15 October 2015

QUARTERLY PRODUCTION REPORT 30 SEPTEMBER 2015

SUMMARY OF PHYSICAL AND FINANCIAL DATA

	Sep-14 Quarter	Jun-15 Quarter	Sep-15 Quarter	Sep-14 YTD	Sep-15 YTD	Sep-15 YTD vs Sep-14 YTD
	kt	kt	kt	kt	kt	%
Production						
Zircon	99.4	97.6	108.0	273.4	271.4	(0.7)
Rutile	41.1	35.9	35.2	119.2	91.4	(23.3)
Synthetic Rutile	-	55.8	54.9	-	112.3	n/a
Total Z/R/SR Production	140.5	189.3	198.1	392.6	475.1	21.0
Ilmenite – Saleable & Upgradeable	73.8	115.5	121.8	300.6	316.9	5.4
Total Mineral Sands Production ¹	214.3	304.8	319.9	693.2	792.0	14.3
Z/R/SR sales revenue A\$ million	134.4	212.6	168.9	415.7	480.7	15.6
Ilmenite and other revenue A\$ million	13.3	21.8	17.0	75.3	54.9	(27.1)
Mineral Sands Revenue A\$ million	147.7	234.4	185.9	491.0	535.6	9.1
Average AUD:USD cents	92.7	77.8	72.7	91.9	76.3	17.0

OVERVIEW

- Zircon/rutile/synthetic rutile (Z/R/SR) production for the September quarter was 198 thousand tonnes, similar to the June 2015 quarter. Compared with the September 2014 quarter of 141 thousand tonnes this represents a 41 per cent increase.
- On a year-to-date basis, Z/R/SR production was 475 thousand tonnes, compared with the previous corresponding period of 393 thousand tonnes, a 21 per cent increase.
- Higher production on a year-to-date basis reflects high-grade titanium feedstock production, namely synthetic rutile, associated with the recommencement of production from Iluka's SR 2 kiln in April of 2015. This kiln was idle during 2014.
- On a year-to-date basis, zircon production is similar while rutile production is 23 per cent lower. The
 cessation of mining at the Murray Basin deposit of Woornack, Rownack, Pirro occurred earlier this year
 and Iluka's approach will be to allocate rutile volumes over the period until the next planned mine
 development in the Murray Basin.
- Revenue for Iluka's main products of Z/R/SR for the 3 months to 30 September 2015 was \$168.9 million, a 26 per cent increase from the September 2014 quarter amount of \$134.4 million. For the nine months to 30 September Z/R/SR revenue was \$480.7 million, compared with \$415.7 million in the same period in 2014. The 16 per cent increase in revenue reflects a number of factors: slightly higher sales volumes;

¹ Total mineral sands production includes ilmenite available for upgrading to synthetic rutile and ilmenite that is available for sale. For both commercial reasons and given the company's increased flexibility in utilising ilmenite production from multiple sources for upgrading to synthetic rutile, the company does not separates ilmenite production into saleable and upgradeable components. The relative utilisation of ilmenite for upgrading or sale is more apparent with the reporting of sales volumes in the June and December quarterly reports.

a higher proportion of synthetic rutile in the product mix; lower AUD:USD exchange rates which were partially offset by lower weighted average US denominated Z/R prices in 2015 compared with 2014.

