RioTinto

# Notice to ASX

23 February 2022

## Changes to Rio Tinto Aluminium (RTA) Pacific Operations Ore Reserve and Mineral Resource Estimates for Weipa

Rio Tinto's 2021 Annual Report which will be released to the market on 24 February 2022 will include changes in estimates of Ore Reserves and Mineral Resources at RTA Pacific Operations for Weipa, compared to those published in the 2020 Rio Tinto Annual Report.

The Ore Reserve and Mineral Resource estimates are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 (JORC Code) and the ASX Listing Rules. Ore Reserves and Minerals Resources are quoted on a 100 per cent basis (100% Rio Tinto share). Mineral Resources are reported in addition to Ore Reserves.

Rio Tinto's 2021 Annual Report will set out in full Rio Tinto's Mineral Resources and Ore Reserves position as of 31 December 2021, and Rio Tinto's interests.

RTA Pacific Operations Ore Reserve estimate, for the Amrun deposit, has decreased by 218Mt, from 1,044Mt to 826Mt. The reduction in Ore Reserve estimate is associated with a routine review of price assumptions over the life of the mine, and updated orebody knowledge. There has been no material change to the economic cut-off methodology or process. There has been no material change to the other reserve modifying factors, including governmental, tenure, environmental, cultural heritage, social, community or operational.

RTA Pacific Operations Mineral Resources exclusive of Ore Reserves, for the Amrun deposit, has increased by 172Mt, from 678Mt to 850Mt. The increase was mainly due to changes in the forecast pricing assumptions used in the reserving process. Those blocks removed from the 2021 Ore Reserve that are physically located above the remaining economic blocks have also been removed from the Mineral Resource.

RTA Pacific Operations Mineral Resources exclusive of Ore Reserves, for the East Weipa and Andoom deposits, has increased by 28Mt, from 35Mt to 63Mt. The increase was mainly due to changes in the forecast pricing assumptions used in the reserving process. Those blocks removed from the 2021 Ore Reserve that are physically located above the remaining economic blocks have also been removed from the Mineral Resource.

Supporting information surrounding the 2021 update to the Ore Reserve and Mineral Resource estimates has been provided on the following pages.

## Table A RTA Pacific Operations Mineral Resources as at 31 December 2021

### Mineral resources

| | Likely mining method[a] | Measured resources as at 31 December 2021 | | | Indicated resources as at 31 December 2021 | | | Total Measured and as at 31 December 2021 | | | Inferred resources as at 31 December 2021 | | | **Total mineral resources as at 31 December 2021** | | | Rio Tinto Interest | Total mineral resources as at 31 December 2020 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Tonnage | Grade | | Tonnage | Grade | | Tonnage | Grade | | Tonnage | Grade | | **Tonnage** | **Grade** | | | Tonnage | Grade | |
| **Bauxite** | | Mt | % $Al_2O_3$ | % $SiO_2$ | Mt | % $Al_2O_3$ | % $SiO_2$ | Mt | % $Al_2O_3$ | % $SiO_2$ | Mt | % $Al_2O_3$ | % $SiO_2$ | **Mt** | **% $Al_2O_3$** | **% $SiO_2$** | % | Mt | % $Al_2O_3$ | % $SiO_2$ |
| Rio Tinto Aluminium (Australia)[b] | | | | | | | | | | | | | | | | | | | | |
| - Amrun[c] | O/P | 100 | 49.5 | 11.6 | 488 | 50.2 | 11.8 | 589 | 50.1 | 11.7 | 262 | 51.7 | 12.1 | **850** | **50.6** | **11.8** | 100.0 | 678 | 50.3 | 11.9 |
| - East Weipa and Andoom[c] | O/P | 63 | 49.5 | 8.4 | - | - | - | 63 | 49.5 | 8.4 | - | - | - | **63** | **49.5** | **8.4** | 100.0 | 35 | 51.1 | 8.3 |
| - Gove | O/P | 28 | 49.0 | 6.8 | 5.0 | 49.0 | 6.6 | 33 | 49.0 | 6.8 | 0.6 | 49.1 | 6.8 | **34** | **49.0** | **6.8** | 100.0 | 34 | 48.7 | 6.8 |
| - North of Weipa | O/P | - | - | - | - | - | - | - | - | - | 1,330 | 52.0 | 11.6 | **1,330** | **52.0** | **11.6** | 100.0 | 1,330 | 52.0 | 11.6 |
| **Total (Australia)** | | 191 | 49.4 | 9.9 | 494 | 50.2 | 11.7 | 684 | 50.0 | 11.2 | 1,592 | 51.9 | 11.6 | **2,276** | **51.3** | **11.5** | | 2,077 | 51.3 | 11.6 |

(a) Likely mining method: O/P = open pit/surface; U/G = underground.

(b) Rio Tinto Aluminium bauxite Resources are stated as dry product tonnes and total alumina and silica grades.

(c) Amrun and East Weipa and Andoom Resource tonnes increased following conversion of Reserves to Resources based on updated economic assumptions. A JORC Table 1 in support of this change will be released to the market contemporaneously with the release of this Annual Report and can be viewed at riotinto.com/invest/financial-news-performance/resources-and-reserves.

## Table B RTA Pacific Operations Ore Reserves as at 31 December 2021

### Ore reserves

| | Type of mine[a] | Proved ore reserves as at 31 December 2021 | | | Probable ore reserves as at 31 December 2021 | | | **Total ore reserves as at 31 December 2021** | | | Rio Tinto Interest | **Rio Tinto share Recoverable mineral** | Total ore reserves as at 31 December 2020 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Tonnage | Grade | | Tonnage | Grade | | **Tonnage** | **Grade** | | | | Tonnage | Grade | |
| **Bauxite** [b] | | Mt | % $Al_2O_3$ | % $SiO_2$ | Mt | % $Al_2O_3$ | % $SiO_2$ | **Mt** | **% $Al_2O_3$** | **% $SiO_2$** | % | **Mt** | Mt | % $Al_2O_3$ | % $SiO_2$ |
| Rio Tinto Aluminium (Australia)[c] | | | | | | | | | | | | | | | |
| - Amrun[d] | O/P | 258 | 54.2 | 9.2 | 568 | 54.9 | 9.1 | **826** | **54.7** | **9.1** | 100.0 | 826 | 1,044 | 54.0 | 9.1 |
| - East Weipa and Andoom[d] | O/P | 77 | 51.7 | 7.4 | 1 | 52.5 | 9.2 | **78** | **51.7** | **7.4** | 100.0 | 78 | 100 | 51.4 | 7.5 |
| - Gove[e] | O/P | 64 | 50.6 | 5.8 | 0.4 | 50.0 | 5.9 | **64** | **50.6** | **5.8** | 100.0 | 64 | 80 | 50.4 | 5.6 |
| **Total (Australia)** | | 398 | 53.1 | 8.3 | 570 | 54.9 | 9.0 | **968** | **54.2** | **8.7** | | 968 | 1,225 | 53.5 | 8.8 |

(a) Type of mine: O/P = open pit/surface, U/G = underground.

