

## Rio Tinto releases first quarter production results

16 April 2019

Rio Tinto chief executive J-S Jacques said “Our iron ore business faced several challenges at the start of this year, particularly from tropical cyclones. As a result, and following the continuing assessment of damage at the port resulting from the cyclones and other minor disruptions, 2019 guidance for Pilbara shipments is reduced to between 333 and 343 million tonnes. The quarterly operational performance in our other products was solid, generally higher than last year. Our focus remains on safety, delivering our ‘value over volume’ strategy and allocating capital with discipline, to continue delivering superior returns to our shareholders in the short, medium and long term.”

		Q1 2019	vs Q1 2018	vs Q4 2018
Pilbara iron ore shipments (100% basis)	Mt	69.1	-14%	-21%
Pilbara iron ore production (100% basis)	Mt	76.0	-9%	-12%
Bauxite	kt	12,763	+1%	+8%
Aluminium	kt	796	+0%	-3%
Mined copper	kt	143.9	+3%	-5%
Titanium dioxide slag	kt	296	+1%	+1%
IOC iron ore pellets and concentrate	Mt	2.5	+5%	-13%

### Operational update

- Pilbara iron ore shipments of 69.1 million tonnes (100 per cent basis) in the first quarter were 14 per cent lower than the first quarter of 2018. Production was significantly impacted by the weather disruptions in March and a fire at Cape Lambert A in January. These events will have an impact on second quarter performance.
- 2019 guidance for Pilbara shipments has been revised to between 333 and 343 million tonnes (previously between 338 and 350 million tonnes, 100 per cent basis). The reduction reflects a slower ramp up and ongoing disruption to shipments caused by weather and other disruptions.
- Commissioning of the Amrun bauxite mine was completed in March 2019, with the project delivered under budget and ahead of schedule. Bauxite production of 12.8 million tonnes in the quarter was one per cent higher than the same period of 2018, despite several weather events throughout the quarter significantly impacting production at the Amrun, Weipa and Gove mines.
- Aluminium production of 0.8 million tonnes was in line with the first quarter of 2018. Excluding the non-managed Becancour smelter, which was impacted by a lock-out, production was one per cent higher, reflecting continued productivity creep.
- First quarter mined copper production of 144 thousand tonnes was three per cent higher than the first quarter of 2018, with strong contributions from Oyu Tolgoi and Rio Tinto Kennecott.
- Titanium dioxide slag production of 296 thousand tonnes was one per cent higher than the first quarter of 2018.
- First quarter production at Iron Ore Company of Canada was five per cent higher than the corresponding quarter of 2018, despite adverse weather conditions impacting production in February.
- At the Oyu Tolgoi Underground Project the review of the mine design and the development schedule is continuing. The commissioning of the main production shaft (Shaft 2) is now expected to complete in October 2019.
- On 27 February 2019, Rio Tinto announced it had discovered copper-gold mineralisation in the Paterson Province in the far east Pilbara region of Western Australia.

- On 8 April 2019, Rio Tinto announced the approval of the construction of the Zulti South project at Richards Bay Minerals (RBM) in South Africa for \$463 million (Rio Tinto share \$343 million).
- On 15 April 2019, Rio Tinto announced it had committed \$302 million (\$166 million Rio Tinto share) of additional expenditure to advance its Resolution Copper project in the US state of Arizona

*All figures in this report are unaudited. All currency figures in this report are US dollars, and comments refer to Rio Tinto's share of production, unless otherwise stated. To allow production numbers to be compared on a like-for-like basis, production from asset divestments completed in 2018 is excluded from Rio Tinto share of production data but assets sold in 2019 remain in comparisons.*

## IRON ORE

### Rio Tinto share of production (million tonnes)

	Q1 2019	vs Q1 2018	vs Q4 2018
Pilbara Blend Lump	20.0	-4%	-8%
Pilbara Blend Fines (a)	28.8	-3%	-9%
Robe Valley Lump	0.6	-60%	-55%
Robe Valley Fines	1.2	-60%	-52%
Yandicoogina Fines (HIY)	13.5	-3%	-9%
<b>Total Pilbara production</b>	<b>64.1</b>	<b>-7%</b>	<b>-11%</b>
<b>Total Pilbara production (100% basis)</b>	<b>76.0</b>	<b>-9%</b>	<b>-12%</b>
<b>Total Pilbara shipments (100% basis)</b>	<b>69.1</b>	<b>-14%</b>	<b>-21%</b>

(a) Pilbara Blend Fines sales include 1.5 million tonnes of other lower grade materials in Q1 2019

### Pilbara operations

Pilbara operations produced 76.0 million tonnes (Rio Tinto share 64.1 million tonnes) in the first quarter, nine per cent lower than the same period in 2018. Production was impacted by a fire at Cape Lambert A in January, which affected Robe Valley Lump and Fines production, and significant disruptions caused primarily by Tropical Cyclone Veronica in March.

First quarter sales of 69.1 million tonnes (Rio Tinto share 58.2 million tonnes) were 14 per cent lower than the same period of last year due to the lower production and damage to the port facilities caused by the cyclone.

Approximately 16 per cent of sales in the first quarter were priced by reference to the prior quarter's average index lagged by one month. The remainder was sold either on current quarter average, current month average or on the spot market.

Approximately 33 per cent of sales in the quarter were made free on board (FOB), with the remainder sold including freight.

### Pilbara projects

Following approval of the \$2.6 billion investment in the Koodaideri replacement mine in November 2018, the project is now progressing to plan with engineering and procurement activities on schedule and site construction works commenced.

The two Robe River Joint Venture projects (West Angelas and Robe Valley), which will sustain production capacity, are progressing. The projects are currently in the process of seeking environmental approvals. Engineering and procurement activities are on schedule and establishment activities at both locations have commenced.

### 2019 guidance

On 1 April 2019, Rio Tinto announced that the impact of the disruption caused by Tropical Cyclone Veronica in March, combined with the impact of the fire at Cape Lambert A in January, was expected to result in a loss of approximately 14 million tonnes of production in 2019.

Following further assessment, the damage to the port from Tropical Cyclone Veronica is expected to result in ongoing disruption to shipments, with recovery work further hindered by Tropical Cyclone Wallace. As a result, Rio Tinto's Pilbara shipments in 2019 are now expected to be between 333 and 343 million tonnes (previously at the lower end of the guidance range of between 338 and 350 million tonnes, 100 per cent basis). The recovery in the second quarter will remain subject to weather.

On 6 April 2019, a minor fire occurred in a screen house at the East Intercourse Island port. Operations at the facility have restarted.

