Rio Tinto

Notice to ASX

Mineral Resources and Ore Reserves updates: supporting information and Table 1 checklists

21 February 2024

Rio Tinto today announces changes in Mineral Resources and Ore Reserves to support its 2023 annual reporting, including:

- Decreased Mineral Resources at the Rio Tinto Kennecott (RTK) Bingham Canyon open pit deposit in Utah, United States of America.
- Increased Ore Reserves and associated decreased Mineral Resources at the Rio Tinto Aluminium (RTA) Pacific Operations Amrun deposit in Queensland, Australia.
- Revised classification for the Ore Reserves at the Iron Ore Company of Canada (IOC) operations in Newfoundland and Labrador, Canada.

The changes in Mineral Resources and Ore Reserves are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 Edition (JORC Code) and the ASX Listing Rules. Supporting information relating to the changes of Mineral Resources and Ore Reserves is set out in this release and its appendices. Mineral Resources and Ore Reserves are quoted in this release on a 100 percent basis. Mineral Resources are reported in addition to Ore Reserves. The figures used to calculate Mineral Resources and Ore Reserves are often more precise than the rounded numbers shown in the tables, hence small differences may result if the calculations are repeated using the tabulated figures.

These changes will be included in Rio Tinto's 2023 Annual Report, to be released to the market on 21 February 2024, which will set out in full Rio Tinto's Mineral Resources and Ore Reserves position as at 31 December 2023, and Rio Tinto's interests.

Rio Tinto Kennecott

Mineral Resources and Ore Reserves for the RTK Bingham Canyon open pit are presented in Table A and Table B. Mineral Resources tonnes have decreased by 21 Mt (22%) as a result of the conversion of the East Wall Extension to Ore Reserves, removal of an opportunity to steepen the South Wall due to geotechnical concerns and changes to economic assumptions. There is an associated increase in Ore Reserves as a result of the East Wall conversion, which has been offset by depletion.

Rio Tinto Aluminium Pacific Operations – Amrun

Mineral Resources and Ore Reserves for the RTA Amrun deposit are presented in Table C and Table D. Mineral Resources exclusive of Ore Reserves have decreased by 55 Mt (7%) at Amrun due to conversion of Mineral Resources to Ore Reserves resulting from a routine review of price assumptions over the life of the mine, and updated orebody knowledge.

Ore Reserves have increased by 149 Mt (19%) at Amrun. The increase in Ore Reserves 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 other modifying factors, including governmental, tenure, environmental, cultural heritage, community or operational.

Iron Ore Company of Canada

Mineral Resources and Ore Reserves for IOC are presented in Table E and Table F. The classification of the Ore Reserves has changed as a result of reclassification of a significant proportion of the Proved Ore Reserves to Probable Ore Reserves. The change reflects a lower level of confidence in the modifying factors in areas supported by older data which does not have recovery and grind energy geometallurgical data.

Table A Rio Tinto Kennecott Copper Bingham Canyon open pit Mineral Resources as at 31 December 2023

	Likely mining method(1)	Measured Mineral Resources as at 31 December 2023					Indicated Mineral Resources as at 31 December 2023					Total Measured and Indicated Mineral Resources as at 31 December 2023				
		Tonnage	Grade				Tonnage	Grade				Tonnage	Grade			
Copper(2)		Mt	% Cu	g/t Au	g/t Ag	% Mo	Mt	% Cu	g/t Au	g/t Ag	% Mo	Mt	% Cu	g/t Au	g/t Ag	% Mo
Bingham Canyon (US)																
- Bingham Open Pit(3)	O/P	38	0.47	0.15	2.47	0.020	22	0.39	0.16	2.66	0.016	59	0.44	0.15	2.54	0.018

	Inferred Mineral Resources as at 31 December 2023					**Total Mineral Resources as at 31 December 2023**					Rio Tinto interest	Total Mineral Resources as at 31 December 2022				
	Tonnage	Grade				**Tonnage**	**Grade**					Tonnage	Grade			
Copper(2)	Mt	% Cu	g/t Au	g/t Ag	% Mo	**Mt**	**% Cu**	**g/t Au**	**g/t Ag**	**% Mo**	%	Mt	% Cu	g/t Au	g/t Ag	% Mo
Bingham Canyon (US)																
- Bingham Open Pit(3)	12	0.26	0.20	2.56	0.005	**72**	**0.41**	**0.16**	**2.55**	**0.016**	100.0	93	0.43	0.15	2.24	0.016

1. Likely mining method: O/P = open pit/surface.
2. Copper Mineral Resources are reported on a dry in situ weight basis.
3. Bingham Canyon Open Pit Mineral Resources molybdenum grades interpolated from exploration drilling assays have been factored based on a long reconciliation history to blast hole and mill samples.

Table B Rio Tinto Kennecott Copper Bingham Canyon open pit Ore Reserves as at 31 December 2023

	Type of mine(1)	Proved Ore Reserves as at 31 December 2023					Probable Ore Reserves as at 31 December 2023					**Total Ore Reserves as at 31 December 2023**				
		Tonnage	Grade				Tonnage	Grade				**Tonnage**	**Grade**			
Copper(2)		Mt	% Cu	g/t Au	g/t Ag	% Mo	Mt	% Cu	g/t Au	g/t Ag	% Mo	**Mt**	**% Cu**	**g/t Au**	**g/t Ag**	**% Mo**
Bingham Canyon (US)																
- Bingham Open Pit(3)	O/P	470	0.37	0.18	1.98	0.038	360	0.36	0.18	1.98	0.028	**829**	**0.37**	**0.18**	**1.98**	**0.033**

	Average mill recovery %				Rio Tinto interest	**Rio Tinto share recoverable metal**				Total Ore Reserves as at 31 December 2022				
										Tonnage	Grade			
Copper(2)	Cu	Au	Ag	Mo	%	**Mt Cu**	**Moz Au**	**Moz Ag**	**Mt Mo**	Mt	% Cu	g/t Au	g/t Ag	% Mo
Bingham Canyon (US)														
- Bingham Open Pit(3)	89	69	71	63	100.0	**2.681**	**3.257**	**37.686**	**0.176**	880	0.38	0.18	1.97	0.033

1. Type of Mine: O/P = open pit/surface.
2. Copper Ore Reserves are reported as dry mill feed tonnes.
3. Bingham Canyon Open Pit Ore Reserves molybdenum grades interpolated from exploration drilling assays have been factored based on a long reconciliation history to blast hole and mill samples.

Table C Rio Tinto Aluminium Pacific Operations Mineral Resources as at 31 December 2023

	Likely mining method[1]	Measured Mineral Resources as at 31 December 2023			Indicated Mineral Resources as at 31 December 2023			Total Measured and Indicated Mineral Resources as at 31 December 2023		
		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
Rio Tinto Aluminium (Australia)[2]										
- Amrun	O/P	115	49.2	11.7	388	49.7	11.7	504	49.6	11.7
- East Weipa and Andoom	O/P	43	49.9	8.8	-	-	-	43	49.9	8.8
- Gove	O/P	9	48.1	8.9	0.4	47.8	8.9	9	48.1	8.9
- North of Weipa	O/P	-	-	-	202	52.0	11.1	202	52.0	11.1
Total (Australia)		**167**	**49.3**	**10.8**	**591**	**50.5**	**11.5**	**759**	**50.2**	**11.4**

	Inferred Mineral Resources as at 31 December 2023			**Total Mineral Resources as at 31 December 2023**			Rio Tinto interest	Total Mineral Resources as at 31 December 2022		
	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
Rio Tinto Aluminium (Australia)[2]										
- Amrun	285	51.7	12.1	**788**	**50.4**	**11.9**	100.0	843	50.6	11.8
- East Weipa and Andoom	-	-	-	**43**	**49.9**	**8.8**	100.0	53	49.3	8.5
- Gove	0.01	46.9	8.1	**9**	**48.1**	**8.9**	100.0	13	48.3	9.0
- North of Weipa	1,248	51.8	11.4	**1,451**	**51.9**	**11.4**	100.0	1,330	52.0	11.6
Total (Australia)	**1,533**	**51.8**	**11.5**	**2,291**	**51.3**	**11.5**		2,240	51.4	11.6

1. Likely mining method: O/P = open pit/surface.
2. Rio Tinto Aluminium bauxite Mineral Resources are stated as dry product tonnes and total alumina and silica grades.

Table D Rio Tinto Aluminium Pacific Operations Ore Reserves as at 31 December 2023

	Type of mine[1]	Proved Ore Reserves as at 31 December 2023			Probable Ore Reserves as at 31 December 2023			**Total Ore Reserves as at 31 December 2023**		
		Tonnage	Grade		Tonnage	Grade		**Tonnage**	**Grade**	
Bauxite[2]		Mt	% Al_2O_3	% SiO_2	Mt	% Al_2O_3	% SiO_2	**Mt**	**% Al2O3**	**% SiO2**
Rio Tinto Aluminium (Australia)[3]										
- Amrun	O/P	263	53.9	9.2	688	54.5	9.0	**950**	**54.3**	**9.1**
- East Weipa and Andoom	O/P	69	50.5	7.9	3	49.5	8.7	**72**	**50.5**	**8.0**
- Gove	O/P	57	50.2	6.4	0.7	50.5	5.0	**58**	**50.2**	**6.4**
Total (Australia)		**388**	**52.8**	**8.6**	**692**	**54.4**	**9.0**	**1,080**	**53.8**	**8.8**

	Rio Tinto interest	**Rio Tinto share recoverable mineral**	Total Ore Reserves as at 31 December 2022		
			Tonnage	Grade	
Bauxite[2]	%	**Mt**	Mt	% Al2O3	% SiO2
Rio Tinto Aluminium (Australia)[3]					
- Amrun	100.0	950	801	54.6	8.9
- East Weipa and Andoom	100.0	72	59	51.7	7.1
- Gove	100.0	58	56	50.5	5.8
Total (Australia)	100.0	**1,080**	916	54.2	8.6

1. Type of Mine: O/P = open pit/surface.
2. Bauxite Ore Reserves are stated as recoverable Ore Reserves of marketable product after accounting for all mining and processing losses. Mill recoveries are therefore not shown.
3. Australian bauxite Ore Reserves are stated as dry tonnes and total alumina and silica grade.

Table E Iron Ore Company of Canada Mineral Resources as at 31 December 2023

	Likely mining method[1]	Measured Mineral Resources as at 31 December 2023					Indicated Mineral Resources as at 31 December 2023					Total Measured and Indicated Mineral Resources as at 31 December 2023				
		Tonnage	Grade				Tonnage	Grade				Tonnage	Grade			
Iron ore[2]		Mt	% Fe	% SiO_2	% Al_2O_3	% P	Mt	% Fe	% SiO_2	% Al_2O_3	% P	Mt	% Fe	% SiO2	% Al2O3	% P
Iron Ore Company of Canada (Canada)[3]	O/P	171	40.8	35.8	0.2	0.02	720	38.5	37.1	0.2	0.03	891	39.0	36.8	0.2	0.03

	Inferred Mineral Resources as at 31 December 2023					**Total Mineral Resources as at 31 December 2023**					Rio Tinto interest	Total Mineral Resources as at 31 December 2022				
	Tonnage	Grade				**Tonnage**	**Grade**					Tonnage	Grade			
Iron ore[2]	Mt	% Fe	% SiO_2	% Al_2O_3	% P	**Mt**	**% Fe**	**% SiO_2**	**% Al_2O_3**	**% P**	%	Mt	% Fe	% SiO_2	% Al_2O_3	% P
Iron Ore Company of Canada (Canada)[3]	751	38.2	37.8	0.2	0.03	**1,641**	**38.6**	**37.3**	**0.2**	**0.03**	58.7	1,666	38.7	37.4	0.2	0.03

1. Likely mining method: O/P = open pit/surface.
2. Iron ore Mineral Resources are stated on a dry in situ weight basis.
3. Iron Ore Company of Canada (IOC) Mineral Resources have the potential to produce marketable product (57% pellets and 43% concentrate for sale at a natural moisture content of 2%) comprising 73 million tonnes at 65% iron 2.7% silica (Measured), 301 million tonnes at 65% iron 2.7% silica (Indicated) and 308 million tonnes at 65% iron 2.7% silica (Inferred) using process recovery factors derived from current IOC concentrating and pellet operations. LOI is not determined for resource drilling samples, so no estimate of % LOI is available for Mineral Resources.

Table F Iron Ore Company of Canada Ore Reserves as at 31 December 2023

	Type of mine[1]	Proved Ore Reserves as at 31 December 2023			Probable Ore Reserves as at 31 December 2023			**Total Ore Reserves as at 31 December 2023**		
		Tonnage	Grade		Tonnage	Grade		**Tonnage**	**Grade**	
Iron ore[2]		Mt	% Fe	% SiO_2	Mt	% Fe	% SiO_2	**Mt**	**% Fe**	**% SiO_2**
Iron Ore Company of Canada (Canada)[3]	O/P	149	65.0	2.8	275	65.0	2.8	**423**	**65.0**	**2.8**

	Rio Tinto interest	**Rio Tinto share marketable product**	Total Ore Reserves as at 31 December 2022		
			Tonnage	Grade	
Iron ore[2]	%	**Mt**	Mt	% Fe	% SiO_2
Iron Ore Company of Canada (Canada)[3]	58.7	**249**	453	65.0	3.0

1. Type of Mine: O/P = open pit/surface.
2. Ore Reserves of iron ore are shown as recoverable Ore Reserves of marketable product after accounting for all mining and processing losses. Mill recoveries are therefore not shown.
3. Iron Ore Company of Canada (IOC) Ore Reserves are reported as marketable product (57% pellets and 43% concentrate for sale) at a natural moisture content of 2%. The marketable product is derived from mined material comprising 357 million dry tonnes at 38% iron, 36% silica, 0.23% alumina, 0.022% phosphorus (Proved) and 651 million dry tonnes at 38% iron, 35% silica, 0.19% alumina, 0.023% phosphorus (Probable) using process recovery factors derived from current IOC concentrating and pellet operations. No meaningful relationship has been established between the product and feed grades of alumina and phosphorus, so these grades cannot be reported for Ore Reserves. Saleable product is produced to meet silica grade specifications, so the Ore Reserves silica grade is the targeted silica grade for the currently anticipated long-term product mix. Loss on Ignition (LOI) is not determined for resource drilling samples, so no estimate of % LOI is available for Ore Reserves.

Rio Tinto Kennecott - Bingham Canyon

The RTK open pit Mineral Resources and Ore Reserves are contained within the Bingham Canyon copper, gold, and molybdenum porphyry deposit and are mined by an open pit located 41 km southwest of Salt Lake City, Utah, United States of America (Figure 1). Mining areas include the Slice 1 and Slice 2 mining cuts in the South Wall of the open pit and Apex mining cut in the North Wall. The Ore Reserves for the open pit mine are supported by the Apex feasibility study expected to be completed in 2024.

An area in the East Wall called the East Wall Extension was identified as an opportunity to convert Mineral Resources to Ore Reserves. Due to the geometry of limestone beds and narrow mining widths, the opportunity presents geotechnical issues and mining width challenges for successful mining. A total of 12 benches have been excavated from the East Wall Extension since 2021, confirming that mining in this area is possible despite the geotechnical challenges. The East Wall Extension, totalling 8 Mt, has been converted to Ore Reserves, which resulted in a reduction of 8% of Mineral Resources and an addition of 1% of Ore Reserves.

An option to steepen the ultimate wall in the South Wall called the Slice 2 Max Ore has been evaluated over the last 2 years. Execution of the design began in 2022 but given geotechnical concerns the decision was made to no longer pursue steepening a portion of the South Wall. As a result, the Mineral Resources associated with this opportunity have been removed resulting in a reduction of 3% of Mineral Resources. Additional changes are a result of updated economic assumptions.

Additional changes in the Ore Reserves model and depletion of grades to account for historic pit wall failures in the open pit resulted in an additional reduction of 4% of Ore Reserves. Changes to Mineral Resources and Ore Reserves are shown in Table G and Table H.

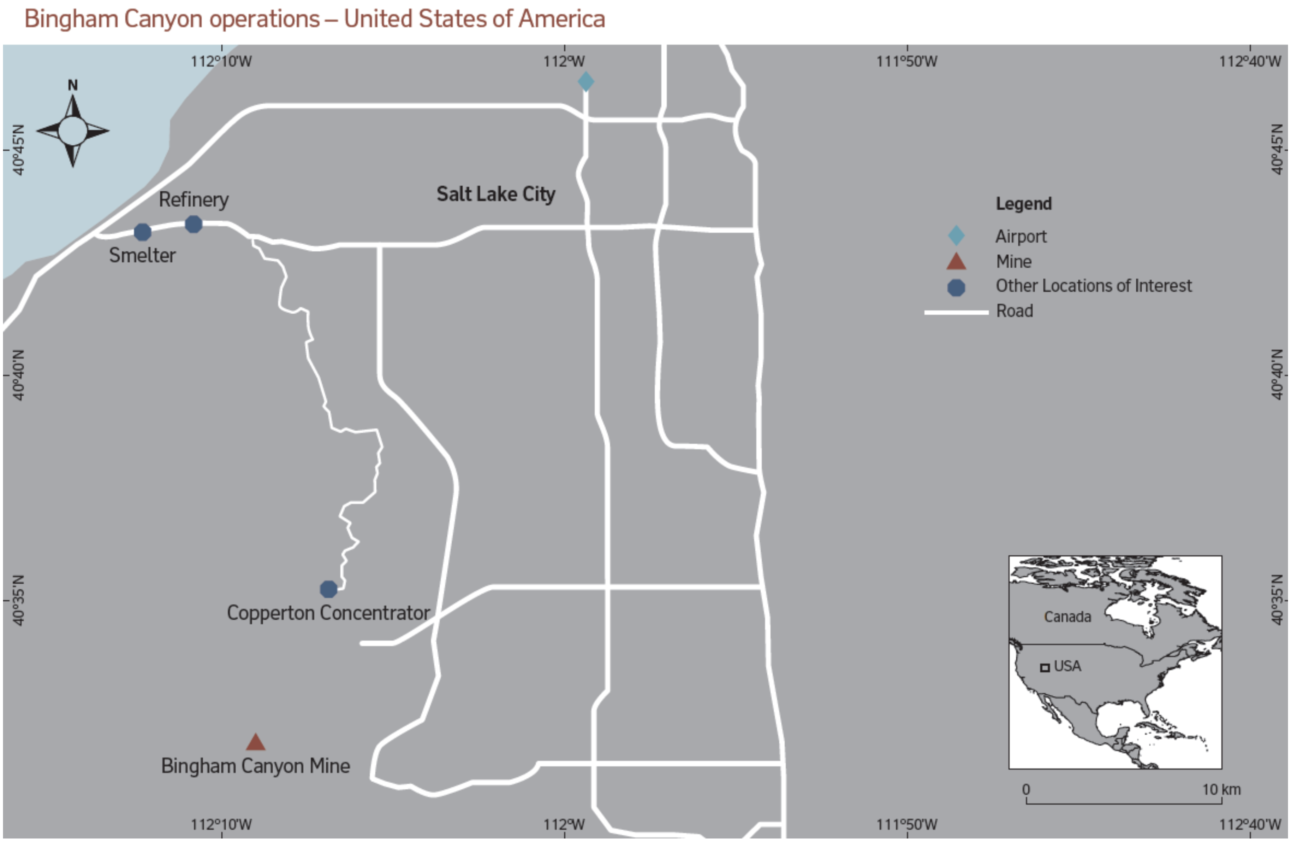

Figure 1 **Property location map – Bingham Canyon**

Table G **Changes to Bingham Canyon open pit Mineral Resources**

	Measured Mineral Resources					Indicated Mineral Resources				
	Mt	% Cu	g/t Au	g/t Ag	% Mo	Mt	% Cu	g/t Au	g/t Ag	% Mo
Mineral Resources at 31 Dec 2022	49	0.50	0.15	2.42	0.019	30	0.42	0.15	2.44	0.015
Additions	0	0.00	0.00	0.00	0.000	0	0.00	0.00	0.00	0.000
Depletions	11	0.59	0.15	2.24	0.017	8	0.49	0.14	1.83	0.011
Mineral Resources at 31 Dec 2023	**38**	**0.47**	**0.15**	**2.47**	**0.020**	**22**	**0.39**	**0.16**	**2.66**	**0.016**

