

AUSTRALIAN **BAUXITE** LIMITED

ASX: ABX

ALCORE LimitedAlF₃ for Aluminium smelters & Lithium ion batteries. Corethane: clean as gas, cheap as coal**3rd Milestone Achieved. ALCORE Testwork Commenced**

- Australian Bauxite Limited (**ABx**)'s wholly-owned subsidiary, ALCORE Limited has commenced the chemical refining of ABx bauxite into aluminium fluoride (AlF₃), commencing with removal of silicon and iron oxides to create a clear solution containing the aluminium fluoride that will be produced by a crystalliser-still stage in coming days.
- This milestone was achieved successfully last week at the ALCORE Research Centre in Berkeley Vale, Central Coast NSW – next focus on designing the optimum blend of bauxite and reagents for the ALCORE mini-production plant
- Construction of the sophisticated mini-production plant was completed over the last 4 months
- ALCORE's patent (pending) application technology is designed to refine raw bauxite to produce Aluminium Fluoride (**AlF₃**) and valuable co-products. AlF₃ is an essential electrolyte ingredient in aluminium smelters
- Global demand for AlF₃ is increasing strongly as aluminium smelter production increases and the use of AlF₃ in lithium ion batteries increases
- Co-products include **Corethane**, which is pure hydrocarbon powder refined from low-value coals that can be a gas or diesel substitute and has many industrial applications
- Corethane has been used as a diesel substitute for fuel security purposes and is ideally suited for use as a sulphur-free bunker fuel for shipping under new strict emissions laws
- Discussions continue with governments, agencies and major companies in the aluminium industry

ABx CEO, Ian Levy commented: "The ALCORE Research Centre has created a laboratory with the highest standards of safety, equipment and technology. At the same time, the ALCORE team designed and constructed the ALCORE mini-production plant which will be our 4th milestone over the next few weeks. The mini-production plant will supply test samples to our three prospective customers.

"I have never seen a more powerful reagent for dissolving rocks – our 4mm sized bauxite was reduced to iron-dust and a clear liquor within a few minutes. ALCORE's powerful new bauxite refining technology can lead to Australia's first production of AlF₃ products to provide security of supply for Australasian aluminium smelters. ALCORE's production of Corethane hydrocarbon can change the energy supply and fuel security outlook for eastern Australia.

"ABx is also pressing ahead with its three core bauxite projects; the Tasmanian mine, the large Binjour Project in central QLD and the Penrose refractory bauxite project 90km inland of Port Kembla NSW. Bulk sampling and processing testwork at the Binjour Project was completed last week and assays are pending."

For further information please contact:

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Figure 1: Summary of the ALCORE Business Strategy



Figure 2: Stage 1 of the ALCORE Mini-Production Plant



Figure 3: ALCORE Laboratory built inside the ALCORE Research Centre



Figure 4: Inside the completed ALCORE Laboratory

About Australian Bauxite Limited

ASX Code ABX


Web: www.australianbauxite.com.au

Australian Bauxite Limited (ABx) has its first bauxite mine in Tasmania & holds the core of the Eastern Australian Bauxite Province. ABx's 14 bauxite tenements in Queensland, New South Wales & Tasmania totalled 914 km² & were selected for (1) good quality bauxite; (2) near infrastructure connected to export ports; & (3) free of socio-environmental constraints. All tenements are 100% owned, unencumbered & free of third-party royalties. The Company's bauxite is high quality 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, mainly highly 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 where 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 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 domestic 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 wholly-owned subsidiary to manage the ALCORE Project leading to the construction of an ALCORE Production Plant to produce Aluminium Fluoride (AlF₃) and valuable co-products, using patent (pending) 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. Stage 1 of the ALCORE project commenced on 1 July as planned at ALCORE's pre-approved Pilot Plant site in Berkeley Vale, Central Coast NSW.

Stage 1 is designed to produce AlF₃ test samples for pre-qualified 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 CO₂ emissions when used as a gas-substitute to fuel large gas turbines. 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

Paul Lennon	Chairman
Ian Levy	CEO & MD
Ken Boundy	Director
Henry Kinstlinger	Company Secretary

Officers

Leon Hawker	Chief Operating Officer
Jacob Rebek	Chief Geologist
Paul Glover	Marketing, Exploration & Relationships