Rio Tinto's Pilbara unit cost guidance in 2019 remains at \$13 - \$14 per tonne.

## ALUMINIUM

### Rio Tinto share of production ('000 tonnes)

	Q1 2019	vs Q1 2018	vs Q4 2018
<b>Rio Tinto Aluminium</b>			
Bauxite	12,763	+1%	+8%
Bauxite third party shipments	8,842	+7%	+20%
Alumina	2,008	+1%	-1%
Aluminium	796	+0%	-3%

#### ***Bauxite***

First quarter bauxite production of 12.8 million tonnes was one per cent higher than the same period of 2018. Increased production capacity following the expansion of Amrun in Queensland was partly offset by weather events throughout the quarter at Weipa, Amrun and Gove, which significantly impacted production. Amrun ramp-up is progressing well, with production rates as per plan. The expansion project at CBG, a non-managed JV, is progressing, with full ramp up expected in 2019.

8.8 million tonnes of bauxite were shipped to third parties in the first quarter, seven per cent higher than same period of 2018.

#### ***Amrun***

The Amrun project was officially opened on 8 March 2019 and commissioning is complete. The project and construction workforce has been demobilised.

#### ***Alumina***

Alumina production in the first quarter of 2019 was one per cent higher than the same period in 2018.

#### ***Aluminium***

Aluminium production of 0.8 million tonnes in the first quarter was in line with the corresponding period of 2018. Excluding production from the non-managed Becancour smelter, which continues to be impacted by a lock-out, production was one per cent higher, reflecting continued productivity creep.

#### ***Kemano***

At the Kemano hydro-power facility at Kitimat, British Columbia, boring of the tunnel commenced on 9 March 2019. The \$0.5 billion project is due to be completed by late-2020.

#### ***2019 guidance***

2019 guidance is unchanged. Rio Tinto's expected share of bauxite production in 2019 is between 56 and 59 million tonnes. Aluminium production guidance is between 3.2 and 3.4 million tonnes and alumina production guidance is 8.1 to 8.4 million tonnes.

## COPPER & DIAMONDS

### Rio Tinto share of production ('000 tonnes)

	Q1 2019	vs Q1 2018	vs Q4 2018
<b>Mined copper</b>			
Rio Tinto Kennecott	52.5	+48%	-10%
Escondida	76.0	-16%	-5%
Oyu Tolgoi	15.4	+18%	+11%
<b>Refined copper</b>			
Rio Tinto Kennecott	29.6	-16%	-54%
Escondida	18.7	-10%	-13%
<b>Diamonds ('000 carats)</b>			
Argyle	2,786	-22%	-13%
Diavik	1,010	-5%	-6%

#### ***Rio Tinto Kennecott***

First quarter mined copper production was 48 per cent higher than the same period of 2018 as mining activity continued in a higher grade area of the pit, coupled with productivity improvements and increased plant throughput.

Refined copper was 16 per cent lower than the first quarter of 2018 and significantly lower than the previous quarter due to a planned anode furnace shutdown at the smelter in February.

Rio Tinto Kennecott continues to toll and purchase third party concentrate to optimise smelter utilisation, with 5.6 thousand tonnes of concentrate received for processing in the first quarter of 2019, compared with 51.8 thousand tonnes in the first quarter of 2018. Purchased and tolled copper concentrate are excluded from reported production figures.

As previously guided, the production profile will see increased variability in grade in 2019 as operations mine in lower levels of the pit, together with waste stripping related to the south wall pushback expansion. Anticipated south wall pushback grades begin to increase in late-2020 and are expected to offset this variability over the longer term.

Grades were also higher in the first quarter for molybdenum, with concentrate production 29 per cent higher than the same quarter in 2018. Molybdenum concentrate production is expected to increase in the second quarter of 2019.

#### ***Escondida***

Mined copper production at Escondida in the first quarter of 2019 was 16 per cent lower than the same period of 2018 due to lower grades.

#### ***Oyu Tolgoi***

Mined copper production from the open pit in the first quarter of 2019 was 18 per cent higher than the same period in 2018, with higher copper grades and recovery partly offset by lower plant throughput due to the processing of harder ore.

#### ***Oyu Tolgoi Underground Project***

Work is underway at the Oyu Tolgoi Underground Project to understand the overall cost and schedule impacts resulting from the review of the mine design and delays with the fit-out and commissioning work on Shaft 2, as announced in February 2019.

Work continues on critical Shaft 2 equipping activities, central heating plant, mine infrastructure, underground materials handling systems and on priority underground development. Pre sinking works for Shaft 3 and Shaft 4 have commenced.

The mine design work, announced in February, to adjust to more detailed geotechnical information and difficult ground conditions continues. Also as announced in February, there have been further delays in the technically complex fit-out and commissioning work on the main production and services shaft (Shaft 2). It is now anticipated that the commissioning of Shaft 2 will be completed by the end of October 2019. This further delay in Shaft 2 will impact on the timeline for other activities in the underground development, and the impact of this and of the mine design work referred to above on the overall project schedule and costs will be announced once the necessary work has been completed.

The total project workforce was around 9,000 at the end of the first quarter, with a continued high (89 per cent) participation rate of Mongolian nationals.

### ***Resolution Copper***

On 15 April 2019, Rio Tinto announced it had committed \$302 million (\$166 million Rio Tinto share) of additional expenditure to advance its Resolution Copper project in the US state of Arizona. The investment will fund additional drilling, ore-body studies, infrastructure improvements and permitting activities as Rio Tinto looks to progress the project to the final stage of the project's permitting phase.

### ***Diamonds***

At Argyle, carat production in the first quarter of 2019 was 22 per cent lower than the same period in 2018 due to lower recovered grade.

At Diavik, carats recovered in the first quarter were five per cent lower than the first quarter of 2018, as lower recovered grades were partially offset by higher ore processing.

### ***2019 guidance***

2019 guidance is unchanged. Rio Tinto's share of mined copper production for 2019 is expected to be between 550 and 600 thousand tonnes, subject to grade availability. Refined copper production is expected to be between 220 and 250 thousand tonnes.

Diamond production guidance for 2019 is between 15 and 17 million carats.

## ENERGY & MINERALS

### Rio Tinto share of production

	Q1 2019	vs Q1 2018	vs Q4 2018
<b>Iron ore pellets and concentrate (million tonnes)</b>			
IOC	2.5	+5%	-13%
<b>Minerals ('000 tonnes)</b>			
Borates – B <sub>2</sub> O <sub>3</sub> content	115	-7%	-3%
Salt	1,310	-13%	-12%
Titanium dioxide slag	296	+1%	+1%
<b>Uranium ('000 lbs)</b>			
Energy Resources of Australia	793	+19%	-14%
Rössing	802	-6%	-18%

#### ***Iron Ore Company of Canada (IOC)***

First quarter production at IOC was five per cent higher than the corresponding period of 2018, despite adverse weather disruptions experienced in February.