- The lower third quarter revenue compared with second quarter 2015 reflects a number of factors: approximately 15 thousand tonnes of zircon volume contracted and scheduled to be shipped in the third quarter being deferred to the fourth quarter, in large part in order to optimise logistics costs by combining cargoes; a higher proportion of standard rather than premium zircon product in the sales mix as well as planned sales of low revenue zircon in concentrate during the quarter; and second half contracted high grade titanium dioxide (rutile and synthetic rutile) shipment timing being strongly weighted to the fourth quarter.
- Iluka's zircon reference price was kept flat from the second quarter to the third quarter. In some markets this resulted in a loss of some volume.
- Mineral sands revenue (including ilmenite and by-products) for the year-to-date was \$535.6 million, compared with \$491.0 million in the same period in 2014, a 9.1 per cent increase. The lower contribution in other revenues from low grade ilmenite concentrate and other by-products reflects market conditions, including lower iron oxide shipments in light of prevailing iron ore prices.
- September quarter revenue per tonne of Z/R/SR sold was marginally higher the June year-to-date figure of A\$1,130/tonne.
- Production and sales guidance remain intact, despite more challenging global economic conditions than at the time of Iluka's budget set in late 2014 and at the issuance of full year guidance parameters in February 2015. As such, aggregate Z/R/SR sales, as stated in February guidance, "may exceed 2015 production...and also be above 2014 Z/R/SR sales" (which were 616 thousand tonnes). In addition, both cash costs of production and capital expenditure are trending within full year guidance.

MARKET CONDITIONS

Global and regional economic conditions continue to weigh on market sentiment and, in some cases, buyer behaviour. However, end-use demand for titanium and zircon does not appear to have softened relative to 2014. Industry dynamics have highlighted production overcapacity downstream of Iluka which, unfortunately, continues in many instances to be utilised for the purpose of securing market share and has led to a more challenging pricing environment for Iluka's customers. This is in contrast to the feedstock sector where Iluka and others earlier took significant measures to reduce supply. Importantly, there is some evidence of excess capacity rationalisation now occurring in the pigment industry.

Zircon

Sector and regional trends remain fundamentally unchanged to the commentary provided at the time of the half year results, although some further erosion in customer confidence levels has been observed. During the September quarter, sales to the ceramics sector remained relatively stable with minor cutbacks in China off-set by increased demand in Europe and India. The chemicals sector, which is predominately located in China, has not displayed any signs of improvement and demand remains weak. Demand for fused zirconia has remained robust in China, although in the United States this sector has weakened off a low base, influenced by reduced demand in the oil and steel industries. Sales for consumption in refractory and foundry applications slowed in the third quarter which is consistent with a slowdown in manufacturing in some economies, while the advent of new sources of production has been associated with, in some cases, a more competitive environment.

Compared with the same time last year, Iluka has the majority of its fourth quarter sales volumes under contract or committed to customers participating in the Iluka pricing and payments framework. This provides a better "look through" to full year volumes than has been the case in the past. The Iluka zircon reference price was kept flat from the second quarter to the third quarter. In some markets this resulted in a loss of some volume due to competitor actions referred to above. As was indicated in the half year results materials (refer slide 15 of the half year results), the company expects to have a higher proportion of both standard grade and zircon in concentrate sales in the second half, associated with market targeting activities and end customer product requirements in some sectors. With a stable Iluka reference price over the last two quarters, mix has been a factor influencing the weighted average received price.

Titanium Dioxide Feedstocks

As Iluka has indicated previously, the majority of its high grade titanium feedstock sales are contracted for the second half of the year and, subject to shipment schedules, are planned to be delivered. Modest price increases have been achieved on some spot volumes.

In terms of the major markets for Iluka's high grade feedstocks, public commentary by some pigment producers reflects the difficulties being experienced in that sector. In light of these conditions it is unrealistic to expect additional volumes beyond those already contracted and factored into Iluka's guidance.

As indicated in prior commentary, sales of chloride ilmenite will be second half weighted. Current shipping schedules confirm this, with some upside expected as some producers seek to lower the cost of head grades to their respective plants.

The titanium sponge market in China remains depressed, as does the welding electrode market. This is in contrast to the rest of Asia where sponge remains stable and welding has seen an uptick in demand; the later influenced predominately by shipbuilding.

PRODUCTION

Total Z/R/SR production for the quarter was 198 thousand tonnes (third quarter 2014: 141 thousand tonnes), comprising 108 thousand tonnes of zircon and 35 thousand tonnes of rutile and 55 thousand tonnes of synthetic rutile during the quarter.

Iluka's third quarter production settings were in line with the guidance provided for full year production. These production settings entail lower mineral separation plant utilisation than normal to reduce transport and operating costs.