	Inferred Mineral Resources					Total Mineral Resources				
	Mt	% Cu	g/t Au	g/t Ag	% Mo	Mt	% Cu	g/t Au	g/t Ag	% Mo
Mineral Resources at 31 Dec 2022	14	0.21	0.16	1.19	0.006	93	0.43	0.15	2.24	0.013
Additions	1	0.40	0.46	11.11	0.036	0	0.00	0.00	0.00	0.000
Depletions	3	0.10	0.11	0.01	0.027	21	0.50	0.12	1.19	0.015
Mineral Resources at 31 Dec 2023	**12**	**0.26**	**0.20**	**2.56**	**0.005**	**72**	**0.41**	**0.16**	**2.55**	**0.016**

Table H **Changes to Bingham Canyon open pit Ore Reserves**

	Proven Ore Reserves					Probable Ore Reserves				
	Mt	% Cu	g/t Au	g/t Ag	% Mo	Mt	% Cu	g/t Au	g/t Ag	% Mo
Ore Reserves at 31 December 2022	484	0.40	0.18	2.10	0.037	395	0.35	0.17	1.82	0.029
Additions	7	0.68	0.21	2.77	0.017	30	0.40	0.06	1.14	0.095
Depletions - Production	21	0.53	0.18	2.26	0.008	17	0.53	0.19	2.25	0.008
Depletions - Other	0	0.00	0.00	0.00	0.000	48	0.28	0.01	0.05	0.086
Ore Reserves at 31 December 2023	**470**	**0.37**	**0.18**	**1.98**	**0.038**	**360**	**0.36**	**0.18**	**1.98**	**0.028**

	Total Ore Reserves					Average mill recovery %				Product			
	Mt	% Cu	g/t Au	g/t Ag	% Mo	Cu	Au	Ag	Mo	Mt Cu	Moz Au	Moz Ag	Mt Mo
Ore Reserves at 31 December 2022	879	0.38	0.18	1.97	0.033	89	70	74	57	2.890	3.406	40.386	0.172
Additions	37	0.74	0.14	1.59	0.086	88	67	72	63	0.237	0.112	1.343	0.021
Depletions – Production	38	0.53	0.19	2.25	0.008	90	70	74	44	0.183	0.162	2.055	0.001
Depletions – Other	49	0.72	0.09	1.34	0.089	88	67	72	63	0.263	0.025	1.114	0.015
Ore Reserves at 31 December 2023	**829**	**0.36**	**0.18**	**1.98**	**0.033**	**89**	**69**	**71**	**63**	**2.681**	**3.257**	**37.686**	**0.176**

Summary of information to support Mineral Resources reporting – Bingham Canyon

RTK open pit Mineral Resources are supported by the information set out in the Appendix 1 to this release and located at Resources & reserves (riotinto.com) in accordance with the Table 1 checklist in the JORC Code. The following summary information is provided in accordance with rule 5.8 of the ASX Listing Rules.

Geology and geological interpretation

The Bingham Canyon deposit is located in the Bingham mining district southwest of Salt Lake City, Utah (Figure 1). The Bingham Canyon deposit is a classic porphyry copper deposit containing economic grades of copper, molybdenum, gold, and silver. Peripheral copper-gold skarns, lead-zinc fissures, and disseminated gold deposits are also associated with this porphyry system.

The Bingham Canyon deposit primarily consists of three nested porphyry dike bodies intruded into an earlier equigranular granitic intrusion. The latter hosts the bulk of mineralisation. The igneous bodies were emplaced into a sedimentary sequence consisting of predominantly quartzites with several thick limestone units in the lower portion of the sequence and thin silty limestones throughout the quartzite sequence.

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

The Bingham Canyon deposit is defined by 180 churn drill holes from 1910 to 1953 and 1,171 diamond core drill holes drilled from 1945 to the present comprising a total of 864,224 m of drilling.

All diamond core holes since nearly the inception of core drilling (D009) have been logged in detail for lithology, structure, alteration and mineralisation. In 1980, geotechnical characterization data was systematically collected. Since 1988, all core logging was standardized to a scale of 1:50. In 2005, geologic and geotechnical logging began being captured electronically and/or on paper. Since December 2016 all information has been captured electronically.

Assays have been carried out on half core and split churn samples. Sample lengths vary from 0.3 m to 3.6 m, with 3 m being the most common. Assay techniques have varied over time but most recently use a combination of full acid digest with AES/MS finish and fire assay for gold and silver.

Core assayed prior to 1990 was assayed by RTK's internal laboratories. After 1990 all assays were completed by external laboratories with documented internal and external quality assurance and quality control (QA/QC) procedures maintained to present. Assays and their origin laboratory results are stored in the Rio Tinto acQuire database. Original assay certificates are stored on Rio Tinto network servers.

The current QA/QC process was established in 1989. The control samples are as follows:

- Duplicate samples of the second half of core are inserted every 40^{th} sample.
- Matrix matched pulp Certified Reference Materials (CRMs) are inserted every 20^{th} sample.
- Blank samples of barren quartzite are inserted every 40^{th} sample.
- Sample duplicates from the coarse reject material are assayed every 20^{th} sample.

Bingham Canyon has 15 CRMs for copper and molybdenum of varying metal concentrations representing the dominant lithology units present at Bingham Canyon including quartz monzonite porphyry, skarn, monzonite and quartzite. Three samples for gold from RTK's former Barneys Canyon gold-silver mine are also used. These CRMs are inserted in the assay process for both diamond drill holes for use in resource modelling and blastholes for use in grade control.

Assays are received electronically from the laboratory (ALS Chemex) and loaded into the acQuire diamond drilling database after being validated. A monthly QA/QC report is distributed for review and any follow up action requests required from the lab to meet validation thresholds. Assay results are checked from the laboratory on a by-hole basis, plotting duplicates, blanks and standards.

Estimation methodology

The Mineral Resources estimation used as the basis of the 31 December 2023 Mineral Resources statement was completed by Rio Tinto in 2023.

Estimation has been carried out by ordinary kriging for all economic (copper, gold, molybdenite and silver) and secondary (arsenic, bismuth, lead, rhenium and sulphur) elements. Density assignments are based on rock type and alteration domains. Grades were estimated into parent blocks using Maptek™ Vulcan™ software. The block size is 15 mE x 15 mN x 15 mRL (50 feet cube).

The major domains for estimation are lithology, mineralisation style (porphyry style mineralisation, sedimentary sequence and syn/late mineralisation dikes), grade zones, and kriging spatial domains (limb zones). The lithology and grade zone models were updated with the latest drill hole information. Assay samples are composited to 8 m lengths for each of the four economic metals and to 15 m for the secondary elements, broken on lithology. Locally varying anisotropy was applied following the orientation of the porphyry mineralisation. Multiple estimation passes are used with varying search distances, composite, and domains selections. A maximum of 3 composites per drillhole was used for the first pass and this restriction was not applied for the second pass. The estimation search volumes dimensions were based on multiples of the drilling spacing for the first pass (approximately 5 times the average drilling spacing) and:

- Pass 1 – ordinary kriging based on rock type, mineralisation style, grade zone and limb zone, using a minimum of 7 and a maximum of 15 composites.
- Pass 2 – ordinary kriging based on rock type, mineralisation style, grade zone and limb zone, using a search volume 50% larger in all dimensions and a minimum of 1 and a maximum of 10 composites.
- Nearest neighbour estimates using the same set of composites and estimation domains as the ordinary kriging estimates were used to populate non-estimated blocks after passes 1 and 2.

Cut-off grades and modifying factors

Reasonable prospects for eventual economic extraction have been assessed through:

- Open pit mining phase designs.
- Optimised Life of Mine (LoM) production scheduling using variable economic margin cut-off grades based on performance of historical metallurgical ore types.
- Operating cost projections and cash flow analysis including estimates for development and sustaining capital.

Criteria used for Mineral Resources classification

Mineral Resources classification is determined by drillhole spacing. The average distance from the three nearest composites to each block is used to calculate the average drillhole spacing.

Each block is classified as Measured, Indicated or Inferred according to the following average drillhole spacings:

- Measured – average spacing less than 91 m between drill holes.
- Indicated – average spacing between 91 m and 182 m.
- Inferred – average spacing greater than 182 m between drill holes.

Finally, a categorical smoothing of the resource classification is performed to account for isolated blocks of a given category surrounded by different categories.

Summary of information to support Ore Reserves reporting – Bingham Canyon

The RTK open pit Ore Reserves consist of the Slice 1, Slice 2 and Apex pushbacks of the Bingham Canyon deposit and are based on the Mineral Resources model for the deposit along with the Apex feasibility study. This study, which incorporates Slice 1 and 2, is expected to be completed in 2024.

Ore Reserves are supported by the information set out in Appendix 1 and located at Resources & reserves (riotinto.com) in accordance with the Table 1 checklist in the JORC Code. The following summary information is provided in accordance with rule 5.9 of the ASX Listing Rules.

Economic assumptions and study outcomes

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. 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.

Ore Reserves are based on the Apex feasibility study mining production schedules and were developed using COMET strategic planning software. Mine plan assumptions were based on historically demonstrated performance at RTK along with forward looking maintenance projections. Mine designs were reviewed by RTK geotechnical staff and an external group of technical experts (Mine Technical Review Team (MTRT)).

The central case Apex feasibility study mine production schedule resulted in a positive project NPV.

Mining method and assumptions

The Bingham Canyon Ore Reserves continue to be exploited by open pit mining methods using conventional diesel/electric haul trucks and electric or hydraulic mining shovels. The Apex pushback is a brownfields mine life extension which will utilise the existing infrastructure of RTK. It is projected that heavy mobile equipment (HME) will be retired and replacements purchased to maintain current fleet capacities at the Bingham Canyon Operation. The Apex feasibility study will evaluate options to increase HME capacity to potentially accelerate waste stripping.

Processing method and assumptions

All milling is done by the Copperton Concentrator's four grinding lines consisting of three 10.4 m and one 11 m SAG mill each feeding two ball mills. Flotation is comprised of a bulk circuit having rougher, scavenger and cleaner lines feeding the Moly Plant where molybdenum disulphide concentrate is produced and bagged for toll roasting. A 25% copper concentrate is pumped 28 km to the Smelter where it is filtered and stockpiled.

The concentrate is smelted in a Flash Smelting Furnace (FSF) and then converted in a Flash Converting Furnace (FCF) operating in a single-line configuration separated by an intermediate matte stockpile. Two parallel furnaces further refine the copper and cast anodes which are railed to the Refinery. Smelter slag is milled and processed to recover metals. The Smelter converts 99.9% of the sulphur emitted from processing the copper concentrate feed into sulphuric acid which is also sold. Heat from the furnaces and the acid plant is used to co-generate about 60% of the Smelter's electric power needs.

At the Refinery, the anodes are interleaved with stainless steel cathode blanks in tank cells of acidic copper sulphate solution. Electric current is applied for about 20 days to dissolve the anodes and deposit 99.99% pure copper which is stripped from the reusable cathode and sold. Precious metals and impurities from the cathodes settle to the bottom of the cells. Gold and silver are recovered from the slimes by process of autoclaving, filtering, hydrochloric leaching and solvent extraction and cast into bars by an induction furnace.

Cut-off grades, estimation methodology and modifying factors

The Ore Reserves cut-off is based on a Waste/Ore Ranking (WOR) calculation which considers pricing, recoveries and costs. The cut-off value was determined based on an iterative approach to determine the optimum value to the deposit.

RTK mine production plans are developed with the objective of maximizing NPV based on the optimization of WOR cut-off grade and production scheduling decisions. The simultaneous optimization of these two parameters is accomplished through a production scheduling program called COMET, which uses Visual Basic linear programming in Microsoft Excel. An enterprise model capturing the material movements, plant capacity constraints, costs, and revenues from the mine through sales is used to project the cash flows and evaluate a multitude of options, while honouring limits on mining and processing constraints, with the program's algorithm ultimately leading to convergence on a solution providing the maximum NPV.

COMET dynamically recalculates WOR of the binned material based on forecasted period's cost and revenue to determine the highest value material to send to the mill as part of the optimization of the integrated mining and processing policy.

There are no material impacts from other Ore Reserves modifying factors, such as: governmental, tenure, environmental, cultural heritage, social or community. Appropriate agreements and approvals are in place to enable operation of the assets.

Criteria used for Ore Reserves classification

The following summarises the conversion of Mineral Resources classification to Ore Reserves classification within the Ore Reserves ultimate pit:

- Measured Mineral Resources not contained within the 0.25% MoS_2 grade zone are classified as Proved Ore Reserves.

- Measured Mineral Resources within the 0.25% MoS_2 grade zone are classified as Probable Ore Reserves.

- Indicated Mineral Resources are classified as Probable Ore Reserves.

Rio Tinto Aluminium Pacific Operations - Amrun

RTA Pacific Operations Mineral Resources and Ore Reserves are contained within two bauxite deposits, one at Gove (North Territory, Australia) and one at Weipa (Queensland, Australia; Figure 2).

The Weipa deposit consist of three primary areas; Amrun, East Weipa/Andoom and North of Weipa. The increase in the Amrun Ore Reserves 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 other modifying factors, including governmental, tenure, environmental, cultural heritage, community or operational.

The decrease in Amrun Mineral Resources coincides with the uptake of bauxite ore from Mineral Resources into Ore Reserves, due to a routine review of price assumptions over the life of the mine and an increase in orebody knowledge. 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 focussed on asset evaluation rather than exploration, systematically bringing the bauxite classification to higher levels of confidence. Table I and Table J summarise the changes to the Mineral Resources and Ore Reserves.

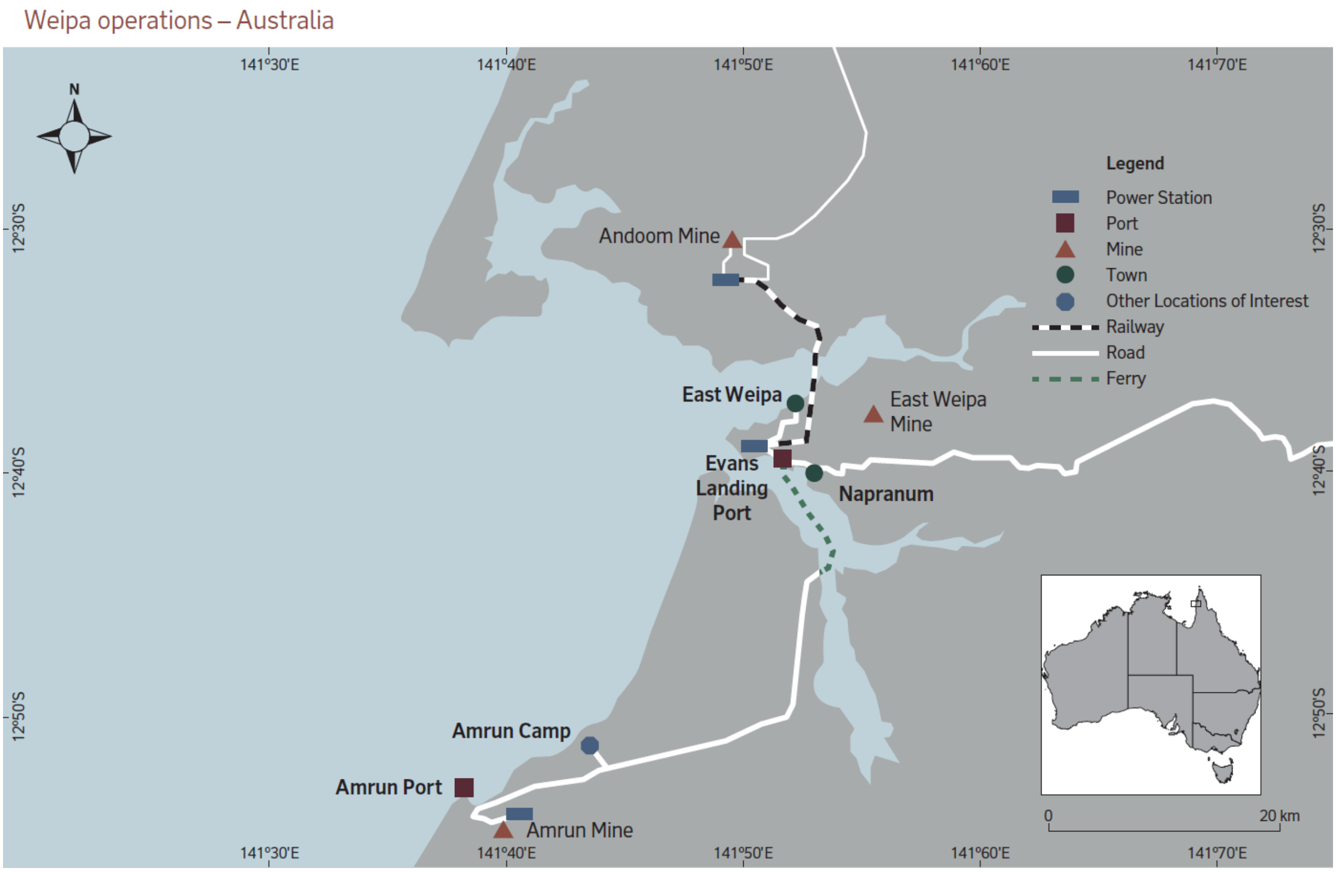

Figure 2 **Property location map – Weipa operations**

Table I Changes to Amrun Mineral Resources

	Measured Mineral Resources			Indicated Mineral Resources			Inferred Mineral Resources			Total Mineral Resources		
	Mt	% Al_2O_3	% SiO_2	Mt	% Al_2O_3	% SiO_2	Mt	% Al_2O_3	% SiO_2	Mt	% Al_2O_3	% SiO_2
Mineral Resources at 31 Dec 2022	101	49.37	11.59	417	49.86	11.75	325	52.06	11.86	**843**	**50.65**	**11.77**
Additions	14	-0.15	0.14	0	0.00	0.00	0	0.00	0.00	**14**	**-0.15**	**0.14**
Depletions	0	0.00	0.00	-28	-0.15	0.01	-41	-0.35	0.24	**-69**	**-0.27**	**0.15**
Mineral Resources at 31 Dec 2023	**115**	**49.22**	**11.73**	**388**	**49.71**	**11.74**	**285**	**51.71**	**12.10**	**788**	**50.36**	**11.87**

Table J Changes to Amrun Ore Reserves

	Proved Ore Reserves			Probable Ore Reserves			Total Ore Reserves		
	Mt	% Al_2O_3	% SiO_2	Mt	% Al_2O_3	% SiO_2	Mt	% Al_2O_3	% SiO_2
Ore Reserves at 31 December 2022	242	54.2	9.0	560	54.8	8.9	801	54.6	8.9
Additions	42	52.0	9.9	128	52.8	9.7	170	52.6	9.7
Depletions - Production	21	53.4	8.4	0	0.0	0.0	21	53.4	8.4
Ore Reserves at 31 December 2023	**263**	**53.9**	**9.2**	**688**	**54.5**	**9.0**	**950**	**54.3**	**9.1**

Summary of information to support Mineral Resources reporting – Amrun

RTA Pacific Operations Mineral Resources are supported by the information set out in the Appendix 2 to this release and located at [Resources & Reserves (riotinto.com)] in accordance with the Table 1 checklist in the JORC Code. The following summary information is provided in accordance with Rule 5.8 of the ASX Listing Rules.

