

QUARTERLY REVIEW TO 30 SEPTEMBER 2021

21 OCTOBER 2021

KEY FEATURES

- Zircon/Rutile/Synthetic Rutile (Z/R/SR) production of 200kt, up 14% from Q2
 - Synthetic rutile production in line with Q2, with SR2 operating at full capacity
 - Zircon production of 89kt was 24% higher, with zircon-in-concentrate (ZIC) production up 38% compared to Q2 due to higher ore treatment volumes, with the Narngulu mineral separation plant running at full capacity
 - Rutile production up 18% on Q2 to 52kt, due to operational improvements and higher rutile assemblage at Sierra Rutile
- Q3 YTD Z/R/SR sales of 676kt
 - Zircon sales of 266kt, reflecting steady ceramic production levels in China; improved conditions in India, South America and Turkey; and strong growth in Europe
 - Rutile sales of 142kt and synthetic rutile sales of 268kt, with already strong demand for high-grade feedstocks amplified by low inventory levels and chlorine shortages in North America and Europe
- Weighted average zircon price achieved in Q3 for premium and standard sand was US\$1,487/t
- Zircon sand prices increased US\$125/t in Q3, with a further US\$120-\$170/t increase effective 1 October
- Iluka's Q4 total zircon sales are fully committed
- Q3 rutile price up 1.5% to US\$1,242/t¹
- All of Iluka's rutile and synthetic rutile is under contract for the remainder of 2021
- Rare earths (Eneabba development)
 - Phase 1 – monazite concentrate sales of 10kt, in line with offtake agreement
 - Phase 2 – site works continuing (project currently in execute)
 - Phase 3 – feasibility study scheduled for finalisation in early 2022. Associated engagement with Commonwealth and State governments is ongoing

PHYSICAL AND FINANCIAL SUMMARY	Q3 20	Q2 21	Q3 21	Q3 20 YTD	Q3 21 YTD	Q3 21 YTD vs Q3 20 YTD
PRODUCTION						%
kt						
Zircon	32.1	71.8	88.7	124.3	230.6	85.5
Rutile ²	47.9	43.6	51.6	131.9	131.5	(0.3)
Synthetic Rutile	55.3	59.9	59.8	166.9	138.8	(16.8)
Z/R/SR Production	135.3	175.3	200.1	423.1	500.9	18.4
Ilmenite	111.2	160.0	165.1	326.6	400.4	22.6
Monazite concentrate	20.6	10.0	12.2	30.3	38.4	26.7
SALES						
kt						
Zircon	63.2	90.8	88.7	141.6	265.9	87.8
Rutile ²	33.8	35.6	52.9	108.5	141.9	30.8
Synthetic Rutile	12.0	115.9	76.3	100.5	267.7	166.4
Z/R/SR sales	109.0	242.3	217.9	350.6	675.5	92.7
Ilmenite	61.1	80.9	30.4	168.2	160.9	(4.3)
Monazite concentrate	10.5	10.2	10.5	20.5	31.2	52.2
REVENUE & CASH COSTS						
\$ million						
Z/R/SR revenue	186.7	359.9	371.9	594.7	1,051.9	76.9
Ilmenite and other revenue	23.5	31.2	20.1	72.0	75.7	5.1
Mineral Sands Revenue	210.2	391.1	392.0	666.7	1,127.6	69.1
Production cash costs of Z/R/SR				403.2	390.6	(3.1)
Ilmenite concentrate & by product costs				15.9	14.3	(10.1)
Total cash costs of production				419.1	404.9	(3.4)
\$ per tonne						
Unit cash production costs Z/R/SR produced				953	780	(18.2)
Unit cost of goods sold Z/R/SR sold				974	931	(4.4)
Revenue Z/R/SR sold	1,713	1,485	1,707	1,696	1,557	(8.2)
AUD:USD cents	71.5	77.0	73.5	67.8	75.9	12.0

¹ Excluded from rutile sales prices is a lower value titanium dioxide product, HYTI, that typically has a titanium dioxide content of 70 to 90%. This product sells at a lower price than rutile, which typically has a titanium dioxide content of 95%.