As advised previously, both the Tutunup South mine in the South West of Western Australia and Iluka's largest synthetic rutile kiln, SR 2, were safely and efficiently reactivated at the end of the first quarter. Mining operations have proceeded in line with budgetary expectations, with this mine being one of the principal sources of ilmenite feed for the SR 2 kiln in the South West. After the kiln recommencement in April 2015, kiln availability and throughput has exceeded company expectations. On this basis, synthetic rutile production for the full year may prove to be higher than the approximately 140 thousand tonnes guided in February.

Mining operations continue at Jacinth-Ambrosia in South Australia. Jacinth-Ambrosia heavy mineral concentrate is processed at both the Narngulu mineral separation plant in Western Australia and at Hamilton in Victoria. Mining operations in the Murray Basin have ceased, with the next planned mine development at Balranald in New South Wales. Iluka has finished goods inventory of rutile and zircon associated with mining operations at Woornack, Rownack and Pirro, as well as concentrate that it will progressively process to supply into the market.

In Virginia, mining continued at Brink, with mining at Concord recommencing in July. The mines will operate until depleted which is expected near the end of the year. As previously advised, mining and processing at Iluka's United States operations are expected to be completed at the end of 2015 (refer ASX Release 12 December 2014).

Appendix 1 shows physical movements on a year-to-date basis. In relation to heavy mineral concentrate (HMC) produced and that processed, the figures indicate a relatively minor HMC build of approximately 48 thousand tonnes.

MINERAL SANDS PRODUCTION

The following table details Iluka's total production by product group, with the source of that production attributed to the regional operating mines and basins. Processing of final product occurs in Australia at one of two mineral separation plants at Hamilton, Victoria and Narngulu, Western Australia. Iluka also has a mineral separation plant in Virginia, United States. A similar table showing a 12 month comparison is on page 5. Given the integrated nature of Iluka's Australian operations, heavy mineral concentrate is capable of being processed into final product at either of the Australian mineral processing facilities. Appendix 1 provides details of the physical flows from mining operations to mineral processing facilities.

Physical Production

						YTD vs
	Sep-14	Jun-15	Sep-15	Sep-14	Sep-15	Sep-14
	Quarter	Quarter	Quarter	YTD	YTD	YTD
	kt	kt	kt	kt	kt	%
Zircon ¹						
Eucla/Perth Basin (SA/WA)	71.8	74.7	85.1	191.6	208.8	9.0
Murray Basin (VIC)	22.3	15.1	12.3	60.8	35.1	(42.3)
Australia	94.1	89.8	97.4	252.4	243.9	(3.4)
Virginia (USA)	5.3	7.8	10.6	21.0	27.5	31.0
Total Zircon Production	99.4	97.6	108.0	273.4	271.4	(0.7)
Putilo						
Eucla/Perth Basin (SA/M/A)	85	9.0	11.2	22.4	27 5	22.8
Murray Basin (V/IC)	32.6	26.0	24.0	22.4	63.0	(34.0)
Total Butile Production	32.0	20.9	24.0	30.0	03.9	(34.0)
	41.1	30.9	35.2	119.2	91.4	(23.3)
<u> </u>						
Synthetic Rutile (WA)	-	55.8	54.9	-	112.3	n/a
TOTAL 7/R/SR PRODUCTION	140 5	189 3	198 1	392.6	475 1	21.0
	140.0	100.0	100.1	002.0	470.1	21.0
<u>llmenite – Saleable &</u> Upgradeable						
Eucla/Perth Basin (SA/WA)	33.8	67.9	66.5	78.9	169.6	115.0
Murray Basin (VIC)	20.9	16.6	13.4	143.4	39.2	(72.7)
Australia	54.7	84.5	79.9	222.3	208.8	(6.1)
Virginia (USA)	19.1	31.0	41.9	78.3	108.1	38.1
Total Ilmenite	73.8	115.5	121.8	300.6	316.9	5.4
-	10.0	110.0	12110	000.0	01010	0.4
TOTAL MINERAL SANDS						
PRODUCTION	214.3	304.8	319.9	693.2	792.0	14.3
=						

Sep-15

¹ Iluka's zircon production figures include small volumes of zircon attributable to external processing arrangements.