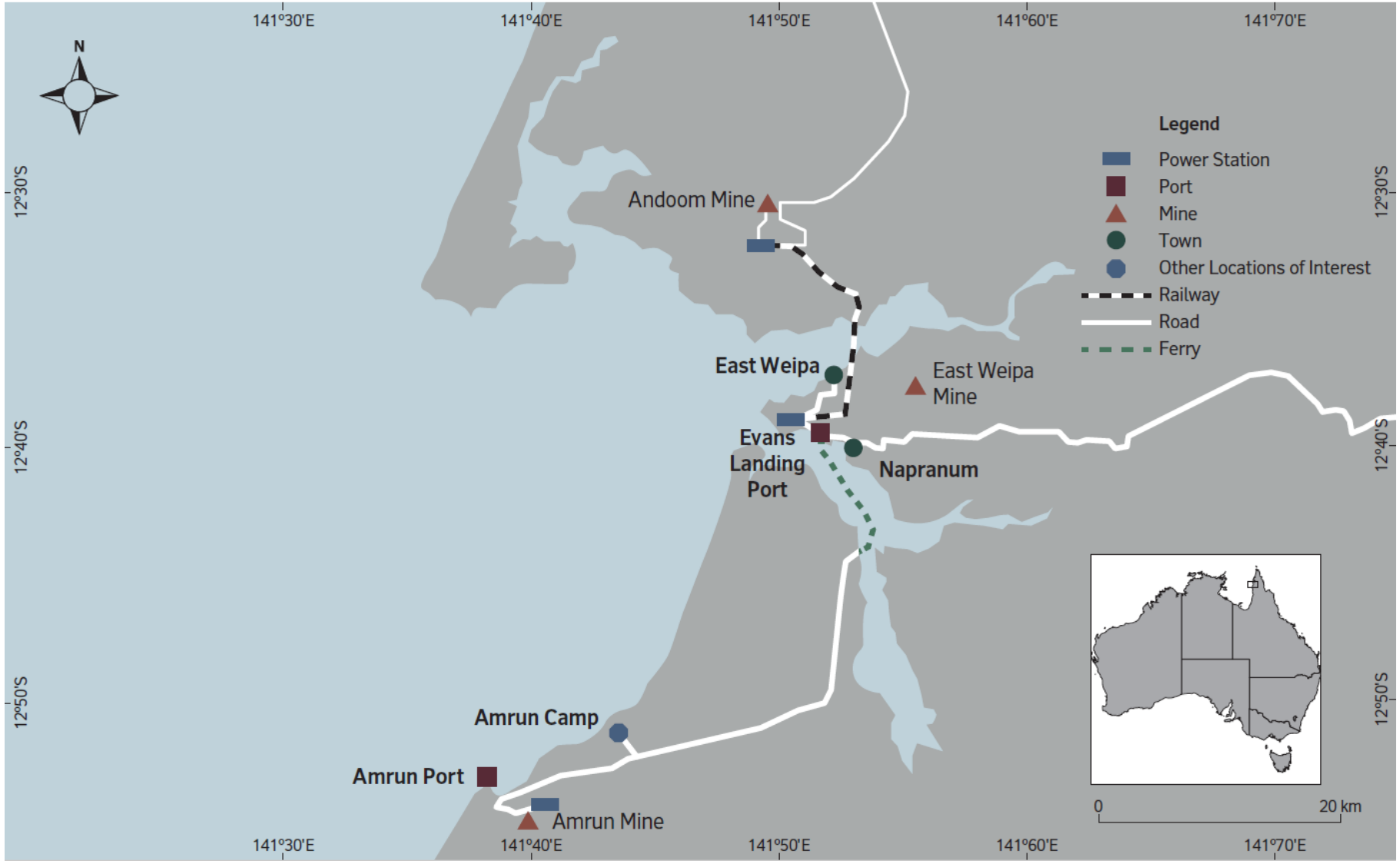
(b) Bauxite Reserves are stated as recoverable Reserves of marketable product after accounting for all mining and processing losses. Mill recoveries are therefore not shown.

(c) Australian bauxite Reserves are stated as dry tonnes and total alumina and silica grade.

(d) Amrun and East Weipa and Andoom Reserve tonnes decreased following updated economic assumptions, updated orebody knowldege and mining depletion. A JORC Table 1 in support of this change will be released to the market contemporaneously with the release of this Annual Report and can be viewed at riotinto.com/invest/financial-news-performance/resources-and-reserves.

(e) Gove Reserve tonnes decreased following updated economic assumptions and mining depletion.

## Weipa operations – Australia



## Summary of information to support the Mineral Resource reporting

The RTA Pacific Operations Mineral Resource estimate is supported by a JORC Table 1 (Sections 1, 2 and 3) document provided in the appendix to this release and located at Resources & reserves (riotinto.com).

An increase in RTA Pacific Operations Mineral Resources coincides with the write back of bauxite ore from Ore Reserves to Mineral Resources due to a routine review of price assumptions over the life of the mine. The methodology of determining Mineral Resources has not changed. The bauxite assets have been in operation for more than fifty years and are well understood. Resource work is currently more focussed on asset evaluation rather than exploration, systematically bringing the bauxite classification to higher levels of confidence.

The following summary of information for Mineral Resource estimates is provided in accordance with Rule 5.8 of the ASX Listing Rules.

### Geology and geological interpretation

RTA Pacific Operations have two bauxite deposits, one at Gove (NT) and one at Weipa (QLD). The host rocks of the two mine sites have been converted to bauxite via a continuum of weathering. High annual rainfall and a geologically stable environment has provided the perfect ingredients for these world-class bauxite deposits to form over many millions of years. A deep saprolitic zone overlain by a classic mottled zone below the bauxite ore attests to this.

The process of bauxitisation involves the conversion of kaolinite to the bauxite minerals gibbsite and boehmite. The principal influence on the process is the composition, supply, and movement of groundwater. The pH of the groundwater is lowered during the process of bauxitisation, and we note that the process is still ongoing as we see a low pH regularly throughout the ground water monitoring bores across the RTA mining leases. To a lesser extent there are organic influences such as vegetation, and possibly burrowing organisms and temperature.

Pisolitic textures are dominant, with variable cementation. However, variably cemented coarser nodule horizons are also common. Some deeper bauxite, as well as underlying laterite, contain abundant interconnected solution cavities, which may have been created geochemically and/or biologically (associated with root channels). Modern day root channel structures and infill, in the upper part of the bauxite, are common. Gibbsite is the major ore mineral, with boehmite being of lesser significance.

Bauxite occurs on laterally extensive plateaus. The plateaus have been variably dissected by erosion into distinguishable main plateau areas, each with their own characteristics, (outlined further in Table 1). The bauxite orebodies are interpreted as flat-lying horizons with topography dictating the geometry. The orebodies are generally overlain by a thin (<1 m) overburden cover and occasional red soil. Beneath the bauxite ore is often a transition zone defined by angular and lumpy textures and a geochemical signature of higher silica and lower alumina. The transition zone is often underlain by the ironstone, with a distinct change in physical properties, particularly the colour.

### Drilling techniques; sampling, sub-sampling method and sample analysis method

The current drilling method at Weipa utilizes aircore drilling. The typical aircore rig is a Land Cruiser mounted rig with a small enough wheelbase to traverse drill lines cleared with one D-6 dozer blade width. Aircore drilling forces compressed air down a space inside the drill rods to the bit face, where the air is then used to return the sample up the inner tube of the drill rod and out via a cyclone. A three bladed HQ aircore bit is attached to 4-inch rods. The drilling system has been designed to reduce grinding of the sample. Historic drilling utilised auger drilling (until 1991). Drilling at Gove is conducted using a tractor mounted 44 mm diameter vacuum drill rig.