² Rutile sales and production volumes include HYTI.

Australian Operations

Mining at Jacinth-Ambrosia in South Australia, produced 71 thousand tonnes of heavy mineral concentrate (HMC), 23% higher than Q2.

Higher HMC production was the result of increased ore treatment volumes, ore grade and recovery. Mining at the Jacinth North deposit will continue as planned before a move to Ambrosia in H2 2022. In September, Iluka commenced commissioning of the company’s first solar farm at Jacinth-Ambrosia, which is expected to produce power in Q4. The solar farm is currently undergoing commissioning and performance testing and is forecast to generate 670MWhrs and 790MWhrs in November and December respectively, representing approximately 18% of consumed power at Jacinth-Ambrosia over the period.

In Western Australia, the Cataby operation produced 149 thousand tonnes of HMC, up 37% from 108 thousand tonnes in Q2. Higher HMC production was the result of higher ore treatment volumes, ore grade and recovery.

The Narngulu mineral separation plant (MSP) continued to operate at full capacity and processed 168 thousand tonnes of HMC, up from 142 thousand tonnes in Q2. The plant had no scheduled maintenance outages in Q3, thus producing higher volumes. The plant processed both Cataby and Jacinth-Ambrosia material to produce a total of 89 thousand tonnes of zircon and 15 thousand tonnes of rutile.

Production of synthetic rutile from SR2 at Capel was 60 thousand tonnes, in line with production from the previous quarter, with SR2 operating at full capacity.

Eneabba Phase 1 produced 12 thousand tonnes of monazite-zircon concentrate, in line with planned shipment requirements and the offtake agreement in place to underpin this initial phase of rare earths operations.

Sierra Leone Operations

Mining at Sierra Rutile produced 77 thousand tonnes of HMC, compared to Q2 production of 65 thousand tonnes. Higher production was a result of improved run time and feed rates as operational improvements were realised throughout the quarter.

Rutile production of 36 thousand tonnes was up 23% compared to Q2, due to higher rutile assemblage within the HMC treated and higher recovery.

Iluka’s third party investment process for the Sembehun development remains in progress. A higher Sierra Rutile depreciation charge of \$12 million is expected in 2021.

MINERAL SANDS PRODUCTION	Q3 20	Q2 21	Q3 21	Q3 20 YTD	Q3 21 YTD	Q3 21 YTD vs Q3 20 YTD
	Kt	kt	kt	kt	kt	%
ZIRCON³						
Jacinth-Ambrosia/ Mid west WA	11.5	60.9	77.6	80.3	208.5	159.7
Cataby/South west WA	20.6	10.9	11.1	44.0	22.1	(49.8)
Sierra Leone	-	-	-	-	-	n/a
Total Zircon	32.1	71.8	88.7	124.3	230.6	85.5
RUTILE						
Jacinth-Ambrosia/ Mid west WA	3.5	6.4	8.6	13.9	25.4	82.7
Cataby/South west WA	13.4	7.6	6.6	25.1	14.2	(43.4)
Sierra Leone	31.0	29.6	36.4	92.9	91.9	(1.1)
Total Rutile	47.9	43.6	51.6	131.9	131.5	(0.3)
Synthetic Rutile (WA)	55.3	59.9	59.8	166.9	138.8	(16.8)
TOTAL Z/R/SR	135.3	175.3	200.1	423.1	500.9	18.4
ILMENITE						
Jacinth-Ambrosia/ Mid west WA	4.4	27.1	34.7	45.5	99.9	119.6
Cataby/South west WA	94.7	123.2	114.4	245.1	264.3	7.8
Sierra Leone	12.1	9.7	16.0	36.0	36.2	0.6
Total Ilmenite	111.2	160.0	165.1	326.6	400.4	22.6
MONAZITE						
Jacinth Ambrosia/ Mid west WA	20.6	10.0	12.2	30.3	38.4	26.7

³ Iluka’s zircon production figures include volumes of zircon attributable to external processing arrangements.