Physical Production – 12 Month Comparison

	12 mths to Sep-14	12 mths to Sep-15	12 mths Sep-15 vs 12 mths Sep-14
	kt	kt	%
Zircon			
Eucla/Perth Basin (SA/WA)	242.4	256.7	5.9
Murray Basin (VIC)	68.7	67.3	(2.0)
Australia	311.1	324.0	4.1
Virginia (USA)	30.8	31.6	2.6
Total Zircon Production	341.9	355.6	4.0
Rutile			
Eucla/Perth Basin (SA/WA)	29.8	34.8	16.8
Murray Basin (VIC)	111.6	114.6	2.7
Total Rutile Production	141.4	149.4	5.7
Synthetic Rutile (WA)		112.3	n/a
		112.0	174
TOTAL Z/R/SR PRODUCTION	483.3	617.3	27.7
Ilmenite – Saleable & Upgradeable			
Eucla/Perth Basin (SA/WA)	104.3	193.2	85.2
Murray Basin (VIC)	195.1	63.8	(67.3)
Australia	299.4	257.0	(14.2)
Virginia (USA)	117.6	124.7	6.0
Total Ilmenite	417.0	381.7	(8.5)
	900 3	000 0	11 0
	300.3	333.0	11.0

PLANNED NEW PRODUCTION

Balranald, Murray Basin, New South Wales

Balranald and Nepean are two rutile-rich mineral sands deposits in the northern Murray Basin, New South Wales. The Balranald development, if approved, will provide the potential for approximately eight years of substantial rutile, zircon and associated ilmenite production. It is proposed that the Balranald development will utilise the existing Hamilton mineral separation plant.

Balranald Stage 1 definitive feasibility study (DFS) is nearing completion and has been focussed on: assessment and refinement of various conventional mining methods; dewatering to ore requirements with associated hydrogeological modelling and testing; and on environmental impact assessments and progression of necessary regulatory approvals, including an Environmental Impact Statement public review process.

During the quarter, activities associated with the DFS Stage 1 included accommodation planning, reviews of haul road design/maintenance regimes and material movement optimisation. When complete, these works are to be followed by the detailed engineering required for project pre-execution activities. Additional test work to better assess the proportion of the ilmenite from Balranald suitable for various downstream processing technologies supports preliminary assessments and continued during the quarter. As part of the statutory planning process, Iluka has prepared a response to State Government agency and community submissions on the New South Wales Environmental Impact Statement. In addition, Iluka is finalising a separate response after the Federal Government reviewed the draft Environmental Impact Statement. Iluka

continues to communicate and inform the community of the assessments and proposed management of the development. The timing of the Balranald project remains subject to the final results of the definitive feasibility study, environmental and other approvals and economic and market conditions.

Cataby, Western Australia

The Cataby mineral sands deposit, located north of Perth, is a deposit that is expected to produce ilmenite suitable for sale, or as a quality ilmenite feed source for synthetic rutile production, as well material volumes of zircon and rutile. Cataby is expected to have an economic life of approximately 8.5 years.

Preparation for execute continued with important environmental approvals being received including for a water extraction licence and various environmental management plans. Design work also progressed for the accommodation camps and site power supply.

In terms of Cataby project timelines, Iluka has recently secured a substantial extension of government approval validity period and an external source of chloride ilmenite supply, which in combination provide further flexibility in terms of timing for the capital commitment to execute the Cataby project. In addition, project work has clarified long lead item and infrastructure upgrade timeframes such that the gap between an execute decision and first production has been reduced materially – deferring any near term requirement for financial commitment to long lead items in these areas.

As Iluka indicated at its full year results announcement on 17 February 2015, technical and financial analyses support the view that financial returns for the Balranald and Cataby projects are likely to be above risk weighted hurdle rates and, as such, support the continued investment in feasibility studies, regulatory approval processes and certain pre-execute activities.

