter by-products and are continuing to discuss future joint plans.

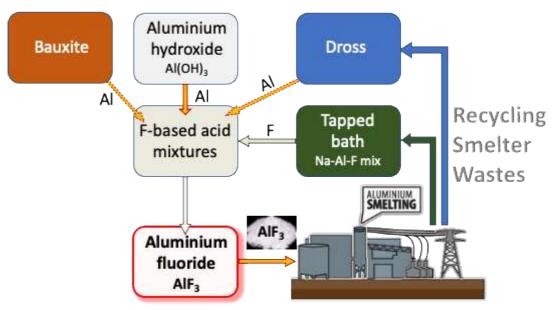


Figure 1: Summary of the Alcore strategy.

COVID-19 Virus Pandemic Response - never give up

- ABx's strict health safety protocols at all ABx-Alcore facilities comply with national and state guidelines. When some staff members are teleworking, ABx-Alcore has still met its schedules by working harder
- The Alcore research centre 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 with NSW Health, if needed.
- Contingency plans to support business and employees until COVID-19 threats pass are in place. Dedicated work by staff is succeeding despite regulatory burdens which have actually increased



BAUXITE OPERATIONS

Exploration was curtailed by COVID-19 travel restrictions. Engineering, research and development costs continued for Binjour Project, exploration lab research and for Alcore and totalled \$442,000, as recorded in Appendix 5B, including Alcore's research into Aluminium Fluoride technology, bauxite beneficiation and exploration, excluding staff and other administration costs.

Production and Sales: ABx again tested our logistics and mining contractors in delivering a significant cargo of 33,405 tonnes to the port of Bell Bay, northern Tasmania. Mining and screening by Hazell Bros, cartage by Dave Wagner & Son and port services by QUBE Ports all stood the strain and the cargo was on-specification, carted and ship-loaded on time. Many thanks for their efforts during these very difficult times.

Rehabilitation ahead of schedule

Rehabilitation at the Bald Hill Bauxite Project is going well and ahead of schedule, taking advantage of the better growing season this year. All land mined to date is returned to the Landowner in a more productive condition than when mining commenced in accordance with ABX's paramount corporate policy, namely:

ABx endorses best practices on agricultural land, strives to leave land and environment better than we find it. We only operate where welcomed.



Figure 2: "After" Rehabilitation Rehabilitated land in the foreground and bottom right is now being cropped with good yields.

Pre-mining, the rocky ridge was only for grazing but stone-removal and reseeding to landholder specifications has resulted in an improved outcome.

Corporate skills in rehabilitating agricultural lands post-mining:

Unlike some other bauxite producers that operate in remote 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 – see report on Binjour project below.



Figure 3: "Before" rehabilitation
Mining at Bald Hill Bauxite Project, Campbell
Town, Northern Tasmania

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

Operations Manager, Nathan Towns (pictured) supervised ore extraction, processing, transport and ore blending activities.



Figure 4: 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.



ALEGRE Project

• AlF₃ is an essential electrolyte ingredient in aluminium smelters and global demand for AlF₃ increases as aluminium smelter production increases and the use of AlF₃ in next-generation batteries increases



Figure 5: Prices & demand for aluminium fluoride AIF₃ exported from China since 2011. Customers pay shipping costs in addition to prices. Recovery from COVID-19 slow-downs may be starting as Chinese is exporting lower tonnages?

- AIF₃ 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 AIF3 to the Australasian Aluminium Smelters and for export
- Australian AIF₃ 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



• 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

This process has the strong potential to be the simplest and lowest cost method to make AIF₃. 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 constructed inside
the Alcore Research Centre.

The Alcore Lab is a climate-controlled laboratory constructed inside the Alcore Research Centre to produce test samples of AlF₃ and co-products. It will become a research centre for testing the technology on many ores.



Figure 7: Commercial-grade and well-crystallised AIF₃ samples made repeatedly and consistently at the Alcore Research Centre

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 and can be located adjacent to aluminium smelters to Refine & Recycle aluminium smelter by-products. Alcore production is not constrained by resource supply and can be located near customers, near sources of low-cost feedstock such as recyclable smelter waste.

Risk management: Alcore's business plan is designed to minimise both the financial and technical risks:

- 1. Alcore process operates at low temperatures & low pressures
- 2. ALCORE's main products in the start-up years 1 to 5 are designed to be AlF₃ utilising the simplest feedstock ingredients, selling AlF₃ into 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 only few buyers.