Zircon

Strong demand for all zircon products continued in Q3, with sales of 89 thousand tones, including zircon-in-concentrate.

Chinese tile production rates were steady over the quarter after returning to pre-pandemic levels in Q2. Power supply restrictions emerged towards the end of the period causing some disruption to production lines.

Tile production rates in India continued to recover throughout the quarter despite exports being negatively impacted by container shortages and subdued domestic tile demand. European tile production continued to outperform, and production rates in key tile producing countries in South America and in Turkey continued to improve, with production returning to pre-pandemic levels.

The outlook for refractories and foundries remains positive and demand for fused zirconia is robust. Zirconium chemical production was stable during the quarter.

Overall, the ceramics industry is experiencing sustained growth in sales. However, profitability is being challenged by increasing costs throughout the supply chain.

The COVID-19 pandemic and associated logistics disruptions remain a headwind, while energy supply shortages are presenting new challenges in some tile producing countries. A number of Iluka's customers and suppliers are closely monitoring developments in the Chinese real estate industry.

Iluka has increased pricing of zircon sand for Q4 2021 by US\$120-170 per tonne, effective from 1 October. Prices vary by region and also reflect responses to increased logistics costs associated with dislocated supply chains.

While Q4 is typically a seasonally slower sales period, Iluka's Q4 2021 zircon sales are fully committed, providing an indication of ongoing supply-side tightness in this market. The company expects Q4 sales volumes in line with those achieved in Q3, though with a higher proportion of zircon-in-concentrate.

Titanium Dioxide Feedstocks

Sales of rutile and synthetic rutile were 129 thousand tonnes.

The global pigment market remains robust with demand in all regions outpacing supply. Pigment pricing momentum is continuing, with increases of US\$175-200 per tonne announced by all major producers for Q4.

In China, the production of both pigment and titanium feedstocks was impacted by energy shortages throughout the period. Exports from China continue to be impacted by unprecedented logistics costs associated with container shortages.

More broadly, pigment inventories are well below seasonal norms and long lead times persist as North American and European pigment producers continue to face shortages of chlorine. In order to manage high chlorine costs and constrained supply, pigment producers are increasingly looking to boost head grades in an attempt to reduce their requirements for chlorine. These developments are driving increased demand for high grade feedstocks such as synthetic rutile and natural rutile. All of Iluka's synthetic rutile and natural rutile is under contract for the remainder of 2021.

The welding market remains strong as high levels of spending on infrastructure in both developing and mature economies continues to support underlying demand.

PROJECT UPDATES

Updates on selected projects for the September quarter are detailed below.



Eneabba, Western Australia

The Eneabba project in Western Australia involves the reclaiming, processing and sale of a strategic stockpile rich in monazite (a mineral containing rare earth elements) and zircon. Eneabba is currently the highest grade rare earths operation globally.

Phase 1 of the project is operational, producing a mixed monazite-zircon concentrate, with the monazite fraction at approximately 20%.

Phase 2 of the project is currently in execute. Once commissioned, this will see the production of two separate concentrates: a dedicated monazite concentrate at approximately 90%, suitable as a direct feed to a downstream rare earths refinery; and a zircon-ilmenite concentrate, which will be processed into finished products (zircon and ilmenite) at the Narngulu MSP. Site works for Phase 2 are continuing, with the bulk of offshore fabrication complete and components in transit. Some lockdown related delays have impacted deliveries from Australian east coast manufacturers. Despite challenges in the supply chain, completion remains on-track for H1 2022.

The feasibility study for Phase 3 at Eneabba, a fully integrated rare earths refinery, is scheduled for finalisation in early 2022. Associated engagement with Commonwealth and State governments is ongoing.



Balranald, New South Wales

Balranald is a rutile-rich deposit in the northern Murray Basin, New South Wales. Owing to its relative depth, Iluka is assessing the potential to develop the deposit via a novel, internally developed, underground mining technology. As disclosed previously, the definitive feasibility study for Balranald was approved in August 2021. Major contracts have now been let and works are proceeding in accordance with the study execution plan.