Logging is currently conducted on *Panasonic Toughpads* and data is captured in an offline *acQuire* logging package at the drill rig. This system allows for data validation to be applied during logging as well as a streamlined method of exporting the data for importing into the main RTA Geology database. Logging is qualitative in nature, i.e., based on lithology. Currently there are ~20 lithologies common to the deposits that get modelled into 4 horizons for the estimation of bauxite resources. All sample intervals (0.25 m) are logged.

Logged lithologies are vetted against historical drill holes and assay parameters.

Samples for geologic logging and analysis are collected on 0.25 m intervals (~2-3 kg) down hole. Whole samples are collected beneath a cyclone return system, i.e., no sample splitting is conducted, or sub samples taken. Multiscreen sampling is undertaken initially to determine optimum screen size for beneficiation at each deposit. Once determined, samples are then beneficiated at the appropriate screen size (1.7 mm for East Weipa, 0.3 mm for Andoom and 0.6 mm for the Amrun deposits). Bauxite at Gove is direct shipping ore (DSO).

Samples are processed and XRF analysed for the major oxides: $Al_2O_3$, $SiO_2$, $Fe_2O_3$, $TiO_2$ and LOI, as well as minor elements and recovery.

**Estimation methodology**

Basic geostatistical analysis is used to help with domaining decisions. Most deposits were modelled as a single laterally extensive domain, apart from Moingum (Hey Point), where two lateral extensive domains have been modelled due to difference in source rocks affecting thickness and grade. Four horizon codes, based on the lithology and assays, are assigned for the modelling and estimation of bauxite resources at Weipa and three at Gove vertically. Interpretation and estimation are currently performed using *Datamine's Studio RM* software, with variography undertaken in *FSS International Consultants (Australia) GS3M* software.

The bauxite horizon is flattened to the mid-point of the drill hole intersections at East Weipa and Andoom, while drill hole collars are flattened to constant elevation at Amrun, Norman Creek and Moingum (Hey Point). The wireframes are filled with blocks on an in/out basis; there is no sub-blocking or block proportions used. For the bauxite horizon, major oxides; LOI and Recovery are estimated into parent cells using ordinary kriging. Overburden and red soil are assigned 0% recovery for the estimation of resources. Cemented bauxite grade is estimated as part of the bauxite horizon and assigned a 100% recovery; the proportion of cemented bauxite is estimated as an indicator variable. Major oxide chemistry is also estimated for the overburden, red soil and ironstone horizons, where data is available. Ordinary kriging is used for interpolation, using the variogram models for the bauxite. Block sizes are determined by ½ the drill hole spacing for each deposit.

A multiple pass search strategy is used to estimate grades utilising different sized search ellipses that include a specified number of samples and drill holes. The lowest category (Pass 4) is not used in the East Weipa and Andoom areas. Maximum extrapolation distance is slightly less than the maximum search radii due to the requirement to use at least two holes to estimate each block.

**Cut-off grades and modifying factors**

RTA Pacific Operations employs a standard approach to identify Mineral Resource volumes with reasonable prospects for eventual economic extraction.

Once the Ore Reserves are defined based on applied economic factors in the reserving process, the remaining blocks are evaluated based on grade cut-offs, thickness cut-offs and location (environmental, cultural heritage and infrastructure buffers) for each of the different deposits, and Mineral Resources defined.

**Criteria used for Mineral Resource classification**

Classification within the bauxite horizon is based on the search pass used to estimate grades, using increasing search radii and decreasing numbers of samples for each subsequent pass. Passes 1 and 2 are classified as Measured Mineral Resources (120 to 180 m), Pass 3 as Indicated (360 m) and Pass 4 as Inferred.

## Summary of information to support the Ore Reserve reporting

The reduction in Ore reserve estimate is associated with a routine review of price assumptions over the life of the mine, and updated orebody knowledge. There has been no material change to the economic cut-off methodology or process. The Ore Reserve estimate is supported by a JORC Table 1 (Section 4) document provided in the appendix to this release and located at www.riotinto.com/investors/reserves-and-resources.

The following summary of information for the Ore Reserve estimate is provided in accordance with Rule 5.9 of the ASX Listing Rules.

### Economic assumptions and study outcomes

The Weipa assets have been operating continuously for several decades, and the Ore Reserve estimates, and life of mine plans are updated annually. This includes the reconciliation of operating parameters and review of input assumptions into the planning processes. The Ore Reserve estimate for Amrun is based on the completed and approved feasibility study and has now been in continuous operation for three years.

The Ore Reserve is mined through shallow, open cut techniques developed over several decades of operations. Once the area is tree cleared and the topsoil / overburden removed, the bauxite is hauled to the processing facility for washing and / or sizing. Product bauxite is stockpiled for shipping to both internal and external customers. Several mining areas are active at any one time to enable blending and to mitigate against operational risk.

Rio Tinto applies a common process to the generation of commodity price assumptions across the group. This involves generation of long-term price forecasts based on current sales contracts, industry capacity analysis, global commodity consumption and economic growth trends (this includes the bonus / penalty adjustments for quality). Exchange rates are also based on internal Rio Tinto modelling of expected future country exchange rates.

Capital and operating cost estimates are sourced from internal Rio Tinto financial modelling and / or project capital estimates. Third party payments are reflective of the current agreements in place.

Due to the commercial sensitivity of these assumptions, an explanation of the methodology used to determine these assumptions has been provided, rather than the actual figures.

### Mining method and assumptions

Dilution and mining recovery parameters are applied during the Ore Reserve estimation process, based on reconciliation of past performance and are reviewed annually. As the Ore Reserve is shallow, geotechnical risks are low. Stockpile heights and wet road conditions are managed in accordance with standard operating procedures

There has been no material change to other Ore Reserve modifying factors, such as: governmental, tenure, environmental, cultural heritage, social or community. Appropriate agreements and approvals remain in place to enable continued operation of these assets.

### Processing methods and assumptions

Weipa bauxite is beneficiated through established techniques to improve product quality and handleability. This is achieved through the removal of the finer fraction, leaving the coarser material as product. Expected bauxite recovery and quality from the beneficiation process is assessed through laboratory scale test work of samples generated from the resource drilling process.

**Cut-off grades, estimation methodology and modifying factors**

The Ore Reserve cut-off is based on an economic parameter, summarised as the margin realised upon sale of the bauxite. The economic cut-off approach considers revenue (bonus/penalty), fixed / operating / capital costs, royalties and other third-party payments. Bauxite that satisfies this economic cut-off, is considered for inclusion in the Ore Reserve. There has been no material change to the economic cut-off methodology or process.

**Criteria used for Ore Reserve classification**

Given the high level of confidence in the reserve modifying factors, the majority of Measured Resources were converted to Proved Ore Reserves and all Indicated Resources were converted to Probable Ore Reserves. Inferred Resources were not considered in the estimation of Ore Reserves.

## Competent Persons' Statement

The information in this report that relates to Mineral Resources is based on information compiled under the supervision of Mr Angus C. McIntyre, who is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM). Mr McIntyre has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity to which he is undertaking to qualify as a Competent Person as defined in the JORC Code. Mr McIntyre is a full-time employee of Rio Tinto and consents to the inclusion in this report of RTA Pacific Operations Bauxite Mineral Resources based on the information that he has prepared in the form and context in which it appears.