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

- A mining lease application covering 437 hectares has been lodged for the Sunrise Bauxite Project to develop the Binjour Bauxite discovery located 115km southwest from the export port of Bundaberg Queensland.
- The Binjour Bauxite Project pre-production and working capital costs totalling \$15 million are fully funded by ABx's marketing partner, Rawmin Mining and Industries of India.
- Customer marketing agreements are in abeyance until the economic effects of COVID-19 are better known.
 Fortunately east Asian and the Indian economies appear to be emerging positively from the recession which 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 ¹.
- 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% Al₂O₃ & 5% SiO₂ which is ideal "metallurgical bauxite" for producing aluminium metal via the low-temperature Bayer alumina refineries.

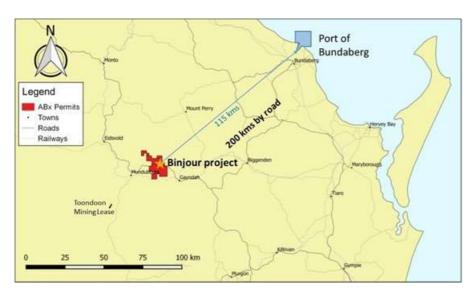


Figure 8: Locations of Binjour bauxite project and transport infrastructure in Queensland

In Planning for 10 years

Since discovery in 2010, ABx has worked with landholders, local & state government, port authorities, operator & logistics contractors, market specialists and customers to develop an optimum strategy for the Sunrise Bauxite Project at Binjour.

The plan is to produce high-quality metallurgical-grade bauxite exported in large bulk carrier ships from the Port of Bundaberg which would increase economic activity and export capabilities around Bundaberg which lies south and outside the Great Barrier Reef.

Support from landholders, local and state government

ABx is grateful for the long-term support from landholders, local communities, local government and state government departments and senior officers that ABx has met and briefed regularly. ABx respects the rights of landholders and has kept them advised of the progress and challenges of developing a project from discovery to export.

Local Employment

The project is located in a region where the population has all the skills needed for this project and the employees will be recruited locally. Total Full Time Equivalent jobs are estimated at 55 direct jobs with up to 150 indirect job in the Wide Bay Burnett district from pit to port.



ABx Rehabilitation Experience on Agricultural Land - a Corporate Strength

The Sunrise Bauxite Project will operate on freehold agricultural and tree plantation land that requires specialised rehabilitation which is one of ABx's corporate strengths, being the only current bauxite producer from high value agricultural land at its Bald Hill Bauxite Project in northern Tasmania.

The plan is to return agriculture back to production rapidly in accordance with ABx's paramount company policy, namely:

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

We only operate where welcomed.

ABx's rehabilitation record in Tasmania is demonstrated by the following "before & after" images from ABx's Bald Hill Bauxite Project in northern Tasmania:



Figure 9: During Mining and After Rehabilitation in ABx's Tasmanian Mine

Project fully-funded by Rawmin Mining

ABx's marketing partner, Rawmin Mining of India has agreed to fund all pre-production and working capital costs for the Sunrise Bauxite Project estimated to total \$15 million and will be entitled to a 50% joint venture interest in the project. ABx will be the project operator.

Market Dynamics Favour Sunrise Bauxite's Entry into Seaborne Markets

Sunrise Bauxite Project will produce a quality-assured, consistent specification bauxite as follows 1:

Binjour product	Total Al ₂ O ₃	Total SiO ₂	Reactive SiO ₂
specifications	%	%	%
Shipped bauxite	45	5	< 4%

Reactive silica is determined by leaching at 140 degrees C

100% trihydrate (THA) gibbsite-rich bauxite that can be refined into alumina at 140° C No monohydrate minerals that need high-temperature (250° C) refining into alumina Low to nil organic carbon content. Low to nil CaO content. Low moisture (\sim 5%) & Excellent handling



Port of Bundaberg

ABx has a Memorandum of Understanding agreement ("MoU") with the Port of Bundaberg to investigate a designated potential stockpile site and consider its potential for:

- 1. Stockpiling bauxite at the "MoU Block" see location shown in Figure 6 below
- 2. Blending the bauxite to the contracted specification, and
- 3. To compensate for high road haulage costs, ABx seeks to load large Cape Size ships (150,000 tonnes cargo) at deep-water anchorage within Port Limits of Bundaberg Port.