Pellet production of 2.7 million tonnes (Rio Tinto share 1.6 million tonnes) was two per cent higher than the first quarter of 2018. Concentrate production for sale of 1.5 million tonnes (Rio Tinto share 0.9 million tonnes) was 11 per cent higher than the first quarter of 2018.

#### ***Borates***

First quarter borates production was seven per cent lower than the first quarter of 2018, due to the impact of higher than average rainfall and the temporary curtailment of production at the evaporator. Normal production levels resumed in March, and production will continue to be aligned to customer demand.

#### ***Iron and Titanium***

Titanium dioxide feedstock production in the first quarter was one per cent higher than the same period of 2018.

Three of nine furnaces at Rio Tinto Fer et Titane were idle for most of the first quarter, however two of these furnaces are restarting and currently ramping up. Three of four furnaces at RBM are currently in operation. A decision to re-start idle furnaces will be based on maximising value over volume.

On 8 April 2019, Rio Tinto approved the next stage in the development of RBM through the construction of the Zulti South project. The \$463 million (Rio Tinto share \$343 million) investment will sustain RBM's current capacity and extend the mine life.

#### ***Salt***

Salt production in the first quarter of 2019 was 13 per cent lower than the first quarter of 2018 due to the impact of Tropical Cyclone Veronica. Production will continue to be aligned to customer demand.

#### ***Uranium***

Energy Resources of Australia continues to process existing stockpiles. First quarter production was 19 per cent higher than the first quarter of 2018 due to higher mill throughput, grade and recoveries.

First quarter production at Rössing Uranium was six per cent lower than the same quarter of 2018, with lower mill throughput partially offset by higher grade.

On 26 November 2018, Rio Tinto announced it had entered into a binding agreement with China National Uranium Corporation for the sale of its entire 68.62 per cent stake in Rössing Uranium. The transaction is subject to certain conditions precedent including merger approval from the Namibian Competition

Commission. Subject to these conditions precedent being met, the transaction is expected to complete in the first half of 2019.

**2019 guidance**

2019 guidance is unchanged. At IOC, guidance for Rio Tinto's expected share of iron ore pellets and concentrates production in 2019 is between 11.3 and 12.3 million tonnes. Titanium dioxide slag production guidance is between 1.2 and 1.4 million tonnes, and boric oxide equivalent production guidance is 0.5 million tonnes.



## EXPLORATION AND EVALUATION

Pre-tax and pre-divestment expenditure on exploration and evaluation charged to the profit and loss account in the first quarter of 2019 was \$124 million, compared with \$101 million in the first quarter of 2018. Approximately 51 per cent of this expenditure was incurred by central exploration, 38 per cent by Copper & Diamonds, seven per cent by Energy & Minerals and the remainder by Iron Ore and Aluminium.

There were no significant divestments of central exploration properties in the first quarter of 2019.

### **Exploration highlights**

Rio Tinto has a strong portfolio of projects with activity in 16 countries across seven commodities. The bulk of the exploration expenditure in this quarter was focused on copper targets in Australia, Canada, Chile, Kazakhstan, Mongolia, Papua New Guinea, Peru, Serbia, United States, Zambia and diamond projects in Canada. Mine-lease exploration continued at a number of Rio Tinto managed businesses including Pilbara Iron in Australia, Oyu Tolgoi in Mongolia, Weipa in Australia, Diavik in Canada, as well as Bingham, Resolution and Boron in the US.

A summary of activity for the quarter is as follows:

<b>Product Groups</b>	<b>Studies stage</b>	<b>Advanced exploration projects</b>	<b>Greenfield/ Brownfield programmes</b>
Aluminium	Cape York, Australia	Amargosa, Brazil Sanxai, Laos	Cape York, Australia
Copper & Diamonds	Copper/molybdenum: Resolution, US	Copper: La Granja, Peru Nickel: Tamarack, US Diamonds: FalCon, Canada	Copper Greenfield: Australia, Chile, China, Kazakhstan, Mongolia, Papua New Guinea, Peru, Serbia, US, Zambia Copper Brownfield: Bingham, Resolution, US Oyu Tolgoi, Mongolia Nickel Greenfield: Canada, Uganda Diamonds Greenfield: Canada Diamonds Brownfield: Diavik, Canada
Energy & Minerals	Lithium borates: Jadar, Serbia Potash: KP405, Canada Heavy mineral sands: Mutamba, Mozambique and Zulti South, South Africa	Uranium: Roughrider, Canada	Heavy mineral sands: Tanzania Industrial Minerals: Serbia
Iron Ore	Pilbara, Australia	Pilbara, Australia	Pilbara, Australia

## **Forward-looking statements**

This announcement may include "forward-looking statements" within the meaning of the US Private Securities Litigation Reform Act of 1995. All statements other than statements of historical facts included in this announcement, including, without limitation, those regarding Rio Tinto's production forecast or guidance, financial position, business strategy, plans and objectives of management for future operations (including development plans and objectives relating to Rio Tinto's products and reserve and resource positions), are forward-looking statements. The words "intend", "aim", "project", "anticipate", "estimate", "plan", "believes", "expects", "may", "should", "will", "target", "set to", "assumes" or similar expressions, commonly identify such forward looking statements.

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Nothing in this announcement should be interpreted to mean that future earnings per share of Rio Tinto plc or Rio Tinto Limited will necessarily match or exceed its historical published earnings per share.