Geology and geological interpretation

The host rocks at Weipa 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 can occur. Modern day root channel structures and infill, in the upper part of the bauxite, are common. Gibbsite is the major mineralised mineral, with boehmite being of lesser significance.

Bauxite occurs on laterally extensive plateaus. The bauxite orebodies are interpreted as flat-lying horizons with topography dictating the geometry. The orebodies are overlain by a thin (<1 m) overburden cover and occasional red soil. Beneath the bauxite mineralisation 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 clay, 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 Amrun 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.

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 four 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) downhole. 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).

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 are 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. Three horizon codes, based on the lithology and assays, are assigned for the modelling and estimation of bauxite resources at Weipa. Interpretation is undertaken using Leapfrog Geo while variography and estimation are performed using Maptek's Vulcan software.

The bauxite horizon is unfolded using the top and bottom contact surfaces at Amrun, Norman Creek. At Moingum (Hey Point) drill hole collars are flattened to constant elevation. 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; loss on ignition (LOI) and recovery are estimated into parent cells using ordinary kriging. Overburden is 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 and floor horizons, where data is available. Ordinary kriging is used for interpolation, using the variogram models for the bauxite. Block sizes are determined by half the minimum 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. 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 Resources 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 ($Al_2O_3 \geq 40\%$; $SiO_2 \leq 15\%$), 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 Resources 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 (720 m). Data of lesser quality (e.g., 2D historical data) is downgraded in classification and needs to be re-drilled to increase confidence.

Summary of information to support Ore Reserves reporting – Amrun

RTA Pacific Operations Ore Reserves are supported by the information set out in Appendix 2 and located at Resources & Reserves (riotinto.com) in accordance with the Table 1 checklist in the JORC Code. The following summary information is provided in accordance with Rule 5.9 of the ASX Listing Rules.

Economic assumptions and study outcomes

The Amrun operation has been operating continuously for over five years, and the Ore Reserves estimate, 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 Amrun feasibility study was completed and approved by Rio Tinto in 2015.

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

The Ore Reserves are mined through shallow, open cut techniques developed over several decades at the greater Weipa 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.

Dilution and mining recovery parameters are applied during the Ore Reserves estimation process, based on reconciliation of past performance, and are reviewed annually. As the Ore Reserves are 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 Reserves modifying factors, such as: governmental, tenure, environmental, cultural heritage, social or community. Appropriate agreements and approvals remain in place to enable continued operation.

Processing methods and assumptions

Amrun 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 Reserves 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 Reserves. There has been no material change to the economic cut-off methodology or process.

Criteria used for Ore Reserves classification

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

Iron Ore Company of Canada

IOC has been mining, concentrating and pelletising meta-taconite deposits in the southern Labrador Trough since 1962 (Figure 3). Rio Tinto has reported Mineral Resources and Ore Reserves for IOC since it acquired its share of the company in 2000.

IOC concentrates oxide mineralised material from the middle unit of the Sokoman Iron Formation. The iron mineralisation of the Middle Iron Formation (MIF) is a mixture of specular hematite and magnetite. The mineralisation is generally coarse grained and suitable for gravity concentration. Logging of drill core identifies ore types which can be upgraded to saleable iron grades (>65% Fe), based on mineralisation and grain size.

Whilst it is easy to identify mineralisation, which is amenable to concentration to saleable iron grades, IOC has historically had difficulty in reliably estimating iron recovery in the concentrator's gravity circuit. In 2009, the methodology for estimating iron recovery was changed to use geometallurgical testing of crushed drill core on shaking tables. Whilst this approach remains imprecise, it produces more reliable estimates than previous methodologies. Grinding energy requirements of the ore are also estimated from geometallurgical testing of drill core. This approach was implemented at the same time as the shaking table testing.

In previous Ore Reserves estimates, IOC determined classification based on the geological certainty, i.e., Measured Mineral Resources mapped directly to Proved Ore Reserves and Indicated Mineral Resources mapped directly to Probable Ore Reserves. This approach was adopted due to the imprecision of the iron recovery estimate. However, this year IOC has incorporated the amount of geometallurgical data supporting the iron recovery estimate into the classification criteria. The drilling support criteria used to determine Ore Reserves classification (based on geometallurgical testing) are the same as those used to determine Mineral Resources classification (based on geological and assay data). As a consequence, for recently drilled areas, where all drilling is subject to metallurgical testing, the old mapping of resource classifications to Ore Reserves classification is retained. However, for areas which were drilled prior to 2009 (where there is limited geometallurgical testing), all Ore Reserves are generally classified as Probable Ore Reserves. The absence of geometallurgical tests does not result in exclusion of material from Ore Reserves, since core logging and geochemistry are sufficient to determine the economic processibility of the Ore Reserves. The reason for mapping Measured Mineral Resources to Probable Ore Reserves in the absence of geometallurgical data is the uncertainty regarding the iron recovery and grinding energy of the ore, not the economic viability of the ore.

As a result of the application of geometallurgical factors to Ore Reserves classification and incorporating annual mining depletion, approximately 105 Mt has been reduced from Proved Ore Reserves to Probable Ore Reserves resulting in a 48% reduction in Proved and 63% increase in Probable.

Rio Tinto reports IOC's Ore Reserves on a saleable product basis (i.e., as a mix of concentrate and pellets).

Figure 3 Property location map – Iron Ore Company of Canada

Summary of information to support Mineral Resources reporting – Iron Ore Company of Canada

IOC open pit Mineral Resources are supported by the information set out in the Appendix 3 to this release and located at [Resources & reserves (riotinto.com)] in accordance with the Table 1 checklist in the JORC Code. The following summary information is provided in accordance with rule 5.8 of the ASX Listing Rules.

Geology and geological interpretation

IOC's Mineral Resources and Ore Reserves for part of the Lake Superior type iron formation. Deposition of the iron bearing minerals occurred in a shallow ocean basin and the formation was subsequently tectonically folded and faulted resulting in a highly metamorphosed hematite and magnetite mineralisation. Igneous intrusions of mafic material are present and have since been metamorphosed as well. Locally the formation has been altered by leaching along structural horizons which resulted in the development of limonite.

Overall geological structure is generally well understood at the mine site. The geology is modelled as a folded sequence of metasedimentary rocks, intruded by igneous units. Zones of alteration are modelled (limonitic mineralisation and limonitic waste) based on observed alteration of drill core and combined water assays and iron grade.

Since 2020, all geological interpretation has been completed in Leapfrog Geo 3D modelling software. Previous to that, geological modelling was completed in Maptek Vulcan.

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

Samples used for Mineral Resources and Ore Reserves estimation are taken from diamond drill core. Drill holes are usually oriented to be perpendicular to bedding, or as close to perpendicular as possible. Oxide iron mineralisation is determined initially by visual inspection of drill core, and then by the use of whole rock geochemistry. Drilling is currently almost exclusively NQ and HQ sized. The core is split using a hydraulic powered splitter.

Half core samples are coarse crushed, then riffle split during several crushing stages to a 20 g sample which is pulverised to produce a sample for assaying. Magnetite grades are assayed by SATMAGAN (calibrated), carbonate and combined water are assayed by absorption method in a Leco furnace and all other assays are carried out by XRF techniques on fused beads. A significant quantity of historical iron grades (prior to April 2019) were assayed using titration.

The core sample length for assaying is currently 4 m, although sample lengths ranging from 3 m to 5 m have been used in the past.

Metallurgical testing samples are selected over 16 m core lengths. Half core samples are selected over 16 m intervals for SPI (grind energy) testing and assay coarse rejects are composited to 16 m intervals for iron recovery testing (by shaking table).

Estimation methodology

Maptek Vulcan software is used for all grade estimations, using inverse distance squared grade estimation. The model is domained by geology and by structure (fold limbs).

Multiple (4) search passes are utilized at increasingly larger search radii. Earlier block estimates are not over-written by later passes. After four estimation passes any un-estimated blocks have an average grade assigned to them by geology type.

Sub block methodology is used for Mineral Resources reporting whereby grades are estimated into parent block of 20 m x 40 m x 13.7 m with sub-blocking down to 5 m x 5 m x 3.425 m,

There are no assumptions made about correlations between variables. All variables are estimated separately. There is no cutting or capping applied to any data as there are no outliers identified in the data. Data is subject to thorough QA/QC and validation process therefore all data is deemed to be valid.

Updates to Mineral Resources estimates are always reconciled against previous estimates. The two models updated in 2023 were Spooks and Humphrey South. The Spooks deposit does not currently have any Ore Reserves, and the model update increased Mineral Resources by 2 Mt. The major area of update in Humphrey South was outside of current Ore Reserves phases and resulted in a decrease in Mineral Resources of ~105 Mt.

Ore Reserves for operating pits are also reconciled against plant performance, which also gives an indication of Mineral Resources accuracy. The two major model updates for 2023 were in areas of very limited production in 2023. Reconciliation of 2023 and 2022 models were carried on 2023 plant data, with the same results. The Ore Reserves models reconcile reasonably well on a monthly basis with plant data.

Cut-off grades and modifying factors

Modelling indicates that ~98% of oxide mineralised material in the middle iron formation within the Resource envelope has a weight yield greater than 33%. At projected long-term prices and costs, the breakeven cut-off grade is approximately 33%, so the entire middle iron formation within the Resource envelope is effectively above cut-off. Consequently, Mineral Resources definition is based on lithology (i.e., all oxide mineralised middle iron formation), rather than the cut-off grade.

Criteria used for Mineral Resources classification

The Mineral Resources classification is based primarily on an assessment of the density of assay and logging data. Classification is determined by drill spacing:

- Measured – average spacing less than 60 m between drill holes.
- Indicated – average spacing from 60 m to 120 m between drill holes.

- Inferred – average spacing from 120 m to 240 m between drill holes.

In areas of poor core recovery or geological complexity the resource classification is reduced by one classification.

Summary of information to support Ore Reserves reporting – Iron Ore Company of Canada

IOC open pit Ore Reserves are supported by the information set out in Appendix 3 and located at Resources & reserves (riotinto.com) in accordance with the Table 1 checklist in the JORC Code. The following summary information is provided in accordance with rule 5.9 of the ASX Listing Rules.

Economic assumptions and study outcomes

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 premium and penalty adjustments for quality). Exchange rates are also based on internal Rio Tinto modelling of expected future country exchange rates. 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.

Ore Reserves estimates are derived from engineered pit designs. These designs are based on geometries which are optimised using the above economic assumptions and slope design geotechnical assessments of at least pre-feasibility study level. Life-of-Mine production schedules are developed using all Ore Reserves to confirm the economic viability of the Ore Reserves and to determine mining equipment and supporting infrastructure requirements. Hydrogeological studies are carried out to estimate dewatering requirements.

Mining method and assumptions

IOC has been in operation since 1962, using a conventional open pit truck shovel mining method. The Ore Reserves are based on a continuation of this proven method. Dilution and ore loss are estimated by regularisation of the sub-blocked geological model. Dilution tolerances based on historical reconciliations are applied to the regularised blocks to determine acceptance or rejection as concentrator feed.

Processing methods and assumptions

IOC has been in operation since 1962, using conventional gravity and magnetic separation methods to upgrade feed at ~38% iron to a concentrate product at ~65% Fe. A portion of the concentrate is then pelletised using industry standard techniques. The Ore Reserves are based on a continuation of these proven concentration and pelletising methods.

Gravity iron recovery is modelled based on geometallurgical testwork carried out on drill core. The modelled gravity iron recovery is combined with the modelled iron grade and the concentrate iron grade to estimate the gravity circuit weight yield. The weight yield from the magnetic separation circuit is estimated from the modelled magnetite grade and the estimated gravity circuit weight yield, using regressions based on metallurgical models and historical performance.

Pellet yield from concentrate fed to the pellet plant is estimated based on the planned product mix, based on historical plant performance.

Ore Reserves are reported on a saleable product basis (i.e., as a mix of concentrate and pellets).

Cut-off grades, estimation methodology and modifying factors

The break-even cut-off grade has been estimated using the price and exchange rate projections developed by Rio Tinto and operating cost estimates based on IOC's 2024 budget. The cut-off grade is based on all fixed and variable operating costs and all sustaining capital costs. The cut-off grade is expressed as a weight yield (i.e., the mass of concentrate produced per tonne of concentrator feed). The break-even cut-off grade is a 33% weight yield.

IOC's Ore Reserves lie within the middle unit of the Sokoman iron formation, which is generally referred to as the Middle Iron Formation (MIF). Modelling of the Ore Reserves deposits indicates that approximately 1% of the MIF in those deposits with the Reserve pits has a weight yield lower than 33%. Consequently, all oxide mineralised MIF is considered to be ore. This is IOC' s current operating practice.

The major ore quality related value drivers for IOC's Ore Reserves are the weight yield and grind energy of the ore. These qualities are estimated from assay and metallurgical testing data obtained from drill core. Quality interpolation for assays and metallurgical parameters is carried out using inverse distance techniques.

All Ore Reserves are located on mining leases held by the Labrador Iron Ore Royalty Corporation (LIORC) and sub-leased to IOC. These mining leases will expire in 2050 to 2052 and the sub-lease agreement will expire one day before the expiry of the mining leases. Reported Ore Reserves are forecast to be exhausted in 2044. LIORC holds surface rights over IOC's processing facilities and all operational pits, which are also sub-leased to IOC. IOC is not aware of any impediments to obtaining surface rights to the remaining areas of reported Ore Reserves.

All Ore Reserves have been released from the Newfoundland and Labrador Environmental Assessment process. IOC is not aware of any impediments to obtaining the environmental and other regulatory permits required to mine remaining areas of reported Ore Reserves.

Mining of the Ore Reserves will require the addition of three mining shovels and approximately 20 haul trucks. The increased truck fleet will require an expansion of the maintenance facilities. Studies are underway for this expansion.

The reported Ore Reserves will be processed through the existing processing facilities. An upgrade to the gravity concentration circuit is currently underway and is expected to be completed in 2024. An upgrade to the tailings disposal system is currently being assessed at pre-feasibility level and is expected to be implemented by 2027.

Criteria used for Ore Reserves classification

The Ore Reserves classification is based on an assessment of the density of drilling and geometallurgical testwork data for estimation of specific grind energy and iron recovery. Classification is determined by drill spacing:

- Proved – average spacing of holes with geometallurgical data less than 60 m between drill holes.
- Probable – average spacing of holes with geometallurgical data from 60 m to 120 m between drill holes.

In areas of poor core recovery or geological complexity the Ore Reserves classification is reduced by one classification.

The hole spacing criteria for Ore Reserves classification matches that used for Mineral Resources classification. A block by block check is carried out to ensure that Proved Ore Reserves can only be derived from Measured Mineral Resources and that Probable Ore Reserves can only be derived from Measured or Indicated Mineral Resources.

Competent Persons' statements

Rio Tinto Kennecott

The information in this report that relates to RTK Mineral Resources is based on information compiled under the supervision of Ana Chiquini and Pancho Rodriguez, who are Members of the Australasian Institute of Mining and Metallurgy (MAusIMM). Ana Chiquini and Pancho Rodriguez have sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity to which they are undertaking to qualify as Competent Persons as defined in the JORC Code. Ana Chiquini and Pancho Rodriguez are full-time employees of Rio Tinto and each of them consents to the inclusion in this report of Mineral Resources based on the information that they have prepared in the form and context in which it appears.

The information in this report that relates to RTK Ore Reserves is based on information compiled under the supervision of Brady Pett, who is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM). Brady Pett 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. Brady Pett is a full-time employee of Rio and consents to the inclusion in this report of Ore Reserves based on the information that he has prepared in the form and context in which it appears.

Rio Tinto Aluminium Pacific Operations

The information in this report that relates to Mineral Resources is based on information compiled under the supervision of Mr Angus C. Mc Intyre, who is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM). Mr Mc Intyre 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 Mc Intyre 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 Reserves based on the information that he has prepared in the form and context in which it appears.

Iron Ore Company of Canada

The information in this report that relates to Mineral Resources is based on information compiled under the supervision of Ramsey Way, Mervin McDonald and Beverly Power, who are Members of Professional Engineers and Geoscientists of Newfoundland and Labrador. Ramsey, Mervin and Beverly have sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity to which they are undertaking to qualify as a Competent Person as defined in the JORC Code. Ramsey, Mervin and Beverly are full-time employees of Rio Tinto and each of them consent to the inclusion in this report of Mineral Resources based on the information that they have 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 Rodney Williams and Stéphane Roche, who are Members of Professional Engineers and Geoscientists of Newfoundland and Labrador. Each of Rodney and Stéphane have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity to which they are undertaking to qualify as a Competent Person as defined in the JORC Code. Each of Rodney and Stéphane are full-time employees of Rio Tinto and consent to the inclusion in this report of Ore Reserves based on the information that they have prepared in the form and context in which it appears.