Wimmera, Victoria

The Wimmera project involves the mining and beneficiation of a fine grained heavy mineral sands ore body in the Victorian Murray Basin for the potential long term supply of zircon and rare earths. One characteristic shared by the fine grained mineral sands deposits located in Western Victoria (those held by Iluka and other project proponents) is higher levels of impurities in their zircon. Absent a processing solution to remove these impurities, the zircon is ineligible for sale into the ceramics market.

Study work for Wimmera is focussed on validating Iluka's zircon processing solution and on progressing baseline environmental studies. Testing results on the processing solution continue to be pleasing. Equipment to pilot this solution on a larger scale is expected to be commissioned in Q4 2021. The rare earth bearing minerals within the Wimmera deposit are very similar to the stockpiled minerals at Eneabba and could supplement feed to Iluka's potential downstream refining activities at Eneabba in future years.



Synthetic Rutile Kiln 1 Restart, Western Australia

SR1 kiln is located at Capel, Western Australia, on the same site as SR2 kiln. SR1 was placed on care and maintenance in 2009. The restart of SR1 represents a low capital expenditure, low risk opportunity to produce an additional 110ktpa of synthetic rutile, with speed to market in light of industry supply constraints. Iluka announced the execution of SR1's restart in August 2021. A project team has been established and has commenced delivery of the execution plan. Start-up is expected in Q4 2022.



Sembehun, Sierra Leone

The Sembehun group of deposits are situated 20 to 30 kilometres north-west of the existing Sierra Rutile operations. Sembehun is one of the largest and highest quality known rutile deposits in the world. Iluka is focused on determining an approach which balances the risk and reward associated with the development of Sembehun and, during the quarter, has continued with the process to identify third parties willing to invest in the next phase of Sierra Rutile's growth. A hydraulic mining trial completed in Q2 demonstrated viability for use at Sembehun as an ancillary mining method; and the implementation of this technology in selected applications at Lanti is also under review.

EXPLORATION

Expenditure on exploration and evaluation in Q3 was \$2.9 million. YTD 2021 expenditure is \$7.6 million, compared to YTD 2020 expenditure of \$7.2 million.

In the US, an initial programme to test a regional prospect on the eastern seaboard was completed, with 20 holes drilled for a total of 1,017 metres. Drilling has commenced on a second regional prospect in central US, with 4 holes drilled for a total of 170 metres. Results from both programmes will be evaluated in Q4.

In Australia, COVID-19 related travel restrictions continue to impact the execution of planned exploration programmes across multiple regions. In Q3, drilling activity focused on resource definition in the Balranald and Euston regions of New South Wales, with 12 holes completed for a total of 821 metres.

Late in the quarter, drilling commenced on two exploration targets in South Australia, with 6 holes drilled for a total of 284 metres.

OTHER UPDATES

Reserve and Resource update

Iluka will provide an updated Reserve and Resource statement in December 2021 as part of the company's normal reserve and resource estimate disclosure.

This document was approved and authorised for release to the market by Iluka's Managing Director.