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# Rio Tinto production summary

## Rio Tinto share of production

		Quarter			Full Year	% Change	
		2018 Q1	2018 Q4	2019 Q1	2018	Q1 19 vs Q1 18	Q1 19 vs Q4 18
<b>Principal Commodities</b>							
Alumina	('000 t)	1,990	2,020	<b>2,008</b>	7,980	1%	-1%
Aluminium	('000 t)	795	817	<b>796</b>	3,231	0%	-3%
Bauxite	('000 t)	12,653	11,790	<b>12,763</b>	50,421	1%	8%
Borates	('000 t)	124	118	<b>115</b>	512	-7%	-3%
Copper - mined	('000 t)	139.3	151.9	<b>143.9</b>	607.6	3%	-5%
Copper - refined	('000 t)	56.1	86.1	<b>48.3</b>	274.8	-14%	-44%
Diamonds	('000 cts)	4,616	4,290	<b>3,796</b>	18,427	-18%	-12%
Iron Ore	('000 t)	71,436	75,018	<b>66,581</b>	290,800	-7%	-11%
Titanium dioxide slag	('000 t)	294	294	<b>296</b>	1,116	1%	1%
Uranium	('000 lbs)	1,515	1,904	<b>1,595</b>	6,764	5%	-16%
<b>Other Metals &amp; Minerals</b>							
Gold - mined	('000 oz)	69.4	118.4	<b>115.4</b>	372.1	66%	-2%
Gold - refined	('000 oz)	40.8	58.6	<b>41.7</b>	198.0	2%	-29%
Molybdenum	('000 t)	1.5	2.2	<b>1.9</b>	5.8	29%	-15%
Salt	('000 t)	1,514	1,496	<b>1,310</b>	6,153	-13%	-12%
Silver - mined	('000 oz)	1,237	1,586	<b>1,481</b>	5,656	20%	-7%
Silver - refined	('000 oz)	867	807	<b>617</b>	2,865	-29%	-24%

Throughout this report, figures in italics indicate adjustments made since the figure was previously quoted on the equivalent page. Production figures are sometimes more precise than the rounded numbers shown, hence small differences may result between the total of the quarter figures and the year to date figures.

## Rio Tinto share of production

	Rio Tinto interest	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Full Year 2018
<b>ALUMINA</b>							
<b>Production ('000 tonnes)</b>							
Jonqui�re (Vaudreuil)	100%	362	365	363	354	373	1,444
Jonqui�re (Vaudreuil) specialty Alumina plant	100%	31	32	31	29	25	124
Queensland Alumina	80%	717	752	748	742	711	2,958
S�o Luis (Alumar)	10%	87	87	85	92	86	351
Yarwun	100%	793	763	744	803	813	3,103
Rio Tinto total alumina production		1,990	1,999	1,972	2,020	2,008	7,980
<b>ALUMINIUM</b>							
<b>Production ('000 tonnes)</b>							
Australia - Bell Bay	100%	47	47	48	48	45	189
Australia - Boyne Island	59%	72	74	75	74	73	295
Australia - Tomago	52%	75	76	78	77	74	305
Canada - six wholly owned	100%	398	402	407	408	400	1,616
Canada - Alouette (Sept-�les)	40%	58	58	59	58	58	234
Canada - B�cancour	25%	10	9	8	8	4	34
Iceland - ISAL (Reykjavik)	100%	52	53	53	54	52	212
New Zealand - Tiwai Point	79%	66	67	68	70	71	270
Oman - Sohar	20%	17	19	20	20	19	76
Rio Tinto total aluminium production		795	805	814	817	796	3,231
<b>BAUXITE</b>							
<b>Production ('000 tonnes) (a)</b>							
Gove	100%	3,124	3,274	2,893	3,250	3,004	12,540
Porto Trombetas	12%	353	393	342	489	285	1,576
Sangaredi	(b)	1,745	1,657	1,261	1,204	1,558	5,868
Weipa	100%	7,431	7,955	8,204	6,847	7,917	30,437
Rio Tinto total bauxite production		12,653	13,279	12,700	11,790	12,763	50,421

(a) Mine production figures for metals refer to the total quantity of metal produced in concentrates, leach liquor or dor  bullion irrespective of whether these products are then refined onsite, except for the data for bauxite and iron ore which represent production of marketable quantities of ore plus concentrates and pellets.

(b) Rio Tinto has a 22.95% shareholding in the Sangaredi mine but benefits from 45.0% of production.

## Rio Tinto share of production

	Rio Tinto interest	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Full Year 2018
<b>BORATES</b>							
<b>Production ('000 tonnes B<sub>2</sub>O<sub>3</sub> content)</b>							
Rio Tinto Borates - borates	100%	124	132	137	118	115	512
<b>COPPER</b>							
<b>Mine production ('000 tonnes) (a)</b>							
Bingham Canyon	100%	35.4	51.2	59.1	58.3	52.5	203.9
Escondida	30%	90.9	92.4	87.4	79.7	76.0	350.4
Oyu Tolgoi (b)	34%	13.0	13.2	13.2	13.9	15.4	53.3
Rio Tinto total mine production		139.3	156.8	159.7	151.9	143.9	607.6
<b>Refined production ('000 tonnes)</b>							
Escondida	30%	20.8	21.0	16.6	21.6	18.7	80.0
Rio Tinto Kennecott	100%	35.3	40.7	54.2	64.6	29.6	194.7
Rio Tinto total refined production		56.1	61.7	70.8	86.1	48.3	274.8
<i>(a) Mine production figures for metals refer to the total quantity of metal produced in concentrates, leach liquor or doré bullion irrespective of whether these products are then refined onsite, except for the data for bauxite and iron ore which represent production of marketable quantities of ore plus concentrates and pellets.</i>							
<i>(b) Rio Tinto owns a 33.52% indirect interest in Oyu Tolgoi through its 50.79% interest in Turquoise Hill Resources Ltd.</i>							
<b>DIAMONDS</b>							
<b>Production ('000 carats)</b>							
Argyle	100%	3,551	3,476	3,830	3,211	2,786	14,069
Diavik	60%	1,065	1,150	1,066	1,078	1,010	4,358
Rio Tinto total diamond production		4,616	4,626	4,896	4,290	3,796	18,427
<b>GOLD</b>							
<b>Mine production ('000 ounces) (a)</b>							
Bingham Canyon	100%	37.4	45.6	56.6	57.1	53.0	196.7
Escondida	30%	18.0	20.5	19.1	22.1	22.2	79.7
Oyu Tolgoi (b)	34%	14.0	16.8	25.8	39.1	40.2	95.7
Rio Tinto total mine production		69.4	82.8	101.4	118.4	115.4	372.1
<b>Refined production ('000 ounces)</b>							
Rio Tinto Kennecott	100%	40.8	48.4	50.3	58.6	41.7	198.0
<i>(a) Mine production figures for metals refer to the total quantity of metal produced in concentrates, leach liquor or doré bullion irrespective of whether these products are then refined onsite, except for the data for bauxite and iron ore which represent production of marketable quantities of ore plus concentrates and pellets.</i>							
<i>(b) Rio Tinto owns a 33.52% indirect interest in Oyu Tolgoi through its 50.79% interest in Turquoise Hill Resources Ltd.</i>							