Puttalam, Sri Lanka

The Puttalam project focus remained on government negotiations with respect to the legal and investment terms for the development and on a scoping study on the PQ deposit, which is now complete. Next phase project planning activities commenced.

Refer Iluka's website (<u>www.iluka.com</u>) - Section: Company Overview, Projects, for more detail on these projects.

EXPLORATION

Perth Basin, Western Australia

Iluka has completed first phase of exploration drilling on E70/2464 (refer Figure 1) with 115 holes drilled for 1,881 metres in the quarter on three traverses. Drilling intersected the target Pleistocene Warren Sands in most holes, the drilling has confirmed the presence of heavy mineral (HM) mineralisation (around five per cent) on each traverse. The exploration drilling is being undertaken under the terms of the Farm-In and Exploration Joint Venture Agreement between Iluka Resources and Governor Broome Sands Pty Ltd.

Further drilling on the tenement will be undertaken in the fourth quarter.

Canning Basin, Western Australia

Iluka completed greenfields drilling on E40/2202, E40/2203, E40/2209, E40/2210, E40/2212, E40/2277, E40/2280 and E40/2283 in the Canning Basin (Figure 2). To the end of the quarter 74 holes were drilled for 5,473 metres. Drilling on the easternmost tenements has intercepted the host Cretaceous Broome Sandstone in most holes. The drilling has established that this sediment is largely unconsolidated and consists of fine to medium grained well sorted sands with zones of low grade (less than 0.5 per cent HM) mineralisation. Drilling has also been completed on the westernmost tenements (E40/2209 to E40/2212, and E40/4057) where drill holes targeted Pleistocene sediments and underlying Cretaceous Broome Sandstone. The drilling intersected scattered low grade (0.5 per cent HM) mineralisation.

Murray Basin, New South Wales / Victoria

Iluka completed a short drilling program in the Murray Basin on two tenements EL 7626 and EL 3903 (Figure 3). For the quarter 62 holes were drilled for 2,910 metres. The drilling on EL 7626 targeted the continuation of known magnetic lineaments within the Loxton Parilla sands which are host to HM accumulations. Drilling intersected the targeted stratigraphy and confirmed the presence of the HM, further work to determine the significance of the HM intercepts. The drilling on EL 3903 targeted known HM deposits to collect further samples for comparative analysis with historical drilling.

Figure 1 Perth Basin, Western Australia



Figure 2 Canning Basin, Western Australia





Figure 3 Murray Basin, New South Wales and Victoria

Figure 4 South Australia



Project Generation

Iluka is continuing exploration activities (from initial prospecting and tenement acquisition to drilling activity) for mineral sands in several other areas in both Australia and at early stages in six international jurisdictions.

During the quarter, Iluka progressed exploration activities in Kazakhstan in order to conduct early stage greenfields exploration for mineral sands targets within the country. An aerial geophysics program is planned in the December quarter and, if suitable anomalies are found, this will be followed up with drilling during the

first half of 2016. No investment decisions, beyond this exploration program, have been made within Kazakhstan.

Drilling on Iluka-held tenements in Brazil continued during the quarter. Low grade HM (less than 0.5 per cent) has been found in near shore marine sediment environments, but these occur at depths of greater than 40 metres from surface.

Exploration – New Commodities

Iluka has established a small team to assess non mineral sands prospectivity on its tenements, and also to evaluate other proximate opportunities. Recent activities included the completion of ground EM surveys at the Fowler Project (E5165, E5417, E4547, E5166, E5110, E5217, E5452, E5675, E5477, E5539, E5564, E 4544), located 60 kilometres north east of the Jacinth-Ambrosia mine (Figure 4). This exploration work is aimed at nickel sulphide mineralisation.

A ground gravity survey was also completed on E5123 (Iluka Farm-In Agreement with Monax Mining Limited) and E5515 (100 per cent Iluka) near Coober Pedy, South Australia (Figure 4). This exploration work is aimed at the discovery of iron oxide copper gold mineralisation.