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APPENDIX 1 – MINING AND PRODUCTION PHYSICAL DATA

Physical Data 3 months to September 21	Jacinth- Ambrosia/ Mid west	Cataby/ South west	Australia Total	Sierra Leone	Group Total
Mining					
Overburden Moved kbcm	1,375	969	2,344	-	2,344
Ore Mined kt	2,746	2,364	4,447	1,590	6,037
Ore Treated Grade HM %	2.9%	7.0%	4.8%	2.2%	3.9%
VHM Treated Grade %	2.6%	5.9%	4.1%	2.2%	3.5%
Concentrating					
HMC Produced kt	71.0	148.5	219.5	77.1	296.7
VHM Produced kt	62.2	129.6	191.8	56.6	248.4
VHM in HMC Assemblage %	87.5%	87.3%	87.4%	73.4%	83.7%
Zircon	38.4%	9.4%	18.8%	4.3%	14.9%
Rutile	8.7%	6.9%	7.5%	52.5%	18.1%
Ilmenite	40.4%	71.0%	61.1%	21.1%	50.7%
HMC Processed kt	127.2	123.7	250.9	80.2	331.1
Finished Product⁴ kt					
Zircon	77.6	11.2	88.7	-	88.7
Rutile	8.6	6.7	15.2	36.4	51.6
Ilmenite (saleable/upgradeable)	34.7	114.4	149.1	16.0	165.1
Synthetic rutile kt	-	59.8	59.8	-	59.8
Monazite concentrate kt	12.2	-	12.2	-	12.2

⁴ Finished product includes material from heavy mineral concentrate (HMC) initially processed in prior periods.

Physical Data 9 months to September 21	Jacinth- Ambrosia/ Mid west	Cataby/ South west	Australia Total	Sierra Leone	Group Total
Mining					
Overburden Moved kbcm	2,423	4,228	6,651	-	6,651
Ore Mined kt	8,018	6,903	14,921	7,074	21,995
Ore Treated Grade HM %	3.0%	6.1%	4.4%	2.2%	3.7%
VHM Treated Grade %	2.7%	5.2%	3.9%	2.2%	3.3%
Concentrating					
HMC Produced kt	200.0	382.6	582.6	214.9	797.5
VHM Produced kt	175.3	336.4	511.7	145.6	657.2
VHM in HMC Assemblage %	87.7%	87.9%	87.8%	67.7%	82.4%
Zircon	39.5%	10.1%	20.2%	3.8%	15.8%
Rutile	7.7%	7.0%	7.2%	43.3%	16.9%
Ilmenite	40.5%	70.9%	60.4%	20.6%	49.7%
HMC Processed kt	359.7	305.8	665.4	228.1	893.6
Finished Product⁵ kt					
Zircon	208.5	22.1	230.6	-	230.6
Rutile	25.4	14.2	39.6	91.9	131.5
Ilmenite (saleable/upgradeable)	99.9	264.3	364.2	36.2	400.4
Synthetic Rutile kt	-	138.8	138.8	-	138.8
Monazite concentrate kt	38.4	-	38.4	-	38.4

Explanatory comments on terminology

Overburden moved (bank cubic metres) refers to material moved to enable mining of an ore body.

Ore mined (thousands of tonnes) refers to material moved containing heavy mineral ore. For Cataby/ South West this refers to ore treated.

Ore Treated Grade HM % refers to percentage of heavy mineral (HM).

VHM Treated Grade % refers to percentage of valuable heavy mineral (VHM) - titanium dioxide (rutile and ilmenite), and zircon found in a deposit.

Concentrating refers to the production of heavy mineral concentrate (HMC) through a wet concentrating process at the mine site, which is then transported for final processing into finished product at the company's Australian mineral processing plant, or the Sierra Leone mineral processing plant.

HMC produced refers to HMC, which includes the valuable heavy mineral concentrate (zircon, rutile, ilmenite) as well as other non-valuable heavy minerals (gangue).

VHM produced refers to an estimate of valuable heavy mineral in heavy mineral concentrate expected to be processed.

VHM produced and the VHM assemblage - provided to enable an indication of the valuable heavy mineral component in HMC.

HMC processed provides an indication of material emanating from each mining operation to be processed.

Finished product is provided as an indication of the finished production (zircon, rutile, ilmenite) attributable to the VHM in HMC production streams from the various mining operations. Finished product levels are subject to recovery factors which can vary. The difference between the VHM produced and finished product reflects the recovery level by operation, as well as processing of finished material/concentrate in inventory. Ultimate finished product production (rutile, ilmenite, and zircon) is subject to recovery loss at the processing stage – this may be in the order of 10 per cent.

Ilmenite is produced for sale or as a feedstock for synthetic rutile production.