## Rio Tinto share of production

	Rio Tinto interest	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Full Year 2018
<b>IRON ORE</b>							
<b>Production ('000 tonnes) (a)</b>							
Hamersley mines	(b)	53,631	56,034	54,583	56,364	51,218	220,612
Hamersley - Channar	60%	1,136	1,227	604	1,337	931	4,304
Hope Downs	50%	5,342	5,783	5,713	5,845	5,957	22,684
Iron Ore Company of Canada	59%	2,364	871	2,880	2,836	2,481	8,952
Robe River - Pannawonica (Mesas J and A)	53%	4,672	4,048	4,208	4,004	1,870	16,932
Robe River - West Angelas	53%	4,290	4,373	4,021	4,631	4,125	17,316
Rio Tinto iron ore production ('000 tonnes)		71,436	72,336	72,010	75,018	66,581	290,800
Breakdown of Production:							
Pilbara Blend Lump		20,714	21,901	20,554	21,674	19,978	84,843
Pilbara Blend Fines		29,769	31,239	29,921	31,652	28,779	122,582
Robe Valley Lump		1,587	1,431	1,470	1,409	635	5,897
Robe Valley Fines		3,086	2,617	2,738	2,595	1,235	11,035
Yandicoogina Fines (HIY)		13,916	14,277	14,446	14,852	13,473	57,491
Pilbara iron ore production ('000 tonnes)		69,072	71,465	69,129	72,182	64,101	281,848
IOC Concentrate		799	572	1,131	1,433	890	3,934
IOC Pellets		1,566	299	1,750	1,403	1,590	5,018
IOC iron ore production ('000 tonnes)		2,364	871	2,880	2,836	2,481	8,952
Breakdown of Sales:							
Pilbara Blend Lump		18,062	19,424	17,967	18,439	15,772	73,892
Pilbara Blend Fines (c)		30,746	35,158	31,432	35,205	28,406	132,541
Robe Valley Lump		1,223	1,264	1,174	1,219	457	4,881
Robe Valley Fines		2,996	3,255	2,839	2,996	1,308	12,085
Yandicoogina Fines (HIY)		13,578	14,388	14,583	14,831	12,294	57,380
Pilbara iron ore sales ('000 tonnes)		66,604	73,489	67,995	72,690	58,236	280,778
IOC Concentrate		746	62	1,521	1,558	516	3,887
IOC Pellets		1,574	202	1,659	1,516	1,576	4,950
IOC Iron ore sales ('000 tonnes)		2,320	263	3,180	3,073	2,092	8,837
Rio Tinto iron ore sales ('000 tonnes)		68,925	73,752	71,175	75,763	60,328	289,614

(a) Mine production figures for metals refer to the total quantity of metal produced in concentrates, leach liquor or doré bullion irrespective of whether these products are then refined onsite, except for the data for bauxite and iron ore which represent production of marketable quantities of ore plus concentrates and pellets.

(b) Includes 100% of production from Paraburdoo, Mt Tom Price, Marandoo, Yandicoogina, Brockman, Nammuldi, Silvergrass and the Eastern Range mines. Whilst Rio Tinto owns 54% of the Eastern Range mine, under the terms of the joint venture agreement, Hamersley Iron manages the operation and is obliged to purchase all mine production from the joint venture and therefore all of the production is included in Rio Tinto's share of production.

(c) Pilbara Blend Fines sales include 1.5m tonnes of other lower grade products in Q1 2019.

## Rio Tinto share of production

	Rio Tinto interest	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Full Year 2018
<b>MOLYBDENUM</b>							
<b>Mine production ('000 tonnes) (a)</b>							
Bingham Canyon	100%	1.5	0.7	1.4	2.2	1.9	5.8
<i>(a) Mine production figures for metals refer to the total quantity of metal produced in concentrates, leach liquor or doré bullion irrespective of whether these products are then refined onsite, except for the data for bauxite and iron ore which represent production of marketable quantities of ore plus concentrates and pellets.</i>							
<b>SALT</b>							
<b>Production ('000 tonnes)</b>							
Dampier Salt	68%	1,514	1,662	1,481	1,496	1,310	6,153
<b>SILVER</b>							
<b>Mine production ('000 ounces) (a)</b>							
Bingham Canyon	100%	461	615	708	736	741	2,520
Escondida	30%	702	758	599	771	657	2,830
Oyu Tolgoi (b)	34%	74	75	77	80	83	306
Rio Tinto total mine production		1,237	1,448	1,384	1,586	1,481	5,656
<b>Refined production ('000 ounces)</b>							
Rio Tinto Kennecott	100%	867	461	730	807	617	2,865
<i>(a) Mine production figures for metals refer to the total quantity of metal produced in concentrates, leach liquor or doré bullion irrespective of whether these products are then refined onsite, except for the data for bauxite and iron ore which represent production of marketable quantities of ore plus concentrates and pellets.</i>							
<i>(b) Rio Tinto owns a 33.52% indirect interest in Oyu Tolgoi through its 50.79% interest in Turquoise Hill Resources Ltd.</i>							
<b>TITANIUM DIOXIDE SLAG</b>							
<b>Production ('000 tonnes)</b>							
Rio Tinto Iron & Titanium (a)	100%	294	232	297	294	296	1,116
<i>(a) Quantities comprise 100% of Rio Tinto Fer et Titane and Rio Tinto's 74% interest in Richards Bay Minerals (RBM).</i>							
<b>URANIUM</b>							
<b>Production ('000 lbs U<sub>3</sub>O<sub>8</sub>) (a)</b>							
Energy Resources of Australia	68%	667	603	820	924	793	3,014
Rössing (b)	69%	848	928	994	979	802	3,750
Rio Tinto total uranium production		1,515	1,531	1,814	1,904	1,595	6,764
<i>(a) ERA and Rössing production reported are drummed U<sub>3</sub>O<sub>8</sub>.</i>							
<i>(b) On 26 November 2018, Rio Tinto signed a binding agreement to sell its 68.62% interest in the Rössing mine in Namibia to China National Uranium Corporation Limited.</i>							

Production figures are sometimes more precise than the rounded numbers shown, hence small differences may result between the total of the quarter figures and the year to date figures.

**The Rio Tinto percentage shown above is at 31 March 2019.**

Rio Tinto's interest in the Kestrel, Hail Creek, Dunkerque and Grasberg operations were sold in 2018. No data for these operations are included in the Share of production table.