The information in this report that relates to Ore Reserves is based on information compiled under the supervision of Mr William Saba who is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM). Mr Saba has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity to which he is undertaking to qualify as a Competent Person as defined in the JORC Code. Mr Saba is a full-time employee of Rio Tinto and consents to the inclusion in this report of RTA Pacific Operations Bauxite Ore Reserve based on the information that he has prepared in the form and context in which it appears.

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This announcement is authorised for release to the market by Steve Allen, Rio Tinto's Group Company Secretary.

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## Weipa JORC Table 1

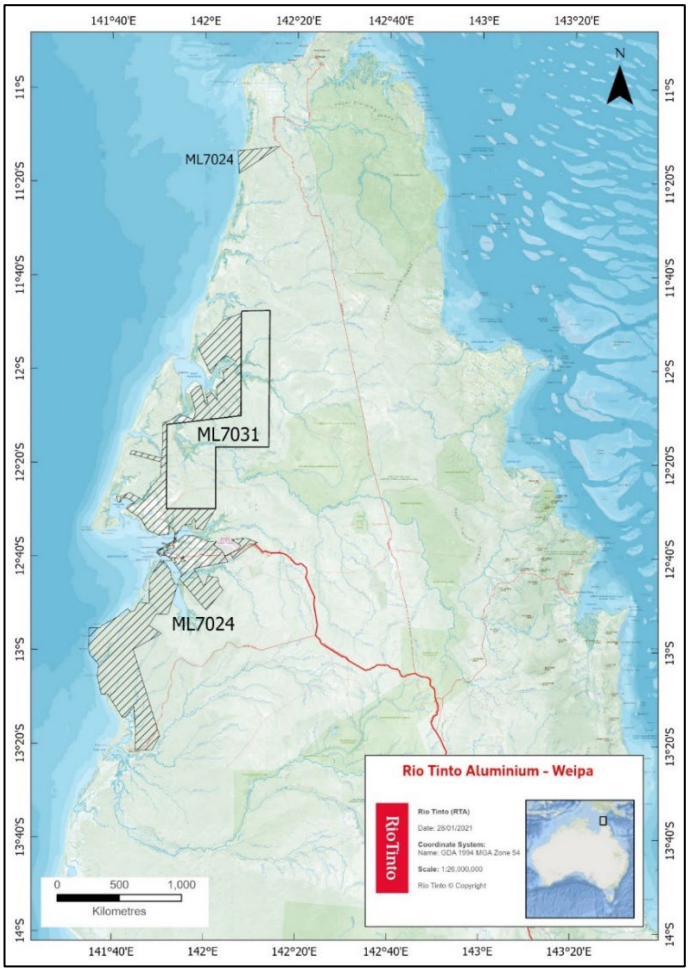
The following table provides a summary of important assessment and reporting criteria used at **Weipa** (as the combination of the Amrun and East Weipa / Andoom deposits) for the reporting of Mineral Resources and Ore Reserves in accordance with the Table 1 checklist in *The Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code, 2012 Edition)*. Criteria in each section apply to all preceding and succeeding sections.

### Section 1: Sampling Techniques and Data

| Criteria | Commentary |
|---|---|
| Sampling techniques | • Samples for geologic logging and analysis are collected on 0.25 m intervals (~2-3 kg) downhole using aircore drilling methods.<br>• Whole samples are collected beneath a cyclone return system (i.e., no sample splitting is conducted).<br>• Multiscreen sampling is undertaken to determine optimum screen size for beneficiation at each deposit.<br>• Once determined, samples are then beneficiated at the appropriate screen size (1.7 mm for East Weipa, 0.3 mm for Andoom and 0.6 mm for the Amrun deposits). |
| Drilling techniques | • The current drilling method utilises aircore drilling.<br>• The typical aircore rig used at Weipa is a Land Cruiser mounted rig with a small enough wheelbase to traverse drill lines cleared with one D-6 dozer blade width. Aircore drilling forces compressed air down a space inside the drill rods to the bit face, where the air is then used to return the sample up the inner tube of the drill rod and out via a cyclone. A three bladed HQ aircore bit is attached to 4-inch rods. The drilling system has been designed to reduce grinding of the sample.<br>• Historic drilling utilised auger drilling (until 1991). |
| Drill sample recovery | • No direct recovery measurements of aircore drilling samples are performed.<br>• Whole sample is taken.<br>• Holes are re-drilled if there is excessive sample loss (determined visually).<br>• Sample weights are recorded before and after beneficiation in the laboratory. |
| Logging | • Standardised Rio Tinto Aluminium Weipa bauxite logging systems are utilized for drilling.<br>• Logging is currently conducted on Panasonic Toughpads and data is captured in an offline acQuire logging package at the drill rig. This system allows for data validation to be applied during logging as well as a streamlined method of exporting the data for importing into the main RTA Geology database.<br>• Logging is qualitative in nature, i.e., based on lithology. Currently there are ~20 lithologies common to the deposits that get modelled into four horizons for the estimation of bauxite resources.<br>• All sample intervals (0.25 m) are logged.<br>• The holes are generally terminated four samples (1 m) into the floor lithologies as observed by the rig geologist.<br>• Logged lithologies are vetted against historical drill holes and assay parameters. |
| Sub-sampling techniques and sample preparation | • No sub-sampling undertaken.<br>• Sample preparation at Weipa is carried out at the purpose-built facility. The facility consists of two Kason washing screens, two drying ovens, a multiple screening facility, and grinding units. Beneficiated, un-beneficiated (crude) and multiscreen drill samples pass through this area prior to their being assayed for the major oxides and loss on ignition (LOI).<br>• Sample preparation at ALS, Brisbane was set up with the same specifications of equipment as Weipa, however, was scalable to install up to six Kasons, larger drying ovens, more grinding capability and room for multi-screens.<br>• The majority of analyses are undertaken at ALS laboratory in Brisbane since 2015, prior to that the majority of the analyses were done at Weipa. |
| Quality of assay data and laboratory tests | • Bauxite industry standard XRF analysis of all major elements and a suite of trace elements are undertaken on all samples.<br>• Matrix matched field standards are systematically used.<br>• Laboratory preparation duplicates and assay standards also form part of the QA/QC procedure.<br>• The Weipa Laboratory participates in a “round robin” process managed through the RTA Process Improvement team. This process includes all the RTA and affiliated laboratories and is reviewed on a |