ABx favours the use of Bundaberg Port because it lies well south of the Great Barrier Reef Park and is sand-bottomed from the point of loading through to international shipping lanes. ABx has worked collegiately with Bundaberg Port management and with all stakeholders in the Wide Bay-Burnett Region since 2010-11 when the discovery of the Binjour Bauxite deposit was made.



Figure 10: Location of the "MoU Block" (middle right) being assessed at the Port of Bundaberg

ABx favours the use of the MoU block at Bundaberg Port because trucks will not need to pass through the Port village community and keeps the bauxite well away from inhabited areas.

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 11: Screening & environmental measurements at Gympie

This bulk-screening test work in late September confirmed the laboratory tests in mid 2019 that Binjour bauxite is ideal for dryscreening 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 the 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 the optimum mining lease totalling 437 hectares that:
 - a. Is on freehold land titles, with no strategic cropping or environmental issues;
 - b. Is ideally located for transport, processing, environmental and community issues; and
 - c. Contain the high-quality layer of bauxite which will be in great demand.
- Seasonal complementarity: 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.

Penrose bauxite types in strong demand

ABx's Penrose bauxite deposit located in a pine plantation 90km inland of Port Kembla NSW contains a bottom layer grading 55% Al₂O₃ 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. ABx has drafted a business proposal but this work has been impacted by the COVID-19 pandemic.

During the quarter, a large sample of the very hard, strongly pigmented top layer material was collected and supplied to a research laboratory for assessment as feedstock into a form of traditional bricks that have been made in western Sydney Basin for many decades. This brick-related research will take more than 6 months, including building certification tests in Germany.



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 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.

Table 2: Tenement information required under LR 5.3.3

Tenement No.	Location
New South Wales	
EL 6997	Inverell
EL 7357	Taralga
EL 8600	Penrose Quarry
Queensland	
ML 80126	Toondoon ML
WE 00120	TOOTIGOOTTWIL
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. In early January 2020, a second exploration tenement was relinquished and a new exploration tenement was applied for – approval pending.

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.



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.

Table 3: ABx JORC-Compliant Resource Estimates

Region	Resource	Million	Thickness	$Al_{2}O_{3}$	SiO ₂	A/S	Fe ₂ O ₃	TiO ₂	LOI	Al ₂ O ₃ AvI	Rx SiO ₂	AvI/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 7	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 8	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 ¹	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 QLD 2	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 3	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 4	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 ⁵	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 ⁶	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 ALL AREAS 137.1

* PDM is Al₂O₃ spinel. Al₂O₃ 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 AVI" & 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. "AVI/Rx" ratio is (Al2O3 AVI)/(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 detrial 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:

- ¹ Maiden Tasmania Mineral Resource, 5.7 million tonnes announced on 08/11/2012
- ² Binjour Mineral Resource, 37.0 million tonnes announced on 18/06/2018
- ³ QLD Mining Lease 80126 Maiden Resource, 3.5 million tonnes announced on 03/12/2012
- 4 Goulburn Taralga Bauxite Resource Increased by 50% to 37.9 million tonnes announced on 31/05/2012
- ⁵ Inverell Mineral Resource update, 38.0 million tonnes announced on 08/05/2012
- ⁶ Guyra Maiden Mineral Resource, 6.0 million tonnes announced on 15/08/2011
- ⁷ Initial resources for 1st Tasmanian mine, 3.5 million tonnes announced on 24/03/2015
- ⁸ 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 Web: www.australianbauxite.com.au

Australian Bauxite Limited (ABx) has its first bauxite mine in Tasmania & controls the Eastern Australian Bauxite Province. ABx's 8 bauxite tenements in Queensland, New South Wales & Tasmania totalling 385 km² are all 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 northern Tasmania. 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 and has created significant bauxite development projects 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)'s 89%-owned technology subsidiary ALCORE Limited was created to fund and manage the AIF3 Project, involving the construction of a production plant to produce aluminium fluoride (AIF₃) and valuable co-products using new Australian technology. Alcore intends to convert aluminium smelter waste (and low grade bauxite) worth less than \$50 per tonne into a suite of valuable products worth more than \$800 per tonne. Alcore's testwork commenced on 1 July 2019 at its hightechnology Research Centre in Berkeley Vale, Central Coast NSW and is currently focussed on producing AIF3 test samples for prequalified aluminium smelter customers. Its processes can also produce Corethane, which is pure hydrocarbon powder to provide thermal and electrical power with low CO2 emissions when used as a gas-substitute or as a diesel substitute for fuel security purposes and is ideally suited for use as a sulphur-free bunker fuel. Corethane is also useable as a chemical reductant instead of imported coke and coals.