## Rio Tinto operational data

	Rio Tinto interest	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Full Year 2018
<b>ALUMINA</b>							
<b>Smelter Grade Alumina - Aluminium Group</b>							
Alumina production ('000 tonnes)							
<i>Australia</i>							
Queensland Alumina Refinery - Queensland	80.0%	896	940	935	927	888	3,697
Yarwun refinery - Queensland	100.0%	793	763	744	803	813	3,103
<i>Brazil</i>							
São Luis (Alumar) refinery	10.0%	871	869	851	918	859	3,509
<i>Canada</i>							
Jonquière (Vaudreuil) refinery - Quebec (a)	100.0%	362	365	363	354	373	1,444
<i>(a) Jonquière's (Vaudreuil's) production shows smelter grade alumina only and excludes hydrate produced and used for specialty alumina.</i>							
<b>Specialty Alumina - Aluminium Group</b>							
Specialty alumina production ('000 tonnes)							
<i>Canada</i>							
Jonquière (Vaudreuil) plant – Quebec	100.0%	31	32	31	29	25	124

**Rio Tinto percentage interest shown above is at 31 March 2019. The data represent full production and sales on a 100% basis unless otherwise stated.**

## Rio Tinto operational data

	Rio Tinto interest	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Full Year 2018
<b>ALUMINIUM</b>							
<b>Primary Aluminium</b>							
Primary aluminium production ('000 tonnes)							
<i>Australia</i>							
Bell Bay smelter - Tasmania	100.0%	47	47	48	48	45	189
Boyne Island smelter - Queensland	59.4%	122	124	126	125	122	497
Tomago smelter - New South Wales	51.6%	145	148	151	149	144	592
<i>Canada</i>							
Alma smelter - Quebec	100.0%	115	116	117	118	115	465
Alouette (Sept-Îles) smelter - Quebec	40.0%	144	146	148	146	144	584
Arvida smelter - Quebec	100.0%	43	43	43	44	43	173
Arvida AP60 smelter - Quebec	100.0%	13	13	13	13	14	52
Bécancour smelter - Quebec	25.1%	39	35	32	30	17	136
Grande-Baie smelter - Quebec	100.0%	57	58	59	59	58	233
Kitimat smelter - British Columbia	100.0%	108	109	110	109	106	436
Laterrière smelter - Quebec	100.0%	63	64	65	65	64	257
<i>France</i>							
Dunkerque smelter (a)	0%	51	52	66	57	-	227
<i>Iceland</i>							
ISAL (Reykjavik) smelter	100.0%	52	53	53	54	52	212
<i>New Zealand</i>							
Tiwai Point smelter	79.4%	83	84	85	88	89	341
<i>Oman</i>							
Sohar smelter	20.0%	87	97	98	99	97	380

(a) On 14 December 2018, Rio Tinto completed the sale of its 100% interest in the Dunkerque smelter. Production is reported up to the date of completion.

**Rio Tinto percentage interest shown above is at 31 March 2019. The data represent full production and sales on a 100% basis unless otherwise stated.**

## Rio Tinto operational data

	Rio Tinto interest	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Full Year 2018
<b>BAUXITE</b>							
Bauxite production ('000 tonnes)							
<i>Australia</i>							
Gove mine - Northern Territory	100.0%	3,124	3,274	2,893	3,250	3,004	12,540
Weipa mine - Queensland	100.0%	7,431	7,955	8,204	6,847	7,917	30,437
<i>Brazil</i>							
Porto Trombetas (MRN) mine	12.0%	2,939	3,273	2,848	4,073	2,372	13,134
<i>Guinea</i>							
Sangaredi mine (a)	23.0%	3,878	3,683	2,803	2,675	3,463	13,039
<b>Rio Tinto share of bauxite shipments</b>							
Share of total bauxite shipments ('000 tonnes)		12,551	12,936	12,427	11,622	12,725	49,536
Share of third party bauxite shipments ('000 tonnes)		8,248	8,738	8,441	7,387	8,842	32,813

(a) Rio Tinto has a 22.95% shareholding in the Sangaredi mine but benefits from 45.0% of production.

**Rio Tinto percentage interest shown above is at 31 March 2019. The data represent full production and sales on a 100% basis unless otherwise stated.**

## Rio Tinto operational data

	Rio Tinto interest	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Full Year 2018
<b>BORATES</b>							
<b>Rio Tinto Borates - borates</b>	100.0%						
<i>US</i>							
Borates ('000 tonnes) (a)		124	132	137	118	115	512
<i>(a) Production is expressed as B<sub>2</sub>O<sub>3</sub> content.</i>							
<b>COAL</b>							
<b>Rio Tinto Coal Australia</b>							
<b>Hail Creek Coal mine (a)</b>	0.0%						
<i>Queensland</i>							
Hard coking coal ('000 tonnes)		924	1,380	396	-	-	2,700
Thermal coal ('000 tonnes)		1,293	1,018	449	-	-	2,760
<b>Kestrel Coal mine (b)</b>	0.0%						
<i>Queensland</i>							
Hard coking coal ('000 tonnes)		430	1,303	484	-	-	2,217
Thermal coal ('000 tonnes)		74	220	35	-	-	329
Total hard coking coal production ('000 tonnes)		1,354	2,683	880	-	-	4,917
Total thermal coal production ('000 tonnes)		1,367	1,238	485	-	-	3,089
Total coal production ('000 tonnes)		2,721	3,921	1,365	-	-	8,007
Total coal sales ('000 tonnes)		3,050	3,717	1,725	-	-	8,492
<b>Rio Tinto Coal Australia share (c)</b>							
Share of hard coking coal sales ('000 tonnes)		1,368	2,228	650	-	-	4,246
Share of thermal coal sales ('000 tonnes) (d)		1,119	791	754	-	-	2,664

(a) On 1 August 2018, Rio Tinto completed the sale of its 82% interest in the Hail Creek mine. Production is reported up to the date of completion.

(b) On 1 August 2018, Rio Tinto completed the sale of its 80% interest in the Kestrel mine. Production is reported up to the date of completion.

(c) Kestrel and Hail Creek produce hard coking coal and thermal coal through their mining operations. Both mines may blend coal types at ports.

(d) Sales relate only to coal mined by the operations and exclude traded coal.