| | |
|---|---|
| | quarterly basis to ensure that standards are maintained. The Weipa laboratory analysts also carry out internal checks on the assay data. Results not meeting certain criteria or outside a designated range are re-analysed. Standard and duplicate samples are also used by the Mine Geology Department to monitor the performance of the laboratory via standard QA/QC routines.<br>• The ALS, Brisbane laboratory maintains its NATA accreditation through annual inspections and testing as required. RTA visit and audit both the preparation facility and analytical rooms regularly.<br>• Every assay batch returned from the laboratories is checked through acQuire QA/QC objects before being accepted to the database for use in resource estimation. Major oxides, LOI, and KSiO2 are checked routinely against performance of field standards, lab duplicates, and lab standards.<br>• Any results for the standards that lie outside three (3) standard deviations of the mean are classified as failing QA/QC and assays excluded from modelling.<br>• Analysis of the performance of certified standards, field duplicates, blanks and third-party check assaying has indicated an acceptable level of accuracy and precision with no significant bias or contamination. |
| Verification of sampling and assaying | • Twin holes were historically used incorrectly. Samples were combined for the two and tested. Results were not comparable for verification purposes. Twin holes are not in use anymore.<br>• Infill drilling programs for resource definition return results in line with the wider spaced drilling.<br>• Data validation occurs throughout the data collection process: during data capture, during importation into the database, following import into the database and during the modelling process (hole name, location checks, RL checks, lithology order checks, missing data, incorrect data). |
| Location of data points | • Pre-2016 drill hole peg locations were surveyed to Australian Height Datum (AHD) and the Geocentric Datum of Australia 1994 (GDA94) grid (and converted to local mine grids) by contract surveyors using Differential Global Positioning System (DGPS) survey equipment which was accurate to 10 cm in both horizontal and vertical directions.<br>• Post 2016 surveys utilises GNSS GPS systems. Where survey has not been completed, e.g., Amrun 2018-2019 drilling campaign, LiDAR positioning of drill collar elevations are utilised to assist in the creation of the topographic surface. |
| Data spacing and distribution | • All downhole drill sampling is at 0.25 m intervals, and samples are taken of the roof and floor.<br>• No sample compositing is done. |
| Orientation of data in relation to geological structure | • Not applicable in lateritic bauxite deposits. All drill holes are vertical, which intersects the horizontal ore body perpendicularly. |
| Sample security | • Samples are collected, bagged, ticketed and sealed at the drill sites. Samples are placed in bulk plastic containers, with a capacity of ~ 300 samples, for shipment to the laboratory. All samples are electronically logged into a system for tracking and validation. Samples are placed on a dispatch advise form and verified by the laboratory on arrival. All assay pulps are stored at Weipa or ALS Brisbane in purpose-built sample storage facilities. |
| Audits or reviews | • An external Mineral Resource and Ore Reserve audit was completed in 2019 on the Weipa deposit. This audit had an outcome of Satisfactory with one medium and five low rated potential risks to the Mineral Resources and Ore Reserves. Actions were put in place to address all findings.<br>• Numerous internal peer reviews and studies have also been undertaken over the years. These reviews concluded that the fundamental data collection and modelling techniques were appropriate. |

## Section 2: Reporting of Exploration Results

| Criteria | Commentary |
|---|---|
| Mineral tenement and land tenure status | • The Weipa Bauxite deposits are located on the western side of the Cape York Peninsula in far north Queensland, Australia. Mining Lease (ML) 7024 and ML 7031 covers the various deposits. ML 7031 was obtained through the acquisition of Alcan in 2007. ML 6024 is a separate lease that is held in order to provide infrastructure access between the north of Embley and south of Embley operations at Weipa.<br>• ML 7024 was granted by the State Government of Queensland under a separate Act of Parliament, "The Commonwealth Aluminium Corporation Pty. Limited Agreement Act 1957". The effective date of the lease granted under this act is 1/1/1958 and the expiry date is 31/12/2041 with an option to extend to 31/12/2062. Lease extensions past 2062 can be obtained, beyond the initial renewal period, subject to both parties' right to terminate on two years notice.<br>• ML 7031 was granted by the State Government of Queensland under a separate Act of Parliament "The Alcan Queensland Pty. Limited Agreement Act of 1965". The effective date of the lease granted under this act is 1/1/1964 and the expiry date is 31/12/2047 with an option to extend to 31/12/2068. Lease extensions past 2068 can be obtained, beyond the initial renewal period, subject to both parties' right to terminate on two years notice.<br>  |

| | |
|---|---|
| Exploration done by other parties | • Not applicable. Weipa is a mature mining operation with more than 50 years of operational and orebody knowledge. |
| Geology | • The rocks of the Cape York Peninsula are divided into two geological units: the sedimentary rocks on the western side of the peninsula and the igneous and metamorphic rocks exposed in the hills on the eastern side of the peninsula (the Coen Inlier).<br>• The Cape York Peninsula bauxites are confined to a dissected laterite plateau, known officially as the Weipa Plateau on the west coast of Cape York Peninsula. The Weipa Plateau is one of three geomorphologic land units that are of particular interest to the geology of the bauxite and kaolin resources. The other two units are the Merluna Plain and the Mapoon Plain.<br>• The Weipa Plateau is a low plateau, usually no more than a few tens of metres above sea level and has been dissected by various river systems resulting in a series of irregularly shaped islands. It is intensely weathered to a depth of 20 m to 30 m with the upper part of the weathered material reconstituted into various nodules as well as some partially cemented rocks. The flatness of the plateau has meant it has been immune to erosion other than by rivers eating away at the sides. Much of the plateau's volume was removed in solution in the groundwater, which is also responsible for the formation of the bauxite. The sedimentary rocks of the Weipa Plateau fall into two categories:<br>▪ The Rolling Downs Group Sediments; and<br>▪ The Bulimba Formation Sediments (Weipa Beds).<br>• These two groups of sediments are eroded and weathered to form the Weipa bauxites. The different sediments resulted in different types of bauxite formations.<br>• The Bulimba Formation sediments lie on top of the Rolling Downs Group and occupy channels that cut down into them. The Rolling Downs Group were uplifted above sea level and weathered before the Bulimba Formation sediments deposited on them. The river sediments are less homogeneous than the marine ones. Deposition occurred as short erratic events rather than a slow continuous one and a changing sea level resulted in a mixture of sands and clays. The greater variability in the sediments is reflected in greater local variability in grade of the Weipa type bauxites.<br>• Andoom type bauxites are derived from shallow marine sediments that are fine grained, with very little quartz, and this material is generally screened at 0.3 mm. The Weipa type bauxites are derived from river deposited sediments that are coarse grained, with abundant quartz, and this material is therefore screened at 1.7 mm. Drilling at Amrun suggests a more intensely braided river system allowing more mixing between the Bulimba and Rolling Downs formations. This fits with the optimum screen size of the area being between the Andoom and Weipa deposits. Amrun is currently screened at 0.6 mm<br>• The Cape York Peninsula bauxites are thin, tabular deposits that vary from zero to 10 m in thickness and are continuous laterally for many kilometres. The unconsolidated pisolites are generally overlain by 0.5 m topsoil and sit on an ironstone base.<br>• The rocks of the Bulimba Formation and Rolling Downs Group have been converted to bauxite via a continuum of weathering. An annual high rainfall and a geologically stable environment has provided the perfect ingredients for a world-class bauxite deposit to form over many millions of years. A deep saprolitic zone overlain by a classic mottled zone below the bauxite mineralisation attests to this.<br>• The process of bauxitisation involves the conversion of kaolinite to the bauxite minerals gibbsite and boehmite. The principal influence on the process is the composition, supply and movement of groundwater. The pH of the groundwater is lowered during the process of bauxitisation, and we note that the process is still ongoing as we see a low pH regularly throughout the ground water monitoring bores across the RTA mining leases. To a lesser extent there are organic influences such as vegetation, and possibly burrowing organisms and temperature.<br>• The dissolution of both kaolin and quartz controls the distribution of silica grades in the deposits. The combination of kaolin and quartz distributions results in a typical vertical chemical profile that is usually found throughout the deposits and appears to be independent of the bauxite thickness i.e., the same vertical grade trend is found in both thin and thick bauxites. The typical vertical grade profile for silica is high silica at the top of the bauxite, which quickly drops to a much lower silica value that plateaus for the majority of the profile and then rises quickly back to high silica values again right at the base of the bauxite profile. As alumina is left behind by the dissolution of kaolinite, the typical |