AIF3 is an essential ingredient in aluminium smelters and is currently 100% imported. Alcore will be the first Australian producer of this strategically important mineral product and will provide security of supply to the large aluminium smelting industry in Australia. Alcore will produce AIF3 from smelter waste materials and thereby maximise the recycling by Australian aluminium smelters.

Directors of ABx

Leon Hawker Chief Operating Officer Paul Lennon Chairman

Ian Levy CFO & MD Jacob Rebek Chief Geologist

Ken Boundy Director Paul Glover Marketing, Exploration & Relationships

Henry Kinstlinger Company Secretary **Nathan Towns Operations Manager** Dr Mark Cooksey CEO Alcore Limited

This announcement has been approved for release by the Board of Australian Bauxite Limited.

For further information please contact:

Ian Levy, CEO

Australian Bauxite Limited Mobile: +61 407 189 122

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

31 December 2020

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	37	2,260
1.2	Payments for		
	(a) exploration & evaluation (if expensed)	(442)	(633)
	(b) development	(601)	(929)
	(c) production	(97)	(1,710)
	(d) staff costs	(23)	(123)
	(e) administration and corporate costs	(16)	(177)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	8	11
1.5	Interest and other costs of finance paid	(2)	(49)
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	347	1,231
1.8	Other (Government package)	13	269
1.9	Net cash from / (used in) operating activities	(776)	150
2.	Cash flows from investing activities		
2.1	Payments to acquire:		
	(a) entities		
	(b) tenements	-	-
	(c) property, plant and equipment	(52)	(52)
	(d) exploration & evaluation (if capitalised)	-	-
	(e) investments	-	-
	(f) other non-current assets	-	-

ASX Listing Rules Appendix 5B (01/12/19)

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (12 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	(52)	(52)

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	10	284
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	-	-
3.6	Repayment of borrowings	-	(391)
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	10	(107)

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	1,718	909
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(776)	150
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(52)	(52)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	10	(107)

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	900	900

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	127	77
5.2	Call deposits	428	1,286
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	345	355
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	900	1,718

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	30
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 \$30,000 director fee were paid to Paul Lennon and Ian Levy for their services 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	-	-	
7.2	Credit standby arrangements	-	-	
7.3	Other (please specify)	-	-	
7.4	Total financing facilities	-	-	
7.5	Unused financing facilities available at qua	arter end	-	
7.6 Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.				

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (Item 1.9)	776
8.2	Capitalised exploration & evaluation (Item 2.1(d))	-
8.3	Total relevant outgoings (Item 8.1 + Item 8.2)	776
8.4	Cash and cash equivalents at quarter end (Item 4.6)	900
8.5	Unused finance facilities available at quarter end (Item 7.5)	-
8.6	Total available funding (Item 8.4 + Item 8.5)	900
8.7	Estimated quarters of funding available (Item 8.6 divided by Item 8.3)	1.2

- 8.8 If Item 8.7 is less than 2 quarters, please provide answers to the following questions:
 - 1. Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Answer: No. The company incurred \$698,000 in costs for development and a mining campaign completed during the Quarter (items 1.2 (b) and (c)). These are not recurring costs. Further development and mining costs will be funded from the proceeds of sales (advance payments, or campaign specific finance). Also note 1st bullet point in the Quarterly report. ABx currently has \$1.18 million available cash.

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: No steps are currently necessary as the Company has sufficient cash to fund its general operations beyond the following two quarters (estimated at \$300,000 per quarter, providing in excess of 3 quarters forward funding from available cash). Alcore, the Company's subsidiary is conducting a capital raise to fund its R&D activities, which have hitherto been funded by the Company.

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

Answer: Yes. The company has sufficient cash to fund its operations beyond the following two quarters. See 8.8 (2).

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: 27/01/2021

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.