Typically, 1 tonne of upgradeable ilmenite will produce between 0.56 to 0.60 tonnes of SR. Iluka also purchases external ilmenite for its synthetic rutile production process.

⁵ Finished product includes material from heavy mineral concentrate (HMC) initially processed in prior periods.

APPENDIX 2 – WEIGHTED AVERAGE RECEIVED PRICES

The following table provides weighted average received prices for Iluka’s main products over the last three half year periods. Iluka’s Annual Report, available at www.iluka.com contains further historical mineral sands price information.

	FY 20	H1 21	Q3 21	Q3 21 YTD
<i>US\$/tonne FOB</i>				
Zircon Premium and Standard	1,319	1,321	1,487	1,372
Zircon (all products, including zircon in concentrate) ¹	1,217	1,254	1,369	1,293
Rutile (excluding HYTI) ²	1,220	1,224	1,242	1,232
Synthetic rutile	Refer Note 3	Refer Note 3	Refer Note 3	Refer Note 3

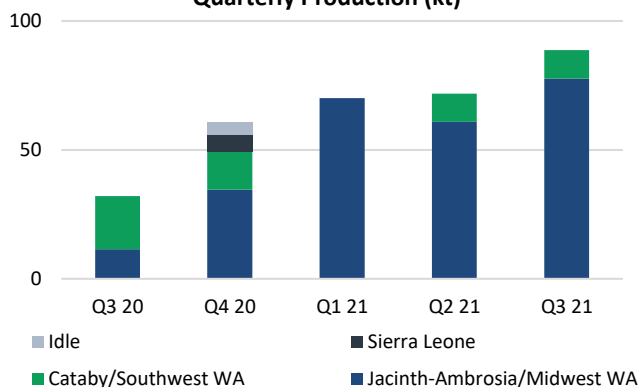
Notes:

1. Zircon prices reflect the weighted average price for zircon premium, zircon standard and zircon-in-concentrate. The prices for each product vary considerably, as does the mix of such products sold period to period. In the year to date 2021 the split of zircon sand and concentrate by zircon sand-equivalent was approximately: 82%:18% (2020 full year: 78%:22%).
2. Excluded from rutile sales prices is a lower value titanium dioxide product, HYTI, that typically has a titanium dioxide content of 70 to 90%. This product sells at a lower price than rutile, which typically has a titanium dioxide content of 95%.
3. Iluka’s synthetic rutile sales are underpinned by commercial offtake arrangements. The terms of these arrangements, including the pricing arrangements are commercial in confidence and as such not disclosed by Iluka. Synthetic rutile, due to its lower titanium dioxide content than rutile, is priced lower than natural rutile.

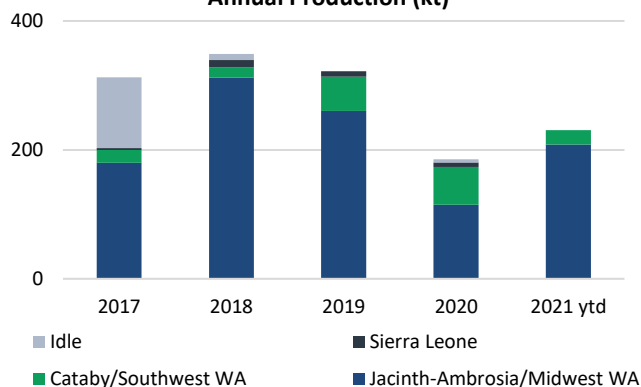


APPENDIX 3 – PRODUCTION SUMMARIES

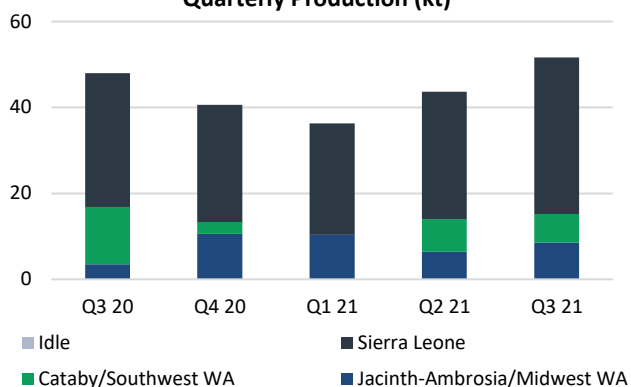
Zircon
Quarterly Production (kt)