**Rio Tinto percentage interest shown above is at 31 March 2019. The data represent full production and sales on a 100% basis unless otherwise stated.**

## Rio Tinto operational data

	Rio Tinto interest	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Full Year 2018
<b>COPPER &amp; GOLD</b>							
<b>Escondida</b>	30.0%						
<i>Chile</i>							
Sulphide ore to concentrator ('000 tonnes)		32,203	31,732	30,513	30,507	<b>32,027</b>	124,956
Average copper grade (%)		0.96	0.96	0.94	0.87	<b>0.82</b>	0.93
Mill production (metals in concentrates):							
Contained copper ('000 tonnes)		252.6	253.6	241.9	219.9	<b>216.9</b>	968.0
Contained gold ('000 ounces)		60	68	64	74	<b>74</b>	266
Contained silver ('000 ounces)		2,339	2,527	1,997	2,570	<b>2,189</b>	9,433
Recoverable copper in ore stacked for leaching ('000 tonnes) (a)		50.4	54.4	49.4	45.7	<b>36.5</b>	199.9
Refined production from leach plants:							
Copper cathode production ('000 tonnes)		69.4	70.1	55.4	71.9	<b>62.4</b>	266.8
<i>(a) The calculation of copper in material mined for leaching is based on ore stacked at the leach pad.</i>							
<b>Freeport-McMoRan</b>							
<b>Grasberg mine (a)</b>	0.0% (b)						
<i>Papua, Indonesia</i>							
Ore treated ('000 tonnes)		15,625	17,101	17,535	14,049	-	64,310
Average mill head grades:							
Copper (%)		1.12	1.06	1.00	0.73	-	0.99
Gold (g/t)		1.63	1.77	1.77	1.08	-	1.59
Silver (g/t)		4.68	5.09	4.49	2.09	-	4.17
Production of metals in concentrates:							
Copper in concentrates ('000 tonnes)		159.9	165.7	158.7	85.4	-	569.7
Gold in concentrates ('000 ounces)		693	842	842	402	-	2,779
Silver in concentrates ('000 ounces)		1,513	1,548	1,439	545	-	5,045
Sales of payable metals in concentrates: (c)							
Copper in concentrates ('000 tonnes)		157.4	145.3	170.6	82.7	-	556.0
Gold in concentrates ('000 ounces)		676	740	903	399	-	2,719
Silver in concentrates ('000 ounces)		1,184	1,098	1,221	426	-	3,928

(a) Through a joint venture agreement with Freeport-McMoRan (FCX), Rio Tinto is entitled to 40% of additional material mined as a consequence of expansions and developments of the Grasberg facilities since 1998. The Q4 2018 results show the forecast from FCX's most recent five-year plan. On 21 December 2018, Rio Tinto completed the sale of its entire interest in the Grasberg mine in Indonesia to PT Indonesia Asahan Aluminium (Persero) (Inalum). Production is reported up to the date of completion.

(b) Rio Tinto share of Grasberg production is 40% of the expansion.

(c) Net of smelter deduction

**Rio Tinto percentage interest shown above is at 31 March 2019. The data represent full production and sales on a 100% basis unless otherwise stated.**

## Rio Tinto operational data

	Rio Tinto interest	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Full Year 2018
<b>COPPER &amp; GOLD (continued)</b>							
<b>Rio Tinto Kennecott</b>							
<b>Bingham Canyon mine</b>	100.0%						
<i>Utah, US</i>							
Ore treated ('000 tonnes)		9,260	8,974	11,173	10,853	<b>10,685</b>	40,260
Average ore grade:							
Copper (%)		0.43	0.63	0.58	0.59	<b>0.55</b>	0.56
Gold (g/t)		0.23	0.26	0.26	0.26	<b>0.25</b>	0.25
Silver (g/t)		2.25	2.73	2.62	2.76	<b>2.76</b>	2.60
Molybdenum (%)		0.025	0.025	0.030	0.032	<b>0.032</b>	0.028
Copper concentrates produced ('000 tonnes)		171	194	233	222	<b>207</b>	820
Average concentrate grade (% Cu)		20.7	26.4	25.3	26.0	<b>25.3</b>	24.8
Production of metals in copper concentrates:							
Copper ('000 tonnes) (a)		35.4	51.2	59.1	58.3	<b>52.5</b>	203.9
Gold ('000 ounces)		37	46	57	57	<b>53</b>	197
Silver ('000 ounces)		461	615	708	736	<b>741</b>	2,520
Molybdenum concentrates produced ('000 tonnes):		2.8	1.5	2.8	4.5	<b>3.8</b>	11.6
Molybdenum in concentrates ('000 tonnes)		1.5	0.7	1.4	2.2	<b>1.9</b>	5.8
<b>Kennecott smelter &amp; refinery</b>							
	100.0%						
Copper concentrates smelted ('000 tonnes)		200	224	246	262	<b>204</b>	932
Copper anodes produced ('000 tonnes) (b)		42.4	44.4	58.1	62.4	<b>33.3</b>	207.3
Production of refined metal:							
Copper ('000 tonnes)		35.3	40.7	54.2	64.6	<b>29.6</b>	194.7
Gold ('000 ounces) (c)		40.8	48.4	50.3	58.6	<b>41.7</b>	198.0
Silver ('000 ounces) (c)		867	461	730	807	<b>617</b>	2,865

(a) Includes a small amount of copper in precipitates.

(b) New metal excluding recycled material.

(c) Includes gold and silver in intermediate products.

**Rio Tinto percentage interest shown above is at 31 March 2019. The data represent full production and sales on a 100% basis unless otherwise stated.**

## Rio Tinto operational data

	Rio Tinto interest	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Full Year 2018
<b>COPPER &amp; GOLD (continued)</b>							
<b>Turquoise Hill Resources</b>							
<b>Oyu Tolgoi mine (a)</b>	33.5%						
<i>Mongolia</i>							
Ore Treated ('000 tonnes)		9,561	10,164	9,652	9,361	<b>9,255</b>	38,738
Average mill head grades:							
Copper (%)		0.51	0.48	0.51	0.55	<b>0.57</b>	0.51
Gold (g/t)		0.25	0.26	0.38	0.56	<b>0.58</b>	0.36
Silver (g/t)		1.32	1.17	1.19	1.22	<b>1.25</b>	1.22
Copper concentrates produced ('000 tonnes)		177.3	178.8	179.8	189.0	<b>210.1</b>	724.9
Average concentrate grade (% Cu)		21.9	22.0	21.9	21.9	<b>21.8</b>	21.9
Production of metals in concentrates:							
Copper in concentrates ('000 tonnes)		38.8	39.4	39.4	41.5	<b>45.8</b>	159.1
Gold in concentrates ('000 ounces)		41.8	50.0	77.0	116.7	<b>120.1</b>	285.4
Silver in concentrates ('000 ounces)		221	225	230	238	<b>247</b>	914
Sales of metals in concentrates:							
Copper in concentrates ('000 tonnes)		34.3	46.1	36.0	40.2	<b>38.5</b>	156.7
Gold in concentrates ('000 ounces)		31	51	55	111	<b>98</b>	248
Silver in concentrates ('000 ounces)		206	250	201	216	<b>200</b>	873
<i>(a) Rio Tinto owns a 33.52% indirect interest in Oyu Tolgoi through its 50.79% interest in Turquoise Hill Resources.</i>							
<b>DIAMONDS</b>							
<b>Argyle Diamonds</b>	100.0%						
<i>Western Australia</i>							
AK1 ore processed ('000 tonnes)		1,260	1,428	1,465	1,292	<b>1,248</b>	5,444
AK1 diamonds produced ('000 carats)		3,551	3,476	3,830	3,211	<b>2,786</b>	14,069
<b>Diavik Diamonds</b>	60.0%						
<i>Northwest Territories, Canada</i>							
Ore processed ('000 tonnes)		556	652	670	651	<b>620</b>	2,530
Diamonds recovered ('000 carats)		1,774	1,916	1,776	1,797	<b>1,683</b>	7,264