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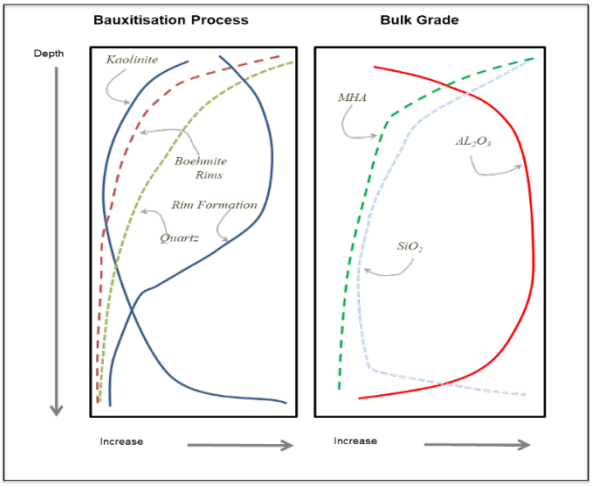
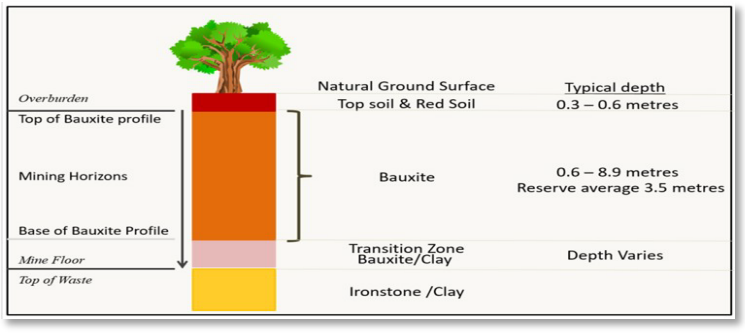
|---|---|
| | vertical grade profile for alumina is almost the inverse of silica. The relationships between the genetic processes and the resulting grade profiles are displayed in the figure on the next page.<br>  <br> |
| Drill hole Information | • As this report relates to Mineral Resources and no Exploration Results are being reported, this section is considered not applicable. Resource work is currently more focussed on asset evaluation rather than exploration, systematically bringing the bauxite classification to higher levels of confidence. |
| Data aggregation methods | • Not applicable. Weipa is a mature mining operation with more than 50 years of operational and orebody knowledge. |
| Relationship between mineralisation widths and intercept lengths | • All drill holes have been drilled perpendicular to the horizontal stratigraphy of the deposit.<br>• All known horizons of the deposits: overburden, red soil, bauxite and ironstone are intersected and sampled during drilling. Drilling continues for 1 m into the ironstone to ensure the transitional boundary between the ore and floor is intersected. |
| Diagrams | • Type section for the Weipa deposits.<br>  <br> |
| Balanced reporting | • Not applicable. Weipa is a mature mining operation with more than 50 years of operational and orebody knowledge. |
| Other substantive exploration data | • Not applicable. Weipa is a mature mining operation with more than 50 years of operational and orebody knowledge. |

| | |
|---|---|
| Further work | • Drilling will continue in the future to further support the five-year and life of mine plans, as well as options for future growth. |

## Section 3: Estimation and Reporting of Mineral Resources

| Criteria | Commentary |
|---|---|
| Database integrity | • Data capture is on *Panasonic Toughpad* digital loggers that have internal validation rules that identify logging errors.<br>• The geological drill hole database (RTA Geology) is managed by the Bauxite Geology Team within Rio Tinto Aluminium. Drilling data is securely stored in a *Microsoft* SQL Server using an *acQuire* front end. acQuire is a third-party software product that provides a user-friendly interface to SQL Server and consists of two components:<br>▪ a Relational Data Model (structured storage tables and links) optimised for the storing of exploration and mining data information; and<br>▪ a Software System (objects for data collect/importing/exporting, validation, viewing, modification, etc.) to manage the data and provide end user functionality for the optimum use of exploration and mining data.<br>• The database is located on a virtual server hosted in Rio Tinto's Azure cloud servers in Sydney. They are backed up daily in accordance with Rio Tinto's standard back up procedure.<br>• The drill hole database used for Mineral Resource estimation has been internally validated. Methods include checking:<br>▪ acQuire scripts for relational integrity, duplicates, total assay and missing / blank assay values.<br>▪ Domain names.<br>▪ Null and negative grade values.<br>▪ Missing or overlapping intervals.<br>▪ Duplicate data.<br>• Drill hole data was also validated visually by domain and compared to the geological model. |
| Site visits | • The Competent Person for the Weipa Mineral Resource visits the site on a regular basis and is involved in all aspects relating to the ore body knowledge. |
| Geological interpretation | • The Weipa bauxite geology is not complex in nature and is well understood as a predominantly pisolitic lateritic weathering profile.<br>• Geological modelling of the bauxite horizon is undertaken using drill hole lithological logging and assay data. Logged lithologies are grouped into four horizons for modelling and estimation purposes, these are:<br>▪ Overburden (Soil, Overburden, Sand).<br>▪ Red Soil (Red Soil and Soil Red).<br>▪ Bauxite (Bauxite, Clay Bauxite, Cemented Bauxite, Transition and Clay Transition).<br>▪ Ironstone (Ironstone, Clay ironstone, Transition, Clay Transition and Clay).<br>• For Transition and Clay Transition difficult to log in the field, horizon allocation is based on grade.<br>• Cross-sectional interpretation of the bauxite stratigraphy is conducted. Three-dimensional wireframes of the sectional interpretations are automatically produced and used to generate and inform the block model.<br>• Geological models using the 1970's data (4 out of 16 models) are not as reliable as those using post 1995 data due to the difference in the quality of drilling and sampling techniques. These areas currently have a downgraded classification and are systematically being replaced with new holes to increase confidence in the Mineral Resource estimation. |
| Dimensions | • The Weipa bauxite deposits are laterally very extensive, covering the majority of ML 7024 and ML 7031 (~380k ha). Deposits vary in average thickness from 1.5 m to around 8 m and vary from 0.3 m to 0.6 m below surface cover. |

Estimation and modelling techniques

- Basic geostatistical analysis is used to help with domaining decisions. Most deposits were modelled as a single domain, apart from Moingum (Hey Point) where two domains have been modelled due to differences in bauxite thickness, grades and source rocks.
- Interpretation and estimation are performed using Datamine's Studio RM software, with variography undertaken in FSS International Consultants (Australia) GS3M software.
- Four horizon codes, based on the lithology and assays, are assigned for the modelling and estimation of bauxite resources, see the Geological Interpretation section. Each deposit is a single domain laterally, divided into four horizons vertically.
- The bauxite horizon is flattened to the mid-point of the drill hole intersections at East Weipa and Andoom, while drill hole collars are flattened to constant elevation at Amrun, Norman Creek and Moingum (Hey Point). The wireframes are filled with blocks on an in/out basis; there is no sub-blocking or block proportions used.
- Major oxides, LOI and Recovery for the bauxite horizon are estimated using ordinary kriging into parent cells.
- Overburden and red soil are assigned 0% recovery for the estimation of resources.
- Cemented bauxite grade is estimated as part of the bauxite horizon and assigned a 100% recovery; the proportion of cemented bauxite is estimated as an indicator variable.
- Major oxide chemistry is also estimated for the overburden, red soil and ironstone horizons, where data is available. Ordinary kriging is used for interpolation, using the variogram models from the bauxite domain.
- A multiple pass search strategy is used to estimate grades, as shown in the following table. Pass 4 is not used in the East Weipa and Andoom areas. Maximum extrapolation distance is slightly less than the maximum search radii due to the requirement to use at least two holes to estimate each block.