Exploration – Doray Gold Farm-In Agreement

Doray Minerals Ltd and Iluka have entered into a Gold Farm-In Agreement covering Gold Rights at the West Gawler Project, which commenced in February 2015. On the 10 September, Doray announced the presence of a number of large coincident geochemical and structural targets indicating the potential for the project area to host significant gold mineralisation.

Partner	Tenement(s)	Key Terms
Royal Resources Limited Located approximately 250km NNE of Adelaide, South Australia	EL 4842	 Iron Ore Rights Agreement Royal must spend a minimum of \$250,000 within the first 12 months. If the project reaches the stage where the Royal Board makes a decision to mine on EL 4842, then Royal has agreed to pay Iluka \$1.5 million. Royal will also pay a 4% gross revenue royalty.
Monax Mining Limited Located approximately 50km from Prominent Hill, South Australia	EL 5123	Farm-In & Exploration JV Agreement Iron-Oxide Copper-Gold Iluka can earn 80% of the project by funding \$2 million of exploration over 4 years
Doray Minerals Limited Located within the Central and Western Gawler Craton, Eucla Basin, South Australia	Numerous	Gold Farm-In Agreement Doray will have the right to earn up to 80% of any Gold Resources discovered within the project area with Iluka retaining rights to discoveries of other commodities made by the Company
Astro Resources NL Located in the Nannup region of southern Western Australia	E70/2464	Farm-in and Exploration Joint Venture Agreement Mineral Sands Iluka can earn 80% of the tenement by funding \$320,000 of exploration

Summary of Farm-In and Joint Exploration Activities

Investment market and media enquiries:

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APPENDIX 1 - OPERATING MINES – PHYSICAL DATA 9 Months to 30 September 2015

	Jacinth- Ambrosia	Murray Basin	Western Australia	Australia Total	Virginia	Group Total
Mining						
Overburden Moved kbcm	867	2,171	204	3,242	-	3,242
Ore Mined kt	5,819	567	1,258	7,645	2,590	10,235
Ore Grade HM %	7.8	38.9	11.2	10.7	7.0	9.8
VHM Grade %	7.0	32.2	10.4	9.4	5.9	8.5
Concentrating						
HMC Produced kt	437	144	141	722	190	912
VHM Produced kt	390	127	130	647	143	790
VHM in HMC Assemblage %	89.4	87.9	92.2	89.6	75.1	86.6
Zircon	59.4	22.9	16.8	43.8	15.4	37.9
Rutile	6.2	40.3	4.9	12.8	-	10.1
Ilmenite	23.8	24.7	70.5	33.1	59.4	38.6
HMC Processed kt	383	164	130	677	187	864
Finished Product ¹ kt						
Zircon	192.4	35.1	16.4	243.9	27.5	271.4
Rutile	24.5	63.9	3.0	91.4	-	91.4
Ilmenite	91.7	39.2	77.9	208.8	108.1	316.9
Synthetic Rutile Produced kt			112.3	112.3		112.3

An explanation of the Iluka's physical flow information can be obtained from Iluka's Briefing Paper - Iluka Physical Flow Information on the company's website <u>www.iluka.com</u>, under Investor Relations, Mineral Sands Briefing Material, 2010. The nature of the Iluka operations base means that HMC from various mining locations can be processed at various mineral separation plants.

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.

Ore Grade HM % refers to percentage of heavy mineral (HM) found in a deposit

VHM 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 one of the company's two Australian mineral processing plants, or the Virginia 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 – both saleable and upgradeable) 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.

Refer Iluka's website <u>www.iluka.com</u> – Mineral Sands Technical Information for more detailed information on the mineral sands mining and production process.

¹ Finished product includes material from heavy mineral concentrate (HMC) initially processed in prior periods.

APPENDIX 2 – PRODUCTION SUMMARIES

Zircon







Synthetic Rutile







¹ Ilmenite is available for sale and also, in part, for upgrading, to synthetic rutile.