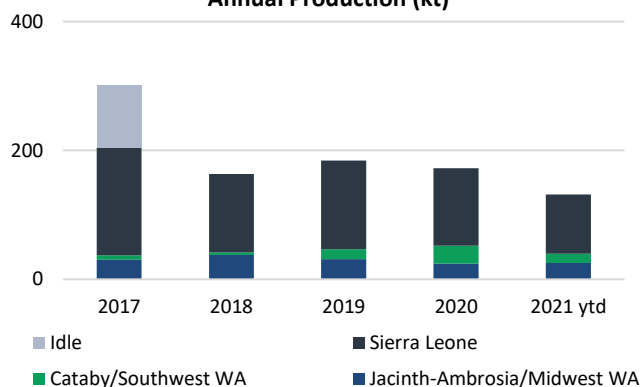
Zircon
Annual Production (kt)



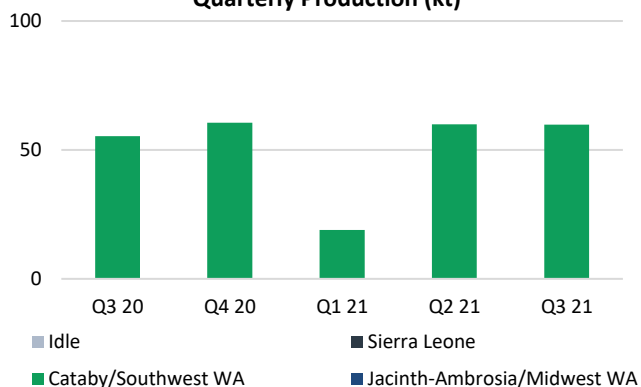
Rutile
Quarterly Production (kt)



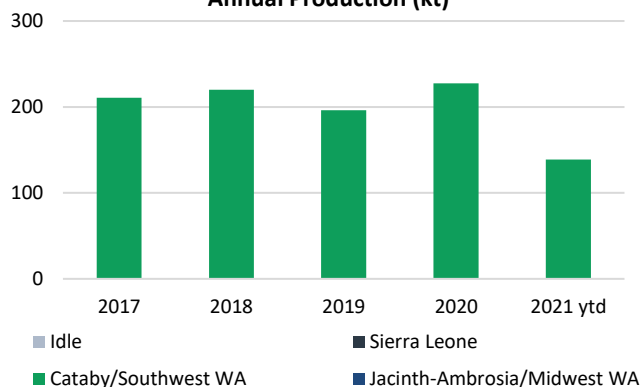
Rutile
Annual Production (kt)



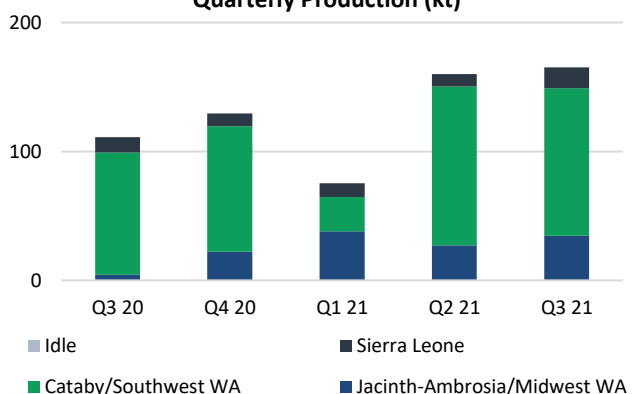
Synthetic Rutile
Quarterly Production (kt)



Synthetic Rutile
Annual Production (kt)



Ilmenite
Quarterly Production (kt)



Ilmenite
Annual Production (kt)