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This announcement is authorised for release to the market by Andy Hodges, Rio Tinto's Group Company Secretary

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Rio Tinto Kennecott – Bingham Canyon JORC Table 1

The following table provides a summary of important assessment and reporting criteria used 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	• Sampling techniques related to Mineral Resources estimation have been either churn or diamond drill core. Since the 1950s, all drilling has been diamond core, either as PQ, NQ, or HQ in size. • Sample intervals can range from 0.3 m to 3.6 m, with 3 m being the standard length. Core is sawn in half with half the core assayed for Cu, Mo, Ag, and Au. The average core sample is 10 kg, which is then split to 1000 g for pulverization and a 100 g pulp is generated for assay (30 g for fire assay, 5 g for AA).
Drilling techniques	• Drilling data summary: (see table below) • The deposit is defined by a program of churn drilling (7%) from 1910 to 1958 and diamond core drilling (93%) drilled from 1945 to 2023. Size of diamond core is as follows: AX/BX – 12%, NX/NQ – 28%, HQ – 54%, PQ – 6%. Diamond drilling campaign is ongoing. • Since the end of churn drilling by 1958, the drilling methodology has not changed.
Drill sample recovery	• Since 1980, the interval length and amount of core recovered has been recorded as part of the standard geotechnical data collection. Drilling methodology has been improved to maximize core recovery. Drilling methods have resulted in 90% of the core with greater than 80% core recovery. • The sample recovery methodology has not changed since 2016 when low recovery between drill runs have been assigned to a specific footage, when possible. No bias has been observed between low and full recovery zones.
Logging	• Since the 1970s, standardised RTK logging systems have been used for all drilling which includes collection of lithology, alteration, structure, veining and mineralisation. • Since 1980, the core has been photographed and geotechnically logged; this represents 65% of cored drilled. • In 2007, 34% of the holes drilled were also logged using an acoustic televiewer (ATV) for structure orientation where ATV data could be collected. Since 2008, all drill holes permissible for entry of the instrument are ATV'd, although only in portions of the holes where the data can be collected. • The logging methodology has not changed materially since 1980.
Sub-sampling techniques and sample preparation	• Pre 1980, core was hand split. Since 1980, core has been sawn in half. One half is sent for assay; the other half is stored at the RTK operation. • Samples are sent to a commercial lab for preparation and assay. Samples are crushed to minus 2 mm and a 1000 g sample split is pulverized to generate 4 sample pulps. These pulps are used for a Au assay, for a Cu, MoS_2 and Ag assay, and for a composite multi-

Drilling data summary:

	Diamond		Churn	
Year	Number of holes	Metres	Number of holes	Metres
1906-1979	482	236,083	181	49,785
1980-1999	248	107.592		
2000-2022	672	337,805		
Total	**1402**	**681,480**	**180**	**49,464**

	element assay; the fourth is returned to RTK. The reject sample material (<2 mm) is returned to RTK. • Sampling procedures have been reviewed and audited by external sampling experts, most recently in 2010 (AMEC) with no material findings. • The sub-sampling methodology has not changed since 1980 when core sawing began.
Quality of assay data and laboratory tests	• Current QA/QC procedures have been in place since 1989. The acQuire data management database system has been used since 2000. • Duplicate samples of the second half of core are generated for every 40th sample. • Matrix matched pulp CRMs are inserted every 20th sample. • Blank samples of barren quartzite are inserted every 40th sample. • A sample duplicate from the coarse reject material is assayed every 20th sample. For every 20 coarse reject pulp assays, a matrix matched standard is inserted. • Cu, MoS_2 and Ag are assayed by HNO_3-$HClO_4$-HF-HCl digestion and ICP-AES analysis. Au is assayed by fire assay fusion with an AAS finish for one assay-ton. • The assay methodology has not changed since 2015, when ICP-AES analysis was implemented. Prior to 2015, Cu, MoS_2 and Ag detection was by AAS. Au assaying has been consistent through this period, by 30 g fire assay. • Analysis of the performance of certified standards, 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	• For all intercepts above certain thresholds (2% Cu, 0.4%, MoS_2, 2.83 g/t Au, 2.83 g/t Ag) an additional sample pulp is generated and assayed from the coarse reject material. • Mineral Resources and Ore Reserves standard operating procedures (SOP) documents are used for data handling, processing, storage and validation processes. • There is no adjustment to drill hole assays. There is a lab ranking for samples assayed by more than one lab and the most appropriate assay is stored as the primary assay. • The sample validation methodology remains unchanged since at least 1994.

Location of data points	• Since 1998, GPS survey is used to locate drill hole collars. Between 1940 and 1998, traditional survey instruments were used to determine collar locations. A local grid system (Bingham Mine grid) is used throughout the mine. The local grid has a counter-clockwise rotation of 31.98 degrees from true north.
	• Down hole surveys are currently completed by two or three methods:
	  o Since the 1960s, a single shot or multi shot tool is used to survey all drill holes at 61 m intervals.
	  o Beginning in 2006, selected holes were also surveyed with a magnetometer accompanying an Acoustic Televiewer (ATV) instrument, and since 2008 most holes are also surveyed by ATV.
	  o Since 1995, a gyro survey tool is used to complete a survey for the entire drill hole length after the drill hole is completed.
	• All surveys are reviewed and generally the gyro method is selected unless the other method(s) indicate that the gyro survey is erroneous. In this case the next most accurate survey method is selected and loaded into the database.
	• Pit topography is kept updated by local surveys that track daily mining advances.

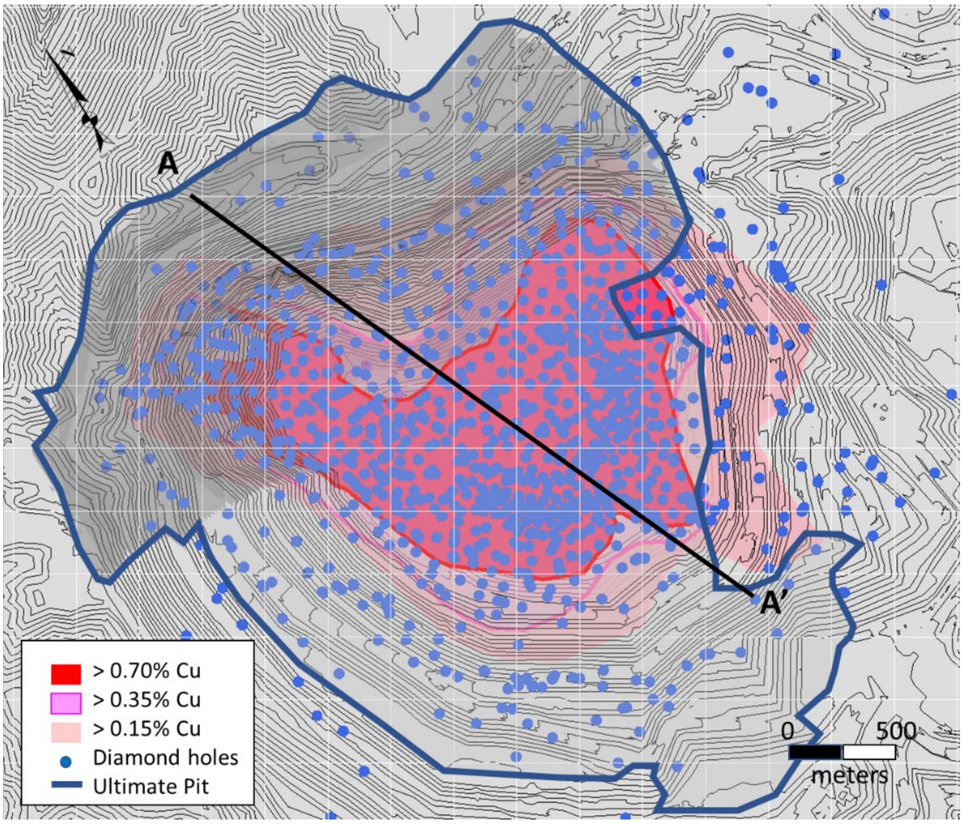
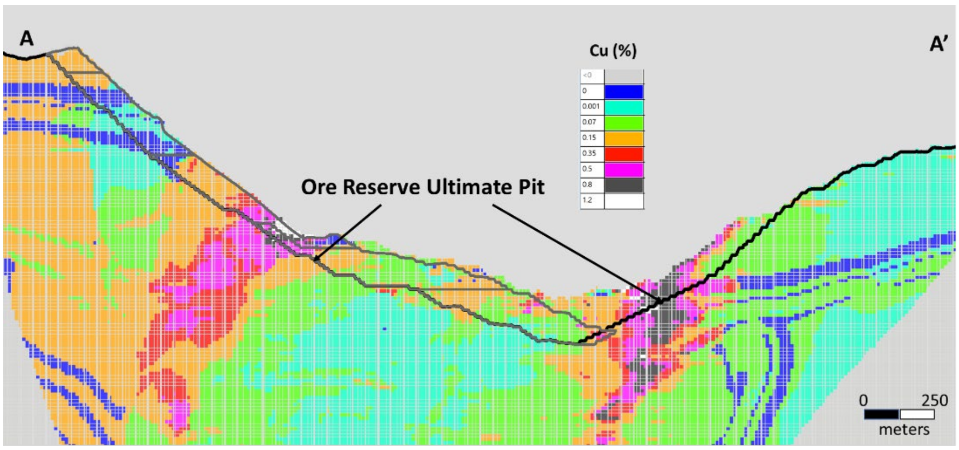
Data spacing and distribution	• Drill spacing is approximately 90 m to 100 m. • Assay intervals are composited to 8 m for model estimations. • The data spacing and distribution is deemed sufficient by the Competent Person to establish geological and grade continuity appropriate for the Mineral Resources classification applied.
Orientation of data in relation to geological structure	• Both vertical and angled drilling are used to delineate mineralisation. Porphyry mineralisation is disseminated and does not display a strong preferred orientation or structural control. • Drill hole orientations are designed to best delineate mineralisation, though collar placement is dependent on mine accessibility and must be oriented accordingly.

Sample security	• Laboratory samples are cut and placed onto crates or pallets and transported by locked trucks to a commercial lab for sample preparation and assay. • A Bolt Seal Chain of Custody form is filled out on-site and includes date, bolt seal number, driver, and any relief drivers. A copy of the Bill of Lading (BOL) and chain of custody form are made and sent with the driver. • Upon receipt of cargo, the lab manager confirms the date and time received, whether the bolt seal is unbroken, and bolt seal number. The lab receiver signs the Chain of Custody and emails a copy to RTK. • Individual samples are weighed before shipment and by the receiving commercial lab. Sample weights are cross checked and verified by RTK. • One half of core and assay pulps are retained in a secure core warehouse in Salt Lake City, Utah

Audits or reviews	• The following reviews have been completed on sampling:
	  o Rio Tinto Corporate Assurance Internal Audit of Resources and Reserves (2015).
	  o Review on the Copper Reconciliation Process at Bingham Canyon Mine (2011).
	  o Sampling procedures have been reviewed and audited by external sampling experts, most recently in 2010 (AMEC).
	  o Review of Sampling, Sample Preparation and the Central Analytical Laboratory (2009).
	• No material findings were made, and these reviews concluded that the fundamental data collection techniques are appropriate.

Section 2: Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and land tenure status	• The Bingham Canyon Mine is wholly owned by Rio Tinto Kennecott Copper (RTK's legal name is Kennecott Utah Copper LLC). • RTK has the authority to mine the Mineral Resources and Ore Reserves identified in this document under existing agreements. RTK also acquired several mineral leases and unpatented lode mining claims located in Tooele, Salt Lake and Utah Counties from Kennecott Exploration Company in 2021.
Exploration done by other parties	• No exploration by other parties has been done in the core area of Bingham Canyon. • Various companies since 1870 have worked around the core of the RTK holdings. As properties were acquired, exploration information was obtained and incorporated into the ore body knowledge. • Since 2009, Rio Tinto Exploration has performed brownfield exploration in and near the deposit.
Geology	• The Bingham Canyon deposit is a classic porphyry copper deposit containing economic values of copper, molybdenum, gold, silver, and historic lead and zinc production. Peripheral copper-gold skarns, lead-zinc fissures, and disseminated and placer gold deposits are also associated with this copper porphyry system. The most recent publication devoted to this deposit is contained in the Society of Economic Geologist, Inc, 2012, Special Publ. # 16, pp. 127-146. The deposit has been extensively studied both economically and academically over the past 100 years and is considered a deposit that defines copper porphyry systems.
Drillhole Information	• A summary of the drill hole data used for Mineral Resources estimation is provided in Section 1 of this table.
Data aggregation methods	• Not applicable as no Exploration Results are being reported.
Relationship between mineralisation	• Down hole intercepts are reported as true width due to disseminated mineralisation that has no preferred orientation.

widths and intercept lengths	
Diagrams	• RTK location and facilities are shown in Figure 1 in the body of this release. • Figure 4 and Figure 5 show a plan view of the drill holes and an example cross section through the deposit.  **Figure 4 Current pit drill hole intersections including those contained within Ore Reserves**  **Figure 5 Cross section A-A' through the Bingham Canyon orebody showing copper mineralisation**
Balanced reporting	• Not applicable as no Exploration Results are being reported.

Other substantive exploration data	• No additional exploration data to report.
Further work	• The Apex pushback is currently in feasibility stage of study. Studies continue to evaluate the potential to mine the extensive porphyry and skarn mineralisation beyond currently reported Mineral Resources and Ore Reserves ultimate pit.

Section 3: Estimation and Reporting of Mineral Resources

Criteria	Commentary
Database integrity	• All drilling data is securely stored in acQuire, a geoscientific information management system managed by a dedicated team within RTK. The system is backed up daily. • Estimation data is digitally compared to the data extracted for the previous model to check data integrity. • All collar, survey, assay and geology data loaded to the database are manually verified against original documents. Validation is documented with signoff documents and included as part of the annual Mineral Resources model documentation. • The database access is controlled and managed by the Geology department. • The database includes data validation for text-based and numeric fields.
Site visits	• Mineral Resources Competent Persons are located either on site or part of the Central team based in Brisbane, Australia. The Competent Person based offsite visits the mine site and core logging and storage facilities regularly, with the most recent visit in November 2023.
Geological interpretation	• There is high confidence in the geology interpretation. Past mining has created over 1.3 km of vertical geology exposures. Geology mapping has been performed since 1926 and historic maps are available on site. • Diamond drilling, structural data and pit mapping are used to build the geology model. • The geology model consists of 62 lithology units, which are then grouped into seven geology domains for statistical analysis and grade estimation, namely: quartzites, quartz monzonite porphyry (QMP), monzonite (MZ) and porphyritic quartz monzonite (PQM), latite porphyry (LP), quartz latite porphyry (QLP), limestones (Jordan, Commercial, Lark, Abed, Bbed) and hornfels beds below the Jordan Limestone. • In addition to the geology model, mineralisation style domains and grade zone domains are modelled. The mineralisation style domains consist of: porphyry style mineralisation, sedimentary sequence (above and below the Midas Thrust) and syn/late mineralisation dikes. Grade zones are modelled by the following grade thresholds: Cu – 0.15% and 0.55%; MoS_2 – 0.02%, 0.09% and 0.25%; Au – 0.010 opt and 0.030 opt, Ag – 0.150 opt and 0.040 opt. These thresholds were defined based on analysis of the grades populations considering different subsets of data and identifying possible breaks in the populations. Blast hole assay values, where available, are used to help define the grade zone domains.
Dimensions	• The deposit is contained within a 4.5 km x 4.5 km area with a maximum thickness of 900 m and average overburden cover of 800 m.
Estimation and modelling techniques	• The data is composited to 8 m lengths for each of the four economic metals (Cu, Au, Ag and MoS_2) and to 15 m for the secondary elements (As, Bi, Pb, Re and S) to provide the same data support for statistical analysis, broken on lithology. All domains mentioned above are flagged into the composites. Combinations of these domains are statistically analysed in specialized software to define domains for variography and estimation. • Grade estimation is controlled by domains. Estimation domains for Cu, Au, and Ag are defined based on the domains mentioned previously: seven geology domains, four mineralisation style domains, four grade zone domains for each metal and seven limb zones. Estimation domains for MoS_2 are only defined based on four grade zone domains and six limb zones, as exploratory data analysis has shown MoS_2 grades are not controlled by lithology or mineralisation style.

	• Extreme value analysis is carried out for the estimation domains defined above. Histograms, probability plots and cumulative plots are used to identify breaks in the populations of grades. Extreme values are preferentially controlled by a “High Yield Restriction” ellipse The number of samples cut per domain and per variable varies from zero to 20 samples and the distribution percentiles of cut vary from 66.7th (in the domains containing fewer samples) to 99.8th.
	• For variography, estimation domains of grade zones, limb zones (mineralisation trends) and rock type are grouped as necessary to constitute stationary domains. For Cu, Au and Ag the typical approach is to group grade zones and limb zones, leaving rock type and mineralisation style domains as the consistent limiting variables. For MoS_2, experimental variograms are calculated for each limb zone, grouping grade zones, rock type and mineralisation style domains. Domain boundaries, except for the limestone rock type, are treated as soft, meaning that composites from adjacent grade zones can be used in estimation.
	• Estimation is carried out by ordinary kriging for all economic (copper, gold, molybdenite and silver) and secondary (arsenic, bismuth, lead, rhenium and sulphur) elements. Multiple estimation passes are used with varying search distances, composite, and domains selections. A maximum of 3 composites per drillhole is used for the first pass and this restriction is not applied for the second pass. The estimation search volumes dimensions are based on multiples of the drilling spacing for the first pass (approximately 5 times the average drilling spacing) and:
	  o Pass 1 - ordinary kriging using a minimum of 7 and a maximum of 15 composites.
	  o Pass 2 - ordinary kriging using a search volume 50% larger in all dimensions and a minimum of 1 and a maximum of 10 composites.
	• Nearest neighbour estimates using the same set of composites and estimation domains as the ordinary kriging estimates are used to populate non-estimated blocks after passes 1 and 2.
	• Locally varying anisotropy is applied following the orientation of the porphyry mineralisation.
	• Grades are estimated into parent blocks using specialised software. The block model size is 15 mE x 15 mN x 15 mRL (50 feet cube).
	• The following validation was carried out on the 2023 resource model:
	  o Swath plot analysis to check for trends and bias in data/estimates and evaluate smoothing.
	  o Histogram comparison to check on variance of data versus estimation (smoothing).
	  o Cumulative frequency comparison to evaluate smoothness of the model, variance, and bias.
	  o Grade-tonnage curves to assess metal-at-risk.
	  o QQ plots to evaluate bias in models versus the declustered database.
	  o Visual validation of the block model against original input grades to identify any possible artifacts.
	  o Reconciliation against production and against ore control model.
	  o Validation is performed on the complete resource model and in the volume included in the LoM plan (slice 1, slice 2 and Apex).
	• The validation checks performed confirm that the resource model validates well against input data and historical production. The ordinary kriging estimates are deemed satisfactory for resource modelling.
	• Historically, a bias has been observed between MoS_2 grades estimated from diamond drilling sample assays and mill sample assays. An adjustment is applied to resource model grades based on historical reconciliations. The adjustment for 2023 is $(0.8923*MoS_2) + 0.0129$ when estimated MoS_2 grades are between 0.02% and 0.05% and is $(0.9614*MoS_2) + 0.0126$ if MoS_2 grades are greater than 0.05%; no adjustment is applied for MoS_2 grades lower than 0.02%.