**Rio Tinto percentage interest shown above is at 31 March 2019. The data represent full production and sales on a 100% basis unless otherwise stated.**

# Rio Tinto operational data

	Rio Tinto interest	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Full Year 2018
<b>IRON ORE</b>							
<b>Rio Tinto Iron Ore</b>							
<i>Western Australia</i>							
<b>Pilbara Operations</b>							
Saleable iron ore production ('000 tonnes)							
Hamersley mines	(a)	53,631	56,034	54,583	56,364	51,218	220,612
Hamersley - Channar	60.0%	1,893	2,045	1,007	2,228	1,552	7,173
Hope Downs	50.0%	10,685	11,567	11,426	11,691	11,913	45,368
Robe River - Pannawonica (Mesas J and A)	53.0%	8,816	7,637	7,940	7,555	3,529	31,947
Robe River - West Angelas	53.0%	8,094	8,252	7,587	8,738	7,783	32,672
Total production ('000 tonnes)		83,120	85,534	82,542	86,576	75,995	337,772
Breakdown of total production:							
Pilbara Blend Lump		24,831	26,253	24,461	26,084	24,068	101,629
Pilbara Blend Fines		35,556	37,368	35,696	38,085	34,924	146,705
Robe Valley Lump		2,993	2,699	2,774	2,659	1,198	11,126
Robe Valley Fines		5,823	4,937	5,166	4,896	2,331	20,821
Yandicoogina Fines (HIY)		13,916	14,277	14,446	14,852	13,473	57,491
Breakdown of total sales:							
Pilbara Blend Lump		21,457	22,954	21,644	22,161	18,968	88,215
Pilbara Blend Fines (c)		37,320	42,638	38,100	42,497	34,558	160,555
Robe Valley Lump		2,307	2,386	2,215	2,301	863	9,209
Robe Valley Fines		5,652	6,141	5,356	5,652	2,468	22,801
Yandicoogina Fines (HIY)		13,578	14,388	14,583	14,831	12,294	57,380
Total sales ('000 tonnes) (b)		80,314	88,506	81,898	87,442	69,150	338,160
<i>(a) Includes 100% of production from Paraburdoo, Mt Tom Price, Marandoo, Yandicoogina, Brockman, Nammuldi, Silvergrass and the Eastern Range mines. Whilst Rio Tinto owns 54% of the Eastern Range mine, under the terms of the joint venture agreement, Hamersley Iron manages the operation and is obliged to purchase all mine production from the joint venture and therefore all of the production is included in Rio Tinto's share of production.</i>							
<i>(b) Sales represent iron ore exported from Western Australian ports.</i>							
<i>(c) Pilbara Blend Fines sales include 1.5m tonnes of other lower grade products in Q1 2019.</i>							
<b>Iron Ore Company of Canada</b> 58.7%							
<i>Newfoundland &amp; Labrador and Quebec in Canada</i>							
Saleable iron ore production:							
Concentrates ('000 tonnes)		1,360	974	1,926	2,441	1,516	6,700
Pellets ('000 tonnes)		2,667	510	2,979	2,389	2,709	8,545
IOC Total production ('000 tonnes)		4,027	1,484	4,905	4,830	4,225	15,245
Sales:							
Concentrates ('000 tonnes)		1,271	105	2,590	2,653	878	6,619
Pellets ('000 tonnes)		2,681	343	2,825	2,581	2,684	8,430
IOC Total Sales ('000 tonnes)		3,951	449	5,415	5,234	3,562	15,049
<b>Global Iron Ore Totals</b>							
Iron Ore Production ('000 tonnes)		87,146	87,018	87,448	91,406	80,219	353,017
Iron Ore Sales ('000 tonnes)		84,265	88,954	87,314	92,676	72,712	353,209

**Rio Tinto percentage interest shown above is at 31 March 2019. The data represent full production and sales on a 100% basis unless otherwise stated.**



## Rio Tinto operational data

	Rio Tinto interest	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Full Year 2018
<b>SALT</b>							
<b>Dampier Salt</b>	68.4%						
<i>Western Australia</i>							
Salt production ('000 tonnes)		2,215	2,431	2,167	2,188	1,917	9,001
<b>TITANIUM DIOXIDE SLAG</b>							
<b>Rio Tinto Iron &amp; Titanium</b>	100.0%						
<i>Canada and South Africa</i>							
<i>(Rio Tinto share) (a)</i>							
Titanium dioxide slag ('000 tonnes)		294	232	297	294	296	1,116

(a) Quantities comprise 100% of Rio Tinto Fer et Titane and Rio Tinto's 74% interest in Richards Bay Minerals' production. Ilmenite mined in Madagascar is being processed in Canada.

<b>URANIUM</b>							
<b>Energy Resources of Australia Ltd</b>							
<b>Ranger mine (a)</b>	68.4%						
<i>Northern Territory, Australia</i>							
U <sub>3</sub> O <sub>8</sub> Production ('000 lbs)		975	881	1,199	1,351	1,160	4,407
<i>(a) ERA production data are drummed U<sub>3</sub>O<sub>8</sub>.</i>							
<b>Rössing Uranium Ltd (a) (b)</b>	68.6%						
<i>Namibia</i>							
U <sub>3</sub> O <sub>8</sub> Production ('000 lbs)		1,236	1,352	1,449	1,427	1,168	5,465

(a) Rössing production data are drummed U<sub>3</sub>O<sub>8</sub>.

(b) On 26 November 2018, Rio Tinto signed a binding agreement to sell its 68.62% interest in the Rössing mine in Namibia to China National Uranium Corporation Limited.

**Rio Tinto percentage interest shown above is at 31 March 2019. The data represent full production and sales on a 100% basis unless otherwise stated.**