| | Search Radii | | | Samples | | |
|---|---|---|---|---|---|---|
| **Pass** | **X (m)** | **Y (m)** | **Z (m)** | **Min** | **Max** | **Per Hole** |
| 1 | 120 | 120 | 1.0 | 12 | 24 | 5 |
| 2 | 180 | 180 | 1.5 | 8 | 24 | 5 |
| 3 | 360 | 360 | 3.0 | 8 | 24 | 5 |
| 4 | 720 | 720 | 6.0 | 8 | 24 | 5 |

- There are no extreme grade values, so no grade cutting is required.
- Estimation parameters and search distances are determined from consideration of the drill hole and sample spacing in each deposit, as well as the anisotropy of the variogram models.
- The plan extents of the block models extend at least two blocks past the drilling grid. In the vertical direction, four 'edge' blocks are created below the base of drilling.
- The block size is set at half the drill hole spacing in the horizontal (40 m x 40 m at Andoom and East Weipa; 50 m x 50 m at Amrun) and at the sample spacing in the vertical (i.e., 0.25 m).
- The model block size effectively is the selective mining unit (SMU).
- Deleterious element silica is assayed using XRF. Kaolinite (reactive silica) is determined using NIR analysis. Quartz is determined by difference.
- No specific assumptions are made regarding the correlation of variables during estimation as each element is estimated independently. Some attributes do show strong positive or negative correlation in the drill hole samples, and the similarity in variogram models for different attributes and identical search parameters effectively guarantee that these correlations are preserved in the estimates.
- Routine validation of the block model estimation is completed using global model versus sample statistics, swathe plots, grade tonnage curves, volume checks, and visual cross-section comparisons

| | |
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| | (block estimates against drill hole samples). Filtering by search volume and number of samples can improve comparisons.<br>• The Mineral Resource estimates take appropriate account of previous estimates and mine production. The new models are broadly comparable with previous estimates despite significant changes in methodology. While detailed reconciliation has not been undertaken, the new models appear to reconcile with mine production within tolerable limits, as previous estimates did. |
| Moisture | • All Mineral Resource tonnages are reported on a dry basis.<br>• All Mineral Resources are reported as the beneficiated dry product, except for North of Weipa (reported as DSO product). |
| Cut-off parameters | • Grade cut-offs are routinely used to determine the potential Mineral Resources of the modelled horizons. Where lithological contacts are transitional, chemical cut-offs based on alumina and silica are used with <15% $SiO_2$ and > 40% $Al_2O_3$. These blocks are then reviewed against location (buffer areas), as well as thickness cut-offs ranging from 0.5 m to 1 m for each deposit.<br>• The estimation of Ore reserves utilises an economic parameter, summarised as the margin realised upon sale of the bauxite. The economic parameter is used as a check to validate technical resource assumptions applied in determining available resources. |
| Mining factors or assumptions | • Weipa is mined through shallow open cut techniques developed over several decades of operations. After topsoil is removed, front end loaders excavate the bauxite and belly dump trucks transport the bauxite to the beneficiation plant.<br>• As the Weipa orebodies are shallow, geotechnical risks are extremely low. Pre-production drilling is completed in order to provide better definition of the roof and floor contacts for the five-year mine planning process.<br>• Estimates include internal dilutional but no allowance for external dilution or mining recovery. Dilution and mining recovery are applied during the reserving process, not during estimation.<br>• A minimum mining thickness for the bauxite horizon of 0.5 m is used for the final determination of resource figures. |
| Metallurgical factors or assumptions | • Weipa bauxite is beneficiated through established techniques to improve product quality and handleability. This is achieved through the removal of the finer fraction and leaves the coarser material as product.<br>• The beneficiation process typically involves wet screening and may include the use of cyclones and classifiers depending on the part of the deposit being beneficiated.<br>• Expected bauxite recovery and quality from the beneficiation process is assessed through laboratory scale test work of samples generated from the resource drilling process.<br>• Bauxite mineralogy has been investigated through numerous studies, primarily using wet chemical techniques, to understand how it will react in the Bayer Process, which is used to extract the alumina at the refineries.<br>• A proprietary mineralogical calculator "MinCalc" is used to estimate bauxite mineralogy and Bayer processing grade for Cape York ore from the routinely collected elemental chemistry and thermogravimetry, as routine wet chemical techniques are prohibitively expensive. MinCalc calibration is orebody specific and is validated and recalibrated during the life of mine operations. |
| Environmental factors or assumptions | • East Weipa, Andoom and Amrun have obtained all relevant environmental approvals required to continue operations.<br>• Operation of tailings dams at Weipa (East Weipa and Andoom) and Amrun are covered by relevant government permits. |
| Bulk density | • Bulk density is not measured on drill hole samples and is not modelled.<br>• Bulk density has been determined by using the Sand Replacement Method and Nuclear Density Gauge Testing according to Australian standards AS 1289.5.3.1-1993 and AS 1289.5.8.1-1995.<br>• A number of studies have been conducted over the deposits with the most common test pit spacing being 5,000 m. This produced the bulk density utilised in resource tonne calculations.<br>• Default values are also assigned to cemented bauxite, overburden and floor material for each of the different deposits at Weipa, see the table on the next page. |

| Bulk Density Parameters | Value (t/m3) |
|---|---|
| Overburden | 1.23 |
| Bauxite | 1.47 – 1.67* |
| Cemented Bauxite | 2.50 |
| Ironstone/Floor | 1.42 |

**Different for each deposit*

**Classification**

- Drilling is conducted to a 76.2 m x 76.2 m (Andoom and East Weipa) or 50 m x 100 m (at Amrun) spacing for grade control purposes.
- To be declared a Measured Resource a deposit must be drilled to a 152.4 m x 152.4 m (Andoom and East Weipa) or 100 m x 200 m (at Amrun) spacing.
- Indicated Resources are drilled on a 305 m x 305 m (Andoom and Weipa) or 200 m x 400 m (at Amrun) spacing.
- Inferred Resources are drilled on a 914.4 m x 914. 4m (Andoom and East Weipa) or 800 m x 1200 m (at Amrun) spacing and utilize multiscreen drilling.
- Classification within the bauxite horizon is based on the search pass used to estimate grades, using increasing search radii and decreasing numbers of samples for each subsequent pass. Passes 1 and 2 are classified as Measured Resources, Pass 3 as Indicated and Pass 4 as Inferred.

| | | Search Radii | | | Samples | | |
|---|---|---|---|---|---|---|---|
| **Resource Category** | **Pass** | **X (m)** | **Y (m)** | **Z (m)** | **Min** | **Max** | **Per Hole** |
| **Measured** | 1 | 120 | 120 | 1.0 | 12 | 24 | 5 |
| | 2 | 180 | 180 | 1.5 | 8 | 24 | 5 |
| **Indicated** | 3 | 360 | 360 | 3.0 | 8 | 24 | 5 |
| **Inferred** | 4 | 720 | 720 | 6.0 | 8 | 24 | 5 |

- Appropriate account has been taken of all relevant factors.
- The Competent Person is satisfied that the current Mineral Resource classification reflects the relevant factors for the deposit.