Moisture	• All Mineral Resources tonnages are estimated and reported on a dry basis.
Cut-off parameters	• Optimised LoM production scheduling of phased mining designs using variable economic marginal cut-off grades based on performance of historical metallurgical ore types, product

	metals, operating cost projections and metal prices produces an average approximately equal to a 0.25 CuEq%. • Metal prices used are provided by Rio Tinto Economics team and are generated based on industry capacity analysis, global commodity consumption and economic growth trends. A single long-term price point is used in the definition of ore and waste and in the financial evaluations underpinning the resources statement. The detail of this process and of the price points selected are commercially sensitive and are not disclosed. • Operating costs are informed by current operations. • It is the company's opinion that all the elements included in the metal equivalent calculation have a reasonable potential to be recovered by RTK's milling, smelting and refining facilities and sold. • Average grades for the individual metals included in the metal equivalent calculation are shown in the Mineral Resources tabulations. • Copper equivalents have been calculated using the formula CuEq% = Cu% + ((Au g/t * Au price per gram * Au_recovery) + (Mo% * Mo price per tonne * Mo_recovery) + (Ag g/t * Ag price per gram * Ag_recovery)) / (Cu price per tonne * Cu_recovery).

Mining factors or assumptions	• The estimate assumes the continuation of open pit mining using the existing mining fleet.
	• Reasonable prospects for eventual economic extraction have been assessed through:
	  o Open pit mining phase designs.
	  o Optimised LoM production scheduling using variable economic marginal cut-off grades based on performance of historical metallurgical ore types.
	  o Operating cost projections and cash flow analysis including estimates for development and sustaining capital.
	• Based on historical performance, no recovery and dilution factors are applied in the estimation.

Metallurgical factors or assumptions	• The metallurgical processes have been developed and optimised based on the long operating history of the deposit. • All process performance parameters (recoveries, concentrate grades including deleterious elements) are based on historical metallurgical test performance of 44 ore types. • Several decades of mineralogy characterisation work concludes that the deposit continues to be of a similar nature to the existing operation. • Average metallurgical recoveries for the resource additions used to calculate CuEq%: **%Cu**: 89 · **%Au**: 70 · **%Mo**: 71 · **%Ag**: 74
Environmental factors or assumptions	• The Bingham Canyon mine is an historical operation managed under Utah regulatory approval. All approvals and permits necessary to mine the Mineral Resources have been obtained and are expected to be maintained.
Bulk density	• Specific gravity/bulk density is determined by the water displacement method using sealed core, volumetric of dry core samples, and gridded rock sampling across the pit and from diamond drilling. • The current density dataset includes measurements from 1974 through 2021. There are 5,079 density measurements in the dataset. All density values are stored in the acQuire database. There were no additional samples collected in 2022 to inform the 2023 resource model. A density zonation model is done based on rock type and alteration (metamorphism and oxidation) as a general proxy for varying densities in a rock type. High or increased metamorphism causes the sediments to be denser. As one moves away from the Bingham Canyon intrusive (heat source for metamorphism), sediment becomes less altered and thus dense. Oxidation of the sulphide is a secondary event that can significantly change the density of the rock. The pyrite breaks down to sulfuric acid, which can leach the clastic rocks (quartzite, siltstone, limestone) and create a porous protolith. • Eight density zones are modelled and, in combination with rock types, average density values for each domain are assigned to the block model.

Average metallurgical recoveries (CuEq% calculation):

%Cu	%Au	%Mo	%Ag
89	70	71	74

	• Yearly mining reconciliation shows calculated tonnage from volume surveys to be within 5% of mine production.

Classification	• Mineral Resources are classified after consideration of understanding of the genetic model, assay and drilling quality and confidence in estimation parameters. Mineral Resources classification is determined by drillhole spacing. The average distance from the three nearest composites to each block is used to calculate the average spacing between drillholes.
	• Each block is classified as Measured, Indicated or Inferred according to the following average drillhole spacings:
	  o Measured – average spacing less than 91 m between drill holes.
	  o Indicated – average spacing between 91 m and 182 m.
	  o Inferred – average spacing greater than 182 m between drill holes.
	• Finally, a categorical smoothing of the resource classification is performed to account for isolated blocks of a given category surrounded by different categories.
	• The Competent Persons are satisfied that the stated Mineral Resources classification reflects the relevant factors of the deposit.

Audits or reviews	• Mineral Resources audits/reviews that have been completed in the past seven years:
	  o Rio Tinto Internal Audit of Ore Reserves and Mineral Resources (executed by AMC) (2023).
	  o External resource model audit by CRM-SA LLC (2022).
	  o Internal database audit of 2021 model completed February 2022.
	  o Fundamental Data – Extraction and Quality review of the resource database (2017).
	  o Long Range Model (Resource model) Cu EDA (2017).
	  o Rio Tinto Corporate Assurance Internal Audit of Resources and Reserves (2015).
	  o Copper Group Peer Review (2015).
	  o Rio Tinto internal review of RTK's Integrated Studies Investment Committee requests for the South Pushback (2014 & 2015).
	  o Review of the Mineral Resources and Ore Reserves procedures (2013).
	  o External review of molybdenum grade adjustments (2014).
	• No material issues were raised in the reviews.

Discussion of relative accuracy/ confidence	• Bingham Canyon open pit mine has been in operation since 1906. The Mineral Resources data collection and estimation techniques used are supported by reconciliation of actual production since 1989. • Reconciliation of actual production with the Mineral Resources estimates for the existing operational are generally within 10% for tonnage and copper grades.

Section 4: Estimation and Reporting of Ore Reserves

Criteria	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• The Ore Reserves model is based on the 2023 Mineral Resources model. • Mineral Resources are reported additional to Ore Reserves.
Site visits	• The Competent Person is located near the mine site and regularly visit the mine and plant sites.
Study Status	• The 2023 estimate is based on the pit slope design from the Apex feasibility study including the most current results of ongoing updates to geotechnical assessments and mine plans and considering all material modifying factors.
Cut-off parameters	• Optimised LoM production scheduling of phased mining designs is carried out using variable economic marginal cut-off grades based on performance of historical metallurgical ore types, product metals, operating cost projections and metal prices.

	• Metal prices used are provided by Rio Tinto Economics and are generated based on industry capacity analysis, global commodity consumption and economic growth trends. A single long term price point is used in the definition of ore and waste and in the financial evaluations underpinning the resources statement. The detail of this process and of the price points selected are commercially sensitive and are not disclosed. • Operating costs are informed by current operations. • It is the company's opinion that all the elements included in the metal equivalent calculation have a reasonable potential to be recovered by RTK's milling, smelting and refining facilities and sold. • Copper equivalents have been calculated using the formula CuEq% = Cu% + (((Au g/t * Au price per gram * Au_recovery) + (Mo% * Mo price per tonne * Mo_recovery) + (Ag g/t * Ag price per gram * Ag_recovery)) / (Cu price per tonne * Cu_recovery).
Mining factors or assumptions	• The Bingham Canyon Ore Reserves continue to be exploited by open pit mining methods using conventional biodiesel/electric haul trucks and electric or hydraulic mining shovels. • The estimate assumes the continuation of open pit mining using the existing mining fleet. • As the deposit is well disseminated, ore boundaries are generally diffused; hence no recovery and dilution factors are applied in the estimation. This is supported by historical performance. • The Ore Reserves production schedule was derived with Inferred Mineral Resources (~1% of total) using an economically optimized mining sequence based on detailed phase designs and cut-off policy determined by constrained linear programming algorithms with the objective to maximise NPV. • Other than sustaining equipment replacements, mining infrastructure required to produce the Ore Reserves currently exists.
Metallurgical factors or assumptions	• The metallurgical processes have been developed and optimized based on the long operating history of the deposit. • All milling is done by the Copperton Concentrator's four grinding lines consisting of three 10.4 m and one 11 m SAG mill each feeding two ball mills. Flotation is comprised of a bulk circuit having rougher, scavenger and cleaner lines feeding the Moly Plant where molybdenum disulphide concentrate is produced and bagged for toll roasting. A 25% copper concentrate is pumped 28 km to the Smelter where it is filtered and stockpiled. • The concentrate is smelted in a Flash Smelting Furnace (FSF) and then converted in a Flash Converting Furnace (FCF) operating in a single-line configuration separated by an intermediate matte stockpile. Two parallel furnaces further refine the copper and cast anodes which are railed to the Refinery. Smelter slag is milled and processed to recover metals. The Smelter converts 99.9% of the sulphur emitted from processing the copper concentrate feed into sulphuric acid which is also sold. Heat from the furnaces and the acid plant is used to co-generate about 60% of the Smelter's electric power needs. • At the Refinery, the anodes are interleaved with stainless steel cathode blanks in tank cells of acidic copper sulphate solution. Electric current is applied for about 20 days to dissolve the anodes and deposit 99.99% pure copper which is stripped from the reusable cathode and sold. Precious metals and impurities from the cathodes settle to the bottom of the cells. Gold and silver are recovered from the slimes by process of autoclaving, filtering, hydrochloric leaching and solvent extraction and cast into bars by an induction furnace. • All process performance parameters (recoveries, concentrate grades including deleterious elements) are based on historical performance of 44 ore types. • Several decades of mineralogy characterisation work concludes that the deposit continues to be of similar nature.
Environmental factors or assumptions	• Expansion of the existing Markham waste dump complex will be required for Apex waste material storage. Topsoil will be salvaged for closure and reclamation purposes before waste rock is dumped. • All approvals and permits necessary to mine the Ore Reserves have been obtained.
Infrastructure	• No significant changes to the existing infrastructure are required to mine Ore Reserves.

	• The mine's power network, 44kV and associated power poles, will require relocation prior to major mining activities beginning. • The east tailings impoundment will be expanded to buttress the east abutment. • Other services will continue to be provided by the existing infrastructure. • The in-pit crusher was relocated ex-pit in April 2021 with an overland conveyor to deliver ore to the Copperton Concentrator.
Costs	• Development capital costs are based on the Apex feasibility study. Sustaining capital costs are based on estimates derived for each operating plant. Both estimates utilise historical plant data where available. • Estimates of prices for consumables are based on historical pricing and global commodity consumption and economic growth trends. • Transportation and treatment charges for existing facilities are based on historical and projected feasibility study estimates. • There are no royalty obligations. The estimate includes an allowance for Utah state severance tax cost of 2.5% of revenue.
Revenue factors	• Revenue projections are based on projected mill head grades, process recovery losses and product prices. • Bingham Canyon applies consensus pricing in the determination of Ore Reserves and Mineral Resources. This involves generation of long-term price points based on industry capacity analysis, global commodity consumption and economic growth trends. A single long-term price point is used in the definition of ore and waste and in the financial evaluations underpinning the reserves and resources statement. The detail of this process and of the price points selected are commercially sensitive and are not disclosed.
Market Assessment	• All Ore Reserves products, other than molybdenum, are sold on open markets with no long-term contract commitments. Molybdenum is sold through contracts with roaster facilities.
Economic	• Economic inputs such as carbon pricing, inflation and discount rates are also generated internally at Rio Tinto. The detail of this process is commercially sensitive and not disclosed. • Economic evaluation of using Rio Tinto long-term prices demonstrates a positive NPV for the Bingham Canyon Ore Reserves under range of price, cost and productivity scenarios.
Social	• The mining tenure is wholly owned, and all permits necessary to mine the Ore Reserves have been obtained.
Other	• Semi-quantitative risk assessments have been conducted throughout the various technical studies and for each operating plant.
Classification	• Mineralisation tends to be reasonably well disseminated for copper, but molybdenum varies from disseminated to highly variable veins in higher grade areas. This difference occurs when grades are 0.25% MoS_2 or greater. As a result: o Measured Mineral Resources not contained within the 0.25% MoS_2 grade zone are classified as Proved Ore Reserves. o Measured Mineral Resources within the 0.25% MoS_2 grade zone are classified as Probable Ore Reserves. o Indicated Mineral Resources are classified as Probable Ore Reserves.
Audits or reviews	• An internal audit of Mineral Resources and Ore Reserves was commissioned by Rio Tinto OBK Technical Assurance and executed by AMC in 2023. Actions were developed for all findings. • An external review of Mineral Resources and Ore Reserves was completed by the Rio Tinto Corporate Assurance Group in 2015 and all finding mitigating actions were completed in 2016. • An independent Mineral Resources and Ore Reserves audit was last completed in 2010 and resulted in low-level findings regarding documentation of procedures.

	• An external review of the Mineral Resources and Ore Reserves estimating processes and documentation was conducted in 2013 and concluded that the fundamental processes are appropriate. All audit findings have been fully addressed.
Discussion of relative accuracy/ confidence	• Historically, reconciliation of actual annual production with the Ore Reserves estimate is generally within 5% for tonnage and copper and gold grades. Prior to 2014, molybdenum could exceed 10% high but a regression analysis and adjustment to the molybdenum grade has resulted in reconciliation performance similar to copper and gold. Silver grade estimates can be in excess of 10% below mined grade due to the nature of mineralisation and drill spacing. • These results are indicative of a robust Ore Reserves estimation process. • Accuracy and confidence of modifying factors are generally consistent with a deposit with a long operating history or with pre-feasibility level studies.

Rio Tinto Aluminium Pacific Operations – Amrun JORC Table 1

The following table provides a summary of important assessment and reporting criteria used 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. • Whole samples are collected beneath a cyclone return system (i.e., no sample splitting is conducted). • Multiscreen sampling is undertaken to determine optimum screen size for beneficiation at each deposit. • Once determined, samples are then beneficiated at the appropriate screen size (0.6 mm for the Amrun deposits).
Drilling techniques	• The current drilling method utilises aircore drilling. • 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.
Drill sample recovery	• No direct recovery measurements of aircore drilling samples are performed. • Whole sample is taken. • Holes are re-drilled if there is excessive sample loss (determined visually). • Sample weights are recorded before and after beneficiation in the laboratory.
Logging	• Standardised RTA bauxite logging systems are utilized for drilling. • 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 four horizons for the estimation of bauxite resources. • All sample intervals (0.25 m) are logged. • The holes are terminated four samples (1 m) into the floor lithologies as observed by the rig geologist. • Logged lithologies are vetted against historical drill holes and assay parameters.
Sub-sampling techniques and sample preparation	• No sub-sampling is undertaken. • Sample preparation of the 2-3 kg bauxite samples at Weipa is carried out at the purpose-built facility. The sample sizes are appropriate to the grain size of the material being sampled. 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). • Sample preparation at ALS (Australian Laboratory Services), Brisbane is set up with the same specifications of equipment as Weipa, however, has been expanded to six Kasons, multiple, larger drying ovens, more grinding capability, and room for multi-screen preparation. • Samples that have completed the appropriate Kason wash screen are crushed to <2.37 mm, split and then ground to 150 µm pulps for XRF, LOI and reactive Silica Analyses.

	• The majority of analyses are undertaken at ALS laboratory in Brisbane since 2015, prior to that the majority of the analyses were done at the Weipa onsite laboratory.
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. • Matrix matched field standards are systematically used. The field team inserts field standards at a rate of 1:50. • Laboratory preparation blanks, duplicates and assay standards also form part of the quality assurance and quality control (QA/QC) procedure. These are as follows: 2 blanks, 3 laboratory duplicates and 4 laboratory standards per batch (~100 samples). • 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. Field standards are also used by the Geology Department to monitor the performance of the laboratory via standard QA/QC routines. • 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. • Every assay batch returned from the laboratories is checked through ioGAS QA/QC objects before being accepted to the database for use in resource estimation. Major oxides, LOI, and $KSiO_2$ are checked routinely against performance of field standards, lab duplicates, and lab standards. • 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	• Infill drilling programs for resource definition return results in line with the wider spaced drilling. • 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. • 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 is utilised to provide collar elevation.
Data spacing and distribution	• Drilling at Amrun is completed systematically according to the following spacing based on level of confidence: o Inferred based on ~1200 m x 800 m. o Indicated ~200 m x 400 m. o Measured ~200 m x 100 m. o Assured (grade control) ~ 76 m x 76 m on an offset diamond pattern. • All downhole drill sampling is at 0.25 m intervals, and samples are taken of the cover and floor. • No sample compositing is done. • The data spacing and distribution is deemed sufficient by the Competent Person to establish geological and grade continuity appropriate for the Mineral Resources classification that has been applied.
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 advice 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 Resources and Ore Reserves 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. The same processes and procedures are utilised at Amrun. • 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 to provide infrastructure access between the north of Embley and south of Embley operations at Weipa.