**Audits or reviews**

- An external Resource and Reserve audit was completed in 2019 on the Weipa deposit. This audit had an outcome of Satisfactory with one medium and five low rated potential risks to the Mineral Resources and Ore Reserves. Actions were put in place to address all findings.
- Numerous internal peer reviews and studies have also been undertaken over the years. These reviews concluded that the estimation techniques were appropriate.

**Discussion of relative**

- The relative accuracy and confidence level in the Mineral Resource estimates are considered to be in line with the generally accepted accuracy and confidence of the nominated JORC Mineral Resource categories. This has been determined on a qualitative, rather than quantitative, basis, and is based on the estimator's experience with a number of deposits at Cape York and similar deposits elsewhere.

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| accuracy/ confidence | The main factors that affect the relative accuracy and confidence of the estimates are the drill hole spacing and the local definition of the lithological horizons.<br>• The estimates are local, in the sense that they are localised to model blocks of a size considered appropriate for local grade estimation. The tonnages relevant to technical and economic analysis are those classified as Measured and Indicated Mineral Resources. |

## Section 4: Estimation and Reporting of Ore Reserves

| Criteria | Commentary |
|---|---|
| Mineral Resource estimate for conversion to Ore Reserves | • The Ore Reserve estimates are developed from the geological models current as of September 2021, and the Mineralogy model updated in 2020.<br>• Mineral Resources are stated exclusive of Ore Reserves. |
| Site visits | • The Ore Reserves Competent Person has been employed by Rio Tinto Aluminium for a significant period and has visited Weipa several times in recent years. |
| Study status | • Weipa Operations has been operating continuously for several decades, and the Ore Reserve estimate and life of mine plan are updated annually. This includes the reconciliation of operating parameters and review of input assumptions into the planning processes.<br>• The Ore Reserve estimate for Amrun is based on the completed and approved feasibility study and has now been in continuous operation for three years. This includes the reconciliation of operating parameters and review of input assumptions into the planning processes. |
| Cut-off parameters | • The Ore Reserve cut-off is based on an economic parameter, summarised as the margin realised upon sale of the bauxite. The economic cut-off approach considers revenue (bonus/penalty), fixed/operating/capital costs, royalties and other third-party payments. Bauxite that satisfies this economic cut-off, is considered for inclusion in the Ore Reserve. |
| Mining factors or assumptions | • The Ore Reserve is mined through shallow, open cut techniques developed over several decades of operations. Once the area is tree cleared and the topsoil/overburden removed, the bauxite is hauled to the beneficiation plant for processing. Several mining areas are active at any one time to enable blending and to mitigate against operational risk.<br>• As the Ore Reserve is shallow, geotechnical risks are low. Stockpile heights and wet road conditions are managed in accordance with standard operating procedures<br>• Dilution and mining recovery parameters are applied during the Ore Reserve estimation process, based on reconciliation of past performance and reviewed annually.<br>• Minimum bauxite mining thickness of 0.9 m is used for Amrun Ore Reserve estimation.<br>• Inferred Mineral Resources are not considered in the estimation of Ore Reserves. |
| Metallurgical factors or assumptions | • Weipa bauxite is beneficiated through established techniques to improve product quality and handleability. This is achieved through the removal of the finer fraction, leaving the coarser material as product. The beneficiation process typically involves wet screening and may include the use of cyclones and classifiers depending on the part of the deposit being beneficiated.<br>• Expected bauxite recovery and quality from the beneficiation process is assessed through laboratory scale test work of samples generated from the resource drilling process.<br>• Extractable alumina is calculated through application of a Mineralogy model. |
| Environmental | • All relevant environmental approvals have been obtained to continue operations.<br>• An EIS has been completed for Amrun with the relevant governmental approvals having been obtained.<br>• Operation of tailings dams at Weipa (East Weipa, Amrun and Andoom) are covered by relevant government permits. |
| Infrastructure | • As East Weipa, Andoom and Amrun are all established sites, all appropriate infrastructure for the existing operation is already developed. This includes water, power, sewage, stores, maintenance |

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| | workshops, administration buildings and the Weipa township. Any infrastructure expansion required in the future is allowed for in the financial modelling that supports the Ore Reserve. |
| Costs | • Operating and sustaining capital costs are sourced from the Weipa Operations financial model.<br>• Future capital costs are based on project study estimates or five-year plan sustaining capital amounts.<br>• Traditional owner and carbon tax assumptions are factored into the financial modelling.<br>• Exchange rates are based on internal Rio Tinto modelling of expected future country exchange rates. |
| Revenue factors | • Commodity prices are based on internal Rio Tinto modelling of the future supply and demand balance for bauxite, alumina and aluminium. This includes the bonus and penalty adjustments for quality.<br>• Queensland royalties are included in the financial modelling at 10.0% of the bauxite price.<br>• Exchange rates are based on internal Rio Tinto modelling of expected future country exchange rates. |
| Market assessment | • Industry analysis is undertaken to assess the existing and future supply and demand balances in bauxite, alumina and aluminium. This includes assessing likely incentive pricing required to bring on new capacity.<br>• Internal Rio Tinto forecasting revises production guidance on an annual basis. |
| Economic | • Operating costs are built up from first principles while capital costs are included based on current estimates. Appropriate escalation is built in where capital costs are to be incurred in the future.<br>• The discount rate to be used in the NPV model is supplied from Rio Tinto corporate and is set based on risk adjusted cost of capital.<br>• Sensitivity analysis is carried out to assess key project drivers and the sensitivity of the project economics to movements in these drivers. |
| Social | • Weipa has in place the Weipa Community Co-existence Agreement (WCCCA) with local traditional owners. It also has a Community Relations department that seeks to build relationships with the local communities in and around Weipa. |
| Other | • Tenure to exploit the Weipa deposit is granted through two state agreements and is held through two mining leases ML 7024 and ML 7031.<br>• The Queensland Government Comalco (ML 7024) lease expires in 2041 with an option of a 21-year extension, then two years' notice of termination; the Ely Alcan Queensland Pty. Limited Agreement Act 1965 (ML7031) expires in 2048 with a 21-year right of renewal with a two-year notice period.<br>• An EIS process was completed for the Amrun brown field mining expansion. Both the Queensland and Commonwealth governments have approved the EIS subject to several conditions. |
| Classification | • Given the high level of confidence in the reserve modifying factors, most Measured Resources were converted to Proved Ore Reserves and all Indicated Resources were converted to Probable Ore Reserves.<br>• Inferred Mineral Resources are not considered in the estimation of Ore Reserves.<br>• The Competent Person is satisfied that the current classification is reasonable for the Weipa Ore Reserves.<br>• The Competent Person is satisfied that the stated Ore Reserve classification reflects the outcome of technical and economic studies. |
| Audits or reviews | • A Mineral Resource and Ore Reserve internal audit was completed in 2019 and in 2015 on the Weipa deposit. These audits concluded that there were medium and low rated potential risks to the Mineral Resources and Ore Reserves. All findings from the recent audit have been actioned for completion by end of 2022. |
| Discussion of relative accuracy/ confidence | • Ore Reserve estimates are compared with production data on a half yearly and annual basis at Weipa. This reconciliation shows that for all key parameters, production was within ±5% of the estimates for calendar year 2021. |