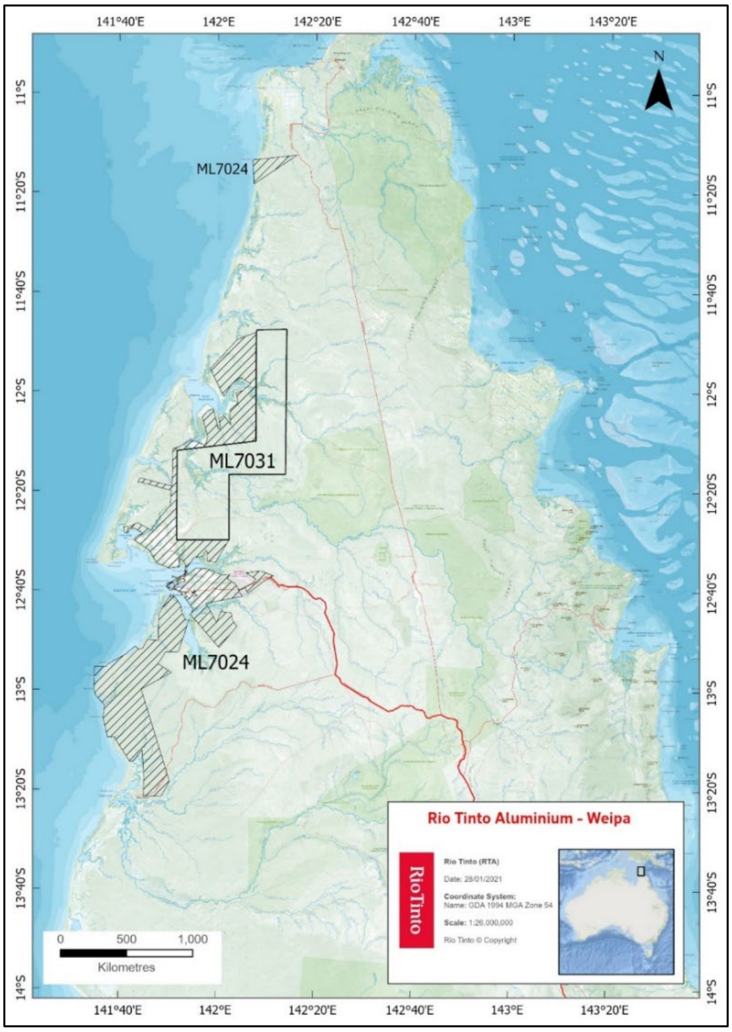
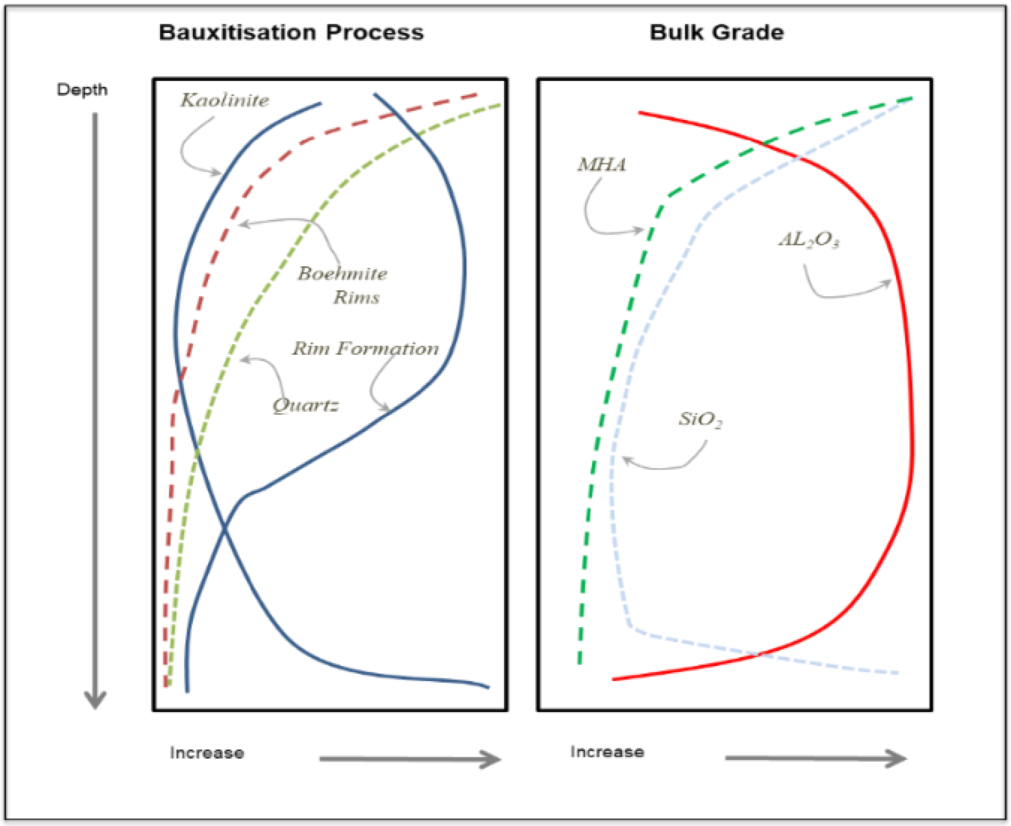


Figure 6 Rio Tinto Aluminium tenement location plan

	• 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. • 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.
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). • 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. • 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: • The Rolling Downs Group Sediments; and • The Bulimba Formation Sediments (Weipa Beds). • These two groups of sediments are eroded and weathered to form the Weipa bauxites. The different sediments resulted in different types of bauxite formations. • 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. • Andoom type bauxites are derived from shallow marine sediments that are fine grained, with little quartz, and this material is 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. • 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 overlain by 0.5 m topsoil and sit on an ironstone or clay base. • 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.

	• 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. • 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 most 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 vertical grade profile for alumina is the inverse of silica. The relationships between the genetic processes and the resulting grade profiles are displayed in the figure below.  **Figure 7 Relationships between the bauxite genetic processes and the resulting grade profiles**
Drillhole 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	• All drill holes have been drilled perpendicular to the horizontal stratigraphy of the deposit.

mineralisation widths and intercept lengths	• All known horizons of the deposits: overburden, red soil, bauxite, and ironstone/clay are intersected and sampled during drilling. Drilling continues for 1 m into the ironstone/clay to ensure the transitional boundary between the ore and floor is intersected.
Diagrams	• RTA location and facilities are shown in Figure 2 in the body of this release. • Figure 8 and Figure 9 show a plan view of the drill holes and a type cross section through the deposit.

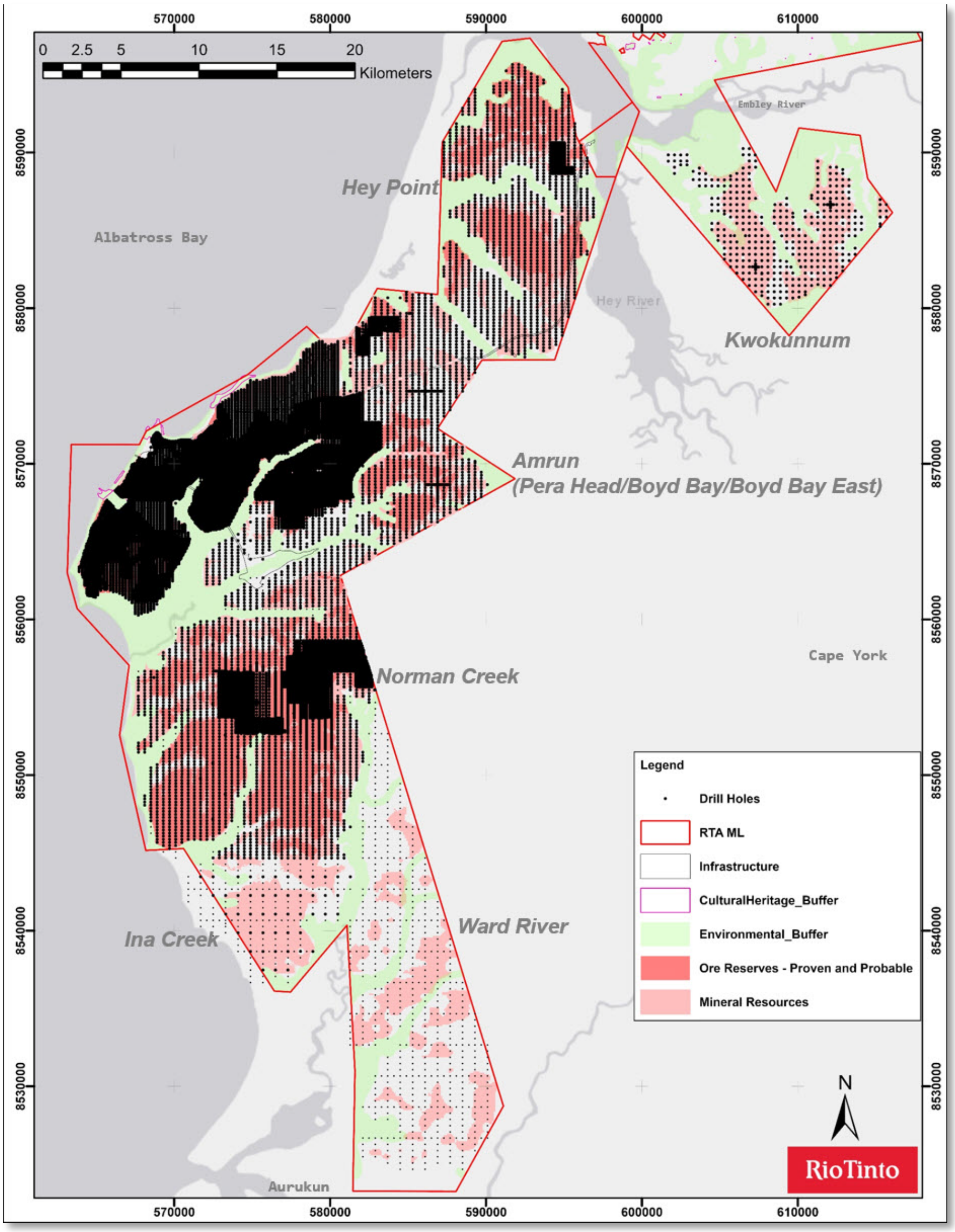


Figure 8 Current pit drill hole plan for Amrun deposits

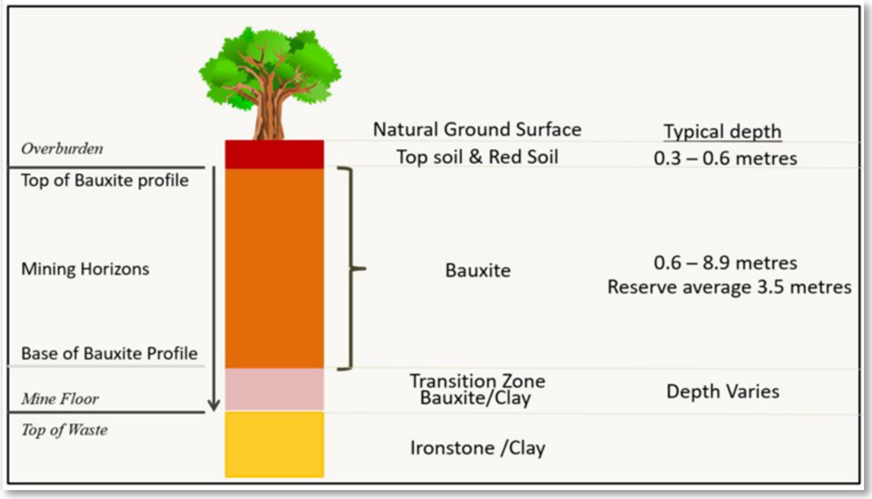


Figure 9 Type section for Amrun deposits

Balanced reporting	• Not applicable. Weipa is a mature mining operation with more than 50 years of operational and orebody knowledge. The Amrun Mine started operations in 2018.
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. • The geological drill hole database (RTA Geology) is managed by the Bauxite Geology Team within RTA. 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: ○ a Relational Data Model (structured storage tables and links) optimised for the storing of exploration and mining data information; and ○ 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. • 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. • The drill hole database used for Mineral Resources estimation has been internally validated. Methods include checking: ○ acQuire scripts for relational integrity, duplicates, total assay, and missing / blank assay values. ○ Domain names. ○ Null and negative grade values. ○ Missing or overlapping intervals. ○ Duplicate data. • Drill hole data was also validated visually by domain and compared to the geological model.

Site visits	• The Competent Person for the Weipa Mineral Resources, which include Amrun, visits the site on a regular basis and is involved in all aspects relating to the orebody knowledge.
Geological interpretation	• The Amrun bauxite geology is not complex in nature and is well understood as a predominantly pisolitic lateritic weathering profile. • Geological modelling of the bauxite horizon is undertaken using drill hole lithological logging and assay data. Logged lithologies are grouped into three horizons for modelling and estimation purposes, these are: o Overburden (Soil, Overburden, Sand, Red Soil). o Bauxite (Bauxite, Clay Bauxite, Cemented Bauxite, Transition and Clay Transition). o Floor (Ironstone and Clay). • Incorrectly logged lithologies are corrected based on grade. • Cross-sectional interpretation of the bauxite stratigraphy is conducted using Leapfrog Geo using LiDAR topography and horizon contact points from drillhole data.
Dimensions	• The Weipa bauxite deposits are laterally very extensive, covering the majority of ML 7024 and ML 7031 (~380 k ha). The Amrun deposits fall on ML 7024. Deposits vary in average thickness from 1.5 m to around 12 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 are modelled as a single domain, apart from Moingum (Hey Point) where two domains are modelled due to differences in bauxite thickness, grades, and source rocks. • Interpretation is undertaken using Leapfrog Geo while variography and estimation are performed using Maptek's Vulcan software Three 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 three horizons vertically. • The bauxite horizon is unfolded using the top and bottom contact surfaces at Amrun and Norman Creek. At Moingum (Hey Point) drill hole collars are flattened to constant elevation. 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 floor horizons, where data is available. Inverse distance is used for estimation. • A multiple pass search strategy is used to estimate grades, as shown in the following table. 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.

Pass	Search radii			Samples		
	X (m)	Y (m)	Z (m)	Min	Max	Per hole
1	120	120	1.0	3	8	1
2	180	180	1.0	3	8	1
3	360	360	1.0	9	14	3
4	720	720	1.0	9	14	3

- *Search radii in the Z direction is in unfolded space. Therefore, a value of 1 allows the search to see the entire profile.
- 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 minimum 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 (near infrared) 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 (block estimates against drill hole samples). Filtering by search volume and number of samples can improve comparisons. • The Mineral Resources 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 Resources tonnages are reported on a dry basis. • All Mineral Resources are reported as beneficiated dry 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. • 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 (grade and thickness cut-off, buffers, declustering) applied in determining available resources.
Mining factors or assumptions	• Amrun 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. • As the Amrun orebodies are shallow, geotechnical risks are extremely low. Pre-production drilling is completed to provide better definition of the roof and floor contacts for the five-year mine planning process. • 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. • 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	• Amrun 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. • 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. • Expected bauxite recovery and quality from the beneficiation process is assessed through laboratory scale test work of samples generated from the resource drilling process.

- 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.
- 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

- Amrun has obtained all relevant environmental approvals required to continue operations.
- Operation of tailings dams at Amrun are covered by relevant government permits.

Bulk density

- Bulk density is not measured on drill hole samples.
- Bulk density has been determined for each deposit at Amrun 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.
- Several 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.
- Default values are also assigned to cemented bauxite, overburden, and floor material for each of the different deposits at Amrun, see the below table.

Bulk density parameters	**Value (t/m^3)**
Overburden	1.23
Bauxite	1.47 – 1.55*
Cemented Bauxite	2.50
Ironstone/Floor	1.42

**Different for each deposit*

Classification

- Drilling is conducted to a 50 m x 100 m spacing for grade control purposes.
- To be declared a Measured Resource a deposit must be drilled to a 100 m x 200 m spacing.
- Indicated Resources are drilled on a 200 m x 400 m spacing.
- Inferred Resources are drilled on an 800 m x 1200 m 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.

Resource Category	**Pass**	**Search radii**			**Samples**		
		X (m)	**Y (m)**	**Z ***	**Min**	**Max**	**Per hole**
Measured	1	120	120	1.0	3	8	1
	2	180	180	1.0	3	8	1
Indicated	3	360	360	1.0	9	14	3
Inferred	4	720	720	1.0	9	14	3

**Search radii in the Z direction is in unfolded space. Therefore, a value of 1 allows the search to see the entire profile.*

	• The Competent Person is satisfied that the current Mineral Resources classification reflects the relevant factors for the deposit.
Audits or reviews	• An external Mineral Resources and Ore Reserves 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. The same processes and procedures are utilised at Amrun. • 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 accuracy/ confidence	• The relative accuracy and confidence level in the Mineral Resources estimates are in line with the accepted accuracy and confidence of the nominated Mineral Resources categories. This has been determined on a qualitative, rather than quantitative, basis, and is based on the estimator's experience with several deposits at Cape York and similar deposits elsewhere. 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. • 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 Reserves estimates are developed from the geological models current as of September 2023, and the Mineralogy model updated in 2020. • Mineral Resources are stated exclusive of Ore Reserves.
Site visits	• The Ore Reserves Competent Person has been employed by Rio Tinto for a significant period and has visited Weipa several times in recent years.
Study Status	• Amrun Operations has been operating continuously for over five years, and the Ore Reserves 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. The Amrun feasibility study was completed and approved by Rio Tinto in 2015.
Cut-off parameters	• The Ore Reserves 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 Reserves are 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. • As the Ore Reserves are shallow, geotechnical risks are low. Stockpile heights and wet road conditions are managed in accordance with standard operating procedures. • Dilution and mining recovery parameters are applied during the Ore Reserves estimation process (up to ± 2%), based on reconciliation of past performance, and reviewed annually. • Minimum bauxite mining thickness of 0.9 m is used for Amrun Ore Reserves estimation. • Inferred Mineral Resources are not considered in the estimation of Ore Reserves.
Metallurgical factors or assumptions	• Amrun 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 (averaging 69%) and quality from the beneficiation process is assessed through laboratory scale test work of samples generated from the resource drilling process. • Extractable alumina is calculated through application of a Mineralogy model.
Environmental factors or assumptions	• All relevant environmental approvals have been obtained to continue operations. • An EIS has been completed for Amrun with the relevant governmental approvals having been obtained. • Operation of tailings dam at Amrun is covered by relevant government permits.
Infrastructure	• Amrun is part of greater Weipa Operation, which has all appropriate infrastructure for the existing operations already developed. This includes water, power, sewage, stores, maintenance 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 Reserves.
Costs	• Operating and sustaining capital costs are sourced from the Weipa Operations financial model. • Future capital costs are based on project study estimates or five-year plan sustaining capital amounts. • Traditional owner and carbon tax assumptions are factored into the financial modelling. • 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. • Queensland royalties are included in the financial modelling at 10.0% of the bauxite price. • 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. • 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. • The discount rate to be used in the NPV (Net Present Value) model is supplied from Rio Tinto corporate and is set based on risk adjusted cost of capital. • 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 extract the Amrun deposit is granted through a single state agreement and is held through one mining leases ML 7024. • The Queensland Government Comalco (ML 7024) lease expires in 2041 with an option of a 21-year extension, then two years' notice of termination. • 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 level of confidence in the reserve modifying factors, Measured Resources are converted to both Proved and Probable Ore Reserves, and all Indicated Resources are converted to Probable Ore Reserves.

	• Inferred Mineral Resources are not considered in the estimation of Ore Reserves. • The Competent Person is satisfied that the current classification is reasonable for the Amrun Ore Reserves. • The Competent Person is satisfied that the stated Ore Reserves classification reflects the outcome of technical and economic studies.
Audits or reviews	• A Mineral Resources and Ore Reserves 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 more recent audit have been actioned.
Discussion of relative accuracy/ confidence	• Ore Reserves estimates are compared with production data on an annual basis at Amrun. This reconciliation shows that for all key parameters, production was within ±5% of the estimates for calendar year 2023.

Iron Ore Company of Canada JORC Table 1

The following table provides a summary of important assessment and reporting criteria used 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 used for Mineral Resources and Ore Reserves estimation are taken from diamond drill core. Drilling is currently almost exclusively NQ and HQ sized, although BQ sized core has been collected in the past. • Oxide iron mineralisation is determined initially by visual inspection of drill core, and then using whole rock geochemistry. • Half core samples are coarse crushed, then riffle split during several crushing stages to a 20g sample which is pulverised to produce a sample for assaying. Magnetite grades are assayed by SATMAGAN (calibrated), carbonate and combined water are assayed by absorption method in a Leco furnace and all other assays are carried out by XRF techniques on fused beads. A significant quantity of historical iron grades were assayed using titration. • The core sample length for assaying is currently 4 m, although sample lengths ranging from 3 m to 5 m have been used in the past.
Drilling techniques	• Drill hole data is a mixture of historic (1960's) and current. • All samples are obtained by diamond drilling, usually at NQ size, with core recovered in a standard tube. Core is not oriented, although some holes are probed with optical and acoustic televiewers to determine structural orientations.
Drill sample recovery	• Core recovery is measured as the length of recovered core divided by the drilled length for each recovered core barrel. • Core recovery is generally very good (>95%), so no special measures are taken to improve core recovery in most lithological units. In limonitically altered units or intervals of fault gouge, however, core recovery is generally poor (<75%). In these cases, HQ size drilling and 1.5m core barrels are used where practical, with varying degrees of success in more successful core recovery. • No relationship has been determined between core recovery and sample grade or material density in unaltered geological units. However, sample bias due to core recovery is likely in the limonitically altered material. In these zones, the softer material is often unrecoverable, with the harder, more competent pieces of rock being recovered more successfully. This can lead to overprediction of ore hardness in limonitically altered ore zones. More work is requited to better quantify this issue.
Logging	• Core samples have been geologically logged to a level of detail to support appropriate Mineral Resources estimation, mining studies and metallurgical studies. Selected holes have been geotechnically logged to a level of detail to support appropriate pit slope design studies. • Core logging is primarily qualitative in nature and follows a Standard Operating Procedure (SOP). All core is photographed before splitting. • The total length of all drill core is inspected and logged, with specific detail applied to intersections of mineralisation as per the SOP.
Sub-sampling techniques and sample preparation	• The core sample length is currently 4 m, although sample lengths ranging from 3 m to 5 m have been used in the past. • Core is split using a hydraulically powered splitter (not sawn). Half of the core is taken for assaying, density determinations and iron recovery testing. • Half core samples weigh, on average, ~9 kg. Samples received at IOC's Carol laboratory are initially dried at 300-400°C for approximately 2.5 hours, then crushed to approximately 19 mm via a jaw crusher. Samples are then riffle split with a small subsample sent for

	pulverization using a Herzog pulveriser. A final 20 g pulp sample (passing a -325 mesh size) is produced and sent on for geochemical analysis. • The sample preparation practices are appropriate for iron ore sampling. • Half core, coarse rejects and pulp duplicates are inserted after every 50th sample. • Sample sizes are mainly determined by sample lengths and weights appropriate for mining representivity and sample handling limitations. • Metallurgical testing samples are selected over 16 m core lengths. Half core samples are selected over 16 m intervals for SPI (grind energy) testing and assay coarse rejects are composited to 16 m intervals for iron recovery testing (by shaking table).
Quality of assay data and laboratory tests	• All geochemical assaying is completed at IOC's on site laboratory. Iron recovery testing is completed by COREM laboratory in Quebec City, using the shaking table technique. SAG Power Index testing is completed at SGS laboratory in Lakefield, Ontario. The SAG Power Index (SPI) is used to calculate material grindability/hardness. • Assaying is performed by XRF technique for the majority of elements, CO2 and H2O++ by absorption technique, and magnetite by SATMAGAN. Iron grade was assayed by titration until 1 April 2019 when the total iron assay was changed to the TGA-XRF method. • The SATMAGAN determination for magnetite has calibration procedures and standards developed. • Half core, coarse rejects and pulp duplicates are inserted after every 50th sample. Quartzite blanks are also submitted after every 49th sample. Matrix matched assay control standards are submitted after every 12th sample. Metallurgical tests (grind energy and iron recovery) in external laboratories insert duplicate samples after every 50th sample. Iron recovery testing also uses a control standard daily and blind duplicates annually. Quartzite blanks provide a quality check for sample swaps. • This quality assurance and quality control (QA/QC) program was implemented by IOC in 2004. Prior to 2004, no established QA/QC program existed within IOC and as such, historical data from prior to 2004 is occasionally omitted from use within resource estimation. • Pre 2009 iron recovery data has been excluded from the dataset due to lack of QA/QC at the COREM laboratory. • Assay results demonstrate good repeatability, but metallurgical test results are more variable. • The Competent Persons consider that the QA/QC procedures and results indicate appropriate levels of precision and accuracy
Verification of sampling and assaying	• Intersections of mineralisation are determined by core logging geologists, and periodic verification is conducted by senior company personnel throughout drilling campaigns. • Twinned holes are occasionally used to check data from old drilling programs (>20 years old), on an ad hoc basis. The results generally show a good correlation between historic and new holes. • Sampling and data management procedures are documented in internal SOPs. • No adjustments are made to primary assay data. Any reconciliation adjustments are made to copies of the primary data or to modelled data. Reconciliation adjustments are made to magnetite grades (to correct for differential oxidation of plant and core samples during sample prep) and to iron recovery (to reflect the operational efficiency differences between laboratory shaking tables and plant spirals). Both adjustments are made in resource block models after estimation, using scripts.
Location of data points	• Drill collars are surveyed to centimetre accuracy using theodolites/total stations (historical data) or high precision GPSs (recent data). Downhole dip surveys are taken in all holes at approximately 50 m downhole intervals. Lateral deviations were not routinely taken in historical drilling programs, due to the presence of magnetic lithologies. Downhole gyroscope surveys were carried out for all holes deeper than 150 m after 2015. Since 2019, gyroscope surveys are conducted on all holes. • All reserve and resource models are developed on a local, planar grid system. • Topographic control is performed using aerial surveys and production of DTM's, this is locally supplemented by some lidar surveys. High precision GPS surveying is used in mine operating areas to create as mined topography.

Data spacing and distribution	• Drillhole spacing criteria for Mineral Resources classification is as follows: ○ Measured – average spacing less than 60 m between drill holes. ○ Indicated – average spacing from 60 m to 120 m between drill holes. ○ Inferred – average spacing from 120 m to 240 m between drill holes. • Historical data spacing and distribution has been sufficient to support grade continuity, however more recently local geological complexity has required tighter spacing for support and revision to resource classifications where appropriate. • Chemistry is determined from the original sample length (currently 4 m of drill core) but metallurgical testing is carried out on composites of up to 16 m length (ie 4 raw samples). Composites are only prepared within a single lithological unit, which can restrict the composite length.
Orientation of data in relation to geological structure	• Older drilling was generally vertical, but since 2006 all drilling has aimed to intersect bedding as close to 90 degrees as is possible (holes can be drilled up to 45 degrees off vertical). • Orientation of drilling is generally consistent with large scale geological structures therefore any resulting sample bias is not considered a significant issue.
Sample security	• Measures used to ensure sample security are considered appropriate. All samples are identified, bar coded and handled by Technical staff. Delivery of samples is performed by Technicians and handling at the laboratory is carried out by laboratory analysts.
Audits or reviews	• Internal and external audits, and peer reviews are conducted periodically. Action plans are developed and implemented concerning sampling techniques and data. These are summarised in Section 3.

Section 2: Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and land tenure status	• IOC's mineral rights, for reported Mineral Resources and Ore Reserves, are sub-leased from the Labrador Iron Ore Royalties Corporation (LIORC), which holds those rights under the Labrador Mining and Exploration Act (1938) as amended (the LM&E Act). The Mineral Resources and Ore Reserves rights are held on mining leases 10 (block 22-1), 13 (block 22-3), 14 (block 22-4), 15 (block 22-5), 17 (block 22-7) and 18 (block 22-8). LIORC receives a 7% royalty on revenue (FOB Sept-Îles) and a 10c/long ton fee on shipped product. Five Indigenous groups have asserted aboriginal rights over the area of IOC's Mineral Resources and Ore Reserves. IOC has signed Impact Benefit Agreements with all five groups. IOC is owned by Rio Tinto (59%), Mitsubishi (26%) and LIORC (15%). • The LM&E Act mining leases are in their final 30-year term, which will expire in 2050 (lease 10) and 2052 (leases 13, 14, 15, 17 and 18). After the expiry of the leases under the LM&E Act, IOC expects to be able to convert the leases to mining leases under the Minerals Act (1990). Under the Minerals Act, leases can be granted for up to 25 years with unlimited renewals of up to 10 years. Lease renewals under the Minerals Act are conditional on having met all lease conditions and can be subject to any conditions the Minister chooses to impose. The most likely condition is for continuous production. • LIORC holds surface rights over the active areas of IOC's operations, which are also sub-leased to IOC. The initial area of surface rights was a grant and subsequent areas have been leases. Surface rights leases are timed to expire around the time that the underlying mineral rights expire. All surface rights leases expire in 2050. • LIORC holds a tailings disposal license over an area of the western side of Wabush Lake. This license has been sub-leased to IOC and allows the extraction of process water from Wabush Lake and deposition of tailings into the license area. This license expires in 2050. • Wabush Lake is a designated Tailings Impoundment Area listed in Schedule 2 of the Metal and Diamond Mining Effluent Regulations of the Fisheries Act. IOC has negotiated a fish habitat offset agreement for an area on the western side of Wabush Lake. LIORC has applied for a change in the area of the provincial tailings license, to align that license with the area for which the fish habitat offset was negotiated.

Exploration done by other parties	• No exploration has been carried out by other parties on the deposits.
Geology	• IOC's Mineral Resources and Ore Reserves form part of the Lake Superior type iron formation. Deposition of the iron bearing minerals occurred in a shallow ocean basin and the formation was subsequently tectonically folded and faulted resulting in a highly metamorphosed hematite and magnetite mineralisation. Locally the formation has been altered by leaching along structural horizons which resulted in the development of limonite.
Drillhole Information	(see table below)

	Diamond drill meters			
Deposit	**Prior to 2004**	**2004-2008**	**2009-Present**	**Total**
Humphrey Main	83,230	7,449	80,242	170,921
Humphrey South	40,771	4,804	67,176	112,751
Luce	43,657	25,692	103,814	173,163
Spooks	9,250	0	2,469	11,719
Lorraine	9,527	0	2,158	11,685
Moss	8,004	4,323	96,112	108,439
Wabush 6	1,412	25,532	19,101	46,045
Smallwood North	23,302	0	4,451	27,753
Total	**219,153**	**67,800**	**375,523**	**662,476**

Data aggregation methods	• Not relevant as no Exploration Results being reported.
Relationship between mineralisation widths and intercept lengths	• Recent drilling programs have been designed to intersect dipping mineralised sequences as close as practically possible to perpendicular, to minimise the difference between intercept widths and mineralisation widths. Appreciable differences still occur in areas of steeply dipping mineralisation. • Geotechnical holes are often aligned sub-parallel to bedding, to allow the mapping of joint sets oriented perpendicular to bedding. Consequently, intercept lengths in these holes are often very different from mineralisation widths. • Older holes were all drilled vertically, so significant and variable differences occurred between intercept lengths and mineralisation widths. • Three-dimensional modelling of the deposit geology corrects for any discrepancies between intercept lengths and mineralisation widths in the resource estimation process. • Exploration Results, including intercept lengths, are not reported to the market.

Diagrams

- IOC location and facilities are shown in Figure 3 in the body of this release.
- Figure 10 and Figure 11 show a plan view of the drill holes and a typical cross section through the deposit.

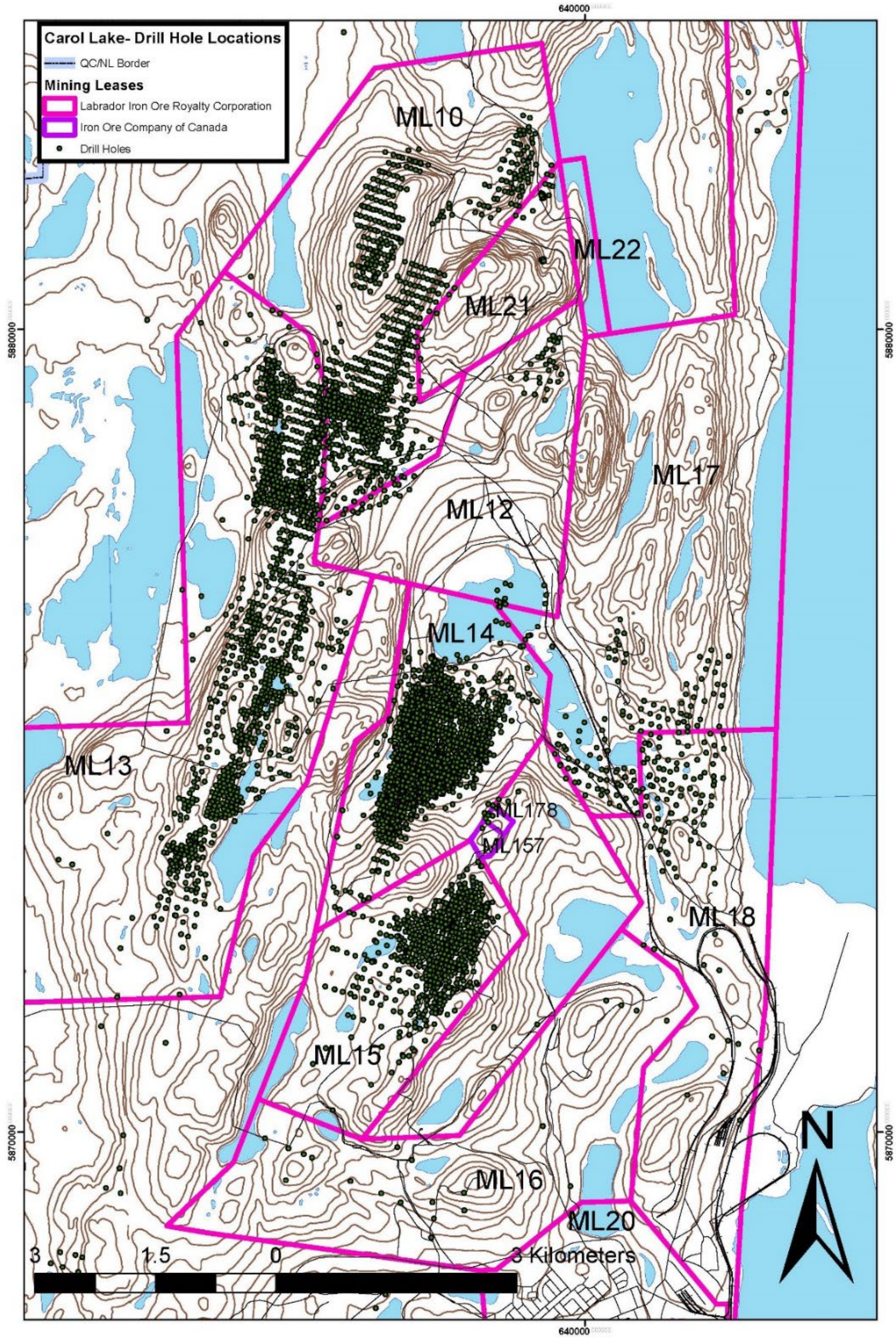


Figure 10 Site tenure and drill hole plan for IOC

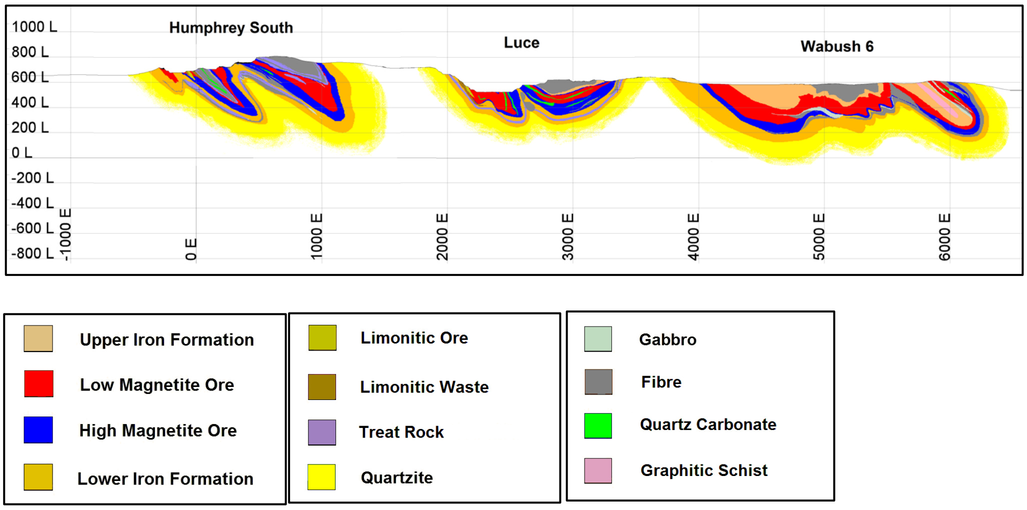


Figure 11 Typical cross section through IOC deposits

Balanced reporting	• Not applicable as Exploration Results are not reported by IOC.
Other substantive exploration data	• Aerial magnetic surveys and both aerial and surface gravity surveys have been carried out, as well as face mapping in active pits.
Further work	• Progressive in-fill drilling will be carried out as required to allow conversion of Mineral Resources to Ore Reserves. It is intended to ultimately achieve a drilling density of 60 m x 60 m, to allow Measured resource classification for most Mineral Resources.

Section 3: Estimation and Reporting of Mineral Resources

Criteria	Commentary
Database integrity	• All data is maintained in an acQuire database. • Pull down menus are used as much as possible within the acQuire database for core logging to ensure consistency of logging codes. • XRF Chemlab data is transferred through network system to the acQuire database (no manual entry). • Iron titration, SATMAGAN (magnetite), H_2O/CO_2 (Leco furnace) and density analysis are entered manually by Chemlab analysts into the laboratory LIM system. • A QA/QC process is in place which includes standards, blanks, duplicates, and whole rock analysis to monitor data quality. • The IOC IT department has a regular process of data backups in place. • Many acQuire fields contain data validation rules. Data validation checks exists within the AcQuire database. Validation checks are also done within Vulan prior to block estimation.
Site visits	• All Competent Persons work full time on site. As a consequence, they are well aware of site issues.
Geological interpretation	• IOC's iron ore operations are focused on exploiting iron formations within the Sokoman Formation of the Knob Lake Group. The Knob Lake Group is divided into six formations, including the Attikamagen, the Denault, the Mackay River, the Wishart, the Sokoman and the Menihek Formations. The dominant Formations encountered within IOC's tenements include the Sokoman and Wishart Formations, along with localized occurrences of the Shabogamo Intrusive. The Sokoman Formation is subdivided into the Lower Iron Formation (LIF), Middle

	Iron Formation (MIF) and Upper Iron Formation (UIF) members. Iron oxide mineralisation can be found in all three members; however, the MIF contains the bulk of economic mineralisation that is mined by IOC. • The MIF is further subdivided into an upper Low Mag Ore (LMO) unit and a lower High Mag Ore (HMO) unit. • Overall geological structure is generally well understood at the mine site. • The geology is modelled as a folded sequence of metasedimentary rocks, intruded by igneous units. Zones of alteration are modelled based on observed alteration of drill core and combined water assays. • Altered material has been historically divided between limonitic mineralisation (i.e. altered material with potential for processing) and limonitic waste (i.e. altered material without potential for processing) based on the combined water grade. In 2017 the distinction between limonitic mineralisation and limonitic waste was modified to also take account of the iron grade, based on operational experience in the Magy area of Humphrey South. As a consequence, additional limonitic mineralisation was identified, particularly in the Humphrey South and Sherwood North deposits. • Estimations are completed using major mineralisation types (HMO/LMO) as domains. • Estimations are also controlled through the use of structural domains which vary by deposit. • Grades are assumed to be continuous both along strike and down dip. • Grade estimations are restricted to mineralisation and waste types (eg HMO samples only used within HMO blocks). • The geology is well understood and no alternative interpretations exist for the deposits.Since 2020, all geological interpretation has been completed in Leapfrog Geo 3D modelling software. Previous to that, geological modelling was completed in Maptek Vulcan.
Dimensions	• The Mineral Resources cover an area of 13 km by 9 km and comprise 8 deposits. • Deposits vary in size from as small as 0.6 km x 0.4 km to 2.5 km x 1.5 km. • Depth varies from 200 m to 400 m
Estimation and modelling techniques	• Assays are composited to 8 m lengths for resource estimation. • Maptek Vulcan software is used for all grade estimations using inverse distance squared for Fe, Al_2O_3, TiO_2, MgO, CaO, H_2O, CO_2, magnetite, Mn, SiO_2, Na_2O, K_2O, P, S, density, core recovery, RQD, SPI, Fe recovery, and Mn recovery. • The model is domained by geology (HMO, LMO, LIF, etc) and by structure (fold limbs). • Multiple search passes are used for estimation with a maximum search distance of 600 m. • Blocks are flagged (ESTFLAG) with each estimation search pass. • After 4 search passes any un-estimated blocks have an average grade assigned to them by geology type. • Estimation is into parent blocks of 20 m x 40 m x 13.7 m with sub-blocking down to 5 m x 5 m x 3.425 m. • Block sizes were originally a function of drill hole spacing of 61 m x 122 m. the drill hole spacing has since been tightened to 61 m x 61 m in active mining areas. • The selective mining unit is assumed to be 10 m x 10 m x 13.7 m (where the bench height is 13.7 m). • There is no recovery of by-products. • There are no assumptions made about correlations between variables. All variables are estimated separately. • Resource estimates are completed by only using matching samples and geology types. For example, HMO samples are only used to estimate HMO blocks. • No cutting or capping applied to any data, as there are no outliers identified. • Drill hole data, composite data, and block estimate data are compared with the use of average grades by material types. Tables are produced and included in model reports. Swath plots are created by easting, northing and elevation for mineralised domains. • Updates to estimates are reconciled against previous estimates. The two models updated in 2023 were Spooks and Humphrey South. The Spooks deposit does not currently have any Ore Reserves, and the model update increased Mineral Resources by 2 Mt. The major area

	of update in Humphrey South was outside of current Ore Reserves phases, and resulted in a decrease in Mineral Resources of ~105 Mt. • Ore Reserves for operating pits are also reconciled against plant performance, which gives an indication of Mineral Resources accuracy. The two major model updates for 2023 were in areas of very limited production in 2023. Reconciliation of 2023 and 2022 models were carried on 2023 plant data, with the same results. The tonnage and key quality parameters of the Ore Reserves models reconcile reasonably well (+\- 10% or better) with concentrator feed as measured on a monthly basis. For the 2023 annual reconciliation, all key quality parameters and overall ore tonnages reconciled within +/- 6%.
Moisture	• Ore Reserves are reported on a saleable product basis at natural moisture content. Historical average moisture contents are used. Mineral Resources are reported on a dry basis.
Cut-off parameters	• Modelling indicates that ~98% of oxide mineralised material in the middle iron formation within the Resource envelope has a weight yield greater than 33%. At projected long-term prices and costs, the breakeven cut-off grade is approximately 33%, so the entire middle iron formation is effectively above cut-off. Consequently, Mineral Resources definition is based on lithology (i.e. all oxide mineralised middle iron formation), rather than a cut-off grade. All material modelled to contain fibrous amphiboles is considered to be waste.
Mining factors or assumptions	• Current mining methods are assumed to be used for the exploitation of all Mineral Resources and Ore Reserves. • Mineral Resources are constrained by pit optimisation shells derived using projected long-term prices and costs.
Metallurgical factors or assumptions	• It is assumed that all Mineral Resources and Ore Reserves will be processed through the existing concentrator. Metallurgical performance is, therefore, based on current metallurgical test parameters for estimation of specific grind energy and gravity iron recovery.
Environmental factors or assumptions	• The existing tailings disposal license has sufficient capacity to accommodate all tailings from the Ore Reserves, if some mechanical stacking is carried out late in the reserve life. It is intended to use exhausted mine pits (initially the Luce pit) to hold the tailings generated from Mineral Resources. A high-level assessment of waste disposal has identified sufficient disposal capacity (from both external waste dumps and pit backfill) to accommodate all waste associated with Mineral Resources and Ore Reserves, but further work is required to refine designs and ensure they match longer term production schedules.
Bulk density	• Bulk density determinations are made from drill core at 16 m intervals. A single sample is taken for each determination. The bulk density is estimated by a water immersion method without wax coating. The rock units generally have low porosity, so the waxless method is considered appropriate. • Porous intervals are identified and sent for wax coating density analysis at an external lab, this process has recently commenced. Limonitically altered zones are poorly sampled for density, due to poor core recovery. Limonitically altered material, however, is not included in Ore Reserves due to uncertainty regarding the material handling characteristics and metallurgical response of the more highly altered material. The poor density determinations in the altered zones does not materially impact Ore Reserves, however, this may have an impact on the Mineral Resources. • Density is spatially modelled for all deposits using inverse distance squared. • Density is not determined from iron grade.
Classification	• Resource classification is completed using a triangulation flagging method. • Categories are determined on a section-by-section basis utilizing drill spacing and geological complexity as the main criteria. Areas of limonite or poor core recovery are lowered in classification due to potential uncertainty. • Sectional polygons are evaluated for continuity along strike and then joined to form a continuous triangulated solid.

	• Drill spacing is predominantly: up to 61 m x 61 m for Measured; from 61 m x 61 m to 122 m x 122 m for Indicated; and from 122 m x 122 m to 244 m x 244 m for Inferred. • Mineral Resources classification takes subjective account of geological and mineralisation continuity, drill density, core recovery and confidence in assay results (based on presence or absence of QA/QC programs). In areas of poor core recovery or geological complexity the resource classification is reduced by one classification. • The Competent Person's consider that the classification appropriately reflects the confidence in the Mineral Resources.

Audits or reviews	• Regular audits have been carried out at IOC as follows:
	  ○ Internal Audits - Orebody Knowledge and Long-term Mine Planning Standard – 2008 and 2012.
	  ○ AMEC (Harry Parker) - 2010.
	  ○ Rio Tinto Audit (Coffey Mining) – 2010 Satisfactory result.
	  ○ Internal Audits 2010 (QIT) and 2012 (AMEC).
	  ○ Rio Tinto Peer Review – 2014.
	  ○ Rio Tinto Audit (Xstract Mining Consultants) – 2015 Satisfactory result.
	  ○ Rio Tinto Audit (Snowden) – 2023 Satisfactory result. All actions relating to findings from this audit have been completed and checked.

Discussion of relative accuracy/ confidence	• Overall, the Competent Persons's are comfortable with the Mineral Resources estimated and consider the classification appropriate for the level of information. There are factors (core recovery, areas of particular geological complexity) which can impact the confidence in the estimates, which has been taken into consideration during classification:
	  ○ Mineral Resources are based on sub block models which are, in turn, based on geological interpretations which utilise diamond drilling. Drilling tends to be tighter spaced higher up in the deposits therefore leading to a more reliable interpretation. Much deeper in the deposits there is sometimes less drilling which can impact the interpretation. The lack of drilling lowers the confidence in the mineralisation at depth.
	  ○ Ore tonnages are calculated based on measured densities on the drill core. Historical drill holes do not have density determinations. Any area of the deposits being supported by older drilling has a potential to have tonnage issues.
	  ○ Only a small percentage of drill holes in each deposit has a down hole gyro survey completed on it. While a dip measurement was likely completed the true azimuth of the hole is an assumed value for most drill holes. This could result in inaccurate geological contacts.
	  ○ The tonnage and key quality parameters of the regularised models (which are extensions of the sub-block models) generally tend to reconcile well (+\- 10% or better) with concentrator feed as measured on a monthly basis. Mining (short range) models reconcile very similarly to the reserve models for most parameters but are usually more conservative in terms of ore tonnage reconciliation. In 2023, the reserve model overpredicted plant feed by 4%, while the mining models overpredicted by only 3%.

Section 4: Estimation and Reporting of Ore Reserves

Criteria	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• The Mineral Resources used as the basis for conversion to Ore Reserves are as described in sections 1 and 3 above. • Mineral Resources are reported additional to the Ore Reserves.
Site visits	• One Competent Person works on site two weeks out of three and the second visits site monthly. As a consequence, both are well aware of the operational issues relating to Ore Reserves.

Study Status	• Explicit pre-feasibility or feasibility studies are not appropriate in operational pits, but operational technical studies (geotechnical, hydrogeological, etc) are all prepared to at least pre-feasibility study level. • All Ore Reserves are based on detailed pit designs. Pit designs are peer reviewed and formally approved by all stakeholders (technical and operational). • Technically achievable and economically viable mine plans have been developed for all Ore Reserves, using appropriate Modifying Factors.
Cut-off parameters	• At projected long-term prices and costs, the breakeven cut-off grade is approximately 33% weight yield (i.e., tonnes of concentrate produced per tonne of concentrator feed). Modelling indicates that ~99% of oxide mineralised material in the middle iron formation within the Reserve pits has a weight yield greater than 33%, so the entire middle iron formation is effectively above cut-off. Consequently, Ore Reserves definition is based on lithology (ie all oxide mineralised middle iron formation), rather than a cut-off grade. A 1% cut-off on manganese grade is used for Ore Reserves (i.e., all material with >1% Mn is considered to be waste, regardless of weight yield). All limonitically altered material and all material modelled to contain fibrous amphiboles is also considered to be waste.
Mining factors or assumptions	• Mineral Resources are converted to Ore Reserves by detailed pit design, based on optimisation (i.e., maximisation) of NPV. • The Ore Reserves are mined by open pit methods, after stripping overlying glacial tills (typically ~2-3 m thick). The low unit cost of open pit mining is suited to the economics of the deposit style. The 13.7 m bench height is appropriate for the geometry of the deposits (i.e. low dilution and ore loss). • Pit slope parameters are determined by geotechnical studies carried out by reputable external consultants and are reviewed by Rio Tinto internal technical experts. Grade control is visual, with guidance from blast hole logging and sampling and face mapping. Ore Reserves are usually in-fill drilled before mining, to improve prediction accuracy on a short term (monthly) basis. • The resource model is regularised to 10 m x 10 m x 13.7 m blocks (the selective mining unit) for pit optimisation. Estimated long term prices and costs are used for pit optimisation. The pits are optimised on an NPV basis (not just cash flow) and the sinking rate is constrained to no more than 3 benches per year. • Mining dilution and ore loss is estimated by regularisation to a 10 m x 10 m x 13.7 m selective mining unit (SMU). Regularised blocks with less than 65% ore lithologies are considered to be waste, based on reconciliations of modelled ore against concentrator feed. • A minimum width of 60 m is used for local restrictions. In general, cutbacks are designed to be at least three times this minimum width (ie 180 m), where feasible. • Inferred Mineral Resources are not used for reserve pit optimisations. Mining schedules are run using only Ore Reserves to demonstrate the economic viability of the Ore Reserves and to determine the mine life. • The mining method requires electrical power to be distributed to the pits (to power the electric shovels and drills), haul roads to connect the pit to waste dumps and the ore delivery system, an ore delivery system (currently an automatic train operation and a crusher and conveyor), dewatering systems (for groundwater extraction and surface water removal) and a concentrator.
Metallurgical factors or assumptions	• The ore is crushed and then ground in autonomous grinding mills. The ground ore is then concentrated using both gravity concentration methods (spirals and reflux classifiers) and magnetic concentration methods. Further grinding by ball mills is required in the magnetic concentration step. A portion of the concentrate is pelletised. • This process is proven technology which has been used at the IOC operation for more than 60 years. • Metallurgical testing of drill core is carried out to determine specific grind energy and iron recovery. This test work is carried out on 16 m sample composites as described above, in the sampling section. Metallurgical parameters are spatially modelled, using the same modelling domains as assayed parameters.

	• Deleterious elements are modelled, and grades are reported in production schedules. Deviations from historical grades are flagged with the marketing group. Key deleterious elements are alumina, manganese, and titanium dioxide. • There has been limited bulk sample test work carried out, but there has been continuous processing of the ore for the past 60 years.
Environmental factors or assumptions	• Acid Rock Drainage (ARD) studies have been carried out which indicate minimal acid production potential (sulphides are very rare in drill core). Gabbro waste units have some potential for acid generation, but with very low sulphur grades (typically ~0.15% S). Limonically altered material also shows potential for acid generate (due to depletion of carbonates), but at even lower sulphur grades (0.02-0.03% S). • Waste rock disposal sites are limited (there is a lot of mineralisation in the area), but there are no significant environmental issues associated with planned sites. • The currently licensed tailings disposal area has a remaining life of approximately 20 years (sufficient for all Ore Reserves). In-pit tailings disposal is being investigated for when the current area is full but has not been sufficiently studied for use in Ore Reserves reporting. Pre-feasibility level studies have been completed to assess options for increasing disposal capacity of the existing Tailings Disposal Facility.
Infrastructure	• IOC has existing operations supplied by existing power and transport infrastructure. Some expansion of the mining operations will be required in the future as strip ratios increase, but power and labour for the increased fleet is expected to be available.
Costs	• The only capital required is sustaining capital, which is based on historical levels and installed capital. • Operating costs are developed using Rio Tinto cost estimation guidelines. The main operating cost drivers (eg fuel price, exchange rates, freight costs etc) are supplied by Rio Tinto Economics. • Deleterious elements are not anticipated to affect prices or costs (based on operational experience). • Product sea freight costs are supplied by Rio Tinto Economics. Rail freight costs are derived from fuel prices supplied by Rio Tinto economics, using Rio Tinto cost estimation guidelines. • Treatment and refining charges are not applicable for iron ore. No allowance has been made for penalties for out of specification product, based on historical performance. • Allowances have been made for royalties to be paid to the LIORC in accordance with the sub-lease agreement between LIORC and IOC. Government royalties have been allowed for in accordance with the provisions of the Labrador Mining and Exploration Act (1938) as amended.
Revenue factors	• Iron grade and iron recovery of the mined ore are estimated from the regularised (i.e., diluted) Ore Reserves model. • Metal prices are supplied by Rio Tinto Economics. • Exchange rates are supplied by Rio Tinto Economics.
Market Assessment	• IOC has a long history of supplying to North American and European customers, which is expected to continue. The low phosphorus and alumina content of IOC products makes them attractive, even in periods of low demand. IOC's main competitor in North America and Europe is Vale, but IOC's lower alumina grades enable it to maintain sales. In Asia, the main competitors are the Pilbara producers, as well as Vale. IOC's low phosphorus and alumina grades enable sales to be maintained against that competition. • Rio Tinto Economics provides price forecasts for use in Ore Reserves estimation. Market volume capacity is not considered to be a problem. IOC's forecast production rates are a very small proportion of projected global demand, even in a contracting market. IOC's quality makes placement of forecast sales volumes reasonably assured. • IOC produces iron ore (concentrate and pellets) for sale to smelters. It is not an industrial mineral.

Economic	• Rio Tinto Economics supplies price and cost information on a real basis for use in NPV calculations. Rio Tinto specifies the discount rate to be used. • Project NPVs are confidential information.
Social	• Impact Benefits Agreements (IBAs) have been negotiated with all five Indigenous land claimants.
Other	• Fibrous minerals are present to greater or lesser degrees in all deposits. Fibrous minerals are not processable, so unmodelled fibrous zones are a risk to Ore Reserves tonnages, both directly and as a consequence of the reduced yield (and, hence, higher cost) that they represent. • Mineral tenure over Ore Reserves is secure. • Ore Reserves are currently constrained by tailings storage capacity.
Classification	• Ore Reserves classification is completed using a triangulation flagging method. • Categories are determined on a section-by-section basis utilizing the spacing of diamond drilling for which geometallurgical testwork has been carried out as the main criterion. Areas of limonite or poor core recovery are lowered in classification due to potential uncertainty. • Sectional polygons are evaluated for continuity along strike and then joined to form a continuous triangulated solid. • If the spacing of drilling with geometallurgical testwork is less than or equal to 61 m x 61 m and the Mineral Resources are classified as Measured, the Ore Reserves are classified as Proved. If the drill spacing is greater than 61 m x 61 m and the Mineral Resources classification is Measured or Indicated, the Ore Reserves are classified as Probable. If the Mineral Resources classification is not Measured or Indicated, the material cannot be converted to Ore Reserves. • Conversion of Mineral Resources to Ore Reserves requires a detailed pit design, based on at least pre-feasibility level geotechnical assessment. The pit design is based on pit optimisations using industry standard software (Whittle) which aim to maximise NPV. • Ore Reserves classification takes subjective account of geological and mineralisation continuity, drilling density, core recovery and confidence in assay and geometallurgical testwork results (based on presence or absence of QA/QC programs). In areas of poor core recovery or geological complexity the Ore Reserves classification is reduced by one classification. • The Ore Reserves classification appropriately reflects the Competent Persons' view of the deposit.
Audits or reviews	• Internal audits and reviews are carried out periodically. Audit actions are carried out within agreed timelines and improvement programs are developed from internal reviews. Details of audits are provided in Section 3.
Discussion of relative accuracy/ confidence	• Historically, IOC has had problems with ore tonnage estimation, generally related to the modelling of internal waste units. Modelling procedures have been improved, so internal waste units are currently being modelled appropriately. Grade (weight yield) estimation generally remains within ±5% of actual, on an annual basis, although weight yield was under-estimated by 7-9% from 2021-22 due to the mining of a zone of atypically coarse mineralisation. • Depositional waste units are generally more accurately modelled than intrusive or alteration waste units. Fibrous waste, in particular, is difficult to model, due to a lack of clear geological controls. • Weight yield estimation remains good on a global basis, but local estimation is poor. • Ore Reserves tonnages are relatively insensitive to economic assumptions and ore tonnage modelling, due to the tailings limitation on Ore Reserves; i.e. the economically viable ore tonnage is greater than the tonnage which can be processed, due to limited tailings storage capacity. Consequently, if the realised ore tonnage is higher than the tonnage modelled, an equivalent tonnage will need to be removed from the Ore Reserves. Similarly, if the realised ore tonnage is lower than the tonnage modelled, additional economically viable ore can be transferred from Mineral Resources into Ore Reserves to make up the difference.

	• Ore Reserves are sensitive to weight yield estimation. Weight yield determines the tailings produced from each tonne of feed. Increased weight yield will generate lower tailings, which will allow more tonnes to be fed to the plant for the fixed tailings capacity. On top of this increased feed tonnage, the increased weight yield will further increase product tonnes. Ore Reserves are reported on a saleable product basis. Similarly, decreased weight yield will generate higher tailings, which will allow less tonnes to be fed to the plant for the fixed tailings capacity. On top of this reduced feed tonnage, the reduced weight yield will further decrease product tonnes.